

**SAN BERNARDINO VALLEY COLLEGE
MASTER PLAN – STADIUM EXPANSION**

**DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT REPORT**

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SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table of Contents

SECTION 1.0 INTRODUCTION	1-1
1.1 Background	1-1
1.2 Decision to Prepare a Supplement to the Final PEIR	1-2
1.3 Availability of the SEIR/Public Review Process.....	1-3
SECTION 2.0 PROJECT DESCRIPTION	2-1
2.1 Project Location and Setting	2-1
2.2 Project Description	2-1
2.3 Project Goals	2-2
SECTION 3.0 ENVIRONMENTAL ANALYSIS	3-1
3.1 Introduction.....	3-1
3.2 Aesthetics.....	3-1
3.3 Air Quality	3-2
3.4 Biological Resources.....	3-8
3.5 Cultural and Paleontologic Resources	3-10
3.6 Geology and Soils.....	3-12
3.7 Hazards and Hazardous Materials.....	3-14
3.8 Hydrology and Water Quality	3-16
3.9 Land Use and Planning	3-17
3.10 Noise.....	3-19
3.11 Public Services	3-22
3.12 Traffic and Parking	3-23
3.13 Utilities	3-39
3.14 Summary.....	3-40
SECTION 4.0 REFERENCES	4-1
SECTION 5.0 LIST OF PREPARERS.....	5-1

List of Figures

Figure 2-1 Vicinity Map.....	2-5
Figure 2-2 Area Map	2-7
Figure 2-3 Stadium Site Plan	2-9

List of Tables

Table 3.3-1 Background Air Quality Data (2009 - 2011)	3-3
Table 3.3-2 Estimated Construction Emissions (lbs/day).....	3-5
Table 3.3-3 Estimated Operational Emissions.....	3-6
Table 3.9-1 Summary of Existing Land Use Designations.....	3-18
Table 3.12-1 Parking Summary.....	3-25
Table 3.12-2 Stadium Parking.....	3-25
Table 3.12-3 Recommended Parking Supply - Peak Periods.....	3-26

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.12-4 Weekend Parking Demand and Supply without Stadium 3-26

Table 3.12-5 Weekend Parking Demand with Stadium and Swap Meet and On-Street
Parking Supply 3-27

Table 3.12-6 Traffic Impact Results Summary 3-28

Table 3.12-7 Intersection Levels of Service - Existing with Proposed Project..... 3-29

Table 3.12-8 Impacts for Signalized Intersections - Existing with Proposed Project ... 3-30

Table 3.12-9 Impacts for Unsignalized Intersection - Existing with Proposed Project . 3-30

Table 3.12-10 Intersection Levels of Service - Horizon 2 (2020) No Project 3-31

Table 3.12-11 Intersection Levels of Service - Horizon 2 (2020) with Proposed Project
..... 3-32

Table 3.12-12 Impacts for Signalized Intersections - Horizon 2 (2020) 3-33

Table 3.12-13 Impacts for Unsignalized Intersections - Horizon 2 (2020) 3-34

Table 3.12-14 Intersection Levels of Service - Horizon 3 (2030) No Project 3-35

Table 3.12-15 Intersection Levels of Service - Horizon 3 (2030) with Proposed Project
..... 3-36

Table 3.12-16 Impacts for Signalized Intersections - Horizon 3 (2030) 3-37

Table 3.12-17 Impacts for Unsignalized Intersections - Horizon 3 (2030) 3-38

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

SECTION 1.0

INTRODUCTION

1.1 Background

San Bernardino Valley College (SBVC) was established in the 1920s and is part of the San Bernardino Community College District (SBCCD). SBVC currently serves the West Valley area of the SBCCD. In 1996, as a result of the 1992 Landers and Big Bear earthquakes, the SBCCD began investigations to locate the San Jacinto fault on the campus. As a result of the 1996 Seismic Hazard Assessment (Leighton and Associates 1996), building replacement projects have been completed at the campus to replace buildings located within or within 50 feet of the fault zone, or within the folding zone, an area of uneven elevation changes during a seismic event.

A Master Plan for San Bernardino Valley College has been completed to account for the various academic buildings, infrastructure improvements, and associated parking required to meet the planning challenges related to the fault and folding zone and to support an estimated future enrollment of 17,927 total students and 12,304 full-time-equivalent students by 2020 and 20,805 total students and 14,289 full-time-equivalent students by 2030.

Measure M, a \$500 million bond measure, was passed in February 2008. This bond measure allowed SBCCD to finalize the SBVC Master Plan and to provide funding for the design and construction of new facilities to implement the Master Plan.

The SBVC Master Plan is a land use plan to guide the physical development of the campus. It is not an implementation plan rather the Master Plan describes a program of potential development for the campus through buildout, which is estimated to occur by 2030. The funding, scheduling, and details of each development project undertaken during the planning horizon will be subject to individual approval by the SBCCD. Therefore, a Program Environmental Impact Report (PEIR) was prepared for the SBVC Master Plan which evaluates at a program level the environmental effects of buildout of the campus under the Master Plan. The SBCCD Board of Trustees certified the PEIR in February 2010.

A PEIR is defined in the California Environmental Quality Act (CEQA) Guidelines as an EIR “which may be prepared on a series of actions that can be characterized as one large project and are related either geographically, as logical parts in the chain of contemplated actions, in connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program....” (CEQA Guidelines Section 158168). Implementation of the Master Plan would take approximately 20 years. Details of projects that would be implemented under the full Master Plan buildout are unknown. Under CEQA, these future projects will rely on the PEIR as the base environmental document for environmental review. Prior to implementation, when greater detail is known, each project must go through another CEQA review process.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

They will be examined in light of the Master Plan and Master Plan PEIR to determine if the project falls within the scope of the Master Plan as examined in the PEIR. If the Lead Agency finds that the subsequent activity would be consistent with the Master Plan, and would not result in new effects or require new mitigation measures, the Lead Agency can approve the activity as being within the scope of the project covered by the PEIR and no new environmental document would be required (CEQA Guidelines Section 15168). Otherwise, subsequent environmental documentation must be prepared. If subsequent documentation is prepared, the environmental analyses would be tiered from the PEIR by incorporating by reference its general discussions and the analysis of cumulative impacts. Subsequent environmental documents would be focused on project- and site-specific impacts. The PEIR may also be used by other public agencies to issue approvals related to the Master Plan.

1.2 Decision to Prepare a Supplement to the Final PEIR

After approval of the SBVC Master Plan and PEIR, a new stadium design was proposed that includes an increase from 2,250 seats proposed in the 2009 Master Plan to 4,000 seats. As such, a *Minor Revision to the Master Plan* would need to be approved per the SBCCD Development and Implementation Guidelines. A minor revision is defined in these guidelines as:

- ◆ A modification to the configuration of a future or existing building footprint (exterior building line at ground level), path, roadways or landscape that does not alter the intent of the master plan.
- ◆ A siting of a relocatable and/or temporary facility.
- ◆ A vertical addition to an existing facility provided that the addition is not determined to be architecturally significant as established in the plan and existing state approvals.

The proposed revisions would result in minor technical changes to the SBVC Master Plan that would require additional environmental review and would result in new significant impacts. Therefore, the SBCCD has determined that a supplement to the PEIR is the appropriate CEQA document to be prepared (CEQA Guidelines Section 15163). CEQA Guidelines Section 15163 allows the lead agency (SBCCD) to choose to prepare a supplement to an EIR rather than a subsequent EIR if only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. Pursuant to CEQA Guideline Section 15163(b): the supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised. A supplement to an EIR may be circulated for public review by itself without recirculating the previous Draft or Final PEIR.

The purpose of the Supplemental EIR (SEIR) is to provide local decision-makers and the public with an objective analysis of the potential environmental consequences of the SBVC Master Plan, as amended. This SEIR provides a discussion of the environmental impacts related to the minor project changes. A discussion of the proposed revisions is included in Section 2.2 of this SEIR.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

1.3 Availability of the SEIR/Public Review Process

This Draft SEIR is being distributed for comment to public agencies and interested groups and individuals, in addition to any others that have requested to be on the project mailing list. The Draft SEIR is also available for review at the following locations:

San Bernardino Valley College
Campus Library
701 South Mount Vernon Avenue
San Bernardino, CA 92410

San Bernardino Community College District
Facilities, Planning and Administrative Services
114 South Del Rosa Drive
San Bernardino, CA 92408

A period of 45 days has been established for public review of the Draft SEIR for the SBVC Master Plan, as amended. Agencies, organizations, and individuals are invited to comment on the information presented in the Draft SEIR during this period. Specifically, comments are requested on the scope and adequacy of the environmental analysis presented in the Draft SEIR and not on the prior PEIR. All comments on the Draft SEIR should be sent to the following SBCCD contact:

Scott Stark
Facilities, Planning and Administrative Services
San Bernardino Community College District
114 South Del Rosa Drive
San Bernardino, CA 92408
stark@sbccd.cc.ca.us

Following the 45-day public review period, the SBCCD will prepare responses to all comments and will compile these comments and responses into a Final SEIR. The SBCCD's Board of Trustees will consider the information in the Draft and Final SEIR during project review and when making a decision to approve or deny the Proposed Project. The Final SEIR will need to be certified as complete by the Board of Trustees prior to making a decision to approve or deny the Proposed Project.

DRAFT
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SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

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SECTION 2.0

PROJECT DESCRIPTION

2.1 Project Location and Setting

SBVC is an 87-acre community college campus in the SBCCD. It is one of three facility locations in the SBCCD, which also includes Crafton Hills College, located approximately 16 miles to the east in the City of Yucaipa, and the SBCCD administrative offices, Professional Development Center, and Applied Technology Training Center, located in the City of San Bernardino (Figure 2-1). SBVC is located at 701 South Mount Vernon Avenue in the City of San Bernardino, with a small portion located in the City of Colton (Figure 2-2). The campus is bounded by Esperanza Street to the north, K Street to the east, Grant Avenue to the south, and Mount Vernon Avenue to the west. The campus is easily accessed from Interstate 215 (I-215) located 0.5 mile to the east and Interstate 10 (I-10) located 1.5 miles to the south.

SBVC is in a developed area surrounded by a mix of residential, commercial, and industrial land uses on the border between the cities of Colton and San Bernardino (Figure 2-2).

2.2 Project Description

As approved in the 2010 PEIR, the SBVC Master Plan included the construction of new home and visitor stands at the track/football field during Horizon 2. The stadium has a current capacity of 1,750 seats. The 2009 Master Plan proposed an increase in seating capacity to 2,250 seats.

After approval of the SBVC Master Plan, the SBCCD proposed a new stadium design that would include 4,000 seats. As such, the SBVC Master Plan will be revised to reflect the following changes:

Stadium and Fields Project

The SBVC Stadium and Fields Project (Proposed Project) would replace the existing home and bleacher facilities and improve stadium lighting, accessibility, and educational/athletic program functions. The project would include a 4,000-seat steel and aluminum bleacher system with approximately 3,000 seats on the home (west) end of the stadium as well as 1,000 seats on the visitor (east) side of the stadium (Figure 2-3). The stadium would only be able to be used at full capacity on the weekend without additional parking designated. Concessions, restroom facilities, and team rooms would surround the facility at the north and south ends of the stadium bleachers. A press box would be added above the home bleachers along with architectural features lining the walkway between the stadium and the future gymnasium building. The stadium lights would be moved to the exterior of the facility and the existing rubberized track and synthetic fields would remain.

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SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

2.3 Project Goals

The goals of the SBVC Master Plan, as amended remain the same as those stated in the SBVC Master Plan PEIR. They are repeated here for informational purposes:

The Master Plan will create connections that link and unify the campus and community to foster a positive memorable experience and identity through the following planning principles (Steinberg Architects 2009):

- ◆ **Student-centered Culture**
 - Large central gathering place
 - Distinct districts
 - Sufficient parking

- ◆ **Hierarchy of Elements**
 - Campus edges/transitions from the campus to the community
 - Delineation of primary and secondary campus entrances
 - Variety of exterior spaces

- ◆ **Access**
 - Vehicular/pedestrian circulation
 - Accessible paths and buildings
 - Wayfinding

- ◆ **Sustainable Design**
 - Respond to natural environment
 - Flexibility of space (long-term use)
 - Energy efficiency

- ◆ **Functional Integration**
 - Consolidate instructional divisions
 - Active and passive exterior spaces
 - Interior/exterior connections

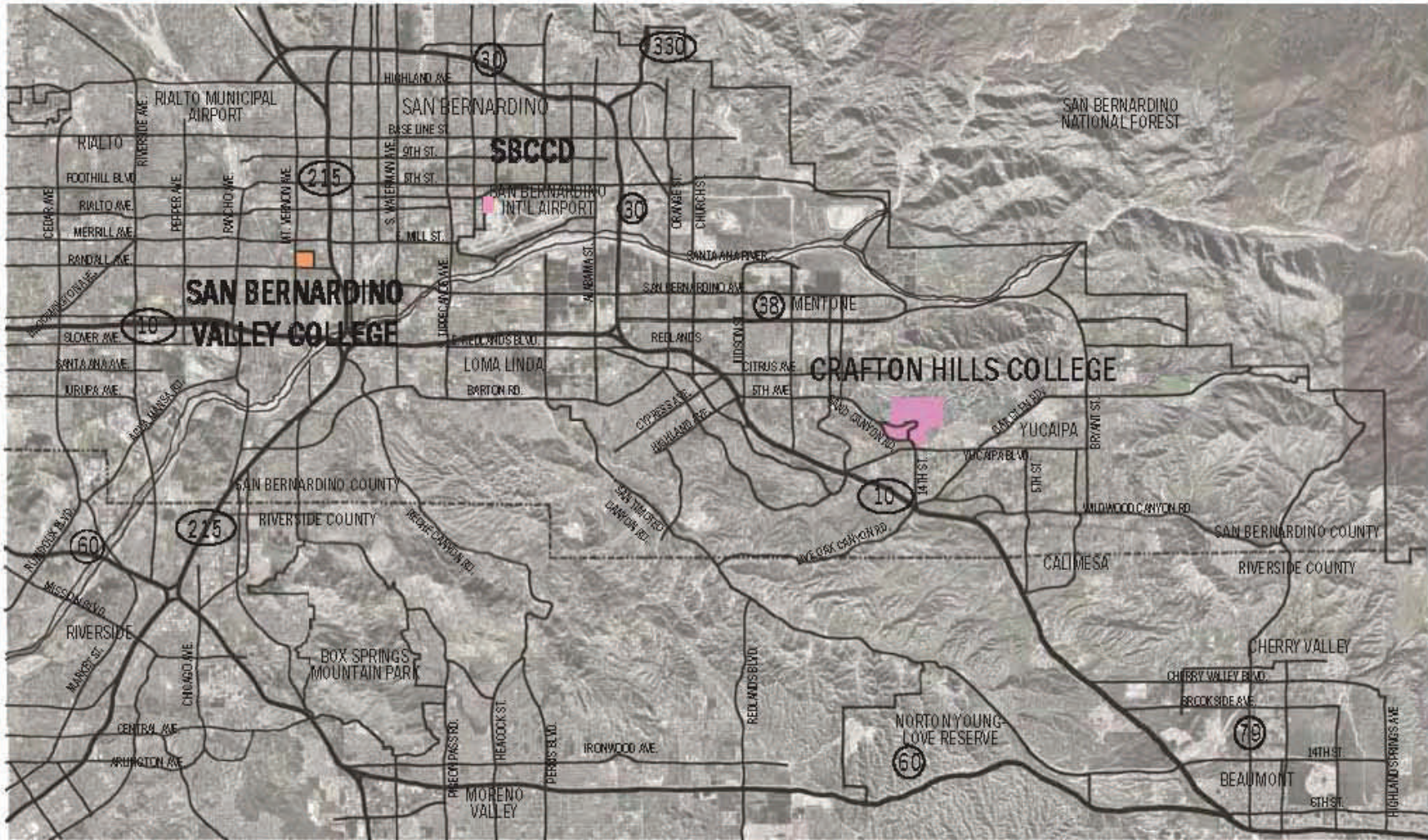


Figure 2-1
Vicinity Map

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SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

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Figure 2-2
Area Map

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SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

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SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

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SECTION 3.0

ENVIRONMENTAL REVIEW

3.1 Introduction

This section provides a discussion of the existing environment within and surrounding SBVC followed by a summary of prior environmental review and an analysis of the impacts of the SBVC Master Plan, as amended.

3.2 Aesthetics

3.2.1 Environmental Setting

The aesthetics environmental setting for the SBVC Master Plan, as amended, is similar to that discussed in the PEIR completed in September 2009. Since certification of the PEIR several buildings have been demolished including the Maintenance and Operations Building, the North Hall Building, and the Chemistry/Physical Science Buildings. Several buildings have been built to replace the demolished buildings including a new Maintenance and Operations Building, a new North Hall Building, and a new Chemistry/Physical Science Building. Two new buildings have been built including a new Media and Communications Building and a new Student Health Services Building.

3.2.2 Prior Environmental Review

Previous Environmental Analysis

The aesthetics impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.2-1 through 3.2-12.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts to aesthetics associated with the SBVC Master Plan with the incorporation of the proposed mitigation measures.

Previously Identified Mitigation Measures

The following mitigation measure was identified in the PEIR to reduce light and glare impacts to less than significant:

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

A-1: Lighting fixtures for the sports field shall be shielded, directed downward, and have sharp cutoff qualities at property lines, in order to minimize light and glare spillover effects that would affect adjacent residential receptors.

3.2.3 Discussion

On-Campus Views. With implementation of the SBVC Master Plan, as amended, the existing home and bleacher facilities and stadium lighting would be replaced and improved. The Proposed Project would include a 4,000-seat steel and aluminum bleacher system with approximately 3,000 seats on the home (west) end of the stadium as well as 1,000 seats on the visitor (east) side of the stadium. Concessions, restroom facilities, and team rooms would surround the facility at the north and south ends of the stadium bleachers. A press box would be added above the home bleachers along with architectural features lining the walkway between the stadium and the future gymnasium building. The stadium lights would be moved to the exterior of the facility and the existing rubberized track and synthetic fields would remain. The proposed changes to the SBVC stadium would occur in the same area as the existing football and track field. The proposed SBVC stadium would be constructed in a complimentary architectural style as described in the PEIR. A less than significant aesthetics impact would occur.

Off-Campus Views. The proposed SBVC stadium would be built in the same area as the existing football and track field. Community viewpoints from K Street would have the most unobstructed view of the proposed SBVC stadium. Existing recreational fields would continue to provide a buffer from the community viewpoints on the eastern edge of the campus. Furthermore, implementation of the Master Plan would transform the campus edge into a transitional zone between the public and academic community. Impacts to off-campus views would be less than significant.

Light and Glare. The proposed SBVC stadium would have sports lighting fixtures located at the exterior of the facility. Implementation of the previously adopted Mitigation Measure A-1 would reduce light and glare impacts to a less than significant level.

3.3 Air Quality

An air quality technical report was prepared for the Master Plan, as amended (SRA 2012). This report is summarized below.

3.3.1 Environmental Setting

The regulatory air quality setting for the SBVC Master Plan, as amended, is the same as discussed in the PEIR (September 2009). The closest ambient air quality monitoring station to the project site is at 4th Street in San Bernardino. The nearest monitoring station that measures sulfur dioxide (SO₂) is the Riverside-Rubidoux station. Ambient concentrations of criteria pollutants measured at these monitoring stations during the period 2009-2011 are presented in Table 3.3-1. Ambient air concentrations were

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

compared with the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The data indicate that the area is in compliance with both CAAQS and NAAQS for carbon monoxide (CO), nitrogen dioxide (NO₂), and SO₂. The state 8-hour CO standard was not exceeded during this three-year period. Exceedances of the NAAQS for ozone were recorded several times per year in the 2006-2008 time period. One exceedance of the NAAQS for PM₁₀ (particulate matter with an aerodynamic diameter of 10 microns or less) was recorded in 2007 during the southern California fire event in October of that year. Exceedances of the CAAQS for ozone PM₁₀ and PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5 microns or less) standards have been recorded at the San Bernardino monitoring station.

Table 3.3-1 Background Air Quality Data (2009 - 2011)

Pollutant	Averaging Time	2009	2010	2011	NAAQS	CAAQS	Monitoring Station
Ozone	8 hour	0.126	0.123	0.136	0.075	0.070	San Bernardino
	1 hour	0.176	0.143	0.160	-	0.09	San Bernardino
PM₁₀	Annual Arithmetic Mean	51.6	41.2	52.3	-	20 µg/m ³	San Bernardino
	24 hour	147.1	99.9	128.4	150 µg/m ³	50 µg/m ³	San Bernardino
PM_{2.5}	Annual Arithmetic Mean	17.2	15.2	N/A	15 µg/m ³	12 µg/m ³	San Bernardino
	24 hour	74.0	54.2	94.6	35 µg/m ³	-	San Bernardino
NO₂	Annual	0.019	0.017	0.019	0.053	0.030	San Bernardino
	1 hour	0.115	0.118	0.110	0.100	0.18	San Bernardino
CO	8 hour	4.61	3.56	4.67	9	9.0	San Bernardino
SO₂	Annual	0.001	0.001	0.000	0.03	-	Riverside
	24 hour	0.003	0.005	0.001	0.14	0.04	Riverside

¹Secondary NAAQS

Values in parts per million (PPM) unless otherwise indicated

N/A = not available from current website data

Source: <http://www.arb.ca.gov/adam/topfour/topfour1.php>

3.3.2 Prior Environmental Review

Previous Environmental Analysis

Air quality impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.3-1 through 3.3-17.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project air quality impacts.

Previously Identified Mitigation Measures

No significant air quality impacts have been identified; therefore, no mitigation measures are required.

3.3.3 Discussion

The SBVC Master Plan, as amended, includes an increase in the stadium's capacity from the proposed capacity in the 2009 Master Plan. Stadium capacity would increase from 2,250 seats to 4,000 seats. Additional details about support buildings surrounding the stadium have become available. Concessions, restroom facilities, and team rooms would surround the facility at the north and south of the stadium bleachers. The stadium would be located within the same area as the current track and football field. The existing rubberized track and synthetic field would remain.

3.3.3.1 Construction Impacts

Construction activities, including soil disturbance dust emissions and combustion pollutants from on-site construction equipment and from off-site trucks hauling dirt, cement or building materials, would create a temporary addition of pollutants to the local airshed. Emissions of pollutants such as fugitive dust and heavy equipment exhaust that are generated during construction are generally highest near the construction site. Emissions associated with construction would include the following:

- ◆ Emissions of fugitive dust from surface disturbance activities;
- ◆ Emissions of combustion pollutants from heavy construction equipment;
- ◆ Emissions of combustion pollutants from worker vehicles;
- ◆ Emissions of combustion pollutants from heavy-duty vehicles transporting; and construction materials and equipment to the site.

It was assumed that construction would require 12 months, and would be completed in 2013. Various types of construction equipment would be required during project construction, including graders, bulldozers, backhoes, excavators, auxiliary motors, dump trucks, water trucks, and pickup trucks. Construction emissions were estimated using the CalEEMod Model, Version 2011.1.1, which is the South Coast Air Quality Management District (SCAQMD's) latest recommended land use model.

Table 3.3-2 presents a summary of the daily construction emissions for the Proposed Project, for each month during construction, in comparison with the SCAQMD significance thresholds. As shown in Table 3.3-2, emissions would be below both the

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SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

SCAQMD’s regional significance thresholds and the localized significance thresholds (LSTs) for all pollutants for each phase of construction. Impacts from construction would therefore be less than significant.

Table 3.3-2 Estimated Construction Emissions (lbs/day)
San Bernardino Valley College Stadium Expansion

Emission Source	ROG	NOx	CO	SOx	PM₁₀	PM_{2.5}
<i>Grading/Site Preparation</i>						
Fugitive Dust	-	-	-	-	0.30	0.16
Heavy Construction Equipment	2.00	13.91	9.51	0.02	1.04	1.04
Worker Trips	0.06	0.06	0.64	0.00	0.13	0.01
Subtotal	2.06	13.97	10.15	0.02	1.47	1.21
<i>Stadium Construction</i>						
Heavy Construction Equipment	2.20	16.33	10.77	0.02	1.04	1.04
Vendor Trips	0.09	0.98	0.60	0.00	0.09	0.03
Worker Trips	0.09	0.09	1.10	0.00	0.23	0.01
Subtotal	2.38	17.40	12.47	0.02	1.36	1.08
<i>Paving</i>						
Heavy Construction Equipment	2.32	14.52	9.76	0.02	1.20	1.20
Worker Trips	0.10	0.10	1.16	0.00	0.24	0.01
Subtotal	2.42	14.62	10.92	0.02	1.44	1.21
<i>Architectural Coatings Application</i>						
Architectural Coatings	13.81	-	-	-	-	-
Heavy Construction Equipment	0.49	2.96	1.94	0.00	0.27	0.27
Worker Trips	0.02	0.02	0.19	0.00	0.04	0.00
Subtotal	14.32	2.98	2.13	0.00	0.31	0.27
<i>Maximum Daily Emissions</i>						
Maximum Daily Emissions	19.12	35.00	25.51	0.04	3.11	2.56
Significance Thresholds	75	100	550	150	150	55
Localized Significance Threshold	N/A	172	407	N/A	4	3
<i>Above Significance Thresholds?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

3.3.3.2 Operational Impacts

The main operational impacts associated with the Proposed Project would be impacts associated with traffic. Minor impacts would be associated with energy use and landscaping. To address whether the Proposed Project would result in emissions that would violate any air quality standard or contribute substantially to an existing or proposed air quality violation, the operational emissions associated with the Proposed Project were compared with the SCAQMD’s significance thresholds. Based on the *San Bernardino Valley College Stadium Expansion Traffic Impact Study* (Fehr & Peers 2012), the estimated trip generation rates for the stadium when events are held that have more than 2,250 attendees (the current stadium capacity), are a total of 785 trips at the start of the event and 785 trips at the end of the event. It is estimated that events with more than 2,250 attendees would be held once per month, for a total of 12 times per year.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

To estimate emissions associated with Project-generated traffic, the CalEEMod Model was used. The CalEEMod Model contains emission factors from the EMFAC2007 model, which is the latest version of the Caltrans emission factor model for on-road traffic. Project-related traffic was assumed to be comprised of a mixture of vehicles in accordance with the CalEEMod Model default outputs for traffic. This assumption includes light duty autos and light duty trucks (i.e., small trucks, sport utility vehicles, and vans) as well as medium- and heavy-duty vehicles that may be traveling to the facility to make deliveries. For conservative purposes, emission factors representing the vehicle mix for 2014 were used to estimate emissions as 2014 was assumed to be the first year of full operation; based on the results of the EMFAC2007 model for subsequent years, emissions would decrease on an annual basis from 2014 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards that are taken into account in the EMFAC2007 model. Emissions associated with area sources and energy use were also estimated using the default assumptions in the CalEEMod Model. Table 3.3-3 presents a summary of the operational emissions associated with the SBVC Stadium Expansion Project.

Table 3.3-3 Estimated Operational Emissions
San Bernardino Valley College Stadium Expansion

Emission Source	ROG	NOx	CO	SOx	PM₁₀	PM_{2.5}
<i>Daily Emissions, Summer lbs/day</i>						
Area Sources	1.03	-	-	-	-	-
Energy Use	0.04	0.35	0.30	0.00	0.03	0.03
Vehicle Trips	6.27	13.79	58.20	0.09	3.18	0.64
Total	7.34	14.14	58.50	0.09	3.21	0.67
Significance Thresholds	55	55	550	150	150	55
<i>Above Significance Thresholds?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Total On-Site Emissions	1.07	0.35	0.30	0.00	0.03	0.03
Localized Significance Threshold	N/A	172	407	N/A	1	1
<i>Above Significance Thresholds?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
<i>Daily Emissions, Winter lbs/day</i>						
Area Sources	1.03	-	-	-	-	-
Energy Use	0.04	0.35	0.30	0.00	0.03	0.03
Vehicle Trips	6.55	14.77	58.48	0.09	3.18	0.65
Total	7.62	15.12	58.78	0.09	3.21	0.68
Significance Thresholds	55	55	550	150	150	55
<i>Above Significance Thresholds?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Total On-Site Emissions	1.07	0.35	0.30	0.00	0.03	0.03
Localized Significance Threshold	N/A	172	407	N/A	1	1
<i>Above Significance Thresholds?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

As shown in Table 3-3, emissions are below the SCAQMD's significance thresholds. The Proposed Project would therefore not result in a violation of an air quality standard, and impacts are less than significant.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

3.3.3.3 Cumulative Impacts

Based on the analysis of impacts, the emissions would be below the SCAQMD's significance thresholds. The thresholds are established based on the potential for a significant direct and cumulative impact based on major source thresholds. Because the emissions are below the significance thresholds, project construction and operations would not result a cumulatively considerable net increase of pollutants. Impacts are less than significant.

3.3.3.4 Impacts to Sensitive Receptors

Construction activities would result in emissions of diesel particulate matter from heavy construction equipment used on site and truck traffic to and from the site, as well as minor amounts of toxic air contaminants (TAC) emissions from motor vehicles (such as benzene, 1, 3-butadiene, toluene, and xylenes). Health effects attributable to exposure to diesel particulate matter are long-term effects based on chronic (i.e., long-term) exposure to emissions. Health effects are generally evaluated based on a lifetime (70 years) of exposure. Due to the short-term nature of construction at the site, no adverse health effects would be anticipated from short-term diesel particulate emissions. Motor vehicle emissions would not be concentrated in any one area but would be dispersed along travel routes and would not be anticipated to pose a significant health risk to receptors.

The traffic impact study (Fehr & Peers 2012) evaluated the potential for significant impacts, including delays that could result in CO "hot spots" at congested intersections. With mitigation, all traffic impacts are reduced to below a level of significance. With mitigation for traffic impacts, therefore, CO "hot spots" would not result from the Proposed Project and would not expose sensitive receptors to substantial pollutant concentrations. Impacts to sensitive receptors are less than significant.

3.3.3.5 Odor Impacts

Construction of the Proposed Project could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust; however, because the construction equipment would be operating at various locations throughout the construction site, and because any operations near existing receptors would be temporary, impacts associated with odors during construction are not considered significant. Stadium projects are not classified as a source of objectionable odors.

3.3.3.6 Global Climate Change Impacts

3.3.3.6.1 Construction Emissions

Based on emission estimates for the entire construction phase of the Proposed Project from the CalEEMod Model, total greenhouse gas (GHG) emissions are estimated at 361.45 metric tons of CO₂-equivalent greenhouse gases (CO₂e). In accordance with SCAQMD interim guidance, emissions from construction are amortized over a 30-year

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

period to account for their contribution to annual GHG emissions. When amortized, the contribution from construction of the stadium expansion would be 12 metric tons of CO₂e annually.

3.3.3.6.2 Operational Emissions

Operational emissions were calculated using the CalEEMod Model, Version 2011.1.1, assuming that at most, events would occur at the stadium 52 times per year. This is a conservative assumption, as it is estimated that events with more than 2,250 attendees would be more likely to occur 12 times per year. Total operational emissions were estimated at 295.24 metric tons of CO₂e annually. When added to the amortized construction emissions, it is anticipated that the Proposed Project would result in an increase of 307 metric tons of CO₂e annually. This level is below the SCAQMD's draft significance threshold of 3,000 metric tons of CO₂e for commercial projects, and is also below the California Air Pollution Controls Officers Association (CAPCOA) suggested screening threshold of 900 metric tons annually, below which no further analysis is warranted.

Based on the evaluation, global climate change impacts would be less than significant.

3.4 Biological Resources

3.4.1 Environmental Setting

The site setting for this Supplemental EIR remains relatively unchanged from that described in the previously prepared PEIR. Since certification of the PEIR, several buildings have been demolished including the Maintenance and Operations Building, the North Hall Building, and the Chemistry/Physical Science Buildings. Several buildings have been built to replace the demolished buildings including a new Maintenance and Operations Building, a new North Hall Building, and a new Chemistry/Physical Science Building. Two new buildings have been built including the Media and Communications Building and the Student Health Services Building. Pre-construction surveys for nesting birds and bats have been completed as required. A biological reconnaissance survey was conducted on April 24, 2011 and on June 2, 2011 to identify biological resources that may have posed constraints for a sewer line that was placed across College Avenue. A bat roost survey was conducted at the Business Building in December 2011 to determine if there were any bat roosts present or other biological resources that may have posed constraints on the demolition of the North Hall Building.

3.4.2 Prior Environmental Review

Previous Environmental Analysis

The biological resources impacts associated with the SBVC Master Plan were evaluated in the following documents:

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.4-1 through 3.4-6.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts on biological resources associated with the SBVC Master Plan with the incorporation of the proposed mitigation measures.

Previously Identified Mitigation Measures

The following mitigation measures were identified in the PEIR to reduce project impacts to less than significant:

- B-1:** A qualified bat biologist shall conduct a preconstruction survey of potential bat roosting sites prior to removal of mature trees and existing structures. If an active bat roost is detected, bat exclusionary devices shall be installed during the non-breeding season (outside of May 1 – October 1) and after bats voluntarily leave the roost for the night to forage. Demolition shall occur once the biologist deems the structure void of bats.
- B-2:** Demolition or construction activities that require the removal of occupied trees or shrubs or other disturbances, such as constant noise and dust, shall take place outside of the bird breeding season (February 15 to September 1) to the maximum extent practicable. If construction activity occurs within the bird breeding season then pre-construction nesting surveys shall be conducted in order to ensure compliance with the MBTA and CDFG Code 3503.5. If active nests are found during the breeding season then buffer zones shall be established around the active nest by a qualified biologist (typically 250 feet radius for a songbird and 500 feet radius for a raptor). Demolition and construction activities shall be avoided within the buffer zone until a qualified biologist determines that the nest(s) is no longer active. If the nest(s) must be removed the removal shall take place in the non-breeding season (September 1 to February 14).

3.4.3 Discussion

The SBVC Master Plan, as amended, includes an increase in the stadium's capacity from the proposed capacity in the 2009 Master Plan. Stadium capacity would increase from 2,250 seats to 4,000 seats. The stadium would be located within the same area as the current track and football field. Project impacts to biological resources would remain less than significant with the implementation of the previously adopted mitigation measures.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

3.5 Cultural and Paleontologic Resources

3.5.1 Environmental Setting

Cultural Resources. The cultural resources for the SBVC Master Plan, as amended, are the same as those identified in the previously prepared PEIR. Since certification of the PEIR, cultural resources monitoring was completed for sewer pipe trenching along College Avenue and K Street from June 20 to August 2, 2011. A Native American monitor was also present for this work. The only cultural artifacts found during the monitoring period included two historic-period glass shreds.

Paleontological Resources. The paleontological resources for the SBVC Master Plan, as amended, are the same as those identified in the previously prepared PEIR.

3.5.2 Prior Environmental Review

Previous Environmental Analysis

The cultural and paleontological resources impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.5-1 through 3.5-8.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts on cultural and paleontological resources associated with the SBVC Master Plan with the incorporation of the proposed mitigation measures.

Previously Identified Mitigation Measures

The following mitigation measures were identified in the PEIR to reduce project impacts to less than significant:

Cultural Resources

CR-1: To avoid inadvertent impacts to subsurface archaeological resources, all ground disturbing activities in undisturbed sediments shall be monitored by a qualified archaeologist. The archaeological monitor shall have the power to temporarily halt or divert equipment to allow for recordation and evaluation of any encountered resources. If evaluated as eligible for the CRHR and determined eligible by the San Bernardino Community College District, the archaeological site must be avoided and preserved. If this is not feasible, an archeological data

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

recovery program shall be developed by a qualified archaeologist. The data recovery report shall be submitted to the San Bernardino Information Center.

- CR-2:** To avoid inadvertent impacts to Native American resources, all ground disturbing activities in undisturbed sediments shall be observed by a Native American monitor. In the event that subsurface resources are encountered, the Native American monitor shall coordinate with the archaeological monitor to temporarily halt or divert equipment to allow for recordation and evaluation of the resource. If human remains of any kind are found during construction activities, all activities must cease immediately and the San Bernardino County Coroner must be notified, as required by state law (Section 7050.5 of the Health and Safety Code). If the coroner determines the remains to be of Native American origin, he or she will notify the Native American Heritage Commission (NAHC). The NAHC will then identify the most likely descendant(s) (MLD) to be consulted regarding treatment and/or reburial of the remains (Section 5097.98 of the Public Resources Code). If an MLD cannot be identified, or the MLD fails to make a recommendation regarding the treatment of the remains within 48 hours after gaining access to the remains, SBCCD shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. Work can continue once the MLD's recommendations have been implemented or the remains have been reburied if no agreement can be reached with the MLD (Section 5097.98 of the Public Resource Code).
- CR-3:** To mitigate potential impacts to the Auditorium and any other identified historic resource from proposed renovations, a renovation plan shall be developed by a qualified architect with experience with historic buildings or an Architectural Historian. The plans shall include specifications to ensure that the renovations do not alter its significant historic fabric that make it eligible for inclusion in the NRHP and CRHR.
- CR-4:** In the event that any building is scheduled for demolition or renovation after the building becomes 50 years in age, a qualified architect with experience with historic buildings or an Architectural Historian shall evaluate the building to determine if it is a historical resource in accordance with the CEQA Guidelines (CCR Title 14 Section 15064.5). If the building is determined not to be a historic resource, then no further work shall be required. If the building is determined to be a historic resource, then Mitigation Measure CR-3 shall apply for renovation work.

Paleontological Resources

- CR-5:** A qualified vertebrate paleontologist, as defined by the County of San Bernardino (Development Code § 82.20.040), shall develop and implement a mitigation program for paleontologic resources. This program shall consist of:

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

1. Monitoring by a qualified paleontological monitor when previously undisturbed subsurface sediments are excavated, graded, or otherwise disturbed. The monitor will be equipped to recover fossils and sediment samples during excavation, but shall have the power to temporarily halt or divert equipment to allow for recovery of large or numerous fossils.
2. Preparation of recovered specimens to a point of identification and permanent preservation. This includes washing sediments to recover small invertebrate and vertebrate fossils.
3. Identification of the specimens and curation of all specimens into an established accredited museum repository (e.g., San Bernardino County Museum) with permanent retrievable paleontologic storage. Preparation of the mitigation program shall include obtaining a signed curation agreement with the museum repository prior to initiation of mitigation activities.
4. Preparation of a report of findings with an appended itemized inventory of identified specimens. The report and inventory shall be submitted to the San Bernardino Community College District and the museum repository (e.g., San Bernardino County Museum). When the San Bernardino Community College District receives the report, inventory, and verification of acceptance of the specimens by the museum repository, mitigation will be complete.

3.5.3 Discussion

Cultural Resources. The SBVC Master Plan, as amended, includes an increase in the stadium's capacity from 2,250 to 4,000 seats. The stadium would be located within the same area as the current track and football field. Project impacts to cultural resources would remain less than significant with the implementation of the previously adopted mitigation measures.

Paleontological Resources. Paleontological impacts would remain the same as discussed in the PEIR. Project impacts to paleontological resources would remain less than significant with the implementation of the previously adopted mitigation measures.

3.6 Geology and Soils

3.6.1 Environmental Setting

The site setting for this Supplemental EIR remains similar to that described in the PEIR. Seismic, soils, and liquefaction conditions on the project site remain the same as those described in the PEIR.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

3.6.2 Prior Environmental Review

Previous Environmental Analysis

The geology and earth resources impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.6-1 through 3.6-5.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts on geology and soils associated with the SBVC Master Plan with the incorporation of the proposed mitigation measures.

Previously Identified Mitigation Measures

The following mitigation measures were identified in the PEIR to reduce project impacts to less than significant:

- G-1:** All temporary excavations, including utility trenches, retaining wall excavations and other excavations shall be performed in accordance with project plans, specifications, and all OSHA requirements, and the current editions of the California Construction Safety Orders.
- G-2:** Utility trenches onsite shall be backfilled with the onsite material, provided it is free of debris, significant organic material, and oversized material. Prior to backfilling the trench, pipes shall be bedded in a granular material, backfilled, and compacted as specified by the project engineer.
- G-3:** A qualified geotechnical firm shall review the site and grading plans for each project as the Master Plan is implemented and comment further on the geotechnical aspects of the project. Geotechnical observations and testing shall be conducted during excavation and all phases of grading operations.

3.6.3 Discussion

The SBVC Master Plan, as amended, includes an increase in the stadium's capacity from the proposed capacity in the 2009 Master Plan. Stadium capacity would increase from 2,250 seats to 4,000 seats. Concessions, restroom facilities, and team rooms would surround the facility at the north and south of the stadium bleachers. The stadium would be located within the same area as the current track and football field. As such, impacts related to seismic groundshaking, grading, and erosion would not be different than what was previously analyzed in the PEIR. Impacts would be less than significant

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

with the implementation of Mitigation Measures G-1 through G-3, as applicable.

Because no significant geology and soil impacts associated with the amended project were identified, no new mitigation measures are required. Mitigation measures identified in the previously certified PEIR for the SBVC Master Plan would not change.

3.7 Hazards and Hazardous Materials

3.7.1 Environmental Setting

Hazards and hazardous materials found at the SBVC campus are the same as those identified in the PEIR (September 2009).

3.7.2 Prior Environmental Review

Previous Environmental Analysis

Hazard and hazardous materials impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.7-1 through 3.7-6.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts on hazards and hazardous materials with the incorporation of the proposed mitigation measures.

Previously Identified Mitigation Measures

The following mitigation measures were identified in the PEIR to reduce project impacts to less than significant:

- HAZ-1:** Prior to demolition of buildings or structures, a survey for building-related hazardous materials shall be conducted by qualified and properly-certified individuals. Asbestos surveys must be conducted by a California Division of Occupational Safety and Health-certified asbestos consultant or site surveillance technician. Surveys for lead-based/bearing substances and lead-containing surface coatings must be conducted by a California Department of Health Service-certified lead inspector/risk assessor. If present, all recommendations regarding the removal and disposal of hazardous materials in accordance with federal, state, and local regulations shall be observed.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

- HAZ-2:** All asbestos disturbance and/or removal operations shall be conducted by a California Occupational Safety and Health Administration (Cal/OSHA) registered and State licensed asbestos removal contractor. All disturbance and/or abatement operations shall be under the direction of a California Certified Asbestos Consultant. At no time shall identified or suspect asbestos-containing materials be drilled, cut, sanded, scraped, or otherwise disturbed by untrained personnel.
- HAZ-3:** All construction activities that may affect asbestos-containing materials shall be conducted in accordance with Title 8 of the California Code of Regulations, Section 1529.
- HAZ-4:** For all abatement activities that will involve the removal of 100 square feet or more of identified asbestos-containing materials, notification shall be made to the South Coast Air Quality Management District in accordance to SCAQMD Rule 1403 and to Cal/OSHA. Notification to both entities shall occur 10 working days prior to the initiation of such activities.
- HAZ-5:** Notification to employees and contractors working within the buildings shall be made in accordance with the California Health and Safety Code Section 25915 *et seq.* and Proposition 65.
- HAZ-6:** All demolition involving potential and identified lead-containing surfaces shall be conducted in accordance with 8 CCR 1532.1 and 29 CFR 1926.62. In addition, all activities involving identified lead-based paints shall be conducted in accordance with 17 CCR, Division 1, Chapter 8, Sections 35001 through 36100.
- HAZ-7:** Any welding, cutting, or heating of interior metal surfaces containing lead surface coating shall be conducted in accordance with 29 CFR 1926.354.
- HAZ-8:** Proper waste characterization and disposal of lead contaminated debris shall be conducted in accordance with Title 22 of the California Code of Regulations and the California Health and Safety Code.
- HAZ-9:** All identified and potential PCB-containing light fixture ballasts shall be handled, collected, transported, and disposed in accordance with the requirements of 22 CCR 67426.1.
- HAZ-10:** All fluorescent light tubes, mercury containing thermostat switch capsules, batteries, and other Universal Waste Rule components shall be handled in accordance with 22 CCR 66273.
- HAZ-11:** All identified and potential refrigerants shall be captured and recycled in accordance with requirements of the South Coast Air Quality Management District and the California Air Resources Board.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

HAZ-12: Prior to demolition or construction activities in existing buildings, a follow-up inspection shall be performed to identify and sample potential environmental hazards located beneath finishes and/or enclosed in wall voids, pipe chases, etc.

3.7.3 Discussion

The SBVC Master Plan, as amended, includes an increase in the stadium's capacity from 2,250 seats to 4,000 seats. Because no significant hazards and hazardous materials impacts associated with the amended project were identified, no new mitigation measures are required. Mitigation measures identified in the previously certified PEIR for the SBVC Master Plan would not change.

3.8 Hydrology and Water Quality

3.8.1 Environmental Setting

The SBVC Master Plan, as amended, is located within the same project site analyzed in the PEIR. The water resources and drainage setting for the SBVC Master Plan, as amended, has not significantly changed since the PEIR was completed in February 2010. A National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction Activity in compliance with Section 402 of the Clean Water Act has been acquired and a Storm Water Pollution Prevention Plan (SWPPP) has been implemented per Mitigation Measures H-1.

3.8.2 Prior Environmental Review

Previous Environmental Analysis

Hydrology and Water Quality impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.8-1 through 3.8-5.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts on hydrology and water quality resources associated with the SBVC Master Plan, with the incorporation of the proposed mitigation measures.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Previously Identified Mitigation Measures

The following mitigation measure was identified in the PEIR to reduce project impacts to less than significant:

H-1: Prior to ground disturbing activities related to grading or any activity affecting federal or state waters, SBCCD shall submit for approval to the State Water Resources Control Board, a Notice of Intent (NOI) to be covered under a National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction Activity (General Permit) in compliance with Section 402 of the Clean Water Act. As part of the General Permit, the SBCCD shall prepare a Storm Water Pollution Prevention Plan (SWPPP) which will: (1) require implementation of Best Management Practices (BMPs) so as to prevent a net increase in sediment load in stormwater discharges relative to preconstruction levels; (2) prohibit discharges of stormwater or non-stormwater at levels which would cause or contribute to an exceedance of any applicable water quality standard contained in the regional basin plan; (3) discuss in detail the BMPs for the project related to control of sediment and erosion, non-sediment pollutants, and potential pollutants in non-stormwater discharges; (4) describe post-construction BMPs for the project; (5) explain the monitoring and maintenance program for the project's BMPs; (6) require reporting of violations to the RWQCB; and (7) list the parties responsible for SWPPP implementation and BMP maintenance both during and after construction. Upon acceptance of the NOI by the State Board, the SBCCD shall implement the SWPPP and will modify the SWPPP as directed by the Storm Water Permit.

3.8.3 Discussion

The SBVC Master Plan, as amended, includes an increase in the stadium's capacity from 2,250 seats to 4,000 seats. Concessions, restroom facilities, and team rooms would surround the facility at the north and south of the stadium bleachers. The stadium would be located within the same area as the current track and football field. The existing rubberized track and synthetic field would remain untouched. No significant hydrology and water quality impacts associated with the amended project were identified; no new mitigation measures are required. Mitigation measures identified in the previously certified PEIR for the SBVC Master Plan would not change.

3.9 Land Use and Planning

3.9.1 Environmental Setting

SBVC is in a developed area surrounded by a mix of residential, commercial, and industrial land uses in the City of San Bernardino bordering the City of Colton. The land uses and land use designations are summarized in Table 3.9-1.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.9-1 Summary of Existing Land Use Designations

	Land Use	Zoning	General Plan Designations
SBVC	Community College Campus	PF (Public Facilities) <i>SB</i>	Public Facilities (PF) <i>SB</i>
North	Residential Commercial	RS (Residential Suburban – 4.5 du/ac) <i>SB</i> RU (Residential Urban – 9 du/ac) <i>SB</i> CG-1 (Commercial General) <i>SB</i>	Residential Suburban (RS) <i>SB</i> Residential Urban (RU) <i>SB</i> Commercial General (CG-1) <i>SB</i>
South	Commercial Residential	C2 (General Commercial) <i>C</i> R3 (Multi Family Residential) <i>C</i> R2 (Duplex Residential) <i>C</i> RS (Residential Suburban – 4.5 du/ac) <i>SB</i>	Multi-Use Area (MU) <i>C</i> High Density Residential (HD) <i>C</i> Medium Density Residential (MD) <i>C</i> Residential Suburban (RS) <i>SB</i>
East	Industrial Residential	IL (Industrial Light) <i>SB</i> RS (Residential Suburban – 4.5 du/ac) <i>SB</i>	Industrial Light (IL) <i>SB</i> Residential Suburban (RS) <i>SB</i>
West	Commercial Residential	CG-1 (Commercial General) <i>SB</i> C2 (General Commercial) <i>C</i> R1 (Single Family Residential) <i>C</i>	Commercial General (CG-1) <i>SB</i> Multi-Use Area (MU) <i>C</i> Low Density Residential (LD)/ Multi-Use Area (MU) <i>C</i>

Notes: *SB* = City of San Bernardino
C = City of Colton
du/ac = dwelling units per acre

3.9.2 Prior Environmental Review

Previous Environmental Analysis

The land use and planning impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.9-1 through 3.9-4.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts on land use and planning.

Previously Identified Mitigation Measures

No significant impacts were identified; therefore, no mitigation measures were required.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

3.9.3 Discussion

Physically Divide an Established Community. The SBVC Master Plan, as amended, includes an increase in the stadium's capacity from the capacity proposed in the 2009 Master Plan. These project changes would not physically divide an established community; no impacts would occur.

Conflict with Existing Land Use Plans and Policies. SBVC is located in a Public Facilities (PF) District where public uses and facilities and similar compatible uses are allowed. No land use change is proposed by the revisions to the SBVC Master Plan. No impacts to existing land use plans and policies would occur.

Conflict with any Applicable Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). The project site is not located within an HCP or NCCP. As such, no impacts would occur.

3.10 Noise

3.10.1 Environmental Setting

The noise setting for the SBVC Master Plan, as amended, is similar as that discussed in the PEIR. Stadium capacity would increase from 2,250 seats that were proposed in the 2009 Master Plan to 4,000 seats. The stadium would be located within the same area as the current track and football field.

3.10.2 Prior Environmental Review

Previous Environmental Analysis

The noise impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.10-1 through 3.10-21.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts to noise associated with the SBVC Master Plan and therefore no mitigation measures were required.

Previously Identified Mitigation Measures

The following mitigation measures were identified in the PEIR to reduce project impacts to a less than significant level:

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

- N-1:** Construction and demolition shall be confined, to the extent practicable, between the hours of 7:00 a.m. and 8:00 p.m.
- N-2:** Notice shall be posted prior to construction identifying the location and dates of construction, and the name and phone number of a contact person at SBVC in case of complaints. The notice shall encourage the residents to call SBVC's contact person rather than the police in case of complaint. The notice shall inform residents of any changes to the schedule, including instances where construction may take place outside of the hours of between 7:00 a.m. and 8:00 p.m. The designated contact person shall be available throughout project construction with a mobile phone. If a complaint is received, SBVC's contact person shall take whatever reasonable steps are necessary to resolve the complaint.
- N-3:** Where feasible, temporary solid noise barriers or berms shall be erected between construction equipment and sensitive off-site receptors.
- N-4:** Construction storage areas shall be located away from sensitive receptors to the extent possible. Where this is not possible, the storage of waste materials, earth, and other supplies shall be positioned in a manner that will function as a noise barrier to the closest sensitive receivers.
- N-5:** All construction equipment shall be equipped with properly operating mufflers of a type recommended by the manufacturer.
- N-6:** Noisy construction equipment items shall be located as far as practicable from the surrounding residential properties and campus buildings.
- N-7:** The quietest construction equipment owned by the contractor shall be used. The use of electric powered equipment is typically quieter than diesel, and hydraulic powered equipment is quieter than pneumatic power. If compressors powered by diesel or gasoline engines are to be used, they shall be contained or have baffles to help abate noise levels.
- N-8:** All construction equipment shall be properly maintained. Poor maintenance of equipment typically causes excessive noise levels.
- N-9:** Noisy construction equipment shall be operated only when necessary, and shall be switched off when not in use.
- N-10:** To avoid potential building damage due to vibration from heavy construction equipment (bulldozers or drill rigs), the following measures shall be implemented when use of such equipment will take place within 11 feet of existing buildings:
- a. Qualified structural and geotechnical engineers shall review the peak vibration velocities estimated in this report, and determine if there are any

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

risks to the building, including possible risks from dynamic soil settlement induced by the vibration. If the structural or geotechnical engineers identify any potential risks, they shall take all necessary steps to protect the building including, but not limited to, photographing and/or videotaping the building in order to provide a record of the existing conditions before construction.

- b. If considered appropriate by a qualified structural engineer or geotechnical engineer, an engineer shall be on-site during the construction activities and perform such tests and observations as are necessary to ensure the structural stability of the building. This may include vibration measurements obtained inside or outside of the building.

N-11: An acoustical analysis shall be required for the future Technical Building to verify that noise from the facility (including auto maintenance and repair, aircraft engine testing, fans and other mechanical equipment) does not exceed a 1-hour L_{eq} of 65 dBA at noise-sensitive offsite receptors. The design features required to achieve this requirement may include one or more of the following elements, as verified by the acoustical study: noise barriers, locating activities inside the building, upgrading the design of the building to increase noise reduction, locating noisy activities away from the nearby homes, and providing silencers for air extraction fans.

N-12: An acoustical analysis shall be required for the future central plant to verify that the overall noise levels generated by the mechanical equipment (i.e., air conditioners, heat pumps, refrigeration equipment, etc.) do not exceed a 1-hour L_{eq} of 65 dBA at noise-sensitive offsite receptors. The design features required to achieve this requirement may include one or more of the following elements, as verified by the acoustical study: selecting quieter equipment, adding or upgrading silencers, improving the design of mechanical penthouses, raising the height of rooftop parapet walls, placing equipment inside a building, and/or installing screen walls around individual equipment items.

N-13: Bleacher seating on the east side of the football field may be closed-backed to provide a barrier to crowd noise. The backing material may extend at least 5 feet above the level of the highest seats in each bleacher so that a barrier is also provided for noise from the higher seating levels.

N-14: An acoustical study shall be required for Building 25 (Liberal Arts) to verify that the building has been properly designed to comply with the L_{dn} threshold of 45 dB for interior areas. The design features required to achieve the noise standard may include one or more of the following elements, as verified by the acoustical study: sound-rated windows and doors, orientation of windows relative to Mount Vernon Avenue, upgraded exterior wall and/or roof construction, insulation batts, and/or forced air ventilation.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

N-15: Mechanical ventilation shall be installed at all new SBVC buildings since the interior threshold of 45 dB L_{dn} is to be met with windows and doors closed.

3.10.3 Discussion

Construction. Construction noise impacts from the SBVC Master Plan, as amended, would remain similar to the noise impacts analyzed in the PEIR. Construction noise impacts would be temporary and less than significant. In compliance with the City Code requirements, construction of the project would occur only between 7:00 a.m. and 8:00 p.m. on Monday through Saturday. There would be no construction activities on Sundays or Federal holidays. Therefore, construction of the project is exempt from the City of San Bernardino noise ordinance standards and would not constitute a significant impact.

Operation. Operational noise impacts from the SBVC Master Plan, as amended, would remain similar to the noise impacts analyzed in the PEIR. Noise impacts associated with future sporting events would continue to be unfeasible to mitigate because, by their nature, these outdoor events are intended to attract large crowds. While the Master Plan, as amended, would increase the capacity of the stadium, it is noted that these noise sources already exist at SBVC and would continue with or without the Master Plan amendment. Mitigation Measure N-13 would provide some reduction in the noise levels associated with outdoor sporting events. However, even with this measure, noise from outdoor sporting events would continue to be significant and unavoidable.

3.11 Public Services

3.11.1 Environmental Setting

The public services for the SBVC Master Plan, as amended, are similar as those identified in the PEIR.

3.11.2 Prior Environmental Review

Previous Environmental Analysis

The public services impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.11-1 through 3.11-4.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts to public services.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Previously Identified Mitigation Measures

There were no significant impacts to public services associated with the SBVC Master Plan. Therefore, there were no mitigation measures identified in the PEIR.

3.11.3 Discussion

Impacts from the SBVC Master Plan, as amended, would be less than significant.

3.12 Traffic and Parking

3.12.1 Environmental Setting

The traffic and parking conditions for the SBVC Master Plan have changed since the completion of the PEIR (February 2010). Parking Structure 1, which was previously proposed for construction in Horizon 1, was eliminated from the SBVC Master Plan. Parking Structure 1 would have had a capacity of 1,250 spaces. Furthermore, the Master Plan previously included a 2,250 seat stadium scheduled to be built in Horizon 2. SBVC now proposes to increase the stadium's capacity to 4,000 seats. A parking assessment and a traffic study were prepared for this Supplemental EIR (Fehr & Peers 2012; 2011a; and 2011b). The results of the studies are summarized below.

3.12.2 Prior Environmental Review

Previous Environmental Analysis

Traffic and parking impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.12-1 through 3.12-26.*

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts on traffic and parking associated with the SBVC Master Plan with the incorporation of the proposed mitigation measures.

Previously Identified Mitigation Measures

The following mitigation measures were identified in the PEIR to reduce project impacts to less than significant:

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

- T-1:** The installation of a traffic signal at the unsignalized intersection of Inland Center Drive/I Street by 2020 will improve operations to an acceptable level of service. Given the close spacing of this intersection with the interchange improvements at the Inland Center Drive/I-215 interchange, a signal interconnect system shall be required to ensure that the corridor is coordinated. Also, because the impact occurs in 2030 and is a result of both project-related traffic and cumulative growth, the SBCCD shall be responsible for a fair-share contribution toward the improvement.
- T-2:** The installation of a traffic signal at these unsignalized intersections of Grant Avenue/K Street and Grant Avenue/I Street by 2030 would improve operations to an acceptable level of service. Since this occurs in a future scenario and is associated with both project traffic and cumulative growth assumptions, the SBCCD shall be required to make a fair-share contribution toward these improvements.

3.12.3 Discussion

3.12.3.1 SBVC Stadium Parking Assessment

The parking assessment concluded that there would be a parking deficit in Horizon 2 and 3 during peak demand period prior to stadium event usage when classes are in session as shown on Table 3.12-1 (Fehr & Peers 2011a). When the parking demand generated by the proposed stadium is applied to the available parking supply during class sessions, the deficit is further exacerbated as shown on Table 3.12-2. SBVC's parking supply would not support a 4,000 seat stadium holding events at the same time as classes are in session (Fehr & Peers 2011a). The Proposed Project would not be used at full capacity during the week when classes are in session.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.12-1 Parking Summary

Location	Horizon 1 – 2010	Horizon 2 – 2020	Horizon 3 – 2030
<i>Recommended Parking Supply – Peak</i>			
	2,433	2,744	3,110
<i>Recommended Parking Supply – Average</i>			
	1,862	2,100	2,380
<i>Planned Supply</i>			
<i>With Swap Meet and On Street Parking</i>			
Supply	2,600	2,473	2,767
Surplus/Deficit – Peak	167	-271	-343
Surplus/Deficit – Average	738	373	387
<i>Without Swap Meet and With On-Street Parking</i>			
Supply	2,160	2,033	2,327
Surplus/Deficit – Peak	-273	-711	-783
Surplus/Deficit – Average	298	-67	-53
<i>With Swap Meet and Without On-Street Parking</i>			
Supply	2,135	2,008	2,302
Surplus/Deficit – Peak	-298	-736	-808
Surplus/Deficit – Average	273	-92	-78
<i>Without Swap Meet and Without On-Street Parking</i>			
Supply	1,695	1,568	1,862
Surplus/Deficit – Peak	-738	-1,176	-1,248
Surplus/Deficit – Average	-167	-532	-518

Table 3.12-2 Stadium Parking

Year	Stadium Parking Demand	Available Parking Supply	Parking Surplus/Deficit
<i>Peak Non-Stadium Demand/Conservative Assessment</i>			
Horizon 1 – 2010	1,990	167	-1,823
Horizon 2 – 2020	1,990	-271	-2,261
Horizon 3 – 2030	1,990	-343	-2,333
<i>Peak Non-Stadium Demand/Average Assessment</i>			
Horizon 1 – 2010	1,724	167	-1,557
Horizon 2 – 2020	1,724	-271	-1,995
Horizon 3 – 2030	1,724	-343	-2,067
<i>Average Non-Stadium Demand/Conservative Assessment</i>			
Horizon 1 – 2010	1,990	738	-1,252
Horizon 2 – 2020	1,990	373	-1,617
Horizon 3 – 2030	1,990	387	-1,603
<i>Average Non-Stadium Demand/Average Assessment</i>			
Horizon 1 – 2010	1,724	738	-986
Horizon 2 – 2020	1,724	373	-1,351
Horizon 3 – 2030	1,724	387	-1,337

The parking assessment also analyzed the parking demands of the campus on the weekend to determine if SBVC could support large-scale weekend stadium events. Through hourly parking occupancy counts collected on the SBVC campus on October 8, 2011 from 11:00 a.m. – 3:00 p.m. it was found that the campus utilization rate for weekends would be approximately 0.05 spaces per student. Using the enrollment

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

projections from SBVC’s Master Plan, the recommended weekend parking supply for each horizon is identified in Table 3.12-3.

Table 3.12-3 Recommended Parking Supply - Peak Periods

Year	Projected Student Enrollment	Recommended Supply Rate	Recommended Supply
Existing Year (2011)	12,000	0.05	600
Horizon 2 – 2020	15,000	0.05	750
Horizon 3 – 2030	17,000	0.05	850

An inventory of parking spaces was collected on October 8, 2011 to confirm existing campus inventory. Additionally, the planned inventory for Horizon Years 2 and 3 from the June 2009 parking assessment was reviewed. This assessment included a 1,250 space parking structure on the southeastern part of the SBVC campus, on the site of Lot 8. Lot 8 was also planned to be reduced from 304 spaces to 76 spaces. Without the construction of the parking structure, it is assumed that Lot 8 would function as a 304 space surface lot. With the inclusion of on-street spaces adjacent to SBVC and Swap Meet overflow parking, there would be a total of 2,600 spaces in Horizon 1, 2,473 spaces in Horizon 2, and 2,767 spaces in Horizon 3. As shown in Table 3.12-4, the amount of available parking would decrease should on-street parking and/or Swap Meet parking become unavailable. Nonetheless, the campus has sufficient parking for non-stadium uses on weekends across all three Horizon years.

Table 3.12-4 Weekend Parking Demand and Supply without Stadium

Location	Existing (2011)	Horizon 2 – 2020	Horizon 3 – 2030
<i>Weekend Parking Demand</i>			
	600	750	850
<i>Planned Supply</i>			
With Swap Meet and On Street Parking			
Supply	2,705	2,633	2,927
Surplus/Deficit	2,105	1,883	2,077
Without Swap Meet and With On-Street Parking			
Supply	2,105	2,033	2,327
Surplus/Deficit	1,505	1,283	1,477
With Swap Meet and Without On-Street Parking			
Supply	2,240	2,168	2,462
Surplus/Deficit	1,640	1,418	1,612
Without Swap Meet and Without On-Street Parking			
Supply	1,640	1,568	1,862
Surplus/Deficit	1,040	818	1,012

To identify whether there is sufficient parking for a stadium event concurrent with class schedules, the parking demand generated by a 4,000 seat stadium was applied to the available surplus from non-stadium parking utilization. Table 3.12-5 identifies the results of this assessment with the assumption that both on-street and Swap Meet parking would remain available. As shown, there is adequate parking for trips being generated by the stadium on weekends, provided that users could access the parking at the Swap

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Meet and the parking along streets adjacent to SBVC (Fehr & Peers 2011b). Should this inventory become unavailable, then the college would not have sufficient parking to support the activities for a 4,000 seat stadium on weekends.

Table 3.12-5 Weekend Parking Demand with Stadium and Swap Meet and On-Street Parking Supply

Year	Stadium Parking Demand	Available Parking Supply	Parking Surplus/Deficit
Existing Year (2011)	1,793	2,105	312
Horizon 2 – 2020	1,793	1,883	90
Horizon 3 – 2030	1,793	2,077	284

3.12.3.2 SBVC Stadium Traffic Impact Study

The traffic study analyzed the Proposed Project’s potential impacts to vehicular circulation, transit, bicycle facilities, and the pedestrian network (Fehr & Peers 2012). Analysis scenarios included the existing operations and the two horizon years (Horizon 2 and 3) of the SBVC Master Plan that would include the Proposed Project.

Table 3.12-6 lists the intersections studied by the traffic study, if the Proposed Project would have an impact on an intersection, when that impact would occur, and the significance after mitigation.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.12-6 Traffic Impact Results Summary

Study Intersection	Impact?	Analysis Scenarios where Impact Occurs	Significance After Mitigation
W. Mill Street & S. Mt. Vernon Avenue	Yes	Horizon 2 (2020), Horizon 3 (2030)	Less than Significant
W. Mill Street & S. K Street	No		
Esperanza Street & S. Mt. Vernon Avenue	Yes	Existing plus Proposed Project, Horizon 2 (2020), Horizon 3 (2030)	Less than Significant
Esperanza Street & S. Eureka	No		
Esperanza Street & S. K Street	No		
Grant Avenue & S. Mt. Vernon	Yes	Horizon 3 (2030)	Less than Significant
Grant Avenue & Fairview Avenue	No		
Grant Avenue & S. K Street	Yes	Horizon 2 (2020), Horizon 3 (2030)	Less than Significant
Grant Avenue & S. J Street	No		
Grant Avenue & S. I Street	Yes	Horizon 2 (2020), Horizon 3 (2030)	Less than Significant
Inland Center Drive & S. I Street	Yes	Horizon 2 (2020), Horizon 3 (2030)	Less than Significant
Inland Center Drive & I-215 Southbound Ramps	Yes	Horizon 2 (2020), Horizon 3 (2030)	Less than Significant
Inland Center Drive & I-215 Northbound Ramps	Yes	Horizon 2 (2020), Horizon 3 (2030)	Less than Significant
Colton Avenue & Mt. Vernon Avenue	Yes	Existing plus Proposed Project, Horizon 2 (2020), Horizon 3 (2030)	Less than Significant

Vehicular Circulation

Existing plus Project Traffic Impacts

This section documents the Proposed Project’s impacts under the existing conditions. This scenario reflects the addition of the Proposed Project’s traffic to the existing traffic volumes. As all of the additional vehicle trips generated by the originally proposed 2,250-seat stadium would be built in tandem with the 1,750-seat expansion, an existing plus Proposed Project trips analysis is unrealistic. This analysis is included for informational purposes only.

Table 3.12-7 documents the level of service (LOS) results for the existing plus Proposed Project scenarios.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.12-7 Intersection Levels of Service - Existing with Proposed Project

Intersection	Control	Start of Event			End of Event		
		Delay	LOS	V/C	Delay	LOS	V/C
Mill St. & Mt. Vernon Ave. ²	Signalized	28.8	C	0.68	29	C	0.6
Mill St. & K St.	Signalized	12.8	B	0.33	12.5	B	0.27
Esperanza St. & Mt. Vernon Ave.	SSSC	31	D		53.3	F	
Esperanza St. & Eureka Ave.	SSSC	11.1	B		10.7	B	
Esperanza St. & K St.	SSSC	8.4	A		8.7	A	
Grant Ave. & Mt. Vernon Ave. & La Cadena Dr. ²	Signalized	16.6	B	0.39	16.3	B	0.36
Grant Ave. & Fairview Ave.	AWSC	7.6	A		7.6	A	
Grant Ave. & K St.	AWSC	20.1	C		11.3	B	
Grant Ave. & J St.	AWSC	13.9	B		14.8	B	
Grant Ave. & I St.	SSSC	15.2	C		12.5	B	
Inland Center Dr. & I St.	Signalized	6.1	A	0.39	14.1	B	0.62
Inland Center Dr. & I-215 Southbound Ramps	Signalized	18.8	B	0.39	18.9	B	0.46
Inland Center Dr. & I-215 Northbound Ramps	Signalized	19.1	B	0.42	20.6	C	0.48
Colton Ave. & Mt. Vernon Ave. ²	Signalized	42.3	D	0.47	42.9	D	0.49

Notes:
1 – Delay for intersections based on application of 2000 Highway Capacity Manual Methodology. Delay was calculated using Synchro 6.0 software. 2 - CMP intersection. 3 - V/C is not calculated for unsignalized intersections.
SSSC – side-street stop controlled
AWSC – all way stop controlled
Source: Fehr & Peers 2012.

A significant impact at a signalized intersection occurs when the intersection is operating at LOS C and the volume to capacity (V/C) ratio increases by 0.04 or more; LOS D and the V/C ratio increases by 0.02 or more; or LOS E/F and the V/C increases by 0.01 or more. Table 3.12-8 compares the V/C ratios for the no project and the Proposed Project scenarios to identify significant impacts at signalized intersections.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

**Table 3.12-8 Impacts for Signalized Intersections –
Existing with Proposed Project**

Intersection	LOS	Allowable ΔV/C	AM Peak Hour			PM Peak Hour		
			No Project	With Project	Δ V/C	No Project	With Project	Δ V/C
Mill St./Mt. Vernon Ave.	C	0.04	0.67	0.68	0.01	0.68	0.60	-0.07
Mill St./K St.	B	N & A	0.26	0.33	0.07	0.26	0.27	0.01
Grant Ave./Mt. Vernon Ave./La Cadena Dr.	B	N/A	0.34	0.39	0.07	0.32	0.36	0.04
Inland Center Dr. & I St.	A	N/A	0.32	0.39	0.07	0.32	0.62	0.30
Inland Center Dr./I-215 Southbound Ramps	B	N/A	0.36	0.39	0.03	0.36	0.46	0.10
Inland Center Dr./I-215 Northbound Ramps	B	N/A	0.36	0.42	0.06	0.36	0.48	0.12
Colton Ave./Mt. Vernon Ave.	D	0.02	0.46	0.47	0.01	0.46	0.49	0.03

Notes:
1 – Delay for signalized intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
BOLD represents significantly impacted location.
Source: Fehr & Peers 2012

A significant impact would occur at the following signalized intersection under the existing with the Proposed Project scenario:

- ◆ Mount Vernon Avenue & Colton Avenue (end of event).

A significant impact at an unsignalized intersection occurs when the intersection is operating below LOS D, meets signal warrants, and the project adds more than 10 trips to the intersection. Table 3.12-9 documents whether unsignalized intersections meet significant impact criteria. As shown in these tables, all intersections are operating at LOS D or better in both scenarios.

**Table 3.12-9 Impacts for Unsignalized Intersection –
Existing with Proposed Project**

Intersection	Control	AM Peak Hour			PM Peak Hour		
		LOS E or F?	>10 Trips	Meets Signal Warrants	LOS E or F?	>10 Trips	Meets Signal Warrants
Esperanza St./Mt. Vernon Ave.	SSSC	No			Yes	Yes	Yes
Esperanza St./Eureka Ave.	SSSC	No			No		
Esperanza St./K St.	SSSC	No			No		
Grant Ave./Fairview Ave.	AWSC	No			No		
Grant Ave./K St.	AWSC	No			No		
Grant Ave./J St.	AWSC	No			No		
Grant Ave./I St.	SSSC	No			No		

Notes: **BOLD** represents significantly impacted location.
SSSC – side-street stop controlled
AWSC – all way stop controlled
Source: Fehr & Peers 2012

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

A significant impact would occur at the following unsignalized intersection under the existing with Proposed Project scenario:

- ◆ Esperanza Street & Mount Vernon Avenue (end of event).

As shown on Tables 3.12-8 and 3.12-9, the Proposed Project is expected to result in a significant impact to area intersections during existing conditions. With implementation of new Mitigation Measure T-3, impacts would be less than significant.

Horizon 2 (2020) Traffic Impacts

This section documents the Proposed Project’s impacts during Horizon 2 of the SBVC Master Plan development, targeted for 2020.

To identify growth along project roadways, the Southern California Association of Governments (SCAG) travel demand forecast (TDF) model buildout volumes in San Bernardino was compared with the SCAG TDF model base year volumes. A growth rate of approximately 2 percent per year, or approximately percent ambient growth between the base year and Horizon 2 was projected. Traffic from student enrollment increases and the 2,250-seat stadium were applied to the 2020 base volumes.

Table 3.12-10 summarizes the LOS results for the Horizon 2 (2020) No Project scenario.

Table 3.12-10 Intersection Levels of Service - Horizon 2 (2020) No Project

Intersection	Control	AM Peak Hour			PM Peak Hour		
		Delay ¹	LOS	V/C	Delay	LOS	V/C
Mill St./Mt. Vernon Ave. ²	Signalized	34	C	0.76	34.0	C	0.72
Mill St./K St.	Signalized	13.3	B	0.38	12.6	B	0.34
Esperanza St./Mt. Vernon Ave.	SSSC	>50	F		>50	F	
Esperanza St./Eureka Ave.	SSSC	11.5	B		11.0	B	
Esperanza St./K St.	SSSC	8.8	A		9.1	A	
Grant Ave./Mt. Vernon Ave./ La Cadena Dr. ²	Signalized	18.5	B	0.49	18.7	B	0.44
Grant Ave./Fairview Ave.	AWSC	8.4	A		8.4	A	
Grant Ave./K St.	AWSC	>50	F		16.9	C	
Grant Ave./J St.	AWSC	44.0	E		47.2	E	
Grant Ave./I St.	SSSC	>50	F		18.8	C	
Inland Center Dr./I St.	Signalized	6.7	A	0.49	37.5	D	0.81
Inland Center Dr./I-215 Southbound Ramps	Signalized	20.3	C	0.53	20.1	C	0.59
Inland Center Dr./I-215 Northbound Ramps	Signalized	21.5	C	0.54	28.4	C	0.62
Colton Ave./Mt. Vernon Ave. ²	Signalized	45.2	D	0.56	46.7	D	0.59

Notes:
1 – Delay for intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software. 2 – CMP intersection. 3 – V/C is not calculated for unsignalized intersections.
BOLD indicates unacceptable operations.
SSSC – side-street stop controlled
AWSC – all way stop controlled
Source: Fehr & Peers 2012.

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

In the No Project scenario, the following intersections would operate at an unacceptable LOS:

- ◆ Esperanza Street & Mt. Vernon Avenue (start of event and end of event);
- ◆ Grant Avenue & K Street (start of event);
- ◆ Grant Avenue & J Street (start of event and end of event); and
- ◆ Grant Avenue & I Street (start of event)

Table 3.12-11 documents the LOS results for the Horizon 2 (2020) with the Proposed Project scenario.

Table 3.12-11 Intersection Levels of Service - Horizon 2 (2020)
with Proposed Project

Intersection	Control	AM Peak Hour			PM Peak Hour		
		Delay ¹	LOS	V/C	Delay	LOS	V/C
Mill St./Mt. Vernon Ave. ²	Signalized	36.4	D	0.80	35.7	D	0.72
Mill St./K St.	Signalized	14.8	B	0.42	13.5	B	0.36
Esperanza St./Mt. Vernon Ave.	SSSC	>50	F		>50	F	
Esperanza St./Eureka Ave.	SSSC	13.4	B		12.4	B	
Esperanza St./K St.	SSSC	9.6	A		10.3	B	
Grant Ave./Mt. Vernon Ave./ La Cadena Dr. ²	Signalized	23.4	C	0.57	22.1	C	0.07
Grant Ave./Fairview Ave.	AWSC	9.7	A		9.8	A	
Grant Ave./K St.	AWSC	>50	F		>50	F	
Grant Ave./J St.	AWSC	>50	F		>50	F	
Grant Ave./I St.	SSSC	>50	F		>50	F	
Inland Center Dr./I St.	Signalized	7.4	A	0.76	>80	F	1.10
Inland Center Dr./I-215 Southbound Ramps	Signalized	25.7	C	0.69	22.2	C	0.70
Inland Center Dr./I-215 Northbound Ramps	Signalized	33.8	C	0.69	75.6	E	0.76
Colton Ave./Mt. Vernon Ave. ²	Signalized	46.4	D	0.60	51.1	D	0.61

Notes:
1 – Delay for intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
2 – CMP intersection
3 – V/C is not calculated for unsignalized intersections.
BOLD indicates unacceptable operations.
SSSC – side-street stop controlled
AWSC – all way stop controlled
Source: Fehr & Peers 2012

With the Proposed Project scenario, the following intersections would operate at an unacceptable LOS:

- ◆ Esperanza Street & Mt. Vernon Avenue(start of event and end of event);
- ◆ Grant Avenue & K Street (start of event and end of event);
- ◆ Grant Avenue & J Street (start of event and end of event);
- ◆ Grant Avenue & I Street (start of event and end of event);
- ◆ Inland Center Drive & I Street (end of event and end of event); and
- ◆ Inland Center Drive & I-215 Northbound Ramps (end of event)

DRAFT
SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

A significant impact at a signalized intersection occurs when the intersection is operating at LOS C and the V/C ratio increases by 0.04 or more; LOS D and the V/C ratio increases by 0.02 or more; or LOS E/F and the V/C increases by 0.01 or more. Table 3.12-12 compares the V/C ratios for the No Project and with the Proposed Project scenarios to identify significant impacts at signalized intersections.

Table 3.12-12 Impacts for Signalized Intersections - Horizon 2 (2020)

Intersection	LOS AM(PM)	Allowable Δ V/C AM(PM)	AM Peak Hour			PM Peak Hour		
			No Project	With Project	Δ V/C	No Project	With Project	Δ V/C
Mill St./Mt. Vernon Ave.	C(C)	0.04(0.04)	0.76	0.8	0.04	0.72	0.72	0.00
Mill St./K St.	B(B)	N/A(N/A)	0.38	0.42	0.04	0.34	0.36	0.02
Grant Ave./Mt. Vernon Ave./La Cadena Dr.	B(B)	N/A(N/A)	0.49	0.57	0.08	0.44	0.51	0.07
Inland Center Dr. & I St.	A(D)	N/A(0.02)	0.49	0.76	0.27	0.81	1.10	0.29
Inland Center Dr./I-215 Southbound Ramps	C(C)	0.04(0.04)	0.53	0.69	0.16	0.59	0.70	0.11
Inland Center Dr./I-215 Northbound Ramps	C(C)	0.04(0.04)	0.54	0.69	0.15	0.62	0.76	0.14
Colton Ave./Mt. Vernon Ave.	D(D)	0.02(0.02)	0.56	0.60	.04	0.57	0.61	0.04

Notes:
1 – Delay for signalized intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
BOLD represents significantly impacted location.
Source: Fehr & Peers 2012

A significant impact would occur at the following signalized intersections in Horizon 2:

- ◆ Inland Center Drive & I Street (end of event);
- ◆ Inland Center Drive & I-215 Southbound Ramps (start of event and end of event);
- ◆ Inland Center Drive & I-215 Northbound Ramps (start of event and end of event); and
- ◆ Mount Vernon Ave & Colton Avenue (start of event and end of event).

A significant impact at an unsignalized intersection occurs when the intersection is operating below LOS D, meets signal warrants, and the project adds more than 10 trips to the intersection. Table 3.12-13 documents whether unsignalized intersections meet significant impact criteria.

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SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.12-13 Impacts for Unsignalized Intersections - Horizon 2 (2020)

Intersection	Control	AM Peak Hour			PM Peak Hour		
		LOS E or F?	>10 Trips	Meets Signal Warrants	LOS E or F?	>10 Trips	Meets Signal Warrants
Esperanza St./Mt. Vernon Ave.	SSSC	Yes	Yes	Yes	Yes	Yes	Yes
Esperanza St./Eureka Ave.	SSSC	No			No		
Esperanza St./K St.	SSSC	No			No		
Grant Ave./Fairview Ave.	AWSC	No			No		
Grant Ave./K St.	AWSC	Yes	Yes	Yes	Yes	Yes	Yes
Grant Ave./J St.	AWSC	Yes	Yes	No	Yes	Yes	No
Grant Ave./I St.	SSSC	Yes	Yes	Yes	Yes	Yes	Yes

Notes:
BOLD represents significantly impacted location.
SSSC – side-street stop controlled
AWSC – all way stop controlled
Source: Fehr & Peers 2012

A significant impact would occur at the following unsignalized intersections in Horizon 2:

- ◆ Esperanza Street & Mt. Vernon Avenue;
- ◆ Grant Avenue & K Street; and
- ◆ Grant Avenue & I Street.

As shown on Tables 3.12-12 and 3.12-13, the Proposed Project is expected to result in a significant impact to area intersections at the end of Horizon 2. Implementation of new Mitigation Measure T-3 would reduce the Proposed Project’s impacts to a less than significant level.

Horizon 3 (2030) Traffic Impacts

To identify growth along project roadways, the SCAG TDF model buildout volumes in San Bernardino were compared with the SCAG TDF model base year volumes. Based on this information, a growth rate of approximately 2 percent per year, or approximately 43 percent ambient growth between the base year and Horizon 3 was projected. Additionally, traffic from student enrollment increases and the 2,250-seat stadium were applied to the 2030 base volumes.

Table 3.12-14 documents the LOS results for the Horizon 3 (2030) No Project scenario.

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SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.12-14 Intersection Levels of Service - Horizon 3 (2030) No Project

Intersection	Control	AM Peak Hour			PM Peak Hour		
		Delay ¹	LOS	V/C	Delay	LOS	V/C
Mill St./Mt. Vernon Ave. ²	Signalized	43.6	D	0.83	44.2	D	0.83
Mill St./K St.	Signalized	13.1	B	0.41	12.3	B	0.38
Esperanza St./Mt. Vernon Ave.	SSSC	>50	F		>50	F	
Esperanza St./Eureka Ave.	SSSC	12.2	B		11.7	B	
Esperanza St./K St.	SSSC	8.9	A		9.3	A	
Grant Ave./Mt. Vernon Ave./ La Cadena Dr. ²	Signalized	22.3	C	0.60	21.4	C	0.54
Grant Ave./Fairview Ave.	AWSC	8.9	A		9.1	A	
Grant Ave./K St.	AWSC	>50	F		23.9	C	
Grant Ave./J St.	AWSC	>50	F		>50	F	
Grant Ave./I St.	SSSC	>50	F		26.3	D	
Inland Center Dr./I St.	Signalized	8.1	A	0.56	60.0	E	0.92
Inland Center Dr./I-215 Southbound Ramps	Signalized	28.9	C	0.66	22.5	C	0.71
Inland Center Dr./I-215 Northbound Ramps	Signalized	24.5	C	0.64	50.7	D	0.76
Colton Ave./Mt. Vernon Ave. ²	Signalized	52.8	D	0.66	59.2	E	0.68

Notes:
1 – Delay for intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
2 – CMP intersection
3 – V/C is not calculated for unsignalized intersections.
4 – OFL = overflow; the delay at the worst approach is very long, to the point that the analysis methodology or software is unable to calculate a specific delay
BOLD indicates unacceptable operations.
SSSC – side-street stop controlled
AWSC – all way stop controlled
Source: Fehr & Peers 2012

In the No Project scenario, the following intersections operate at an unacceptable LOS during one or more peak hours:

- ◆ Esperanza Street & Mt. Vernon Avenue (start and end of event);
- ◆ Grant Avenue & K Street (start of event);
- ◆ Grant Avenue & J Street (start of event and end of event);
- ◆ Grant Avenue & I Street (start of event);
- ◆ Inland Center Drive & I Street (end of event);
- ◆ Inland Center Drive & I-215 Northbound Ramps (end of event); and
- ◆ Colton Avenue & Mt. Vernon Avenue (start of event and end of event).

Table 3.12-15 documents the LOS results for the Horizon 3 (2030) with the Proposed Project scenario.

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SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.12-15 Intersection Levels of Service - Horizon 3 (2030)
with Proposed Project

Intersection	Control	AM Peak Hour			PM Peak Hour		
		Delay ¹	LOS	V/C	Delay	LOS	V/C
Mill St./Mt. Vernon Ave. ²	Signalized	55.2	E	0.93	48.7	D	0.86
Mill St./K St.	Signalized	13.8	B	0.44	12.9	B	0.41
Esperanza St./Mt. Vernon Ave.	SSSC	>50	F		>50	F	
Esperanza St./Eureka Ave.	SSSC	12.8	B		12.2	B	
Esperanza St./K St.	SSSC	9.2	A		9.7	A	
Grant Ave./Mt. Vernon Ave./ La Cadena Dr. ²	Signalized	30.0	C	0.68	30.2	C	0.64
Grant Ave./Fairview Ave.	AWSC	10.5	B		10.8	B	
Grant Ave./K St.	AWSC	>50	F		>50	F	
Grant Ave./J St.	AWSC	>50	F		>50	F	
Grant Ave./I St.	SSSC	>50	F		>50	F	
Inland Center Dr./I St.	Signalized	9.1	A	0.79	>80	F	1.18
Inland Center Dr./I-215 Southbound Ramps	Signalized	41.5	D	0.79	25.0	C	0.81
Inland Center Dr./I-215 Northbound Ramps	Signalized	40.9	D	0.78	>80	F	0.86
Colton Ave./Mt. Vernon Ave. ²	Signalized	56.9	E	0.74	74.1	E	0.72

Notes:
1 – Delay for intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
2 – CMP intersection
3 – V/C is not calculated for unsignalized intersections.
BOLD indicates unacceptable operations.
SSSC – side-street stop controlled
AWSC – all way stop controlled
Source: Fehr & Peers 2012

With the Proposed Project scenario, the following intersections would operate at an unacceptable LOS during one or more peak hours:

- ◆ Mill Street & Mt. Vernon Avenue (start of event);
- ◆ Esperanza Street & Mt. Vernon Avenue (start of event and end of event);
- ◆ Grant Avenue & K Street (start of event and end of event);
- ◆ Grant Avenue & J Street (start of event and end of event);
- ◆ Grant Avenue & I Street (start of event and end of event);
- ◆ Inland Center Drive & I Street (end of event);
- ◆ Inland Center Drive & I-215 Northbound Ramps (end of event); and
- ◆ Colton Avenue & Mt. Vernon Avenue (start of event and end of event).

A significant impact at a signalized intersection occurs when the intersection is operating at LOS C and the V/C ratio increases by 0.04 or more; LOS D and the V/C ratio increases by 0.02 or more; or LOS E/F and the V/C increases by 0.01 or more. Table 3.12-16 compares the V/C ratios for the No Project and with Project scenarios to identify significant impacts at signalized intersections.

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SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.12-16 Impacts for Signalized Intersections - Horizon 3 (2030)

Intersection	LOS AM(PM)	Allowable ΔV/C AM(PM)	AM Peak Hour			PM Peak Hour		
			No Project	With Project	Δ V/C	No Project	With Project	Δ V/C
Mill St./Mt. Vernon Ave.	D(D)	0.02(0.02)	0.83	0.93	0.1	0.83	0.86	0.03
Mill St./K St.	B(B)	N/A(N/A)	0.41	0.44	0.03	0.38	0.41	0.03
Grant Ave./Mt. Vernon Ave./La Cadena Dr.	C(C)	0.04(0.04)	0.60	0.68	0.08	0.54	0.64	0.10
Inland Center Dr. & I St.	A(E)	N/A(0.01)	0.56	0.79	0.23	0.92	1.18	0.26
Inland Center Dr./I-215 Southbound Ramps	C(C)	0.04(0.04)	0.66	0.79	0.13	.71	0.81	0.10
Inland Center Dr./I-215 Northbound Ramps	C(D)	0.04(0.02)	0.64	0.78	0.14	0.76	0.86	0.10
Colton Ave./Mt. Vernon Ave.	D(E)	0.02(0.01)	0.66	0.74	0.08	0.68	0.72	0.04

Notes:
1 – Delay for signalized intersections based on application of *2000 Highway Capacity Manual* Methodology. Delay was calculated using Synchro 6.0 software.
BOLD represents significantly impacted location.
Source: Fehr & Peers 2012

A significant impact would occur at the following signalized intersections in Horizon 3:

- ◆ Mill Street & Mt. Vernon Avenue (start of event and end of event);
- ◆ La Cadena Drive & Grant Avenue & Mt. Vernon Avenue (start of event and end of event);
- ◆ Inland Center Drive & I Street (end of event);
- ◆ Inland Center Drive & I-215 Southbound Ramps (start of event and end of event);
- ◆ Inland Center Drive & I-215 Northbound Ramps (start of event and end of event); and
- ◆ Mount Vernon Ave & Colton Avenue (start of event and end of event).

A significant impact at an unsignalized intersection occurs when the intersection is operating below LOS D, meets signal warrants, and the project adds more than 10 trips to the intersection. Table 3.12-17 documents whether unsignalized intersections meet significant impact criteria.

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SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Table 3.12-17 Impacts for Unsignalized Intersections - Horizon 3 (2030)

Intersection	Control	AM Peak Hour			PM Peak Hour		
		LOS E or F?	>10 Trips	Meets Signal Warrants	LOS E or F?	>10 Trips	Meets Signal Warrants
Esperanza St./Mt. Vernon Ave.	SSSC	Yes	Yes	Yes	Yes	Yes	Yes
Esperanza St./Eureka Ave.	SSSC	No			No		
Esperanza St./K St.	SSSC	No			No		
Grant Ave./Fairview Ave.	AWSC	No			No		
Grant Ave./K St.	AWSC	Yes	Yes	Yes	Yes	Yes	Yes
Grant Ave./J St.	AWSC	Yes	Yes	No	Yes	Yes	No
Grant Ave./I St.	SSSC	Yes	Yes	Yes	Yes	Yes	Yes

Notes:
BOLD represents significantly impacted location.
SSSC – side-street stop controlled
AWSC – all way stop controlled
Source: Fehr & Peers 2012

A significant impact would occur at the following unsignalized intersections in Horizon 3:

- ◆ Esperanza Street & Mt. Vernon Avenue;
- ◆ Grant Avenue & K Street; and
- ◆ Grant Avenue & I Street.

As shown on Tables 3.12-16 and 3.12-17, the Proposed Project is expected to result in a significant impact to area intersections at the end of Horizon 3. Implementation of new Mitigation Measure T-3 would reduce the Proposed Project’s impacts to a less than significant level.

Transit System Impacts

Currently there are transit lines with stops along Mt. Vernon Avenue and Mill Street. The Proposed Project would not disrupt existing transit services or facilities on either Mt. Vernon Avenue or Mill Street. Therefore, the Proposed Project would not impact or affect existing transit service; the impact is less than significant.

Bicycle Network Impacts

There is a Class I bicycle trail along Inland Center Drive/Colton Avenue near the project site. Because this facility is off-street, it would not be impacted by any increase in project traffic along this roadway. Additionally, there is a Class III bicycle route along Mt. Vernon Avenue. As the Master Plan is implemented, the bicycle route would not be affected. Impacts are less than significant.

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SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Pedestrian Network Impacts

There are existing sidewalks along Mill Street, Esperanza Street, Mt. Vernon Avenue, Grant Avenue, K Street, I Street, and Colton Avenue/Inland Center Drive. Additionally, most intersections have one or more crosswalks, and all signalized intersections have pedestrian phases. With the addition of project traffic, existing pedestrian facilities would remain intact. Therefore, the Proposed Project would have less than significant impacts and no mitigation is required.

3.12.4 Mitigation Measures

T-3: For events in excess of 2,250 to 4,000 seats, the SBCCD shall prepare a traffic management plan (TMP) that shall include traffic control officers (TCOs) placed at key locations in the project vicinity on days when large events are being held. The TCOs will direct vehicles along the most direct route from a key entrance point to the project parking lots. For example, one TCO will direct the vehicles entering the project area from the I-215 freeway ramps at Inland Center Drive to the southern parking structure, while another will direct vehicles entering the project area from the north along Mount Vernon to the Swap Meet parking lots. By coupling TCOs with additional directional signage along the key routes, project traffic will be limited to a few routes with ample parking and vehicle delay at the impacted intersections will be reduced. SBCCD shall coordinate with the City of San Bernardino to contract TCOs and get approval for directional signage.

3.13 Utilities

3.13.1 Environmental Setting

The utilities for the SBVC Master Plan, as amended, are the same as those identified in the PEIR.

3.13.2 Prior Environmental Review

Previous Environmental Analysis

The public services and utilities impacts associated with the SBVC Master Plan were evaluated in the following documents:

- ◆ *San Bernardino Valley College Master Plan Final Program Environmental Impact Report (February 2010); and*
- ◆ *San Bernardino Valley College Master Plan Draft Program Environmental Impact Report (September 2009) – pages 3.13-1 through 3.13-8.*

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SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Previously Identified Significant Project Impacts

The PEIR did not identify any significant project impacts on utilities with the incorporation of the proposed mitigation measures.

Previously Identified Mitigation Measures

With the implementation of mitigation measures as described in other sections of the PEIR, impacts from the on-campus installation of utilities were found to be less than significant.

3.13.3 Discussion

The SBVC Master Plan, as amended, includes an increase in the stadium's capacity from 2,250 seats to 4,000 seats. Concessions, restroom facilities, and team rooms would surround the facility at the north and south of the stadium bleachers. No substantial increases in water, sewer, solid waste, electrical, or natural gas demand are expected, as the new stadium would replace the existing stadium. Impacts would be less than significant.

3.14 Summary

Implementation of the SBVC Master Plan, as amended, would result in new significant transportation impacts. The Proposed Project is expected to result in significant impacts to area intersections for existing conditions, Horizon 2 conditions, and Horizon 3 conditions. Implementation of new Mitigation Measure T-3 would reduce significant transportation impacts to a less than significant level.

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SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

SECTION 4.0

REFERENCES

Fehr & Peers

2012 *San Bernardino Valley College Stadium Expansion Traffic Impact Study*.
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2011a *San Bernardino Valley College Stadium Assessment, Task 1*. September
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SAN BERNARDINO VALLEY COLLEGE MASTER PLAN – STADIUM EXPANSION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

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SECTION 5.0

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