

## ***Washington Boulevard/Andora Bridge Improvement Project AQCA***



# **Air Quality Conformity Analysis**

Washington Boulevard, City of Roseville, Placer County

03-PLA-25501

CML 5182 (074)

**June 2017**



The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 U.S. Code 327.



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**June 2017**

Prepared By:



Date:

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## Acronyms and Abbreviations

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AADT	Average annual daily traffic
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
City	City of Roseville
CMP	corrugated metal pipes
CO	carbon monoxide
CO Protocol	California Project-Level Carbon Monoxide Protocol†
CY	Cubic yards
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration
IAC	Interagency Consultation
LOS	level of service
mph	miles per hour
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO <sub>2</sub>	nitrogen dioxide
O <sub>3</sub>	ozone
PLCG	Project Level Conformity Group
PM	particulate matter
POAQC	Projects of Air Quality Concern
ppm	parts per million
Proposed Project	Washington Boulevard/Andora Underpass Improvement Project
RTP	Regional Transportation Plans
SACOG	Sacramento Area Council of Governments
SCS	Sustainable Communities Strategy
SER	Standard Environmental Reference
SIP	state implementation plan
SR	State Route
SVAB	Sacramento Valley Air Basin
SWPPP	Storm Water Pollution Prevention Plan
TCMs	Transportation Control Measures
TIP	transportation improvement program
USC	U.S. Code
UPRR	Union Pacific Railroad

# **Chapter 1** Introduction and Project Description

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This Air Quality Conformity Analysis contains the information that is required to make a project-level air quality conformity determination for the Washington Boulevard/Andora Bridge Improvement Project. This analysis has been prepared to be consistent with information published by Federal Highway Administration (FHWA) related to Project-Level Conformity Analysis, the Standard Environmental Reference (SER) Air Quality Conformity Findings Checklist (included as Appendix A), applicable U.S. Environmental Protection Agency (EPA) project-level analysis guidance, the Transportation Conformity Regulations at 40 Code of Federal Regulations (CFR) 93 Subpart A, and Section 176(c) of the federal Clean Air Act (42 U.S. Code [USC 7506] (c)).

This analysis only addresses the conformity requirements of the Federal Clean Air Act. It does not address general air quality analysis or studies conducted for the National Environmental Policy Act (NEPA) or the California Environmental Quality Act (CEQA), and only addresses pollutants for which the project area is designated nonattainment, or attainment with an approved maintenance state implementation plan (SIP), by EPA.

This report is intended to provide all information needed by FHWA to make a project-level conformity determination for a project that falls under 23 USC 327 NEPA Assignment to California Department of Transportation (Caltrans); or to support a full project-level conformity determination by Caltrans under 23 CFR 326 NEPA Assignment for projects that require a project-level conformity determination (including regionally significant projects as defined in 40 CFR 93.101), and that are categorically excluded from NEPA analysis under 23 CFR 771.117(c)(22) or 23 CFR 771.117(c)(23).

## **1.1 Project Description**

The City of Roseville (City) is proposing to improve a 0.85-mile section of Washington Boulevard as part of the proposed Washington Boulevard/Andora Bridge Improvement Project (proposed project) (Figure 1). The proposed project involves widening a two-lane section of Washington Boulevard between Sawtell Road and Pleasant Grove Boulevard to four lanes and replacing the existing 100-year-old Union Pacific Railroad (UPRR) bridge (referred to in this document as the Andora Underpass or Andora Bridge) on Washington Boulevard. Caltrans is the lead agency under both NEPA and the City is the lead agency under CEQA. The proposed project is included in the Sacramento Area Council of Governments' (SACOG) 2016 *Metropolitan Transportation Plan/Sustainable Communities Strategy* (MTP/SCS) (Sacramento

Area Council of Governments 2016a). Engineering for the project is also programmed in the SACOG 2017-2020 Metropolitan Transportation Improvement Program (MTIP) (Sacramento Area Council of Governments 2016b).

## 1.2 Project Location

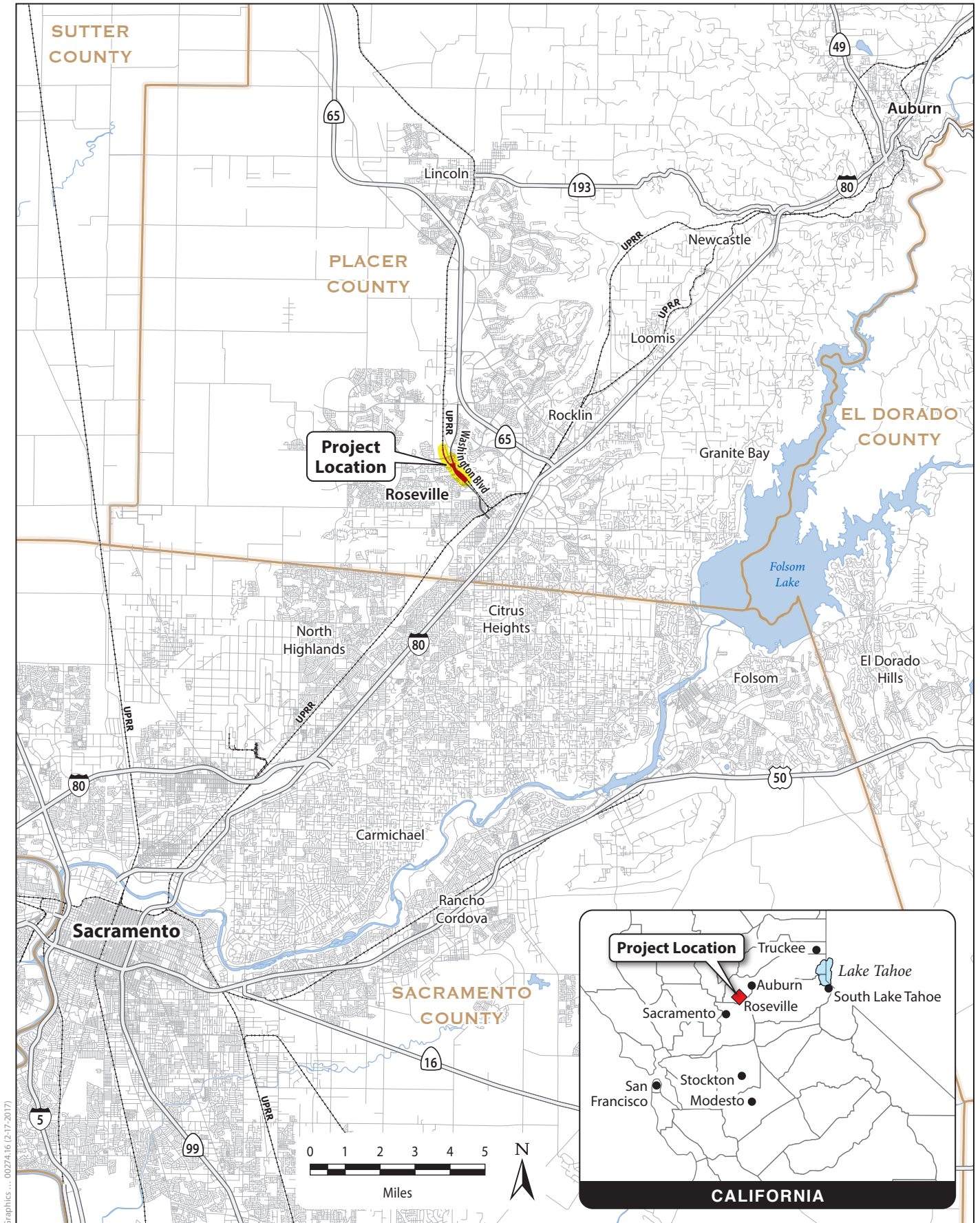
The proposed project is in the City of Roseville, Placer County, along an approximately 0.85-mile segment of Washington Boulevard between Sawtell Road and Pleasant Grove Boulevard (Figure 2). At the southern end of the project area, the UPRR line runs along the east side of Washington Boulevard, crosses over the road just south of the South Branch of Pleasant Grove Creek, and continues along the west side of the road toward Pleasant Grove Boulevard. The southern end of the project area is surrounded by commercial development to the east and residential area to the west. The Diamond Oaks and Kaseberg-Kingswood neighborhoods are adjacent to the central and northern portions of the project area. City general open space and preserve open space lands occupy the area immediately west of the Andora Underpass. Residential development is present on both sides of Washington Boulevard between the Andora Underpass and Pleasant Grove Boulevard. An existing Class 1 (i.e., off street) bike path along the east side of Washington Boulevard connects Diamond Oaks Road to Derek Place.

## 1.3 Project Background

Washington Boulevard generally runs north-south and begins in downtown Roseville, at its junction with Oak Street, and ends at State Route (SR) 65. The boulevard provides an important local connection between downtown Roseville and North Central Roseville, Northwest Roseville, and North Industrial through its connections with other major local thoroughfares, including Foothills Boulevard, Pleasant Grove Boulevard, Roseville Parkway, Industrial Boulevard, and Blue Oaks Boulevard. Washington Boulevard provides a vital economic link from residential areas to shopping and employment centers in downtown Roseville.

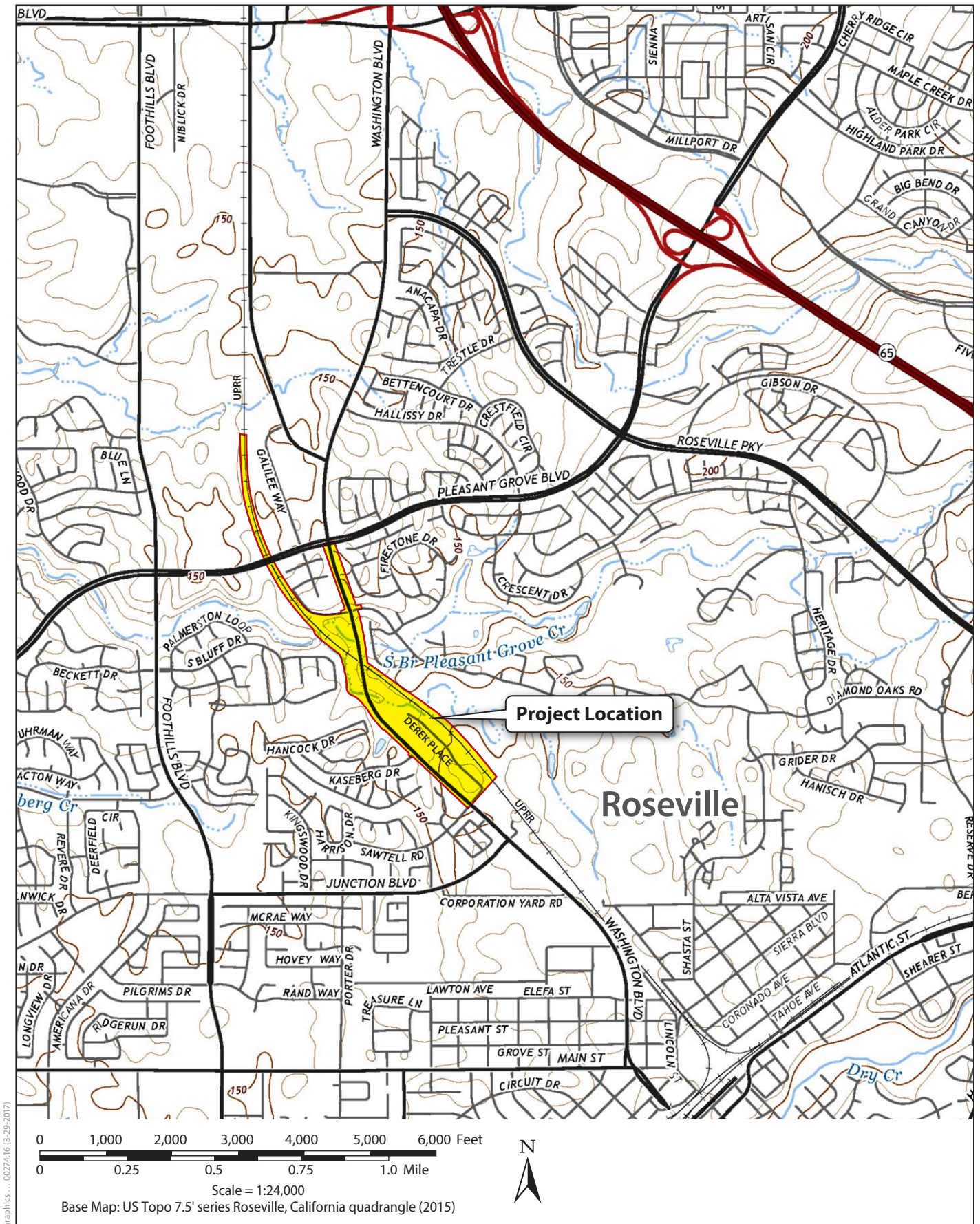
Washington Boulevard was constructed as a two-lane road as part of the State Highway System approximately 100 years ago. The City decided to widen Washington Boulevard to improve the level of service (LOS) and other traffic performance measures and to accommodate increasing traffic volumes. The City elected to delay improvements to the 0.85-mile segment of Washington Boulevard associated with the proposed project because of the extensive coordination necessary with UPRR and the costs associated with widening the Andora Underpass.

The City of Roseville's Transportation System 2035 Capital Improvement Program (CIP) identifies improvements to Washington Boulevard, including the widening of Washington



**Figure 1**  
**Regional Location**





**Figure 2**  
**Project Location**

Boulevard between Sawtell Road and Pleasant Grove Boulevard, to improve traffic circulation and pedestrian traffic through the area. Approximately 18,000 vehicles per day presently travel through this segment, and the road improvements would enhance accessibility for motorists, pedestrians, and cyclists along Washington Boulevard and nearby intersections. To enable roadway widening at the narrow Andora Underpass, the existing structure must be removed and replaced. The Andora Underpass would need to remain open and accessible to rail traffic during project construction because approximately 25 trains travel over it each day.

## **1.4 Purpose and Need**

### **1.4.1 Purpose**

The purpose of the proposed project is to improve existing and future traffic; enhance access and safety for motorists, pedestrians, and cyclists; and meet railroad clearance requirements. The proposed project would also provide better connectivity between the existing two-lane, 0.85-mile segment of Washington Boulevard and the existing four-lane segments of Washington Boulevard and provide an evacuation route in case of an emergency. The improvements would also offer a better and more continuous route for pedestrians and bicyclists, who are currently forced to detour off Washington Boulevard onto Derek Place.

### **1.4.2 Need**

The project is needed because recurring morning and evening peak-period demand exceeds the current design capacity of Washington Boulevard, creating traffic operation and safety issues for motorists, pedestrians, and cyclists. These issues result in moderate delays and wasted fuel, which are expected to be exacerbated by anticipated increases in traffic from future population and employment growth.

## **1.5 Project Alternatives**

Two Build Alternatives (Alternative 1 and Alternative 2) and a No Project Alternative are being considered for this project. The assessment of alternatives is based on design year (2035) conditions.

After extensive engineering and traffic analysis efforts, and review and screening of design concepts, two Build Alternatives that would meet the project's purpose and need and objectives surfaced for consideration and analysis. Alternatives 1 and 2 involve the same project

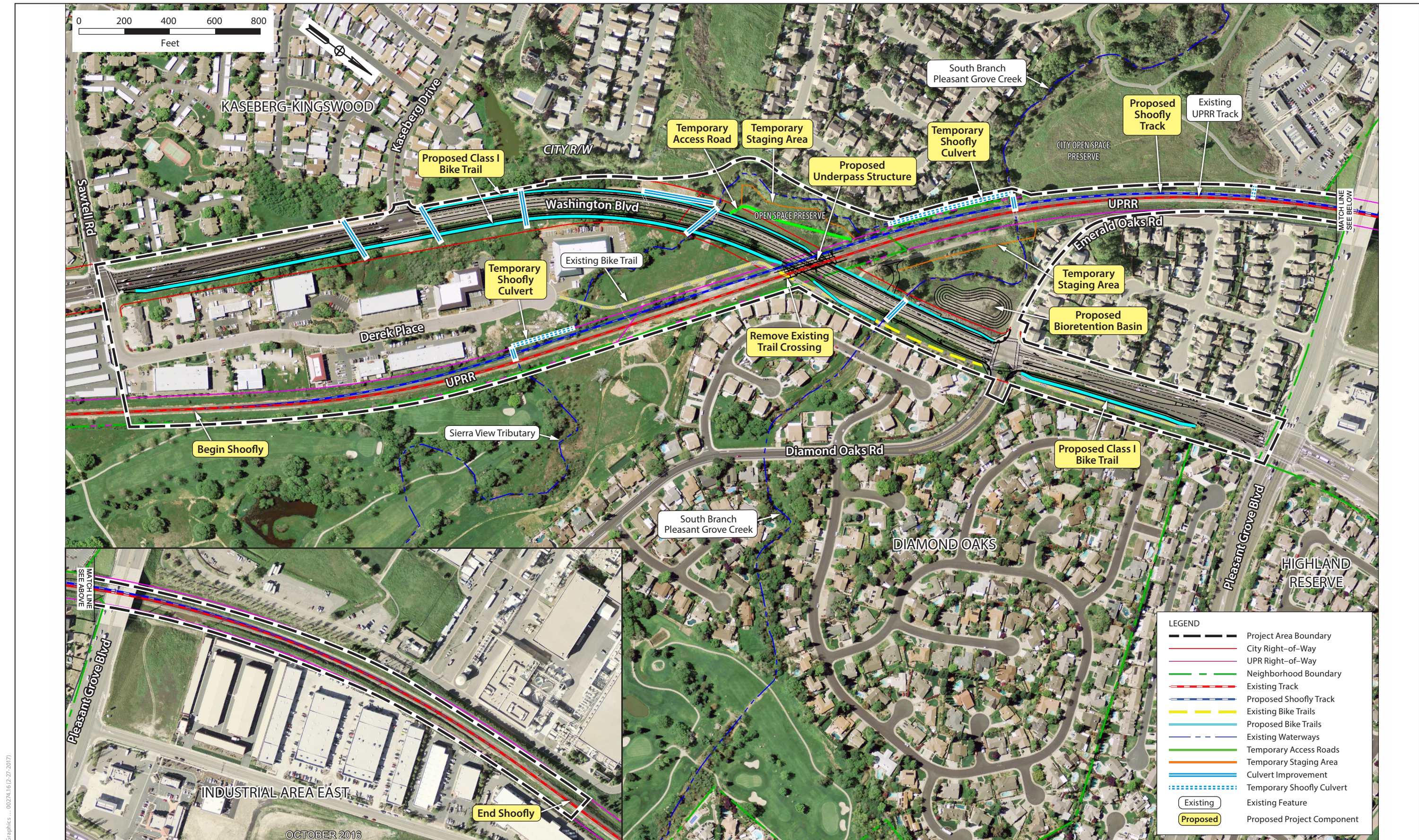
components described above. The primary differences between the Build Alternatives are the construction access and traffic diversion options and the associated staging and duration of construction. Alternative 1 involves complete road closure and rerouting of traffic for a period of 5 months and an estimated construction duration of 13 months; Alternative 2 would leave one lane open during construction and would require an estimated 20 months of construction.

### **1.5.1 Alternative 1 (Both Lanes Closed During Construction)**

Alternative 1 (the proposed project) would include the following elements:

- Widening approximately 0.85 mile of Washington Boulevard from two to four lanes with a raised or painted median separating northbound and southbound traffic.
- Widening the Andora Underpass to a two-span bridge with columns located in the roadway median island to accommodate the additional two lanes.
- Adding 8-foot-wide Class 2 (i.e., on-street with appropriate signing and striping) bike lanes along both sides of Washington Boulevard.
- Expanding the existing Class 1 bike path on the east side of Washington Boulevard from Diamond Oaks Road to Derek Place with a 10- to 12-foot-wide path parallel to Washington Boulevard and connecting it to Sawtell Road.
- Removing the existing bicycle/pedestrian crossing under UPRR and provide a new connection to the Class 1 bike path on the east side of Washington Boulevard.
- Adding a new 8- to 12-foot-wide multiuse path on the west side of Washington Boulevard between Emerald Oaks Road and Kaseberg Drive. Portions of the proposed multiuse path may be deferred until additional construction funding is available.
- Providing traffic signal modifications. The existing traffic signal at Diamond Oaks Road would be modified to conform to the new four-lane roadway.
- Installation of sound walls.
- Conducting floodplain, water quality, and drainage improvements.
- Relocating existing utilities, including sewer, water, telecommunications, and natural gas.





**Figure 3**  
**Project Components**



- Temporally restriping Foothills Boulevard at Junction Boulevard to provide two left-turn lanes from southbound Foothills Boulevard to eastbound Junction Boulevard.

The proposed project would not alter the existing bus turnout adjacent to southbound Washington Boulevard and south of Pleasant Grove Boulevard. Each of the major proposed project components is described in greater detail below. Figure 3 provides an overview of these components. Figure 4 also provides the locations of sensitive receptors located in the vicinity of the project alignment.

#### **1.5.1.1 Washington Boulevard Widening**

The proposed project would consist of widening Washington Boulevard to allow two through lanes in each direction with a raised or painted median separating the northbound and southbound traffic. Concrete curbs would define the new edge of roadway and separate the vehicular traffic from the pedestrians.

#### **1.5.1.2 Andora Underpass and Bridge Widening**

The existing Andora Underpass has substandard vertical clearance. To provide standard vertical clearance, the profile grade of Washington Boulevard would be lowered approximately 3 feet. The lowering of the roadway would also require removal and replacement of two drainage culvert crossings (described below under 2.4.5 Floodplain and Drainage Improvements).

Widening the Andora Underpass would involve broadening the existing bridge structure to a two-span bridge with columns located in the roadway median island. The existing roadway crosses beneath the UPRR tracks at a 45-degree angle. Because UPRR limits bridge skews to a maximum of 30 degrees, the proposed bridge median columns would be slightly skewed, by approximately 15 degrees. The existing Andora Underpass can accommodate two railroad tracks, although only one track currently exists at this location. Therefore, the project would be designed to accommodate two UPRR tracks; the proposed bridge structure may be constructed in stages to include a second track at a future date.

The Andora Underpass would have concrete abutments and wingwalls. The concrete would have some relief to mimic the appearance of an old style Works Progress Administration bridge. There is also the potential for incorporating architectural enhancements, color, and features into the concrete facade to provide additional visual interest and character for the structure. The superstructure would consist of painted steel girders with painted steel hand railings extending above the track level. The bottom of the structure (soffit) would show the individual steel girders and not be smooth like a normal concrete highway bridge.

No second track is proposed as part of this project; however, the ability to easily add a second track to the structure without needing to widen the concrete abutments is a project requirement. According to UPRR, there are no reasonably foreseeable plans to install a second track.

#### **1.5.1.3 Railroad Shoofly**

During the 5- to 6-month construction period, railroad traffic would be maintained except for short time periods allowed by UPRR. During removal of the existing Andora Underpass, the railroad would be detoured to a temporary track, known as a shoofly. An estimated 25 trains would use the track per day. During the transition from the old track to the shoofly and then back again, the rail line would be shut down to train traffic for about 4 hours. No trains would be diverted around the project site to other rail lines.

The shoofly would be within UPRR- and City-owned rights of way (as shown in Figure 3). The shoofly would be approximately 6,500 feet long (1.25 miles), would extend up to 0.75 mile north and 0.5 mile south of the Andora Underpass, and could shift up to 65 feet westerly. Temporary fill would be placed within the portion of the Sierra View Tributary (an estimated 600 feet) that runs along the tracks to accommodate the temporary shoofly alignment.

The temporary railroad shoofly would be constructed using soil excavated from the project site for the roadway widening and reconstruction of the existing roadway structural section. No imported fill is expected to be needed. Approximately 13,500 cubic yards (CY) of fill would be placed east of Washington Boulevard and 22,500 CY would be placed west of Washington Boulevard to create the shoofly.

The temporary shoofly fill would be removed and disposed at permitted soil disposal sites. Railroad slopes would be restored using the appropriate seed mix and in accordance with the project Storm Water Pollution Prevention Plan (SWPPP) and any permit conditions.

#### **1.5.1.4 Bike Trail Improvements**

Eight-foot-wide Class 2 bike lanes would also be included along both sides of the roadway. The existing Class 1 bike path on the east side of Washington Boulevard from Diamond Oaks Road to Derek Place would be connected to a 10-foot-wide Class 1 bike trail parallel to Washington Boulevard to connect to Sawtell Drive. The existing pedestrian underpass approximately 100 feet east of Washington Boulevard would be abandoned. A new 10-foot-wide multiuse path on the west side of Washington Boulevard between Emerald Oaks Road and Kaseberg Drive is also proposed; however, the construction of this path may be deferred until additional construction funding is available.





**Figure 4**  
**Areas of Sensitive Receptors**



#### **1.5.1.5 Floodplain, Water Quality, and Drainage Improvements**

The lowering of Washington Boulevard under the Andora Underpass requires a variety of drainage and floodplain improvements because the low point of Washington Boulevard would be below the 100-year flood elevation. These improvements include the following (shown in Figure 3):

- Regrading ditches and adding a drainage pump station to drain the Andora Underpass.
- Constructing a bioretention basin to treat existing stormwater and comply with current stormwater quality requirements (Water Quality Order No. 2013-0001-DWQ). The new bioretention basin would be used to treat stormwater runoff that originates from the northern portion of the project and an area tributary to the intersection of Washington Boulevard and Pleasant Grove Boulevard. The bioretention basin (shown in Figure 3) would be constructed on the City-owned parcel bordered by Emerald Oaks Road, the South Branch of Pleasant Grove Creek, and Washington Boulevard. This parcel currently supports an open annual grassland. The basin would be created by excavation, construction of a berm along the east side of the South Branch of Pleasant Grove Creek, and placement of imported drain rock and sand-compost mix to support runoff retention, water quality treatment and specialized planting.
- Replacing and extending corrugated metal pipes (CMPs) in four crossings of unnamed tributaries of Sierra View Tributary to support widening of Washington Boulevard.
- Replacing and extending two box culvert replacements (Sierra View Tributary and South Branch Pleasant Grove Creek).

#### **1.5.1.6 Traffic Signal Improvements**

No new traffic signals are proposed as part of the project; however, the existing traffic signal at Diamond Oaks Road would be modified to conform to the new four-lane roadway and the traffic signal at Pleasant Grove Boulevard would have signal re-timing only.

#### **1.5.1.7 Utility Relocations**

The lowering of the roadway would necessitate relocation of City-owned sewer and water lines, underground telecommunication lines, and potential adjustments to underground Pacific Gas and Electric (PG&E) gas lines.

### 1.5.2 Alternative 2 (One Lane Closure during Construction)

Alternative 2 is designed to satisfy the project objectives identified in Section 1.4, *Purpose and Need*, while avoiding or minimizing environmental impacts associated with the project. The alignment and associated project components for Alternative 2 are the same as described for Alternative 1 and involve the same improvements to Washington Boulevard; however, it differs in its construction approach, including traffic diversion and schedule. The main difference from the proposed project is that Alternative 2 would leave one lane open during construction and would require an estimated 20 to 24 months to construct because a temporary railroad bridge is required over Washington Boulevard to maintain train traffic.

Under Alternative 2, Washington Boulevard vehicular traffic would be allowed to pass through the project site under the control of one-way flagging operations during some of the construction phases. However, the travelling public would still be significantly delayed during construction under Alternative 2 because it would not be possible to maintain two lanes of traffic flow during most of the construction period; therefore, more than half of the normal traffic would use an alternative route.

### 1.5.3 No Project Alternative

The No Project Alternative would not involve any improvements to Washington Boulevard. The existing roadway and Andora Underpass would remain in their current state.

## 1.6 Air Quality Regulatory Framework

Table 1 shows that the project is in an area that is nonattainment for ozone (O<sub>3</sub>) and particulate matter (PM<sub>2.5</sub>) and maintenance for carbon monoxide (CO). This analysis focuses on these criteria pollutant(s). The conformity process does not address pollutants for which the area is attainment/unclassified, mobile source air toxics, other toxic air contaminants or hazardous air pollutants, or greenhouse gases.

**Table 1. Project Area Attainment Status**

Criteria Pollutant	Federal Attainment Status
Ozone (O <sub>3</sub> )	Severe Nonattainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment
Carbon Monoxide (CO)	Moderate Maintenance
Particulate Matter (PM <sub>10</sub> )	Attainment
Particulate Matter (PM <sub>2.5</sub> )	Moderate Nonattainment

Source: United States Environmental Protection Agency 2016a

Table 1 shows the applicable federal attainment status for O<sub>3</sub>, nitrogen dioxide (NO<sub>2</sub>), CO, PM<sub>10</sub>, and PM<sub>2.5</sub> for the portion of Placer County within the Sacramento Valley Air Basin (SVAB), including the project area. The 8-hour federal O<sub>3</sub> nonattainment classification applies to the Sacramento Metropolitan Area, which is defined as the area between Yolo and Solano Counties on the west and the western majority of Placer and El Dorado Counties on the east. The 24-hour PM<sub>2.5</sub> standard nonattainment classification applies to the majority of the SVAB south of Tehama County. The CO maintenance area consists of portions of Placer, Yolo, and Sacramento Counties that are within the Sacramento Metropolitan Area. Maps showing the nonattainment designations for these pollutants are provided in Appendix B.

## **1.7 Public Review Comments Related to Air Quality Conformity**

Circulation for public comment was not required because the NEPA determination for this project is a Categorical Exclusion.

## **Chapter 2      Regional Conformity**

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The Washington Boulevard/Andora Underpass Improvement Project was included in the regional emissions analysis conducted by SACOG for the conforming 2016 MTP/SCS (PLA25501). The project's design concept and scope have not changed significantly from what was analyzed in the regional emission analysis. This analysis found that the plan, which takes into account regionally significant projects and financial constraint, will conform to the SIP(s) for maintaining the National Ambient Air Quality Standards (NAAQS) as provided in Section 176(c) of the Clean Air Act. FHWA determined that the 2016 MTP/SCS, as amended, conforms to the SIP on December 16, 2016. Additional documentation related to the regional emissions analysis is contained in Appendices C and D.

The Washington Boulevard/Andora Underpass Improvement Project is also included in the federal 2017–2020 MTIP. The project's open-to-traffic year is consistent with (within the same regional emission analysis period as) the construction completion date identified in the federal transportation improvement program (TIP) and/or RTP. The federal TIP gives priority to eligible Transportation Control Measures (TCMs) identified in the SIP and provides sufficient funds to provide for their implementation. FHWA determined that the 2017–2020 MTIP conforms to the SIP on December 16, 2016. Documentation related to the public and interagency consultation process conducted to develop the TIP is contained in Appendices C and D.



# **Chapter 3**

## **Localized Impact (Hot-Spot) Conformity**

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### **3.1 Carbon Monoxide Hot-Spot Analysis**

The California Project-Level Carbon Monoxide Protocol<sup>†</sup> (CO Protocol) was used to analyze CO impacts for the project. The hot-spot analysis covered the most congested intersections affected by the project in 2016 (existing year) and 2035 (design year), with 2016 conditions having the highest concentrations.

The ambient air quality effects of traffic emissions were evaluated using the modeling procedures described in Appendix B of the CO Protocol and Appendix E of this document. The assumptions used in the hot-spot analysis are consistent with those used in the regional emissions analysis.

The modeling results shown in Appendix E indicate that total CO concentrations would not cause or contribute to any new localized violations of the federal 1-hour or 8-hour CO ambient standards. Appendix F provides model input data and output reports.

The NEPA document for this project does not identify specific avoidance, minimization, and/or mitigation measures for CO. A written commitment to implement such control measures is, therefore, not required.

The approved MTP/SCS and MTIP for the project area have no CO mitigation or control measures that relate to the project's construction or operation. Therefore, a written commitment to implement CO control measures is not required.

### **3.2 PM<sub>2.5</sub>/PM<sub>10</sub> Hot-Spot Analysis**

The portion of Placer County within the SVAB, including the project area, is currently categorized as a nonattainment area for the federal PM<sub>2.5</sub> (2006) standard (see Table 1).

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<sup>†</sup> CAL3QHCR can also be used, with EMFAC emission factors, in place of the CO Protocol. If this type of analysis is done, the following must be described fully: why the CO Protocol was not used; how the analysis complies with EPA regulations (Appendix W and other CO modeling guidance); modeling assumptions and inputs; outputs; and evaluation regarding whether or not the project will cause, contribute to, or worsen a CO hot-spot. Interagency consultation regarding model usage, emission factors (latest EMFAC version made available for conformity use by EPA), and results is required if CAL3QHCR is used and must be documented in a suitable appendix along with listings of all model inputs and outputs.

A quantitative PM hot-spot analysis is required under the EPA Transportation Conformity Rule for Projects of Air Quality Concern (POAQC), as described in EPA's Final Rule of March 10, 2006. Projects that are not POAQC do not require detailed PM hot-spot analysis.

In March 2006, the FHWA and EPA issued a guidance document entitled *Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas* (Federal Highway Administration and U.S. Environmental Protection Agency 2006). This guidance identifies examples of projects that are most likely POAQCs and details a qualitative step-by-step screening procedure to determine whether project-related particulate emissions have potential to generate new air quality violations, worsen existing violations, or delay attainment of NAAQS for PM<sub>2.5</sub> or PM<sub>10</sub>. EPA's and FHWA's Qualitative PM hot-spot guidance was superseded in December 2010 when EPA issued a guidance document entitled *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas* (U.S. Environmental Protection Agency 2010). This guidance prescribes a quantitative approach to performing PM hot-spot analyses to satisfy project-level transportation conformity requirements. EPA's quantitative PM hot-spot guidance was last revised in November 2015 to reflect MOVES2014 and its subsequent minor revisions such as MOVES2014a, to update design value calculations to be more consistent with other EPA programs, and to reflect guidance implementation and experience in the field (U.S. Environmental Protection Agency 2015).

Section 93.123(b)(1) of the Conformity Rule defines the projects that require a PM<sub>2.5</sub> or PM<sub>10</sub> hot-spot analysis as follows.

1. New highway projects that have a significant number of diesel vehicles and expanded highway projects that have a significant increase in the number of diesel vehicles.
2. Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project.
3. New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location.
4. Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location.

5. Projects in or affecting locations, areas, or categories of sites that are identified in the PM2.5 or PM10 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The project is not considered a POAQC for PM2.5 because it does not meet the definition of a POAQC as defined in EPA's Transportation Conformity Guidance, outlined below.

1. **New highway projects that have a significant number of diesel vehicles and expanded highway projects that have a significant increase in the number of diesel vehicles.**

Appendix B from the EPA's Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas provides guidance on what types of projects may be projects of local air quality concern (40 CFR 93.123(b)(1)). Appendix B indicates that a facility with an average annual daily traffic (AADT) volume of 125,000 and 8% trucks (10,000 truck AADT) are likely considered a POAQC. The proposed project would widen Washington Boulevard from two to four travel lanes between Sawtell Road/Derek Place and Pleasant Grove Boulevard. For existing roadway facilities, the effect of a project on truck volumes is normally the main point on which this criterion is judged. Design year (2035) conditions were selected for the analysis since they represents the year with maximum traffic volumes.

Table G-1 in Appendix G indicates that the AADT in the transportation study area for the project under design year (2035) conditions would vary between 9,400 and 60,000, depending on the location. Heavy-duty trucks comprise approximately 2% of this AADT, resulting in a truck AADT of 188 to 1,200 (Horton pers. comm.).

Based on the data presented in Table G-1, predicted AADT would be less than the EPA's AADT guidance criterion of 125,000. Predicted truck percentages and volumes would also be well below the EPA's guidance criteria of 8% or 10,000 vehicles per day (maximum truck percentages and truck AADT are 2% and 1,200, respectively). Accordingly, the proposed project would not serve a significant number of diesel vehicles or result in a significant increase in diesel vehicles.

2. **Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project.** Peak-hour LOS and delay at study area intersections under design year (2035) conditions are presented in Table G-2 in Appendix G. The table indicates that the intersections of Washington Boulevard/Pleasant Grove Boulevard, Washington Boulevard/Sawtell Road/Derek Place, and Washington Boulevard/Junction Boulevard would experience increases in delay with

implementation of the project. However, the project would improve AM peak hour operations at Washington Boulevard/Diamond Oaks Road/Emerald Oak Road from LOS E to C and improve PM peak hour operations from LOS D to C. Delays would also decrease at Washington Boulevard/Kaseberg Drive.

Although LOS and delay would be degraded at two study area intersections, they would not serve a significant number of trucks (2%), therefore, the proposed project would not affect any at-grade intersections with a high number of diesel vehicles.

3. **New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location.** The project does not include new bus or rail terminals and transfer points.
4. **Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location.** The project does not include expanded bus or rail terminals and transfer points.
5. **Projects in or affecting locations, areas, or categories of sites that are identified in the PM<sub>2.5</sub> or PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.** SMAQMD's PM<sub>2.5</sub> SIP, *PM<sub>2.5</sub> Implementation/Maintenance Plan and Redesignation Request for Sacramento PM<sub>2.5</sub> Nonattainment Area*, has not identified any locations, areas, or categories of sites as a site of violation or possible violation.

The project is not considered a POAQC for PM<sub>2.5</sub> because it does not meet the definition of a POAQC as defined in EPA's Transportation Conformity Guidance. Therefore, a PM hot-spot analysis is not required.

The project underwent interagency consultation through SACOG's Project Level Conformity Group (PLCG), which issued concurrence that the project is not a POAQC on May 4, 2017. Appendix H contains the documentation submitted to SACOG's PLCG used to support its concurrence, as well as concurrence letters from EPA and Caltrans that the project is not a POAQC.

The approved PM<sub>2.5</sub> SIP has no control measures applicable to the project. Therefore, a written commitment to implement control measures is not required.

The NEPA document for this project identifies the following mitigation, minimization, or avoidance measures related to PM<sub>10</sub> and/or PM<sub>2.5</sub>:

1. Implement California Department of Transportation Standard Specification Section 14.
2. Implement Additional Control Measures for Construction Emissions of Fugitive Dust.

Approval of the NEPA document for this project will be considered a written commitment to implement the identified PM10 and/or PM2.5 control measures.

The approved MTP/SCS and MTIP for the project area have no PM mitigation or control measures that relate to the project's construction or operation. Therefore, a written commitment to implement PM control measures is not required.

### **3.3 Construction-Related Hot-Spot Emissions**

40 CFR 93.123(c)(5) states the following.

CO, PM10, and PM2.5 hot-spot analyses are not required to consider construction-related activities which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established 'Guideline' methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site.

Construction of the entire project is expected to require 13 to 20 months, therefore construction activities in one general location would occur for fewer than 5 years. Accordingly, construction-related emissions related to the project are not considered in the project-level or regional conformity analysis.

# Chapter 4      References

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## 4.1    References Cited

- Benson, P. 1989. CALINE4—A Dispersion Model for Predicting Air Pollutant Concentrations Near Roadways. Sacramento, CA: California Department of Transportation.
- California Air Resources Board. 2016. Aerometric Data Analysis and Management System (ADAM): Top 4 Summary. Available: <<http://www.arb.ca.gov/adam/topfour/topfour1.php>>. Accessed: October 24, 2016.
- Federal Highway Administration and U.S. Environmental Protection Agency. 2006. Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas. EPA420-B-06-902. March.
- Fehr & Peers. 2017. Transportation Study for the Washington Boulevard Widening Project. Prepared for the City of Roseville. January 24.
- Garza, V. J., P. Graney, and D. Sperling. 1997. Transportation Project-Level Carbon Monoxide Protocol. Davis, CA: Institute of Transportation Studies, University of California, Davis.
- Sacramento Area Council of Governments. 2016a. 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy. Building a Sustainable Future. Adopted February 18.
- . 2016b. 2017/2020 Metropolitan Transportation Improvement Program. Adopted September 15.
- U.S. Environmental Protection Agency. 2010. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas. EPA-420-B-13-05. December.
- U.S. Environmental Protection Agency. 2015. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas. EPA-420-B-15-084. November.
- U.S. Environmental Protection Agency. 2016a. Nonattainment Areas for Criteria Pollutants. Last Revised: September 15, 2016. Available: <<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>>. Accessed: October 31, 2016.
- U.S. Environmental Protection Agency. 2016b. Air Data. Monitor Values Report. Last Revised: September 14, 2016. Available: <<https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>>. Accessed: October 24, 2016.

## 4.2 Personal Communications

Horton, Garry. Mark Thomas & Company, Sacramento, CA. November 9, 2016—Email message to Laura Yoon, ICF.

## **Appendix A.** Air Quality Conformity Findings Checklist

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# Transportation Air Quality Conformity Findings Checklist

<b>Project Name:</b>	Washington Boulevard/Andora Bridge Improvement Project		
<b>Dist-Co-Rte-PM:</b>	03-PLA-25501	<b>EA:</b>	
<b>Federal-Aid No.:</b>	CML 5182 (074)		
<b>Document Type:</b>	<input type="checkbox"/> 23 USC 326 CE <input checked="" type="checkbox"/> 23 USC 327 CE <input type="checkbox"/> EA <input type="checkbox"/> EIS		

**Step 1.** Is the project located in a nonattainment or maintenance area for ozone, nitrogen dioxide, carbon monoxide (CO), PM<sub>2.5</sub>, or PM<sub>10</sub> per EPA's [Green Book](#) listing of non-attainment areas?

☐ If no, go to Step 17. **Transportation conformity does not apply to the project.**

☒ If yes, go to Step 2.

**Step 2.** Is the project exempt from conformity per [40 CFR 93.126](#) or [40 CFR 93.128](#)?

☐ If yes, go to Step 17. **The project is exempt from all project-level conformity requirements (40 CFR 93.126 or 128)** (check one box below and identify the project type, if applicable).

☐ 40 CFR 93.126    Project type:

☐ 40 CFR 93.128

☒ If no, go to Step 3.

**Step 3.** Is the project exempt from regional conformity per [40 CFR 93.127](#)?

☐ If yes, go to Step 8. **The project is exempt from regional conformity requirements (40 CFR 93.127)** (identify the project type).    Project type:

☒ If no, go to Step 4.

**Step 4.** Is the project located in a region with a currently conforming RTP and TIP?

☒ If yes, **the project is included in a currently conforming RTP and TIP per 40 CFR 93.115. The project's design and scope have not changed significantly from what was assumed in RTP conformity analysis (40 CFR 93.115[b])** Go to Step 8.

☐ If no and the project is located in an isolated rural area, go to Step 5.

☐ If no and the project is not located in an isolated rural area, STOP and do not proceed until a conforming RTP and TIP are adopted.

**Step 5.** For isolated rural areas, is the project regionally significant per 40 CFR 93.101, based on review by Interagency Consultation?

☐ If yes, go to Step 6.

☐ If no, go to Step 8. **The project, located in an isolated rural area, is not regionally significant and does not require a regional emissions analysis (40 CFR 93.101 and 93.109[I]).**

**Step 6.** Is the project included in another regional conformity analysis that meets the isolated rural area analysis requirements per 40 CFR 93.109, including Interagency Consultation and public involvement?

☐ If yes, go to Step 8. **The project, located in an isolated rural area, has met its regional analysis requirements through inclusion in a previously-approved regional conformity analysis that meets current requirements (40 CFR 93.109[I]).**

☐ If no, go to Step 7.

**Step 7.** The project, located in an isolated rural area, requires a separate regional emissions analysis.

☐ **Regional emissions analysis for regionally significant project, located in an isolated rural area, is complete. Regional conformity analysis was conducted that includes the project and reasonably foreseeable regionally significant projects for at least 20 years. Interagency Consultation and public participation were conducted. Based on the analysis, the interim or emission budget conformity tests applicable to the area are met (40 CFR 93.109[I] and 95.105).<sup>1</sup> Go to Step 8.**

**Step 8.** Is the project located in a CO nonattainment or maintenance area?

☐ If no, go to Step 9. **CO conformity analysis is not required.**

☒ If yes, **hot-spot analysis requirements for CO per the [CO Protocol](#) (or per EPA's modeling guidance, CAL3QHCR can be used with EMFAC emission factors<sup>2</sup>) have been met. Project will not cause or contribute to a new localized CO violation (40 CFR 93.116 and 93.123)<sup>3</sup>. Go to Step 9.**

**Step 9.** Is the project located in a PM<sub>10</sub> and/or a PM<sub>2.5</sub> nonattainment or maintenance area?

☐ If no, go to Step 13. **PM<sub>2.5</sub>/PM<sub>10</sub> conformity analysis is not required.**

☒ If yes, go to Step 10.

<sup>1</sup> The analysis must support this conclusion before going to the next step.

<sup>2</sup> Use of the CO Protocol is strongly recommended due to its use of screening methods to minimize the need for modeling. When modeling is needed, the Protocol simplifies the modeling approach. Use of CAL3QHCR must follow U.S. EPA's latest CO hot spot guidance, using EMFAC instead of MOVES; see: <http://www.epa.gov/otaq/stateresources/transconf/projectlevel-hotspot.htm#co-hotspot>.

<sup>3</sup> As of October 1, 2007, there are no CO nonattainment areas in California. Therefore, the requirements to not worsen existing violations and to reduce/eliminate existing violations do not apply.

**Step 10.** Is the project considered to be a Project of Air Quality Concern (POAQC), as described in EPA's [Transportation Conformity Guidance](#) for PM 10 and PM 2.5?

- ☒ If no, **the project is not a project of concern for PM10 and/or PM2.5 hot-spot analysis based on 40 CFR 93.116 and 93.123 and EPA's Hot-Spot Analysis Guidance. Interagency Consultation concurred with this determination on May 4, 2017.** Go to Step 12.
- ☐ If yes, go to Step 11.

**Step 11.** The project is a POAQC.

- ☐ **The project is a project of concern for PM10 and/or PM2.5 hot-spot analysis based on 40 CFR 93.116 and 93.123, and EPA's Hot-Spot Guidance. Interagency Consultation concurred with this determination on [REDACTED]. Detailed PM hot-spot analysis, consistent with 40 CFR 93.116 and 93.123 and EPA's Hot-Spot Guidance, shows that the project would not cause or contribute to, or worsen, any new localized violation of PM10 and/or PM2.5 standards.** Go to Step 12.

**Step 12.** Does the approved PM SIP include any PM10 and/or PM2.5 control measures that apply to the project, and has a written commitment been made as part of the air quality analysis to implement the identified SIP control measures? [(Control measures can be found in the applicable Federal Register notice at: <http://www.epa.gov/otaq/stateresources/transconf/reg9sips.htm#ca>.)]

- ☐ If yes, **a written commitment is made to implement the identified SIP control measures for PM10 and/or PM2.5 through construction or operation of this project (40 CFR 93.117).** Go to Step 14.
- ☒ If no, go to Step 13.

**Step 13a.** Have project-level mitigation or control measures for CO, PM10, and/or PM2.5, included as part of the project's design concept and scope, been identified as a condition of the RTP or TIP conformity determination? AND/OR

**Step 13b.** Are project-level mitigation or control measures for CO, PM10, and/or PM2.5 included in the project's NEPA document?

AND

**Step 13c** (applies only if Step 13a and/or 13b are answered "yes"). Has a written commitment been made as part of the air quality analysis to implement the identified measures?

- ☒ If yes to 13a and/or 13b and 13c, **a written commitment is made to implement the identified mitigation or control measures for CO, PM10, and/or PM2.5 through construction or operation of this project. These mitigation or control measures are identified in the project's NEPA document and/or as conditions of the RTP or TIP conformity determination<sup>1</sup> (40 CFR 93.125(a)).** Go to Step 14.
- ☐ If no, go to Step 14

**Step 14.** Does the project qualify for a 771.117(c)(22), (c)(23), (c)(26), (c)(27), or (c)(28)<sup>4</sup> Categorical Exclusion pursuant to 23 USC 326 and is an Air Quality Conformity Analysis required to document any analysis required by Steps 1 through 13 of this form?<sup>5</sup>

- ☐ If yes, then Caltrans prepares the Air Quality Conformity Analysis and makes the conformity determination. No FHWA involvement is required. See the [AQCA Annotated Outline](#). Go to Step 17.
- ☒ If no, go to Step 15.

**Step 15.** Does the project qualify for any Categorical Exclusion pursuant to 23 USC 326 (including 771.117(c)(22), (c)(23), (c)(26), (c)(27), or (c)(28) when NO Air Quality Conformity Analysis is required)?

- ☐ If yes, then no FHWA involvement is required and Caltrans makes the conformity determination through its signature on the CE form. **An Air Quality Conformity Analysis (AQCA) is not needed.** Go to Step 17.
- ☒ If no, go to Step 16.

**Step 16.** Does the project require preparation of a Categorical Exclusion, EA, or EIS pursuant to 23 USC 327?

- ☒ If yes, then Caltrans submits a conformity determination to FHWA for FHWA's conformity determination. **An AQCA is needed.** See the [AQCA Annotated Outline](#).

Date of FHWA air quality conformity determination: [REDACTED]

Go to Step 17.

**Step 17. STOP as all air quality conformity requirements have been met.**

**Signature:**

**Printed Name:** [REDACTED]

**Date:** [REDACTED]

**Title:** [REDACTED]

<sup>4</sup> Please note that certain activities covered by these categorical exclusions may require that Caltrans prepare an Air Quality Conformity Analysis rather than documenting the conformity determination with the Senior Environmental Planner's signature on the Categorical Exclusion form.

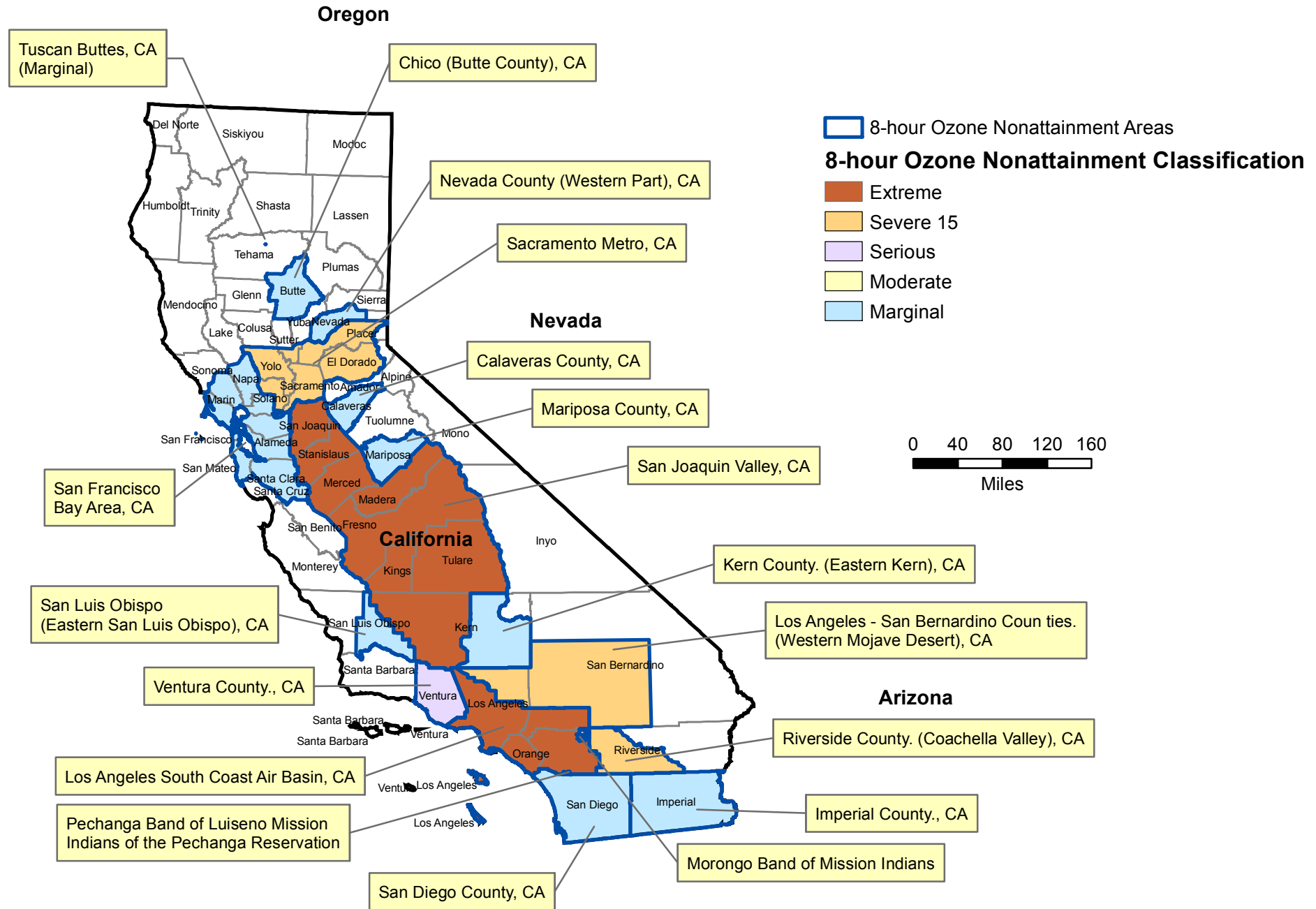
<sup>5</sup> Please note that for ALL projects the project file must include evidence that one of the three following situation applies: 1) Conformity does not apply to the project area; or 2) The project is exempt from all conformity analysis requirements; or 3) The project is subject to project-level conformity analysis (and possibly regional conformity analysis) and meets the criteria for a conformity determination. The project file must include all supporting documentation and this checklist.

## **Appendix B.** Ozone, CO, and PM<sub>2.5</sub> Nonattainment Maps

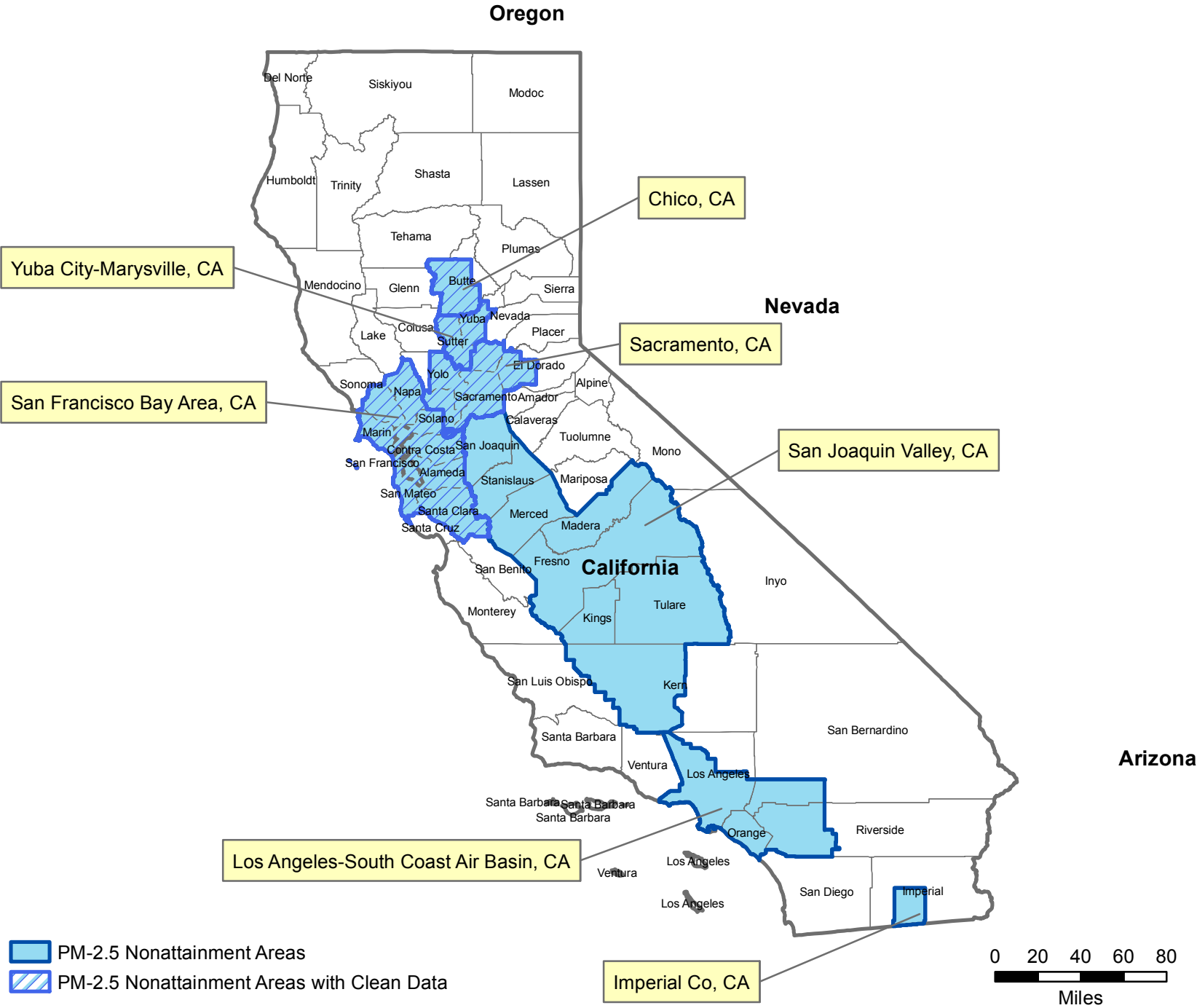
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# California 8-hour Ozone Nonattainment Areas (2008 Standard)



12/05/2013



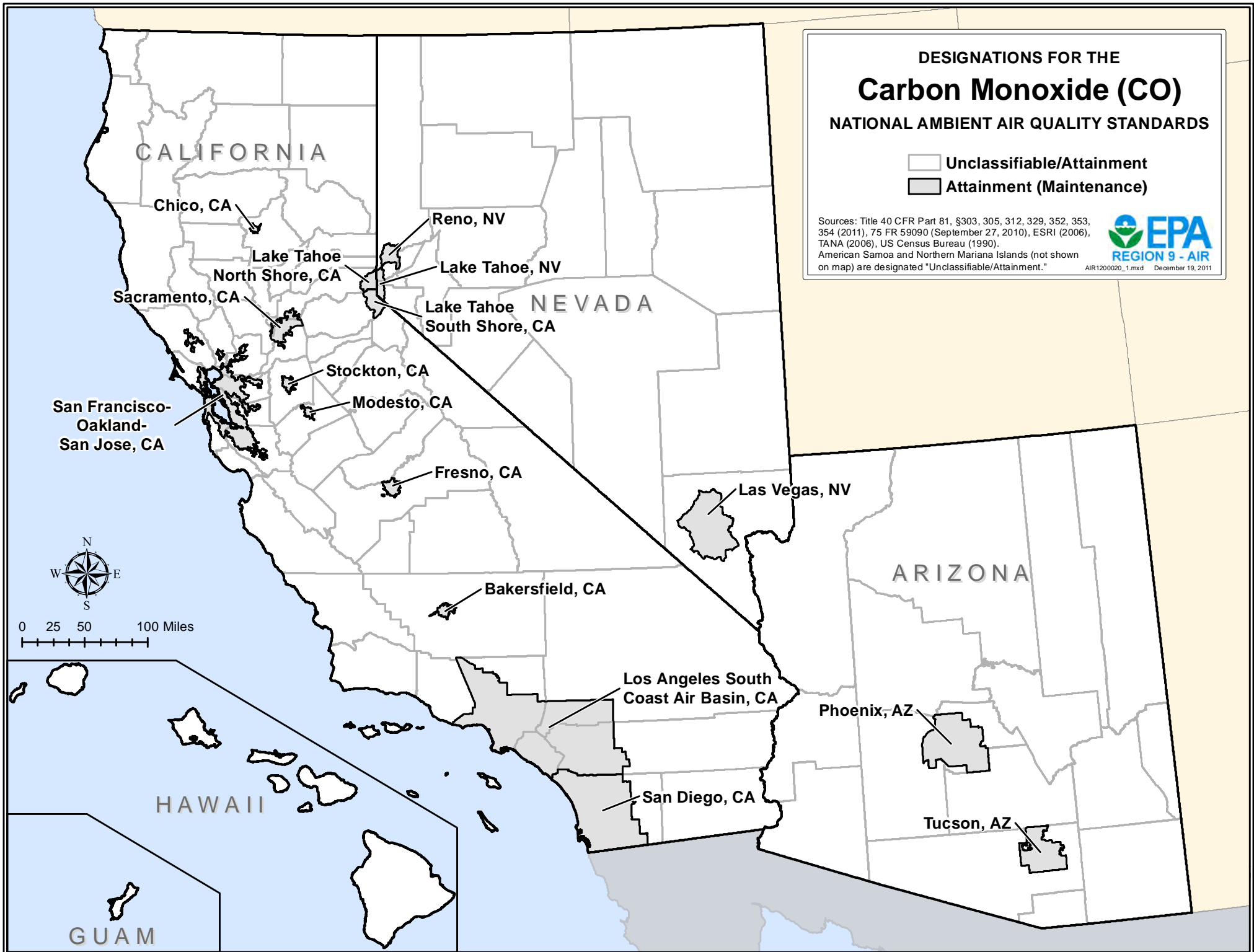
California PM-2.5 Nonattainment Areas (2006 Standard)



DESIGNATIONS FOR THE  
**Carbon Monoxide (CO)**  
NATIONAL AMBIENT AIR QUALITY STANDARDS

-  Unclassifiable/Attainment  
 Attainment (Maintenance)

Sources: Title 40 CFR Part 81, §§303, 305, 312, 329, 352, 353, 354 (2011), 75 FR 59090 (September 27, 2010), ESRI (2006), TANA (2006), US Census Bureau (1990). American Samoa and Northern Mariana Islands (not shown on map) are designated "Unclassifiable/Attainment."



# **Appendix C. Documentation Related to Regional Conformity**

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## **C.1 Regional Emissions Analysis Conducted for Conforming RTP**

The regional emissions analysis found that regional emissions will not exceed the SIP's emission budgets for mobile sources in the build year, a horizon year at least 20 years from when conformity analysis started, and additional years meeting conformity regulation requirements for periodic analysis. The regional emissions analysis was based on the latest population and employment projections for the Sacramento Region, including Sacramento, Sutter, Yolo, and Yuba Counties, and in El Dorado and Placer Counties outside the Tahoe Basin, that were adopted by the SACOG at the time the conformity analysis was started in 2015. These assumptions are less than 5 years old. The modeling was conducted using current and future population, employment, traffic, and congestion estimates. The traffic data, including the fleet mix data, were based on the most recently available vehicle registration data included in the EMFAC model. EMFAC2011 was used, which was the most recent version of the model developed by the California Air Resources Board and approved for use in California by the EPA at the time of the analysis.<sup>1</sup>

## **C.2 Public and Interagency Consultation Process for TIP**

The federal MTIP was developed in accordance with SACOG's policies for community input and interagency consultation procedures. These procedures ensure that the public has adequate opportunity to be informed of the federal MTIP development process and encourages public participation and comment. SACOG did not receive any comments on the Air Quality Conformity Analysis for the MTIP.

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<sup>1</sup> EMFAC2014 was approved by EPA on December 14, 2015, with a 24-month grace period for conversion from EMFAC 2011 to EMFAC 2014. As the air quality analysis was completed prior to EPA's approval of EMFAC2014 and falls within their 24-month grace period before EMFAC2014 is required, EMFAC2011 is used in this analysis.

## **Appendix D.** MTP and MTIP Project Listing and Federal Approval Letters

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## 2016 MTP/SCS Project List

Projects listed as "Project Development Only" are anticipated to begin early stages of development including project planning, design, preliminary engineering, environmental clearance, and ROW acquisition by 2036. These projects remain eligible to seek federal and state funding, but under the financial constraint requirements for projecting revenues, the construction phase is not included in the DPS. If/when additional revenues for these projects become available to cover full construction costs, these projects can be considered as part of an amendment to the MTP/SCS following a technical analysis and consistency with plan requirements. While total costs are shown for these projects, for budgeting purposes, no more than 10% of the total project costs are anticipated to be captured within the MTP/SCS planning period. Year of expenditure costs are not provided since construction of these projects is not part of the financially constrained project list.

Project ID	Included in DPS	COUNTY	LEAD AGENCY	CATEGORY	TITLE	PROJECT DESCRIPTION	Completion Timing	TOTAL COST (2015 Dollars)	YEAR OF EXPENDITURE
PLA25323	Yes	Placer	City of Roseville	E- Transit Capital (Minor)	Sierra Gardens Transfer Point	Improve Sierra Gardens Transfer Point. Improvements may include new bus turnouts, shelters, restrooms, landscaping, lighting, crosswalks, sidewalks, and other pedestrian improvements such as bulb-outs. (Emission benefits in kg/day: 63 ROG, 63 Nox, 25 PM10.)	Completion by 2020	\$1,012,151	\$1,012,151
PLA25416	Yes	Placer	City of Roseville	F- Transit O&M (Demand Response)	South Placer Call Center	Operating cost contribution towards ADA complementary paratransit services provided for the South Placer Call Center.	Completion by 2020	\$187,500	\$187,500
PLA25516	Yes	Placer	City of Roseville	D- Programs & Planning	SRTS Toolkit Expansion	Multiple Schools in the Roseville City School District: Expand Safe Routes to School (SRTS) toolkit. SRTS3-03-006	Completion by 2020	\$295,000	\$295,000
PLA15911	Yes	Placer	City of Roseville	B- Road & Highway Capacity	Taylor Rd.	In Roseville; from just N/O E. Roseville Parkway to City Limits, widen Taylor Rd. from 2 to 4 lanes.	2021-2036	\$5,042,390	\$6,153,000
PLA25538	Yes	Placer	City of Roseville	B- Road & Highway Capacity	Vista Grande Arterial	In Roseville, from Fiddymont Rd west to Westbrook Blvd, construct new 4-lane arterial.	Completion by 2020	\$2,500,000	\$2,500,000
PLA25501	Yes	Placer	City of Roseville	B- Road & Highway Capacity	Washington Blvd/Andora Undercrossing Improvement Project	In Roseville, widen Washington Blvd from 2 to 4 lanes, including widening the Andora Underpass under the UPRR tracks, between Sawtell Rd and just south of Pleasant Grove Blvd. and construct bicycle and pedestrian improvements adjacent to roadway. (CMAQ funds are for bicycle and pedestrian improvements only. Emission Benefits in kg/day: 0.9 ROG, 0.51 NOx, 0.16 PM10)	Completion by 2020	\$16,091,643	\$16,091,643
PLA25582	Yes	Placer	City of Roseville	A- Bike & Ped	Washington Boulevard Improvement	In Roseville, along Washington Boulevard from Kaseburg Drive to Pleasant Grove Boulevard, construct new concrete sidewalks, Class I & Class II bike facilities. Proposed facilities cross under the Union Pacific tracks (aka "Andora Underpass"). (Emission Benefits in kg/day: 0.24 ROG; 0.16 NOx; 0.05 PM2.5).	Completion by 2020	\$1,242,517	\$1,242,517
PLA25483	Project Development	Placer	City of Roseville	B- Road & Highway Capacity	Westbrook Blvd.	Construct New Road: west of Fiddymont Road between Baseline and Pleasant Grove in proposed new Sierra Vista Specific Plan.	Completion after 2036	\$7,500,000	
PLA25481	Yes	Placer	City of Roseville	B- Road & Highway Capacity	Westbrook Blvd.	Construct New Road: west of Fiddymont and north of Blue Oaks in proposed new Creekview Specific Plan.	Completion by 2020	\$6,000,000	\$6,293,000
PLA19470	Project Development	Placer	City of Roseville	B- Road & Highway Capacity	Woodcreek Oaks	Widen from 2 - 4 lanes from Canavari Dr to North Branch of Pleasant Grove Creek.	Completion after 2036	\$3,500,000	
PLA25626	Yes	Placer	PCTPA	G- System Management,	At-Grade Railroad Crossings	At-Grade Railroad Crossings, including quiet zones throughout County	2021-2036	\$500,000,000	\$781,967,000
PLA25588	Yes	Placer	PCTPA	A- Bike & Ped	Bicycle Facilities	Construct various bicycle facilities according to implement the Regional Bicycle Master Plan and Local Bicycle Master Plans as amended.	Lump Sum or Ongoing	\$40,000,000	\$52,565,000
PLA25632	Yes	Placer	PCTPA	E- Transit Capital (Vehicles)	Bus Replacement	Lump-sum for bus vehicles for fiscal years 2019-2036; does not account for expansion of service. Placer County operators only.	Lump Sum or Ongoing	\$63,153,000	\$82,991,000
PLA25587	Yes	Placer	PCTPA	A- Bike & Ped	Complete Street & Safe Routes to School	Enhance pedestrian/bicycle and landscaping along approximately 40 miles of roadway and construct Safe Routes to School improvements to implement local plans.	Lump Sum or Ongoing	\$52,000,000	\$68,335,000
PLA25586	Yes	Placer	PCTPA	G- System Management,	Electric Vehicle Charging and Alternative Fuels	Develop and construct an electric vehicle charging and alternative fuels infrastructure.	Lump Sum or Ongoing	\$20,000,000	\$26,283,000
PLA25601	Yes	Placer	PCTPA	B- Road & Highway Capacity	I-80/SR 65 Interchange Improvements Phase 2	In Placer County: Between Douglas Blvd. and Rocklin Road; Reconfigure I-80/SR 65 interchange to widen southbound to eastbound ramp from 1 to 2 lanes, and replace existing eastbound to northbound loop ramp with a new 3 lane direct flyover ramp.	2021-2036	\$110,000,000	\$172,033,000
PLA25602	Yes	Placer	PCTPA	B- Road & Highway Capacity	I-80/SR 65 Interchange Improvements Phase 3	In Placer County: Between Douglas Blvd. and Rocklin Road; Widen Taylor Road from 2 to 4 lanes between Roseville Parkway and Pacific Street, and Reconfigure I-80/SR 65 interchange to widen the southbound to westbound ramp from 2 to 3 lanes.	2021-2036	\$179,000,000	\$279,944,000
PLA25603	Yes	Placer	PCTPA	B- Road & Highway Capacity	I-80/SR 65 Interchange Improvements Phase 4	In Placer County: Between Douglas Blvd. and Rocklin Road; Reconfigure I-80/SR 65 interchange to construct one lane HOV direct connectors from eastbound to northbound and southbound to westbound (HOV lanes would extend to between Galleria Blvd. and Pleasant Grove Blvd. on SR 65).	2021-2036	\$95,000,000	\$148,574,000

# **Appendix E. Carbon Monoxide Hot-Spot Analysis Modeling Procedures**

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The ambient air quality effects of traffic emissions related to the Washington Boulevard/Andora Underpass Improvement Project were evaluated using the CALINE4 dispersion model (Benson 1989) and the modeling procedures described below. These procedures are based on Appendix B of the Caltrans/University of California, Davis CO Protocol.

## **E.1 Roadway and Traffic Conditions**

Traffic volumes and operating conditions used in the modeling were obtained from the traffic analysis prepared for this project. CO modeling was conducted using p.m. traffic volumes. The peak hour used was chosen to represent the most stable meteorological conditions.

CO modeling was performed for the following scenarios.

1. Existing (2016).
2. Design Year (2035) with and without project.

Traffic data provided by Fehr & Peers (2017) indicates that peak-period volumes and delay at the affected intersections would typically be highest under p.m. peak hour conditions. Accordingly, CO concentrations were modeled for p.m. peak hour conditions to evaluate the highest potential CO impacts of project. Note that the only differences between the Build Alternatives occur during construction. Traffic volumes, speeds, and other operational conditions under the Build Alternatives would be identical. Accordingly, the CO hot-spot assessment is based on a single set of traffic conditions, which is representative of both the Build Alternatives.

## **E.2 Vehicle Emission Rates**

Vehicle emission rates were determined using the California Air Resources Board's EMFAC2014 emission rate program. Free flow traffic speeds were adjusted to a speed of 5.0 miles per hour (mph) for vehicles entering and exiting intersection segments to represent a worst-case scenario, as 5 mph is the lowest speed EMFAC allows. EMFAC2014 modeling procedures followed the guidelines recommended by Caltrans. The program assumed Placer County regional traffic data, averaged for each subarea, operating during the winter months. A low January temperature of 39° F was assumed.

### **E.3 Receptor Locations**

CO concentrations were estimated at four receptor locations located near the most congested intersections affected by the project.

- Washington Boulevard/Pleasant Grove Boulevard
- Washington Boulevard/Kaseberg Drive
- Washington Boulevard/Junction Boulevard

Receptors were chosen based on Caltrans' CO Protocol. Receptor heights were set at 5.9 feet (1.8 meters). EPA modeling guidance suggests that receptors normally be chosen to be around breathing height (6 feet).

### **E.4 Meteorological Conditions**

Meteorological inputs to the CALINE4 model were determined using the methodology recommended in the CO Protocol (Garza et al. 1997). The meteorological conditions used in the modeling represent a calm winter period. The worst-case wind angles option was used to determine a worst-case concentration for each receptor. The meteorological inputs are listed below.

1. 0.5 meters per second wind speed (1.64 feet per second) wind speed.
2. G stability class ground-level temperature inversion.
3. 15 degree wind direction standard deviation.
4. 1,000 meter mixing height.

### **E.5 Background Concentrations and Eight-Hour Values**

A background concentration of 1.93 parts per million (ppm) was added to the modeled 1-hour values to account for sources of CO not included in the modeling. Eight-hour modeled values were calculated from the 1-hour values using a persistence factor of 0.7. A background concentration of 1.37 ppm was added to the modeled 8-hour values. All background concentration data were taken from the North Highlands-Blackfoot Way monitoring station from 2013 through 2016 (California Air Resources Board 2016; U.S. Environmental Protection Agency 2016b).

The CO air quality modeling results are shown in Table E-1.

**Table E-1. CO Modeling Results (in Parts Per Million)**

Intersection	Rec. <sup>a</sup>	1-Hour Concentration <sup>b</sup>			8-Hour Concentration <sup>c</sup>		
		Existing (2016)	Design (2035)		Existing (2016)	Design (2035)	
			No Project Alternative	Build Alternatives 1 and 2		No Project Alternative	Build Alternatives 1 and 2
Washington Boulevard/Pleasant Grove Boulevard	1	3.8	2.6	2.6	2.7	1.9	1.9
	2	3.5	2.5	2.5	2.5	1.8	1.8
	3	3.4	2.5	2.5	2.4	1.8	1.8
	4	3.8	2.6	2.6	2.7	1.9	1.9
Washington Boulevard/Kaseberg Drive	5	3.1	2.3	2.4	2.2	1.6	1.7
	6	2.9	2.2	2.3	2.1	1.6	1.6
	7	3.0	2.3	2.4	2.1	1.6	1.7
	8	2.9	2.2	2.3	2.1	1.6	1.6
Washington Boulevard/Junction Boulevard	9	3.0	2.4	2.4	2.1	1.7	1.7
	10	3.0	2.4	2.4	2.1	1.7	1.7
	11	3.1	2.4	2.4	2.2	1.7	1.7
	12	2.9	2.4	2.4	2.1	1.7	1.7
State Standard (ppm)		20	20	20	9	9	9
Federal Standard (ppm)		35	35	35	9	9	9
<p>Notes:</p> <p><sup>a</sup> Consistent with Caltrans CO Protocol, receptors are located at 3 meters from the intersection, at each of the four corners to represent the nearest location in which a receptor could potentially be located adjacent to a travelled roadway. The modeled receptors indicated are not representative of the actual sensitive receptors. All intersections modeled have two intersecting roadways.</p> <p><sup>b</sup> Average 1-hour background concentration between 2013 and 2015 was 1.93 ppm (California Air Resources Board 2016).</p> <p><sup>c</sup> Average 8-hour background concentration between 2013 and 2015 was 1.37 ppm (U.S. Environmental Protection Agency 2016b).</p> <p>CO = carbon monoxide; ppm = parts per million</p>							

## **Appendix F.** CO Modeling Data and Output Reports

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -5 0 -5 * AG 495 4.3 0.0 17.0			
B. EBD	* 0 -2 1000 -2 * AG 5 4.3 0.0 10.0			
C. WBA	* 1000 4 0 4 * AG 11 4.3 0.0 13.3			
D. WBD	* 0 4 -1000 4 * AG 756 4.3 0.0 13.3			
E. SBA	* -7 1000 -7 0 * AG 1090 4.3 0.0 20.6			
F. SBD	* -4 0 -4 -1000 * AG 1084 4.3 0.0 13.3			
G. NBA	* 7 -1000 7 0 * AG 1191 4.3 0.0 20.6			
H. NBD	* 4 0 4 1000 * AG 942 4.3 0.0 13.3			

III. RECEPTOR LOCATIONS

RECEPTOR	* COORDINATES (M)
	* X Y Z
1. R_001	* -18 11 1.8
2. R_002	* 10 10 1.8
3. R_003	* -11 -15 1.8
4. R_004	* 18 -7 1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

		* PRED *		CONC/LINK												
		* BRG *		* CONC *		(PPM)										
RECEPTOR		* (DEG) *		* (PPM) *		A	B	C	D	E	F	G	H			
-----*-----*-----*-----*-----																
1. R_001	*	169.	*	1.1	*	0.1	0.0	0.0	0.2	0.1	0.4	0.3	0.0			
2. R_002	*	185.	*	1.1	*	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.1			
3. R_003	*	6.	*	1.2	*	0.1	0.0	0.0	0.1	0.5	0.1	0.0	0.3			
4. R_004	*	274.	*	1.0	*	0.3	0.0	0.0	0.3	0.0	0.1	0.3	0.0			

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -2 0 -2 * AG 52 4.3 0.0 10.0			
B. EBD	* 0 0 1000 0 * AG 0 4.3 0.0 10.0			
C. WBA	* 1000 0 0 0 * AG 0 4.3 0.0 10.0			
D. WBD	* 0 2 -1000 2 * AG 65 4.3 0.0 10.0			
E. SBA	* 0 1000 0 0 * AG 1066 4.3 0.0 10.0			
F. SBD	* -2 0 -2 -1000 * AG 1078 4.3 0.0 10.0			
G. NBA	* 4 -1000 4 0 * AG 948 4.3 0.0 13.3			
H. NBD	* 4 0 4 1000 * AG 923 4.3 0.0 13.3			

III. RECEPTOR LOCATIONS

RECEPTOR	* COORDINATES (M) *
	* X Y Z
1. R_001	* -6 7 1.8
2. R_002	* 10 5 1.8
3. R_003	* -8 -7 1.8
4. R_004	* 11 -5 1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

RECEPTOR	* PRED *		CONC/LINK							
	* BRG * CONC *		(PPM)							
	* (DEG) *	* (PPM) *	A	B	C	D	E	F	G	H
-----*-----*-----*-----										
1. R_001	* 174. *	1.2 *	0.0	0.0	0.0	0.0	0.1	0.7	0.4	0.0
2. R_002	* 352. *	1.0 *	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.6
3. R_003	* 172. *	1.1 *	0.0	0.0	0.0	0.0	0.0	0.7	0.4	0.0
4. R_004	* 352. *	1.0 *	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.5

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -11 0 -11 * AG 1824 4.3 0.0 27.9			
B. EBD	* 0 -5 1000 -5 * AG 2006 4.3 0.0 17.0			
C. WBA	* 1000 9 0 9 * AG 2021 4.3 0.0 24.3			
D. WBD	* 0 5 -1000 5 * AG 2097 4.3 0.0 17.0			
E. SBA	* -7 1000 -7 0 * AG 1002 4.3 0.0 20.6			
F. SBD	* -4 0 -4 -1000 * AG 1133 4.3 0.0 13.3			
G. NBA	* 9 -1000 9 0 * AG 982 4.3 0.0 24.3			
H. NBD	* 4 0 4 1000 * AG 593 4.3 0.0 13.3			

III. RECEPTOR LOCATIONS

	* COORDINATES (M)
RECEPTOR	* X Y Z
1. R_001	* -18 14 1.8
2. R_002	* 10 22 1.8
3. R_003	* -11 -26 1.8
4. R_004	* 22 -14 1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

		* PRED *				CONC/LINK											
		* BRG *		* CONC *				(PPM)									
RECEPTOR		* (DEG)		* (PPM)		*		A		B		C		D		E	
1. R_001	*	97.	*	1.9	*	0.0	0.5	0.8	0.3	0.2	0.0	0.0	0.1				
2. R_002	*	186.	*	1.6	*	0.0	0.2	0.4	0.0	0.0	0.4	0.4	0.1				
3. R_003	*	78.	*	1.5	*	0.1	0.5	0.4	0.0	0.0	0.3	0.2	0.0				
4. R_004	*	277.	*	1.9	*	0.6	0.3	0.0	0.5	0.0	0.2	0.2	0.0				

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S      Z0= 100. CM      ALT= 0. (M)  
BRG= WORST CASE      VD= 0.0 CM/S  
CLAS= 7 (G)      VS= 0.0 CM/S  
MIXH= 1000. M      AMB= 0.0 PPM  
SIGTH= 15. DEGREES      TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -5 0 -5 * AG 719 1.3 0.0 17.0			
B. EBD	* 0 -2 1000 -2 * AG 5 1.3 0.0 10.0			
C. WBA	* 1000 4 0 4 * AG 11 1.3 0.0 13.3			
D. WBD	* 0 4 -1000 4 * AG 1792 1.3 0.0 13.3			
E. SBA	* -7 1000 -7 0 * AG 2025 1.3 0.0 20.6			
F. SBD	* -4 0 -4 -1000 * AG 1680 1.3 0.0 13.3			
G. NBA	* 7 -1000 7 0 * AG 1691 1.3 0.0 20.6			
H. NBD	* 4 0 4 1000 * AG 969 1.3 0.0 13.3			

III. RECEPTOR LOCATIONS

	* COORDINATES (M)
RECEPTOR	* X Y Z
1. R_001	* -18 11 1.8
2. R_002	* 10 10 1.8
3. R_003	* -11 -15 1.8
4. R_004	* 18 -7 1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

	*	* PRED *		CONC/LINK									
	*	BRG	*	CONC	*		(PPM)						
RECEPTOR	*	(DEG)	*	(PPM)	*	A	B	C	D	E	F	G	H
	*		*		*								
1. R_001	*	169.	*	0.5	*	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0
2. R_002	*	263.	*	0.5	*	0.1	0.0	0.0	0.3	0.1	0.0	0.0	0.1
3. R_003	*	5.	*	0.5	*	0.1	0.0	0.0	0.1	0.3	0.1	0.0	0.1
4. R_004	*	275.	*	0.5	*	0.1	0.0	0.0	0.2	0.0	0.1	0.1	0.0

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -2 0 -2 * AG 51 1.3 0.0 10.0			
B. EBD	* 0 0 1000 0 * AG 0 1.3 0.0 10.0			
C. WBA	* 1000 0 0 0 * AG 0 1.3 0.0 10.0			
D. WBD	* 0 2 -1000 2 * AG 53 1.3 0.0 10.0			
E. SBA	* 0 1000 0 0 * AG 2016 1.3 0.0 10.0			
F. SBD	* -2 0 -2 -1000 * AG 2009 1.3 0.0 10.0			
G. NBA	* 4 -1000 4 0 * AG 968 1.3 0.0 13.3			
H. NBD	* 4 0 4 1000 * AG 963 1.3 0.0 13.3			

III. RECEPTOR LOCATIONS

	* COORDINATES (M)
RECEPTOR	* X Y Z
1. R_001	* -6 7 1.8
2. R_002	* 10 5 1.8
3. R_003	* -8 -7 1.8
4. R_004	* 11 -5 1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

		* PRED *				CONC/LINK									
		* BRG *		* CONC *				(PPM)							
RECEPTOR		* (DEG)		* (PPM)		*		A		B		C		D	
1. R_001	*	172.	*	0.5	*	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0		
2. R_002	*	351.	*	0.4	*	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2		
3. R_003	*	171.	*	0.5	*	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0		
4. R_004	*	351.	*	0.4	*	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2		

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -11 0 -11 * AG 2222 1.3 0.0 27.9			
B. EBD	* 0 -5 1000 -5 * AG 2459 1.3 0.0 17.0			
C. WBA	* 1000 9 0 9 * AG 2834 1.3 0.0 24.3			
D. WBD	* 0 5 -1000 5 * AG 2843 1.3 0.0 17.0			
E. SBA	* -7 1000 -7 0 * AG 1390 1.3 0.0 20.6			
F. SBD	* -4 0 -4 -1000 * AG 1977 1.3 0.0 13.3			
G. NBA	* 9 -1000 9 0 * AG 1205 1.3 0.0 24.3			
H. NBD	* 4 0 4 1000 * AG 912 1.3 0.0 13.3			

III. RECEPTOR LOCATIONS

	* COORDINATES (M)
RECEPTOR	* X Y Z
1. R_001	* -18 14 1.8
2. R_002	* 10 22 1.8
3. R_003	* -11 -26 1.8
4. R_004	* 22 -14 1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

	*	* PRED *		CONC/LINK											
	*	BRG	*	CONC	*	(PPM)									
RECEPTOR	*	(DEG)	*	(PPM)	*	A	B	C	D	E	F	G	H		
	*		*		*										
1. R_001	*	97.	*	0.7	*	0.0	0.2	0.3	0.1	0.1	0.0	0.0			
2. R_002	*	188.	*	0.6	*	0.0	0.1	0.2	0.0	0.0	0.2	0.1	0.1		
3. R_003	*	9.	*	0.6	*	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1		
4. R_004	*	278.	*	0.7	*	0.2	0.1	0.0	0.2	0.0	0.1	0.1	0.0		

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S      Z0= 100. CM      ALT= 0. (M)  
BRG= WORST CASE      VD= 0.0 CM/S  
CLAS= 7 (G)      VS= 0.0 CM/S  
MIXH= 1000. M      AMB= 0.0 PPM  
SIGTH= 15. DEGREES      TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE	VPH	(G/MI)	(M) (M)
A. EBA	* -1000 -5 0 -5 * AG	809	1.3	0.0 17.0
B. EBD	* 0 -2 1000 -2 * AG	5	1.3	0.0 10.0
C. WBA	* 1000 4 0 4 * AG	11	1.3	0.0 13.3
D. WBD	* 0 4 -1000 4 * AG	1632	1.3	0.0 13.3
E. SBA	* -7 1000 -7 0 * AG	1406	1.3	0.0 20.6
F. SBD	* -4 0 -4 -1000 * AG	1496	1.3	0.0 13.3
G. NBA	* 7 -1000 7 0 * AG	1774	1.3	0.0 20.6
H. NBD	* 4 0 4 1000 * AG	867	1.3	0.0 13.3

III. RECEPTOR LOCATIONS

	* COORDINATES (M)
RECEPTOR	* X Y Z
1. R_001	* -18 11 1.8
2. R_002	* 10 10 1.8
3. R_003	* -11 -15 1.8
4. R_004	* 18 -7 1.8

JOB: Washington/Andora Widening Project  
 RUN: CALINE4 RUN (WORST CASE ANGLE)  
 POLLUTANT: Carbon Monoxide

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -2 0 -2 * AG 51 1.3 0.0 10.0			
B. EBD	* 0 0 1000 0 * AG 0 1.3 0.0 10.0			
C. WBA	* 1000 0 0 0 * AG 0 1.3 0.0 10.0			
D. WBD	* 0 2 -1000 2 * AG 63 1.3 0.0 10.0			
E. SBA	* 0 1000 0 0 * AG 1386 1.3 0.0 10.0			
F. SBD	* -2 0 -2 -1000 * AG 1381 1.3 0.0 10.0			
G. NBA	* 4 -1000 4 0 * AG 863 1.3 0.0 13.3			
H. NBD	* 4 0 4 1000 * AG 856 1.3 0.0 13.3			

III. RECEPTOR LOCATIONS

RECEPTOR	* COORDINATES (M) *
	* X Y Z
1. R_001	* -6 7 1.8
2. R_002	* 10 5 1.8
3. R_003	* -8 -7 1.8
4. R_004	* 11 -5 1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

		* PRED *				CONC/LINK									
		* BRG *		* CONC *				(PPM)							
RECEPTOR		* (DEG)		* (PPM)		*		A		B		C		D	
1. R_001	*	174.	*	0.4	*	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0		
2. R_002	*	351.	*	0.3	*	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2		
3. R_003	*	171.	*	0.4	*	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0		
4. R_004	*	351.	*	0.3	*	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1		

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -11 0 -11 * AG 2155 1.3 0.0 27.9			
B. EBD	* 0 -5 1000 -5 * AG 2439 1.3 0.0 17.0			
C. WBA	* 1000 9 0 9 * AG 2723 1.3 0.0 24.3			
D. WBD	* 0 5 -1000 5 * AG 2958 1.3 0.0 17.0			
E. SBA	* -7 1000 -7 0 * AG 1742 1.3 0.0 20.6			
F. SBD	* -4 0 -4 -1000 * AG 1483 1.3 0.0 13.3			
G. NBA	* 9 -1000 9 0 * AG 1104 1.3 0.0 24.3			
H. NBD	* 4 0 4 1000 * AG 844 1.3 0.0 13.3			

III. RECEPTOR LOCATIONS

	* COORDINATES (M)
RECEPTOR	* X Y Z
1. R_001	* -18 14 1.8
2. R_002	* 10 22 1.8
3. R_003	* -11 -26 1.8
4. R_004	* 22 -14 1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

		* PRED *		CONC/LINK													
		* BRG *		* CONC *		(PPM)											
RECEPTOR		* (DEG)		* (PPM)	*	A	B	C	D	E	F	G	H				
		*		*		-----											
1. R_001	*	97.	*	0.7	*	0.0	0.2	0.3	0.1	0.1	0.0	0.0					
2. R_002	*	258.	*	0.6	*	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.1				
3. R_003	*	7.	*	0.6	*	0.1	0.0	0.0	0.1	0.2	0.1	0.0	0.1				
4. R_004	*	278.	*	0.7	*	0.2	0.1	0.0	0.2	0.0	0.1	0.1	0.0				

1  
EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project Detou  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -7 0 -7 * AG 461 3.7 0.0 20.6			
B. EBD	* 0 -4 1000 -4 * AG 567 3.7 0.0 13.3			
C. WBA	* 1000 5 0 5 * AG 771 3.7 0.0 17.0			
D. WBD	* 0 4 -1000 4 * AG 712 3.7 0.0 13.3			
E. SBA	* -9 1000 -9 0 * AG 1588 3.7 0.0 24.3			
F. SBD	* -5 0 -5 -1000 * AG 1493 3.7 0.0 17.0			
G. NBA	* 9 -1000 9 0 * AG 1452 3.7 0.0 24.3			
H. NBD	* 5 0 5 1000 * AG 1500 3.7 0.0 17.0			

III. RECEPTOR LOCATIONS

	* COORDINATES (M)
RECEPTOR	* X Y Z
1. R_001	* -22 11 1.8
2. R_002	* 14 15 1.8
3. R_003	* -15 -18 1.8
4. R_004	* 22 -11 1.8



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project Detou  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

RECEPTOR	* PRED *		CONC/LINK							
	* BRG * CONC *		(PPM)							
	* (DEG) *	* (PPM) *	A	B	C	D	E	F	G	H
-----*-----*-----*-----										
1. R_001	* 97. *	1.1 *	0.0	0.2	0.3	0.1	0.3	0.0	0.0	0.2
2. R_002	* 187. *	1.3 *	0.0	0.1	0.2	0.0	0.0	0.3	0.5	0.2
3. R_003	* 7. *	1.2 *	0.1	0.0	0.0	0.1	0.5	0.1	0.0	0.3
4. R_004	* 349. *	1.0 *	0.0	0.1	0.1	0.0	0.3	0.0	0.1	0.4

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project Detou  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -9 0 -9 * AG 1995 3.7 0.0 24.3			
B. EBD	* 0 -5 1000 -5 * AG 1751 3.7 0.0 17.0			
C. WBA	* 1000 11 0 11 * AG 2397 3.7 0.0 27.9			
D. WBD	* 0 5 -1000 5 * AG 2228 3.7 0.0 17.0			
E. SBA	* -9 1000 -9 0 * AG 1476 3.7 0.0 24.3			
F. SBD	* -5 0 -5 -1000 * AG 1277 3.7 0.0 17.0			
G. NBA	* 9 -1000 9 0 * AG 1335 3.7 0.0 24.3			
H. NBD	* 5 0 5 1000 * AG 1947 3.7 0.0 17.0			

III. RECEPTOR LOCATIONS

RECEPTOR	* COORDINATES (M) *
	* X Y Z
1. R_001	* -22 14 1.8
2. R_002	* 14 25 1.8
3. R_003	* -15 -23 1.8
4. R_004	* 22 -15 1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project Detou  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

		* PRED *				CONC/LINK											
		* BRG *		* CONC *				(PPM)									
RECEPTOR		* (DEG)		* (PPM)		*		A		B		C		D		E	
1. R_001	*	97.	*	1.9	*	0.0	0.4	0.7	0.3	0.3	0.0	0.0	0.2				
2. R_002	*	189.	*	1.6	*	0.0	0.2	0.4	0.0	0.0	0.3	0.4	0.3				
3. R_003	*	8.	*	1.6	*	0.4	0.0	0.0	0.2	0.4	0.2	0.0	0.4				
4. R_004	*	278.	*	1.7	*	0.6	0.2	0.0	0.5	0.0	0.1	0.2	0.0				

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project Detou  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 7 (G) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 0.0 PPM  
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE VPH (G/MI) (M) (M)			
A. EBA	* -1000 -7 0 -7 * AG 461 3.7 0.0 20.6			
B. EBD	* 0 -4 1000 -4 * AG 972 3.7 0.0 13.3			
C. WBA	* 1000 5 0 5 * AG 1111 3.7 0.0 17.0			
D. WBD	* 0 4 -1000 4 * AG 712 3.7 0.0 13.3			
E. SBA	* -9 1000 -9 0 * AG 2226 3.7 0.0 24.3			
F. SBD	* -5 0 -5 -1000 * AG 1469 3.7 0.0 17.0			
G. NBA	* 9 -1000 9 0 * AG 1454 3.7 0.0 24.3			
H. NBD	* 5 0 5 1000 * AG 2100 3.7 0.0 17.0			

III. RECEPTOR LOCATIONS

	* COORDINATES (M)
RECEPTOR	* X Y Z
1. R_001	* -22 11 1.8
2. R_002	* 14 15 1.8
3. R_003	* -15 -18 1.8
4. R_004	* 22 -11 1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project Detou  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

		* PRED *				CONC/LINK											
		* BRG *		* CONC *				(PPM)									
RECEPTOR		* (DEG)		* (PPM)		*		A		B		C		D		E	
1. R_001	*	97.	*	1.5	*	0.0	0.3	0.4	0.1	0.4	0.0	0.0	0.2				
2. R_002	*	351.	*	1.4	*	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.0				
3. R_003	*	7.	*	1.5	*	0.1	0.0	0.0	0.1	0.7	0.1	0.0	0.4				
4. R_004	*	349.	*	1.4	*	0.0	0.2	0.2	0.0	0.4	0.0	0.1	0.6				

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Washington/Andora Widening Project Detou  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S      ZO= 100. CM      ALT= 0. (M)  
BRG= WORST CASE      VD= 0.0 CM/S  
CLAS= 7 (G)      VS= 0.0 CM/S  
MIXH= 1000. M      AMB= 0.0 PPM  
SIGTH= 15. DEGREES      TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK	* LINK COORDINATES (M) *	EF	H	W
DESCRIPTION	* X1 Y1 X2 Y2 * TYPE	VPH	(G/MI)	(M) (M)
A. EBA	* -1000 -9 0 -9 * AG	2209	3.7	0.0 24.3
B. EBD	* 0 -5 1000 -5 * AG	1751	3.7	0.0 17.0
C. WBA	* 1000 11 0 11 * AG	2397	3.7	0.0 27.9
D. WBD	* 0 5 -1000 5 * AG	2413	3.7	0.0 17.0
E. SBA	* -9 1000 -9 0 * AG	1476	3.7	0.0 24.3
F. SBD	* -5 0 -5 -1000 * AG	1491	3.7	0.0 17.0
G. NBA	* 9 -1000 9 0 * AG	1520	3.7	0.0 24.3
H. NBD	* 5 0 5 1000 * AG	1947	3.7	0.0 17.0

III. RECEPTOR LOCATIONS

	* COORDINATES (M)
RECEPTOR	* X Y Z
1. R_001	* -22 14 1.8
2. R_002	* 14 25 1.8
3. R_003	* -15 -23 1.8
4. R_004	* 22 -15 1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 2

JOB: Washington/Andora Widening Project Detou  
RUN: CALINE4 RUN (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

		* PRED *				CONC/LINK											
		* BRG *		* CONC *				(PPM)									
RECEPTOR		* (DEG)		* (PPM)		*		A		B		C		D		E	
1. R_001	*	97.	*	1.9	*	0.0	0.4	0.7	0.4	0.3	0.0	0.0	0.2				
2. R_002	*	189.	*	1.7	*	0.0	0.2	0.4	0.0	0.0	0.4	0.4	0.3				
3. R_003	*	8.	*	1.7	*	0.4	0.0	0.0	0.2	0.4	0.2	0.0	0.4				
4. R_004	*	278.	*	1.8	*	0.6	0.2	0.0	0.5	0.0	0.2	0.3	0.0				

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EXIT

## **Appendix G. Selected Traffic Data**

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This appendix includes the following selected traffic data from the *Transportation Study for the Washington Boulevard Widening Project* (Fehr & Peers 2017).



**Table G-1. AADT Volumes and Truck Percentages**

Location	Existing Conditions (2016)		Design Year Conditions (2035)				
			No Project Alternative		Build Alternatives 1 and 2		
	AADT	Truck AADT <sup>a</sup>	AADT	Truck AADT <sup>a</sup>	AADT	Truck AADT <sup>a</sup>	Δ Truck AADT from No Project Alternative
Washington Boulevard between Pleasant Grove Boulevard and Industrial Avenue	15,500	310	27,500	550	29,300	586	36
Washington Blvd between Kaseberg Drive and Emerald Oak Road / Diamond Oaks Road	22,100	442	30,400	608	35,800	716	108
Washington Blvd between Kaseberg Drive and Emerald Oak Road / Diamond Oaks Road	20,300	406	24,900	498	32,000	640	142
Washington Blvd between Kaseberg Drive and Sawtell Road / Derek Place	20,700	414	25,000	500	32,100	642	142
Washington Blvd between Junction Boulevard and Corporation Yard Road	23,900	478	36,300	726	36,400	728	2
Pleasant Grove Boulevard between Winslow Drive and Washington Boulevard	43,400	868	58,900	1178	60,000	1200	22
Pleasant Grove Boulevard between Washington Boulevard and Galilee Road/ Elmwood Rive	44,100	882	58,900	1178	57,600	1152	-26
Diamond Oaks Road between Glenwood Circle / Firestone Drive and Washington Boulevard	4,700	94	9,100	182	9,400	188	6
Junction Boulevard between Washington Boulevard and Corporation Yard Road	13,400	268	25,700	514	27,900	558	44
Foothills Boulevard between Pleasant Grove Boulevard and S Bluff Drive / Beckett Drive	32,200	644	50,000	1,000	49,400	988	-12

Source: Fehr & Peers 2017

Notes:

<sup>a</sup> Trucks assumed to represent 2 percent of total AADT.

**Table G-2. Intersection Operations Results (2035 Conditions)**

Intersection	2035 No Build Alternative				2035 Build Alternatives 1 and 2			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Washington Boulevard / Pleasant Grove Boulevard	41	<b>D</b>	110	<b>F</b>	<u>52</u>	<b>D</b>	<u>162</u>	<b>F</b>
Washington Boulevard / Diamond Oaks Road / Emerald Oak Road	68	<b>E</b>	36	<b>D</b>	22	C	22	C
Washington Boulevard / Kaseberg Drive	8 (13)	A (B)	9 (37)	A ( <b>E</b> )	4 (11)	A (B)	7 (35)	A ( <b>D</b> )
Washington Boulevard / Sawtell Road / Derek Place	9	A	10	A	<u>12</u>	<u>B</u>	<u>16</u>	<u>B</u>
Washington Boulevard / Junction Boulevard	15	B	41	<b>D</b>	<u>20</u>	<u>C</u>	42	<b>D</b>
Source: Fehr & Peers 2017 <b>Bold</b> font indicates intersections at LOS D, E, or F. <u>Underlined</u> font indicate an increase in delay from the no project to project condition. The LOS and average delay in seconds per vehicle are reported.								

## **Appendix H. PM Interagency Consultation**

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The Washington Boulevard/Andora Underpass Improvement Project underwent interagency consultation (IAC) through SACOG's PLCG. The PLCG issued concurrence that the project is not a POAQC on May 4, 2017. This appendix provides evidence that the IAC concurred with the conclusion that the project is not a POAQC, including concurrence emails from the EPA and FHWA.

## Hatcher, Shannon

---

**From:** Jose Luis Caceres <JCaceres@sacog.org>  
**Sent:** Thursday, May 04, 2017 4:41 PM  
**To:** ALETA KENNARD; alexander.fong@dot.ca.gov; AGreen@placer.ca.gov; Jose Luis Caceres; CAnderson@airquality.org; dave.johnston@edcgov.us; douglas.coleman@dot.ca.gov; Heather.Phillips@arb.ca.gov; Lee Jason (jason.lee@dot.ca.gov); jbarton@edctc.org; Ungvarsky.John@epa.gov; Joseph.Vaughn@dot.gov; oconnor.karina@epa.gov; lmcneel-caird@pctpa.net; mjones@ysaqmd.org; Wright Molly (mwright@airquality.org); pphillee@airquality.org; Renee DeVere-Okie; rodney.tavitas@dot.ca.gov; shalanda\_christian@dot.ca.gov; sharon.tang@dot.ca.gov; Shengyi Gao; sspaethe@fraqmd.org; Yu-Shuo (YChang@placer.ca.gov)  
**Cc:** Hatcher, Shannon; Villanueva Martin (martin.villanueva@dot.ca.gov); Yoon, Laura; Bushnell-Bergfalk, Susan  
**Subject:** Not a POAQC: Roseville Washington Blvd/Andora Bridge Widening (PLA25501)

All,

The PLCG has determined that the City of Roseville's project, Washington Blvd/Andora Bridge Improvement Project (PLA25501), is NOT a Project of Air Quality Concern (POAQC).

EPA and FHWA both concurred on 5/4/2017.

- José Luis Cáceres

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**From:** Vaughn, Joseph (FHWA) [mailto:Joseph.Vaughn@dot.gov]  
**Sent:** Thursday, May 04, 2017 2:07 PM  
**To:** Jose Luis Caceres; ALETA KENNARD; alexander.fong@dot.ca.gov; AGreen@placer.ca.gov; CAnderson@airquality.org; dave.johnston@edcgov.us; douglas.coleman@dot.ca.gov; Heather.Phillips@arb.ca.gov; Lee Jason (jason.lee@dot.ca.gov); jbarton@edctc.org; Ungvarsky.John@epa.gov; oconnor.karina@epa.gov; lmcneel-caird@pctpa.net; mjones@ysaqmd.org; Wright Molly (mwright@airquality.org); pphillee@airquality.org; Renee DeVere-Okie; rodney.tavitas@dot.ca.gov; shalanda\_christian@dot.ca.gov; sharon.tang@dot.ca.gov; Shengyi Gao; sspaethe@fraqmd.org; Yu-Shuo (YChang@placer.ca.gov)  
**Cc:** Hatcher, Shannon; Yoon, Laura; Bushnell-Bergfalk, Susan; Villanueva Martin (martin.villanueva@dot.ca.gov)  
**Subject:** RE: POAQC: Roseville Washington Blvd/Andora Bridge Widening (PLA25501) Due: 5/17

FHWA concurs that this is not a project of air quality concern.

Joseph Vaughn  
Environmental Specialist  
FHWA, CA Division  
(916) 498-5346

---

**From:** Jose Luis Caceres [mailto:JCaceres@sacog.org]  
**Sent:** Wednesday, May 03, 2017 10:13 AM  
**To:** ALETA KENNARD; [alexander.fong@dot.ca.gov](mailto:alexander.fong@dot.ca.gov); [AGreen@placer.ca.gov](mailto:AGreen@placer.ca.gov); Jose Luis Caceres; [CAnderson@airquality.org](mailto:CAnderson@airquality.org); [dave.johnston@edcgov.us](mailto:dave.johnston@edcgov.us); [douglas.coleman@dot.ca.gov](mailto:douglas.coleman@dot.ca.gov); [Heather.Phillips@arb.ca.gov](mailto:Heather.Phillips@arb.ca.gov); Lee Jason ([jason.lee@dot.ca.gov](mailto:jason.lee@dot.ca.gov)); [jbarton@edctc.org](mailto:jbarton@edctc.org); [Ungvarsky.John@epa.gov](mailto:Ungvarsky.John@epa.gov); Vaughn, Joseph (FHWA); [oconnor.karina@epa.gov](mailto:oconnor.karina@epa.gov); [lmneel-caird@pctpa.net](mailto:lmneel-caird@pctpa.net); [mjones@ysaqmd.org](mailto:mjones@ysaqmd.org); Wright Molly ([mwright@airquality.org](mailto:mwright@airquality.org)); [pphillee@airquality.org](mailto:pphillee@airquality.org); Renee DeVere-Okie; [rodney.tavitas@dot.ca.gov](mailto:rodney.tavitas@dot.ca.gov); [shalanda\\_christian@dot.ca.gov](mailto:shalanda_christian@dot.ca.gov); [sharon.tang@dot.ca.gov](mailto:sharon.tang@dot.ca.gov); Shengyi Gao; [sspaethe@fraqmd.org](mailto:sspaethe@fraqmd.org); Yu-Shuo ([YChang@placer.ca.gov](mailto:YChang@placer.ca.gov))  
**Cc:** Hatcher, Shannon; Yoon, Laura; Bushnell-Bergfalk, Susan; Villanueva Martin ([martin.villanueva@dot.ca.gov](mailto:martin.villanueva@dot.ca.gov))  
**Subject:** POAQC: Roseville Washington Blvd/Andora Bridge Widening (PLA25501) Due: 5/17  
**Importance:** High

Project Level Conformity Group,

Attached for interagency review is the City of Roseville's project, **Washington Blvd/Andora Bridge Improvement Project (PLA25501)**, a two- to four-lane bridge widening. As part of project level conformity under NEPA, it requires a determination of whether it is a project of air quality concern.

Please confirm that you concur that this is NOT a Project of Air Quality Concern (POAQC). **Please email questions and comments by 5 p.m., Wednesday, May 17.**

This project falls under the 23 USC 327 (formerly 6005) federal process. As such, it requires written concurrence by EPA (Karina O'Conner) and FHWA (Joseph Vaughn). Please remember to use "reply all," to make comments to the group. Otherwise, you may also contact the sponsor directly (Caltrans D3 Local Assistance is assisting):

Martin Villanueva  
Caltrans Local Assistance District 3  
[Martin.villanueva@dot.ca.gov](mailto:Martin.villanueva@dot.ca.gov)

***José Luis Cáceres***

Transportation Planner, SACOG  
(916) 340-6218



## Hatcher, Shannon

---

**From:** OConnor, Karina <OConnor.Karina@epa.gov>  
**Sent:** Thursday, May 04, 2017 9:45 AM  
**To:** Jose Luis Caceres; ALETA KENNARD; alexander.fong@dot.ca.gov; AGreen@placer.ca.gov; canderson@airquality.org; dave.johnston@edcgov.us; douglas.coleman@dot.ca.gov; Heather.Phillips@arb.ca.gov; Lee Jason (jason.lee@dot.ca.gov); jbarton@edctc.org; Ungvarsky, John; Joseph.Vaughn@dot.gov; Imcneel-caird@pctpa.net; mjones@ysaqmd.org; Wright Molly (mwright@airquality.org); pphille@airquality.org; Renee DeVere-Oki; rodney.tavitas@dot.ca.gov; shalanda\_christian@dot.ca.gov; sharon.tang@dot.ca.gov; Shengyi Gao; ssphaethe@fraqmd.org; Yu-Shuo (YChang@placer.ca.gov)  
**Cc:** Hatcher, Shannon; Yoon, Laura; Bushnell-Bergfalk, Susan; Villanueva Martin (martin.villanueva@dot.ca.gov)  
**Subject:** RE: POAQC: Roseville Washington Blvd/Andora Bridge Widening (PLA25501) Due: 5/17

EPA concurs that this is not a project of air quality concern.

Thanks, Karina

Karina OConnor  
EPA, Region 9  
Air Planning Office (AIR-2)  
(775) 434-8176  
[oconnor.karina@epa.gov](mailto:oconnor.karina@epa.gov)

---

**From:** Jose Luis Caceres [mailto:JCaceres@sacog.org]  
**Sent:** Wednesday, May 03, 2017 10:13 AM  
**To:** ALETA KENNARD <akennard@airquality.org>; alexander.fong@dot.ca.gov; AGreen@placer.ca.gov; Jose Luis Caceres <JCaceres@sacog.org>; canderson@airquality.org; dave.johnston@edcgov.us; douglas.coleman@dot.ca.gov; Heather.Phillips@arb.ca.gov; Lee Jason (jason.lee@dot.ca.gov) <jason.lee@dot.ca.gov>; jbarton@edctc.org; Ungvarsky, John <Ungvarsky.John@epa.gov>; Joseph.Vaughn@dot.gov; OConnor, Karina <OConnor.Karina@epa.gov>; Imcneel-caird@pctpa.net; mjones@ysaqmd.org; Wright Molly (mwright@airquality.org) <mwright@airquality.org>; pphille@airquality.org; Renee DeVere-Oki <RDeVere-Oki@sacog.org>; rodney.tavitas@dot.ca.gov; shalanda\_christian@dot.ca.gov; sharon.tang@dot.ca.gov; Shengyi Gao <SGao@sacog.org>; ssphaethe@fraqmd.org; Yu-Shuo (YChang@placer.ca.gov) <YChang@placer.ca.gov>  
**Cc:** Hatcher, Shannon <Shannon.Hatcher@icf.com>; Yoon, Laura <Laura.Yoon@icf.com>; Bushnell-Bergfalk, Susan <Susan.Bushnell-Bergfalk@icf.com>; Villanueva Martin (martin.villanueva@dot.ca.gov) <martin.villanueva@dot.ca.gov>  
**Subject:** POAQC: Roseville Washington Blvd/Andora Bridge Widening (PLA25501) Due: 5/17  
**Importance:** High

Project Level Conformity Group,

Attached for interagency review is the City of Roseville's project, **Washington Blvd/Andora Bridge Improvement Project (PLA25501)**, a two- to four-lane bridge widening. As part of project level conformity under NEPA, it requires a determination of whether it is a project of air quality concern.

Please confirm that you concur that this is NOT a Project of Air Quality Concern (POAQC). **Please email questions and comments by 5 p.m., Wednesday, May 17.**

This project falls under the 23 USC 327 (formerly 6005) federal process. As such, it requires written concurrence by EPA (Karina O'Conner) and FHWA (Joseph Vaughn). Please remember to use "reply all," to make comments to the group. Otherwise, you may also contact the sponsor directly (Caltrans D3 Local Assistance is assisting):

Martin Villanueva



***José Luis Cáceres***

Transportation Planner, SACOG  
(916) 340-6218



## Hatcher, Shannon

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**From:** Vaughn, Joseph (FHWA) <Joseph.Vaughn@dot.gov>  
**Sent:** Thursday, May 04, 2017 2:07 PM  
**To:** Jose Luis Caceres; ALETA KENNARD; alexander.fong@dot.ca.gov; AGreen@placer.ca.gov; CAnderson@airquality.org; dave.johnston@edcgov.us; douglas.coleman@dot.ca.gov; Heather.Phillips@arb.ca.gov; Lee Jason (jason.lee@dot.ca.gov); jbarton@edctc.org; Ungvarsky.John@epa.gov; oconnor.karina@epa.gov; Imcneel-caird@pctpa.net; mjones@ysaqmd.org; Wright Molly (mwright@airquality.org); pphilley@airquality.org; Renee DeVere-Ok; rodney.tavitas@dot.ca.gov; shalanda\_christian@dot.ca.gov; sharon.tang@dot.ca.gov; Shengyi Gao; sspaethe@fraqmd.org; Yu-Shuo (YChang@placer.ca.gov)  
**Cc:** Hatcher, Shannon; Yoon, Laura; Bushnell-Bergfalk, Susan; Villanueva Martin (martin.villanueva@dot.ca.gov)  
**Subject:** RE: POAQC: Roseville Washington Blvd/Andora Bridge Widening (PLA25501) Due: 5/17

FHWA concurs that this is not a project of air quality concern.

Joseph Vaughn  
Environmental Specialist  
FHWA, CA Division  
(916) 498-5346

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**From:** Jose Luis Caceres [mailto:JCaceres@sacog.org]  
**Sent:** Wednesday, May 03, 2017 10:13 AM  
**To:** ALETA KENNARD; alexander.fong@dot.ca.gov; AGreen@placer.ca.gov; Jose Luis Caceres; CAnderson@airquality.org; dave.johnston@edcgov.us; douglas.coleman@dot.ca.gov; Heather.Phillips@arb.ca.gov; Lee Jason (jason.lee@dot.ca.gov); jbarton@edctc.org; Ungvarsky.John@epa.gov; Vaughn, Joseph (FHWA); oconnor.karina@epa.gov; Imcneel-caird@pctpa.net; mjones@ysaqmd.org; Wright Molly (mwright@airquality.org); pphilley@airquality.org; Renee DeVere-Ok; rodney.tavitas@dot.ca.gov; shalanda\_christian@dot.ca.gov; sharon.tang@dot.ca.gov; Shengyi Gao; sspaethe@fraqmd.org; Yu-Shuo (YChang@placer.ca.gov)  
**Cc:** Hatcher, Shannon; Yoon, Laura; Bushnell-Bergfalk, Susan; Villanueva Martin (martin.villanueva@dot.ca.gov)  
**Subject:** POAQC: Roseville Washington Blvd/Andora Bridge Widening (PLA25501) Due: 5/17  
**Importance:** High

Project Level Conformity Group,

Attached for interagency review is the City of Roseville's project, **Washington Blvd/Andora Bridge Improvement Project (PLA25501)**, a two- to four-lane bridge widening. As part of project level conformity under NEPA, it requires a determination of whether it is a project of air quality concern.

Please confirm that you concur that this is NOT a Project of Air Quality Concern (POAQC). **Please email questions and comments by 5 p.m., Wednesday, May 17.**

This project falls under the 23 USC 327 (formerly 6005) federal process. As such, it requires written concurrence by EPA (Karina O'Conner) and FHWA (Joseph Vaughn). Please remember to use "reply all," to make comments to the group. Otherwise, you may also contact the sponsor directly (Caltrans D3 Local Assistance is assisting):

Martin Villanueva  
Caltrans Local Assistance District 3  
[Martin.villanueva@dot.ca.gov](mailto:Martin.villanueva@dot.ca.gov)

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