

Memorandum

To: CHAIR AND COMMISSIONERS

CTC Meeting: October 8, 2013

Reference No.: 2.2b
Action

From: ANDRE BOUTROS
Executive Director

Subject: **DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT (DEIR/EIS) FOR THE STATE ROUTE 58 (SR-58) KRAMER JUNCTION EXPRESSWAY PROJECT**

ISSUE:

Should the Commission, as a Responsible Agency, provide comments in response to the DEIR/EIS for the SR-58 Kramer Junction Expressway Project in Kern County?

RECOMMENDATION:

Staff recommends that the Commission make no comments relative to the alternatives or environmental impacts addressed in the DEIR/EIS. However, staff recommends that a letter be sent to the Department that states the following:

- The Commission has no comments with respect to the alternatives or environmental impacts addressed in the DEIR/EIS.
- The Commission recommends that the Department and its partners identify and secure the necessary funding to complete the project.
- If funds or other actions under the purview of the Commission are anticipated, upon completion of the final environmental document, notification should be provided to the Commission as a Responsible Agency.

BACKGROUND:

The Department is the designated CEQA/NEPA Lead Agency responsible for the environmental review of the project. For project summary information, please see the Department's memorandum included as agenda item 2.2b (1).

Memorandum

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: October 8, 2013

Reference No.: 2.2b.
Action Item

From: STEVEN KECK
Acting Chief Financial Officer

Prepared by: Katrina Pierce
Division Chief
Environmental Analysis

Subject: **COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT**

RECOMMENDATION:

The California Department of Transportation (Department) recommends that the California Transportation Commission (Commission) review and comment at the October 2013 Commission meeting on the following Draft Environmental Impact Report:

ISSUE:

06-Ker-58, PM R143.5/R143.9, 08-SBd-58, PM 0.0/12.9

This project in San Bernardino County will widen a portion of State Route 58 (SR 58) from two lanes to four lanes, as well as construct a SR 58/United States Route 395 (US 395) Interchange and an overhead structure at Burlington Northern Santa Fe Railway near the town of Boron. The project is programmed in the 2012 State Transportation Improvement Program. The total estimated cost is \$199,509,000 for capital and support. Construction is estimated to begin in Fiscal Year 2017-18. The scope, as described for the preferred alternative, is consistent with the project scope programmed by the Commission in the 2012 State Transportation Improvement Program.

Alternatives considered for the proposed project include:

- No Build Alternative.
- Alternative 1 - This alternative would construct a four-lane divided expressway with partial control of access, an interchange at the SR 58/US 395 junction and a railroad grade separation approximately 2.5 miles east of Kramer Junction.
- Alternative 1A - This alternative is the same as Alternative 1 with the exception of a different interchange geometry at the SR 58/US 395 junction .

- Alternative 2 - This alternative would construct a four-lane divided expressway with partial control of access, an interchange at the SR 58/US 395 junction and a railroad grade separation approximately 3.9 miles west of Kramer Junction.
- Alternative 3 - This alternative would construct a four-lane divided expressway with partial control of access, an interchange at the SR 58/US 395 junction and a railroad grade separation approximately 2.6 miles west of Kramer Junction.

The decision to prepare an Environmental Impact Report was made due to analysis results indicating unavoidable significant environmental impacts. Impacts include:

- Land Use
- Consistency with Local Plans
- Community Impacts
- Traffic and Transportation
- Visual/Aesthetics
- Cultural Resources
- Hazardous Waste
- Paleontology
- Noise and Vibration
- Air Quality
- Biological
- Cumulative Impacts

Measures to be incorporated to minimize impacts of the project are included in the attached table of potential impacts and proposed mitigation measures.

Attachments

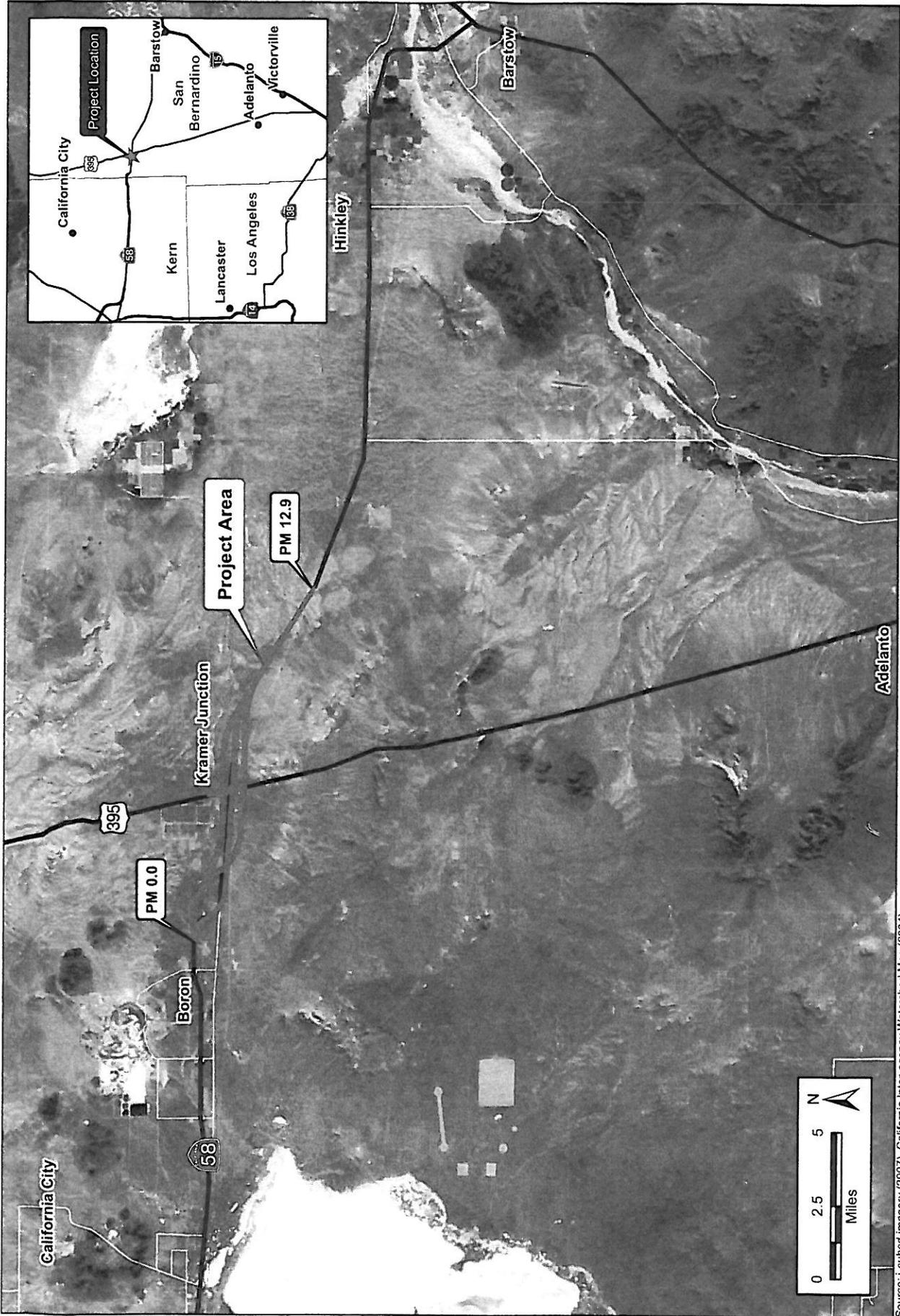
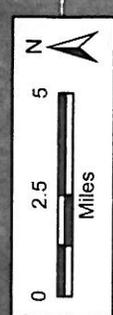


Figure 1.1
Regional Vicinity Map
State Route 58 Kramer Junction Expressway Project

Source: i-cubed Imagery (2007), California Inter-agency Watershed Map (2004)

State Route 58 Kramer Junction Expressway Project
 06-Ker-58 PM R143.5/R143.9
 08-SB6-58 PM R0.0/R12.9
 EA 08-34770
 Project Number 0800000616



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Table S-2: Summary of Potential Impacts & Proposed Measures by Alternative

Affected Resources	Alternative 1 Northerly Alignment 4-Lane Divided Expressway	Alternative 1A Northerly Alignment 4-Lane Divided Expressway (with Spread Diamond and Cloverleaf Interchange at SR-58/US-395)	Alternative 2 Existing Alignment 4-Lane Expressway with Median	Alternative 3 Southerly Alignment 4-Lane Divided Expressway	Alternative 4 No-Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Cost	\$149,195,000	\$147,437,000	\$332,202,000	\$196,075,000	No impact, but Alternative 4 would not preclude costs in necessary maintenance.	N/A
Land Use: Existing & Future Land Use	Acquisitions would be required; inconsistencies would result with existing land uses. Impacts would be minor adverse under NEPA and less than significant under CEQA.	Acquisitions would be required; inconsistencies would result with existing land uses. Impacts would be minor adverse under NEPA and less than significant under CEQA.	Acquisitions would be required; inconsistencies would result with existing land uses. Impacts would be minor adverse under NEPA and less than significant under CEQA.	Acquisitions would be required; inconsistencies would result with existing land uses. Impacts would be minor adverse under NEPA and less than significant under CEQA.	No impact.	Amendments to the zoning and land use designations for parcels affected by the proposed project would be required.
Land Use: Consistency with State, Regional, and Local Plans	Alternative 1 would be consistent with applicable plans. Impacts would be minor adverse under NEPA and less than significant under CEQA.	Alternative 1A would be consistent with applicable plans. Impacts would be minor adverse under NEPA and less than significant under CEQA.	Alternative 2 would be consistent with applicable plans. Impacts would be minor adverse under NEPA and less than significant under CEQA.	Alternative 3 would be consistent with applicable plans. Impacts would be minor adverse under NEPA and less than significant under CEQA.	Alternative 4 would be inconsistent with portions of the County of San Bernardino General Plan.	None required
Growth	Project-related growth would not occur.	Project-related growth would not occur.	Project-related growth would not occur.	Project-related growth would not occur.	Project-related growth would not occur.	None required
Farmlands/ Timberlands:	No impact.	No impact.	No impact.	No impact.	No impact.	None required
Community Impacts	Displacement of four uses would occur under Alternative 1: <ul style="list-style-type: none"> Antique shop Anique car restoration shop Airplane hangar/storage facility Residence Business impacts associated with changes to traffic patterns at the junction may reduce number of customers stopping. Removal of businesses would alter the character of the junction Access to businesses on existing SR-58 and to the northwest of the junction would be reduced. Impacts to the community would be minor adverse under NEPA and less than significant under CEQA following the implementation of mitigation measures.	Displacement of one use would occur under Alternative 1A: <ul style="list-style-type: none"> Airplane hangar/storage facility Business impacts associated with changes to traffic patterns at the junction may reduce number of customers stopping. Access to businesses on existing SR-58 and to the northwest of the junction would be reduced. Impacts to the community would be minor adverse under NEPA and less than significant under CEQA following the implementation of mitigation measures.	Displacement of up to 14 uses would occur under Alternative 2: <ul style="list-style-type: none"> Pilot Travel Center and Subway Restaurant Chevron gas station 76 gas station/ convenience store Arco and AMPM Burger King Roadhouse Restaurant Residence Relax Inn motel Tire service shop Gift shop Two vehicle maintenance/scrap facilities Southern CA Edison Utility Substation Wastewater impoundment basins Substantial changes to community character and negative impacts on employees that would be displaced. Business impacts associated with changes to traffic patterns at the junction may reduce number of customers stopping. Access to businesses on existing SR-58 and to the northwest of	No displacement would occur under Alternative 3. Business impacts associated with changes to traffic patterns at the junction may reduce number of customers stopping. Access to businesses on the existing SR-58 would be reduced. Impacts to the community would be minor adverse under NEPA and less than significant under CEQA following the implementation of mitigation measures.	No impact. No impact. No impact.	CI-1: Caltrans will ensure that direct vehicle access to all businesses and residences from both northbound and southbound directions of US-395 is achieved following construction. CI-2: A Construction Management Plan and a Transportation Management Plan (see TR-1) will be prepared for the project and include coordination efforts that will inform the community about project activities, maintain access to and from the project area during construction, minimize construction-period traffic, and control glare, dust, and noise. Measures to minimize construction impacts in these sections also apply to minimizing permanent community cohesion/character impacts. CI-3: To address bypass impacts, Caltrans will coordinate with the community and County regarding the possibility of placing a Welcome sign at both ends of the proposed expressway with brief information encouraging visitors to visit services offered at Kramer Junction. CI-4: During Final Design and Construction, every effort will be made to further minimize the amount of right-of-way needed for the facility and to further minimize community and environmental impacts. ECON-1: Sufficient relocation resources will be made available to displaced businesses in accordance with the Uniform Relocation Assistance and Property Acquisition Act to 1970 as amended (42 USC Secs. 4601-4655). ECON-2: Businesses displaced by the project alternatives will be relocated in an area that is comparable to the existing location in terms of accessibility and traffic volume. ECON-3: Signage provisions will be made available to businesses whose temporary or permanent visibility and

Summary

Affected Resources	Alternative 1 Northerly Alignment 4-Lane Divided Expressway	Alternative 1A Northerly Alignment 4-Lane Divided Expressway (with Spread Diamond and Cloverleaf Interchange at SR-58/US-395)	Alternative 2 Existing Alignment 4-Lane Expressway with Median	Alternative 3 Southerly Alignment 4-Lane Divided Expressway	Alternative 4 No-Build Alternative	Avoidance, Minimization, and/or Mitigation Measures vehicular access change as a result of the project.
Environmental Justice	Impacts from SR-58 through-traffic bypassing Kramer Junction businesses have the potential to reduce economic activity at these businesses, which employ low-wage and minority workers. With incorporation of mitigation measures aimed at maintaining the commercial viability of Kramer Junction businesses, effects would not be disproportionately high and adverse on environmental justice populations.	Impacts from SR-58 through-traffic bypassing Kramer Junction businesses have the potential to reduce economic activity at these businesses, which employ low-wage and minority workers. With incorporation of mitigation measures aimed at maintaining the commercial viability of Kramer Junction businesses, effects would not be disproportionately high and adverse on environmental justice populations.	Minority and low-wage workers, who may be member of low-income households, are employed at Kramer Junction businesses that would be displaced under Alternative 2. These effects have the potential to be disproportionately high and adverse on environmental justice populations. Implementation of mitigation measures would reduce the effects, but potential effects would remain substantial following mitigation.	Impacts from SR-58 through-traffic bypassing Kramer Junction businesses have the potential to reduce economic activity at these businesses, which employ low-wage and minority workers. With incorporation of mitigation measures aimed at maintaining the commercial viability of Kramer Junction businesses, effects would not be disproportionately high and adverse on environmental justice populations.	No impact.	For details on measures ECON-1 through ECON-3, please see Section 3.4 in Chapter 3.
Utilities	Utility relocation would be required. Impacts would be minor adverse under NEPA and less than significant under CEQA following the implementation of mitigation measures.	Utility relocation would be required. Impacts would be minor adverse under NEPA and less than significant under CEQA following the implementation of mitigation measures.	Utility relocation would be required, including the Southern California Edison facility to the southwest of Kramer Junction. Impacts would be minor adverse under NEPA and less than significant under CEQA following the implementation of mitigation measures.	Utility relocation would be required. Impacts would be minor adverse under NEPA and less than significant under CEQA following the implementation of mitigation measures.	No impact.	UT-1. Caltrans will coordinate all utility relocation work with the affected utility companies to ensure minimum disruption to customers in the service areas during construction. If Alternative 2 is selected as the preferred alternative, a coordination plan will be established with SCE. The coordination plan will include specific measures to minimize electrical service disruption that would occur with relocation of the existing SCE substation. This coordination plan will be in place and agreed upon by Caltrans and SCE before any relocation activities occur as a result of the proposed project. For details on measures TR-1 and TR-2, please see Section 3.5 in Chapter 3.
Traffic and Transportation/Pedestrian and Bicycle Facilities	A beneficial effect on traffic operations would occur. No impact to pedestrian and bicycle facilities would occur. Temporary construction impacts would be minimized with measure TR-1.	A beneficial effect on traffic operations would occur. No impact to pedestrian and bicycle facilities would occur. Temporary construction impacts would be minimized with measure TR-1.	A beneficial effect on traffic operations would occur. No impact to pedestrian and bicycle facilities would occur. Temporary construction impacts would be minimized with measure TR-1.	A beneficial impact to traffic operations would occur. No impact to pedestrian and bicycle facilities would occur. Temporary construction impacts would be minimized with measure TR-1.	No impact would occur, including none of the beneficial impacts to traffic operations projected under the build alternatives.	TR-1. Caltrans will prepare a TMP to ensure that local and regional traffic moves efficiently during construction. The TMP and the construction plans will be provided to community agencies, such as the fire department, prior to project commencement. The information provided will include access and traffic management plans that describe any projected temporary street closures or expected traffic delays due to construction vehicles on the roadways. The following elements will be major components of the project TMP: <ul style="list-style-type: none"> • A public awareness campaign related to the scheduling of work; • A construction zone enforcement enhancement program (COZEEP); • Use of portable changeable message signs

Affected Resources	Alternative 1 Northerly Alignment 4-Lane Divided Expressway	Alternative 1A Northerly Alignment 4-Lane Divided Expressway (with Spread Diamond and Cloverleaf Interchange at SR-58/US-395)	Alternative 2 Existing Alignment 4-Lane Expressway with Median	Alternative 3 Southerly Alignment 4-Lane Divided Expressway	Alternative 4 No-Build Alternative	Avoidance, Minimization, and/or Mitigation Measures (FCMS):
Visual/Aesthetics	Viewers located close to the Alternative 1 alignment would experience impacts to their northern- and southern-facing views because a highway and interchange would be introduced where none currently exists. Impacts would be substantial adverse under NEPA and significant under CEQA. Implementation of mitigation measures would reduce impacts, but impacts would remain substantial adverse and significant.	Viewers located close to the Alternative 1A alignment would experience impacts to their northern- and southern-facing views because a highway and interchange would be introduced where none currently exists. Impacts would be substantial adverse under NEPA and significant under CEQA. Implementation of mitigation measures would reduce impacts, but impacts would remain substantial adverse and significant.	Viewers located close to the Alternative 2 alignment would experience impacts to their northern- and southern-facing views because a highway and interchange would be introduced where none currently exists. Impacts would be substantial adverse under NEPA and significant under CEQA. Implementation of mitigation measures would reduce impacts, but impacts would remain substantial adverse and significant.	Viewers located close to the Alternative 3 alignment would experience impacts to their northern- and southern-facing views because a highway and interchange would be introduced where none currently exists. Impacts would be substantial adverse under NEPA and significant under CEQA. Implementation of mitigation measures would reduce impacts, but impacts would remain substantial adverse and significant.	No impact.	<ul style="list-style-type: none"> Advance information signing that will communicate the date, time, and duration of ramp closures; Plan road closures to minimize impacts on local circulation to the maximum extent feasible; and Preparation of temporary detour plans, if needed, during the plans, specifications, and estimates (P&S&E) phase of the project. (Note: No detours are anticipated at this time.) <p>For details on measures AES-1 through AES-9, please see Section 3.7 in Chapter 3.</p>
Cultural Resources	Under Alternative 1, no known historic properties would be affected. There are a total of 9 unevaluated archaeological sites within the Alternative 1 footprint that could be affected. With the implementation of mitigation, impacts would be minor adverse under NEPA and less than significant under CEQA.	Under Alternative 1A, no known historic properties would be affected. There are a total of 9 unevaluated archaeological sites within the Alternative 1A footprint that could be affected. With the implementation of mitigation, impacts would be minor adverse under NEPA and less than significant under CEQA.	Under Alternative 2, no known historic properties would be affected. There are a total of 18 unevaluated archaeological sites within the Alternative 2 footprint that could be affected. With the implementation of mitigation, impacts would be minor adverse under NEPA and less than significant under CEQA.	Under Alternative 3, no known historic properties would be affected. There are a total of 10 unevaluated archaeological sites within the Alternative 3 footprint that could be affected. With the implementation of mitigation, impacts would be minor adverse under NEPA and less than significant under CEQA.	No impact.	<p>CR-1: If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.</p> <p>CR-2: If human remains are discovered, State Health and Safety Code Section 7059.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the county coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC, which will then notify the MLD. At this time, the person who discovered the remains will contact Gary Jones, District 8 Native American Coordinator at (909) 383-7505 so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable.</p>
Hydrology and Floodplains	Alternative 1 would result in the addition of impervious surface in the area, but impacts would be minor adverse under NEPA and less than significant under CEQA. Temporary impacts to natural drainages would be minimized through implementation of measures HF-1 through HF-6.	Alternative 1A would result in the addition of impervious surface in the area, but impacts would be minor adverse under NEPA and less than significant under CEQA. Temporary impacts to natural drainages would be minimized through implementation of measures HF-1 through HF-6.	Alternative 2 would result in the addition of impervious surface in the area, but impacts would be minor adverse under NEPA and less than significant under CEQA. Temporary impacts to natural drainages would be minimized through implementation of measures HF-1 through HF-6.	Alternative 3 would result in the addition of impervious surface in the area, but impacts would be minor adverse under NEPA and less than significant under CEQA. Temporary impacts to natural drainages would be minimized through implementation of measures HF-1 through HF-6.	No impact.	For details on measures HF-1 through HF-6, please see Section 3.9 in Chapter 3.

Summary

Affected Resources	Alternative 1 Northerly Alignment 4-Lane Divided Expressway	Alternative 1A Northerly Alignment 4-Lane Divided Expressway with Spread Diamond and Cloverleaf Interchange at SR-58/US-395	Alternative 2 Existing Alignment 4-Lane Expressway with Median	Alternative 3 Southerly Alignment 4-Lane Divided Expressway	Alternative 4 No-Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Water Quality and Stormwater Runoff	Alternative 1 would increase the amount of impervious surface in the study area by 130 acres, potentially increasing stormwater runoff, but impacts would be minor adverse under NEPA and less than significant under CEQA. Best management practices would be implemented.	Alternative 1A would increase the amount of impervious surface in the study area by 123 acres, potentially increasing stormwater runoff, but impacts would be minor adverse under NEPA and less than significant under CEQA. Best management practices would be implemented.	Alternative 2 would increase the amount of impervious surface in the study area by 317 acres, potentially increasing stormwater runoff. In addition, Alternative 2 would affect 3.44 acres of waters under the jurisdiction of the California Department of Fish and Wildlife. Following the implementation of best management practices and measures related to wetlands, impacts would be minor adverse under NEPA and less than significant under CEQA.	Alternative 3 would increase the amount of impervious surface in the study area by 356 acres, potentially increasing stormwater runoff. In addition, Alternative 3 would affect 4.7 acres of waters under the jurisdiction of the California Department of Fish and Wildlife. Following the implementation of best management practices and measures related to wetlands, impacts would be minor adverse under NEPA and less than significant under CEQA.	No impact.	For details on measures WQ-1 through WQ-5, please see Section 3.10 in Chapter 3. See Measures BIO-2 through BIO-5 for wetlands.
Geology/Soils/Seismic/ Topography	Ground shaking and fault rupture would be limited by constructing at the natural grade and in low cuts and embankments. A Stormwater Pollution Prevention Plan (SWPPP) would limit erosion. Impacts would be minor adverse under NEPA and less than significant under CEQA with implementation of GEO-1 and GEO-2.	Ground shaking and fault rupture would be limited by constructing at the natural grade and in low cuts and embankments. A SWPPP would limit erosion. Impacts would be minor adverse under NEPA and less than significant under CEQA with implementation of GEO-1 and GEO-2.	Ground shaking and fault rupture would be limited by constructing at the natural grade and in low cuts and embankments. A SWPPP would limit erosion. Impacts would be minor adverse under NEPA and less than significant under CEQA with implementation of GEO-1 and GEO-2.	Ground shaking and fault rupture would be limited by constructing at the natural grade and in low cuts and embankments. A SWPPP would limit erosion. Impacts would be minor adverse under NEPA and less than significant under CEQA with implementation of GEO-1 and GEO-2.	No impacts.	For details on measures GEO-1 and GEO-2, please see Section 3.11 in Chapter 3.
Paleontology	Alternative 1 has the potential to affect paleontological resources through deep excavation or other ground-disturbing activities. With the implementation of mitigation measures, impacts would be minor adverse under NEPA and less than significant under CEQA.	Alternative 1A has the potential to affect paleontological resources through deep excavation or other ground-disturbing activities. With the implementation of mitigation measures, impacts would be minor adverse under NEPA and less than significant under CEQA.	Alternative 2 has the potential to affect paleontological resources through deep excavation or other ground-disturbing activities. With the implementation of mitigation measures, impacts would be minor adverse under NEPA and less than significant under CEQA.	Alternative 3 has the potential to affect paleontological resources through deep excavation or other ground-disturbing activities. With the implementation of mitigation measures, impacts would be minor adverse under NEPA and less than significant under CEQA.	No impact.	For details on measures PA-1 through PA-7, please see Section 3.12 in Chapter 3.
Hazardous Waste/ Materials	Alternative 1 would not create new hazards during project operation. With respect to construction, recognized environmental conditions related to three existing uses are present within the project footprint and have the potential to result in substantial adverse impacts if chemicals are released. Impacts are expected to be minor adverse under NEPA and less than significant under CEQA with the implementation of mitigation measures.	Alternative 1A would not create new hazards during project operation. With respect to construction, recognized environmental conditions related to one existing use at the airplane hangar in addition to historical uses are present within the project footprint and have the potential to result in substantial adverse impacts if chemicals are released. Impacts are expected to be minor adverse under NEPA and less than significant under CEQA with the implementation of mitigation measures.	Alternative 2 would not create new hazards during project operation. With respect to construction, recognized environmental conditions related to eight existing uses (including four service stations) in addition to historical uses are present within the project footprint and have the potential to result in substantial adverse impacts if chemicals are released. Impacts are expected to be minor adverse under NEPA and less than significant under CEQA with the implementation of mitigation measures.	Alternative 3 would not create new hazards during project operation. With respect to construction, recognized environmental conditions related to two existing uses (Caltrans facility and wastewater impoundments) are located adjacent to the project footprint and have the potential to result in substantial adverse impacts if chemicals are released. Impacts are expected to be minor adverse under NEPA and less than significant under CEQA with the implementation of mitigation measures.	No impact.	For details on measures HAZ-1 through HAZ-20, please see Section 3.13 in Chapter 3.

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Air Quality	Alternative 1 is in conformity with regional emission standards and would not increase CO and PM concentrations to levels that would result in new air quality violations or worsen existing violations. Temporary construction-related emissions of pollutants would occur, but would be minor adverse under NEPA and less than significant under CEQA with the implementation of standard Caltrans measures.	Alternative 1A is in conformity with regional emission standards and would not increase CO and PM concentrations to levels that would result in new air quality violations or worsen existing violations. Temporary construction-related emissions of pollutants would occur, but would be minor adverse under NEPA and less than significant under CEQA with the implementation of standard Caltrans measures.	Alternative 2 is in conformity with regional emission standards and would not increase CO and PM concentrations to levels that would result in new air quality violations or worsen existing violations. Temporary construction-related emissions of pollutants would occur, but would be minor adverse under NEPA and less than significant under CEQA with the implementation of standard Caltrans measures.	Alternative 3 is in conformity with regional emission standards and would not increase CO and PM concentrations to levels that would result in new air quality violations or worsen existing violations. Temporary construction-related emissions of pollutants would occur, but would be minor adverse under NEPA and less than significant under CEQA with the implementation of standard Caltrans measures.	No impact.	For details on measures AQ-1 and AQ-2, please see Section 3.14 in Chapter 3.
Noise and Vibration	Operation of Alternative 1 is not expected to result in substantial noise increases and may result in noise reductions when compared with existing conditions. Noise would approach or exceed the noise abatement criteria at one modeled receiver, but given the lack of frequent occupation of outdoor areas at this location, noise abatement is not proposed. Operational noise would be minor adverse under NEPA and less than significant under CEQA. Construction-related noise would be minimized with the implementation of standard Caltrans measures.	Operation of Alternative 1A is not expected to result in substantial noise increases and may result in noise reductions when compared with existing conditions. Noise would approach or exceed the noise abatement criteria at two modeled receivers, but given the lack of frequent occupation of outdoor areas at these locations, noise abatement is not proposed. Operational noise would be minor adverse under NEPA and less than significant under CEQA. Construction-related noise would be minimized with the implementation of standard Caltrans measures.	Operation of Alternative 2 is not expected to result in substantial noise increases and may result in noise reductions when compared with existing conditions. Noise would not approach or exceed the noise abatement criteria at any modeled receivers. Operational noise would be minor adverse under NEPA and less than significant under CEQA. Construction-related noise would be minimized with the implementation of standard Caltrans measures.	Operation of Alternative 3 is not expected to result in substantial noise increases and may result in noise reductions when compared with existing conditions. Noise would not approach or exceed the noise abatement criteria at any modeled receivers. Operational noise would be minor adverse under NEPA and less than significant under CEQA. Construction-related noise would be minimized with the implementation of standard Caltrans measures.	No impact.	<p>NOI-1: To reduce noise levels from construction to the extent that is technically feasible and avoid unnecessary annoyance from construction noise, the construction noise control measures listed below will be implemented.</p> <ul style="list-style-type: none"> To the extent practicable, avoid using construction equipment or any other activity that could generate high noise levels near homes. If nighttime construction is required, the community will be advised. Place maintenance yards, hatch plants, haul roads, and other construction-oriented operations in locations that would be the least disruptive to the community. Hold community meetings to explain to area residents the construction work, time involved, and control measures to be taken to reduce the impact of construction work, as appropriate. Schedule the timing and duration of construction activities to minimize noise impacts at noise-sensitive locations. As practicable, use noise-attenuating "jackets" or portable noise screens to provide shielding for pavement breaking, jack hammering, or other similar activities when work is close to noise-sensitive areas. Comply with Caltrans' Standard Specification 14-8.02A (2010): <ul style="list-style-type: none"> Do not exceed 86 dBA Lmax at 50 feet from the job site activities from 9 p.m. to 6 a.m. Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.

Affected Resources	Alternative 1 Northerly Alignment 4-Lane Divided Expressway	Alternative 1A Northerly Alignment 4-Lane Divided Expressway (with Spread Diamond and Cloverleaf Interchange at SR-58/US-395)	Alternative 2 Existing Alignment 4-Lane Expressway with Median	Alternative 3 Southerly Alignment 4-Lane Divided Expressway	Alternative 4 No-Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Energy	Operational energy demands would decrease due to increased traffic efficiency. Energy would be consumed during project construction, but would have limited effect on local energy resources. Impacts would be minor adverse under NEPA and CEQA.	Operational energy demands would decrease due to increased traffic efficiency. Energy would be consumed during project construction, but would have limited effect on local energy resources. Impacts would be minor adverse under NEPA and CEQA.	Operational energy demands would decrease due to increased traffic efficiency. Energy would be consumed during project construction, but would have limited effect on local energy resources. Impacts would be minor adverse under NEPA and CEQA.	Operational energy demands would decrease due to increased traffic efficiency. Energy would be consumed during project construction, but would have limited effect on local energy resources. Impacts would be minor adverse under NEPA and CEQA.	No impact.	None required.
Natural Communities	No natural vegetation communities of concern were identified in the project area. Alternative 1 has the potential to disrupt animal movement and would cause habitat fragmentation, which would be a substantial adverse effect under NEPA and a significant impact under CEQA. Impacts would be minimized with implementation of BIO-1 and would be minor adverse and less than significant following mitigation.	No natural vegetation communities of concern were identified in the project area. Alternative 1A has the potential to disrupt animal movement and would cause habitat fragmentation, which would be a substantial adverse effect under NEPA and a significant impact under CEQA. Impacts would be minimized with implementation of BIO-1 and would be minor adverse and less than significant following mitigation.	No natural vegetation communities of concern were identified in the project area. Alternative 2 has the potential to disrupt animal movement and would cause habitat fragmentation, which would be a substantial adverse effect under NEPA and a significant impact under CEQA. Impacts would be minimized with implementation of BIO-1 and would be minor adverse and less than significant following mitigation.	No natural vegetation communities of concern were identified in the project area. Alternative 3 has the potential to disrupt animal movement and would cause habitat fragmentation, which would be a substantial adverse effect under NEPA and a significant impact under CEQA. Impacts would be minimized with implementation of BIO-1 and would be minor adverse and less than significant following mitigation.	No impact.	BIO-1: In coordination with CDFW two oversized culverts, east and west of US-395, will be installed as part of the project. These culverts will be a minimum of six feet tall and 10 feet wide.
Wetlands and Other Waters	Alternative 1 would directly affect 3.4 acres of CDFW jurisdictional waters, which would be a substantial adverse effect under NEPA and a significant impact under CEQA. Following mitigation, impacts would be minor adverse and less than significant.	Alternative 1A would directly affect 3.4 acres of CDFW jurisdictional waters, which would be a substantial adverse effect under NEPA and a significant impact under CEQA. Following mitigation, impacts would be minor adverse and less than significant.	Alternative 2 would directly affect 4.7 acres of CDFW jurisdictional waters, which would be a substantial adverse effect under NEPA and a significant impact under CEQA. Following mitigation, impacts would be minor adverse and less than significant.	Alternative 3 would directly affect 4.7 acres of CDFW jurisdictional waters, which would be a substantial adverse effect under NEPA and a significant impact under CEQA. Following mitigation, impacts would be minor adverse and less than significant.	No impact.	For details on measures BIO-2 through BIO-5, please see Section 3.18 in Chapter 3.
Plant Species	Alternative 1 would affect the following non-listed plant species: Barstow woolly sunflower: Loss of 77 individual plants and 275 acres of potential habitat. Desert cymopterus: Loss of 275 acres of potential habitat. Mojave spinneflower: Loss of 41 populations and 275 acres of potential habitat. Crowned mulilla: Loss of 107 populations and 663 acres of potential habitat. Joshua tree: Loss of 12 individual trees. Impacts to plant species would be substantial adverse under NEPA and significant under CEQA, but they would be reduced to minor adverse and	Alternative 1A would affect the following non-listed plant species: Barstow woolly sunflower: Loss of 77 individual plants and 275 acres of potential habitat. Desert cymopterus: Loss of 275 acres of potential habitat. Mojave spinneflower: Loss of 41 populations and 275 acres of potential habitat. Crowned mulilla: Loss of 107 populations and 663 acres of potential habitat. Joshua tree: Loss of 12 individual trees. Impacts to plant species would be substantial adverse under NEPA and significant under CEQA, but they would be reduced to minor adverse and	Alternative 2 would affect the following non-listed plant species: Barstow woolly sunflower: Loss of 276 acres of potential habitat. Desert cymopterus: Loss of 13 individuals and 276 acres of potential habitat. Mojave spinneflower: Loss of three populations and 276 acres of potential habitat. Crowned mulilla: Loss of five populations and 634 acres of potential habitat. Joshua tree: Loss of eight individual trees. Impacts to plant species would be substantial adverse under NEPA and significant under CEQA, but they would be reduced to minor adverse and	Alternative 3 would affect the following non-listed plant species: Barstow woolly sunflower: Loss of 50 individuals and 312 acres of potential habitat. Desert cymopterus: Loss of 21 individuals and 312 acres of potential habitat. Mojave spinneflower: Loss of 11 populations and 312 acres of potential habitat. Crowned mulilla: Loss of 91 populations and 689 acres of potential habitat. Joshua tree: Loss of six individual trees. Impacts to plant species would be substantial adverse under NEPA and significant under CEQA, but they would be	No impact.	For details on measures BIO-6 through BIO-13, please see Section 3.19 in Chapter 3.

Affected Resources	Alternative 1 Northerly Alignment 4-Lane Divided Expressway	Alternative 1A Northerly Alignment 4-Lane Divided Expressway (with Spread Diamond and Cloverleaf Interchange at SR-58/US-395)	Alternative 2 Existing Alignment 4-Lane Expressway with Median	Alternative 3 Southerly Alignment 4-Lane Divided Expressway	Alternative 4 No-Build Alternative	Avoidance, Minimization, and/or Mitigation Measures
Animal Species	Alternative 1 would result in the loss of potential habitat for animal species in the following amounts: Burrowing owl: 676 acres Loggerhead shrike: 663 acres Le Conte's Thrasher: 663 acres American Badger: 663 acres Impacts to species identified in the section would be substantial adverse under NEPA and significant under CEQA, but they would be reduced to minor adverse and less than significant following mitigation.	Alternative 1A would result in the loss of potential habitat for animal species in the following amounts: Burrowing owl: 676 acres Loggerhead shrike: 663 acres Le Conte's Thrasher: 663 acres American Badger: 663 acres Impacts to species identified in the section would be substantial adverse under NEPA and significant under CEQA, but they would be reduced to minor adverse and less than significant following mitigation.	Alternative 2 would result in the loss of potential habitat for animal species in the following amounts: Burrowing owl: 647 acres Loggerhead shrike: 634 acres Le Conte's Thrasher: 634 acres American Badger: 634 acres Impacts to species identified in the section would be substantial adverse under NEPA and significant under CEQA, but they would be reduced to minor adverse and less than significant following mitigation.	Alternative 3 would result in the loss of potential habitat for animal species in the following amounts: Burrowing owl: 702 acres Loggerhead shrike: 689 acres Le Conte's Thrasher: 689 acres American Badger: 689 acres Impacts to species identified in the section would be substantial adverse under NEPA and significant under CEQA, but they would be reduced to minor adverse and less than significant following mitigation.	No impact.	For details on measures BIO-14 through BIO-21, please see Section 3.20 in Chapter 3.
Threatened and Endangered Species	Alternative 1 would result in the loss of 543 acres of habitat suitable for the desert tortoise and Mohave ground squirrel (MGS). Following mitigation, impacts on these species would be minor adverse under NEPA and less than significant under CEQA.	Alternative 1A would result in the loss of 543 acres of habitat suitable for the desert tortoise and MGS. Following mitigation, impacts on these species would be minor adverse under NEPA and less than significant under CEQA.	Alternative 2 would result in the loss of 529 acres of habitat suitable for the desert tortoise and MGS. Following mitigation, impacts on these species would be minor adverse under NEPA and less than significant under CEQA.	Alternative 3 would result in the loss of 529 acres of habitat suitable for the desert tortoise and MGS. Following mitigation, impacts on these species would be minor adverse under NEPA and less than significant under CEQA.	No impact.	For details on measures BIO-22 through BIO-42, please see Section 3.21 in Chapter 3.
Invasive Species	There is a potential for the introduction of invasive species related to the construction of Alternative 1. With the implementation of mitigation measures, impacts would be minor adverse under NEPA and less than significant under CEQA.	There is a potential for the introduction of invasive species related to the construction of Alternative 1A. With the implementation of mitigation measures, impacts would be minor adverse under NEPA and less than significant under CEQA.	There is a potential for the introduction of invasive species related to the construction of Alternative 2. With the implementation of mitigation measures, impacts would be minor adverse under NEPA and less than significant under CEQA.	There is a potential for the introduction of invasive species related to the construction of Alternative 3. With the implementation of mitigation measures, impacts would be minor adverse under NEPA and less than significant under CEQA.	No impact.	For details on measures BIO-43 and BIO-44, please see Section 3.22 in Chapter 3.
Cumulative Impacts	Beyond the substantial adverse effects/significant impacts that would occur as a direct result of implementation of Alternative 1, no cumulatively considerable impacts would occur.	Beyond the substantial adverse effects/significant impacts that would occur as a direct result of implementation of Alternative 1A, no cumulatively considerable impacts would occur.	Beyond the substantial adverse effects/significant impacts that would occur as a direct result of implementation of Alternative 2, no cumulatively considerable impacts would occur.	Beyond the substantial adverse effects/significant impacts that would occur as a direct result of implementation of Alternative 3, no cumulatively considerable impacts would occur.	No cumulatively considerable impacts would occur.	None required.

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