

# Grove Avenue Corridor Project

SAN BERNARDINO COUNTY, CALIFORNIA  
DISTRICT 8 – SBD – Ontario  
FPN HPLUL-5092(039)/ Project ID: 0815000220

## Draft Environmental Impact Report/ Environmental Assessment



Prepared by the

**State of California Department of Transportation  
and  
City of Ontario**

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S.C. 327 and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans.



August 2019





# General Information about This Document

## ***What's in this document:***

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), and the City of Ontario have prepared this Draft Environmental Impact Report/Environmental Assessment (EIR/EA), which examines the potential environmental impacts of the alternatives being considered for the Grove Avenue Corridor Project (proposed project or project) located in San Bernardino County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA). The City of Ontario is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

## ***What you should do:***

- Please read this document.
- Additional copies of this document and the related technical studies are available for review at:
  - Caltrans District 8 office at 464 W. 4<sup>th</sup> Street, San Bernardino, CA 92401 and at the City of Ontario City Clerk at 303 East “B” Street, Ontario, CA 91764-4105. This document may be downloaded at the following website: [www.ontarioca.gov/planning](http://www.ontarioca.gov/planning)
  - South Ontario Library, 3850 East Riverside Drive, Ontario, CA 91761
  - Ovitt Family Community Library, 215 East “C” Street, Ontario, CA 91764
- Attend the public meeting at the Ontario Senior Center located at 225 East “B” Street, Ontario, CA 91764 from 5:00 to 8:00 p.m. on September 19, 2019.
- We’d like to hear what you think. If you have any comments about the proposed project, please attend the public meeting and/or send your written comments to the City of Ontario by the deadline.
  - Submit comments via postal mail to:  
Mr. Richard Ayala, Senior Planner, City of Ontario, Planning Caltrans,  
“Attn: Grove Avenue Corridor Project”, 303 East “B” Street, Ontario, CA 91764-4105
  - Submit comments via e-mail to [rayala@ontarioca.gov](mailto:rayala@ontarioca.gov)
- Be sure to submit comments by the deadline: October 2, 2019.

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***What happens next:***

After comments are received from the public and reviewing agencies, the City of Ontario and Caltrans, as assigned by FHWA, may (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, the City of Ontario and Caltrans could design and construct all or part of the project.

***Alternative formats:***

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Mr. Richard Ayala, Senior Planner, City of Ontario, Planning Department, "Attn: Grove Avenue Corridor Project", 303 East "B" Street, Ontario, CA 91764-4105; (909) 395-2036 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice) or 711.

Widen Grove Avenue, from 4<sup>th</sup> Street to Airport Drive

**DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT**

Submitted Pursuant to: (State) Division 13, Public Resources Code  
(Federal) 42 U.S.C. 4332(2)(C) and 49 U.S.C. 303

THE STATE OF CALIFORNIA  
Department of Transportation  
and  
City of Ontario

8/7/19  
Date of Approval

  
David Bricker  
Deputy District Director, District 8  
Division of Environmental Planning  
California Department of Transportation  
NEPA Lead Agency

8/7/19  
Date of Approval

  
Richard Ayala  
City of Ontario  
CEQA Lead Agency

The following person may be contacted for additional information concerning this document:

Richard Ayala  
City of Ontario  
909 395 2036  
303 East "B" Street  
Ontario, CA 91764



# Summary

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## ***National Environmental Policy Act Assignment***

California participated in the “Surface Transportation Project Delivery Pilot Program” (Pilot Program) pursuant to 23 United States Code (U.S.C.) 327, for more than 5 years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (Moving Ahead for Progress in the 21<sup>st</sup> Century) (Public Law [P.L.] 112-141), signed by President Obama on July 6, 2012, amended 23 U.S.C. 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the California Department of Transportation (Caltrans) entered into a Memorandum of Understanding (MOU) pursuant to 23 U.S.C. 327 (National Environmental Policy Act [NEPA] Assignment MOU) with the Federal Highway Administration (FHWA). The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016, for a term of 5 years. In summary, Caltrans continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions (CE) that FHWA assigned to Caltrans under the 23 U.S.C. 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

Caltrans is the lead agency under NEPA. The City of Ontario (City) is the lead agency under the California Environmental Quality Act (CEQA). The proposed project is known as the Grove Avenue Corridor Project (Project) and is located in the city of Ontario, San Bernardino County, California.

## **S-1 Overview of Project Area**

The City, in cooperation with Caltrans District 8, proposes to widen Grove Avenue in the city of Ontario and the county of San Bernardino from four to six lanes between 4<sup>th</sup> Street and State Street/Airport Drive. Grove Avenue is located approximately 1.4 miles east of Euclid Avenue and approximately 1.2 miles west of Vineyard Avenue along Interstate 10 (I-10). The project area is bound on the north by 4<sup>th</sup> Street and on the south by State Street/Airport Drive. The widened segment of Grove Avenue would be located south of I-10 and would serve the city of Ontario.

Land uses in the project vicinity include residential, commercial, industrial, parks and recreation, and public facilities. In the project study area, several approved or planned projects in the project study area may affect or require design coordination with the project. These projects are:

- I-10 Corridor Project (FHWA)
- I-10/Grove Avenue Interchange Project
- Omnitrans West Valley Connector (Federal Transit Administration [FTA])
- I-15 Corridor Improvement Project
- San Bernardino County Flood Control District's Master Stormwater System Maintenance Program (MSWMP)
- Metro Gold Line Foothill Extension Construction Authority
- College Park Specific Plan
- Ontario Center Specific Plan
- Ontario Festival Specific Plan
- Meredith International Centre Specific Plan
- Guasti Plaza Specific Plan
- Omnitrans Route 290
- San Bernardino County Transportation Authority (SBCTA) Ontario Airport Rail Access
- Mountain Village – City of Ontario Specific Plan
- Pomona Corridors Specific Plan

## **S-2 Purpose and Need**

The purpose of the proposed Grove Avenue Corridor Project is to accomplish the following objective:

- Alleviate existing and anticipated future congestion along Grove Avenue between 4<sup>th</sup> Street and Airport Drive and improve traffic operations along the corridor in the city of Ontario.

Improvements to Grove Avenue are needed to accommodate recent and projected growth in passenger and goods/trucks movement associated with Ontario International Airport and changes in land use since Grove Avenue was originally constructed.

Based on traffic projections and the existing and planned land uses in the vicinity, the existing Grove Avenue facility is forecast to operate at unsatisfactory level of service (LOS) at three intersections within the project limits by 2045 without improvements.

### **S-3 Proposed Action**

Caltrans, in cooperation with the City and the County, proposes to widen Grove Avenue from a four-lane roadway to a six-lane roadway from 4<sup>th</sup> Street to State Street/Airport Drive. Grove Avenue is located approximately 1.4 miles east of Euclid Avenue and approximately 1.2 miles west of Vineyard Avenue along I-10. The project area is bound on the north by 4<sup>th</sup> Street and on the south by State Street/Airport Drive.

One No Build Alternative and one Build Alternative are under consideration. The No Build Alternative would include no improvements.

The Build Alternative proposes local street improvements along Grove Avenue and improvements at the Grove Avenue/Holt Boulevard intersection. This alternative is bound on the north by 4<sup>th</sup> Street and on the south by State Street/Airport Drive. Table S-1 provides a summary of these alternatives. Because the No Build Alternative represents the scenario under which existing conditions remain unchanged, the Build Alternative has been identified by the Project Development Team (PDT) as the preferred alternative and is generally referred to as the Grove Avenue Corridor Project or the proposed project (or project) in this document.

### **S-4 Joint CEQA/NEPA Document**

The Grove Avenue Corridor Project is subject to federal, as well as City and State, environmental review requirements because the City proposes the use of federal funds from FHWA and/or the project requires an approval from FHWA. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. The City is the project proponent and the lead agency under CEQA. FHWA's responsibility for environmental review, consultation, and any other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S.C. Section 327 and the MOU dated December 23, 2016, and executed by FHWA and Caltrans. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the USDOT Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within California, except for certain categorical exclusions that FHWA assigned to Caltrans under the 23 U.S.C.

326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, quite often a “lower level” document is prepared for NEPA. One of the most commonly seen joint document types is an Environmental Impact Report (EIR)/Environmental Assessment (EA).

After receiving comments from the public and reviewing agencies, a Final EIR/EA will be prepared. The City and Caltrans may prepare additional environmental and/or engineering studies to address comments. The Final EIR/EA will include responses to comments received on the Draft EIR/EA and will identify the preferred alternative. If the decision is made to approve the project, a Notice of Determination will be published for compliance with CEQA, and Caltrans will decide whether to issue a Finding of No Significant Impact (FONSI) or require an Environmental Impact Statement (EIS) for compliance with NEPA. A Notice of Availability (NOA) of the FONSI will be sent to the affected units of federal, state, and local government, and to the State Clearinghouse in compliance with Executive Order (EO) 12372.

## **S-5 Project Impacts**

Table S-1 provides a brief comparison of the impacts of the No Build Alternative and the Build Alternative (proposed project). Other alternatives to the project (e.g., alternative sites, reversible lanes, widening both sides, widening to the west) would not meet the purpose and need or would have greater impacts and have been considered but dismissed from further consideration.

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
<p>Consistency with State, Regional, and Local Plans and Programs</p>	<p>The No Build Alternative is inconsistent with several plans.</p>	<p>The Build Alternative is inconsistent with the Southern California Association of Governments (SCAG) Regional Comprehensive Plan (RCP).</p>	<p><b>LU-3:</b> The remnant parking lot on the west side of John Galvin Park will be reconfigured to maintain as many parking spots at this location as possible.</p> <p><b>VA-2:</b> Where it is not feasible to save the existing trees, new tree and vegetation plantings shall be included in the final design of the roadway. Replacement trees shall be two 24-inch boxed trees for each tree removed by the project. All areas disturbed by the project shall be fitted with new landscaping, including trees, groundcovers, accent plants, and turf grass (in park areas adjacent to existing remaining turf).</p> <p><b>NC-1:</b> The project shall preserve as many mature trees as practicable. Although there is no City or County ordinance for tree removal, the project's landscape plan will incorporate a tree replacement plan with a replacement ratio of 2:1 – for every mature tree removed, two trees will be planted to be consistent with Measure VA-2. Mature trees (larger than 20 feet high) that are to be removed shall be replaced with two 24-inch box trees. Design plans shall indicate locations of existing mature trees (larger than 20 feet high) to be preserved in place. Tree replacement shall meet all Caltrans and City standards and policies, and near John Galvin Park, the replacement tree species will incorporate species that have been identified as those of the original planting of John Galvin Park in the 1930s</p>
<p>Parks and Recreation</p>	<p>No impact.</p>	<p>Permanent impacts to approximately 0.12 acre of park space. 1.2 acres of park space would be temporarily impacted due to temporary construction easements (TCE).</p>	<p><b>LU-1:</b> Turf grass and rock curbs will be replaced in TCE areas within Grove Memorial Park to match pre-project conditions in consultation with the property owner (City) during and at completion of construction.</p> <p><b>LU-2:</b> Turf grass and rock curbs will be replaced in TCE areas within John Galvin Park to match pre-project conditions in consultation with the property owner (City) during and at completion of construction.</p> <p><b>LU-3:</b> The remnant parking lot on the west side of John Galvin Park will be reconfigured to maintain as many parking spots at this location as possible.</p>

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Growth	The No Build Alternative is inconsistent with the regional mobility goals in the study area; however, it is not anticipated to influence growth within the study area.	No impact.	No avoidance, minimization, and/or mitigation measures required.
Cultural Resources	No impact.	No impact.	<p><b>CR-1:</b> If cultural resources are discovered at the job site, all work activities shall stop within a 60-foot radius of the discovery, the discovery area shall be protected, and the Resident Engineer shall be notified. Cultural resources shall not be moved or taken from the job site until Caltrans investigates and determines the significance of the find. Work activities shall not resume within the discovery area until Caltrans provides written notification authorizing work activities to resume.</p> <p><b>CR-2: Human Remains.</b> If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County Coroner will be contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), who will designate the Most Likely Descendent (MLD). At this time, the Caltrans District 8 Environmental Branch Chief, Andrew Walters (909) 383-2647, will be contacted so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.</p>
Community Character and Environmental Justice	No impact.	No impact.	<p><b>COM-1:</b> Where acquisition and relocation are unavoidable, provisions of the Uniform Act and the 1987 Amendments, as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs adopted by USDOT (March 2, 1989) and, where applicable, the California Public Park Preservation Act of 1971, will be followed. An appraisal of the affected property will be obtained, and an offer for the full appraisal will be made.</p> <p><b>COM-2:</b> Outreach activities targeted to low-income residents will be conducted during the planning, design, and construction phases of the Build Alternative.</p>

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Utilities/Emergency Services	Without the proposed project improvements, emergency response times would continue to worsen.	Approximately 136 utilities have the potential to be affected by the proposed Build Alternative.	<p><b>UT-1:</b> During final design, the Project Engineer will prepare utility relocation plans in consultation with the affected utility providers/owners for those utility facilities that will need to be relocated, removed, or protected in-place.</p> <p><b>UT-2:</b> During final design, the Project Engineer will prepare utility relocation plans in consultation with the affected utility providers/owners for those utility facilities that will need to be relocated, removed, or protected in place. If relocation is necessary, the final design will focus on relocating utilities within the State right-of-way (ROW) or other existing public ROWs and/or easements. If relocation outside of existing or the additional public ROWs and/or easements required for the project is necessary, the final design will focus on relocating those facilities in adjacent public ROWs and in a manner so as to not result in significant community, land use, or natural resource impacts.</p> <p><b>UT-3:</b> Close coordination with utility service providers and implementation of a public outreach program will be conducted, as needed, to minimize impacts to surrounding communities.</p> <p><b>UES-1:</b> Prior to and during any construction activities, the City will coordinate with emergency service providers to ensure that all providers are aware of temporary road closures and detours.</p> <p><b>UES-2:</b> Emergency service phone numbers (i.e., fire, emergency medical, police) will be posted in visible locations in all active construction areas.</p> <p><b>UES-3:</b> To avoid conflicts during construction, the project's Resident Engineer will notify all emergency and other essential service providers no less than 2 weeks prior to the start of construction. Agencies to be notified include:</p> <ul style="list-style-type: none"> <li>• City of Ontario Police Department</li> <li>• City of Ontario Fire Department</li> <li>• San Bernardino County Sheriff's Department</li> <li>• San Bernardino County Fire Department</li> </ul>
Relocation	No impact.	0 full business relocations	<p><b>COM-1:</b> Where acquisition and relocation are unavoidable, provisions of the Uniform Relocation Act and the 1987 Amendments, as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for</p>
Business displacements	No impact.	0 full business relocations	

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Residential displacements	No impact.	12 full residential displacements	Federal and Federally Assisted Programs adopted by USDOT (March 2, 1989) and, where applicable, the California Public Park Preservation Act of 1971 will be followed. An appraisal of the affected property will be obtained, and an offer for the full appraisal will be made.
Traffic and Transportation/ Pedestrian and Bicycle Facilities	<p>Two intersections are forecast to operate at unsatisfactory LOS in opening year (2025) no-build conditions:</p> <p>By 2045, four intersections in the immediate vicinity are forecast to operate at unsatisfactory LOS in design-year (2045) no-build conditions.</p>	<p>Average delays for intersections in the immediate project vicinity are forecast to significantly improve with implementation of the Build Alternative. Because no arterial roadways would be permanently closed, there are no permanent impacts to access or circulation, and no indirect impacts are anticipated with implementation of the Build Alternative.</p>	<p><b>T-1:</b> Final Transportation Management Plan (TMP) – A TMP (July 2015) was prepared during development of the preliminary engineering for the project. During final design, a Final TMP will be prepared. At a minimum, the Final TMP will include the detailing of any projected temporary street closures or expected traffic delays due to project construction activities. The Final TMP will include a public awareness program that will use an appropriate combination of the Highway Advisory Radio (HAR), local media, newsletters, and/or flyers. The following elements will be major components of the Final TMP: Public Awareness Campaign, particularly related to the scheduling of work; Construction Zone Enhanced Enforcement Program (COZEEP); utilization of portable changeable message signs (CMSs); and notification to be sent to local cities and emergency responders, if applicable.</p> <p><b>T-2:</b> During project construction, the Project Engineer will ensure that the measures in the Final TMP are properly implemented by the contractor.</p> <p><b>T-3:</b> During final design and construction, the Project Engineer will work with affected property owners to identify means to avoid and minimize parking impacts, including space management, such as restriping of parking areas and identifying parking replacement options.</p> <p><b>T-4:</b> All pedestrian facilities will be designed to meet or exceed requirements of the Americans with Disabilities Act (ADA) and current safety standards. Access to pedestrians and bicyclists shall be maintained to the extent practicable during the construction period.</p> <p><b>T-5:</b> Prior to and during construction, the Project Engineer will coordinate with Omnitrans, the Ontario-Montclair School District, and other affected transit providers to request and comply with applicable procedures for any required temporary bus stop relocations or other disruptions to transit service during construction, if necessary.</p>

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Paleontological Resources	No impact	Low to moderate potential for impacting paleontological resources.	<p><b>T-6:</b> During final design and prior to and during construction, the Project Engineer will coordinate with the design and construction team for the I-10/Grove Avenue Interchange Project to ensure the Grove Avenue Corridor Project and the I-10/Grove Avenue Interchange Project are designed compatibly.</p> <p><b>P-1:</b> Develop and implement a Paleontological Monitoring Plan (PMP), with monitoring in excavations more than 10 feet deep for sediments mapped as Holocene at the surface and more than 5 feet deep for excavations mapped as Pleistocene at the surface. The PMP will guide and facilitate the identification and treatment of paleontological resources, if any are found, during project construction to reduce adverse effects on significant resources. The PMP will summarize identified paleontologically sensitive areas within the area of potential effects (APE), the organization and responsibilities of the paleontological team, the responsibilities of other parties, and the treatment and communications procedures to be implemented if paleontological resources are encountered during the project.</p>

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Hazardous Waste/Materials	No impact.	May require the removal of utility poles along Grove Avenue and Holt Boulevard that consist of creosote treated wood and are considered areas of concern (AOCs). If removed, the poles should be managed as treated wood waste (TWW) in accordance with the Department of Toxic Substances Control (DTSC) Alternative Management Standards for TWW. The Build Alternative would require the removal of multiple residential structures and, depending on the structures' age, they may contain asbestos-containing material (ACM) and lead-based paint (LBP). The presence of these materials would need to be investigated prior to removal of the structures to comply with environmental and worker safety regulatory requirements for ACM and LBP.	<b>HW-1:</b> Prior to property acquisition, limited soil investigations at 1194 E. Holt Boulevard and 1111 E. Holt Boulevard will be performed to determine the presence of compromised soils. If any compromised soils are present, they shall be removed and disposed of per regulatory requirements.
Cumulative Impacts	No impact.	No impact.	No avoidance, minimization, and/or mitigation measures required.
Visual/Aesthetics	No impact.	Less than substantial, the effect is anticipated to be a moderately low change to the visual environment.	<b>VA-1:</b> The existing trees, particularly within the park area, provide scale, shade, and visual relief to the extent of roadway paving. Preserving existing trees to the extent feasible will help maintain the existing visual character of the roadway. <b>VA-2:</b> Where it is not feasible to save the existing trees, new tree and vegetation plantings shall be included in the final design of the roadway. Replacement trees shall be two 24-inch boxed trees for each tree removed by the project. All areas disturbed by the project shall be fitted with new landscaping, including trees,

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Floodplain/Hydrology	No impact.	Culvert crossings would be extended to accommodate the roadway widening by 37 feet. The 100-year flood event would still be contained in the channel.	<p>groundcovers, accent plants, and turf grass (in park areas adjacent to existing remaining turf).</p> <p><b>VA-3:</b> To support the replacement of plantings, the project shall include a permanent irrigation system to all new plantings. Materials used for irrigation shall be as per City of Ontario standards.</p> <p><b>VA-4:</b> Decorative paving shall be employed for medians, islands, and parkway strips that are too narrow to plant. Paving color and texture/pattern shall match City of Ontario standards.</p> <p><b>HYD-1:</b> Provide positive drainage during construction and refrain from filling designated floodplains. Construction site surface runoff will be channeled into existing drainage facilities so as to not cause water flow on neighboring properties. Offsite flows will be managed in a manner that will mimic the existing drainage network and will not inundate the roadway surface of any of the existing drainage systems.</p> <p><b>HYD-2:</b> Implement standard Best Management Practices (BMPs) as identified in the City of Ontario's Water Quality Management Plan, including temporary construction site BMPs to address site soil stabilization and reduce deposition of sediments to receiving waters.</p> <p><b>HYD-3:</b> Include erosion control and water quality protection during construction at the West Cucamonga Channel. BMPs will be designed and implemented to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP). Typical measures that may be implemented include preservation of existing vegetation, use of soil binders or hydroseeding, and installation of silt fences or fiber rolls.</p> <p><b>HYD-4:</b> Contractor shall develop a contingency plan for unforeseen discovery of underground contaminants in the Stormwater Pollution Prevention Plan (SWPPP).</p> <p><b>HYD-5:</b> Limit construction activities between October and May to those actions that can adequately withstand high flows and entrainment of construction materials. The Contractor shall prepare a Rain Event Action Plan (REAP) and discuss high flows mitigation.</p>
Water Quality	No impact.	Would add 2.57 acres of additional Impervious Surface Area.	<p><b>WQ-1: Implement Temporary Construction BMPs.</b> The project will be required to conform to the requirements of the National Pollutant Discharge Elimination System (NPDES) Permit for</p>

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Air Quality	No impact.	Minimal short-term construction impacts are anticipated to be generated from excavation, grading, hauling, and various other activities needed to construct the project; however, reactive organic gas (ROG) and other emissions are expected to be low due to the limited construction activities scheduled for the project. Therefore, the thresholds of significance established for ROG emissions by the South Coast Air Quality	<p>Construction Activities, Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002.</p> <p><b>WQ-2: Prepare and Implement an SWPPP.</b> The Contractor will be required to develop an acceptable SWPPP. The SWPPP shall contain BMPs that have demonstrated effectiveness at reducing stormwater pollution. The SWPPP shall address all construction-related activities, equipment, and materials that have the potential to affect water quality. All Construction Site BMPs will be installed, maintained, and inspected to control and minimize the impacts of construction-related pollutants. The SWPPP shall include BMPs to control pollutants, sediment from erosion, stormwater runoff, and other construction-related impacts. In addition, the SWPPP shall include implementation of specific stormwater effluent monitoring requirements based on the project's risk level to ensure that the implemented BMPs are effective in preventing discharges from exceeding any of the water quality standards.</p> <p><b>WQ-3: Incorporate Design Principles into Final Roadway Design.</b> Design Principles are permanent measures to minimize pollution discharges by retaining source materials and stabilizing soils. The three objectives associated with Design Principle BMPs include maximizing vegetated surfaces; preventing downstream erosion; and stabilizing soil areas. These design objectives will be applied to the entire project.</p>
			No avoidance, minimization, and/or mitigation measures required.

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Noise	<p>Without the proposed project, approximately 166 dwelling units would experience noise impacts. Noise levels for design-year no-build conditions are expected to increase up to 3 decibels (dB) over existing noise levels due to projected traffic volume increases over existing conditions. Estimated no-build traffic noise levels were found to approach or exceed the applicable Noise Abatement Criteria (NAC) at representative residential locations.</p>	<p>Management District (SCAQMD) would not be exceeded during construction of the project.</p> <p>127 dwelling units are expected to experience noise impacts. Increases in noise levels are due to the addition of the two lanes (one in each direction) within the Grove Avenue corridor. The additional lanes would shift traffic closer to representative receivers within the proposed project area. Under future design-year 2045 build conditions, most of the receiver locations have traffic noise levels that were found to approach or exceed the applicable NAC.</p>	<p><b>N-1:</b> Based on the studies completed, Caltrans and the City will incorporate noise abatement in the form of soundwalls that meet the criteria for reasonableness and feasibility. The recommended soundwalls would reduce the traffic noise by at least 5 dB at the impacted receivers, would meet the design goal by providing a 7-dB reduction for at least one receiver, and would cost less than the reasonable cost allowance. If, during final design, conditions have substantially changed, noise abatement may change or not be necessary, depending on the results of the updated noise analysis during final design information. The final decision of the noise abatement will be made upon completion of the project design and the public involvement process.</p> <p>During circulation of the draft environmental document, soundwall surveys will be conducted with all property owners and residents of benefited receptors located within the footprint of the Build Alternative. If more than 50 percent of the responding benefited receptors oppose the soundwall, then the soundwall will not be constructed.</p>
Natural Communities	<p>No impact.</p>	<p>No impact to communities of concern or regional species of concern.</p> <p>The project would result in permanent unavoidable impacts to approximately 174 trees (by trimming and removals).</p>	<p><b>NC-1:</b> The project shall preserve as many mature trees as practicable. Although there is no City or County ordinance for tree removal, the project's landscape plan will incorporate a tree replacement plan with a replacement ratio of 2:1 – for every mature tree removed, two trees will be planted to be consistent with Measure VA-2. Mature trees (larger than 20 feet high) that are to be removed shall be replaced with two 24-inch box trees. Design plans shall indicate locations of existing mature trees (larger than 20 feet high) to be preserved in place. Tree replacement shall meet all Caltrans and City standards and policies, and near John Galvin Park, the replacement tree species will incorporate species that have been identified as those of the original planting of John Galvin Park in the 1930s.</p>
Threatened and Endangered Species	<p>No impact.</p>	<p>No impact.</p>	<p>No avoidance, minimization, and/or mitigation measures required.</p>

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Invasive Species	No impact.	There is potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that seed is spread along the highway.	<p><b>IS-1:</b> In compliance with the EO on Invasive Species (EO 13112) and guidance from FHWA, the landscaping and erosion control included in the project will not use species listed as invasive. In areas of particular sensitivity (i.e., near or adjacent to drainages), extra precautions will be taken if invasive species are found in or next to the construction areas. This includes the inspection and cleaning of construction equipment and eradication strategies, as required by the Caltrans Biological Monitor, to be implemented should an invasion occur. Any cleaning of equipment or site watering will be conducted in adherence to any applicable drought conditions and related regulations. A Caltrans biologist or Landscape Architect will approve any seed lists (for planting).</p>
Animal Species	No impact.	Less than significant impact after mitigation.	<p><b>Mitigation Measure AS-1:</b> To avoid effects to nesting birds, the Project Engineer will require the contractor to conduct vegetation removal or tree-trimming activities outside of the nesting bird season (i.e., February 15 through August 31).</p> <p>If vegetation clearing is necessary during the nesting season, the Project Engineer will require the contractor to have a qualified biologist conduct a preconstruction survey within 150 feet of construction areas no more than 10 days prior to construction at the location to identify the location of nests, if any. A qualified biologist is one that has previously surveyed for nesting bird species within southern California.</p> <p>Should nesting birds be found, an exclusionary buffer will be established by the qualified biologist around each nest site. The buffer will be clearly marked in the field by construction personnel under guidance of the contractor's qualified biologist, and construction or clearing will not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active.</p> <p>The qualified biologist will monitor the nests on a weekly basis to ensure that construction activities do not disturb or disrupt nesting activities.</p> <p>If the qualified biologist determines that construction activities are disturbing or disrupting nesting activities, then the biologist will notify the Project Engineer, who has the authority to stop or modify construction to reduce the noise and/or disturbance to the nests. Responses may include, but are not limited to, increasing the size of the exclusionary buffer, curtailing nearby work</p>

**Table S-1. Summary of Major Potential Impacts from Alternatives**

Environmental Resource	No Build Alternative	Build Alternative (Proposed Project)	Avoidance, Minimization or Mitigation Measures
Wetlands and Other Waters	No impact.	The project would result in no permanent impacts and approximately 0.46 acre (795 linear feet) of temporary impacts to nonwetland Waters of the U.S. as a result of improvements to existing, enclosed box culverts for Grove Avenue.	<p>activities, turning off vehicle engines and other equipment wherever possible to reduce noise, installing a protective noise barrier between the nest and the construction activities, and/or working in other areas until the young have fledged.</p> <p><b>WET-1:</b> Construction activities within the West Cucamonga Channel and Princeton Basin will be designed and conducted to maintain downstream flow conditions. All construction activities will be effectively isolated from water flows to the greatest extent feasible. This may be accomplished by working in the dry season or dewatering the work area in the wet season. When work in standing or flowing water is required, structures for isolating the in-water work area and/or diverting the water flow must not be removed until all disturbed areas are cleaned and stabilized. The diverted water flow must not be contaminated by construction activities. Structures used to isolate the in-water work area and/or diverting the water flow (e.g., coffer dam, geotextile silt curtain) must not be removed until all disturbed areas are stabilized.</p>

## S-6 Coordination with Public and Other Agencies

Table S-2 lists the permits/approval status of each permit required for construction of the project (Build Alternative).

**Table S-2. Project Permits and Approvals**

Agency	Permit/Approval	Status
U.S. Army Corps of Engineers	Non-notifying Clean Water Act (CWA) Section 404 Nationwide Permit (NWP) 14 (Linear Transportation Projects), provided all terms and conditions of the NWP permit program (33 <i>Code of Federal Regulations</i> [CFR] 330) are met.	Not yet applied
San Bernardino County Flood/U.S. Army Corps of Engineers	A 408 permit will be required for potential impacts to the Cucamonga Creek.	Not yet applied
Regional Water Quality Control Board	CWA Section 401 Water Quality Certification. It should be noted that although it is anticipated that the project may likely qualify for a non-notifying NWP 14, CWA Section 401 Water Quality Certification must be issued prior to CWA Section 404 authorization for (any) impacts to Waters of the U.S. A fee commensurate with the extent of the activity will be required as part of this permit.	Not yet applied
California Department of Fish and Wildlife	Lake or Streambed Alteration Agreement (SAA). A fee commensurate with the extent of the activity will be required as part of this permit.	Not yet applied
City of Ontario	Pursuant to Section 10-2.06, the City requires approval and removal permits for parkway trees to be removed. To remove a parkway tree, it must meet criteria set forth by the City. No person shall remove or relocate any parkway tree without prior authorization from the City.	Not yet applied
State Water Resources Control Board	Construction General Permit, Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS000002.	Not yet applied
State Historic Preservation Officer	Determination of Eligibility.	Letter of Concurrence dated April 25, 2017
FHWA	Air Quality Conformity Determination.	To be obtained prior to environmental document certification

In addition to the permits listed above, a cooperative agreement with Omnitrans will be required to temporarily defer or relocate the five bus stop stations within the limits of the project. Three bus stations on 4<sup>th</sup> Street between N. Virginia Avenue and N. Calaveras Avenue are part of Bus Route 86, and two bus stations located on Holt Boulevard at the intersection of Holt Boulevard and Grove Avenue are part of Bus Routes 61 and 80.

The project anticipates entering into a Service Agreement with the Southern Pacific Railroad (SPRR) for flaggers and inspection during periods of work along Grove Avenue between Holt Boulevard and Airport Drive. It is also anticipated that a Construction and Management (C+M) Agreement and Operations Engineer (OE) clearance, Section 13 Clauses, will be inserted into the Construction Specifications.

Individual utility agreements are expected with the associated owners of gas, electrical, water, and communication facilities for the Build Alternative (proposed project). Additional agreements may be required depending on selection of the preferred alternative. For the Build Alternative (proposed project), agreements will be needed for the oil companies.

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# **Chapter 1** Proposed Project

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## **1.1 Introduction**

The California Department of Transportation (Caltrans) and the City of Ontario (City) propose to widen Grove Avenue from 4<sup>th</sup> Street to State Street/Airport Drive for the design year of 2045 under the proposed Grove Avenue Corridor Project. The No Build Alternative would retain the existing configuration of Grove Avenue, while the Build Alternative (as the preferred alternative and proposed project) proposes to widen Grove Avenue from a four-lane roadway to a six-lane roadway from Interstate 10 (I-10) to State Street/Airport Drive. Implementation of the Build Alternative would alleviate existing and anticipated future congestion, improve traffic operations and mobility, and provide route continuity along Grove Avenue in conformance with the City of Ontario’s General Plan Circulation Element. Specifically, it would accommodate recent and projected growth in passenger and goods/trucks movement associated with Ontario International Airport. This project would coincide with the I-10/Grove Avenue Interchange Project, which would construct a new interchange along I-10 at Grove Avenue, replacing the existing interchange at 4<sup>th</sup> Street. The Grove Avenue Corridor Project is currently expected to be open to traffic in year 2025.

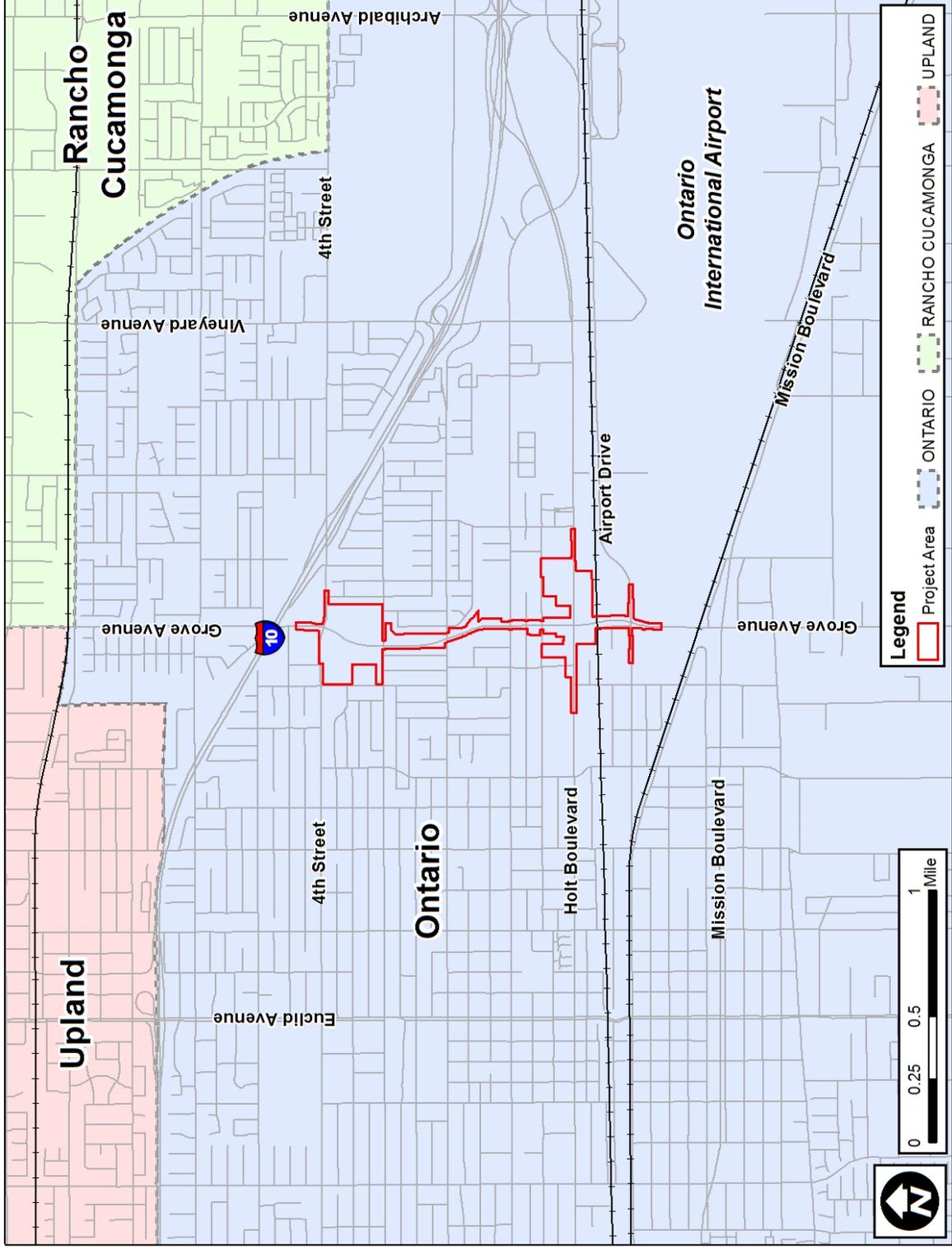
Caltrans is the lead agency under the National Environmental Policy Act (NEPA). The City is the lead agency under the California Environmental Quality Act (CEQA).

### **1.1.1 Project Location and Setting**

Within the project area, Grove Avenue is an arterial road that runs in the north-south direction through Ontario in San Bernardino County. The proposed Grove Avenue Corridor Project would occur on an approximately 1.24-mile-long stretch of Grove Avenue between 4<sup>th</sup> Street to the north and State Street/Airport Drive to the south (see Figures 1-1 and 1-2). There are also proposed improvements to the Grove Avenue and Holt Boulevard intersection. The closest major freeways to the project area are I-10 to the north and State Route (SR) 60 to the south.

The project limits extend approximately 550 feet north of 4<sup>th</sup> Street to approximately 650 feet south of State Street/Airport Drive. Grove Avenue has two lanes each running northbound and southbound, including a center turning lane in two sections, starting from south of 4<sup>th</sup> Street to the northern project limit and from Holt Street to D Street. The Grove Avenue corridor right-of-way (ROW) is owned by the City, and all required easements for the project would be acquired by the City. Refer to Figures 1-1 and 1-2 for the project location and vicinity maps.





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Figure 1-2. Project Vicinity Map

The primary intersections in the project area are 4<sup>th</sup> Street, Holt Boulevard, and State Street/Airport Drive. In addition, 4<sup>th</sup> Street is classified by the City as a principal arterial east of Grove Avenue and a collector street to the west. Holt Boulevard is a primary arterial, and State Street/Airport Drive is a collector street.

At the State Street/Airport Drive intersection, the project construction limits extend approximately 700 feet in either direction on State Street/Airport Drive. At the Holt Boulevard intersection, the construction limits extend on Holt Avenue for approximately 1,600 feet to the west and 1,750 feet to the east. At the 4<sup>th</sup> Street intersection, the construction limits extend for approximately 650 and 630 feet to the west and east of the intersection, respectively.

Grove Avenue crosses under an Amtrak railroad grade separation between Holt Boulevard and State Street/Airport Drive.

Land uses in the project study area include residential, commercial, industrial, and open space, with most land uses being low- to medium-density residential uses. Grove Avenue goes through the center of John Galvin Park in the northern portion of the project area. Ontario International Airport is adjacent to the southeast corner of the project area.

### **1.1.2 Programming Status**

The proposed Grove Avenue Corridor Project is included in the 2015 Federal Statewide Transportation Improvement Program (FSTIP), Amendment #15-04. The FSTIP approved \$2.293 million in federal funds in the 2014/2015 fiscal year for preliminary engineering. Of that \$2.293 million, \$1.693 million is dedicated to design and \$0.720 million is dedicated to the environmental process. There is a total capital cost estimation of \$31.8 million for the entire Grove Avenue Corridor Project.

### **1.1.3 Planning Background**

The proposed Grove Avenue Corridor Project would conform to the City of Ontario's General Plan. The General Plan is considered the general framework for the City's growth over the next 20 years or more into the future. To accommodate the anticipated growth, the General Plan provides numerous lasting policies, governance manuals, city council priorities, and implementation plans. Specifically, the General Plan's Functional Roadway Classification Plan shows existing and proposed traffic and circulation facilities within the City. Included in the Functional Roadway Classification Plan is the Grove Avenue Corridor Project, which proposes to widen the existing roadway from four lanes to six lanes between I-10 and Holt Boulevard. A Project Study

Report for the Grove Avenue corridor improvements was conducted in 2010 by the City.

## **1.2 Purpose and Need**

The purpose and need statement for any given project serves three primary functions. First, it establishes the problem, or problems, leading up to why the project is being proposed (i.e., need); second, it identifies the project objectives that would solve those problems (i.e., purpose). A third, and equally important, function of the purpose and need statement is that it provides a basis for comparing the alternatives against one another and comparing the alternatives against the project. The following sections describe in more detail the project's purpose and need.

### **1.2.1 Purpose of the Project**

The purpose of the proposed Grove Avenue Corridor Project is to accomplish the following objective:

- Alleviate existing and anticipated increases in congestion along Grove Avenue between 4<sup>th</sup> Street and Airport Drive and improve traffic operations along the corridor in the city of Ontario.

### **1.2.2 Need for the Project**

Improvements to Grove Avenue are needed to accommodate recent and projected growth in passenger and goods/trucks movement associated with Ontario International Airport and changes in land use since Grove Avenue was originally constructed.

Based on traffic projections and the existing and planned land uses in the vicinity, the existing Grove Avenue facility is forecast to operate at unsatisfactory level of service (LOS) at three intersections within the project limits by 2045 without improvements.

#### **1.2.2.1 Capacity, Transportation Demand, and Safety**

Currently, there is sufficient capacity on the Grove Avenue corridor to accommodate existing travel demands within the project limits.

Existing traffic conditions play a critical role in the overall analysis of infrastructure investments. Existing conditions and volumes provide a baseline by which to evaluate current performance of the circulation system and are used as the basis of future forecast volumes. Capacity on a corridor such as Grove Avenue is measured by analyzing performance at intersections. A basic signalized intersection can be

characterized by performance measures as a function of the average vehicle control delay. Control delay is the portion of the total delay attributed to traffic signal operation for signalized intersections. Control delays include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Once delays have been estimated for each lane group and aggregated for each approach and the intersection as a whole, the appropriate LOS is determined. All LOS analyses use methodologies approved in the *Highway Capacity Manual 2000 Edition* (HCM).

As shown in Table 1-1, there are six grades of LOS, ranging from LOS A (representing excellent operation) to LOS F (representing forced flow and jammed conditions).

**Table 1-1. LOS Thresholds for an Intersection with Traffic Signals**

Level of Service	Description	Signalized Intersection Delay (seconds per vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and ≤ 20
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	> 20 and ≤ 35
D	Fair operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>35 and ≤ 55
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55 and ≤ 80
F	Forced flow. Represents jammed conditions. Backups form at locations downstream or on the cross street and may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	> 80

Source: *Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington, D.C., 2000.*

The existing Grove Avenue corridor traffic analysis follows the HCM intersection capacity analysis method using Synchro 7 Software computer program. The study was conducted in February 2013. The results provide average control delay and volume to capacity (v/c) delay, which are used to generate LOS. Each intersection is based on vehicle delay analysis for the morning peak period (7:00 a.m. to 9:00 a.m.) and evening

peak period (4:00 p.m. to 6:00 p.m.), resulting in four segments for analysis: eastbound, westbound, northbound, and southbound. Table 1-2 provides existing HCM average control delays, HCM v/c ratio, and HCM LOS, reported in the *Traffic Operations Analysis* (January 2015) Technical Appendix.

**Table 1-2. Existing (2013) Peak Hour Intersection LOS Summary**

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
Grove Avenue/4 <sup>th</sup> Street	35.0	D	34.5	C
Grove Avenue/I Street	5.7	A	3.8	A
Grove Avenue/G Street	7.1	A	5.5	A
Grove Avenue/D Street	5.4	A	4.4	A
Grove Avenue/Holt Boulevard	33.7	C	31.8	C
Grove Avenue/State Street-Airport Drive	20.4	C	29.9	C

Source: *Traffic Operations Analysis Report, 2015.*

All intersections are functioning at LOS C or better, except for 4<sup>th</sup> Street during the AM peak hour; however, the 4<sup>th</sup> Street intersection is borderline LOS D while still providing flow above unstable levels.

### ***Population and Traffic Forecasts***

Based on Federal Highway Administration (FHWA) and Caltrans requirements for the I-10/Grove Avenue Interchange Project, traffic forecasts need to address a horizon of 20 years beyond project opening, which requires development of 2045 conditions because the opening year for the proposed Grove Avenue Corridor Project and proposed I-10/Grove Avenue Interchange Project is anticipated to be 2025.

A key objective of the traveling modeling effort for this project was to maintain consistency with the traffic forecasts developed for the recently completed *I-10 Corridor Study – Project Approval/Environmental Document (PA/ED) High Occupancy Vehicle (HOV) and Express Lanes Project* by the San Bernardino County Transportation Authority (SBCTA). The San Bernardino County Transportation Analysis Model (SBTAM) used for the *I-10 Corridor Study – PA/ED HOV and Express Lanes Project* was utilized for the Grove Avenue Corridor Project, including all roadway network and demographic data assumptions. The SBTAM, which utilizes the TransCAD platform (version 5.0 r4), includes additional detail within San Bernardino County and has been recalibrated based on countywide traffic activity. The Grove

Avenue Corridor Project model analysis includes a No Build Alternative and a Build Alternative.

The SBTAM incorporates the baseline demographic dataset developed by SBCTA for San Bernardino County consistent with population growth forecasts published by the Southern California Association of Governments (SCAG). The SCAG region consists of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. Key demographic projections for San Bernardino County and the SCAG region are provided in Table 1-3.

**Table 1-3. Key Demographic Data**

Area	Population	Resident Population	Households	Residents Employed
<b>Existing – 2012</b>				
San Bernardino County	2,015,994	1,962,290	605,913	700,600
SCAG Region	16,964,830	16,640,598	548,465	7,386,196
<b>2035</b>				
San Bernardino County	2,749,810	2,685,254	847,405	1,059,329
SCAG Region	21,852,486	21,497,514	7,230,262	9,310,132
<b>Percent Growth from 2012 to 2035</b>				
San Bernardino County	36	37	40	51
SCAG Region	29	29	29	26

Source: I-10 Corridor Project Traffic Study, August 2014 (Appendix A-3).

Although the regional growth rate stabilized in the last 20 years, from 1990 to 2010 the urbanization and suburbanization of the region has continued (SCAG Regional Transportation Plan [RTP]). In 2010, San Bernardino County exceeded 2 million people and increased its share of the population from 17.7 percent in 1990 to 23.4 percent in 2010. According to SCAG, the fast growth of population relative to employment in Riverside and San Bernardino counties has led to an imbalance of jobs and housing in the region, posing a serious transportation problem.

***Projected Capacity Needs, Delay, and Level of Service***

The I-10 Corridor Traffic Operations Analysis (January 2015) provided data for existing traffic conditions (2012), opening year conditions (2025), and the horizon year (2045). Because the horizon year forecasts for 2045 are required in this analysis, the 2035 forecast volumes were post-processed by applying the forecast annual growth rate in 2035 forecast volumes to generate 2045 forecasts. Overall, the average growth of traffic volumes at the study area intersections between existing and opening year 2025

was approximately 2 percent per year. Between opening year 2025 and horizon year 2045, the average growth of traffic volumes at the study area intersections was approximately 1 percent per year.

Opening year 2025 no-build conditions assume the current interchange conditions at 4<sup>th</sup> Street and existing lane configurations are the same in the study area. Table 1-4 summarizes the opening year 2025 no-build peak-hour LOS results at the study intersections.

**Table 1-4. Opening Year 2025 No-Build Peak-Hour Intersection LOS Summary**

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
Grove Avenue/4 <sup>th</sup> Street	44.7	D	63.8	E
Grove Avenue/I Street	6.7	A	6.3	A
Grove Avenue/G Street	9.0	A	9.0	A
Grove Avenue/D Street	6.4	A	9.2	A
Grove Avenue/Holt Boulevard	<b>82.8</b>	<b>F</b>	<b>134.7</b>	<b>F</b>
Grove Avenue/State Street	25.1	C	29.3	C

Note: **BOLD** indicates unsatisfactory.

Horizon year 2045 no-build conditions also assume the current interchange conditions at 4<sup>th</sup> Street and existing lane configurations in the study area. Table 1-5 summarizes the horizon year 2045 no-build peak-hour LOS results at the study intersections.

**Table 1-5. Horizon Year 2045 No-Build Peak-Hour Intersection LOS Summary**

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
Grove Avenue/4 <sup>th</sup> Street	51.2	D	<b>117.4</b>	<b>F</b>
Grove Avenue/I Street	8.0	A	7.5	A
Grove Avenue/G Street	11.1	B	20.6	C
Grove Avenue/D Street	18.3	B	14.8	B
Grove Avenue/Holt Boulevard	<b>213.8</b>	<b>F</b>	<b>352.9</b>	<b>F</b>
Grove Avenue/State Street	<b>88.3</b>	<b>F</b>	<b>83.2</b>	<b>F</b>

Note: **BOLD** indicates unsatisfactory.

By opening year, these forecasts predict that the Grove Avenue and Holt Boulevard intersection will operate at LOS F conditions under no-build conditions. The Holt Boulevard, 4<sup>th</sup> Street, and State Street intersections will continue to deteriorate to LOS F conditions as forecasted in the horizon year 2045 No Build LOS summary.

### **Safety**

Corridors that are highly congested generally have higher congestion-related crash rates. Demand for higher capacity is a result of the tremendous growth in passenger and goods/truck movement associated with Ontario International Airport and the overall change in land use since the existing interchange was built in the late 1950s.

There are three critical transportation deficiencies in the project area:

1. Several local street corridors, street intersections, and freeway ramps will suffer from congestion as a result of inadequate capacity to handle future traffic operations leading to the I-10/4<sup>th</sup> Street interchange. This congestion is a result of the growth in goods movement and truck traffic in the city of Ontario, especially near Ontario International Airport.
2. The existing Grove Avenue roadway cross section and its connections to the State and National Highway System are currently inconsistent and nonuniform for its role as an alternate north-south arterial corridor to Interstate 15 (I-15).
3. Provide route continuity along Grove Avenue in conformance with the City of Ontario General Plan Circulation Element, which identifies Grove Avenue as a six-lane principal arterial.

These deficiencies will be further exacerbated by the future traffic forecasts and anticipated traffic demands in the project area.

#### **1.2.2.2 Roadway Deficiencies**

Several local street corridors, street intersections, and freeway ramps will suffer from congestion as a result of inadequate capacity to handle future traffic operations leading to the I-10/4<sup>th</sup> Street interchange resulting from growth in goods movement and truck traffic in Ontario, especially near Ontario International Airport.

Existing Grove Avenue's roadway cross section and access to the State and National highway systems are currently inconsistent and nonuniform for its role as an alternate north-south arterial corridor to I-15.

These deficiencies will be further exacerbated by the future year traffic forecasts and anticipated traffic demands for the project area.

### **1.2.2.3 Social Demands or Economic Development**

The existing Grove Avenue corridor is a primary regional access for the city of Ontario and Ontario International Airport. Ontario International Airport is the center of a developing freight movement system that includes the airport, two railroads, four major freeways, and an expanding network of freight forwarders.

The existing 4<sup>th</sup> Street/I-10 interchange in the project area also provides direct access to the cities of Ontario, Rancho Cucamonga, and Upland via I-10, as well as key residential, retail, industrial, commercial, and mixed-use developments highlighted in their General Plans.

Construction of the Build Alternative would result in the conversion of existing land uses to transportation-related uses. The Build Alternative would permanently affect existing residential, commercial, industrial, parks and recreation, and public facilities, but it has been designed to avoid existing built land uses to the extent practicable while adhering to design and operational criteria to maintain a safe roadway. During final design, efforts would be undertaken to further minimize construction and operation impacts to existing and planned land uses.

Given the shortage of major developable vacant lands adjacent to the proposed project, the Build Alternative would provide a significant advantage to affect development decisions in the area. The Grove Avenue Corridor Project is not expected to substantially influence the overall amount or type of growth. The pattern and rate of population and housing growth would be expected to remain consistent with the population anticipated by existing General Plans for the area. The potential for growth in the study area is consistent with local land use plans and current trends. The project would not influence growth, and no growth-related impacts are expected. Current growth trends and potential future growth are considered in local land use plans, and the project would not influence growth that is not currently planned.

### **1.2.2.4 Legislation**

SBCTA is responsible for administering the County's half-cent sales tax dedicated to transportation, Measure I, and as the County Transportation Commission, SBCTA is responsible for overseeing certain federal and State funding programs. Measure I was first approved in November 1989 and was extended through 2040. Major street improvement projects, such as the widening of Grove Avenue, are identified as part of the Measure I 2010-2040 Strategic Plan and SBCTA Ordinance No. 04-01.

### **1.2.2.5 Modal Interrelationships and System Linkages**

#### ***Freight Movement***

The continuous movement of goods is a crucial aspect of continued economic development for Ontario, the Inland Empire, and the nation. Freight movement via truck transport is a major component to maintain the complex trade system, including southern California's seaports, airports, rail yards, and distribution centers. If no improvements are made to the existing Grove Avenue corridor, trucks traveling from Ontario International Airport to I-10 will experience severe traffic congestion by design year 2045.

#### ***Omnitrans***

The project site and its vicinity are served by Omnitrans. Omnitrans is a public transit agency that provides an extensive fixed-route bus system, including Routes 61, 63, and 80 in the project area. In particular, Omnitrans Routes 63 and 80, which travel along Holt Boulevard within the project study area, would benefit from more reliable travel if the proposed improvements were constructed at the Grove Avenue/Holt Boulevard intersection.<sup>1</sup> In addition to their existing fixed route system, Omnitrans is conducting a route and mode-of-transit analysis for the Holt Boulevard/4<sup>th</sup> Street corridor. If implemented, this new route would cross Grove Avenue at Holt Boulevard and would run from Fontana near the Kaiser Permanente Medical Center; through Rancho Cucamonga, Ontario, and Montclair; and end at the Transcenter in Pomona.

#### ***Metrolink***

Metrolink is a commuter rail line that provides service to Ontario and other cities in San Bernardino and Riverside counties. The Metrolink San Bernardino Line is perpendicular to Grove Avenue north of I-10. The Riverside Line connects Union Station in Los Angeles to the downtown Riverside Station with a stop at the East Ontario Station in Ontario, southeast of the proposed Grove Avenue Corridor Project area. The Metrolink San Bernardino Line connects Union Station in Los Angeles to the downtown Riverside Station with a stop near the proposed project at the Upland Station, approximately 1.5 miles northwest of the proposed project.

#### ***Ontario International Airport***

Ontario International Airport is a 1,700-acre passenger and commercial service airport adjacent to the southeast portion of the project site. Ontario International Airport is the third major airport in the area after Los Angeles International Airport and John Wayne Airport. In 2014, approximately 4.2 million passengers used the airport. In addition to

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<sup>1</sup> <http://omnitrans.org/schedules/>

passenger services, Ontario International Airport is a hub for commercial traffic, accounting for 474,346 tons of air cargo in 2014. Ontario International Airport is the west coast air and truck hub for UPS and is a major distribution point for FedEx, Ameriflight, Empire, Kalitta, and West Air. The proposed Grove Avenue Corridor Project is an integral component for the success of the airport because it would greatly enhance north-south mobility leading to Ontario International Airport.<sup>2</sup>

### **Highways**

I-10 connects to I-15 approximately 5 miles east of Grove Avenue. I-15 provides a regional connection between Orange, Riverside, and San Bernardino counties through its interchanges with SR-60 and SR-91. The SR-60/Grove Avenue interchange is approximately 2 miles south of the project area.

#### **1.2.2.6 Air Quality Improvements**

The following transportation control measures are anticipated to improve air quality and are included as part of the proposed project:

- Implementation of the Build Alternative would produce benefits to regional air quality by reducing project congestion levels within the study area.
- Grove Avenue is designated as a Bicycle Corridor by the City of Ontario Multipurpose Trails and Bikeway Corridor Plan. The Build Alternative proposes an outside lane width of 15 feet, in accordance with the City of Ontario Master Plan of Streets and Highways. Standard sidewalks would be provided on both sides of Grove Avenue within the project limits.

#### **1.2.2.7 Independent Utility and Logical Termini**

FHWA regulations (*23 Code of Federal Regulations* [CFR] 771.111 (f)) require that a proposed project:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
2. Have independent utility or independent significance (be usable and require a reasonable expenditure even if no additional transportation improvements in the area are made); and
3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

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<sup>2</sup> Ontario International Airport... News and Facts...Statistics...Volume of Air Traffic...Retrieved March 9, 2015.

The project corridor is of sufficient length (approximately 1.24 miles) to adequately address transportation issues that have been identified in the stated purpose and need. The Build Alternative would be of sufficient length to provide significant congestion relief in this corridor within the project limits. These improvements would function effectively in addressing the congestion on Grove Avenue and coincide with the I-10/Grove Avenue Interchange Project. As a result, the proposed project connects logical termini on Grove Avenue with the I-10 mainline. This project area is large enough to appropriately address the potential environmental impacts of the proposed project. In addition, the proposed project can meet the identified need for congestion relief as an independent project and is not dependent on any other projects to meet the identified purpose for the interchange improvements. Finally, the proposed improvements would be designed and constructed to minimize potential conflict with other reasonably foreseeable transportation improvements in the area.

### **1.3 Project Description**

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. There is one Build Alternative and a No Build Alternative. The project is located in San Bernardino County on a 1.24-mile-long stretch of the Grove Avenue corridor south of the I-10/Grove Avenue interchange. Within the limits of the project, Grove Avenue is a conventional four-lane road. The purpose of the project is to widen the corridor to alleviate existing and anticipated future congestion, provide improved traffic operations, and provide route continuity along Grove Avenue in conformance with the City of Ontario's General Plan Circulation Element.

#### **1.3.1 Project Alternatives**

The Grove Avenue Corridor Project considers one No Build Alternative and one Build Alternative to address existing and future projected traffic demands. A summary of the proposed project alternatives is provided below.

##### **1.3.1.1 Build Alternative (Preferred Alternative and Proposed Project)**

The Build Alternative, shown in Figure 1-3, includes widening Grove Avenue from four lanes to six lanes between 4<sup>th</sup> Street and State Street/Airport Drive in accordance with the City of Ontario Master Plan. South of 4<sup>th</sup> Street, Grove Avenue would be widened to the west to avoid impacts to the historic Jay Littleton Ballpark. Between I Street and Holt Boulevard, Grove Avenue would be widened to the east, and between Holt Boulevard and State Street/Airport Drive, Grove Avenue would be widened on both sides.

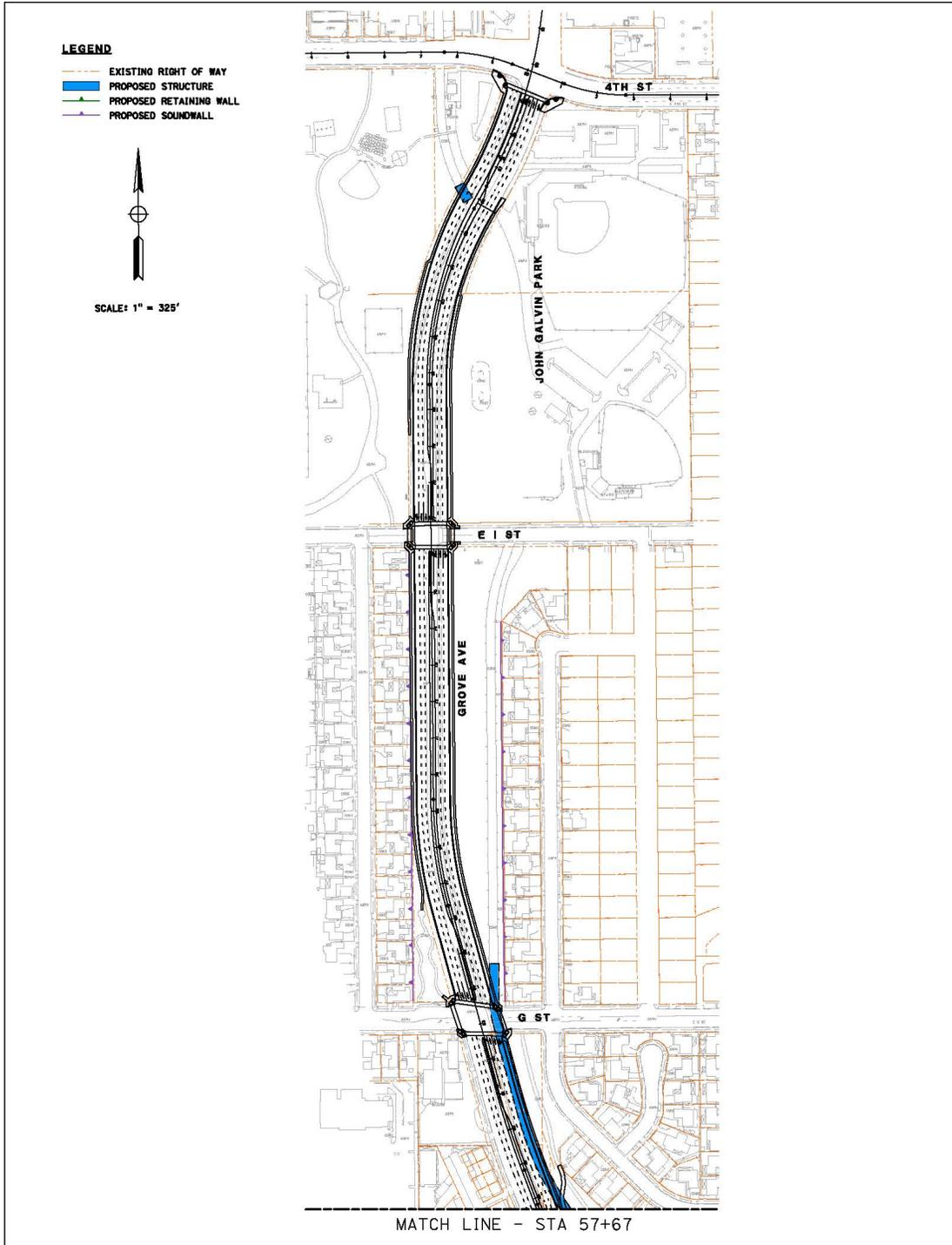


Figure 1-3. Build Alternative (Sheet 1 of 2)

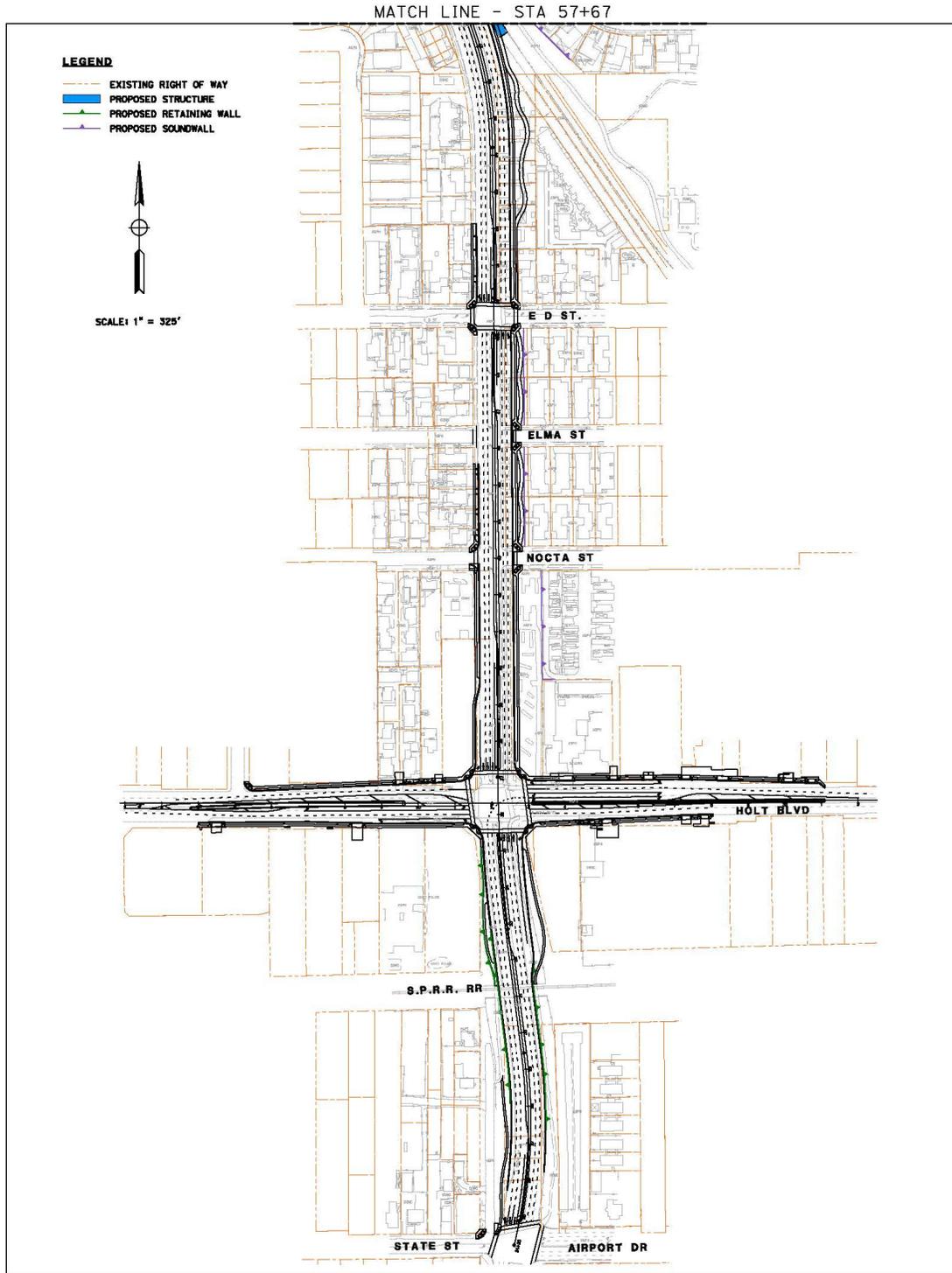


Figure 1-3. Build Alternative (Sheet 2 of 2)

In addition, Holt Boulevard would be widened at the Grove Avenue intersection from one through lane, one through-right lane, and one left-turn lane in each direction to two through lanes, one through-right lane, and two left-turn lanes in each direction. The Build Alternative would include covering a portion of two culverts: G Street Culvert and Grove Avenue Culvert.

### ***Earthwork and Retaining Walls***

The cut slopes would be a standard 2 (horizontal) to 1 (vertical), and fill slopes would be a standard 4 (horizontal) to 1 (vertical). Four retaining walls are proposed under the Southern Pacific Railroad (SPRR) Bridge between Holt Boulevard and State Street/Airport Drive to accommodate the widening of Grove Avenue to avoid impacts to the SPRR Bridge. The retaining walls would range from 6 to 10 feet in height and would be constructed at the following locations:

- Northbound Grove Avenue under the SPRR Bridge, between the roadway and the sidewalk
- Northbound Grove Avenue between the SPRR Bridge and Holt Boulevard, at the back of the sidewalk
- Southbound Grove Avenue under the SPRR Bridge, between the roadway and the sidewalk
- Southbound Grove Avenue between the SPRR Bridge and Holt Boulevard, at the back of the sidewalk

### ***Nonmotorized and Pedestrian Features***

Grove Avenue is designated as a Bicycle Corridor by the City of Ontario Multipurpose Trails and Bikeway Corridor Plan. The Build Alternative proposes an outside lane width of 15 feet in accordance with the City of Ontario Master Plan of Streets and Highways. Standard sidewalks would be provided on both sides of Grove Avenue within the project limits.

### ***Right-of-Way Acquisition***

The proposed project impacts a mostly developed area of Ontario. To provide ROW for the local street widening, the Build Alternative would acquire approximately 14 properties and partially acquire approximately 70 properties. The ROW impacts consist of single-family and multi-family residential properties, vacant parcels, and commercial properties including, but not limited to, an auto repair facility and a towing yard. In addition, temporary construction easements (TCEs) would be needed from several properties where grading and other temporary construction uses would occur.

### ***Unique Features of the Build Alternative***

The Build Alternative was designed to reduce impacts associated with property acquisitions. The Build Alternative reduces the number of property acquisitions to 14, which includes 8 single-family residences, and would not result in demolition of Sovereign Grace Baptist Church.

#### **1.3.1.2 Transportation System Management and Transportation Demand Management Alternatives**

Although transportation system management measures alone could not satisfy the purpose and need of the project, the following transportation system management measures have been incorporated into the Build Alternative for this project:

- Coordination of traffic signals

#### **1.3.1.3 No Build Alternative**

The No Build Alternative proposes no improvements within the project area. Grove Avenue would maintain the existing four through lanes, and the existing configuration at the Grove Avenue/Holt Boulevard intersection would be maintained.

As discussed in Section 1.2.2.1, Capacity, Transportation Demand, and Safety, while the existing configuration is adequate for existing traffic flows, there will be inadequate service at the Grove Avenue/Holt Boulevard intersection by the 2025 build year. Intersection performances will continue to deteriorate up to the 2045 horizon year.

### **1.3.2 Comparison of Alternatives**

After comparing and weighing the benefits and impacts of all feasible alternatives, some of which are summarized in Table 1-6, the Project Development Team (PDT) has identified the Build Alternative as the Preferred Alternative, subject to public review. Because the other alternative is the No Build Alternative (under which no improvements would be constructed on Grove Avenue), the Build Alternative also serves as the proposed project as analyzed in this environmental document. Final identification of the Preferred Alternative by the City and Caltrans will occur after the public review and comment period.

The Build Alternative proposed for this project requires a commitment of resources and would result in some environmental impacts. This commitment is balanced with the ability to meet the purpose and need and the effects of not implementing the project (the No Build Alternative). Table 1-6 provides a summary of key issues where impacts have been identified.

Table 1-6. Key Issues

Criteria		No Build Alternative	Build Alternative (Proposed Project)
<p>Meets the purpose and need: The purpose of the proposed Grove Avenue Corridor Project is to accomplish the following objectives:</p> <ul style="list-style-type: none"> <li>• Alleviate existing and anticipated future congestion along Grove Avenue between 4<sup>th</sup> Street and Airport Drive;</li> <li>• Improve traffic operations and mobility to and from Ontario International Airport, a future cargo hub facility near Grove Avenue and Holt Boulevard, and other planned uses; and</li> <li>• Provide route continuity along Grove Avenue in conformance with the City of Ontario General Plan Circulation Element, which identifies Grove Avenue as a six-lane principal arterial.</li> </ul> <p>Improvements to Grove Avenue are needed to accommodate recent and projected growth in passenger and goods/trucks movement associated with Ontario International Airport and changes in land use since Grove Avenue was originally constructed.</p>		<p>No – Does not alleviate existing or future congestion along Grove Avenue; does not improve traffic operations and mobility; and does not conform with the City of Ontario's General Plan Circulation Element.</p>	<p>Yes – Would alleviate existing and future congestion along Grove Avenue between 4<sup>th</sup> Street and Airport Drive; would improve traffic operations and mobility to and from Ontario International Airport; and would provide route continuity along Grove Avenue in conformance with the City of Ontario's General Plan Circulation Element.</p>
Traffic and Transportation		None	None
Number of Acquisitions	Acquisitions	0	14
	Partial Acquisitions	0	70
Relocations		0	18 residential, 0 business
Parks and Recreation		None	Permanent impacts to approximately 0.12 acre of park space. 1.2 acres of park space would be temporarily impacted due to TCEs.
Cultural Resources		None	None

**Table 1-6. Key Issues**

Criteria	No Build Alternative	Build Alternative (Proposed Project)
Noise	Without the proposed project, approximately 99 dwelling units will experience noise impacts. Noise levels for design-year no-build conditions are expected to increase up to 2 decibels (dB) over existing noise levels due to projected traffic volume increases over existing conditions. Estimated no-build traffic noise levels were found to approach or exceed the applicable Noise Abatement Criteria (NAC) at representative residential locations.	132 dwelling units are expected to experience noise impacts. Increases in noise levels are due to the addition of the two lanes (one in each direction) within the Grove Avenue corridor. The additional lanes would shift traffic closer to representative receivers within the proposed project area. Under future design-year 2045 build conditions, most of the receiver locations have traffic noise levels that were found to approach or exceed the applicable NAC.
Air Quality	None	Minimal short-term construction impacts are anticipated to be generated from excavation, grading, hauling, and various other activities needed to construct the project; however, reactive organic gas (ROG) and other emissions are expected to be low due to the limited construction activities scheduled for the project. Therefore, the thresholds of significance established for ROG emissions by the South Coast Air Quality Management District (SCAQMD) would not be exceeded during construction of the project.
Natural Communities	None	No impact to communities of concern or regional species on concern.  The project would result in permanent unavoidable impacts to approximately 174 trees (by trimmings and removals).
Floodplain/Hydrology	None	Culvert crossings would be extended to accommodate the roadway widening by 37 feet. The 100-year flood event would still be contained in the channel.

**Table 1-6. Key Issues**

<b>Criteria</b>	<b>No Build Alternative</b>	<b>Build Alternative (Proposed Project)</b>
Water Quality	None	Would add 2.57 acres of additional impervious surface area.
Wetlands and Other Waters	None	The project would result in no permanent impacts and approximately 0.46 acre (795 linear feet) of temporary impacts to nonwetland Waters of the U.S. as a result of improvements to existing, enclosed box culverts for Grove Avenue.
Capital Cost of Alternative	\$0	\$31.8 million

After the public circulation period, all comments will be considered, and the City and Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. Under CEQA, the City will certify that the project complies with CEQA, prepare findings for all significant impacts identified, prepare a Statement of Overriding Considerations for impacts that will not be mitigated below a level of significance, and certify that the findings and Statement of Overriding Considerations have been considered prior to project approval. The City will then file a Notice of Determination with the State Clearinghouse that will identify whether the project will have significant impacts, if mitigation measures were included as conditions of project approval, that findings were made, and that a Statement of Overriding Considerations was adopted. Similarly, if Caltrans, as assigned by FHWA, determines the NEPA action does not significantly impact the environment, Caltrans will issue a Finding of No Significant Impact (FONSI). If it is determined that the project is likely to have a significant effect on the environment, an Environmental Impact Statement (EIS) will be prepared.

### **1.3.3 Alternatives Considered but Withdrawn from Further Discussion**

Assembly Bill (AB) 2542 requires any state or local automobile capacity-increasing project or a major street or highway lane realignment project sent to the California Transportation Commission for approval consider reversible lanes in the design of the project. The Grove Avenue Corridor Project is not a capacity-increasing or major street realignment project; therefore, AB 2542 does not apply.

During the initial design of this project, two alternatives were considered: widening Grove Avenue to the east and widening Grove Avenue to the west. Both alternatives included three through lanes in each direction along Grove Avenue. The alternative that widened Grove Avenue to the east was chosen as the Build Alternative. The rejected alternative, which widened Grove Avenue to the west, is described below.

### **1.3.3.1 Widen to the West Alternative**

From State Street north to the SPRR crossing, the Widen to the West Alternative matched the Build Alternative configuration. North of the SPRR, Grove Avenue would be widened to the west until north of G Street. North of G Street to 4<sup>th</sup> Street, the alignment matched that of the Build Alternative.

This alternative would have the following ROW impacts:

- 19 property acquisitions
  - 13 single-family residences
  - 3 apartment buildings – 8 units each
  - 2 vacant parcels
- Demolition of one building associated with Sovereign Grace Baptist Church at the southwest corner of Grove Avenue and G Street
- Partial acquisition of 0.06 acre of Grove Memorial Park, located northwest of the Grove Avenue/G Street intersection
- *De Minimis* Section 4(f) impacts to John Galvin Park

Due to the extensive ROW requirements and associated property and park impacts, the Widen to the West Alternative was eliminated from further consideration; therefore, this alternative cannot be considered an environmentally superior alternative to the proposed Build Alternative that is carried through for further analysis in this document.

## **1.4 Permits and Approvals Needed**

Table 1-7 lists the permits, reviews, and approvals that would be required for project construction of the Build Alternative (proposed project).

**Table 1-7. Required Permits, Reviews, and Approvals**

<b>Agency</b>	<b>Permit/Approval</b>	<b>Status</b>
U.S. Army Corps of Engineers	Non-notifying Clean Water Act (CWA) Section 404 Nationwide Permit (NWP) 14 (Linear Transportation Projects), provided all terms and conditions of the NWP permit program (33 CFR 330) are met.	Not yet applied
San Bernardino County Flood/U.S. Army Corps of Engineers	A 408 permit will be required for potential impacts to the Cucamonga Creek.	Not yet applied
Regional Water Quality Control Board	CWA Section 401 Water Quality Certification. It should be noted that although it is anticipated that the project may likely qualify for a non-notifying NWP 14, CWA Section 401 Water Quality Certification must be issued prior to CWA Section 404 authorization for (any) impacts to Waters of the U.S. A fee commensurate with the extent of the activity will be required as part of this permit.	Not yet applied
California Department of Fish and Wildlife	Lake or Streambed Alteration Agreement (SAA). A fee commensurate with the extent of the activity will be required as part of this permit.	Not yet applied
City of Ontario	Pursuant to Section 10-2.06, the City requires approval and removal permits for parkway trees to be removed. To remove a parkway tree, it must meet criteria set forth by the City. No person shall remove or relocate any parkway tree without prior authorization from the City.	Not yet applied
State Water Resources Control Board	Construction General Permit, Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS000002.	Not yet applied
State Historic Preservation Officer	Determination of Eligibility.	Letter of Concurrence dated April 25, 2017
FHWA	Air Quality Conformity Determination.	To be obtained prior to environmental document certification

In addition to the permits listed above, a cooperative agreement with Omnitrans will be required to temporarily defer or relocate the five bus stop stations within the limits of the project. Three bus stations on 4<sup>th</sup> Street between N. Virginia Avenue and N. Calaveras Avenue are part of Route 86, and two bus stations located on Holt Boulevard at the intersection of Holt Boulevard and Grove Avenue are part of Routes 61 and 80.

The project anticipates entering into a Service Agreement with SPRR for flaggers and inspection during periods of work along Grove Avenue between Holt Boulevard and

Airport Drive. It is also anticipated that additional agreements, clearances, and clauses will be inserted into the Construction Specifications.

Individual utility agreements are expected with the associated owners of gas, electrical, water, and communication facilities with the Build Alternative. Additional agreements may be required depending on selection of the preferred alternative. For the Build Alternative, an agreement will be needed for the oil companies.