

# **HAZARDOUS MATERIALS TECHNICAL REPORT**

**Brightline West Cajon Pass High-Speed Rail Project**

**October 2022**

Prepared for  
Federal Railroad Administration

Prepared by  
HNTB

# Contents

Abbreviations and Acronyms .....	iii
1. Introduction .....	1
2. Project Description.....	1
2.1. Background.....	1
2.2. Project Area .....	2
2.3. Purpose of and Need for the Project .....	2
2.3.1. Purpose .....	2
2.3.2. Need .....	2
2.4. Project Elements.....	8
2.4.1. Build Alternative.....	8
2.4.2. Section 1 – High Desert .....	8
2.4.3. Section 2 – Cajon Pass .....	10
2.4.4. Section 3 – Greater Los Angeles .....	10
2.5. Construction .....	11
3. Methodology.....	12
3.1. Relevant Regulations, Plans, and Policies .....	12
3.1.1. Federal Requirements .....	12
3.1.2. State, Regional, and Local Requirements .....	12
3.2. Study Area .....	13
3.3. Methods Used .....	13
4. Affected Environment.....	15
4.1. Section 1 – High Desert.....	17
4.2. Section 2 – Cajon Pass .....	19
4.3. Section 3 – Greater Los Angeles .....	20
5. Environmental Consequences and Mitigation.....	22
5.1. Construction .....	22
5.2. Operation .....	22
5.3. Avoidance, Minimization, and/or Mitigation Measures .....	22
5.3.1. Construction .....	22
5.3.2. Operation .....	23
6. References .....	24

## Appendices

Appendix A EDR Area / Corridor Report Executive Summary and Mapped Sites Summary

## Figures

Figure 1. Project Area and Vicinity.....	4
Figure 2. Potential Hazardous Material Locations Map.....	16

## Tables

Table 1. Hazardous Materials Sites within the Section 1 Construction Area .....	17
Table 2. Hazardous Materials Sites within the Section 2 Construction Area .....	20
Table 3. Hazardous Materials Sites within the Section 3 Construction Area .....	21

## Abbreviations and Acronyms

AQMD	Air Quality Management District
ASTM	ASTM International (formerly American Society for Testing and Materials)
ADT	average daily traffic
Callista	California State Transportation Agency
Caltrans	California Department of Transportation
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
EIS	Environmental Impact Statement
FEIR	Final Environmental Impact Report
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
GHG	greenhouse gas
HMMP	Hazardous Materials Management Plan
HOV	high-occupancy vehicle
HSR	High-Speed Rail
I-	Interstate
LOS	level of service
LUST	leaking underground storage tank
mph	miles per hour
MOU	memorandum of understanding
NPDES	National Pollutant Discharge Elimination System
OSFM	California Office of the State Fire Marshal
Project	Cajon Pass High-Speed Rail Project
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SBCSWMD	San Bernardino County Solid Waste Management Division
SBCTA	San Bernardino County Transportation Authority
SCE	Southern California Edison
SR-	State Route
U.S. EPA	U.S. Environmental Protection Agency
UST	underground storage tank
VHT	vehicle hours traveled
VMT	vehicle miles traveled

# 1. Introduction

DesertXpress Enterprises, LLC (dba “Brightline West”) proposes to construct and operate the Cajon Pass High-Speed Rail Project (Project), a 49-mile train system capable of speeds up to 140 miles per hour (mph) between Victor Valley, California and Rancho Cucamonga, California (Project). The Project includes two new railway stations—one in Hesperia, and one in Rancho Cucamonga. The connecting station in Victor Valley would be constructed as part of a separate project that was evaluated in the DesertXpress Final Environmental Impact Statement (Final EIS; FRA 2011).

The Project would be powered by overhead electric catenary within the Interstate 15 (I-15) right-of-way for 48 miles, and on existing transportation corridors for the last mile into the proposed Rancho Cucamonga station. The Project would require construction of one new traction power substation (TPSS) in the Hesperia area. The maintenance facility that was evaluated with the XpressWest High-Speed Passenger Train Project will provide the primary maintenance functions, although layover tracks are anticipated at the Rancho Cucamonga station, which could include light maintenance capability, such as interior cleaning and daily inspection.

Trains are expected to operate daily on 45-minute headways between Victor Valley and Rancho Cucamonga. The trip between Victor Valley and Rancho Cucamonga will be approximately 35 minutes. Service will be coordinated with existing and planned Metrolink service at the Rancho Cucamonga station to provide a convenient connection between the high-speed rail and commuter rail systems.

The Project would be constructed and operated under a lease agreement with the California Department of Transportation (Caltrans) for the use of the I-15 right-of-way and the station at Hesperia. Brightline West will secure additional agreements for Right-of-Way Use; Design & Construction Oversight and Reimbursement; and Operations & Maintenance, as necessary. For the last mile of the project from I-15 to the Rancho Cucamonga Station, there will be Agreements with the City of Rancho Cucamonga and the San Bernardino County Transportation Authority (SBCTA) for land rights, construction, operations and maintenance.

## 2. Project Description

### 2.1. Background

Early Project coordination for HSR service from Victor Valley to Rancho Cucamonga began in 2020, with Brightline West meeting with the San Bernardino County Transportation Authority (SBCTA) to examine a connection between Victor Valley and Rancho Cucamonga. This meeting resulted in a memorandum of understanding (MOU) that was fully executed in July 2020 between Brightline West and SBCTA to study the potential of building HSR within the I-15 right-of-way between Victor Valley and Rancho Cucamonga. A separate MOU was executed in September 2020 between Brightline West and the Southern California Regional Rail Authority, which operates Metrolink, for connection to the existing Metrolink station in Rancho Cucamonga. Additionally, the California State Transportation Agency (CalSTA), Caltrans, the

California High-Speed Rail Authority, and Brightline West have executed an MOU regarding the Project. The MOU reflects both the regional and statewide interest and value in the Project, including interconnectivity opportunities, and outlines how the parties will work together to advance their shared interest in the success of the Project.

## **2.2. Project Area**

The Project would construct and operate a 49-mile train system capable of speeds up to approximately 140 mph between Victor Valley and Rancho Cucamonga, California. The Project includes two new railway stations: one in Hesperia, and one in Rancho Cucamonga and will connect to another Brightline West station in Victor Valley. The proposed rail alignment would be located within the median of the I-15 freeway between Victor Valley and Rancho Cucamonga., except for the last mile approaching the proposed Rancho Cucamonga station. The Project area is depicted in Figure 1.

## **2.3. Purpose of and Need for the Project**

### **2.3.1. Purpose**

The purpose of the Project is to provide reliable and safe passenger rail transportation between the Los Angeles metropolitan region and the High Desert of San Bernardino County. The Project would provide a convenient, efficient, and environmentally sustainable alternative to automobile travel on the highly congested I-15 freeway. The Project would add capacity to the overall transportation system by introducing a new HSR service from Victor Valley to Rancho Cucamonga. The Project would reduce travel time, improve reliability, and increase the mobility options for travel between metropolitan regions. Travel time from Victor Valley to Rancho Cucamonga for Project users would be approximately 30 percent faster during normal conditions and at least twice as fast during congestion peak periods. The Project would reduce automobile vehicle miles traveled (VMT) resulting in a corresponding reduction in greenhouse gas (GHG) emissions and air quality emissions.

#### ***2.3.1.1. Multi-Modal Use of the I-15 Corridor***

Operation of the Project would significantly increase the capacity of I-15 as a multi-modal corridor in Southern California. This increase in capacity would benefit freeway operations by providing an alternative to automobile travel that would reduce travel time. This shift of people from automobile to train travel along the I-15 corridor would reduce the need for programmed and/or planned freeway improvement and widening projects.

### **2.3.2. Need**

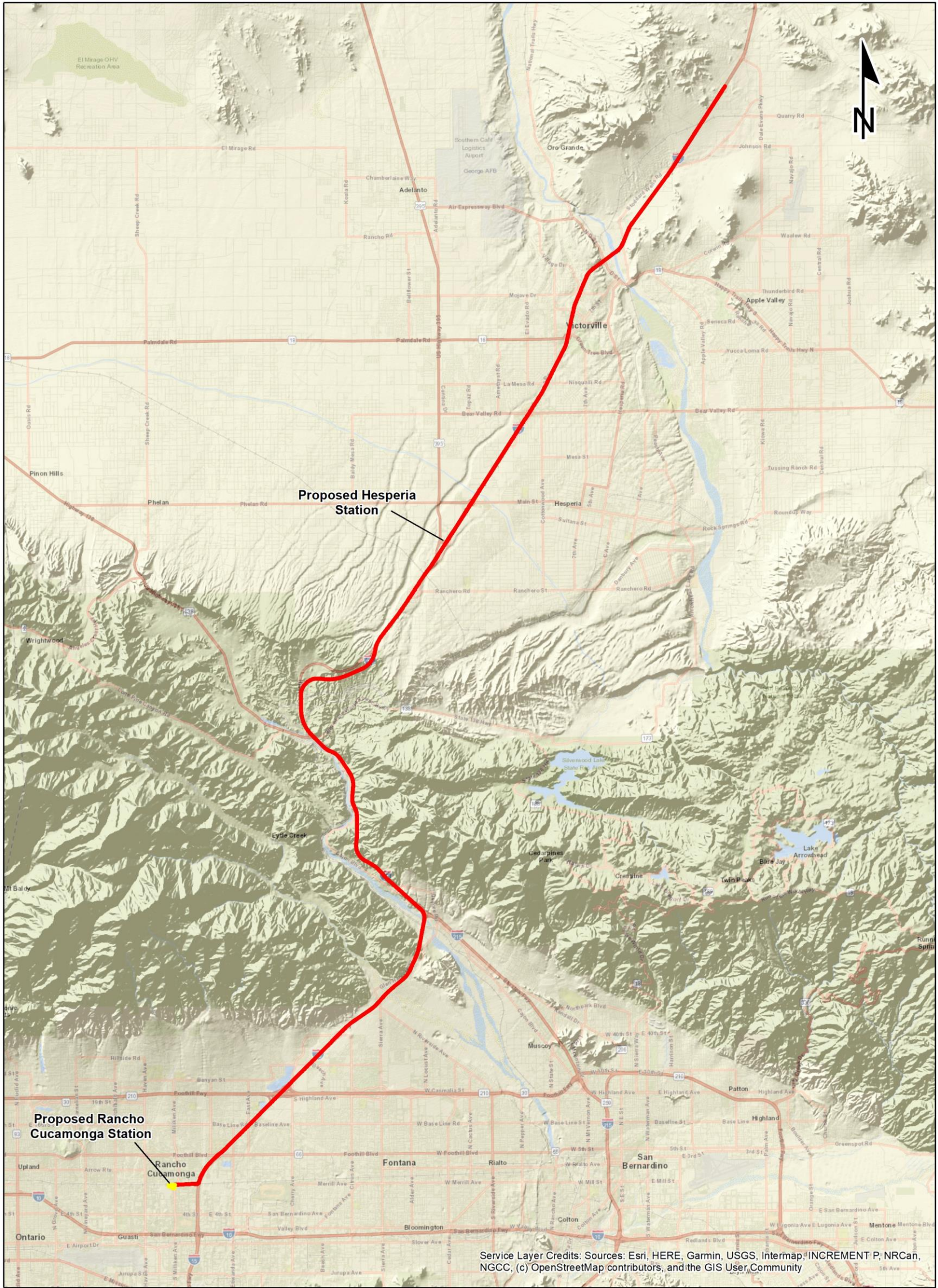
The Project is needed to address transportation capacity deficiencies, major points of congestion, limited travel mode choices, safety deficiencies, and reduce GHG emissions.





Travel demand analysis completed on behalf of the Project forecasts 49.1 million one-way trips between Southern California and Las Vegas in 2025, with approximately 85 percent of travelers making the trip by automobile. Most of these trips use the Cajon Pass segment of the I-15, which is capacity constrained. Further, the freeway system leading into the I-15 from points west, east, and south, including the I-10, State Route 210 (SR-210), I-215, and SR-60 have similar delays and capacity constraints. The Project would address this demand, by providing a

transportation alternative to vehicle travel, and it would allow access to the Brightline West service from the Greater Los Angeles and the Riverside-San Bernardino-Ontario Metropolitan areas, as well as points beyond, with a connection to the Metrolink system in Rancho Cucamonga.

The Project would also support federal and state policies focused on climate change and the need to reduce VMT and associated GHG emissions.

Figure 1. Project Area and Vicinity



<p><b>Legend</b></p> <p> Preliminary Station Location</p> <p> Proposed Rail Alignment</p>	<p><b>Project Area and Vicinity Map</b></p> <p>Brightline West Cajon Pass High-Speed Rail</p> <p>Victor Valley to Rancho Cucamonga, San Bernardino County, California</p>	
	<p> Miles</p> <p>0 1.5 3</p>	



### *2.3.2.1. Capacity Constraints*

I-15 through the Cajon Pass is one of the most congested segments of I-15, with no alternative routes that provide comparable direct road travel capability because of the mountainous topography. Through the Cajon Pass, I-15 supports daily workforce commuters, recreational travel, and regional and interstate freight and goods movement. According to the traffic study prepared for the I-15 Corridor Project Initial Study/Environmental Assessment (Caltrans and SBCTA 2018), unreliability in travel time along segments of I-15 and surrounding roadways is caused by roadway capacity constraints, frequent accidents, and various factors that cause unanticipated congestion. Travelers using the Project would no longer need to drive through the most congested parts of the corridor in the Cajon Pass for interstate or commuter trips, thereby avoiding driving next to many large freight trucks, idling, and inefficient stop-and-go traffic conditions.

By 2045, travel speeds are expected to decrease on all but one segment of I-15 between the San Bernardino Valley and Apple Valley in the AM peak period, and travel speeds on most segments would also decrease—some by more than 10 mph—in the PM peak period (SCAG 2020). Based on the Project Report for the I-15 Corridor Study (addition of express lanes), traffic volumes on I-15 between I-10 and SR-210 are expected to increase in the range of 31 to 38 percent from 2014 to 2045. The Project Report states the existing level of service (LOS) is acceptable in most locations but that there are bottlenecks in each direction of travel that degrade traffic operation, especially between Baseline Road and SR-210. Because the express lane project is increasing capacity by adding express lanes, the traffic volumes are projected to increase by an additional 27 percent. The Project Report further mentions that, although the express lane project would improve conditions in the general purpose lanes in many segments, it would cause the segment between the I-10 and Fourth Street to worsen in the PM peak hour (both directions). In the AM peak hour, the segment between Arrow Route and Fourth Street would worsen in the southbound direction. The segment between Baseline Road and SR-210 would continue to operate at over capacity conditions in all scenarios.

SCAG's Connect SoCal Goods Movement Technical Report identifies I-15 as part of the U.S. Department of Transportation's (USDOT) Primary Highway Freight Network and among the network segments that carry the highest volumes of truck traffic in the region. It also identifies the entirety of the Cajon Pass as a truck bottleneck, with over 15,000 annual vehicle hours of delay.

As documented above, given the attractiveness of the origins and destinations, the transportation capacity constraints on I-15 as described in current and predicted average daily traffic (ADT) and LOS limit reasonable highway access between Rancho Cucamonga, Hesperia, and Victor Valley.

### *2.3.2.2. Travel Demand*

The anticipated substantial increases in population, housing, and employment in San Bernardino County will result in greater demand for transportation facilities and services, including increased travel demand that will result in congestion on roadways if capacity does not keep up with the demand. The proposed Hesperia Station would provide convenient connections between High Desert communities and the more urbanized San Bernardino Valley

and Metropolitan Los Angeles. The High Desert provides lower cost housing options for Southern California residents, while the Rancho Cucamonga/Ontario area around Ontario International Airport has become a significant employment center.

SCAG forecasts, in its 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), that the population of San Bernardino County will grow to 2,815,000 by 2045, a 29 percent increase from the U.S. Census Bureau's 2018 population estimate of 2,180,085, and that the number of households will grow to 875,000, a 39 percent increase over the 2018 household estimate of 630,633 (U.S. Census Bureau 2020). Additionally, the 2020-2045 RTP/SCS forecasts employment in San Bernardino County will increase to 1,064,000 by 2045, a 72 percent increase from the U.S. Census Bureau's estimate of 617,828 in 2018.

While the proposed Victor Valley station site would be located at the convergence of all the highways *en route* to Las Vegas for Southern California travelers, the Rancho Cucamonga station would be closer to major population centers in Southern California. Compared to the Victor Valley station, the proposed HSR station in Rancho Cucamonga, located about 45 miles east of Downtown Los Angeles, would provide more direct access to the densely populated centers in Southern California for both drivers and Metrolink riders; 87 percent of the potential market for trips between Las Vegas and Southern California (equivalent to 42.7 million of the one-way, in-scope trips in 2025) live within 75 miles of the location of the proposed Rancho Cucamonga station.

The proposed station in Rancho Cucamonga, with a Metrolink connection to Los Angeles, would further meet the forecasted demand of the 49.1 million one-way trips between Las Vegas and Southern California estimated in 2025. Similarly, the proposed Hesperia station would be at the convergence of US Highway 395 (US-395) and I-15, so it would serve commuters to Greater Los Angeles from the major corridors in the Victor Valley.

The Project would also support SCAG's Connect SoCal Passenger Rail Technical Report, which identifies closing connectivity gaps as a major strategy to increase mobility and improve sustainability. The Project would facilitate transit connections and would allow residents of the Greater Los Angeles and the Riverside-San Bernardino-Ontario Metropolitan areas to travel exclusively by mass transit and passenger rail to and from the High Desert of San Bernardino. Southern California residents could take the Los Angeles Metro rail, regional bus systems, Amtrak, or Metrolink to Los Angeles Union Station to connect via the Metrolink San Bernardino Line to the Rancho Cucamonga station. Residents could also take the planned West Valley Connector Bus Rapid Transit service that will operate between the Pomona station on the Metrolink Riverside Line in eastern Los Angeles County and the Rancho Cucamonga station. While still in early planning and design stages, the planned Tunnel to Ontario International Airport (ONT) project may provide an additional connection from the Rancho Cucamonga station to the Ontario International Airport.

Additionally, SBCTA and SCAG's 2015 Advanced Regional Rail Integrated Vision – East (ARRIVE Corridor) plan proposes strategies for transitioning the Metrolink San Bernardino Line, which would serve the Rancho Cucamonga station, from a traditional commuter rail line to one that promotes transit-oriented development. Improvements to Metrolink, its transit connections, and additional development of the station areas with transit-supportive uses at greater densities and intensities will encourage the formation of areas that are walkable and that provide mobility options in the region. The Project would further the goals of the ARRIVE

Corridor plan by increasing the activity centers that can be accessed by Southern California's rail network. The Metrolink Southern California Optimized Rail Expansion (SCORE) program intended to increase speeds, reliability, and capacity on Metrolink lines including on the San Gabriel Subdivision which serves the Rancho Cucamonga station.

In 2010, the San Bernardino Associated Governments (the predecessor agency to SBCTA) completed the Victor Valley Long Distance Commuter Needs Assessment, which identified a phased set of commuter improvement projects. Those projects ranged from expanded park and ride facilities to an express bus service linking the Victor Valley area of the High Desert to the Rancho Cucamonga Metrolink station. The Joshua Street Park & Ride is near the Project's proposed station in Hesperia. Such commuter-focused planned improvements highlight the need for travel options that reduce the number of single occupancy automobiles on I-15 in San Bernardino County, particularly through the Cajon Pass.

FHWA's Southern California Regional Freight Study (USDOT 2020) identifies I-15 as a major interstate highway corridor that provides access to the interior of the United States for goods arriving at the ports of the Los Angeles region and ranks it among the highest truck volume corridors in the western United States. Caltrans' 2015 Interregional Transportation Strategic Plan identifies I-15 as a high priority corridor, among six nationally identified "Corridors of the Future," and a "vital link between Mexico, Southern California, and locations to the north and east of the region." I-15 also connects Southern California and the southwestern United States to the San Joaquin Valley's agricultural goods via SR-58. By providing passenger rail capacity in the corridor, the Project would help maintain freeway capacity for truck freight use by removing passenger vehicles from the roadway network.

### 2.3.2.3. *Safety*

Alternatives to automobile travel would provide improved safety conditions on the I-15 corridor with diversion of vehicle trips to HSR. On a national level, comparing miles traveled via commercial aircraft, train, and automobiles on highways, auto travel on highways has by far the highest rate of passenger fatalities per mile traveled. In 2019, the average rate of passenger fatalities from highway travel was more than 75 times the comparable rate for travel by air and 34 times the comparable rate by rail. For 2016, the Bureau of Transportation Statistics' National Transportation Statistics (USDOT 2018) reported a rate of passenger fatalities per 100 million passenger miles traveled by highway nearly 10 times greater than the rates for travel by air or rail. HSR is one of the safest forms of travel.

The California Office of Traffic Safety ranks San Bernardino County 16th-worst out of 58 counties for total fatal and injury crashes in 2018 (the most recent year of data available). According to the University of California, Berkeley, and SafeTREC's Transportation Injury Mapping System, there were 819 collisions with one or more deaths or injuries along I-15 in San Bernardino County in 2019. Of these, nearly one quarter (199) occurred in the 12 miles of the Cajon Pass, although the Cajon Pass accounts for only 6.5 percent of the length of I-15 in the county.

A study by the I-15 Mobility Alliance found that the segment of I-15 from I-215 in San Bernardino to I-40 in Barstow had a fatality rate 0.009 per million VMT, well above the

alliance's performance goal of 0.003 fatalities per million. By connecting the Victor Valley to Rancho Cucamonga, the Project would allow more travelers to stay off segments of I-15.

## 2.4. Project Elements

### 2.4.1. Build Alternative

The Build Alternative (i.e., the Project) consists of a proposed HSR passenger railway with associated infrastructure, including two proposed passenger stations. Nearly all of the Project would be built within the I-15 right-of-way. Near the proposed southern terminus station in Rancho Cucamonga, approximately 1 mile of the rail alignment would be in city street, railroad, or utility rights-of-way.

The proposed rail alignment would be located within the median of the I-15 freeway between Victor Valley and Rancho Cucamonga except at the approach to the proposed Rancho Cucamonga station. The rail alignment would be predominately at grade (the same elevation as the existing freeway), with select segments of the alignment on aerial structures or in a trench to allow for grade separations (including 4 BNSF and 3 UP railroad crossings) and to provide a safe incline for train operation. The rail alignment would be predominantly single-track, with limited double-track segments in Victor Valley (2.6 miles, including 0.9 miles constructed as part of the DesertXpress High-Speed Passenger Train Project), Hesperia (5.5 miles), and Rancho Cucamonga (2 miles). This would allow for 45-minute headways in the opening year between Victor Valley and Rancho Cucamonga and with additional infrastructure, 22.5-minute headways by year 11. These headways, along with the ability to couple trains (double passenger capacity), would address projected ridership needs for the foreseeable future.

For analytical purposes, the Build Alternative is described in three sections. Sections were developed to reflect similarly developed areas with similar environmental sensitivity. The sections include:

- **Section 1:** High Desert – from the Victor Valley station, continuing south along I-15, to the I-15/Oak Hill Road interchange in Hesperia
- **Section 2:** Cajon Pass – from the I-15/Oak Hill Road interchange, continuing south along I-15, through the Cajon Pass, to the I-15/Kenwood Avenue interchange
- **Section 3:** Greater Los Angeles – from the I-15/Kenwood Avenue interchange in San Bernardino, continuing south along I-15, through the existing Metrolink station in Rancho Cucamonga to Haven Avenue

### 2.4.2. Section 1 – High Desert

The proposed rail alignment would connect to the DesertXpress High Speed Train alignment approximately one mile south of the Victor Valley station in Apple Valley. The Victor Valley station was proposed by the DesertXpress High Speed Train Project (DesertXpress Project) and approved in 2011 and modified by the re-evaluation in 2020. From this point, the alignment would continue south within the I-15 median. The rail alignment throughout Section 1 would be predominantly single track; however, the rail alignment would be double-track north of Stoddard Wells Road to the northern terminus of the alignment as it approaches the train platforms of the Victor Valley station. The Project would include a new structure over the existing CEMEX railroad bridge. Based on future discussion with CEMEX, the existing railroad

bridge may be reconstructed as part of the DesertXpress project, in which case the alignment would run at-grade in the median under the railroad bridge.

Brightline West will build a new Southbound on ramp and bridge at South Stoddard Wells Road to replace similar existing facilities further south. This in-turn requires modifications of I-15 up to and including the Mojave River crossing.

At the Mojave River, a new rail bridge will be constructed within the median of I-15. The existing I-15 bridge would be widened to accommodate the rail line. The alignment would then continue at grade in the I 15 median with minor roadway widenings for the remainder of Segment 1. This portion of the alignment would interface with the following interchanges: Stoddard Wells Road North, Stoddard Wells Road South, D Street/E Street, Mojave Drive, Roy Rogers Drive/Hook Road, Palmdale Road, La Mesa Road/Nisqualli Road, Bear Valley Road, Main Street/Phelan Road, Joshua Street, US 395, Ranchero Road, and Oak Hill Road.

A new substation would be constructed to support the Project along I-15, between Mesa Street and Mojave Street. The area is currently largely undeveloped, other than existing overhead power lines and utility access.

### **Hesperia Station**

Section 1 includes a new passenger station in Hesperia, at the I-15/Joshua Street interchange. This station would serve daily travelers between the High Desert of San Bernardino County and the Los Angeles Basin. This would be a limited service for select southbound AM and northbound PM weekday on selected Brightline train coaches. The northbound on-ramp to Joshua Street would be realigned closer to the freeway, and station parking would be on the north side of Joshua Street. Parking would be accessed at the location of the existing northbound ramp intersection. To accommodate the rail alignment, the existing US-395 northbound connector and the existing Joshua Street bridge would be replaced. The Joshua Street bridge would be reconstructed at a higher elevation, requiring raising of the I-15 ramps and Mariposa Road. The passenger platform would be located within the I-15 median, with direct access from the reconstructed Joshua Street bridge at the southern end of the double-track segment in Hesperia. The Project design includes adequate parking areas to accommodate parking demand.

### **Design Elements**

Segment 1 of the Project includes the following design elements.

- **Reconstructions/Interchange Modifications:** Widening portions of the I-15 freeway and modifications to interchanges at Stoddard Wells Road southbound on- and off-ramp, D Street/E Street, Mojave Drive, Roy Rogers Drive/Hook Road, Palmdale Road, La Mesa Road/Nisqualli Road, Bear Valley Road, Main Street/Phelan Road, US-395, Ranchero Road, Oak Hill Road, and Joshua Street
- **New Substation:** Construction of a new substation along I-15 between Mesa Street and Mojave Street
- **Station Area:** Hesperia station platform, station access/infrastructure, surface parking lot accommodating approximately 360 vehicles, bus pick up/drop off areas, Kiss and Ride

### **2.4.3. Section 2 – Cajon Pass**

Beginning at the I-15/Oak Hill Road interchange and traveling south, the alignment would run on the west side of the I-15 northbound lanes at grade and within the existing I-15 right-of-way. In this area, the I-15 runs through the San Bernardino National Forest for approximately 12 miles. The rail alignment throughout Section 2 would be entirely single-track. The Project would require relocation of California Highway Patrol (CHP) emergency crossovers where the new guideway would block existing crossovers. Four new crossover locations would be placed to take advantage of existing CHP access between the separated I-15 alignments in the following locations:

- West of Forestry Road crossing the northbound lanes.
- Approximately 1.25 miles in the southbound direction along I-15 from the crossover near Forestry Road, across the northbound lanes.
- West of the Baldy Mesa (Trestles) OHV Staging Area, across the northbound lanes.
- West of Perdew Canyon and approximately 1.25 miles north of Mathews Ranch Road, across both the north and southbound lanes.

The alignment would remain at grade throughout Segment 2.

Where I-15 northbound and southbound lanes reconnect at the foot of the Cajon Pass, the rail alignment would be within the I-15 median. This would require widening portions of the I-15 freeway and minor realignment of ramps at the I-15/SR-138 interchange.

#### **Design Elements**

Segment 2 of the Project includes the following design elements.

- Bridges/Viaducts: None
- Reconstructions/Interchange Modifications: Widening portions of the I-15 freeway including several miles of retained fill, and realignment of ramps at the I-15/ SR-138 interchange
- Other Facilities: CHP emergency crossovers

### **2.4.4. Section 3 – Greater Los Angeles**

Beginning at the Kenwood Avenue interchange, the proposed rail alignment would continue at grade in the I-15 median. At the I-15/I-215 interchange, the alignment would continue between the divided I-15 freeway at the same elevation as the freeway including the Devore interchange viaduct, curving to the southwest parallel to freeway. The rail alignment would require I-15 freeway and interchange ramp modifications at Baseline Avenue, SR-210, Beech Avenue, Duncan Canyon Road, Sierra Avenue, and Glen Helen Parkway.

The rail alignment would transition to an aerial alignment and elevate over the I-15 southbound lanes south of Church Street and cross at Foothill Boulevard. It would continue along the west side of the I-15 freeway on an elevated alignment to enter the San Gabriel Subdivision and Eighth Street corridor. The alignment would transition onto an aerial structure and would turn west, running parallel to and partially within the existing rail corridor and partially within the Eighth Street right-of-way before entering the existing Rancho Cucamonga Metrolink station

area on an elevated structure. The rail alignment would maintain a single-track configuration prior to exiting the freeway median south of Church Street, where it would transition to a double-track configuration for the remaining distance to the Rancho Cucamonga station. At the Rancho Cucamonga station, an elevated station with a center platform and tracks on either side would be constructed parallel to and above the existing eastbound Metrolink platform, extending over Milliken Avenue. A new parking structure is proposed at Rancho Cucamonga Station, and would replace existing surface parking to accommodate increased parking demand. The Project design includes adequate parking areas to accommodate parking demand in the opening year.

### **Design Elements**

Segment 3 of the Project includes the following design elements.

- **Bridges/Viaducts:** Viaduct of approximately 3.5 miles to cross I-15 southbound lanes and along existing rail corridor near Rancho Cucamonga station
- **Reconstructions/Interchange Modifications:** I-15 freeway and interchange ramp modifications at SR-210, Beach Avenue, Duncan Canyon Road, and Glen Helen Parkway
- **Station:** Dedicated Brightline station adjacent to the existing Rancho Cucamonga Metrolink station, with vertical circulation down to the platform, shared access with existing Metrolink station, a share parking structure for vehicles, and a bus plaza

## **2.5. Construction**

In general, construction activities would consist of clearing, grading, excavation, placing fill, stockpiling materials, constructing bridges and walls, installing drainage, installing sub-ballast and subgrade, placing and anchoring railroad ties, placing ballast material, and tamping ballast, constructing stations, substations, mobilization and demobilization. Construction equipment would likely include dump trucks, excavators, loaders, cranes, water trucks, backhoes, scrapers, rollers, ballast tampers, concrete trucks, and drill rigs.

For new and reconstructed overpasses and bridges, construction activities would include clearing, grubbing, demolition of existing structures, excavation and drilling for foundations, concrete pouring, formwork and rebar placement for foundations, falsework installation, construction of bridge decking, placement of ballast and ties, mobilization and demobilization.

Most construction activities would occur on Caltrans right-of-way. Some, for the rail stations and power substations, would occur on public property owned by the City of Rancho Cucamonga, SBCTA, or State of California. Temporary construction areas, or TCAs, are properties that would be temporarily utilized for construction staging and storage. The Project would require TCAs along the alignment between Victor Valley and Rancho Cucamonga.

## 3. Methodology

### 3.1. Relevant Regulations, Plans, and Policies

#### 3.1.1. Federal Requirements

The primary federal laws regulating hazardous materials and wastes are the Resource Conservation and Recovery Act (RCRA) of 1976 and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980. RCRA provides for “cradle to grave” regulation of hazardous wastes. The purpose of CERCLA is to clean up contaminated sites so that public health and welfare are not compromised. Other relevant federal laws include:

- Community Environmental Response Facilitation Act of 1992 (42 U.S.C. 9620)
- Clean Water Act (33 U.S.C. 1251)
- Clean Air Act (42 U.S.C. 85) and the 1990 amendments
- Safe Drinking Water Act (42 U.S.C. 300)
- Occupational Safety and Health Act (OSHA; 29 U.S.C. 15)
- Atomic Energy Act (42 U.S.C 2011 et seq)
- Toxic Substances Control Act (15 U.S.C 2601 et seq)
- Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136)
- Executive Order 12088, Federal Compliance with Pollution Control (43 FR 477047, 3 CFR, 1978 Comp., p 243)
- U.S. Environmental Protection Agency’s (U.S. EPA) Standards and Practices for All Appropriate Inquiries (40 CFR Part 312)
- ASTM Standard Practice for Environmental Site Assessments (E 1527-13)
- ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16)
- ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14)

#### 3.1.2. State, Regional, and Local Requirements

##### 3.1.2.1. *California Office of the State Fire Marshal*

The California Office of the State Fire Marshal (OSFM) is responsible for ensuring the implementation of the California Fire Code Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement, which provide vital facility chemical and emergency response information to regulators, first responders, and the public with respect to community-right-to-know laws and emergency response preparedness.

Reporting must be done electronically using the California Environmental Reporting System.



### ***3.1.2.2. Mojave Desert Air Quality Management District and South Coast Air Quality Management District***

The Mojave Desert Air Quality Management District (AQMD) and South Coast AQMD are regional governing authorities that have primary responsibility for controlling air pollution from stationary sources. The AQMDs implement air quality programs required by state and federal mandates, enforce rules and regulations based on air pollution laws, and educate businesses and residents about their role in protecting air quality and the risks of air pollution. The AQMDs typically require that all equipment with the potential to emit air pollutants (including air toxics and hazardous air pollutants) have a valid AQMD permit prior to commencing construction and/or operation, but they specifically exclude railroads from requiring such permits.

### ***3.1.2.3. San Bernardino County Fire Department, Hazardous Materials Division***

San Bernardino County Fire Department manages six hazardous material and hazardous waste programs. They include the Hazardous Materials Business Plan, Hazardous Waste and Onsite Treatment, Aboveground Petroleum Storage, Underground Storage Tank Program, California Accidental Release Program, and OSFM's HMMP and Hazardous Materials Inventory Statement. The San Bernardino County Fire Department's Hazardous Materials Division collaborates on emergency plans with local county jurisdictions.

### ***3.1.2.4. San Bernardino County Solid Waste Management Division***

The San Bernardino County Solid Waste Management Division (SBCSWMD) is responsible for the operation and management of the solid waste disposal system. It also administers the National Pollutant Discharge Elimination System (NPDES) in San Bernardino County.

### ***3.1.2.5. Regional Water Quality Control Boards***

The Lahontan Regional Water Quality Control Board (RWQCB) and Santa Ana RWQCB oversee surface water and groundwater within the study area. The RWQCBs' stormwater programs permit discharges of pollutants in stormwater runoff to Waters of the United States under the NPDES. A general permit approach is used to reduce pollutants by requiring specified control measures.

## **3.2. Study Area**

The study area includes the Project footprint for the entire 49-mile corridor between Victor Valley and Rancho Cucamonga and a 1/8-mile radius immediately surrounding the Project footprint. The proposed rail alignment would be located predominantly in the median or immediately alongside the I-15 freeway within the Caltrans I-15 right-of-way. The proposed passenger stations and power substation are within the study area.

## **3.3. Methods Used**

To determine the potential for encountering known hazardous materials, a corridor study was ordered from EDR™ (EDR 2020) and the U.S. EPA's website, Cleanups in my Community, was searched (U.S. EPA 2021). The EDR study searched federal, state, and local environmental records to identify locations within a 1-mile buffer of the project centerline for the entire

corridor where unauthorized releases of hazardous materials have occurred. The 1-mile buffer was ordered to ensure inclusion of any sites known to contain hazardous material in the project vicinity. EDR documented its study results in a 4,480-page report. The Executive Summary, Mapped Site Summary, Key Map, and thirty-one Focus Maps are provided in Appendix A. The EDR report briefly assesses the sites identified within the Project footprint and in 1/8-mile increments from the center of the I-15 right-of-way. The sites include dry-cleaners and underground storage tank (UST) sites.

The Cleanups in my Community website (U.S. EPA 2021) was used to identify ongoing hazardous waste cleanup locations, which are more likely to include known hazardous materials than areas not in such cleanup locations.

This memo evaluates the likelihood that hazardous materials may be present in soil or groundwater beneath the study area as a result of activities that have occurred in the vicinity of the project. The likelihood is ranked as high, moderate, or low based on the following descriptions:

- **High** – Assigned to property in the study area with known or probable contamination. An example of a property in this category would be a leaking UST (LUST) property where remediation had not been started or was not yet finished. This rank was also assigned if site remediation or closure information was not available.
- **Moderate** – This rank was assigned in the following situations:
  - Potential or suspected contamination
  - Property within or adjoining the study area with known use or storage of hazardous material that had received violation notices from an inspecting agency or where visual evidence of inadequate chemical and storage practices (such as significant staining) were observed but where no environmental assessments had occurred
  - LUST property in the study area that is in final stages of remediation or in post-remediation monitoring. Any LUST property adjacent to the I-15 right-of-way would be included in this category, regardless of case status.
  - Facilities within or adjoining the study area where USTs are likely present but that appeared to be abandoned by their former operators
  - Properties that have not been identified as “closed” but involved limited volume hazardous material releases on hard surfaces (e.g., asphalt or concrete)
- **Low** –Assigned to property where use or storage of hazardous materials occurs, but the property has no significant violations, known releases, or evidence of inadequate chemical-handling procedures. Examples are active USTs and dry-cleaning facilities with no documented releases, as well as properties outside the study area where remediation of previous releases have been completed. A **low** ranking was also assigned to LUST properties that have been closed longer than 10 years

USTs identified in the EDR report were reviewed based on the descriptions above. All UST sites were assigned a **low** ranking as none had associated releases. UST sites are not specifically identified in this report.

## 4. Affected Environment

The EDR search identified 19 potential hazardous materials sites within the Project footprint and 394 hazardous material sites within 1/8-mile of the footprint. Some of the hazardous materials sites are found in more than one database or appear as more than one type of environmental record. For example, a rental facility in Victorville is included in seven of the EDR-searched databases and environmental records. This one location is counted as 7 separate sites in the EDR report. There are 349 unique sites within 1/8-mile of the footprint.

The review of U.S. EPA's Cleanups in my Community website revealed no ongoing hazardous waste cleanups within the study area.

The following subsections provide information about the 19 sites within the Project footprint and 14 LUST sites identified within 1/8-mile of the Project. The remaining hazardous material sites are all categorized as "low" risk because there is no record of release and are not discussed in this report. The hazardous materials sites within the study area are shown on Figure 2, Potential Hazardous Materials Locations Map. Sites shown on the map are color-coded to reflect their categorization as a "high," "moderate," or "low" risk for encountering hazardous materials.

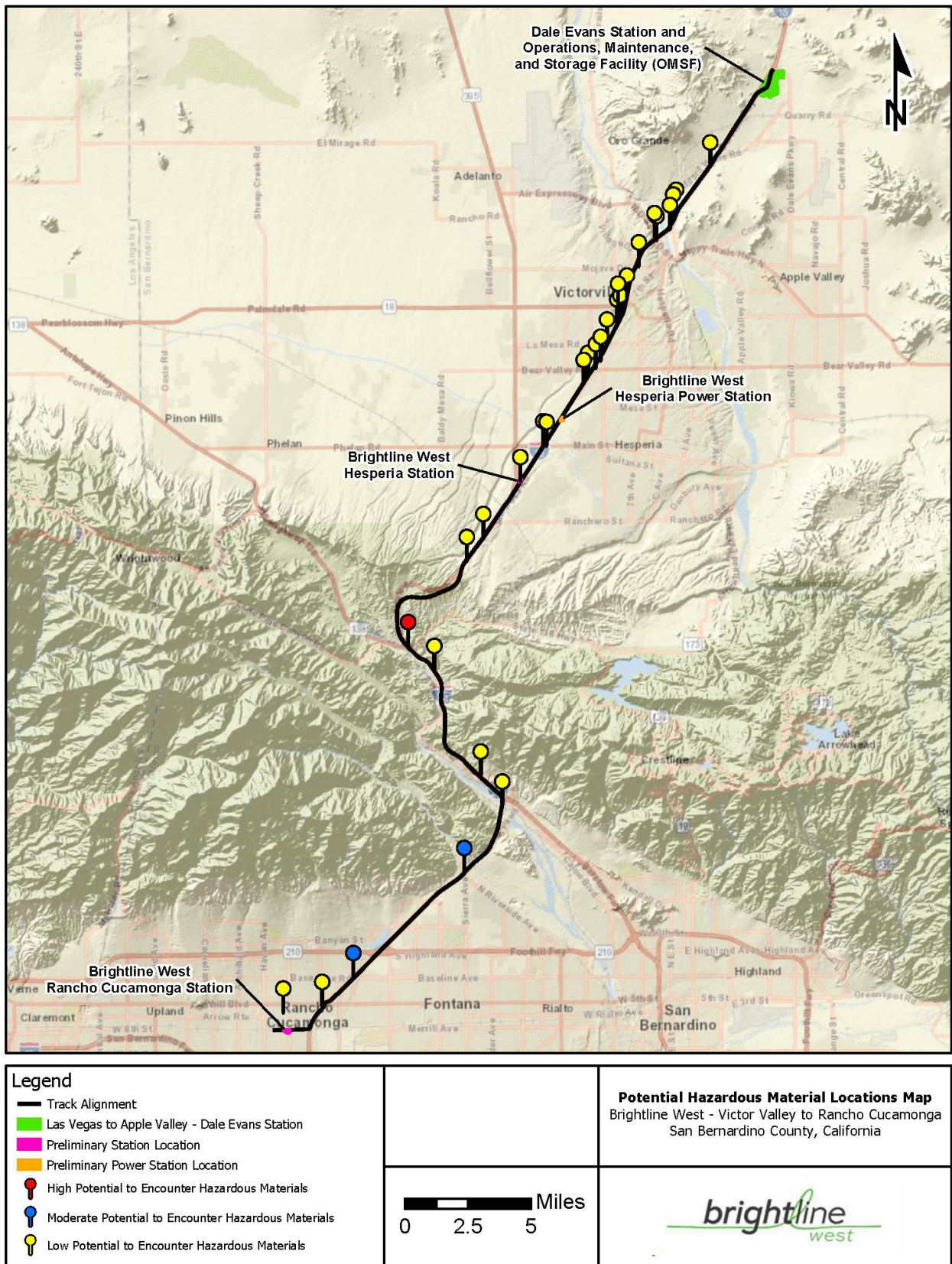


Figure 2. Potential Hazardous Material Locations Map

## 4.1. Section 1 – High Desert

Table 1 lists 22 hazardous material sites identified in Section 1 (High Desert) of the study area. The sites include four hazardous material incidents, one hazardous waste manifest, three construction stormwater permits, 12 LUSTs, and two dry cleaners. These sites did not meet the criteria for “high” or “moderate” rankings. All were ranked with a “low” likelihood that hazardous materials are present.

**Table 1. Hazardous Materials Sites within the Section 1 Construction Area**

Site	Address	Closure Date	Site Notes	Rank	Within Footprint	Within 1/8-mile
NA	Stoddard Wells Rd and I-15	4/28/1989	Tractor trailer accident	Low	X	
NA	Main Street / overpass eastbound	2/25/1991	NA	Low	X	
NA	Southbound I-15, 150 feet south of Joshua Rd	7/29/1991	Tractor trailer accident	Low	X	
Don Halstead	16919 Outer Hwy 15 Victorville, CA	10/25/2000	Manifest for 40 gallons (0.1668 ton) unspecified oil-containing waste	Low	X	
Construct Concrete Barrier	Hesperia, CA	9/8/2017	Construction Stormwater Permit	Low	X	
1-15 La Mesa Nisqualli Interchange Project	La Mesa/Nisqualli overcrossing New I-15 overcrossing	11/28/2013	Construction Stormwater Permit	Low	X	
Nisqualli 12kV	Amargosa Rd Mariposa Rd between Cottonwood Ave and Luna Rd Victorville, CA	5/14/2013	Construction Stormwater Permit	Low	X	
Rental Facility LUST	16363 D St Victorville, CA	12/31/1997	Unknown volume unleaded gasoline release. Contaminated soil excavated and disposed.	Low		X
Cal Trans Maintenance LUST	13693 Mariposa Rd Victorville, CA	8/30/1996	10/24/95 diesel pipeline leak discovered. Contaminated soil was excavated and disposed of at time of discovery.	Low		X

Site	Address	Closure Date	Site Notes	Rank	Within Footprint	Within 1/8-mile
Prime Equipment LUST	14268 Valley Center Dr Victorville, CA	6/12/1991	6/12/91 Diesel leak discovered during tank removal	Low		X
Chevron #9-3863 LUST	16881 Stoddard Wells Rd Victorville, CA	10/17/2007	7/15/87 Waste oil leak discovered. No information available about tank removal, but this has been closed.	Low		X
KOA Campgrounds LUST	16530 Stoddard Wells Rd Victorville, CA	3/18/1994	12/27/88 Solvent/Other non-petroleum hydrocarbon tank leak discovered. Lahontan RWQCB closed site 3/18/94.	Low		X
Affordable RV LUST	11854 Mariposa Rd Victorville, CA	10/24/2004	5/23/04 Diesel leak reported.	Low		X
Mesa Transmission LUST	11854 Mariposa Rd Victorville, CA	5/13/2020	Multiple diesel tank leak	Low		X
US Rentals LUST	11612 Mariposa Rd Victorville, CA	8/11/2008	Multiple diesel leaks. No information on site remediation, but site closed 8/11/08.	Low		X
Unocal #5596 LUST	16088 Mojave Dr Victorville, CA	12/20/2006	6/9/92 Discovered gasoline leak. Site assessment began 6/9/92. Closed 12/20/06.	Low		X
Arco #204 LUST	12122 Mariposa Rd Victorville, CA	5/13/2020	Gasoline leak discovered 8/21/87. Site remediated via soil vapor extraction in 1996.	Low		X
Shell Service Station LUST	13105 Main St W Hesperia, CA	11/20/2008	Gasoline leak discovered 5/15/90. Site remediated, method unknown, 1990. Site closed 11/20/08.	Low		X
Arco AM/PM No. 1908 LUST	16251 D St Victorville, CA	8/5/2010	Multiple tanks. Original gasoline leak discovered 9/19/86. Remediation and enforcement action closed 8/5/10.	Low		X
Pilot Tanker Diesel	Northbound I-15, corner of Mariposa Rd and Jenny St Hesperia, CA	7/27/2009	Diesel fuel release from a tanker truck along northbound shoulder of I-	Low	X	

Site	Address	Closure Date	Site Notes	Rank	Within Footprint	Within 1/8-mile
			15 between Oak Hill Rd and Joshua St.			
Saturn Cleaners	12353 Mariposa Rd Victorville, CA	NA	Small quantity hazardous material generator. Last solvent recovery occurred in 2015.	Low	X	
Deluxe Cleaners of Victorville	15329 Palmdale Rd, Suite P Victorville, CA	6/1/2007	Closed-loop dry-cleaning equipment	Low		X

Notes:

NA = not available

LUST = leaking underground storage tank

## 4.2. Section 2 – Cajon Pass

Table 2 lists the four hazardous material sites identified in the study area in Section 2 (Cajon Pass) of the Project. Hazardous material events at these four sites include two hazardous material incidents, one construction stormwater permit, one LUST, and one cleanup and abatement order.

Most of the sites in Section 2 were ranked with a “low” likelihood that hazardous materials are present.

The SR-138 Widening Project had both the construction stormwater permit and the cleanup and abatement order. The clean-up and abatement order was issued in 2016. No remediation or closure information is available, so this site has been ranked with a “high” likelihood.

The hazardous material incident sites (see the last two lines of Table 2) were closed more than 30 years ago. No remediation information is available for those two sites. They were ranked with a “low” likelihood for hazardous materials.

**Table 2. Hazardous Materials Sites within the Section 2 Construction Area**

Site	Address	Closure Date	Site Notes	Rank <sup>a</sup>	Within Footprint	Within 1/8-mile
SR-138 Widening Project	Phelan, CA	9/21/2018	Construction Stormwater Permit	Low	X	
SR-138 Widening Project	Phelan, CA	NA	8/16/16 Cleanup and Abatement Order unknown contaminant and volume	High	X	
Summit Inn Texaco LUST	6010 Mariposa Rd Hesperia, CA	6/6/2009	7/10/97 gasoline leak reported	Low		X
Hazardous Material Incident	Southbound I-15 on-ramp, 200 feet south of Kenwood Ave	9/1/1989	NA	Low	X	
Hazardous Material Incident	Kenwood Ave and I-15	7/26/1990	NA	Low	X	

Notes:

NA = not available

- a. High – LUST remediation not started;  
 Low – UST or dry cleaning with no documented releases

### 4.3. Section 3 – Greater Los Angeles

Table 3 lists the six hazardous material sites identified in the study area in Section 3 (Greater Los Angeles) of the Project. The sites include two hazardous material incidents, two construction stormwater permits and placements of wetlands fill and dredge material, one hazardous material release, and one dry cleaner.

The construction stormwater permits, wetlands fill and dredge material sites, and the dry cleaner are ranked with a “low” likelihood that hazardous materials are present because there is no record of release. However, the two hazardous material incident locations and the hazardous material release sites are ranked with a “moderate” likelihood.



**Table 3. Hazardous Materials Sites within the Section 3 Construction Area**

Site	Address	Closure Date	Site Notes	Rank <sup>a</sup>	Within Footprint	Within 1/8-mile
Hazardous Material Incident	Corner Sierra Ave and I-15 Fontana, CA	NA	9/28/1999 40-gallon Sulfonic Acid spill. Load shifted within the trailer and spilled onto an asphalt surface. Site remediation information not available.	Moderate	X	
Hazardous Material Incident	I-15 southbound between the I-210 and Base Line Rd Fontana, CA	NA	12/24/2008 50-gallon Diesel release. Tractor trailer rig drove off I-15, rupturing saddle tank. No site remediation information available.	Moderate	X	
I-15/Base Line Road Interchange Improvement	Fontana, CA	4/29/18	Construction Stormwater Permit Wetlands fill and dredge material	Low	X	
Caltrans I-15/I-215 Interchange Improvements	Junction I-15 and I-215 San Bernardino, CA	10/9/2017	Construction Stormwater Permit Wetlands fill and dredge material	Low	X	
B&P Woodgrain Paneling LUST	8886 Vincent Ave Rancho Cucamonga, CA	5/31/1990	Methylene Chloride release. No site remediation information available.	Moderate		X
Kayla Cleaners	12365 Foothill Blvd, Suite 103	6/30/2010	Inactive as of 6/30/2010	Low		X

## Notes:

NA = Not Available

- a. Moderate – LUST remediation started;  
Low – UST or dry cleaning with no documented releases

## 5. Environmental Consequences and Mitigation

### 5.1. Construction

Project construction may require demolition and/or removal of buildings, other structures, soil, and paving materials to accommodate the proposed facilities. During these activities, various hazardous materials may be encountered. Near the existing Metrolink station (Rancho Cucamonga), herbicides, petroleum hydrocarbons, and metals could be found in soils or groundwater. In the I-15 corridor, petroleum hydrocarbons and aerially-deposited lead may be found in soils or groundwater. There is also the potential to encounter previously unidentified hazardous materials.

The construction contractor may use hazardous materials to operate and maintain equipment during construction. Such materials may include petroleum products such as gasoline, diesel fuel, and hydraulic fluid; lubricating oils and solvents; cleansers; and other substances. The construction contractor would maintain copies of the required Safety Data Sheets for each hazardous chemical and would ensure that the copies are readily accessible during each work shift.

The potential for effects from construction activities would be minimized through the development and implementation of best management practices and other measures, such as those described in Section 6.3.

### 5.2. Operation

Project maintenance would likely involve the routine use and storage of materials such as fuel, lubricants, solvents, paint, compressed gas, and waste products. The California Office of the State Fire Marshall would require preparation and implementation of a HMMP for the Project. Project operation would require safe handling, use, storage, and disposal of hazardous materials in accordance with that HMMP.

### 5.3. Avoidance, Minimization, and/or Mitigation Measures

Construction and operation mitigation would prevent the spread of contaminated material and would reduce the potential for harmful exposure of workers and the public.

The following measures could be implemented as part of the Project. Construction measures would be performed by the construction contractor. Operation measures would be performed by Brightline West.

#### 5.3.1. Construction

- The State of California requires preparation of a HMMP prior to application for permits for demolition, grading, or construction. The HMMP would be utilized during all phases of construction and would address UST decommissioning, field screening, materials testing methods, mitigation and contaminant management requirements, and health and safety requirements.
- Prior to any construction activities, an accurate contact list would be developed that includes telephone numbers for regulatory agencies, Health and Safety personnel, the

National Response Center, and cleanup contractors with whom there is a pre-established agreement for response. The list would also include all appropriate federal, state, and local agencies that must be contacted when a discharge or discovery occurs. These agencies may include:

- Lahontan and Santa Ana RWQCBs
  - Department of Toxic Substances Control
  - City toxics management divisions
  - San Bernardino County Department of Environmental Health
- Disturbed soil would be monitored for visual evidence of contamination (staining or discoloration). Soil would be monitored for the presence of volatile organic compounds using appropriate field instruments. If the monitoring procedures indicate the possible presence of contaminated soil, a plan would be implemented that identifies procedures for segregation, sampling, and chemical analysis of the soil. Contaminated soil would be profiled for disposal and would be transported with appropriate hazardous or non-hazardous waste manifests by a properly certified hazardous material hauler to a state-certified disposal or recycling facility licensed to accept and treat the type of waste indicated by the profiling process.
  - In the event that construction activities or soil removal processes generate any contaminated groundwater that must be disposed of outside of the dewatering/NPDES process, the groundwater will be profiled, manifested, hauled, and disposed of in the same manner.
  - Construction contractor(s) would have a well-developed hazardous material program in place and would use non-hazardous substances in routine construction and maintenance activities when available. Construction contractors would dispose of all hazardous or solid wastes and debris encountered or generated during construction and demolition activities.

### 5.3.2. Operation

- The State of California requires preparation of a HMMP prior to application for permits. The operational HMMP would be updated by the owner/operator and would address UST decommissioning, field screening, materials testing methods, mitigation and contaminant management requirements, and health and safety requirements.

## 6. References

EDR. 2020. EDR Area/Corridor Report. XpressWest Phase 2 Rancho Cucamonga to Victorville. August 14, 2020.

U.S. EPA (U.S. Environmental Protection Agency). 2021. Cleanups in my Community. <https://www.epa.gov/cleanups/cleanups-my-community>. Accessed November 5, 2021.