

We're scoping rail for the High Desert Corridor.

HIGH DESERT CORRIDOR
Rail Component Fact Sheet

SUMMER 2015



Metro®



Overview

The High Desert Corridor (HDC) is a proposed multipurpose corridor that could integrate four components into one project, including:

1. A freeway/expressway connecting SR-14 in Los Angeles County and US-395, I-15 and SR-18 in San Bernardino County, with a tollway along a portion of the route
2. A high-speed rail connection between the Palmdale Transportation Center (PTC) and the proposed XpressWest station in Victorville
3. A grade-separated bikeway
4. Green energy production/transmission facilities

There are currently two other high-speed rail projects being proposed in California: 1) the California High-Speed Rail (CAHSR) which would run between San Francisco/Sacramento and San Diego, with a stop in Palmdale, and 2) the XpressWest HSR between Las Vegas and Victorville. There is also existing Metrolink service between Palmdale and Los Angeles Union Station. The HDC high speed rail could “fill the gap,” providing direct connections to the proposed CAHSR and XpressWest systems. The HSR projects could provide an interstate connection between Las Vegas, Nevada, and Los Angeles Union Station in California.

This HDC rail component is being carefully coordinated with these other two projects to ensure efficient high speed rail connections throughout Southern California, as well as provide interstate access to Metrolink destinations. Additionally, the Antelope Valley Transit Authority and the Victor Valley Transit Authority could use the HDC and the rail stations to connect residents and commuters to the regional and interstate systems.

Rail Alternatives Analysis (RAA) Report and Preferred Alternative

As part of the environmental process and alternatives screening, Los Angeles County Metropolitan Transportation Authority and Caltrans prepared a Rail Alternatives Analysis (RAA) included as part of the Draft Environmental Impact Statement/Report (Draft EIS/EIR) released in Fall 2014. In July 2015, the Preferred Alternative (PA) was finalized and adopted by Caltrans and the Metro Board of Directors. The PA is a multipurpose alternative that includes freeway/tollway with high-speed rail in the median along with the green energy Corridor and the bikeway. The PA also includes two previously considered variations (Variations D and B1) as part of the alignment. The PA will be carried to the Final Environmental Impact Statement/Report (Final EIS/EIR), which is anticipated to be released during Spring 2016.

The following highlights some of the findings from the RAA; you can also view the entire document on the HDC project website.

HDC'S HIGH SPEED RAIL SERVICE BOUNDARIES

The HDC high-speed rail would connect the proposed CAHSR station and PTC in Palmdale on the west end with the proposed XpressWest station on the east end in Victorville. The HDC project evaluated a number of options for connecting with these two stations. These options are being considered to maximize the design speeds, for improved service, and to minimize impacts to the environment.

HDC RAIL MODES

For the purpose of completing the RAA, two rail modes were compared from an operational standpoint for placement along the HDC corridor: commuter rail and high-speed rail. Commuter rail service is similar to Amtrak and Metrolink service. High-Speed Rail service is significantly faster, reaching higher maximum speeds. Other modes, including maglev and the X-train, were considered but withdrawn earlier because they do not meet the project purpose and need, are not in the regional planning process, and do not provide a gap closure between the Palmdale Transportation Center and the XpressWest Victorville station. After evaluation for consistency with purpose, need and other criteria, the study concluded that a high-speed rail technology would be selected to run through the HDC corridor.

HDC RAIL CONFIGURATION

The RAA also evaluated how the high speed rail service would be integrated into the environmentally cleared footprint for the HDC corridor; the width of the corridor is 500 feet west of US-395 and 300 feet east of US-395. Considerable effort went into evaluating whether the trains should operate within the median of the HDC highway or along the side of the HDC highway. Ultimately, it was determined that the safest, least impactful to the environment and most cost effective location for the trains is within the median of the highway. Barriers and safety zones will be used to separate the rail from the highway to maintain safety and maximize operating speeds and service.

CALIFORNIA HIGH SPEED RAIL AND XPRESSWEST PROPOSED SERVICES

The California High Speed Rail Authority (CHSRA) is currently planning and designing a high speed rail system connecting San Francisco to Los Angeles (with a future extension to San Diego). The CAHSR project proposes design speeds of slightly over 200 mph from northern California via the Central Valley into the Los Angeles basin via the Antelope Valley, with a planned station in the City of Palmdale near the existing Palmdale Transportation Center. As of 2014, the CHSRA is moving forward with planning, design, engineering, environmental and construction work on various segments of the proposed CAHSR system.

The XpressWest High Speed Rail is a separate, privately financed effort that proposes to run from Las Vegas to Victorville in the high desert. The XpressWest system is designed to achieve 160 mph and would be interoperable with CAHSR technology. XpressWest completed their environmental documents and received a Record of Decision from both the Federal Railroad Administration and Federal Highway Administration in 2011. As of 2014, XpressWest is continuing to work on their business and funding plans to secure the necessary funds to begin construction.

Additionally, rail services could travel on HDC tracks in a sustainable manner through the potential use of cutting-edge technologies such as the use of an electrical catenary system powered by solar or wind. Supplying HDC's electrical needs by generating power within the right of way may also provide opportunities for underground transmission connections to the utility grid. The Green Energy component of the HDC is discussed further in the “HDC Green Energy Fact Sheet.”

High Desert Corridor Region



How does High Speed Rail Technology Compare to Others?

There are various types of rail technologies and modes, including light rail, commuter rail and high-speed rail. All these rail systems utilize steel wheels on steel rail tracks. The following highlights some of the basic features of each rail technology.






LIGHT RAIL – Typically electric-powered systems that operate at speeds similar to local roads (under 60 mph). These trains are similar in size to articulated buses and are designed for frequent stops, often less than one mile apart, and are integrated into local communities.

COMMUTER RAIL – Typically diesel powered trains that operate at speeds less than 100 mph. These trains are typically used by Amtrak and Metrolink as commuter service designed for stops every three to five miles. Commuter Rail trains are significantly larger than light rail trains and must operate in a dedicated right-of-way.

HIGH-SPEED RAIL – This classification of trains varies greatly depending on emerging and proven technologies. For evaluation of the HDC project, high-speed rail technology utilizes steel wheel on steel track and electrically-powered trains that operate at higher speeds. High-speed rail systems cover large geographic areas with more infrequent stops than both Light Rail and Commuter Rail trains.

Contact Us

Please use the following contact tools for additional information, questions, or comments:

-  Robert Machuca
Project Manager
Metro
One Gateway Plaza, 99-22-9
Los Angeles, CA 90012
-  888.252.7433
-  hdc@metro.net
-  metro.net/hdc
-  Caltrans: dot.ca.gov/disto7/hdc
-  [@metrohdc](https://twitter.com/metrohdc)
-  facebook.com/metrohdc

