METROLINK

Metrolink Climate Resilient Railroad Bridges

\$2.48 million requested from the 2024 Local Transportation Climate Adaptation Program (LTCAP)

Scour Protection from Riverine Flooding in Arroyo Simi Channel



One of the four Ventura County Line Bridges to be protected from the double threat of wildfire (debris) and riverine flooding, due to climate change.

Twin Threats to Critical Rail Infrastructure

Arroyo Simi Channel is a waterway that runs through multiple cities in southern Ventura County. The Metrolink Ventura Subdivision crosses the channel at four different locations within the City of Moorpark.

Without the Project, the estimated 20%* increase in 2-year, 5-year, 10-year, 20-year, 50-year and 100-



year flood events, compounded by increased wildire debris in the channel, will cause more slow orders, train delay, service disruptions, and public expenditures for bus bridges and emergency repairs. (*Using Cal-Adapt RCP4.5 Medium Emissions Scenario.)

LOCAL SHARE & LEVERAGED FUNDS

The \$2.48M LTCAP request is matched with \$620,000 in State Rail Assistance funds, or 20% of the \$3.10M LTCAP project. Metrolink is leveraging the \$3.10M with a 2020 award of \$6.75M in Federal Railroad Administration State of Good Repair funding, matched by an initial \$6.75M in Ventura County local funds.

PROJECT SCOPE

The Project will perform protective rehabilitation and scour mitigation for the four existing bridges crossing the Arroyo Simi Channel east of the Moorpark Amtrak and Metrolink rail station in Ventura County, at MP 427.70; 428.15; 428.63; and 429.26.

Vegetation within the Metrolink right-of-way will be cleared; the channel will be rerouted for construction. FHWA Class IX riprap will be installed to protect the bridge piers from scour and damage from storm debris. Concrete encasements will be extended to the bottom of the riprap, with reinforcement as needed. The Channel will be restored to pre-construction conditions.

Project Schedule: July 2025-June 2028

KEY PROJECT BENEFITS OVER 20 YEARS:

- **Prevents** loss of ridership due to climate-related service disruption and train delay, thus keeping 702,540 riders on Amtrak and Metrolink passenger rail (averaging 35,127 per year).
- Reduces 11,552 metric tons of GHG by avoiding an additional 36.2 million vehicle miles traveled (VMT).
- Reduces health impacts (asthma and heart disease) and related medical costs by reducing criteria pollutants (ROG, PM2.5 and diesel PM, and NOx), especially in environmentally burdened CES 4.0 communities where more than 407,000 people live (about half the total population within ½ mile buffer of the Ventura County Line).
- Avoids 839,323 hours in passenger travel time delay, valued at \$13.7M, and reduces lost workdays for public transit riders (defined as a "disadvantaged community" by LTCAP).
- Sustains affordable intercounty rail transit to 13 VCL stations with more than 300,000 jobs within walking distance.
- Boosts regional economic vitality by ensuring on-time shipping without weight restrictions for 34 monthly Union Pacific freight trains, serving local and global shippers, as well as 14 Pacific Surfliner and 22 Metrolink trains per day (66 per day after Link US opens in 2035).
- **Supports** transit-oriented communities and affordable housing and accommodates future demand as regional rail investments draw millions of new riders.
- **Avoids** increased maintenance cycles in response to floods and thus saves \$75M in additional inspection, maintenance, and repairs.

Protecting Lossan Corridor Bridges & Passenger and Freight Service Between Two Megaregions

The Project is located on an intercity/regional rail corridor that extends through the Project Area from Los Angeles Union Station through Ventura Station. The corridor is shared by Amtrak (Pacific Surfliner)



and Metrolink's Ventura County Line (VCL) regional rail from Ventura eastward until Burbank, where it joins the Antelope Valley Line, and all three connect to Los Angeles Union Station (LAUS). Amtrak and Metrolink share 10 stations in the Project Area. Union Pacific Railroad (UP) operates approximately 34 trains per month on the VCL, using the segment that includes the Arroyo Simi Channel bridges near Moorpark.