

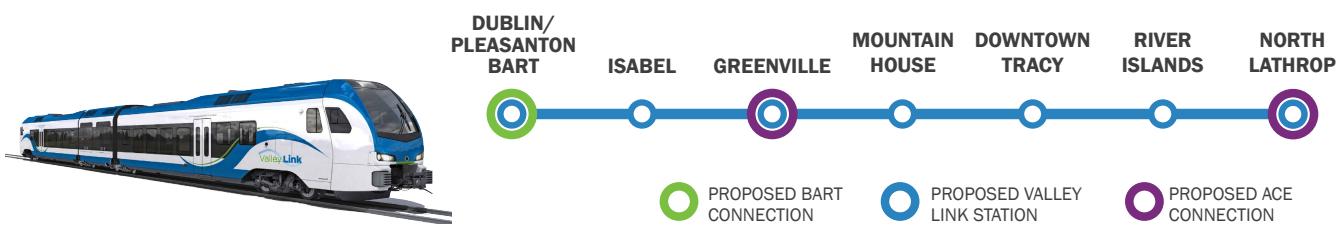
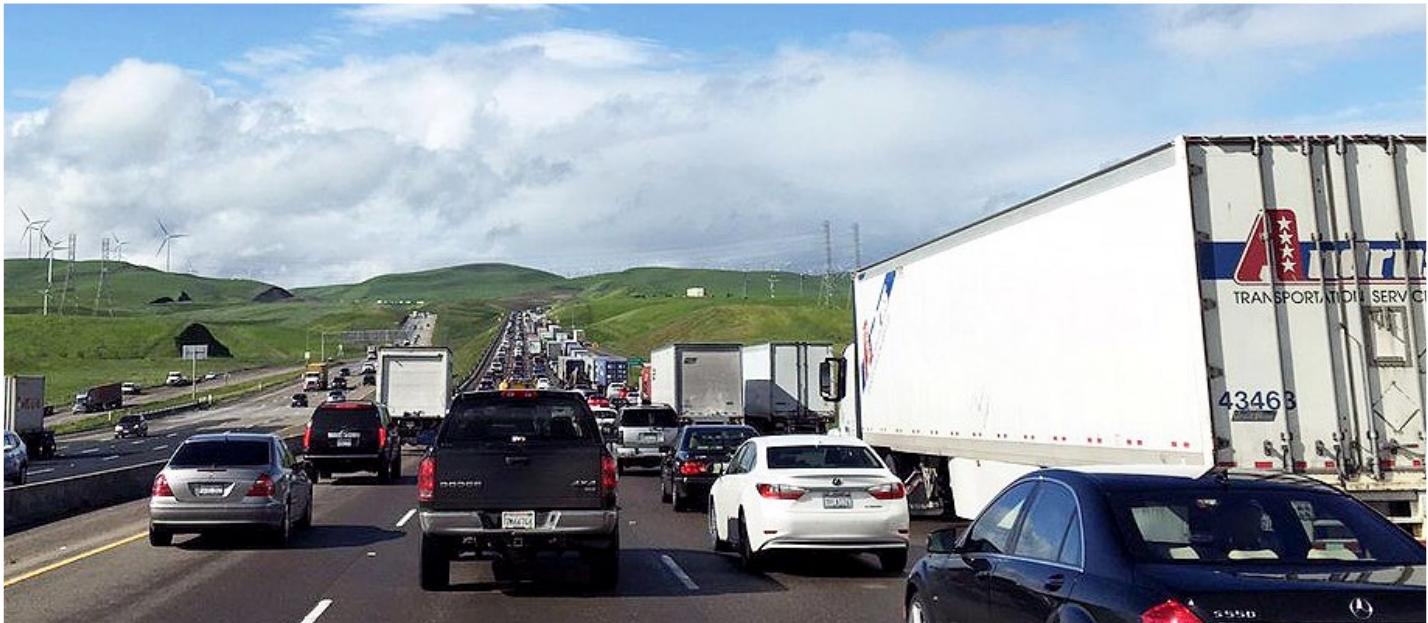


Connecting People, Housing, and Jobs

December  
2020

# Draft Environmental Impact Report

SCH# 2018092027



Tri-Valley ▾ San Joaquin Valley  
**REGIONAL RAIL AUTHORITY**

# DRAFT ENVIRONMENTAL IMPACT REPORT

## TRI-VALLEY – SAN JOAQUIN VALLEY REGIONAL RAIL AUTHORITY

### VALLEY LINK

STATE CLEARINGHOUSE #2018092027

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## Acronyms and Abbreviations

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<b>Acronym</b>	<b>Definition</b>
A/UR	Agricultural-Urban Reserve
AAQA	ambient air quality analysis
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACE	Altamont Corridor Express
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACRHR	Alameda County Register of Historical Resources
ACTC	Alameda County Transportation Commission
ADA	Americans with Disabilities Act
ADWF	average dry weather flow
AIA	airport influence area
ALUCP	airport land use compatibility plan
AMP	archeological monitoring plan
APE	area of potential effect
AREMA	American Railroad Engineering and Maintenance-of-Way Association
ASTM	American Society for Testing and Materials
ATP	archeological testing plan
Authority	Tri-Valley–San Joaquin Valley Regional Rail Authority
AVI	Amador Valley Industries
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
Bay Area	San Francisco Bay Area
BEMU	battery-electric multiple unit
bgs	below ground surface
BMP	best management practice
BO	biological opinion
Board	Tri-Valley–San Joaquin Valley Regional Rail Authority Board of Directors
BPT	benefit per ton
BRT	Bus Rapid Transit
Btu	British thermal units
C&D	construction and demolition
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE program	Corporate Average Fuel Economy program
CAHSRA	California High Speed Rail Authority
CAISO	California Independent System Operator

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<b>Acronym</b>	<b>Definition</b>
cal	calibrated
CAL FIRE	California Department of Forestry and Fire Protection
Cal Water	California Water Service Company
Cal. Code Regs.	California Code of Regulations
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
CalSTA	California State Transportation Authority
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CCCTA	Central Contra Costa Transit Authority
CCIC	Central Coast Information Center
CCR	California Code of Regulations
CCWD	Contra Costa Water District
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH <sub>4</sub>	methane
CHSRA	California High-Speed Rail Authority
CIDH	cast-in-drilled-hole
CIP	Capital Improvement Plan
CNDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2e</sub>	carbon dioxide equivalent
COC	contaminant of concern
CPRR	Central Pacific Railroad
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRMP	construction risk management plan
CSRP	California State Rail Plan
CUPA	Certified Unified Program Agency
CVFPB	Central Valley Flood Protection Board
CVP	Central Valley Project
CWA	Clean Water Act

<b>Acronym</b>	<b>Definition</b>
dB	decibel
DEIR	draft environmental impact report
DLH	diesel locomotive haul
DMU	diesel multiple unit
DOC	California Department of Conservation
DOGGR	California Department of Oil, Gas, and Geothermal Resources
DPM	diesel particulate matter
DPR	California Department of Pesticides Regulation
DSRSD	Dublin San Ramon Services District
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EACCS	East Alameda County Conservation Strategy
EBCE	East Bay Community Energy
EBMUD	East Bay Municipal Utility District
EBRPD	East Bay Regional Park District
EDR	Environmental Data Resources, Inc.
EFH	essential fish habitat
EIR	environmental impact report
EMF	electromagnetic field
EMU	electric multiple unit
EO	Executive Order
ESA	federal Endangered Species Act
ESU	evolutionarily significant unit
ETS	electronic toll system
F	Fahrenheit
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FHWA	Federal Highway Administration
FHWG	Fisheries Hydroacoustic Working Group
Fish & G. Code	California Fish and Game Code
FMMP	Farmland Mapping and Monitoring Program
Foundation	Bay Area Clean Air Foundation
FRA	Federal Railroad Administration
FSZ	Farmland Security Zone
FTA	Federal Transit Administration
G/D	gallon per day
GAMAQI	<i>Guide for Assessing and Mitigating Air Quality Impacts</i>
GHG	greenhouse gas
GIS	geographic information system
GO	General Order
gpd	gallons per day
GPS	global positioning system

<b>Acronym</b>	<b>Definition</b>
gWh	gigawatt hours
GWP	global warming potential
HAER	Historic American Engineering Record
HAPC	Habitat Area of Particular Concern
HARP 2	Hotspots Analysis and Reporting Program Version 2
HBMU	hybrid battery multiple unit
HCP	habitat conservation plan
Health & Safety Code	California Health and Safety Code
HI	hazard index
HRA	health risk assessment
HRIER	Historical Resources Inventory and Evaluation Report
I-	Interstate
I-5	Interstate 5
IOS	initial operating segments
IPCC	Intergovernmental Panel on Climate Change
ITP	incidental take permit
kBtu	thousands of British thermal units
kWh	kilowatt hours
LAMP	Local Agency Management Program
LAVTA	Livermore Amador Valley Transit Authority
LAVWMA	Livermore Amador Valley Water Management Agency
LOS	level of service
LRFD	Load and Resistance Factor Design
MAX	Modesto Area Express
MBTA	Migratory Bird Treaty Act
MEI	maximum exposed individual
mgd	million gallons per day
mm/yr	millimeters per year
MMBtu	millions of British thermal units
MOU	memorandum of understanding
mph	miles per hour
MPO	metropolitan planning organization
MTBE	methyl tertiary-butyl ether
MTC	Metropolitan Transportation Commission
MUTCD	Manual on Uniform Traffic Control Devices
MWELO	model water efficient landscape ordinance
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NCCP	natural community conservation plan
NEHRPA	National Earthquake Hazards Reduction Program Act

<b>Acronym</b>	<b>Definition</b>
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NLUGBI	North Livermore Urban Growth Boundary Initiative
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO <sub>2</sub>	nitrogen dioxide
NOA	naturally occurring asbestos
NOP	Notice of Preparation
NO <sub>x</sub>	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	New Source Review
NWIC	Northwest Information Center
OCS	overhead catenary system
OEHHA	California Office of Environmental Health Hazard Assessment
OHP	California Office of Historic Preservation
OHWM	ordinary high-water mark
OMF	operation and maintenance facility
OWTS	onsite wastewater treatment system
PAH	polynuclear aromatic hydrocarbons
Pb	lead
PCB	polychlorinated biphenyl
PDA	priority development area
PG&E	Pacific Gas & Electric
PGA	peak horizontal ground acceleration
PGS	Pleasanton Garbage Service
PHMSA	Pipeline and Hazardous Materials Safety Administration
PM	particulate matter
PM10	particulate matter of 10 microns in diameter and smaller
PM2.5	particulate matter of 2.5 microns in diameter and smaller
ppb	parts per billion
PTC	positive train control
Public Res. Code	California Public Resources Code
RC	reinforced concrete
RCRA	Resources Conservation Recovery Act
RMS	root mean square
ROG	reactive organic gases

<b>Acronym</b>	<b>Definition</b>
ROW	right-of-way
RPS	California Renewables Portfolio Standard
RTD	San Joaquin Regional Transit District
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board
SAFE Vehicles Rule	Safer Affordable Fuel-Efficient Vehicles Rule
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCS	sustainable communities strategy
SEL	sound exposure level
SFBAAB	San Francisco Bay Area Air Basin
SHPO	State Historic Preservation Officer
SIL	significant impact level
SIP	state implementation plan
SJCOG	San Joaquin Council of Governments
SJEHD	San Joaquin County Environmental Health Department
SJJPA	San Joaquin Joint Powers Authority
SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SJRRC	San Joaquin Regional Rail Commission
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLC	California State Lands Commission
SLF	Sacred Lands File
SMARA	California Surface Mining and Reclamation Act of 1975
SO <sub>2</sub>	sulfur dioxide
SOI	Secretary of the Interior
SO <sub>x</sub>	sulfur oxide
SPRR	Southern Pacific Railroad
SRA	shaded riverine aquatic
SSJID	South San Joaquin Irrigation District
SSWP	Site Specific Work Plan
StaRT	Stanislaus Regional Transit
SVP	Society of Vertebrate Paleontology
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TDS	total dissolved solids
TMP	transportation management plan
TOD	transit-oriented development
TPH	total petroleum hydrocarbons
TPSS	traction power substation

<b>Acronym</b>	<b>Definition</b>
U.S.C.	United States Code
UGB	urban growth boundary
ULSD	ultra-low-sulfur diesel
UPRR	Union Pacific Railroad
US	U.S. Highway
USA North	Underground Service Alert North
USACE	U.S. Army Corps of Engineers
USBR	United States Bureau of Reclamation
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VERA	Voluntary Emissions Reduction Agreement
VMT	vehicle miles traveled
VOC	volatile organic compound
VTMS	variable toll message sign
Wat. Code	California Water Code
WDR	waste discharge requirement
Working Group	Altamont Regional Rail Working Group
WPRR	Western Pacific Railroad
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter