

15 ACRONYMS AND ABBREVIATIONS

This list of acronyms and abbreviations identifies and defines common terms used in the San Francisco to San Jose Project Section Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS). In a few instances, the same acronym or abbreviation will pertain to multiple terms. These are resource-specific instances, and multiple terms are not abbreviated the same way in any give section or chapter. Acronyms and abbreviations in this chapter are presented alphabetically, beginning with symbols and numbers.

°C	degrees Celsius
°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
µin/sec	microninch per second
µT	microtesla
1987 Manual	<i>Corps of Engineers Wetlands Delineation Manual</i>
2005 Statewide Final Program EIR/EIS	<i>Final Program Environmental Impact Report/Environmental Impact Statement for the Proposed California High-Speed Train System</i>
2008 Bay Area to Central Valley Program EIR/EIS	<i>Bay Area to Central Valley High-Speed Train Final Program Environmental Impact Report/ Environmental Impact Statement</i>
2012 Business Plan	<i>California High-Speed Rail Program Revised 2012 Business Plan</i>
2016 Business Plan	<i>California High-Speed Rail Program 2016 Business Plan: Connecting and Transforming California</i>
2018 Business Plan	<i>California High-Speed Rail Program 2018 Business Plan: Connecting California, Expanding Economy, Transforming Travel</i>
AA	assessment area
AAQA	ambient air quality analysis
AASHTO	American Association of State Highway and Transportation Officials
AB	(California) Assembly Bill
AB 32 Scoping Plan	Climate Change Scoping Plan
ABAG	Association of Bay Area Governments
AC	alternating current
AC Transit	Alameda–Contra Costa County Transit District
ACE	Altamont Corridor Express
ACGIH	American Conference of Governmental Industrial Hygienists
ACHP	Advisory Council on Historic Preservation
ACLUP	airport comprehensive land use plan
ACM	asbestos-containing materials
ACS	American Community Survey
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
ADT	average daily traffic

AEDT	(Federal Aviation Administration) Aviation Environmental Design Tool
AGR	agricultural water supply
AIA	airport influence area
Airport Master Plan	<i>Airport Master Plan for Norman Y. Mineta San Jose International Airport</i>
ALS	Advanced Life Support
AMR	American Medical Response
ANSI	American National Standards Institute
APE	area of potential effect
APLIC	Avian Power Line Interaction Committee
APN	Assessor's Parcel Number
APS	alternative planning strategy
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASCE	American Society of Civil Engineers
ASR	Archaeological Survey Report
ASTM	American Society for Testing and Materials
ATC	automatic train control
ATOR	above top of rail
ATP	archaeological treatment plan
Authority	California High-Speed Rail Authority
AWSS	auxiliary water supply system
BA	biological assessment
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
Basin Plan	Water Quality Control Plan
Bay Area	San Francisco Bay Area
Bay Trail	San Francisco Bay Trail
BCDC	San Francisco Bay Conservation and Development Commission
Bcf	billion cubic feet
BEMP	built environment monitoring plan
BETP	built environment treatment plan
BFE	base flood elevation
bgs	below ground surface
BLS	Basic Life Support
BMP	best management practice
BNSF	BNSF Railway (formerly Burlington Northern and Santa Fe Railroad)

BO	biological opinion
BPT	benefit per ton
BRMP	biological resources management plan
BRT	bus rapid transit
Btu	British thermal unit
C&D	construction and demolition
C.F.R.	Code of Federal Regulations
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Office of Emergency Services
Cal. Code Regs.	California Code of Regulations
Cal. Fish and Game Code	California Fish and Game Code
Cal. Gov. Code	California Government Code
Cal. Public Res. Code	California Public Resources Code
CalEEMod	California Emissions Estimator Model
Cal-EPA	California Environmental Protection Agency
Cal-ISO	California Independent System Operator
Cal-OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	climate action plans
CARB	California Air Resources Board
CAS	California Academy of Sciences
CBA	Community Benefits Agreement
CBC	California Building Code
CBOE	California (State) Board of Education
CCC	central California coast
CCED	California Conservation Easement Database
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDMG	California Division of Mines and Geology
CDOF	California Department of Finance
CDP	census-designated place
CDPH	California Department of Public Health
CEC	California Energy Commission

CED	California Energy Demand
CEDD	California Employment Development Department
CEMOF	Centralized Equipment Maintenance and Operations Facility
Center	Maritime Eco-Industrial Center
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CGP	Construction General Permit
CGS	California Geological Society
CH ₄	methane
CHP	California Highway Patrol
CHRIS	California Historic Resources Information System
CIP	cast-in-place
CLUP	comprehensive land use plan
CMP	compensatory mitigation plan
CMP	construction management plan
CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CNPS Online Inventory	CNPS Online Inventory of Rare and Endangered Plants of California
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO Protocol	Transportation Project-Level Carbon Monoxide Protocol
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalent
COG	council of governments
COLD	cold freshwater habitat
COMM	commercial and sport fishing
CORA	Community Overcoming Relationship Abuse
CP	control point
CP	construction package
CPAD	California Protected Areas Database
CPCN	certificate of public convenience and necessity
CPUC	California Public Utilities Commission
CRAM	California Rapid Assessment Method

CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSE	countywide siting element
CSRP	<i>Final California State Rail Plan</i>
CT	computed tomography
CTP	construction transportation plan
CTP 2040	<i>California Transportation Plan 2040</i>
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWG	community working group
CWHR System	California Wildlife Habitat Relationships Habitat Classification Scheme
CZMA	Coastal Zone Management Act
dB	decibel
dBA	A-weighted decibel
DC	direct current
DDT	dichlorodiphenyl-trichloroethane
DDV	Diridon Design Variant
DOGGR	(California) Division of Oil, Gas, and Geothermal Resources
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
DPS	distinct population segment
DTSC	California Department of Toxic Substances Control
DTX	Downtown Extension
DWR	California Department of Water Resources
ECOS	Environmental Conservation Online System
EFH	essential fish habitat
EGPR	Environmental Goals and Policy Report
EIA	U.S. Energy Information Administration
EIR	environmental impact report
EIS	environmental impact statement
ELF	extremely low frequency
EM	electromagnetic
EMC	electromagnetic compatibility
EMCPP	Electromagnetic Compatibility Program Plan
EMF	electromagnetic fields
EMFAC	emission factors model

EMI	electromagnetic interference
EMMA	Environmental Mitigation Management and Assessment system
EMR	electromagnetic radiation
EMS	emergency medical services
EMU	electric multiple unit
EO	(California) Executive Order
ESA	environmentally sensitive area
ESA	environmental site assessment
EST	estuarine habitat
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FAST Act	Fixing America's Surface Transportation Act
FBI	Federal Bureau of Investigation
FCC	Federal Communications Commission
Fed. Reg.	<i>Federal Register</i>
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	federal Endangered Species Act
FHWA	Federal Highway Administration
FHZ	flood hazard zone
FIRM	Flood Insurance Rate Map
FIS	flood insurance study
FLSSC	Fire and Life Safety and Security Committee
FOE	finding of effect
Footprint Report	<i>Technical Memorandum EIR/EIS Assessment of California High-Speed Train Alignment Electromagnetic Field Footprint</i>
Foundation	Bay Area Clean Air Foundation
FRA	Federal Railroad Administration
FRA guidance manual	<i>High-Speed Ground Transportation Noise and Vibration Impact Assessment</i>
FRSH	freshwater replenishment
FTA	Federal Transit Administration
FY	fiscal year
G	Gauss
g/L	grams per liter
GHAD	geologic hazard abatement district
GHG	greenhouse gas

GHz	gigahertz
GIS	geographic information system
GO	General Order
Gov. Code	(California) Government Code
gpd	gallons per day
GPS	global position system
Greenprint	<i>Santa Clara Valley Greenprint</i>
GWP	Global Warming Potential
GWR	groundwater recharge
H + T	housing plus transportation
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscape Survey
HAP	hazardous air pollutant
HASR	Historic Architectural Survey Report
HCP	habitat conservation plan
HEC-RAS	Hydrologic Engineering Center’s River Analysis System
HMBP	hazardous materials business plan
HMF	heavy maintenance facility
HOT	high-occupancy toll
Hot Spots Act	Air Toxics “Hot Spots” Information and Assessment Act
HOV	high-occupancy vehicle
HRA	health risk assessment
HSR	high-speed rail
HTL	high tide line
HUC	hydrologic unit code
Hz	Hertz
I-	Interstate
I/O	Input-Output
IAMF	impact avoidance and minimization feature
IBC	International Building Code
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IEEE	Institute of Electrical and Electronics Engineers
IGP	Industrial General Permit
IND	industrial service supply
Interim Guidance	<i>Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents</i>

IPM	integrated pest management
ISEP	<i>CHSTP Implementation Stage Electromagnetic Compatibility Program Plan</i>
JPA	Joint Powers Authority
K	kindergarten
kHz	kilohertz
kV	kilovolt
kV/m	kilovolts per meter
kVA	kilovolt-ampere
KVP	key viewpoint
L/kg	liters per kilogram
LAX	Los Angeles International Airport
LBP	lead-based paint
L _{dn}	day-night sound level, dBA
LEDPA	least environmentally damaging practicable alternative
LEED	Leadership in Energy and Environmental Design
LEP	limited English proficiency
L _{eq}	equivalent sound level, dBA
L _{eq} (h)	hourly equivalent sound level, dBA
LID	low-impact development
L _{max}	maximum sound level
LMF	light maintenance facility
L _{min}	minimum sound level
LOS	level of service
LPMG	local policy maker group
LRFD	load and resistance factor design
LRT	light rail transit
LSA	lake and streambed alteration
LSR	line source response
L _v	velocity level, VdB
LWCF	Land and Water Conservation Fund
Magnuson-Stevens Act Management Program	Magnuson-Stevens Fisheries Conservation and Management Act Management Program for the San Francisco Bay Segment of the California Coastal Zone
MAP-21	Moving Ahead for Progress in the 21st Century
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority

mG	milligauss
mg	milligrams
mg/m ³	milligrams per cubic meter
mgd	million gallon(s) per day
MHW	mean high water
MHz	megahertz
MIGR	fish migration
MLD	most likely descendant
MM	mitigation measure
MMBtu	million British thermal units
MMcf	million cubic feet
MMT	million metric tons
MOA	memorandum of agreement
MOU	memorandum of understanding
MOVES	Motor Vehicle Emission Simulator
MP	milepost
MPE	maximum permissible exposure
mpg	miles per gallon
mph	miles per hour
MPO	metropolitan planning organization
MRI	magnetic resonance imaging
MRP	Municipal Regional Permit
MRZ	mineral resource zone
MS4	municipal separate storm sewer system
MSASP	<i>Millbrae Station Area Specific Plan</i>
MSAT	mobile source air toxics
MT	main track
MTC	Metropolitan Transportation Commission
MUNI	San Francisco Municipal Railway
MW	megawatt
N ₂ O	nitrous oxide
NAAQS	national ambient air quality standards
NAC	noise abatement criteria
NAGPRA	Native American Grave Protection and Repatriation Act
NAHC	Native American Heritage Commission
NAICS	North American Industry Classification System
NAL	numeric action level

NAV	navigation
NAVD	North American Vertical Datum
NBA	National Basketball Association
NCCP	natural community conservation plan
NCCPA	Natural Community Conservation Planning Act
NEPA	National Environmental Policy Act
NF	negative feeder wire
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHL	National Historic Landmark
NHL	National Hockey League
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NMR	nuclear magnetic resonance
NO	nitric oxide
NO ₂	nitrogen dioxide
NOA	naturally occurring asbestos
NOA	Notice of Availability
NOD	Notice of Determination
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	California Native Plant Protection Act
NPS	National Parks Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	New Source Review
O&M	operations and maintenance
O ₃	ozone
OAK	Metropolitan Oakland International Airport
OCP	organochlorine pesticides
OCS	overhead contact system
OEHHA	Office of Environmental Health Hazard Assessment
OHWM	ordinary high water mark
OPR	California Office of Planning and Research

OSHA	Occupational Safety and Health Administration
Outreach Plan	<i>San Francisco to San Jose Project Section Environmental Justice Outreach Plan</i>
OWJ	official(s) with jurisdiction
PA	programmatic agreement
PAA	Preliminary Alternatives Analysis
PAH	polycyclic aromatic hydrocarbons
Pb	lead
PBF	physical or biological feature
PCB	polychlorinated biphenyl
PCE	primary constituent element
PCEP	Caltrain Peninsula Corridor Electrification Project
PCJPB	Peninsula Corridor Joint Powers Board
PEC	potential environmental concern
PED OC	pedestrian overhead crossing
PEM	palustrine emergent wetlands
PEMC	palustrine emergent seasonally flooded
Peninsula	San Francisco Peninsula
PFMC	Pacific Fishery Management Council
PG&E	Pacific Gas and Electric Company
PHA	preliminary hazard analysis
PI	principal investigator
PJD	preliminary jurisdictional determination
PL	Public Law
PM	particulate matter
PM ₁₀	particulate matter smaller than or equal to 10 microns in diameter
PM _{2.5}	particulate matter smaller than or equal to 2.5 microns in diameter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
PPD	pounds per day
PPV	peak particle velocity
PRIIA	Passenger Rail Investment and Improvement Act
PRM	paleontological resources monitor
PRMMP	paleontological resource monitoring and mitigation plan
Project Section, project	San Francisco to San Jose Project Section
Prop 1A	Proposition 1A, The Safe, Reliable, High-Speed Passenger Train Bond Act
Prop K Expenditure Plan	Proposition K, The New Transportation Expenditure Plan for San Francisco

PRS	paleontological resources specialist
PTC	positive train control
PUB	palustrine unconsolidated bottom
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
RAP	removal action plan
Rapanos	Rapanos-Carabell consolidated decisions
RARE	habitat for rare and endangered species
RCRA	Resource Conservation and Recovery Act
REC-1	water recreation—contact
REC-2	water recreation—non-contact
Regional Rail Plan	<i>San Francisco Bay Area Regional Rail Plan</i>
RF	radio frequency
RFQ	request for qualifications
RHA	Rivers and Harbors Act
RHNA	regional housing need allocation
RIMS II	Regional Input-Output Modeling System II
RMS	root-mean-square
ROD	Record of Decision
ROG	reactive organic gas
RPA	Refined Program Alignment
RPS	Renewables Portfolio Standard
RPW	relatively permanent waters
RRP	restoration and revegetation plan
RSA	resources study area
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board
RWS	Regional Water System
SAMCEDA	San Mateo County Economic Development Association
SamTrans	San Mateo County Transit District
SB	(California) Senate Bill
SBWR	South Bay Water Recycling
SCAQMD	South Coast Air Quality Management District
SCC	standard cost category
SCS	sustainable community strategy
SCVHA	Santa Clara Valley Habitat Agency
SCVHP	Santa Clara Valley Habitat Plan

SCVOSA	Santa Clara Valley Open Space Authority
SCVWD	Santa Clara Valley Water District
SEL	sound exposure level, dBA
SEL _{ref}	sound exposure level reference
SEPP	security and emergency preparedness plan
SF ₆	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFCTA	San Francisco County Transportation Authority
SFE	City and County of San Francisco Department of the Environment
SFMTA	San Francisco Municipal Transportation Agency
SFO	San Francisco International Airport
SFPP	San Francisco Products Pipeline
SFPUC	San Francisco Public Utilities Commission
SFTC	Salesforce Transit Center
SFTP	<i>San Francisco Transportation Plan</i>
SGMA	Sustainable Groundwater Management Act
SHELL	shellfish harvesting
SHPO	State Historic Preservation Officer
SIL	significant impact level
SIP	state implementation plan
SIP	state implementation plan
SJC	Norman Y. Mineta San Jose International Airport
SJRRC	San Joaquin Regional Rail Commission
SJVAPCD	San Joaquin Valley Air Pollution Control District
SJMWS	San Jose Municipal Water System
SJWC	San Jose Water Company
SMCWPPP	San Mateo Countywide Water Pollution Prevention Program
SNAP	Supplemental Nutrition Assistance Program
SO ₂	sulfur dioxide
SOI	Secretary of the Interior
SoMa	South of Market
SOQ	statement of qualifications
SO _x	sulfur oxides
SPRR	Southern Pacific Railroad
SPUR	San Francisco Bay Area Planning and Urban Research Association
SPWN	fish spawning
sq. ft.	square feet

SR	State Route
SSMP	safety and security management plan
SSP	system safety program
SSPP	system safety program plan
SST-FD	seismic specialists team-fault displacement
Statewide Program EIR/EIS	<i>Final Program EIR/EIS for the Proposed California High-Speed Train System</i>
STB	Surface Transportation Board
SVAWPC	Silicon Valley Advanced Water Purification Center
SVP	Silicon Valley Power
SVP	Society of Vertebrate Paleontology
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
T	Tesla
TAC	toxic air contaminant
TAIP	Terminal Area Improvement Program
Tanner Act	Toxic Air Contaminant Identification and Control Act
TCE	temporary construction easement
TCP	traditional cultural property
TEAMC	Transportation Equity Allied Movement Coalition
TERPS	terminal instrument procedures
TGV	Train à Grande Vitesse (French high-speed train)
THPO	Tribal Historic Preservation Officer
TIP	transportation improvement program
TJPA	Transbay Joint Powers Authority
TM	technical memorandum
TMDL	total maximum daily load
TNW	traditional navigable water
TOD	transit-oriented development
TPF	traction power facility
TPSS	traction power substation
TRA	trackage rights agreement
TSA	Transportation Security Administration
TVA	threat and vulnerability assessment
TWG	technical working group
UCERF3	Third Uniform California Earthquake Rupture Forecast
UCMP	University of California Museum of Paleontology

UCSF	University of California, San Francisco
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act
UPRR	Union Pacific Railroad
US	U.S. Highway
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USCS	Unified Soil Classification System
USDA	U.S. Department of Agriculture
USDOI	U.S. Department of the Interior
USDOT	U.S. Department of Transportation
USEO	U.S. Presidential Executive Order
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tanks
Valley-to-Valley Line	Silicon Valley to Central Valley Line
V/C	volume to capacity
VCP	vegetation control plan
VdB	vibration decibel(s)
VegCAMP	Vegetation Classification and Mapping Program
VHS	very high-speed
V/m	volts per meter
VMT	vehicle miles traveled
VOC	volatile organic compound
VTA	Santa Clara Valley Transportation Authority
VTP 2040	<i>Valley Transportation Plan 2040: The Long-Range Transportation Plan for Santa Clara County</i>
W	watt
WARM	warm freshwater habitat
WCP	weed control plan
WDR	water discharge requirement
WEAP	workers environmental awareness program
WEF	wildlife exclusion fencing
WER	watershed evaluation report
WestCAT	Western Contra Costa County Transit Authority
WETA	San Francisco Bay Area Water Emergency Transportation Authority

WETS Tables	Climate Analysis for Wetlands Tables
WHO	World Health Organization
WHSRN	Western Hemisphere Shorebird Reserve Network
WILD	wildlife habitat
WiFi	wireless fidelity
WSIP	water system improvement program
WWTP	wastewater treatment plant