

15 ACRONYMS AND ABBREVIATIONS

This chapter provides a list of the acronyms and abbreviations used in this Environmental Impact Report/Environmental Impact Statement. Definitions are provided to the right of each term.

2005 Statewide Program EIR/EIS	Statewide Program Environmental Impact Report/ Environmental Impact Statement for the Proposed California High-Speed Train System
2008 Bay Area to Central Valley Program EIR/EIS,	Bay Area to Central Valley High-Speed Train Final Program Environmental Impact Report/ Environmental Impact Statement
°C	degree(s) Celsius
°F	degrees Fahrenheit
AADT	annual average daily traffic
AB	(California) Assembly Bill
AC	alternating current
ACGIH	American Conference of Governmental Industrial Hygienists
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing materials
ACS	American Community Survey (U.S. Census Bureau)
AD	Anno Domini, years after the birth of Jesus Christ
ADA	average daily attendance
	or
	Americans with Disabilities Act
ADT	average daily traffic
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model (USEPA air quality model)
af	acre-feet
afy	acre-feet per year
amsl	above mean sea level
Amtrak	National Railroad Passenger Corporation
ANSI	American National Standards Institute
AP Act	Alquist-Priolo Earthquake Fault Zoning Act
APE	area of potential effect
APN	Assessor's Parcel Number
APS	alternative planning strategy
AQMD	air quality management district
AQMP	air quality management plan
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASCE	American Society of Civil Engineers



ASR	Archaeological Survey Report
ASTM	ASTM International (formerly known as the American Society for Testing and Materials)
AT&SF	Atchison, Topeka and Santa Fe Railway
ATC	automatic train control
ATP	Archaeological Treatment Plan
Authority	California High-Speed Rail Authority
AVTA	Antelope Valley Transit Authority
Burbank to Los Angeles Project Section	Burbank to Los Angeles Project Section of the California High-Speed Rail System
BART	Bay Area Rapid Transit
Basin	South Coast Air Basin
BAT	Best Available Technologies
BEMP	Built Environment Monitoring Plan (cultural resources)
BETP	Built Environment Treatment Plan
BFE	base flood elevation
BGEPA	Bald and Golden Eagle Protection Act
bgs	below ground surface
BLM	Bureau of Land Management
BMP	best management practice
BPM-V3	Business Plan Model, Version 3
BNSF	BNSF Railway (previously known as the Burlington Northern and Santa Fe Railroad)
BOD	biological oxygen demand
BOR	Bureau of Reclamation
B.P.	years before present
Btu	British thermal unit
C&D	construction and demolition
CA	state classifications
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CADD	computer-aided design and drafting systems
CAISO	California Independent System Operator
Cal. Code Regs.	California Code of Regulations
CAL FIRE	California Department of Forestry and Fire Protection
Cal. Public Res. Code	California Public Resources Code

Cal. Water Code	California Water Code
CalEEMod	California Emissions Estimator Model
Cal-EPA	California Environmental Protection Agency
CALINE4	California LINE Source Dispersion Model, Version 4
Cal-IPC	California Invasive Plant Council
Cal-OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CCS 83	California Coordinate Systems of 1983
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDOF	California Department of Finance
CDP	census designated place (U.S. Census Bureau)
CEC	California Energy Commission
CEDD	California Employment Development Department
CENELEC	<i>Comité Européen de Normalisation Électrotechnique</i> (European Committee for Electrotechnical Standardization)
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
C.F.R.	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey
cgs units	unit(s) of magnetic flux density
CH ₄	methane
CHL	California Historical Landmark
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIA	Community Impact Assessment
CLOMR	Conditional Letter of Map Revision
cm	centimeter(s)
CMF	Central Maintenance Facility



CMP	Congestion Management Plan
	or
	Construction Management Plan
C/NR	Conservation and Natural Resources
CNEL	community noise equivalent level
CNDDB	California Natural Diversity Database
CNG	compressed natural gas
CNPS	California Native Plant Society
со	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
Cortese List	State of California Department of Toxic Substances Control Hazardous Waste and Substances Sites List
CP	construction package
CPA	Community Plan Area
CPSWQ	Certified Professional in Storm Water Quality
CPTED	Crime Prevention through Environmental Design
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank (California Natural Diversity Database)
CSLC	California State Lands Commission
CSMP	Corridor System Management Plan
CSRP	California State Rail Plan
CSTMP	Construction Safety Transportation Management Plan
CTP	Construction Transportation Plan
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
DAR	Difficult to Access Reach
dB	decibel(s)
DB	design-build
dBA	A-weighted decibel(s)
dBA L _{eq}	equivalent continuous noise level measured in A-weighted decibels
DC	direct current
DOC	California Department of Conservation
DOGGR	California Department of Oil, Gas, and Geothermal Resources
DOI	U.S. Department of the Interior
DPM	diesel particulate matter

DPR	California Department of Parks and Recreation
DRIR	Draft Relocation Impact Report
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EDMS	Emission and Dispersion Modeling System
EIR	environmental impact report (CEQA)
EIS	environmental impact statement (NEPA)
EJ	environmental justice
ELF	extremely low frequency
EMC	electromagnetic compatibility
EMCPP	Electromagnetic Compatibility Program Plan
EMF	electromagnetic field(s)
EMFAC2014	Emission Factors Model, 2014
EMI	electromagnetic interference
EMMA	Environmental Mitigation Management and Assessment (Authority)
EMS	emergency medical services
EMU	electric multiple unit
EO	(California) Executive Order
EOO	Emergency Operations Organization
ERA	environmentally restricted area
ESA	environmental site assessment
FAA	Federal Aviation Administration
FAST Act	Fixing America's Surface Transportation Act
F-B LGA	Fresno to Bakersfield Locally Generated Alternative
FCC	Federal Communications Commission
FE	listed as endangered
Fed. Reg.	Federal Register
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FOE	Finding of Effect
Footprint Report	Technical Memorandum 300.07, EIR/EIS Assessment of HSR Alignment EMF Footprint
FRA	Federal Railroad Administration
FT	federally listed as threatened



FTA	Federal Transit Administration
FY	fiscal year
g	acceleration of gravity
G	gauss
GAMAQI	Guide for Assessing and Mitigating Air Quality Impacts
GC	general conformity
GFD	Glendale Fire Department
GHG	greenhouse gas
GHz	gigahertz
GIS	geographic information system
GPS	global positioning system
GSSPR	geology, soils, seismicity, and paleontological resources
GWh	gigawatt-hour(s)
GWP	global warming potential
НА	Hydrological Area
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscape Survey
HASR	Historic Architectural Survey Report
HC	hydrocarbons
НСМ	Highway Capacity Manual
HCP	Habitat Conservation Plan
HEPA	high-efficiency particulate air
HF	high frequency
HMF	heavy maintenance facility
HOV	high-occupancy vehicle
HPSR	Historic Property Survey Report
HSR	high-speed rail
HU	Hydrologic Unit
HUC	Hydrologic Unit Code
HVAC	heating, ventilation, and air conditioning
Hz	Hertz
I	Interstate
IAMF	impact avoidance and minimization feature
IBC	International Building Code
ICC	Interstate Commerce Commission
ICS	Initial Construction Segment

IEEE	Institute of Electrical and Electronic Engineers
in/sec	inch(es) per second
IOS	Initial Operating Segment
IPaC	USFWS Information for Planning and Conservation
ISEP	Implementation Stage Electromagnetic Compatibility Program Plan
K	soil erodibility factor
kHz	kilohertz
kV	kilovolt(s)
kV/m	kilovolt(s) per meter
KVP	key viewpoint
kWh	kilowatt-hour(s)
LAC+USC Medical Center	Los Angeles County and University of Southern California Medical Center
LACDPW	Los Angeles County Department of Public Works
LACFCD	Los Angeles County Flood Control District
LACM	Natural History Museum of Los Angeles County
LACSD	Sanitation Districts of Los Angeles County
LADOT	Los Angeles Department of Transportation (City of Los Angeles)
LADWP	Los Angeles Department of Water and Power (City of Los Angeles)
LAFD	Los Angeles Fire Department (City of Los Angeles)
LAMC	Los Angeles Municipal Code (City of Los Angeles)
LAUS	Los Angeles Union Station
LAX	Los Angeles International Airport
LBP	lead-based paint
LCFF	Local Control Funding Formula
LDA	light-duty automobiles
L _{dn}	day-night sound level, dBA
LDT	light-duty trucks
LEDPA	Least Environmentally Damaging Practicable Alternative
LEED	Leadership in Energy and Environmental Design
LEP	limited English proficiency
L _{eq}	equivalent sound level, dBA
LGA	Locally Generated Alternative
LID	low-impact development
Link US	Link Union Station (Metro project)
L _{max}	maximum instantaneous noise level
LMF	light maintenance facility



Letter of Map Revision
level(s) of service
Los Angeles–San Diego–San Luis Obispo (Rail Corridor)
long-range transportation plan
localized significance threshold
line source transfer mobilities
root-mean-square velocity level
Land and Water Conservation Fund
magnitude
million years ago
million annual passengers
Metropolitan Area Express (light rail system)
maximum entropy modeling
methylene blue activated substances
Migratory Bird Treaty Act of 1918
Los Angeles County Metropolitan Transportation Authority
milligauss
milligram(s) per liter
milligram(s) per cubic meter
mean high water mark
megahertz
mile(s)
major investment study
milliliter(s)
most likely descendant
mitigation measure
million British thermal units
Mitigation Monitoring and Enforcement Plan
million metric tons
millimeter per year
memorandum of agreement
maintenance of infrastructure facility
maintenance of infrastructure siding facility
memorandum of understanding
maintenance-of-way facility
maximum permissible exposure
mile(s) per hour

MPO	metropolitan planning organization
MR	map reference
MRF	naterials recycling facility
MRI	magnetic resonance imaging
MRZ	Mineral Resource Zone (California Geological Survey)
MS4	municipal separate storm sewer system
MSAT	mobile source air toxics
MSE	mechanically stabilized earth
MTBE	methyl tertiary butyl ether
MUN	municipal and domestic supply
MW	megawatt(s)
mW/cm ²	milliwatts per square centimeter
N/A	not applicable
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NACE	National Association of Corrosion Engineers
NAD 83	North American Datum of 1983
NADR	Noise Abatement Decision Report (Caltrans)
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NAICS	North American Industry Classification System
NAVD 88	North American Datum of 1988
NCA	neighborhood council area
NCCP	Natural Communities Conservation Plan
NEPA	National Environmental Policy Act
NF	negative feeder
NFPA	National Fire Protection Association
ng/L	nanograms per liter
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NIMS	National Incident Management System
NIOSH	National Institute for Occupational Safety and Health
NMFS	National Marine Fisheries Service
NMR	nuclear magnetic resonance
NO	nitric oxide
NO ₂	nitrogen dioxide



NOA	naturally occurring asbestos
NOAA Fisheries	National Oceanic and Atmospheric Administration Fisheries Service
NOD	Notice of Determination
NOI	Notice of Intent (NEPA)
NOP	Notice of Preparation (CEQA)
NOS	North Outfall Sewer
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	Noise Study Report (Caltrans)
NTU	Nephelometric Turbidity Units
NWI	National Wetlands Inventory (USFWS)
O&M	operating and maintenance
O ₃	ozone
OAERP	Operational Area Emergency Response Plan (Los Angeles County)
OAL	Office of Administrative Law (California)
000	Operation Control Center (California HSR System)
OCS	overhead contact system
OEHHA	California Office of Environmental Health Hazard Assessment
OHP	California Office of Historic Preservation
OHWM	ordinary high water mark
OSHA	Occupational Safety and Health Administration
PA	programmatic agreement
PAA	preliminary alternatives analysis
PCB	polychlorinated biphenyls
PCE	perchloroethylene
PEC	potential environmental concern
PEPD	Burbank to Los Angeles Project Section Preliminary Engineering for Project Definition
PET	position emission tomography
PG&E	Pacific Gas and Electric Company
pg/L	picograms per liter
PGA	peak ground acceleration
рН	percentage of hydrogen
PHA	preliminary hazard analysis

PM	particulate matter
PM _{2.5}	particulate matter, smaller than or equal to 2.5 microns in diameter
PM ₁₀	particulate matter, smaller than or equal to 10 microns in diameter
Porter-Cologne Act	Porter Cologne Water Quality Control Act
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRIIA	Passenger Rail Investment and Improvement Act of 2008
PRMMP	Paleontological Resource Monitoring and Mitigation Plan
Procedures	Procedures for Discharges of Dredge or Fill Material to Waters of the State
project section	Burbank to Los Angeles Project Section of the California High-Speed Rail System
PRS	paleontological resources specialist
PTC	positive train control infrastructure
PTE	permission to enter
PUC	Partnerships to Uplift Communities
QSD/QSP	Qualified SWPPP Developer/Practitioner (California Stormwater Quality Association certification)
RCRA	Resource Conservation and Recovery Act
RECLAIM	Regional Clean Air Incentives Market (SCAQMD)
RENFE	Spanish National Railways Network
RF	radio frequency
RFI	radio-frequency interference
RHNA	Regional Housing Needs Assessment
RIMS	Regional Input-Output Modeling System (Bureau of Economic Analysis)
RITC	Regional Intermodal Transportation Center (Hollywood Burbank Airport)
RMS	root-mean-square
ROD	Record of Decision
ROG	reactive organic gases
ROW	right-of-way
RRP	restoration and revegetation plan
RSA	resource study area
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board



SAA	supplemental alternatives analysis
SB	(California) Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCRRA	Southern California Regional Rail Authority
SCS	sustainable communities strategy
SCE	Southern California Edison
SE	state-listed as endangered
SEA	Significant Ecological Area
SEL	sound exposure level
SEM	sequential excavation method
SEMS	Standardized Emergency Management System
SF ₆	sulfur hexafluoride
SHPO	(California) State Historic Preservation Office(r)
SIP	state implementation plan
SLF	Sacred Lands File (NAHC)
SO ₂	sulfur dioxide
SOI	(U.S.) Secretary of the Interior
	or
	sphere of influence
SOQ	statement of qualifications
SOx	sulfur oxides
SPCC	spill prevention, control, and countermeasure
SQMP	stormwater quality management plan
SR	(California) State Route
SRTP	Short-Range Transportation Plan (Metro)
SSC	species of special concern
SSPSA	special-status plant study area
State Rail Plan	(California) State Rail Plan
Statewide Program EIR/EIS	Final Program Environmental Impact Report/Environmental Impact Statement for the Proposed California High-Speed Train System
ST	state-listed as threatened
STB	Surface Transportation Board
STIP	(California) State Transportation Improvement Program
SVP	Society of Vertebrate Paleontology
SWG	stakeholder working group

SWMP	stormwater management plan/program
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
Т	Tesla
TAC	toxic air contaminants
TCE	temporary construction easement
TCP	traditional cultural property
TDS	total dissolved solids
TGV	Train à Grande Vitesse (French high-speed train)
ТМ	technical memorandum
TMDL	total maximum daily load
TNM 2.5	Traffic Noise Model, Version 2.5 (FHWA)
TOD	transit-oriented development
TOG	total organic gas
TPSS	traction power substation
tpy	tons per year
TSA	(U.S.) Transportation Security Administration
TVA	threat and vulnerability assessment
TWG	Technical Working Group
Unified Program	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act
UPRR	Union Pacific Railroad
US	U.S. (highway route)
U.S.	United States
USACE	United States Army Corps of Engineers
USACE manual	USACE Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual
USAF	United States Air Force
USD	Unified School District
USDA	United States Department of Agriculture
U.S. DOT	United States Department of Transportation
USDA	United States Department of Agriculture
USEO	United States Presidential Executive Order
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey



v/mvolts per meterVdBvibration velocity decibel(s)veh/hrvehicles per hourVHFvery high frequencyVHTvehicle hours traveledVMTvehicle miles traveledVOCvolatile organic compoundVSAvibration-sensitive areaWARMwarm freshwater habitatWCPweed control planWiFiwireless fidelityWiFiwireless fidelity for microwave accessWTFWireless Telecommunications Facilitiesµg/m³microgram(s) per cubic meterµTmicrotesla	V/C	volume-to-capacity ratio
veh/hrvehicles per hourVHFvery high frequencyVHTvehicle hours traveledVMTvehicle miles traveledVOCvolatile organic compoundVSAvibration-sensitive areaWARMwarm freshwater habitatWCPweed control planWEAPWorker Environmental Awareness ProgramWiFiwireless fidelityWiMAXworldwide interoperability for microwave accessWTFWireless Telecommunications Facilitiesµg/m³microgram(s) per cubic meter	v/m	volts per meter
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WiFiwireless fidelityWiMAXworldwide interoperability for microwave accessWTFWireless Telecommunications Facilitiesµg/m³microgram(s) per cubic meter	WCP	weed control plan
WiMAXworldwide interoperability for microwave accessWTFWireless Telecommunications Facilitiesµg/m³microgram(s) per cubic meter	WEAP	Worker Environmental Awareness Program
WTFWireless Telecommunications Facilitiesμg/m³microgram(s) per cubic meter	WiFi	wireless fidelity
μg/m ³ microgram(s) per cubic meter	WiMAX	worldwide interoperability for microwave access
	WTF	Wireless Telecommunications Facilities
μT microtesla	µg/m³	microgram(s) per cubic meter
	μΤ	microtesla