

Chapter 12

Definitions, Abbreviations, and Acronyms

12.1 Definitions

above grade – The location of a structure or transit guideway above the surface of the ground (also known as *elevated* or *aerial*).

acre – A unit of measurement of area equivalent to 43,560 square feet.

aerial guideway – Generally a longer bridge structure that is located above existing grade to cross over a wide road or multiple railroad.

alight – To get down, as from a vehicle; dismount.

alignment – The horizontal and vertical ground plan of a roadway, railroad, transit route, or other facility.

alluvium – Deposits resulting from the operations of water including floodplains, lakes, rivers, and fans at the foot of mountain slopes.

AM peak – The morning commute period, about two hours, during which the greatest movement of passengers occurs, generally from home to work; the portion of the morning service period when the greatest level of ridership is experienced and service provided.

Americans with Disabilities Act of 1990 (ADA) – The law passed by Congress in 1990 that makes it illegal to discriminate against people with disabilities in employment, services provided by state and local governments, public and private transportation, public accommodations, and telecommunications.

AMTRAK (National Passenger Corporation) – A quasi-public corporation created by the federal Rail Passenger Service Act of 1970 to improve and develop intercity passenger rail service throughout the United States.

aquifer – A permeable region of rock or soil through which groundwater can move.

aquitard – A material of low permeability that greatly slows the movement of groundwater.

at grade – The location of a structure or transit guideway at the same level as the ground surface.

average control delay (or average delay) – The weighted average of the control delay experienced for all turning movements at an intersection. The average is weighted by the traffic volume making each turning movement. Average Control Delay is used as the basis for defining *Level of Service (LOS)* at intersections.

ballast – Coarse gravel or crushed rock laid to form a bed for roads or railroads.

ballasted track – A track in which the rails are fastened to wood, concrete, or steel cross-ties that are embedded in ballast.

biotreatment – Filtering stormwater through vegetation and soils before discharging to the storm drain system.

bridge – A structure between abutments that spans a physical obstacle such as a road, river, or railroad tracks.

British thermal unit (BTU) – A unit of heat energy defined as the amount of heat required to raise the temperature of 1 pound of water by 1 degree Fahrenheit. One BTU equals approximately 778.169 foot-pounds-force, 1.055056 kilojoules, or 0.293071 watt-hour.

box culvert – A device used to channel water, which may be used to allow water to pass underneath a roadway, railroad, or embankment.

box jacking – A method for constructing a station wherein the rectangular portion of the permanent station structure that would be located under the Caltrain tracks would be constructed in the open excavation area and subsequently jacked (or “pushed”) into its final position under the tracks.

bus shelter – A structure constructed near a bus stop to provide seating and protection from the weather for the convenience of waiting passengers.

bus stop – A curbside place where passengers board a transit vehicle or disembark from the vehicle.

bus turnout – A cutout in the roadside to permit a transit vehicle to dwell at a curb.

busway – A roadway reserved for buses only. It may be a grade-separated or controlled-access roadway. Also known as a *bus lane*.

CAL3QHC – Microcomputer-based model used to predict carbon monoxide concentrations from motor vehicles at roadway intersections

California Environmental Quality Act (CEQA) – Modeled after the National Environmental Policy Act, this California state law encourages the protection of the environment through policies and procedural requirements.

candidate species – Any species of fish, wildlife, or plant that has been determined to be a candidate for listing under Section 4 of the Endangered Species Act of 1973 (amended).

capital – Long-term assets, such as property, buildings, roads, rail lines, and vehicles.

capital costs – Costs of long-term assets of a public transit system such as property, buildings, vehicles, etc.

Capital Improvement Program (CIP) – The list of capital projects for a 5- to 7-year programming period.

capital project – Construction and/or procurement of district assets, such as transit centers, transit vehicles, and track.

carbon dioxide equivalent (CO₂e) – A measurement used to account for the fact that different greenhouse gases (GHGs) have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Central Business District (CBD) – An area of a city that contains the greatest concentration of commercial activity: the *downtown*. This is the traditional downtown retail, trade, and commercial area of a city or an area of very high land evaluation, traffic flow, and concentration of retail business offices, theaters, hotels, and services.

commuter rail – Long-haul rail passenger service operating between metropolitan and suburban areas, whether within or across the geographical boundaries of a state, usually characterized by reduced fares for multiple rides, and commutation tickets for regular, recurring riders. Also known as *regional rail* or *suburban rail*.

conceptual engineering – A conceptual design of a project, including any alternatives or design options, at a feasibility level of engineering.

cone penetrometer tests – A testing method used to determine the geotechnical engineering properties of soils and delineating soil stratigraphy.

Congestion Management Agency (CMA) – A countywide organization responsible for preparing and implementing the county's Congestion Management Program. In Santa Clara County, VTA is the designated CMA.

consist – A group of rail vehicles that make up a train.

control delay – The amount of additional travel time experienced by a user that is attributable to a control device (i.e., a signal or stop sign).

corridor – A broad geographical band that follows a general directional flow or connects major sources of trips. It may contain a number of streets and highways and many transit lines and routes.

critical movement – Each intersection approach has a critical movement, which is the movement (i.e., left turn, thru, or right turn) that dictates the signal timing for that approach, based on its volume and the signal control. Critical movement analysis identifies the set of movements that cannot happen concurrently and require the most time to serve demand. For example, a standard intersection with four approaches has four critical movements, and the critical movement at one approach may be the through movement and at another approach may be the left-turn movement.

critical movement delay – The control delay experienced by each of the critical movements at an intersection. The average critical movement delay (or average critical delay) is the weighted average of the control delay for all the critical movements at an intersection. The average is weighted by the traffic volumes for the critical movements. A change in average critical delay of more than 4 seconds is one of the thresholds in the definition of significant impacts for intersections used by the Santa Clara County Congestion Management Program, the City of San Jose, and the City of Santa Clara.

critical volume to capacity ratio (V/C) – The number of vehicles per hour making the critical movements at an intersection divided by the capacity of the lanes provided for those movements. A change in Critical V/C of more than one percent (0.01) is one of the thresholds in the definition of significant impacts for intersections used by the Santa Clara County Congestion Management Program, the City of San Jose, and the City of Santa Clara.

crossover – A pair of switches that connects two parallel rail tracks, allowing a train on one track to cross over to the other. When two crossovers are present in opposite directions, in the shape of an “X,” the four-switch configuration is called a double crossover.

cultural resources – Archaeological and historic resources that could be affected by a given project. Cultural resources include buildings, sites, districts, structures, or objects having historical, architectural, archaeological, cultural, or scientific importance.

cumulative impact – The impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.

cut-and-cover box – Used to describe construction of an underground station from the surface.

dBA – Unit of sound level adjusted by frequency weightings to correspond to human hearing response. Referred to as “A-weighted” decibel.

Decibel (dB) – Logarithmic scale measuring the intensity of sound (the sound pressure level).

disabled – With respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities; a record of such an impairment; or being regarded as having such an impairment.

discretionary – Subject to the discretion of legislators or an administrator. The federal Section 5309 New Starts Program is an example of a discretionary program.

electromagnetic field (EMF) – A physical field produced by electrically charged objects; associated with electromagnetic radiation.

electromagnetic interference (EMI) – Electromagnetic interference may include the interruption, obstruction, or other degradation in the effective performance of electronic systems or equipment.

EMFAC2002 – The emissions model approved by the U.S. Environmental Protection Agency for use in California.

evapotranspiration – The return of water from the soil and from plants to the atmosphere by evaporation and transpiration.

express service – Express service is deployed in one of two general configurations: (1) A service generally connecting residential areas and activity centers via a high-speed, nonstop connection (e.g., a freeway or exclusive right-of-way such as a dedicated busway with limited stops at each end for collection and distribution). Residential collection can be exclusively or partially undertaken using park-and-ride facilities. (2) Service operated nonstop over a portion of an arterial in conjunction with other local services. The need for such service arises where passenger demand between points on a corridor is high enough to separate demand and support dedicated express trips.

Federal Transit Administration (FTA) – A part of the U.S. Department of Transportation that administers the federal program of financial assistance to public transit.

fill – Earth used to create embankments or to raise low-lying areas in order to bring them to grade.

final engineering – The detailed design and production of plans and specifications for project construction.

Final Environmental Impact Report (Final EIR) – A report that responds to comments received on a Draft EIR in accordance with the California Environmental Quality Act.

fixed guideway – Any public transportation facility utilizing and occupying a separate right-of-way or rails for the exclusive use of public transportation service, including but not limited to fixed rail, automated guideway transit, and exclusive facilities for buses and other high-occupancy vehicles; this term also means a public transportation facility using a fixed catenary system and right-of-way that can be used by other forms of transportation.

floodplain – The part of the ground surface inundated with water on a recurring basis, usually associated with the 1 percent recurrence interval (100-year) flow.

frequency – The amount of time scheduled between consecutive buses or trains on a given route segment; in other words, how often the bus or train comes (also known as *headway*).

g – horizontal ground acceleration.

grade separated – A crossing of two forms of transportation paths (e.g., light rail tracks and a highway) at different levels to permit unconstrained operation.

gram – Unit of measurement of mass (metric system).

headway – The scheduled time interval between any two revenue vehicles operating in the same direction on a route. Headways may be “load” driven (i.e., developed on the basis of demand and loading standards) or “policy” based (i.e., dictated by policy decisions, such as service every 30 minutes during the peak periods and every 60 minutes during the base period). See also, *frequency*.

hectare (ha) – A measure of area that equals 2.47 acres or 10,000 square meters.

high occupancy vehicle (HOV) – A *carpool*, or vehicle occupied by two or more persons.

high occupancy vehicle lane (HOV lane) – A system of exclusive lanes signed and striped for use by vehicles with multiple occupants (two or more persons). HOV lanes are designed on roadways to reduce traffic congestion, improve safety, reduce fuel consumption, and improve air quality.

high rail vehicle – A road vehicle that has been adapted to be able to run on both rails and roads.

intermodal – Those issues or activities that involve or affect one mode of transportation, including transportation connections, choices, cooperation, and coordination of various modes. Also known as *multimodal*.

intermodal facility – A building or site specifically designed to accommodate the meeting of two or more transit modes of travel.

Joint Powers Authority – A group of representatives from several entities that have agreed to undertake a joint operation venture. In the Santa Clara region, the Capitol Corridor Joint Powers Authority administers the Capitol Corridor Intercity Rail service between Sacramento and San Jose.

kilo – Prefix used in metric measurement, 1,000.

kilojoule (kJ) – A common metric unit of work or energy, comparable to the British thermal unit (BTU). One kilojoule equals $9.47817120313 \times 10^{-4}$ BTU, 2.7778×10^{-4} watt-hour, or 0.737562149277 foot-pound-force.

kiss-and-ride facility – The part of a park-and-ride facility where commuters are dropped off to board a public transportation vehicle.

Ldn (Day-Night Equivalent Sound Level) – The A-weighted Leq (see below) for a 24-hour period with a 10-dB penalty imposed on noise that occurs during nighttime hours.

lead track – A track that branches off from a mainline track for access to a car storage yard or maintenance facility.

Leq (equivalent sound level) – The steady sound level that represents the same sound energy as varying sound levels over a specific time period (typically 1 hour or 24 hours).

level of service (LOS) – This is a measure used by transportation professionals to grade performance of transportation facilities. LOS is graded on a scale of A (the best performance or least congested conditions) to F (the worst performance or most congested conditions).

light rail transit (LRT) – Lightweight passenger rail cars operating singly (or in short, usually two-car, trains) of fixed rails in right-of-way that is not separated from other traffic for much of the way. Light rail vehicles are driven electrically, with power being drawn from an overhead electric line via a trolley or a pantograph. Also known as *streetcar*, *tramway*, or *trolley car*.

L_{max} – The maximum level during a single noise event.

L_n – The sound level exceeded “n” percent of the time.

liter – Unit of measurement of volume (metric system).

local service – A type of operation that involves frequent stops and consequent low speeds, the purpose of which is to deliver and pick up transit passengers as close to their destinations or origins as possible.

locomotive wye – An arrangement of tracks in a triangular shape normally located at the end of a mainline track or railroad yard. Using switches, a wye enables trains to turn around.

mainline track – The main track on a railroad; large railroads often have several mainlines.

maintenance-of-way track – A siding track used expressly for storage of track maintenance equipment or materials.

mass transit – Another name for *mass transportation*” or *public transportation*.

mass transportation – Transportation by bus, rail, or other conveyance that can be either publicly or privately owned, providing general or special service to the public (but not including school buses or charter or sightseeing service) on a regular and continuing basis. Also known as *mass transit*, *public transportation*, and *transit*.

meter (m) – Metric unit of measurement equal to 39.37 inches.

Metropolitan Transportation Commission (MTC) – The regional transportation planning agency covering the nine-county San Francisco Bay Area. MTC is responsible for reviewing applications, distributing federal and state transportation grants, and allocating certain transportation monies.

microTesla (mT or μT) – A common unit of magnetic field intensity equal to 10⁻⁶ Tesla. The unit is widely used to measure the strength of electromagnetic fields generated by power lines or electronic equipment. By comparison, the strength of the Earth’s magnetic field at the surface is about 50 microTeslas. One microTesla equals 0.01 Gauss.

milliGauss (mG) – A unit of magnetic flux density equal to 0.001 Gauss or 0.1 microTesla. The magnetic fields generated by power lines and electronic equipment are often measured in milliGauss.

mitigation – Measures taken to minimize adverse environmental impacts. Mitigation could reduce the magnitude and extent of an impact from a level of adverse or significant to a level of not adverse or less than significant.

Multimodal Improvement Plan – VTA terminology for *Deficiency Plan* as defined by CMA statute. Multimodal Improvement Plans identify offsetting measures to improve transportation conditions on CMP facilities in lieu of making physical traffic capacity improvements such as widening an intersection or roadway. Multimodal improvements may include, for example, widening sidewalks or adding bike lanes.

National Environmental Policy Act (NEPA) – The United States’ basic national charter for protecting the environment. It establishes policy and sets goals and provides means for carrying out the policy.

National Historic Preservation Act of 1966 (NHPA) – The primary federal law pertaining to the protection of cultural resources.

National Register of Historic Places (NRHP) – A federal listing of historic resources protected under the National Historic Preservation Act of 1966.

New Starts – Federal funding granted under Section 5309 (B) of the United States Code. These discretionary funds are made available for the construction of new fixed guideway systems or extensions of existing fixed guideway systems.

nonpoint source – Pertains to the discharge of pollutants into waters or air where the pollutant sources come from an area rather than a single source that can be pinpointed.

off-peak – Non-rush-hour periods of the day when travel activity is generally lower and less transit service is scheduled.

operating cost – The total costs to operate and maintain a transit system including labor, fuel, maintenance, wages and salaries, employee benefits, taxes, etc.

operating expense – Monies paid in salaries and wages, settlement of claims, maintenance of equipment and buildings, and rentals of equipment and facilities.

ozone – A major component of photochemical smog, which is formed in the atmosphere by the chemical reaction between nitrogen dioxide and organic gases in the presence of sunlight. Excessive levels of ozone can cause eye irritation, reduced visibility, vegetation damage, and aggravation of respiratory conditions. The biggest source of these gases is the automobile.

pantograph – a jointed framework conveying a current to a train, streetcar, or other electric vehicle from overhead wires.

park-and-ride – A parking area intended for transit riders who arrive at transit stations by car.

park-and-ride facility – A parking garage and/or pavement used for parking passengers' automobiles, either free or for a fee, while they use transit agency facilities. Park-and-ride facilities are generally established as collector sites for rail or bus service. Park-and-ride facilities may also serve as collector sites for vanpools and carpools and as transit centers.

passenger miles – A measure of service utilization that represents the cumulative sum of the distances ridden by each passenger. It is normally calculated by summing the passenger load multiplied by the distance between individual bus stops. For example, ten passengers riding in a transit vehicle for 2 miles equals 20 passenger miles.

peak hour/peak period – The period with the highest ridership during the entire service day, generally referring to either the peak hour or peak several hours (peak period).

peak particle velocity (PPV) – The maximum instantaneous peak in the velocity of an object's vibratory motion. The PPV is used to define thresholds of potential building damage from vibration.

Phase 1 – VTA's BART Silicon Valley Berryessa Extension Project; the first phase of VTA's BART Silicon Valley Program evaluated as part of this Supplemental Environmental Impact Statement/ Subsequent Environmental Impact Report (SEIS/SEIR).

pipe arch – A method for constructing a station wherein a structural arch would be installed under the tracks from within the excavation area using interlocking steel pipes installed by micro-tunneling methods, followed by construction of the permanent station structure under the tracks.

pocket track – A third track located between two mainline tracks and connected at both ends to both tracks with crossovers, used for the temporary storage of trains.

PM10 – Particulate matter less than 10 microns in diameter. One micron is equal to one-millionth of a meter.

PM2.5 – Particulate matter less than 2.5 microns in diameter; considered to be fine particulate matter.

preliminary engineering – Refinements to a project's design developed during conceptual engineering. Includes preliminary technical studies performed to determine relevant aspects of project location, any feasible alternatives or design options, and various costs and benefits before advancing the project into the detailed final design phase.

program – To assign funds to a project or to implement projects or policies.

queuing – Formation of a line of vehicles at an intersection or ramp, when vehicle arrival rates are higher than departure rates.

Record of Decision (ROD) – A written public record explaining why the lead agency has taken a particular course of action.

retained cut – The construction of earth-retaining structures to support excavations where tracks are located below existing grade.

retained fill – The construction of retaining walls to support fill where tracks are raised above existing grade.

revenue – Receipts derived from or for the operation of transit service, including farebox revenue, revenue from other commercial sources, and operating assistance from governments. Farebox revenue includes all fares, transfer charges, and zone charges paid by transit passengers.

revenue service – The time when a revenue vehicle is in operation over a route and is available to the public for transport.

right-of-way (ROW) – The land over which a public road or rail line is built. An exclusive right-of-way is a road, lane, or other corridor designated exclusively for a specific purpose or for a particular group of users, such as light rail vehicles, buses, or other transportation facilities.

root-mean-square amplitude (RMS) – The average energy of vibration measured over a short time interval, usually 1 second. RMS vibration velocity is considered the best available measure of potential human annoyance from groundborne vibration.

route – A specified path taken by a transit vehicle, usually designated by a number or a name, along which passengers are picked up or discharged.

SCREEN3 – Gaussian plume model used to provide maximum ground-level pollution concentrations for point, area, flare, and volume sources.

screenline – Vehicle trips crossing the county line on major roadways.

Section 106 – Section 106 of the National Historic Preservation Act of 1966.

sequential excavation method – A method for constructing a station wherein the cross-sectional area of the tunnel under tracks would be excavated sequentially in segments (from the open excavation area adjacent to the tracks). Once a segment of the tunnel is excavated, the surrounding soil is supported using shotcrete and excavation progresses to the next segment until the entire portion is complete.

shoo-fly – A temporary track that is constructed to allow trains to continue to operate through a construction zone.

siding track – A track adjacent to a mainline track used for various purposes such as the storage of trains.

spur track – A short, dead-end track that diverges off a mainline track and ends at (serves) a business.

State Implementation Plan (SIP) – A plan for attaining national ambient air quality standards required by the Clean Air Act.

STA – Abbreviation for station or stationing. A precise point from which measurements in surveying are made.

station – A public transportation passenger facility.

subballast – A finer grained, granular material that provides additional support under the ballast.

Subsequent Environmental Impact Report (SEIR) – Following certification of a Final Environmental Impact Report (EIR) an SEIR is prepared if substantial changes are proposed in the project, substantial changes occur with respect to the circumstances under which the project is undertaken, or new information of substantial importance comes to light.

Supplemental Environmental Impact Statement (SEIS) – An SEIS is prepared if substantial changes in the proposed action are relevant to its environmental effects or there are significant new circumstances or information relevant to the environmental concerns that bear on the proposed action or its impacts.

tail track – A track that extends beyond the end of a terminal station or storage yard (located at the end of a mainline), used for storing cars or switching trains between tracks for a return trip.

Traction power substation (TPSS) – Facilities that provide the power required to run BART trains on the mainlines, storage tracks, and maintenance facilities.

Train Control Communications Room (TCCR) – Central location where the operations of the BART trains are monitored.

transfer – The change from one transit vehicle to another.

transit center – A fixed location that has significant infrastructure, such as a waiting room, benches, restrooms, sales outlet, ticket or pass vending machines, and/or other services, where passengers transfer from one route or vehicle to another.

transit corridor – A broad geographic band that follows a general route alignment, such as a roadway or rail right-of-way, and includes a service area within that band that would be accessible to the transit system.

transit-oriented joint development (TOJD) – Commercial, residential, or mixed-use development that is undertaken in connection with existing, planned, or proposed transit facilities.

trip – The one-way operation of a revenue vehicle between two terminal points on a route. Trips are generally noted as inbound, outbound, eastbound, westbound, etc. to identify directionality when being discussed or printed.

tunnel boring machine (TBM) – A method for constructing a station that involves driving the TBM under the tracks, followed by ground improvement and subsequent use of mining methods to create the final station structure configuration required under the tracks.

turnout – A split in the track used to switch a train between two different tracks.

U.S. Fish and Wildlife Service (USFWS) – The federal agency that administers the Federal Endangered Species Act and is responsible for the protection of fish and wildlife habitat, including wetland areas.

vehicle hours – The hours a vehicle travels while in revenue service (vehicle revenue hours) plus deadhead hours. For rail vehicles, vehicle hours refer to passenger car hours. Vehicle hours exclude hours for charter services, school bus service, operator training, and maintenance testing.

vehicle miles – The miles a vehicle travels while in revenue service (vehicle revenue miles) plus deadhead miles. For rail vehicles, vehicle miles refer to passenger car miles. Vehicle miles exclude miles for charter services, school bus service, operator training, and maintenance testing.

volume to capacity ratio (V/C) – The volume of vehicles per hour in a lane or roadway segment divided by the capacity of that lane or roadway segment.

watershed – The part of the Earth’s surface from which stormwater runoff flows to a single point.

wetlands – According to the U.S. Army Corps of Engineers, wetlands are areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, under normal conditions, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and similar areas and are subject to protection under Executive Order 11990 and Section 404 of the federal Clean Water Act.

wye – An arrangement of tracks in a triangular shape, typically located at the end of a mainline track or railroad yard. Using switches, a wye enables trains to turn around.

yard – An area in a system used for maintaining, storing, or holding trains.

12.2 Abbreviations and Acronyms

Abbreviation	Definition
°F	degrees Fahrenheit
µg/m ³	microgram per cubic meter
µin	micro-inch
µT	microTesla
2010 CAP	2010 Clean Air Plan
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AC	alternating current
ac	artificial channel deposits
ACE	Altamont Corridor Express
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
ADT	average daily traffic
ADWF	average dry weather flow
AEP	Association of Environmental Professionals
AF	adjustment factor
AIA	added impervious area
AL	action level
Alquist-Priolo Act	Alquist-Priolo Earthquake Fault Zoning Act
ALUC	Airport Land Use Commission
APE	area of potential effect
APM	automated people mover
APN	assessor parcel number
ARB	California Air Resources Board
ARTP	Archeological Resources Treatment Plan
ATCM	airborne toxic control measure
BA	Biological Assessment
BAAQMD	Bay Area Air Quality Management District
BART Extension and TOJD TIA	<i>VTA's BART Silicon Valley – Transportation Impact Analysis of the BART Extension and VTA's Transit-Oriented Joint Development</i>
BART Extension TIA	<i>VTA's BART Silicon Valley – Phase II Extension Project Draft Traffic Impact Analysis</i>

Abbreviation	Definition
Basin Plan	Water Quality Control Plan
Bicycle Plan	<i>Santa Clara Countywide Bicycle Plan</i>
BMP	best management practice
BO	Biological Opinion
BPA	Bonneville Power Administration
BRT	Bus Rapid Transit
BTU	British thermal units
BVR	building vibration response
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Division of Occupational Safety and Health
CALGreen	statewide mandatory Green Building Standards Code
California CAA	California Clean Air Act
Caltrain	Peninsula Corridor Joint Powers Board
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Controls Officers Association
CAT	Climate Action Team
CCR	California Code of Regulations
CCTV	closed-circuit television
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEOP	Construction Education and Outreach Plan
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH ₄	methane
<u>CHSR</u>	California High-Speed Rail
CHSRA	California High-Speed Rail Authority
CLUP	Comprehensive Land Use Plan
CMP	Congestion Management Program
CMS	Core Modification Study
CMU	concrete masonry unit

Abbreviation	Definition
CNDDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
<u>COMP</u>	<u>Construction Outreach Management Program</u>
CPTs	cone penetrometer tests
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CSA	construction staging area
<u>CTMP</u>	<u>Construction Transportation Management Plan</u>
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
<u>CWG</u>	<u>Community Working Group</u>
cy	cubic yards
DASH	Downtown Area Shuttle
dB	decibels
dba	A-weighted sound levels
DC	direct current
DF	direct fixation
DPM	diesel particulate matter
DPR	Department of Pesticide Regulation
Draft EIS/EIR	Draft Environmental Impact Statement/Environmental Impact Report
DSA	disturbed soil area
DSAP	<i>Diridon Station Area Plan</i>
DSM	deep soil mix
DTSC	Department of Toxic Substances Control
<u>EE</u>	<u>Emergency Egress</u>
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
EM	electromagnetic interference
EMF	electromagnetic fields
EO	Executive Order
EPA	U.S. Environmental Protection Agency
<u>EPB</u>	<u>earth-pressure-balanced</u>
ESA	Endangered Species Act

Abbreviation	Definition
<u>ESCP</u>	<u>Emergency Services Coordination Plan</u>
ESU	evolutionarily significant unit
FAA	Federal Aviation Administration
<u>FAI</u>	<u>Fresh Air Intake</u>
FAR	Federal Aviation Regulations
FDL	force density level
FEMA	Federal Emergency Management Agency
FFGA	Full Funding Grant Agreement
FHWA	Federal Highway Administration's
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
Five Wounds Church	Five Wounds National -Portuguese <u>National</u> Church and School
FR	<i>Federal Register</i>
FST	floating slab track
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Plan
GHG	greenhouse gas emissions
gpd	gallons per day
GWh	gigawatt-hours
Habitat Plan	<i>Santa Clara Valley Habitat Plan</i>
HAPs	hazardous air pollutants
HCM	Highway Capacity Manual
HMBP	Hazardous Materials Business Plans
HMCD	Hazardous Materials Compliance Division
HMTA	Hazardous Material Transportation Act
HOV	high-occupancy-vehicle
HPD	Historic Properties Directory
HRDF	highly resilient direct fixation fasteners
HRI	Historic Resources Inventory
Hz	Hertz
I	Interstate
ISA	Initial Site Assessment
IST	Isolated Slab Track
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Traffic Engineers

Abbreviation	Definition
kg	kilogram
KNR	kiss-and-ride
kV	kiloVolt
kWh	kilowatt-hours
LBP	lead-based paints
Ldn	day-night equivalent sound level
LED	light-emitting diode
Leq	day-night equivalent sound level
LID	Low Impact Development
Ln	percentile sound levels
LOS	level of service
LRT	light rail transit
LSR	Line Source Response
LWCF	Land and Water Conservation Fund
MAP-21	Moving Ahead for Progress in the 21st Century Act
MBTA	Migratory Bird Treaty Act
MF	modeling factor
mG	milligauss
mgd	million gallons per day
MIS	Major Investment Study
mph	miles per hour
MRP	Municipal Regional Permit
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSATs	mobile-source air toxics
MST	Monterey Salinas Transit
mT	microTesla
MT	metric tons
MTC	Metropolitan Transportation Commission
MTC Model	Metropolitan Transportation Commission's Regional Model
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAVD 88	North American Vertical Datum of 1988
NCRIC	Northern California Regional Intelligence Center
NEPA	National Environmental Policy Act

Abbreviation	Definition
NFIP	National Flood Insurance Act
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO ₂	nitrogen dioxide
NOA	naturally occurring asbestos
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O&M	operation and maintenance
OCC	Operational Control Center
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OSHA	Occupational Safety and Health Administration
PA	Programmatic Agreement
Pb	lead
PCBs	polychlorinated biphenyls
PEL	permissible exposure limit
PG&E	Pacific Gas & Electric Company
Phase II Project	VTA's BART Silicon Valley—Phase II Extension Project
PM	particulate matter
PM ₁₀	PM that is 10 microns in diameter or less
PM _{2.5}	PM that is 2.5 microns in diameter or less
PNR	park-and-ride
POAQC	project of air quality concern
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppb	parts per billion
ppm	parts of million
PPV	peak particle velocity
PRC	Public Resources Code
PUC	Public Utility Commission
Qf & Qhf	Holocene age alluvial fan deposits
Qhc	Holocene stream channel deposits
Qhff	Holocene alluvial fan deposits
Qhl	Holocene alluvial fan levee deposits

Abbreviation	Definition
QP	Qualified Professional
RAMP	Real Estate Acquisition Management Plan
RAP	Remedial Action Plan
RCRA	Resource Conservation and Recovery Act
Regional Water Board	Regional Water Quality Control Board
REL	reference exposure level
<u>RWF</u>	<u>Regional Wastewater Facility</u>
ROCs	reactive organic compounds
ROD	Record of Decision
ROG	reactive organic gas
ROW	right-of-way
RSF	rail suspension fastener
RST	resiliently supported tie
RTP	Regional Transportation Plan
RV	recreational vehicle
San Jose Downtown Strategy 2000 EIR	<i>Strategy 2000: San Jose Greater Strategy 2000 Environmental Impact Report</i>
SAR	Suspicious Activity Report
SB	Senate Bill
SCADA	Supervisory Control And Data Acquisition System
SCAR	Santa Clara/Alum Rock
SCCSO	Santa Clara County Sheriff's Office
SCFD	Santa Clara Fire Department
SCGP	<i>Santa Clara 2010–2035 General Plan</i>
SCPD	Santa Clara Police Department
SCS	Sustainable Communities Strategy
SCUSD	Santa Clara Unified School District
SCVHP	<i>Santa Clara Valley Habitat Plan</i>
SCVWD	Santa Clara Valley Water District
SCWSU	Santa Clara Water and Sewer Utility
SCWU	Santa Clara Water Utility
SEIR	Subsequent Environmental Impact Report
SEIS	Supplemental Environmental Impact Statement
SEL	Sound Exposure Level
<u>SEM</u>	<u>Sequential Excavation Method</u>

Abbreviation	Definition
SFBAAB	San Francisco Bay Area Air Basin
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJFD	San Jose Fire Department
SJGP	<i>Envision San Jose 2040 General Plan</i>
SJPD	San Jose Police Department
SJPRNS	City of San Jose Department of Parks, Recreation and Neighborhood Services
SJPW	San Jose Department of Public Works
SJUSD	San Jose Unified School District
SJWC	San Jose Water Company
SNI	Strong Neighborhoods Initiative
SO ₂	sulfur dioxide
<u>SOI</u>	<u>Secretary of the Interior</u>
SR	State Route
SSCP	Safety and Security Certification Program
State Water Board	State Water Resources Control Board
SVRTC Project	Silicon Valley Rapid Transit Corridor Project
SWPPP	Storm Water Pollution Prevention Plan
TA	Valley Transportation Authority
TAC	toxic air contaminant
TBM	tunnel boring machine
TCCR	Train Control Communications Room
<u>TCP</u>	<u>Traffic Control Plan</u>
TCRP	Traffic Congestion Relief Program
TIA	Transportation Impact Analysis
<u>TIRCP</u>	<u>Transit and Intercity Rail Capital Program</u>
TMDL	total maximum daily load
TOD	transit-oriented development
tpd	tons per day
TPSS	traction power substation
Transportation 2035 Plan	<i>Transportation 2035 Plan for the San Francisco Bay Area</i>
TRD	trench remixing and deep-wall
TSCA	Toxic Substances Control Act

Abbreviation	Definition
TVF	tunnel ventilation fans
TVS	<u>Tunnel Ventilation Shaft</u>
TWLTL	two-way left-turn lane
TWSC	two-way stop-controlled
U.S. 101	U.S. Highway 101
Unified Program	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
V	volt
V/C	volume-to-capacity ratio
V/m	volts per meter
VdB	vibration decibels
VMT	vehicle miles traveled
VOC	volatile organic compound
vph	vehicles per hour
vpmpl	vehicles per mile per lane
VTA	Santa Clara Valley Transportation Authority
VTA Model	VTA's 2012 PD Phase II, December 2014 Travel Demand Forecasting Model
VTP 2040	<i>Valley Transportation Plan 2040</i>
WPCP	Water Pollution Control Plant
WSA	Water Supply Assessment
YOE	year of expenditure

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