# Transportation Planning Glossary

## Aa

**Access Control:** The condition where the right of owners or occupants of abutting land or other persons to access a highway is fully or partially controlled by public authority.

**Access Management:** Involves managing where vehicles enter the highway to improve highway operations and reduce accidents.

**Access Point:** Location where vehicles can enter or exit a highway.

**Adoption:** California Transportation Commission (CTC) establishment of a specific highway route location.

**Air Basin:** An area or territory that contains similar meteorological and geographical conditions. In California, the Air Resources Board (ARB) has established nine air basins.

**All-Way Stop Control:** An intersection with stop signs at all approaches.

**Annual Average Daily Traffic (AADT):** Daily traffic that is averaged over a calendar year or fiscal year.

**Arterial:** A class of street that primarily serves through-traffic and major traffic movements.

**Arterial Highway:** A general term denoting a highway primarily used by through traffic usually on a continuous route.

**Auxiliary Lane:** The portion of the roadway for weaving, truck climbing, speed change, or other purposes supplementary to through traffic movement.

**Average Daily Traffic (ADT):** The average number of vehicles passing a specified point during a 24-hour period. Frequently used in relation to the “peak-month” average daily traffic.

**Average Lane Width:** The average width of a travel lane. It is a weighted average of all lane widths found in the facility segment under consideration.

**Average Median Width:** The weighted average of all median widths found in the facility segment under consideration.

**Average Travel Speed (ATS):** A performance measure used to estimate level of service on a two-lane highway. The facility length divided by the average travel time of all vehicles traversing the facility, including all stopped delay times.

**Average Shoulder Width:** The weighted average of all shoulder widths found in the facility segment under consideration.

## Bb

**Bypass:** An arterial highway that permits traffic to avoid part or all of an urban area.

**Bike Route Class:** Classification of a bicycle facility. There are three classes: Class I (bicycle facility separate from roadway), Class II (designated bicycle facility adjacent to roadway), Class III (non-designated but open to bicycles).

##Cc

**California Environmental Quality Act (CEQA):** 1970 State legislation that requires that State agencies regulate activities with major consideration for environmental protection.

**California Transportation Investment System Tool (CTIS):** A tool that visually displays, using GIS software, where transportation investment is currently underway (programmed) and where it is planned over the next 20 years.

**Caltrans or Department:** California Department of Transportation.

**Capacity:** The maximum number of vehicles or persons that can pass a point on a roadway during a specified time period (usually one hour) under prevailing roadway, traffic and control conditions.

**Capacity Expansion:** New facilities and operational improvements, which add through lanes.

**Carbon Monoxide (CO):** A product of incomplete burning of fuel, produced by motor vehicles (the primary source), home heating, and, to a lesser extent, industrial activities.

**Carpool:** A group of people who share automobile transportation to designated destinations, usually alternating drivers and vehicles.

**Changeable Message Signs (CMS):** Electronic signs that can change the message it displays. Often used on highways to warn and redirect traffic. Also referred to as variable or electronic message signs.

**Channelization:** The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands or other suitable means to facilitate the safe and orderly movement of both vehicles and pedestrians.

**Clear Recovery Zone:** An area clear of fixed objects adjacent to the roadway to provide a recovery zone for vehicles that have left the traveled way. A minimum clear
recovery area of 20 feet on conventional highways and 30 feet on freeways and high speed expressways is desirable.

Climbing lane: A lane added on an uphill grade for use by trucks, recreational vehicles and other heavy vehicles with speeds significantly reduced by grade.

Closed Circuit Television (CCTV): This ITS technology allows a camera to display remote verification of road and weather conditions, traffic conditions and incidents. This CCTV camera will have compatibility with other communication technologies, such as, cable TV, kiosks and the Internet.

Collector: A roadway providing land access and traffic circulation within residential, commercial and industrial areas.

Coincident: Occurring at the same time; in agreement. A highway made be signed coincident with another highway (Example: SR 89/SR 70).

Concept: A strategy for future improvements that will reduce congestion or maintain the existing level of service on a specific route.

Continuous left-turn lane: A lane that simultaneously serves left turning vehicles traveling in opposite directions.

Conformity: Process to assess the compliance of any Federally funded or approved transportation plan, program, or project with air quality implementation plans. The conformity process is defined by the Clean Air Act.

Congestion: Defined as, reduced speeds of less than 35 miles per hour for longer than 15 minutes.

Controlled Access Highway: In situations where the Director or the California Transportation Commission (CTC) has determined it advisable, a facility may be designated a "controlled access highway" in lieu of the designation "freeway". All statutory provisions pertaining to freeways and expressways apply to controlled access highways.

Conventional Highway: A highway without control of access, which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations.

Corridor: A set of essentially parallel transportation facilities for moving people and goods between two points.

Crawl Speed: The maximum sustained speed that can be maintained by a specified type of vehicle on a constant upgrade of a given percent.

Density: The number of vehicles per mile (or per lane per mile) on the traveled way at a given instant.

Design Exception: Written record that documents the engineering decisions leading to the exception from a design standard. Exceptions are possible for both mandatory and advisory design standards.

Design Speed: A speed selected to establish specific minimum geometric (horizontal, vertical, site distance) design elements for a particular section of highway.

District: Department of Transportation Districts.

Divided Highway: A highway with separated roadbeds for traffic in opposing directions.

Easement: A right to use or control the property of another for designated purposes.

Encroachment: Occupancy of project right-of-way by non-project structures or objects of any kind or character.

Environmental Impact Report (EIR): A detailed statement setting forth the environmental effects and considerations pertaining to a project as specified in California Environmental Quality Act (CEQA), and may mean either a Draft or a Final EIR.

Environmental Impact Statement (EIS): An environmental impact document prepared pursuant to the National Environmental Policy Act (NEPA) of 1969. The Federal government uses the term EIS in the place of the environmental impact report (EIR), which is used in CEQA.

Environmental Scoping Tool: A tool that visually displays, using GIS software, where habitats, species and hazardous sites are currently located.

Exclusive Turn Lane: A storage area designated to only accommodate left or right turning vehicles.

Expressway: An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections.

Facility Concept: General term used to describe the number of lanes and degree of access control on a State Route or Freeway. The term can be used to describe the existing facility or the future facility that will be required to handle projected traffic volumes within adopted level of service standards.

Fatal Plus Injury Actual: Contains specific data for accidents that are State highway related. Each accident record contains a ramp, intersection or highway post-mile address that ties it to the highway database.

Fatal Plus Injury Average: The Statewide Average Accident Rate (SWA) is based on a rated segment. The accident-rating factor (ARF) indicates how the existing
segment compares to other segments on the State Highway System. The ARF is a comparison of then segment’s accident rate to the statewide average accident rate for roads of the same type and having similar characteristics. Accident severity as well as accident frequency is considered in calculating the ARF.

**Fatal Plus Injury per Million Vehicle Miles:** The fatality rate of those killed in vehicles plus the injury rate of those injured in vehicles.

**Federal Highway Administration (FHWA):** An agency of the US Department of Transportation that funds highway planning programs.

**Federal Transit Administration (FTA):** An agency of the US Department of Transportation that funds transit planning and deployment programs.

**Fiscal Year (FY):** For California, the FY is the accounting period beginning July 1 and ending June 30. For Federal budget and accounting purposes the FY period begins October 1 and ends September 30.

**Focus Routes:** These routes are a subset of the 34 High Emphasis IRRS routes. They represent the ten corridors that should be the highest priority for completion to minimum facility standards in order to serve higher volume interregional trip movements.

**Free Flow Speed:** The average speed of vehicles on a given facility, measured under low-volume conditions, when drivers tend to drive at their desired speed and are not constrained by delay from traffic control devices.

**Freeway:** A divided arterial highway with full control of access and with grade separations at intersections. A freeway, as defined by statute, is also a highway in respect to which: (1) the owners of abutting lands have no right or easement of access to or from their abutting lands; or (2) such owners have only limited or restricted right or easement of access. This statutory definition also includes expressways.

**Freeway and Express System (F&E):** The Statewide system of highways declared by the Legislature to be essential to the future development of California. The F&E System has been constructed with a large investment of funds for the ability of control access, in order to ensure the safety and operational integrity of the highways.

**Freeway-to-freeway Connection:** A single or multilane connection between freeways.

**Frontage Street or Road:** A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

**Functional Classification:** Guided by Federal legislation, refers to a process by which streets and highways are grouped into classes or systems, according to the character of the service that is provided, i.e., Principal Arterials, Minor Arterials and Major Collectors.

**Gap:** The time, in seconds, for the front bumper of the second of two successive vehicles to reach the starting point of the front bumper of the first.

**Geometric Design:** Geometric design is the arrangement of the visible elements of a road, such as alignment, grades, sight distances, widths, slopes, etc.

**Goods Movement:** The general term referring to the flow of commodities, modal goods movement systems and goods movement institutions.

**Grade (profile):** The average change in elevation of the highway surface within the segment under study. As used in highway capacity analysis, grade is expressed as level, rolling or as a percentage (specific grade). Grade and terrain are not interchangeable terms. For example, a highway may pass through rolling terrain yet have a level grade due to design and construction features.

**Level:** A combination of horizontal and vertical alignments that permits heavy vehicles to maintain approximately the same speed as passenger cars; this may include short grades of no more than 1 to 2 percent.

**Rolling:** A combination of horizontal and vertical alignments causing heavy vehicles to reduce their speed substantially below that of passenger cars but not to operate at crawl speeds for a significant period of time or at frequent intervals. Generally, rolling terrain has short grades of no more than 4 percent and average grades of less than 3 percent.

**Specific grade:** Any upgrade of 3 percent or greater that extends for 0.6 mile or more. Trucks will operate at or near crawl speeds due to the horizontal and vertical features of the highway. If the grade varies, it is analyzed as a single, composite (weighted average).

**Grade Separation:** A crossing of two highways or a highway and a railroad at different levels.

**Headway (Highway):** The time in seconds between consecutive vehicles moving past a point, in a given lane, measured front to front.

**High Emphasis Routes:** High Emphasis routes that are characterized as being the most critical Interregional Road System (IRRS) routes. More importantly, these routes are critical to interregional travel and the state as a whole.

**High Occupancy Vehicle (HOV):** Term for multi-occupant highway vehicles such as buses, jitneys, vans and carpools.

**Highway:** Term applies to roads, streets, and parkways, and also includes right-of-way, bridges, railroad crossings, tunnels, drainage structures, signs, guard rails, and protective structures in connection with highways.

**Highway Advisory Radio (HAR):** An ITS technology that provides valuable information to travelers through prerecorded messages that contain traffic information, road conditions, chain requirements and road closures, etc.
Transmission is generally accomplished through low-powered AM broadcast.

**Highway Capacity Manual (HCM):** Updated in 2000 by the Transportation Research Board of the National Research Council, the HCM presents various methodologies for analyzing the operation (Level-of-Service) of transportation systems.

**Highway Classification:** For purposes of capacity analysis, separation of two-lane highways into Class I, II or III. Class I includes major interregional routes, Class II includes smaller links in the system and Class III includes segments of two-lane highway in smaller developed areas or communities.

**Highway Planting:** Vegetation placed for aesthetic, safety, environmental mitigation, or erosion control purposes, including necessary irrigation systems, inert materials, mulches and appurtenances.

**Highway Trust Fund:** Federal user fees on gasoline, etc. go into this fund. Used to reimburse states for Federal-aid projects.

**High Occupancy Vehicle (HOV) Lane:** Preferential or exclusive lane for high occupancy vehicles.

**Hydrocarbons (HC):** Incompletely burned or evaporated fuel or solvents, produced by mobile sources and industrial sources.

**Incident Management:** Technologies that allow transportation managers to identify and respond quickly to incidents on the highway system.

**Initial Study:** A preliminary analysis prepared by the lead agency to determine whether an environmental impact report (EIR) or negative declaration must be prepared pursuant to the California Environment Quality Act (CEQA).

**Intelligent Transportation Systems (ITS):** Use of advanced sensor, computer, and electronic systems to increase the safety and efficiency of the transportation system.

**Interchange:** A system of interconnecting roadways in conjunction with one or more grade separations providing for the interchange of traffic between two or more roadways on different levels.

**Intermodal:** The ability to connect, and make connections between modes of transportation.

**Intermodal Corridor of Economic Significance (ICES):** Significant National Highway System Corridors that link intermodal facilities most directly, conveniently and efficiently to intrastate, interstate, and international markets.

**Intermodal Transportation Management System (ITMS):** ITMS is an integral and fundamental tool used in system planning and advanced planning activities. The ITMS provides an interactive, intermodal and multimodal, quick response transportation planning analysis tool for use in system planning and jointly with regional agencies.

**Interregional Road System (IRRS):** A series of interregional state highway routes, outside the urbanized areas, that provides access to, and links between, the State’s economic centers, major recreational areas and urban and rural regions.

**Interregional Transportation Strategic Plan (ITSP):** The ITSP identifies six key objectives for implementing the Interregional Improvement Program and strategies and actions to focus improvements and investments. This document also addresses development of the interregional road system and intercity rail in California, and defines a strategy that extends beyond the 1998 State Transportation Improvement Program (STIP).

**Intersection:** The general area where two or more roadways join or cross, which include roadside facilities for traffic movements in that area.

**Interstate Highway System:** The system of highways that connects the principal metropolitan areas, cities, and industrial centers of the United States. The Interstate System also connects the US to internationally significant routes in Mexico and Canada.

**Island:** A defined area between traffic lanes for control of vehicle movements or for pedestrian refuge. Within an intersection a median or an outer separation is considered an island.

**Kilometer Post (KP):** Using kilometers and counties, the KP system identifies specific and unique locations in the California highway system.

**Lane Numbering:** On a multilane roadway, the traffic lanes available for through traffic traveling in one direction are numbered from left to right when facing in the direction of traffic flow.

**Left turn lane:** A storage area designated to only accommodate left turning vehicles.

**Level-of-Service (LOS):** A rating using qualitative measures that characterize operational conditions within a traffic stream and perception of those measures by motorists and passengers.

**Level terrain:** A combination of horizontal and vertical alignments that permits heavy vehicles to maintain approximately the same speed as passenger cars; this generally includes short grades of no more than 1 to 2 percent.

**Lifeline Route:** A route on the State Highway System that is deemed so critical to emergency response/life safety activities of a region or the state. It must remain open immediately following a major earthquake, or for which preplanning for detour and/or expedient repair and reopening can guarantee the through movement of emergency equipment and supplies.
Local Street or Local Road: A street or road primarily for access to residences, businesses, or other abutting property.

Local Transportation Commission (LTC): A designated transportation planning agency for a county which is not within the jurisdiction of a statutorily created Regional Transportation Planning Agency or a Council of Governments.

Maintained Miles: The length of a facility that is preserved and kept in the safe and usable condition to which it has been improved.

Maintain Only: Designation for routes where level-of-service is not an appropriate measure of system performance, with only maintenance and safety projects anticipated. A route may be classified as “Maintain Only” when it meets one or more of the following criteria:

- Low Average Annual Daily Traffic (typically less than 2,500)
- Not on the Interregional Road System
- Route purpose is primarily for basic access/local circulation rather than interregional travel
- Significant and/or sensitive environmental resources are in close proximity
- High degree of traffic control (stop control and/or signalization)

Median: The portion of a divided highway separating the traveled ways for traffic in opposite directions.

Median Lane: A speed change lane within the median to accommodate left turning vehicles.

Memorandum of Understanding (MOU): Formal structure for interagency cooperation.

Merging: The converging of separate streams of traffic into a single stream.

Metropolitan Planning Organization (MPO): By federal provision, the Governor designates this organization by principal elected officials of general-purpose local governments. MPOs are established to create a forum for cooperative decision-making. Each MPO represents an urbanized area with a population of over 50,000 people.

Minimum Turning Radius: The radius of the path of the outer front wheel of a vehicle making its sharpest turn.

Mixed Flow: Traffic movement having automobiles, trucks, buses and motorcycles sharing traffic lanes.

Mode: Types of transportation: auto, bus, rail, etc.

Mountainous terrain: A combination of horizontal and vertical alignments causing heavy vehicles to operate at crawl speeds for significant distances or at frequent intervals.

Multimodal: The availability of transportation options using different modes within a system or corridor.

Multiple Lanes: Freeways and conventional highways are sometimes defined by the total number of through traffic lanes in both directions. Thus, an 8-lane freeway has 4 through traffic lanes in each direction. Likewise, a 4-lane conventional highway has 2 through traffic lanes in each direction.

National Environmental Policy Act (NEPA): 1969 legislation requiring all Federal agencies to prepare an environmental impact statement evaluating proposed Federal actions which may significantly affect the environment.

National Highway System (NHS): ISTEA established a 155,000-mile NHS to provide an interconnected system of principle arterial routes to serve major travel destinations and population centers, international border crossings, as well as ports, airports, public transportation facilities and other intermodal transportation facilities. The NHS must also meet national defense requirements and serve interstate and interregional travel.

National Network (NN) for Trucks: This network is comprised of the National System of Interstate and Defense Highways, examples are I-10, I-5 and I-80. STAA Trucks are allowed on the NN.

Nitrogen Oxides (NO\textsubscript{x}): Products of high-compression internal combustion engines, power plants and other large burners.

Non-Motorized Transportation Facility: That combination of vehicles and ways generally including bikeways bicycles, sidewalks, bridle paths and horses which permit the transport of people.

Outer Separation: The portion of an arterial highway between the traveled ways of a roadway for through traffic and a frontage street or road.

Particulate Matter (PM\textsubscript{10}): Mostly carbon particles much like soot; however, fine particles of dust, metals, asbestos and suspended droplets are also found. Produced by industry, motor vehicles and natural processes. Fugitive dust comes from such sources as agricultural tilling, construction, mining and quarrying, paved and unpaved road and wind erosion.

Passing Lane: A lane added to improve passing opportunities in one direction of travel on a two-lane highway.

Peak: 1. The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon or evening (p.m.) peak. 2. The period during which the demands for transportation services is the heaviest.
Peak Period Directional Split: During the peak period, the directional distribution of traffic.

Platoon: A group of vehicles traveling together as a group, either voluntarily or involuntarily because of signal control, geometrics, lack of passing opportunities or other factors.

Post-Mile (PM): Using miles and counties, the PM system identifies specific and unique locations in the California highway system.

Percent Time Spent Following (PTSF): A performance measure used to estimate level of service on a two-lane highway. It is the average percentage of travel time that vehicles must travel in platoons behind slower vehicles due to the inability to pass.

Prescriptive: Type of easement that comes into existence without formal action because of long term historical use in a corridor. A prescriptive right cannot be established over land owned by a governmental entity.

Programming: Process of scheduling high-priority projects for development and implementation.

Project Initiation Document (PID): A report that documents agreement on the design concept, design scope, schedule and estimated cost of a project so that the project can be included in a future programming document. Reports include, among others, the PSR, FSSR, Combined PSR/PR, PEER and the NBSSR.

Project Report: Report summarizing the feasibility of needs, alternatives, costs, etc., of a proposed transportation project affecting state transportation facilities. Often project reports consist of a Transmittal Letter and a draft environmental document.

Public Participation: The active and meaningful involvement of the public in the development of transportation plans and programs.

Public Transportation: Transportation service to the public on a regular basis using vehicles that transport more than one person for compensation, usually but not exclusively over a set route or routes from one fixed point or another. Routes and schedules may be determined through a cooperative arrangement.

Ramp: A connecting roadway between a freeway or expressway and another highway, road, or roadside area.

Ramp Metering: A traffic management strategy which utilizes a system of traffic signals on freeway entrance and connector ramps to regulate the volume of traffic entering a freeway corridor. This is to maximize the efficiency of the freeway and thereby minimize the total delay in the transportation corridor.

Recession: California Transportation Commission (CTC) cancellation of a previously adopted highway route location.

Region (Transportation Planning): A geographical area assigned to a Regional Transportation Planning Agency (RTPA) responsible for regional transportation planning.

Regional Transportation Plan (RTP): State-mandated documents to be developed biennially by all region transportation planning agencies (RTPAs). They consist of policy, action and financial elements.

Regional Transportation Planning Agency (RTPA): Created by AB 69 to prepare regional transportation plans and designated by the Business, Transportation and Housing (BT&H) secretary to receive and allocate transportation funds. RTPAs can be Councils of Government (COGs), Local Transportation Commissions (LTCs), Metropolitan Planning Organizations (MPOs), or statutorily-created agencies.

Rehabilitation: Activities which preserve the quality and structural integrity of a roadway by supplementing normal maintenance activities.

Relinquishment: A transfer of the State’s right, title, and interest in and to a highway, or portion thereof, to a city or county.

Remote Atmospheric Weather System (RAWS): This ITS system collects atmospheric forecasting data to analyze weather patterns.

Resurfacing: A supplemental surface or replacement placed on an existing pavement to restore its riding qualities or increase its strength.

Ridesharing: Transportation system management (TSM) technique providing the systems and management to facilitate carpooling, vanpooling, buspooling and increasing transit usage.

Right-of-Way: Real estate acquired for transportation purposes, which includes the facility itself (highway, fixed guideway, etc.) as well as associated uses (maintenance structures, drainage systems, roadside landscaping, etc.)

Roadbed: That portion of the roadway extending from curb line to curb line or shoulder line to shoulder line. Divided highways are considered to have two roadbeds.

Roadside: A general term denoting the area adjoining the outer edge of the roadbed. Areas between the roadbeds of a divided highway may also be considered roadside.

Roadway: That portion of the highway included between the outside lines of the sidewalks, or curbs and gutters, or side ditches including also the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

Road Weather Information Systems (RWIS): This ITS system collects pavement temperature, visibility, wind speed and direction and precipitation data and presents the data in a useable format to transportation system operators, potentially for the travelling public.

Rolling terrain: A combination of horizontal and vertical alignments causing heavy vehicles to reduce their speed substantially below that of passenger cars but not to operate at crawl speeds for a significant amount of time.
**SAFETEA-LU:** Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. SAFETEA-LU is the federal transportation act signed into law in August 2005.

**Safety Index:** The traffic Safety Index is a tool for evaluating safety benefits which provides a measure of the accident dollars saved by the motorist expressed as a percentage of the sum of right-of-way (R/W) and construction costs.

**Safety Roadside Rest:** A roadside area provided for motorists to stop and rest for short periods. It includes paved parking areas, drinking water, toilets, tables, benches, telephones, information panels, and may include other facilities for motorists.

**Scenic Corridor:** A band of land which is visible from and generally adjacent to, but outside of, the highway right of way having scenic, historical, or other aesthetic characteristics.

**Scenic Highway:** An officially designated portion of the State Highway System traversing areas of outstanding scenic beauty and/or historic character. Designations include: All-American Road, National Scenic Byway, U.S. Forest Service Byway, Historic Highway and State Scenic Highway.

**Segment:** A portion of highway identified for analysis that is homogenous in nature.

**Separate Turning Lane:** An auxiliary lane for traffic in one direction, which has been physically separated from the intersection area by a traffic island.

**Shoulder:** The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

**Signalized Intersection:** A place where two roadways cross and have a signal controlling traffic movements.

**Skew Angle:** The complement of the acute angles between two centerlines which cross.

**Spacing:** The distance between consecutive vehicles, in a given lane, measured front to front.

**Speed Change Lane:** An auxiliary lane, including tapered areas, primarily for the acceleration or deceleration of vehicles entering or leaving the through traffic lanes.

**State Freeway and Expressway System:** The Statewide system of highways declared by the Legislature to be essential to the future development of California.

**State Highway Operation and Protection Program:** A four-year program limited to projects related to state highway safety and rehabilitation.

**State Implementation Plan (SIP):** Plan required by the Federal Clean Air Act of 1970 to attain and maintain national ambient air quality standards.

**State Routes:** State highways within the State, other than Interstate and US routes, which serve intrastate and interstate travel. These highways can be freeways, expressways or conventional highways.

**State Title:** Property purchased by the State and held in fee title.

**State Transportation Improvement Program (STIP):** Biennial document, adopted by the California Transportation Commission (CTC), which provides the schedule of projects for develop over the upcoming five years.

**Strategic Highway Network (STRAHNET):** A network of highways important to the United States strategic defense policy and which provides defense access, continuity, and emergency capabilities for the movement of personnel, materials and equipment in both peace time and war time.

**Surface Transportation Assistance Act Network (STAA):** The National Network (NN), Terminal Access (TA) and Service Access Route make up this network. These routes allow STAA trucks.

**Surface Transportation Assistance Act (STAA) Trucks:** This act required states to allow larger trucks on the National Network (NN) which is comprised of the Interstate State plus the non-Interstate System Federal-aid Primary System. “Larger trucks” includes (1) doubles with 28.5-foot trailers, (2) singles with 48-foot semi-trailers and unlimited kingpin-to-rear axle (KRPA) distance, (3) unlimited length for both vehicle combinations, and (3) width up to 102 inches.

**Telecommuting:** The substitution, either partially or completely, of transportation to a conventional office through the use of computer and telecommunications technologies (telephones, personal computers, modems, facsimile machines, electronic mail, etc.)

**Terminal Access (TA) Routes:** Terminal Access routes are portions of State routes, local roads, that can accommodate STAA trucks. TA route allow STAA trucks to (1) travel between NN routes, (2) reach a truck’s operating facility, or (3) reach a facility where freight originates, terminates, or is handled in the transportation process.

**Topography:** The surface features of the land that a highway passes through (i.e. the topographic features of the surrounding land). For the purposes of a Transportation Concept Report, terrain is classified into one of three categories: flat, rolling or mountainous. The terms “terrain” and “grade” are not interchangeable (see “Grade”).

**Flat:** The land surrounding the highway is level or nearly level. The most typical example of flat terrain is a valley.

**Rolling:** Land in the vicinity of the highway is composed of low hills, dips and rolls, or other types of undulations. Rolling terrain is found in many locations, including the foothills surrounding the Central Valley of California.

**Mountainous:** Terrain with extensive, steep slopes (often in excess of 6 percent) that may rise sharply on one side of the highway while dropping away rapidly on the other.
Three C Process (3C): “Continuing, cooperative and comprehensive” planning process. Required of metropolitan planning organizations (MPOs) as a condition for receiving federal capital or operation assistance.

Traffic Accident Surveillance and Analysis System (TASAS): A system that provides a detailed list and/or summary of accidents that have occurred on highways, ramps, or intersections in the State Highway System. Accidents can be selected by location, highway characteristics, accidents data codes or any combinations of these.

Traffic Conditions: Any characteristics of the traffic stream that may affect capacity or operation, including the percentage composition of the traffic stream by vehicle type and driver characteristics (such as the differences between weekday commutes and recreational drivers).

Traffic Lane: The portion of the traveled way for the movement of a single line of vehicles.

Traffic Markings: All lines, words, or symbols (except signs) officially placed within the roadway to regulate, warn, or guide traffic.

Traffic Sign: A device mounted on a fixed or portable support, conveying a message or symbol to regulate, warn, or guide traffic.

Traffic Signal: A traffic control device regulating the flow of traffic with green, yellow and red phases.

Transit: Generally refers to passenger service provided to the general public along established routes with fixed or variable schedules at published fares. Related terms include: public transit, mass transit, public transportation, urban transit and paratransit.

Transportation Concept Report (TCR): Planning document that identifies current operating conditions, future deficiencies, route concept, concept level of service (LOS) and conceptual improvements for a route or corridor.

Transportation Control Measure (TCM): A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMS include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances and the use of cleaner burning fuels in motor vehicles.

Transportation Demand Management (TDM): “Demand-based” techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of the peak hours.

Transportation Equity Act for the 21st Century (TEA21): As an addition to Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, TEA21, which was enacted June 9, 1998, authorizes highway, highway safety, transit and other surface transportation programs for the following 6 years.

Transportation Improvement Program (TIP): Federally required annual schedule of projects for transportation development for the upcoming five years. A project must be in the appropriate regional-Federal TIP to receive Federal or CTC funding.

Transportation Management Center (TMC): A focal point that can monitor traffic and road conditions, as well as train and transit schedules, and airports and shipping advisories. From here, information about accidents, road closures and emergency notification is relayed to travelers.

Transportation Permits: The Department of Transportation has the discretionary authority to issue special permits for the movement of vehicles/loads exceeding statutory limitations on the size, weight and loading of vehicles contained on Division 15 of the California Vehicle Code. Requests for such special permits require the completion of an application for a Transportation Permit from the office Traffic Operations-Transportation Permits. Route Classes for length are labeled yellow, green, blue, brown and red. Route Classes for weight are labeled purple, orange and green. See http://www.dot.ca.gov/hq/traffops/permits/ for more information.

Transportation Stakeholder: In transportation, stakeholders include FHWA, CTC, RTPAs, transportation departments, transportation commissions, cities and counties, Native American Tribal Governments, economic development and business interests, resource agencies, transportation interest groups, the public and the Legislature.

Transportation System Development Program (TSDP): A TSDP identifies a reasonable, comprehensive and effective range of transportation improvements on state highways. It is the Department’s statement of priorities for improvements in negotiating and joint planning with regional agencies.

Transportation System Management (TSM): TSM is 1) a process oriented approach to solving transportation problems considering both long and short range implications; and 2) a services and operations process oriented in which low capital, environmentally-responsive, efficiency-maximizing improvements are implemented on existing facilities.

Travel Way: The portion of the roadway for the movement of vehicles, exclusive of shoulders.

Troposphere Ozone: Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels, solvents, petroleum processing and storage and pesticides.

Two Way Stop Control: Traffic control at an intersection where the minor approaches are controlled by stop signs but the major street is not.

Typical Section: Depiction of the basic (or typical) design elements/features for an existing or planned facility. Typical sections can be prepared for a variety of facilities, including: highway sections, lane transition areas, medians, interchanges, pavement structural sections, bike paths and drainage systems.

US Department of Transportation: The principal direct Federal funding agency for transportation facilities and programs. Includes the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Federal Railroad Administration (FRA), and other.
**US Route:** A network of highways of statewide and national importance. These highways can be freeways, expressways or conventional highways.

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**Vehicle Miles Traveled (VMT):** Used in trend analysis and forecasts. (1) On highways, a measurement of the total miles traveled in all vehicles in the area for a specific time period. It is calculated by the number of vehicles multiplied by the miles traveled in a given area or on a given highway during the time period. (2) In transit, the number of vehicle miles operated on a given route or line or network during a specific time period.

**Vehicle Occupancy:** The number of people aboard a vehicle at a given time; also known as auto or automobile occupancy when the reference is to automobile travel only.

**Vista Point:** A paved area beyond the shoulder, which permits travelers to safely exit the highway to stop and view a scenic area. In addition to parking areas, trash receptacles, interpretive displays, and in some cases rest rooms, drinking water and telephones may be provided.

**Volume:** The number of vehicles passing a given point during a specified period of time.

**Volume/Capacity Ratio (V/C Ratio):** The ratio of flow rate to capacity for a transportation facility.

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**Weaving:** The crossing of traffic streams, moving in the same general direction, accomplished by merging and diverging.

**Weaving Section:** A length of roadway over which traffic streams cross paths through lane-changing maneuvers, at one end of which two one-way roadways merge and at the other end of which they separate.

**Weigh-in Motion (WIM):** Technology that determines a vehicle’s weight without requiring it to stop on a scale.