

PROJECT DEVELOPMENT GLOSSARY

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A

Access control	<p>Two methods of Managing access control:</p> <ol style="list-style-type: none"> 1) Managed access control M/A this is a prescribed method of regulating access where incorporated Cities or Towns have access permitting authority and outside of those limits WSDOT has permitting authority. 2) Limited Access (L/A) - this method of regulating access <p>(Control of access) - The condition where the right of owners of abutting land have access to a highway that is either full, partial or modified control.</p>
L/A - full	<p>Preference is given to through traffic by providing access connections only with selected public roads and by prohibiting crossing at grade and direct private driveway connections, i.e. freeways have full access control.</p>
L/A - partial	<p>Preference given to through traffic to a degree that in addition to access connections with selected public roads, there may be some crossing at grade and some private driveway connections. No direct commercial access is allowed</p>
L/A - modified	<p>Modified access control is intended to prevent further deterioration in the safety and operational characteristics of existing highways due to traffic interference by limiting the number and location of access points to the highway. Direct commercial access is allowed</p>

Access Control Classification

In January of 1993, the Washington State Department of Transportation adopted the new Chapter 468-52 WAC titled, "Highway Access Management--Access Control Classification System and Standards". The WAC can be consulted to see the classification system and standards in its entirety. The table below provides a summary.

ACCESS CONTROL CLASSIFICATION SYSTEM - SUMMARY CHAPTER 468-52 WAC ✦ (9-22-92)					
Highway Classification	Functional Characteristics	Posted Speed Limit (MPH)	Typical Planned Median Treatment	Planned Intersection Spacing *	Minimum Private Connection Spacing *
1	High speed, high volume, long trips serving interstate, inter-regional, and inter-city travel. Service to abutting land subordinate to service of major traffic movements.	50 to 60	Restrictive, where multi-lane is warranted.	1.0 mile	1320 ft. One per parcel
2	Medium to high speeds, medium to high volumes, medium to long trips serving inter-regional, inter-city and intra-city travel. Service to abutting land subordinate to service of traffic movement.	Urban: 35 - 50 Rural: 45 - 55	Restrictive (as above)	0.5 mile	660 ft. One per parcel
3	Moderate speeds, moderate volumes, short trips serving inter-city, intra-city, and inter-community travel. Balance between land access and mobility. Used where land use is less than maximum build out, but development potential is high.	Urban: 30 - 40 Rural: 45 - 55	Restrictive (as above) TWLTL may be utilized as conditions warrant.	Rural: 0.5 mile Urban: 0.5 mile/less with signal progression analysis	330 ft.
4	Moderate speeds, moderate volumes, shorter trips serving inter-city, intra-city, and inter-community travel. Balance between land access and mobility. Used where level of development is more intensive and major land use changes less likely than on class 3.	Urban: 30 - 35 Rural: 35 - 45	Non-restrictive	Rural: 0.5 mile Urban: 0.5 mile/less with signal progression analysis	250 ft.
5	Low to moderate speeds, moderate to high volumes, primarily short trips serving intra-city and intra-community travel. Service of land access dominant function.	25 to 35	Non-restrictive	0.25 mile/less with signal progression analysis	125 ft.

✦ NOTE: This table is for summary purposes only and was not included in the final WAC.

* See text of WAC for exceptions.

Accessibility	<ol style="list-style-type: none"> 1) A measure of mobility 2) Total travel times between areas weighted by the relative attractiveness of the destination 3) Barrier free facilities which can be used by handicapped persons or wheelchair users 4) A measure of the ability of the public transportation users to access transit modes
Active Transportation	<p>“Active transportation” is a means of getting around that is powered by human energy, primarily walking and bicycling.</p> <p>https://www.transportation.gov/mission/health/active-transportation</p>
Activity center	A major concentration of employment and commercial activity, which may be found in suburban areas as well as in the downtown areas.
Activity	Any subdivision of a project whose execution requires time and other resources.
ADA	American with Disabilities Act
Added Revision Report, ARR	A technical report which documents specific analyses in order to approve or reject a proposed revision to freeway access. See Design Manual Chapter 550. Note: Access Revision Report was previously known as the Interchange Justification Report, IJR.
Aging	A monthly plan of how dollars and workforce will be spent for a work item phase, many people outside of the organization would simply refer to this as a budget.
Alignment	The specific path a highway will take between two designated points within a corridor.
Alley	Narrow lane between houses or buildings giving access to the rear of those houses or buildings
ANSI	American National Standards Institute

Arterial	A type of roadway typically divided into principal and minor arterials.
Principal Arterial	Provides either full or semi-controlled access and includes the freeway system and all State routes. Principal arterials form the backbone of the highway system and should be design to provide as high a level of service as is practicable. Principal arterials provide for movement between urban and rural intra-County population centers. As such, this roadway facility classification predominantly serves "through" traffic with minimum direct service to abutting land uses. The Washington State Ferry system routes act as principal arterials connecting one urban area within the region to another.
Minor Arterial	Minor arterials provide access to the principal arterial and freeway system. They provide a lower level of travel mobility than principal arterials to major communities within the County. They provide primary access to or through communities of high density residential, commercial or retail or industrial land areas. They provide access to abutting properties at pre-determined locations. Trip length on minor arterials generally exceeds five miles. Minor arterials provide routes for public transit systems between major communities within the County.
ARTBA	American Road and Transportation Builders Association
Articulated bus	An extra-long, high capacity segmented bus that has the rear portion flexibly but permanently connected to the forward portion with no interior barrier to hamper movement between the two parts. The seated passenger capacity is 60 to 80 passengers and a length of 60 to 70 feet. The turning radius for an articulated buys is usually less than that of a standard urban or intercity bus.
ATB	Asphalt Treated Base
ATMS	Advanced Traffic Management Systems
Auxiliary roads	Roads acting as a subsidiary to the highway. Includes frontage roads and speed-change lanes.
Average vehicle occupancy	The number of persons divided by the number of vehicles traveling past a selected point over a predetermined time period, usually expressed to two or three significant digits (i.e., 1.2 or 1.26).

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B

BAC	Bicycle Advisory Committee
Bascule	A drawbridge, counterbalanced so that when one end is lowered the other is raised.
Baseline need	the primary reason a project has been proposed at a location
Business Access & Transit Lanes (BAT Lanes)	BAT lanes help buses and other vehicles move more efficiently through traffic and provide better access to businesses. These curb lanes, located along the route, are expressly reserved for turning vehicles and buses.
Benefit-cost ratio	The ratio of the dollars of discounted benefits achievable to a given outlay of discounted costs.
BFA	Bicycle Federation of America
Bicycle	Any device propelled solely by human power upon which a person or persons may ride, having two tandem wheels, either of which is 16 inches or more in diameter, or three wheels, any one of which is more than 20 inches in diameter.
bicycle route	A system of facilities that is used or has a high potential for use by bicyclists or that is designated as such by the jurisdiction having the authority. A series of bicycle facilities may be combined to establish a continuous route and may consist of any or all types of bicycle facilities.
bike lane	A portion of a highway or street identified by signs and pavement markings as reserved for bicycle use.
Binder course	A plant mix of graded aggregate (generally open graded) and bituminous material, which constitutes the lower layer of the surface course.
Bituminous Coating	<p>Prime Coat - an application of low viscosity liquid bituminous material to coat and bind mineral particles preparatory to placing a base or surface course.</p> <p>Seal Coat - a thin treatment consisting of bituminous material usually limited to sand-seal, chip seal, slurry seal, contrast seal, and fog seal.</p> <p>Contrast Seal - a seal coat designed primarily to provide color or texture contrast with an adjacent surface.</p> <p>Fog Seal - a thin application of bituminous material without cover aggregate.</p> <p>Slurry Seal - a seal coat consisting of a semi fluid mixture of asphaltic emulsion and fine aggregate.</p> <p>Tack Coat - an application of bituminous material to an existing surface to provide bond with a superimposed course.</p>
Bituminous Concrete	a designed combination of dense graded mineral aggregate filler and bituminous cement mixed in a central plant, laid and compacted while hot.
BMPs	Best Management Practices
BST	Bituminous Surface Treatment

Budget	<p>a : a statement of the financial position of an administration for a definite period of time based on estimates of expenditures during the period and proposals for financing them</p> <p>b : a plan for the coordination of resources and expenditures</p> <p>c : the amount of money that is available for, required for, or assigned to a particular purpose</p>
Current Law Budget	current law budget is the current revenue stream, if the project is in current law it is funded; this includes projects carried forward from previous biennium(s); each region has a funding allocation and the region determines how to allocate those funds to projects on their prioritization lists by sub-program.
New Law Budget	new law budget is for proposed projects and is based on new state revenue sources in order for projects not funded by current law budget to receive funding; the new funding sources come from the legislature or may be self-imposed via public vote, etc.
NOTE:	when preparing budgets each region's programming office needs to look several bienniums ahead, even though they are only budgeting one biennium at a time, this needs to be done to determine how many dollars to spend in PE, R/W and CONSTRUCTION phases. The amount spent in each phase (PE, R/W and CONSTRUCTION) changes every biennium.

C

CAC	Crash Analysis Corridor
CAL	Crash Analysis Location
CEVP	Cost Estimate Validation Process Using input from various disciplinary experts costs associated with potential risks to a project are assessed and the probability of delivering a project at a given cost and by a given date is determined.
CFR	Code of Federal Regulations
Cantilever	A projecting structure as a beam supported at one end. A structural member as a beam that projects beyond the fulcrum and is supported by a balancing member or downward force behind the fulcrum. A bracket or block supporting a balcony or cornice.
Cantilever bridge	A bridge formed by two projecting beams or trusses that are joined in the center by a connecting member and are supported on piers and anchored by counterbalancing members.
Capacity, design (or roadway capacity)	Maximum number of vehicles (vehicular capacity) or persons (person capacity) that can pass over a given section of roadway in one or both directions during a given period of time under a prevailing environmental, roadway, and roadway user conditions, usually expressed as vehicles per hour or persons per hour. (Operational capacity of an HOV lane should be below this).
Capacity, operational	Maximum number of vehicles (vehicular capacity) or persons (person capacity) that can pass over a given section of roadway in one or both directions during a given period of time under a prevailing management strategy that assures an acceptable free-flow level of service, usually expressed as vehicles per hour or person per hour. (This should be the goal for operating HOV facilities).
Carpool	A motor vehicle occupied by two or more people traveling together
Channelization	The separation or regulation of conflicting traffic movements into definite paths of travel by use of pavement markings, raised islands or other means.
Clear zone	Clear Zone-"...a roadside zone clear of hazardous objects or conditions for a distance consistent with the speed, traffic volume, and geometric conditions of the site." (see FHWA-TS-81-216, Functional Requirements of Highway Safety Features.)
Collector	A collector provides the primary access to a minor arterial for one or more neighborhoods or non-residential areas. Collectors distribute trips to and from the arterial system.

Collector distributor road	A parallel roadway designed to remove weaving from the mainline reduce the number of mainline entrances and exits. It may be within a single interchange, two closely spaced interchanges or continuous through several interchanges. Collector distributor roads that connect three or more interchanges should be two lanes wide; all others may be one or two lanes in width depending on capacity requirements. Intermediate connections to the mainline should be considered for long collector distributor roads. Where special conditions require two-lane collector road off connections, a reduction in the number of freeway lanes, the use of an auxiliary lane, or a combination of these, the design should conform to other standards for off connections.
Commuter rail	Passenger rail service that operates within a metropolitan region on tracks usually part of the general railroad system (shared with freight).
Compliance rate	Number of HOVs on an HOV facility divided by the number of total vehicle on the HOV facility (eligible and ineligible), expressed as a percent.
Congestion pricing	Road pricing based on congestion; typically charge more for peak periods.
Contextual need	any identified need that is not a baseline need
Corridor	One of several general paths a highway can take to satisfy the route requirements and has one or more specific alignment alternatives. A corridor can include, as a whole or in part, any existing state highway facility, county highway facility, city street, new alignments or any combination of these
CPM	Critical Path Method - a scheduling technique for projects with multiple stages and/or activities
CRA	Cost Risk Assessment
CRAB	County Road Administration Board (CRAB) CRAB is an oversight agency for county road organizations. As part of that function, it administers the Rural Arterial and the County Arterial preservation programs for the state.
Critical Path	a path connecting all activities which have minimum or zero float/slack times. The critical path is the longest path through the network.
Critical Path Techniques	Are used to represent graphically the multiple relationships between stages in complicated projects. The graphical networks show the dependencies or <i>precedence relationships</i> between activities and can be used to control and monitor progress, cost and resources or projects. Critical path techniques identify the most critical activities in projects. One specific critical path technique is the Critical Path Method, CPM. Related terms: activity, duration, and slack time.
CTR	Commute Trip Reduction
Curves	Provides the required change in direction in the form best suited to the operating characteristic of the transportation facility. See also Horizontal Curves and Vertical Curves .

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D

DDHV	Direction Design Hourly Volume
de-bond	Breaking the bond between layers (or materials)
DEIS	Draft Environmental Impact Statement
Delay	The increased travel time experienced by a person or vehicle, due to circumstances that impede the desirable movement of traffic. It is measured as the time difference between actual travel time and free-flow travel time.
Density	The number of vehicles per mile on the traveled way at a given instant.
Design capacity	The maximum volume of traffic that the roadway can handle.
Design Concurrence	
Design Approval	project design milestone; required regardless of delivery method. WSDOT Design Manual, Chapter 300
Design Documentation Package, DDP	The portion of the Project File, including Design Approval and Project Development Approval that will be retained long term in accordance with WSDOT document retention policies. Depending on the scope of the project, it contains the Project Summary and some or all of the other documents discussed in Chapter 300.
Design speed	The maximum safe speed when conditions are so favorable that the design features of the highway govern.
Design year	The year for which a project is designed. In transportation projects, the design year is typically taken to be 20 years from the time of construction. Using the traffic volumes estimated in the future allows engineers to design the project to meet those predicted needs. In effect, the design life of the project is taken to be 20 years. What actually happens in the future may differ from predictions.
Direct access ramp	A grade-separated on or off ramp that provides local access from a street or transit support facility to the freeway HOV facility.
Diverging	The dividing of a single stream of traffic into separate streams.
Diverging Diamond Interchange, DDIC	a type of diamond interchange in which the two directions of traffic on the non-freeway road cross to the opposite side on both sides of the bridge at the freeway.
Divided highway	A highway with separated roadbeds for traffic in opposing directions.
DOJ	The U.S. Department of Justice
Duration	The time required to perform an activity.
DWL	Design Working Load

E

EAC	Enhancement Advisory Committee
Earned Value Analysis	“Earned Value” is a project management technique. It measures what you got, for what you actually spent; the value of the work accomplished; the measured performance; the Budgeted Cost of Work Performed (BCWP).
EIS	Environmental Impact Statement - report that details any adverse economic, social, and environmental effects of a proposed transportation project for which federal funding is being sought. Adverse effects could include air, water, or noise pollution; destruction or disruption of natural resources; adverse employment effects; injurious displacement of people or businesses; or disruption of desirable community or regional growth.
Eminent domain	The power to take private property for public use without the owner's consent upon payment of just compensation.
Emphasis patrols	Law enforcement efforts focused on a small segment of highway to enforce traffic laws.
EPA	Environmental Protection Agency
ESA	Endangered Species Act
Express bus service	Bus service with limited stops, either from a collector area directly to a specific destination or in a particular corridor with stops at major transfer points or activity centers. Express bus service is usually routed along freeways and/or HOV facilities where available.
Expressway	A divided arterial highway for through traffic with full or partial control of access and generally with grade separations at major intersections.
Extra work	An item of work not provided for in the contract as awarded but found by the engineer to be essential for the satisfactory completion of the contract within its intended scope.

F

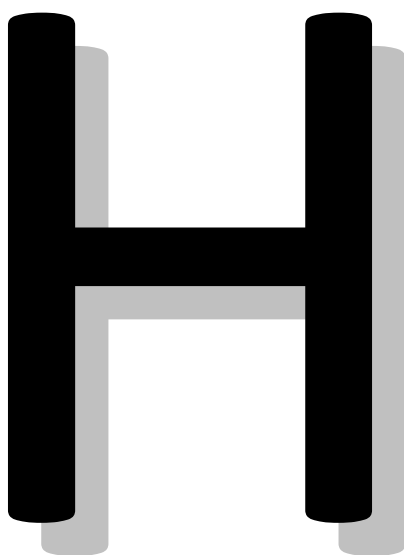
Feasibility study	A study to assess the feasibility of implementing various alternatives to address an identified purpose and need.
FEIS	Final Environmental Impact Statement
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration - division of United States Department Of Transportation (USDOT) that funds highway planning & programs.
Fixed guideway	Any urban transportation system composed of vehicles that can operate only on their own guideways, which are constructed for that purpose. Examples include light rail, monorail, etc.
Flexible Pavement	Typically Asphalt Concrete Pavement (aka Hot Mix Asphalt). A pavement structure that maintains intimate contact with and distributes loads to the subgrade and depends upon aggregate interlock, particle friction, and cohesion for stability.
Flex-time	Allows employees the discretion to choose their own working hours to avoid peak-period traffic
Flyover ramp	A grade-separated, usually high-speed, facility that provides ingress and egress over a freeway mainline facility to a local arterial street, another freeway, or other facility. These can be general-purpose facilities and/or dedicated for HOV use.
FONSI	Finding Of No Significant Impact
Force account work	Prescribed work paid for based on actual costs and appropriate additives.
Freeway	A divided arterial highway with full control of access.
Fringe parking (Peripheral parking)	A parking facility located immediately outside the central business district, where personal vehicles may be parked and travelers may continue their trips to downtown via transit, carpool, or vanpool.
Frontage 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.
FTA	Federal Transit Administration - division of USDOT that funds transit planning and programs, (formerly UMTA).
Full diamond interchange	An interchange shaped like a diamond with on and off ramps for both directions of travel.
Functional Class	Functional Class Map-a State of Washington functional class system that consists of four classifications: Interstate, Principal Arterial, Minor Arterial and Collector. A functional classification system facilitates both the day-to-day decisions and long-range planning related to land use and transportation.
FY	Fiscal Year

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G

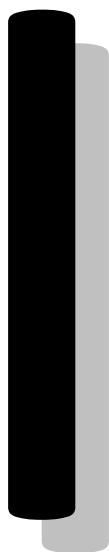
GIS	Geographic Information Systems, GIS is software that combines tabular information with graphic data to model geographic reality. The primary use of GIS is to manage information, analyze data, and, most important, communicate visually different views of the same data for different audiences.
GMA	Growth Management Act (1990, amended 1991) declares "in the public interest that citizens, communities, local governments, and the private sector cooperate and coordinate with one another in comprehensive land use planning". GMA relates land-use, transportation, capital facilities, housing, public utilities, and environmental protection in its requirements.
Gore	The term "gore" generally refers to the area between a through roadway and an exit ramp, the term sometimes is also used to refer to the similar area between a through roadway and a converging entrance ramp.
GPS	Global Positioning System, GPS is a constellation of satellites orbiting the earth twice daily transmitting precise time and position. With a GPS receiver, users can pinpoint their location by bouncing a signal off three satellites, measuring the interval and triangulating position.
GSP	General Special Provisions,
Guaranteed ride home program	A program providing an assured trip for commuters not able to use their normal carpool, vanpool, or bus commute mode because of personal emergencies or work obligations. This can be accomplished through the use of company cars, taxis, or rental vehicles.

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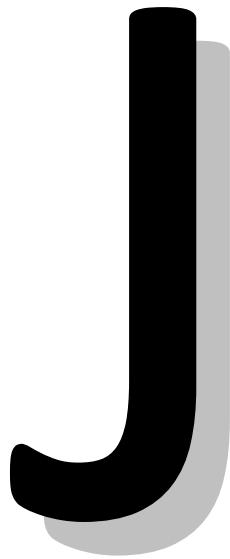


HAER	Historical American Engineering Record, a national inventory record kept by the Department of Interior in Washington, D.C. or landmarks, structures or other features of historical value such as bridges, etc.
HCM	Highway Capacity Manual
HCT	High Capacity Transit
Headway	The time interval between successive vehicles (measured from bumper to bumper), moving along the same lane in the same direction on a roadway, usually expressed in seconds.
Heavy Rail	"Heavy" refers to how many people can ride the train not how much the train weighs. Heavy rail operates on separate right-of-way than other transportation modes.
HGV	Heavy Goods Vehicles

High-Speed Rail	<p>Passenger trains that operate on their own right of way for long distances between cities and at speeds of 125 miles per hour (about 200 kilometers per hour). EXAMPLE: Amtrak's Metroliner service between Washington, D.C. and New York City. Track and safety improvements would be required to make high-speed rail available in the Pacific Northwest. Trains in our region of the country currently operate at a mandated maximum speed of 79 mph.</p>
Horizontal alignment	The straight lines (tangents) and curves of the road.
Horizontal curves	<p>Usually arcs of circles or spirals. Generally, a circular arc makes up the greater portion of the curve. The arcs of varying radii or spirals provide a gradual transition between the circular arc and tangents.</p> <p>Simple curves consist of a circular arc tangent to two straight sections of a route...spiral transitions are sometimes used at the ends of circular arcs.</p> <p>Broken-back curves consist of an arrangement of curves having a short tangent between two curves in the same direction (undesirable in design).</p> <p>Compound curves two or more consecutive curves that are tangential...a two-arc simple curve having its centers on the same side of the common tangent at the junction; a multi-compound curve has three or more centers on the same side of the curve.</p> <p>Reverse curves a two-arc simple curve having its centers on opposite sides of the common tangent at the junction;</p>
HOV	High Occupancy Vehicle. Typically any vehicle that carries more than one person, which is called an SOV (Single Occupant Vehicle). HOV lanes are typically reserved for transit and vehicles carrying 2 or more persons, sometimes 3 or more persons. Motorcycles are also allowed to use the HOV lanes in the State of Washington.
HOV Lane	High Occupancy Vehicle Lane. Reserved for use by high occupancy vehicles (HOVs) either all day or during specified periods (e.g. during the rush hours). An HOV for the purpose of the lane may be a bus, carpool, vanpool or motorcycle.
HSP	Highway System Plan



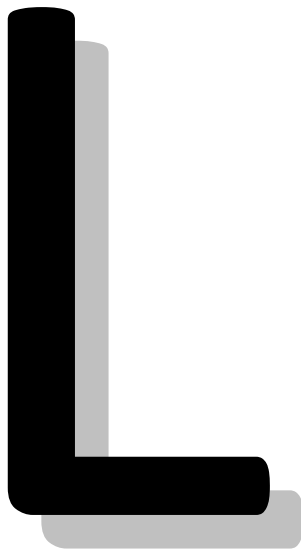
IAL	Intersection Analysis Location
ICE	Intersection Control Evaluation
Interchange, I/C	A separated grade intersection that allows traffic to move freely from one road to another without crossing another line of traffic.
IT	Information Technology
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation Systems
IVHS	Intelligent Vehicle Highway Systems - technologies that focus on monitoring, guiding or operating motorized vehicles.



JMCPA	Job Mix Compliance Price Adjustment
JOC	Job Order Contract. JOCs are competitively bid, indefinite quantity, indefinite delivery, and fixed-price construction contracts. They combine many contracts into one that is administered by one project team. They differ from traditional "requirements" contracts in two ways: they cover all types of construction, maintenance, repair and renovation assignments under a single contract, and the contracts are in place before the owner identifies specific requirements.
JRPC	Joint Regional Policy Committee

K

Kiosk	An open pavilion, gazebo, or other public location on which transportation information can be displayed to the public. Displays may involve several mediums: paper, interactive computers, electronic message displays, etc.
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Lane	<p>A portion of street or highway, usually indicated by pavement markings, that is intended for one line of vehicles.</p> <ul style="list-style-type: none"> • Auxiliary lane the portion of roadway adjoining the traveled way for parking, speed change, turning, storage for turning, weaving, truck climbing, or other purposes supplementary to through traffic. Auxiliary lanes are used to comply with capacity requirements; maintain lane balance; accommodate speed change; weaving and maneuvering for entering and exiting traffic; or to encourage carpools, vanpools, and use of transit. • Bus lane (bus primary lane, preferential bus lane) A highway or street lane reserved for buses. • Bypass lane A bypass around a queue of vehicles at ramps or mainline meters. • Concurrent flow lane An HOV lane (commonly the inside lane) that is operated in the same direction as the adjacent mixed-flow lanes, and designated for use during at least a portion of the day. The lane is separated from the adjacent freeway by a standard lane stripe (termed non-separated lane) or buffer. • Contraflow lane An HOV lane operating in a direction opposite to the normal flow of traffic (commonly the inside lane in the off-peak direction of travel), designated for peak direction travel during at least portions of the day. For freeway applications, the lane is separated by plastic pylons or movable barriers. • General purpose lane (also known as multi-use lane) Lanes available for use by all vehicles (trucks, SOVs, HOVs, buses, etc.) • HOV lane See HOV lane • Shoulder lane An HOV lane created on an existing median or outside shoulder of a freeway. • Weaving lane Maneuvering lane for entering and exiting traffic, also see collector-distributor.
LDD	Local Development District
Least Cost Planning	A planning concept that provides a consistent framework in which alternative resource strategies can be evaluated.

Level of Service (LOS)	The level of service is a measure of how well a transportation facility is serving the volume of vehicles using it. A descriptive measure of the quality and quantity of transportation service provided to users. Quantifiable characteristics such as travel time, travel cost, number of transfers, etc. are considered.
Leveling course	The layer of material placed on an existing surface to eliminate irregularities prior to placing an overlaying course.
LID	Local Improvement District
Light rail	(LRT - Light Rail Transit) An urban railway system characterized by its ability to operate single cars or short trains in streets or exclusive right-of-way, capable of discharging passengers at track or car floor level. "Light" refers to how many people can ride the train, not how much the train weighs. Trips start and end in the same metropolitan area. Light rail train cars generally are shorter than heavy rail cars and carry from 6,000 to 20,000 passengers per track hour. EXAMPLE: Portland Oregon's MAX system.
Linear Schedule	a graphical scheduling method focusing on continuous resource utilization in repetitive activities
Line haul	That portion of a commute trip that is express (nonstop) between two points.
LMC	Latex Modified Concrete (LMC) - a Portland cement concrete modified by the addition of one item, latex. This latex is a milky-white emulsion known by the chemical name of styrene-butadiene. It is the "film-forming" properties of this latex in the hardened state that provides the desired reduction in permeability.
LRP	WSF's "Long Range Plan" provides a blueprint to guide WSF's investments and service for the next 20 years. The Long Range Plan is updated once every 10 years.
LSDC	Low Slump Dense Concrete
LTC	Legislative Transportation Committee, http://ltc.leg.wa.gov/default.asp
Luminaire	Street light.

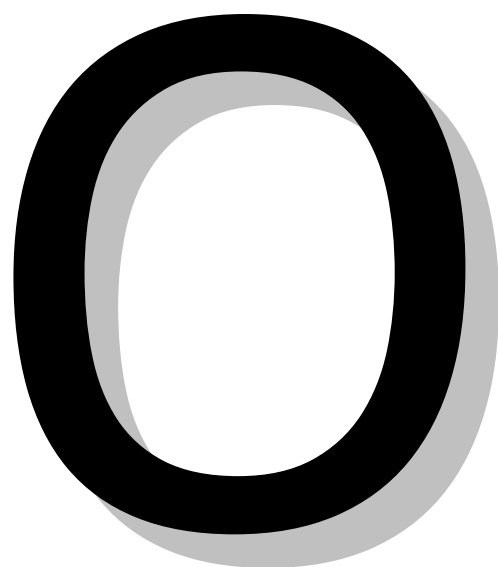
M

Macadam	A layer of coarse, graded, angular mineral aggregate with a filler of fine aggregate, interlocked by compaction.
MAR	Material Acceptance Report (MAR) - WSDOT Form, an example is in the Construction Manual.
MDL Master Deliverables List	a standardized Work Breakdown Structure; a comprehensive listing of project elements that is agreed to by all regions –This list is intended as a starting point for the creation of work breakdown structures (WBS) for projects & schedules.
Measures of Effectiveness (MOE)	Are measures or tests, which reflect the degree of attainment of particular objectives. Measures of Effectiveness (MOEs) are used to compare competing alternatives. MOEs are sometimes called performance measures.
Median	The portion of the divided highway separating the traveled way for traffic in opposite directions.
Merging	The converging of separate streams of traffic into a single stream.
Minor Arterial	Minor arterials provide access to the principal arterial and freeway system.
Minor collector	Minor collectors provide direct access to local roads and driveway access to abutting properties.
Mitigation	To compensate for wetlands destroyed during construction.
Mobility	Capable of moving from one place to another. As congestion increases, mobility decreases.
Mode	A particular form of travel (i.e., traveling by car, walking, bicycling, traveling by bus, traveling by carpool, traveling by train, etc.)
Mode shift	The shift of people from one mode to another (i.e., shifting from bus to carpool, or from single occupancy vehicles to HOVs or vice versa).
Mode split	A term that describes how many people use alternative forms of transportation. It is the percentage or breakdown of overall trips made by driving alone, carpool, vanpool, and transit.
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization (MPO)
MTD	Mass Transfer Device
MTP	Metropolitan Transportation Plan
Multi-modal	All types of transportation, typically refers to modes of travel other than the single occupant vehicle.
MVET	Motor Vehicle Excise Tax

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N

NAAQS	National Ambient Air Quality Standards - federal standards that set allowable concentrations and exposure limits for criteria pollutants. The purpose of these standards is to protect human health.
NCRS	Natural Resources Conservation Service (NCRS) ⇒ formerly called the Soil Conservation Service (SCS)
NDE	Non-destructive Evaluation
NEPA	National Environmental Policy Act
NHS	National Highway System - will be designated by Congress in 1995 and contain all Interstate routes, a large percentage of urban and rural principal arterials, and strategic highways and connectors. ISTEA funding will be available for NHS.
NMAP	No more acronyms please!
NPTS	Nationwide Personal Transportation Survey
NTS	National Transportation System - ISTEA called for the development of a "National Intermodal Transportation System that is economically efficient and environmentally sound, provides the foundation of the Nation to compete in the global economy, and will move people and goods in an energy efficient manner."
NUCA	National Utility Contractors Association
NWZSIC	National Work Zone Safety Information Clearinghouse



OAPU	Order Adjudicating Public Use (legally identifies property as necessary for public use - the OAPU is obtained during R/W acquisition - usually it is the first step in the condemnation process).
Objectives	Specific, measurable statements related to the attainment of goals.
O-D	Origin-Destination; an O-D study determines where trips originate and what their destination is. O-D studies are common and are a useful tool in planning for the future needs of the traveling public.
Off-peak direction	Direction of lower demand during a peak commuting period. In a radial corridor, the off-peak direction has traditionally been away from the CBD in the morning and toward it in the evening.
Operating Speed	Operating Speed = the highest overall speed at which a driver can travel on a given highway under favorable weather conditions and under prevailing traffic conditions without at any time exceeding the safe speed as determined by the design speed on a section by section basis.

P

Park and ride lot	A transit, carpool, and/or vanpool facility where people can park their auto and then ride transit or join a carpool or vanpool to work.
Parking management	Measures that favor vehicles used by carpools and vanpools, including the establishment of parking charges for commuter parking, preferential parking for pool vehicles, and the elimination of free or low-cost off-street parking at employment areas.
Parking supply	Total number of parking spaces within a given area or facility.
Parkway	An arterial highway for noncommercial traffic, with full or partial control of access, and usually located within a park or a ribbon of park like development.
Partial cloverleaf interchange	An interchange that has one or more loop ramps but less than 4 loop ramps as you find in a full cloverleaf interchange.
Pavement Management System, PMS	System to Rank-pavement condition to determine the year in which paving is needed. These sections are then ranked statewide. Letter codes used next to the pavement rank are: A for asphalt concrete, B for bituminous, C for Portland cement concrete pavements, G for gravel, A/C for ACP over concrete, B/C for BST over concrete
Pavement sections	Pavement thickness on a segment of roadway.
PCB	Prestressed Concrete Beam
PCCP	Portland Cement Concrete Pavement
Peak direction	Direction of higher demand during a peak commuting period. In a radial corridor, the peak direction has traditionally been toward the CBD in the morning and away from it in the evening.
Peak hour	The hour during which the highest volume of traffic is using the roadway under consideration.
Peak period	Portion of the day in which the heaviest demand occurs for a given transportation corridor or region, usually defined as a morning or evening period of two or more hours.
Plan	A proposed project or purpose for the accomplishment of an objective.
Planning	To make plans (formulate a scheme/program for accomplishment of goals).
PPMOC	Program Project Management Oversight Committee
Program	A group of projects having specified schedules and costs.
Programming	The process of developing a list of prioritized projects, with accurate cost estimates and spending plans, to put forward for the legislature to approve for funding. The heart of this effort is prioritizing projects within their various program and sub-program categories (preservation and improvement) safety, mobility, etc.

Principal Arterial	Provides either full or semi-controlled access and includes the freeway system and all State routes. Principal arterials form the backbone of the highway system and should be design to provide as high a level of service as is practicable. .
Project	The <i>Project Management Institute</i> defines a project to be "a <u>temporary</u> endeavor undertaken to create a <u>unique</u> product or service." Projects are distinct from "operations," which are usually <u>ongoing</u> and <u>repetitive</u> activities.
Project Manager	A project manager then is any person assigned to lead a team toward completion of a project . A project manager applies specialized knowledge, skills, tools, and techniques in order to meet customer expectations of a project .
Prospectus	Description of a project.
PSE / PS&E	Plans Specifications and Estimate. This is the set of contract plans with specifications and the design engineer's estimate for a project.
PSRC	Puget Sound Regional Council, PSRC develops policies and coordinates decisions about regional growth, transportation and economic development planning within King, Pierce, Snohomish and Kitsap counties. PSRC is composed of over 80 jurisdictions, including all four counties, cities and towns, ports, state and local transportation agencies and tribal governments within the region.
PTR	Permanent Traffic Recorder
Pumping	The ejection of foundation material, either wet or dry, through joints or cracks or along edges of rigid slabs, due to vertical movements of the slab under traffic.

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Q

Quality of Service (QOS)	Defined by the Highway Capacity Manual or by agreement. Intended to describe how well a facility or service operates or functions from the perspective of the user.
Queue	A string of people or vehicles. (Also, see bypass for queue bypass).

Current project management plan (and work plan) – Capital Program Development & Management Office (CPDM) Manual, Design Manual 305; monitor & control (Quarterly Project Report) Quality: Control – actions at the production levels to produce the desired quality and professional services. Assurance – actions to ensure prudent quality control procedures are in place. Verification – actions to ensure a Quality Management Plan (QMP) was implemented and followed.

R

Ramp metering	A procedure used to reduce congestion on a freeway facility by managing vehicle flow from local access entrance ramps. An entrance ramp is equipped with a metering device and traffic signal that allows vehicles to enter a facility at a controlled rate.
RAMS	Request for Approval of Materials Sources, a standard form used by WSDOT construction engineers/inspectors for gaining approval of Materials Sources, an example can be found in the Construction Manual.
Route Termini Index	A common location - description - name listing of the current statewide system.
RJC	Road Jurisdiction Committee.
R/U	R/U-Rural or Urban area as defined by Roadway Inventory.
RID	Road Improvement District.
RAP	Rural Arterial Program
Rapid rail	(RRT - Rapid Rail Transit) An urban railway system characterized by high-speed trains operating in exclusive right-of-way without grade crossings and served by platforms at stations.
RDP	Route Development Plan
Reconnaissance report	Investigation/exploration of an area for the purposes of building a highway.
Resurfacing	A supplemental surface or replacement placed on an existing pavement to restore its riding qualities or increase its strength.
Reversible lanes	Lanes that the direction of traffic can be reversed. I-5 has reversible lanes in Seattle.
RID	Road Improvement District.
Ride match	A carpool, vanpool, and buspool matching service. Commuters are matched with others having similar commute trip origins, destinations, and schedules.
Ride sharing	Also see carpool; sharing of one vehicle by two or more commuters. While the concept of ridesharing applies primarily to carpools and vanpools, it is sometimes applied to transit as well.
Right-of-way	Land owned by the state for the purposes of highway and transportation facility construction.
Risk Miles	Those sections of highway that have a higher probability of accidents over a continuous period of time.
Roadway sections	The shoulder and lane widths of a section of roadway.
ROD	Record of Decision

Route	A statutory designated highway, being a new highway or existing highway with new alignments, and is laid out as running to or by way of certain designated points, without specifying the particular way to be followed to or by way of such points. Each route may contain one or more corridors.
RTA	Regional Transit Authority - affiliated with Metro They are the "rail advocate" arm of Metro. Both light rail and other rail options.
RTC	Rails to Trails Conservancy
RTP	Regional Transit Project or a Regional Transportation Plan
RTPO	Regional Transportation Planning Organization
Rumble strips	Raised pavement markers that cause a vehicle to vibrate and generate noise to alert the driver of the vehicle.

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S

SB	SB-Steel Beam
SC & DI	Surveillance Control and Driver Information. A remotely operated system for monitoring and managing the operation of an HOV and/or freeway facility to better assure acceptable traffic operation and improved responsiveness to incidents. Major elements are (a) Surveillance - collection and processing of data by detectors and visible verification by closed circuit television: (b) Communications -- presentation of operation information to motorists through signs, delineation, signals, and/or auditory means: and (c) Control -- application of traffic restraints or direction of flow by signs, barrier gates, and signals.
SCoRE (some call this “CEVP light”, see CEVP)	SCoRE (Scope, Cost, and Risk Evaluation) – a peer level review/”due diligence analysis on the scope schedule and cost estimate for projects. Evaluates the quality and completeness, including anticipated risk and variability, of the projected cost and schedule. Objective: The SCoRE workshop is intended to provide an Evaluation of the cost and schedule estimates for a WSDOT or Regional transportation project. It considers data about the project brought by representatives of the Project Team. The depth, detail and completeness of the Project Team information will be a determining factor in the final SCoRE output and it is critical to have a clearly defined scope for the project at the beginning of the workshop. If there is uncertainty about scope, this issue must be resolved at the start of the session.
SCS	Soil Conservation Service ⇒ changed its name to Natural Resources Conservation Service (NCRS)
Scope of work	Defines the limits of the project. Establishes boundaries for the work to be performed.
Seismic loads	Loads experienced by structures during earthquakes.
SEPA	State Environmental Policy Act
Sight distance	Minimum distance necessary for a driver to see conflicting traffic and take the action necessary to avoid colliding with that traffic.

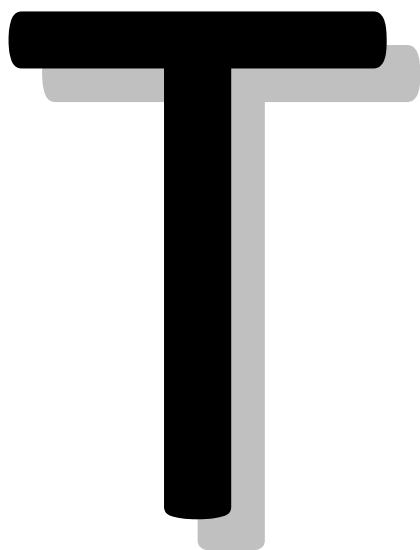
SHPO	<p>The acronym SHPO stands for State Historic Preservation Officer -each state, U.S. territory and protectorate has their own SHPO usually appointed by the governor or such jurisdictions.</p> <p>A SHPO is the official responsible for ensuring that the Federal National Historic Preservation Act (which includes Section 106 & 110 covering historic properties and national historic landmarks, respectively) is satisfied for federal undertakings, along with the federal agency, the Advisory Council for Historic Preservation (ACHP, or Council).</p> <p>There is also a National Conference of SHPOs that, among other things, considers larger multi-state or nationwide federal undertakings. There are also Tribal Historic Preservation Officers (THPOs) that have similar responsibilities for federal undertakings on tribal reservations -see Environmental Procedures Manual. Further information can be obtained by going to http://spirit.lib.uconn.edu/ArchNet/Topical/CRM/crmshpo.html</p>
SHRP	<p>SHRP= Strategic Highway Research Program. It is a unit of the National Research Council that was authorized by section 128 of the Surface Transportation and Uniform Relocation Assistance Act, 1987.</p>

Signal Terms	<p>Pre-timed signal - Service movements in a fixed sequence and with a fixed amount of green time to a each movement, cycle after cycle.</p> <p>Actuated signal - Controller responds to varying demands on each approach to adjust sequence and green times on each cycle.</p> <p>Coordinated operation - Applied to the intersection between two or more intersection controllers that allow vehicles to traverse the roadway with a minimum disruption.</p> <p>Isolated (Free) operation - single signalized intersection through which the flow of traffic is controlled without giving any consideration to the operation of adjacent signalized intersection.</p> <p>Stopped delay is defined as that period of time when vehicles are in a locked-wheel position on an intersection approach. Stopped delay does not include the delay time when vehicles move up in a queue (that is, when their wheels are not completely locked), nor does it include the deceleration/acceleration delay time associated with the stopping and starting maneuvers, respectively.</p> <p>Definitions</p> <p>Cycle -The total time required to complete one sequence of signalization around an intersection. In basic pretimed control the cycle length is fixed; in actuation the cycle length varies (up to predetermined maximum) according to the number of vehicles involved.</p> <p>Offset - The relationship between two or more intersection controls along an artery such that vehicles starting at a reference point may proceed along the artery at a predetermined speed without stoppage. Is accomplished by resetting each intersection control from a master control to select the artery green point capable of true progression.</p> <p>Split - The Division of time within the signal cycle between adjacent phase in the sequence</p> <p>Phase - portion of signal cycle during which an assignment of right of way is made to given traffic movement(s). A phase is typically composed of vehicle green, yellow and any all red clearance intervals.</p> <p>Ring - an ordered sequencing of mutually exclusive phases</p>
SIP	<p>State Implementation Plan - required documents prepared by states and submitted to EPA for approval. SIPs identify state actions and programs to implement designated responsibilities under the Clean Air Act (CAA).</p>
Skew angle	<p>Any angle other than 90 degrees. It is desirable for two intersecting roadways to intersect at 90 degrees or nearly 90 degrees. Skew angles increase driver discomfort and make it difficult to fully utilize the sight distance that is available. Skew angles also increase the distance a vehicle must travel when crossing a roadway, exposing it to conflicting traffic movements for a longer period of time.</p>

Skid number	The coefficient of skid resistance (locked tire) times 100.
Skid resistance	The frictional force between a locked tire and a pavement, which force resists motion.
Slack time	The maximum time that an activity can be delayed without causing the project to fall behind schedule. Slack time is always minimum or zero along the critical path. Slack time is known as <i>float time</i> .
SOR	Systems Operations Review
SOV	Single Occupant Vehicle - a vehicle carrying only the driver.
SPTP	State Public Transportation Plan
SRPP	State Rail Passenger Program
Speed	<p>Speed-a rate of motion expressed as distance per unit time.</p> <p><u>Speed Limits</u></p> <p>Posted Speed - the maximum speed that is allowed</p> <p>Posted Advisory Speed - the maximum safe speed that is recommended around a corner.</p> <p>Design Speed - the maximum safe speed that can be maintained over a specified section of highway when conditions are so favorable the design features of the highway govern.</p> <p>Operating Speed - the highest overall speed at which a driver can travel on a given highway under favorable weather conditions and under prevailing traffic conditions without at any time exceeding the safe speed as determined by the design speed on a section by section basis.</p>
Speed-change lanes	Lanes provided for traffic to accelerate if they are entering a higher speed road or decelerate if they are entering a lower speed road.
Staged construction	Construction performed in a logical sequence. Each stage of construction completes an important part of the facility being built.
Staggered work hours	A form of alternative work hour schedule where all employees in an organization are arbitrarily assigned by their employer daily start and stop times. These times are staggered over a range of 15 minutes to two hours. Employees generally have little choice in their work hours. The intent is to spread out commuting peaks.
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program - a new categorical funding program created with the ISTEA. Funds may be used for a wide variety of purposes, including: roadway construction, reconstruction, resurfacing, restoration and rehabilitation; roadway operational improvements; capital costs for transit projects; highway and transit safety improvements; bicycle and pedestrian facilities; scenic and historical transportation facilities; and, preservation of abandoned transportation corridors.

STPP	Surface Transportation Policy Project
Subsidy	The employer or owner subsidizes partially or fully, the out-of-pocket cost of their own employee or a tenant's employee work trip. Subsidy options can include transit passes, carpool parking fees, vanpool fares and guaranteed rides home.
Suburban activity center (SAC)	An activity center located outside the downtown core of a metropolitan area.
Strategic arterial street (SAS)	A suggested new functional class of an urban roadway facility offered in Research Report 1107-4 by the Texas DOT, through their Center for Transportation Research. Synonym for "super street" defined in this glossary. The concept of a strategic arterial would have its functional roadway classification just below freeways & expressways and above primary arterials.
Super street	<p>Super Street (or regional arterial) concepts typically consist of an upgraded arterial street with certain distinct design and operating characteristics. It would have design speeds of 40 to 50 mph, grade separations at railroads and some or most cross streets, partial access control, and favored treatment for arterial traffic at non-grade separated intersections. Whether a street is truly "super" is in the eye of the user.</p> <p>OTHER TERMS USED FOR THIS TYPE OF FACILITY INCLUDE:</p> <p>Strategic Arterial Street (SAS), Principal Arterial, High-Flow Arterial, Continuous Flow Boulevard, Regional Arterial, Regional Thoroughfare</p>
Surety	The corporation, partnership, or individual, other than the contractor, executing a bond furnished by the contractor.

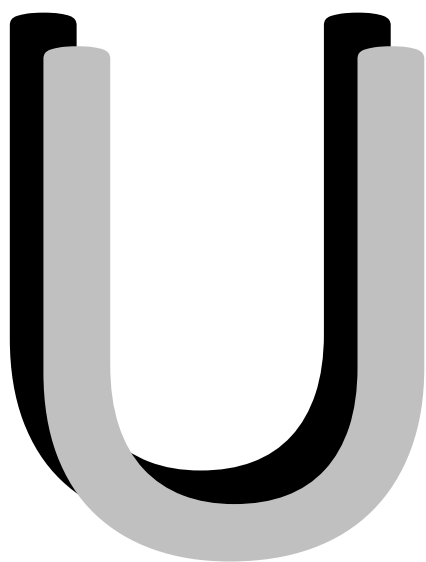
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TAG	Transportation Analysis Group
Take a lane	A general implementation approach whereby an HOV facility is created by taking or borrowing use of a mixed-flow lane on a freeway, usually by pavement markings and signing. This approach is rarely used has met with fierce public backlash when its attempted.
TAZ	Transportation Analysis Zone
TCM	Transportation Control Measures - transportation measures typically associated with manage transportation related emissions in an effort to improve air quality.
TDM	<p>Travel (or Transportation) Demand Management - strategies to "manage" demand placed on the transportation infrastructure. TDM is receiving greater attention than in the past when supply management (i.e. where to build new highways) was almost the only issue examined. TDM is one category of TSM actions. TDM strategies may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> ✓ Telecommuting/teleworking ✓ Carpool Matching Services (Ride Sharing) ✓ Education ✓ Mail-order services ✓ Flex-time ✓ Staggered Work Shifts ✓ Congestion Pricing ✓ Parking Rates/availability <p>Policies, programs and actions implemented to increase the use of HOVs and/or spread the timing of travel to less congested time periods through alternate work hour programs and other strategies.</p>
TDM ordinances	See trip reduction ordinances
TDM plan	A plan developed for a corridor, CBD, or a specific employment site for the purpose of discouraging SOV commutes and encouraging work travel by HOVs, and mitigating traffic impacts on road networks. A TDM plan should serve the specific transportation needs of employees and residents, reduce drive-alone vehicle trips and reduce the parking demand at the work site.
TDM program	A jurisdiction's overall traffic operational and development policies that implements the plan and require programmatic actions on the part of the proponent or developer.
TDP	Transit Development Plan
TE	Terminal Engineering (WSDOT- Ferries Division)
TEA's	Transportation Enhancement Activities

TEA-21	<p>Transportation Equity Act. This is the Act (passed in 1998) that followed ISTEA. This act leaves the basic program structure created by ISTEA in tact. Which includes:</p> <p><i>The National Highway System (NHS)</i> <i>The Bridge Program</i> <i>The Interstate Maintenance Program</i> <i>The CMAQ Program</i> <i>The Surface Transportation Program (STP)</i> <i>Planning with MPOs</i> <i>Flexibility between the highway programs and transit.</i></p> <p>And several new programs: <i>National Corridor Planning and Development Program and Coordinated Border Infrastructure Program.</i> <i>The Transportation Infrastructure Finance and Innovation Act</i> <i>The Interstate Reconstruction and Rehabilitation Pilot Program.</i></p>
TEF	Transportation Equipment Fund ("stores" acquisition of equipment for the region)
Telecommuting aka Teleworking	Telecommuting-"the partial or total substitution of telecommunications and/or computer technology for the daily commute to and from work." (ITE Journal, December 1992 pg.40.) A strategy that is increasing in popularity among employees and employers that reduces demand on transportation systems during peak periods.
TI	TI-Traffic Index, an expression of the volume and character of traffic which has a direct effect on the design of the pavement. The TI is supplied to the headquarters Materials Laboratory by the headquarters Traffic Data Office and is base on a traffic analysis by vehicle classification. (See Section 520 of the WSDOT Design Manual).
TIA	Transportation Improvement Account
TIB	Transportation Improvement Board
TIP	Transportation Improvement Program - this is a document prepared by states and planning commissions citing projects to be funded under federal transportation programs for a full-year period. Without TIP inclusion, a project is ineligible for federal funding.
TMA	Transportation Management Area (TMA)
TMO	Transportation Management Organization - same as TMA
TORT CLAIMS	Regarding amounts provided in the budget, tort claims are payments for claims based on a grievance for which the state has been found to be legally responsible; a tort is a wrongful act other than a breach of contract for which a civil action for damages can be brought.
TPO	Transportation Planning Organization
TRAC	Transportation Center (WSDOT research center)
Traffic mitigation	The use of TDM techniques to reduce the traffic impact of new development.
Traffic signal modification	Strategies include: More efficient timing (timing changes), More loops Signal Coordination, Doing signal interconnect work, Rebuilding signalized intersection - improved channelization, Upgraded controllers

Transit	Passenger transportation that is available to any person who pays a prescribed fare. Operating on established schedules along fixed routes and designated stops, it is designed to move relatively large groups of people at one time.
Transit center	(Transit station) A mode transfer facility serving transit buses and other modes such as automobiles, bicycles, and pedestrians.
Transportation	Moving people and things from one place to another.
Transportation management	A concept that includes the use of TDM and TSM techniques in order to lessen traffic impacts of development and encourage private sector improvement to accommodate traffic growth. Sometimes referred to as traffic mitigation.
Transportation planning	A process that involves: Understanding types of decisions to be made; Assessing opportunities/limitations of the future; Identify consequences of alternatives; Relate alternatives to goals and objectives; Present information to decision-makers.
Travel time	The time it takes a vehicle to travel a segment of highway or from one point to another point.
TRO's	Trip Reduction Ordinances
TRPC	Thurston Regional Planning Council
TSM	<p>Transportation Systems Management - strategies to increase the efficiency of the existing transportation system. TSM actions may include operational improvements to the existing transportation system, new facilities, and demand management strategies. Specific TSM actions can include, but are not limited to, the following:</p> <ul style="list-style-type: none"> ✓ High Occupancy Vehicle (HOV) lanes ✓ Traffic Signal Coordination and enhanced detection (traffic engineering) ✓ Ramp Metering ✓ Reversible lanes ✓ Access Management ✓ Parking Management (i.e. street parking, park & ride lots)
TSMC	Transportation System Management Center
Turn-back line	A turn-back line is shown as that line between right of way needed for highway purposes and right of way that will be relinquished to others.
TWLTL	Two-way Left-Turn Lane



UAB	Urban Arterial Board - a state government agency to fund local projects. Projects are selected through an evaluation process...those projects with support from more than one governing body (i.e. city, county, state or other) tend to receive support from UAB.
UGA	Urban Growth Area
UMTA	Urban Mass Transportation Administration (now called FTA)
UPWP	Unified Planning Work Program - this is the scope of work that each RTPPO enters into with WSDOT. Each work program covers a fiscal year. It describes the work methods and anticipated products that the RTPPO will utilize in its planning work.
USDOT	United States Department of Transportation - principal direct federal funding and regulating agency for transportation facilities and programs. Contains FHWA and FTA.
UTW	Ultra-Thin Whitetopping. A technique/process in which 50 to 100 millimeters of high-strength, fiber-reinforced concrete is placed over a milled surface of distressed asphalt concrete paving. UTW is designed for low-speed traffic areas or areas with a lot of stop and go traffic, such as street intersections, bus-stops, or toll booths. UTW requires significantly less time to construct and repairs last much longer.



Value Engineering	Value Engineering (VE) is a creative management problem-solving technique. It is formally defined by the Society of American Value Engineers (SAVE) as: ...the systematic application of recognized techniques which identify the function of a product or service, establish a value for that function, and provide the necessary function reliably at the lowest overall cost. In all instances the required function should be achieved at the lowest possible life cycle cost consistent with requirements for performance, maintainability, safety, and aesthetics. Comprised of a 7-phase job plan: information, function analysis, creative, evaluation, develop, present and implement,
Vanpool	A passenger van used by seven to 15 commuters. The route and schedule are determined by the group.
Variable work hours	See alternative work schedules
Vehicle occupancy	Number of people riding in a vehicle at one time.
Vertical alignment	The grades the road takes as it passes over terrain. Typically the vertical alignment attempts to use the natural contours and geography of the area.
Vertical curves	Straight sections of grade line joined by parabolic arcs broken-back vertical curves or broken back grade lines consist of a short tangent between two vertical curves (undesirable in design).
Violation rate	Percentage of traffic in an HOV facility that does not qualify to be in that facility.
Vision	<p>To see the future; to imagine; to suppose; to form a mental image of something that is not present. (Some describe a vision as an unattainable goal... something you are always striving for) --a guiding light, a beacon that beckons.</p> <p>Quote from <i>"Philosophical Autobiography"</i> by Karl Jasper "It seems for the man, who does not day dream a while, his star will grow dark, that star by which all our work and everyday existence will be guided."</p>
Vision 2020	Describes the long-range land use, growth, and transportation strategy of all member jurisdictions of the Puget Sound Regional Council
VMT	Vehicle Miles Traveled
VPS	Vehicle Positioning Systems



Weaving	<p>Weaving is defined as the crossing of two or more traffic streams traveling in the same general direction along a significant length of highway, without the aid of traffic control devices, Highway Capacity Manual (HCM) Special Report 209 1985. Typically a weaving section is formed by a merge area followed closely by a diverge area (an on-ramp followed by an off-ramp). Four types of traffic movements will generally travel on a freeway weaving section:</p> <ol style="list-style-type: none"> 1) Freeway to Freeway Traffic (a non-weaving traffic stream). 2) Freeway to Off-Ramp Traffic (a weaving traffic stream). 3) On-Ramp to Freeway Traffic (a weaving traffic stream). 4) On-Ramp to Off-Ramp Traffic (a non-weaving traffic stream). <p>The 1985 HCM classifies weaving sections as:</p> <p>A SIMPLE WEAVING AREA is formed by a single merge followed by a single diverge.</p> <p>A MULTIPLE WEAVING AREA is formed by one merge followed by two diverges or by two merges followed by a single diverge.</p> <p>A RAMP-WEAVE SECTION is formed by a one-lane on-ramp followed closely by a one-lane off-ramp where the two are joined by a continuous auxiliary lane.</p> <p>A MAJOR WEAVING SECTION is formed when at least three entry and exit legs have two or more lanes.</p> <p>The 1985 HCM also defines three weaving area configuration types A, B & C.</p>
WOA	Work Order Authorization - these are processed by Program Management upon request by the design office responsible for the project.
Work elements	Tasks relating to transportation work within the district.
Work zone	A work zone is an area of a trafficway with highway construction, maintenance, or utility-work activities. A work zone is typically marked by signs, channeling devices, barrier, pavement markings and/or work vehicles.
WSDOT	Washington State Department of Transportation
WSF	Washington State Ferries
WSF TDM	Washington State Ferries Terminal Design Manual