Section 11 Glossary

GLOSSARY

A

Adjustment – An additive or subtractive quantity that adjusts a parameter for a base condition to represent a prevailing condition.

Adjustment factor – A factor that adjusts a parameter for a base condition to represent a prevailing condition.

All-way stop-controlled (AWSC) intersection – An intersection with stop signs on all approaches. The driver's decision to proceed is based on a consensus of right-of-way governed by the traffic conditions of the other approaches and the rules of the road (e.g., the driver on the right has the right-of-way if two vehicles arrive simultaneously).

Analysis period – A single time period (for example, the peak 15 min of the peak hour) during which a capacity analysis is performed on a system element.

Annual average daily traffic (AADT) – The total volume of traffic passing a point or segment of a highway facility in both directions for 1 year divided by the number of days in the year.

Approach – A set of lanes at an intersection that accommodates all left-turn, through, and right-turn movements from a given direction.

Arterial street – A street interrupted by traffic control devices (e.g., signals, stop signs, or yield signs) that primarily serves through traffic and that secondarily provides access to abutting properties.

Automobile mode – A travel mode that includes all motor vehicle traffic using a roadway except transit buses. It includes such vehicles as trucks, recreational vehicles, motorcycles, and tour buses.

В

Bicycle – A vehicle with two wheels tandem, propelled by human power, and usually ridden by one person.

Bicycle facility – A road, path, or way specifically designated for bicycle travel, whether exclusively or with other vehicles or pedestrians.

Bicycle lane – A portion of a roadway designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles.

Bicycle mode – A travel mode under which a nonmotorized bicycle is used on a roadway or pathway.

Bus – A self-propelled, rubber-tired road vehicle designed to carry a substantial number of passengers (at least 16) and commonly operated on streets and highways.

Bus mode – A transit mode operated by rubber-tired vehicles that follow fixed routes and schedules along roadways.



Bus shelter – A structure with a roof and (typically) three enclosed sides that protects waiting transit passengers from wind, rain, and sun.

Bus stop – A designated area along a street where one or more buses can simultaneously stop to load and unload passengers. It can be on-line (buses stop wholly or partially in the travel lane) or off-line (buses stop out of the travel lane).

С

Capacity – The maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions.

Collector street – A surface street providing land access and traffic circulation within residential, commercial, and industrial areas.

Corridor – A set of parallel transportation facilities, for example a freeway and an arterial street.

Crosswalk – See pedestrian crosswalk.

D

Default value – A representative value that may be appropriate in the absence of local data.

Delay – Additional travel time experienced by a driver, passenger, bicyclist, or pedestrian beyond that required to travel at the desired speed.

Demand – The number of vehicles or other roadway users desiring to use a given system element during a specific time period, typically 1 h or 15 min.

Density – The number of vehicles occupying a given length of a lane or roadway at a particular instant.

Design hour – An hour with a traffic volume that represents a reasonable value for designing the geometric and control elements of a facility.

F

Facility – A length of roadway, bicycle path, or pedestrian walkway composed of a connected series of points and segments.

Flow rate – The equivalent hourly rate at which vehicles or other roadway users pass over a given point or section of a lane or roadway during a given time interval of less than 1 h, usually 15 min.

Freeway – A fully access-controlled, divided highway with a minimum of two lanes (and frequently more) in each direction.



Н

Headway – The time between two successive vehicles as they pass a point on the roadway, measured from the same common feature of both vehicles (for example, the front axle or the front bumper).

High-occupancy vehicle (HOV) – A vehicle with a defined minimum number of occupants (>1); HOVs often include buses, taxis, and carpools, when a lane is reserved for their use.

Highway – A general term for denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way.

I

Interchange – A system of interconnecting roadways providing for traffic movement between two or more highways that do not intersect at grade.

Intersection delay – The total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility, divided by the volume departing from the corresponding cross section of the facility.

L

Level of service (LOS) – A quantitative stratification of a performance measure or measures that represent quality of service, measured on an A–F scale, with LOS A representing the best operating conditions from the traveler's perspective and LOS F the worst.

Local street – A street that primarily serves a land-access function.

Μ

Major street – The street not controlled by stop signs at a two-way stop-controlled intersection.

Median – The area in the middle of a roadway separating opposing traffic flows.

Metropolitan Planning Organization (MPO) – A regional transportation planning and policy agency for urban areas with populations larger than 50,000.

Minor street – The street controlled by stop signs at a two-way stop-controlled intersection.

Mobility – The ability of people and goods to travel from place to place.

Mode – See travel mode.

Model – A procedure that uses one or more algorithms to produce a set of numerical outputs describing the operation of a segment or system, given a set of numerical inputs.

Multimodal – Being used by more than one travel mode.



Multimodal analysis – A type of HCM analysis where the LOS of each travel mode on a facility is evaluated simultaneously.

0

Off-ramp – A ramp that accommodates diverging maneuvers.

On-ramp – A ramp that accommodates merging maneuvers.

Oregon Highway Plan (OHP) – A plan prepared by the Oregon Transportation Commission in 1999 to guide the development and management of state highways for the next 20 years.

Ρ

Park-&-Ride – Parking facilities where users can leave their vehicles and transfer to transit for the remainder of their trip.

Peak hour – The hour of the day in which the maximum volume occurs.

Peak hour factor (PHF) – The hourly volume during the analysis hour divided by the peak 15-min flow rate within the analysis hour; a measure of traffic demand fluctuation within the analysis hour.

Pedestrian – An individual traveling on foot.

Pedestrian crosswalk – A connection between pedestrian facilities across sections of roadway used by automobiles, bicycles, and transit vehicles. Crosswalks can be marked or unmarked.

Pedestrian mode – A travel mode under which a journey (or part of a journey) is made on foot along a roadway or pedestrian facility.

Performance measure – A quantitative or qualitative characterization of some aspect of the service provided to a specific road user group.

Puget Sound Regional Council – Regional transportation, economic development and growth management planning organization for central Puget Sound.

Q

Quality of service – A description of how well a transportation facility or service operates from a traveler's perspective.

Queue – A line of vehicles, bicycles, or persons waiting to be served due to traffic control, a bottleneck, or other causes.



R

Ramp – A dedicated roadway providing a connection between two other roadways; at least one of the roadways a ramp connects is typically a high-speed facility such as a freeway, multilane highway, or C-D roadway.

Roadway – That portion of a highway improved, designed, or ordinarily used for vehicular travel and parking lanes but exclusive of the sidewalk, berm, or shoulder even though such sidewalk, berm, or shoulder is used by persons riding bicycles or other human-powered vehicles.

Regional Transportation Plan (RTP) – A long-term plan for a region's transportation system, usually conducted every 5 years and plan for thirty years into the future. RTPs are typically developed by a Metropolitan Planning Organization (MPO).

Rural – An area with widely scattered development and a low density of housing and employment.

S

Saturation flow rate – The equivalent hourly rate at which previously queued vehicles can traverse an intersection approach under prevailing conditions, assuming that the green signal is available at all times and no lost times are experienced.

Service measure – A performance measure used to define LOS for a transportation system element.

Shoulder – A portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles; emergency use; and lateral support of the subbase, base, and surface courses.

Shoulder bikeway – A bicycle facility where bicyclists use a paved shoulder, separated by striping from motor vehicle traffic, for travel along a roadway.

Side street – See minor street.

Sidewalk – A pedestrian facility located parallel and in proximity to a roadway.

Speed – A rate of motion expressed as distance per unit of time.

Statewide Priority Index System – A method for identifying potential safety problems on state highways.

Street – See highway.

Study period – See analysis period.

Т

Traffic condition – A characteristic of traffic flow, including distribution of vehicle types in the traffic stream, directional distribution of traffic, lane use distribution of traffic, and type of driver population on a given facility.



6

Traffic control device – A sign, signal, marking, or other device used to regulate, warn, or guide traffic.

Transportation Analysis Zone (TAZ) – A unit of geography used in transportation planning models. A TAZ can vary in geographic size, but usually has a population of less than 3000 people. TAZs are constructed based on census block information.

Transportation System Plan (TSP) – A Long-range plan to identify a system of transportation facilities and services adequate to meet community needs, creates a 20-year plan for transportation projects.

Transit frequency – The count of scheduled fixed-route transit vehicles that stop on or near an urban street segment during the analysis period.

Transit mode – A travel mode in which vehicles (including buses, streetcars, and street-running light rail) stop at regular intervals along the roadway to pick up and drop off passengers.

Travel mode – A particular form of travel, for example, walking, bicycling, traveling by automobile, or traveling by bus.

Truck – A heavy vehicle engaged primarily in the transport of goods and materials or in the delivery of services other than public transportation.

Two-Way Stop-Controlled (TWSC) – The type of traffic control at an intersection where drivers on the minor street or drivers turning left from the major street wait for a gap in the major-street traffic to complete a maneuver.

U

Uncontrolled – Lacking a traffic control device that interrupts traffic flow (e.g., a traffic signal, stop sign, or yield sign).

Unsignalized intersection – An intersection not controlled by traffic signals.

Urban – An area typified by high densities of development or concentrations of population, drawing people from several areas within a region.

Urban Growth Boundary – A regional boundary, set used by local governments as a guide to zoning and land use decisions

V

Volume – The total number of vehicles or other roadway users that pass over a given point or section of a lane or roadway during a given time interval, often 1 h.

Volume-to-capacity (v/c) ratio – The ratio of flow rate to capacity for a system element.

