
GLOSSARY
Glossary of Transportation Planning Terminology

GLOSSARY OF TRANSPORTATION PLANNING TERMINOLOGY

The following are terms used throughout the Waterdown/Aldershot Transportation Master Plan (TMP). These terms are a collection of typical terms used in numerous transportation planning exercises throughout North America.

AADT (Annual Average Daily Traffic) - Data used to represent the amount of traffic occurring on roads. AADT is collected annually for various segments of roadway by the road authority.

Access - Refers to the ability to reach or connect to a roadway.

Access Management - Techniques of transportation infrastructure management intended to reduce congestion and accident rates, lessen need for highway widening, conserve energy, and reduce pollution. Examples include; limiting entrance and exit of traffic on highways, use of medians and turn lanes, placement and timing of signals, as well as implementation of supportive local by-laws and policies.

Accessibility(1) - (1) The extent to which facilities are barrier free and useable by disabled persons, including wheelchair users. (2) A measure of the ability or ease of all people to travel among various origins and destinations.

Accessibility(2) - Ability to reach a destination or use a facility or service without being impeded by physical or other barriers due to auditory, visual, mobility, or cognitive disabilities.

Alternative Modes (of Transportation) - The term "mode" is used to refer to and distinguish from each other the various forms of transportation, such as automobile, transit, ship, bicycle and walking. Alternative mode refers to any mode other than single occupant vehicle.

Arterial - A major street or highway. It is a general term, which includes expressways, major and minor arterial streets' and provincial highways having regional continuity. It is a road intended to move a relatively large volume of traffic at medium to high speeds.

Bicycle (or “Bike”) - A vehicle propelled by human power upon which any person may ride, having two tandem wheels, except scooters and similar devices. The term also applies to three- and four-wheeled human-powered vehicles, but not tricycles for children.

Bicycle Facilities - A general term denoting improvements and provisions made by public agencies to accommodate or encourage bicycling, including parking and storage facilities, bike lanes, paved shoulders and wide outside lanes.

Bicycle Lane (“Bike Lane”) - A portion of a roadway that has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists.

Bicycle Path (“Bike Path”) - See Shared Use Path Bicycle System. A system of bikeways designated by the jurisdiction having authority with appropriate directional and informational signage. Bicycle systems should establish a continuous routing, but may be a combination of any and all types of bikeways.

Bikeway - A generic term for a road, street, or path that in some way is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes. This term can be used interchangeably with “bicycle facility”.

Capacity - The volume of vehicles the road was designed to carry in a unit of time, such as an hour; can also be applied to transit or bicycle/pedestrian paths.

Collector - A street or highway that provides for traffic movement between major streets and local street. It is a road intended to collect traffic from local streets and land-access roads

Community - A physical or cultural grouping of stakeholders with common interests created by shared proximity or use. Community can be defined at various levels within a larger context (e.g., neighbourhood, city, or region).

Commute Alternatives - Carpooling, vanpooling, transit, bicycling, walking, and telecommuting. Also includes any alternative work-hours program.

Commute - A repetitive home-to-work or work-to-home trip.

Commuter - Person who travels regularly between home and work or school.

Congestion - Recurrent congestion is defined as a condition lasting for 15 minutes or longer where travel demand exceeds design capacity. That typically means freeway speeds were 50 km/h or less during peak commute periods on a typical incident-free weekday. "Non-recurrent" congestion is defined as backups caused by special circumstances, such as accidents, stalled vehicles, sporting events, etc. The consequences of congestion are longer and less predictable travel times.

Consultation - When one party confers with another identified party and, prior to taking action(s), considers that party's views.

Corridor - A geographic area that is defined by major roads and rail facilities, and major flows of travel. Transportation corridors are identified for the purpose of analyzing the patterns and flows of traffic between origins and destinations.

Demand Management - A set of strategies that promote increased efficiency of the transportation system by influencing individual travel behaviour.

Ferryboat - Vessel, generally a steam or diesel-powered conventional ferry vessel, for carrying passengers and/or vehicles over a body of water; may also be a hovercraft or other high speed vessel.

Freeway - A multilane divided highway without traffic signals and with limited opportunities for access and egress.

Greenway - A corridor of undeveloped land, usually in an urban area, which is set aside or used for conservation and/or recreation. Greenways can also serve as pedestrian and bicycle facilities for recreation and transportation. In this region, the term is often used to mean a Shared Use Path, rather than the more complete definition of greenway.

HCM (Highway Capacity Manual) - published by the Transportation Research Board (TRB), the HCM outlines fundamental information and computational techniques on the quality of service and capacity of highway facilities.

Headway - The scheduled time interval between any two revenue vehicles operating in the same direction on a route. Headways may be LOAD driven, that is, developed on the basis of demand and loading standards or, POLICY based, i.e., dictated by policy decisions such as service every 30 minutes during the peak periods and every 60 minutes during the base period.

High-Occupancy Vehicle (HOV) lane - A lane designated for the exclusive use of high-occupancy vehicles, such as carpools, vanpools, other ridesharing modes, and buses.

Home-based Work Trip Attractions - Home-based work trip attractions describes the trips made by commuters from their homes to their place of work.

Human Environment - The surroundings in which people conduct their lives, including built and natural environments, as well as cultural resources.

Impacts - The effects of a transportation project, including (a) direct (primary) effects; (b) indirect (secondary) effects; and (c) cumulative effects.

Intelligent Transportation System (ITS) - A system that uses modern electronic, communication and control technologies to provide travelers with better information on traffic condition, provide vehicles with safety equipment and improve the transportation infrastructure. Also includes technologies that identify, monitor, or control vehicles.

Intelligent Vehicle Highway System (IVHS) - Intelligent Vehicle Highway Systems are technological innovations developing or applying electronics, communications and information processing technologies to improve the efficiency and safety of surface transportation systems. Such technology may include systems that alert authorities to emergency situations, on-board navigation systems for vehicles, electronic collection of tolls and transit fares, traffic management centers that can adjust speed limits, traffic signals and road access and electronic monitoring of vehicles.

Intermodal - The term "mode" is used to refer to and distinguish from each other the various forms of transportation, such as automobile, transit, ship, bicycle and walking. Intermodal refers specifically to the connections between modes.

Intermodal Planning - Planning that reflects a focus on connectivity between modes as a means of facilitating linked trip making.

Land Use - The purpose for which land or the structures on the land are being utilized; for example: commercial, residential, retail.

Level of Service (LOS) - This is a qualitative or quantitative measure used to characterize the operating conditions of a transportation service, as perceived by its users. Most commonly applied to traffic operations, where designations go from A (best) to F (worst). Summarizes transportation operating conditions. It is usually used to describe a section of road or an intersection as experienced by drivers, but can also be applied for users of other modes of transportation. A system of indicating delay at signalized intersections, which is graded on a letter scale from A to F, generally outlined by the HCM as: A \leq 10 sec, B = 10-20 sec, C = 20-35 sec, D = 35-55 sec, E = 55-80 sec, F > 80sec.

Liveable Community - A neighbourhood, community or region with compact, multidimensional land use patterns that ensure a mix of uses, minimize the impact of cars, and promote walking, bicycling and transit access to employment, education, recreation, entertainment, shopping and services.

Local Roads - Provide access to private property or low volume public facilities.

Local Service - A type of operation that involves frequent stops and consequent low speeds, the purpose of which is to deliver and pick up transit passengers as close to their destinations or origins as possible. Transit service involving many stops and low operating speeds with the purpose of picking up or delivering passengers as closely as possible to origins and destinations.

Long Range Objectives - A long-term (20-25 years) general end that is achievable and marks progress toward a goal.

Measures of Effectiveness (MOE) - Parameters describing the quality of service provided to drivers, passengers, and pedestrians. Speed, delay, passenger loadings, and transit vehicle travel time could be examples. Qualitative rankings such as Level of Service and On-Time Performance would be based on these measures.

Mobility - Refers to the ability to travel along a highway facility.

Mode - Any one of the following means of moving people or goods: aviation, bicycle, highway, paratransit, pedestrian, pipeline, rail (commuter, intercity passenger and freight), transit, space and water. A way people or goods get from one place to another, such as using cars and trucks, freight and passenger trains, walking, bicycling, and riding buses.

Mode Split - Mode split is the percentage of trips taken by each of the possible modes of travel (auto, transit, bicycle, walking). Mode split does not refer to the number of trips, but rather to the proportion of people that use each of the various modes of transportation. It also describes the process of allocating the proportion of people using modes. Frequently used to describe the percentage of people using private automobiles as opposed to the percentage using public transportation.

Multi Modal - Refers to the availability of multiple transportation options, especially within a system or corridor. A multi-modal approach to transportation planning focuses on the most efficient way of getting people or goods from place to place, be it by truck, train, bicycle, automobile, airplane, bus, foot, or even a computer modem.

Multimodal Planning - Planning that reflects consideration of more than one mode to serve transportation needs in a given area.

Natural Environment - The surroundings not made by humans within which the transportation system operates. This includes both physical and ecological aspects, including traditional cultural resources.

Non-Motorized Travel - Travel accomplished by cycling or walking.

Pedestrian - One who walks or journeys on foot; a walker.

Preservation - Actions taken to protect existing natural and human environments, investments and mobility options.

Public Meeting/Consultation - a formal or informal event designed for a specific issue or community group where information is presented and input from community residents is received.

Quality of Life - This classification includes work which is designed to enhance the environment associated with, or impacted by, transportation improvements. Program categories within this classification include transportation enhancements, noise walls, landscape, air quality, signs, wetland mitigation, and rest areas.

Rapid Transit - Rail or bus transit service operating completely separate from all modes.

Right-of-Way - The right of one vehicle or pedestrian to proceed in a lawful manner in preference to another vehicle or pedestrian. A general term denoting land, property or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

Roadway - A general term denoting a public way intended for vehicular use.

Shared Use Path - A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the roadway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers and other non-motorized users.

Short Range Objective - A short-term (5-10 years), specific, measurable, intermediate end that is achievable and marks progress toward a goal.

Shoulder - The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use and for lateral support of sub-base, base and surface courses. In rural areas, this portion may also be used for bicycle and pedestrian travel.

Sidewalk - The portion of the street or highway right-of-way designated for preferential or exclusive use of pedestrians.

Signed Shared Roadway (Signed Bike Route) - A shared roadway that has been designated by signing as a preferred route for bicycle use.

Single-Occupant Vehicle (SOV) - A vehicle containing only the driver and no other passengers.

Stakeholder Advisory Committee (SAC) - A representative group of stakeholders that provided direction to the Waterdown/Aldershot TMP.

Stakeholders - Individuals and groups with an interest in the outcomes of policy decisions and actions.

Sustainability - Meeting the needs of the present without compromising the ability to meet the needs of the future.

TAC (Technical Advisory Committee) - This was a committee that represented the government agencies within and adjacent to the study area, as part of the Waterdown/Aldershot TMP.

Transit - Generally refers to urban passenger transportation service, local in scope, provided to the public along established routes with fixed or variable schedules at published fares.

Transportation Demand Forecasting Model - A demand-forecasting model is a tool for representing and analyzing the major ways people get around. Usually this tool is a software package, which incorporates a road network, land use data, and a mathematical formula to distribute and route trips. The model is calibrated to existing traffic counts. Then it can be used to forecast traffic and test the effect of changes in the road network.

Transportation Management Association (TMA) - Transportation Management Associations are groups of businesses, which develop transportation demand management (TDM) measures in order to reduce the need for commuter parking. Measures may include carpool matching services, transit subsidies, shuttle vans, etc. By working as a group, TDM measures are more effective.

Transportation Master Plan - A long-range document that identifies facilities and programs that should function as an integrated transportation system and includes a financial plan that demonstrates how the long-range plan can be implemented. The plan must show that the current system can be operated and maintained over the long-term, as well as recommend capital expansion projects to be constructed.

Transportation Planning - A collaborative process of examining demographic characteristics and travel patterns for a given area. This process shows how these characteristics will change over a given period of time, and evaluates alternatives for the transportation system of the area and the most expeditious use of funding. Long-range planning is typically done over a period of twenty years; short-range programming of specific projects usually covers a period of three to five years.

Transportation System Management - Techniques for increasing the efficiency, safety, capacity, or level of service of a transportation facility without increasing its size. Examples include, but are not limited to, traffic signal improvements, traffic control devices including installing medians and parking removal, channelization, access management, ramp metering, and restriping for high occupancy vehicle (HOV) lanes. TSM is a combination of low-cost strategies that use a total approach to transportation system management. The goal is to shift emphasis from expanding capacity to making better use of existing transportation systems.

Travel Demand Management (TDM) - TDM is a combination of strategies or actions whose goal is to encourage travelers to use alternatives to driving alone. TDM strategies may be developed for a single work site, specific corridor, or area.

Travel Time - The time it takes to travel door-to-door.

Vehicle Kilometres of Travel (VKT) - The sum of all the kilometres traveled by vehicles (not people) in a specified amount of time.

Vision - A description of the future physical appearance and qualities of a community.

Volume - The number of vehicles that actually pass through a given kilometre of road in a unit of time such as a day; can also be applied to transit or bicycle/pedestrian paths.