

GLOSSARY

Acceleration Lane An auxiliary lane to enable a vehicle to increase speed to merge with through

traffic.

Access Control See Controlled Access.

Access Management The management of the location and basic dimensions of access to property,

from a roadway.

Accident (not used - see Collision)

Adverse Crown Negative superelevation on a curve, due to the normal cross section of

non-superelevated sections.

Approach Nose The end of a median or island that faces approaching traffic.

Approach Taper The taper required in advance of an intersection to shift the through lanes

laterally to the right to provide the width for a left-turn auxiliary lane.

Area of Concern An object or roadside condition that may warrant safety treatment.

Arterial Road A road primarily for through traffic.

Auxiliary Lane A lane in addition to, and placed adjacent to, a through lane intended for a

specific manoeuvre such as turning, merging, diverging, weaving and for

slow vehicles.

Average Annual Daily Traffic (AADT)

The total volume of traffic passing a point or segment of a roadway, in both

directions for one year, divided by the number of days in the year.

Barrier Transition A method by which a change in longitudinal barrier type provides continuous

protection to adjacent traffic.

Barrier Warrant A criterion that identifies a potential need for a traffic barrier.

Bay Taper At an intersection, the taper from the edge of the through lane to the beginning

of the full width auxiliary left- or right-turn lane.

Bike Lane A lane intended for the exclusive use of bicycles, within a roadway used by

motorized vehicles.

Bike Path A bicycle facility, physically separated from roadways, where motor vehicle

traffic, except maintenance vehicles, is excluded.

Bike Route Any roadway signed specifically to encourage bicycle use.

Bikeway A roadway, or part of a roadway, intended for the use of bicycles, either

exclusively or shared with other vehicular traffic or pedestrians.

Border Area The area adjoining the outer edge of the sidewalk.

December 2009 Page 4.2.1



Boulevard	The strip of land paralleling the roadway between the curb and the sidewalk, often planted with trees, grass, shubbery.
Braking Distance	The distance travelled from the time that braking begins to the time the vehicle comes to a stop.
Break Point	The outer extremity of the shoulder where the side slope begins.
Breakaway	A design feature that allows a device such as a sign, luminaire or traffic signal suport to yield or separate upon impact.
Bridge Railing	A longitudinal barrier whose primary function is to prevent an errant vehicle from going over the side of the bridge structure.
Broken Back Curve	An arrangement of curves in which a short tangent separates two curves in the same direction.
Building Line	A line prescribing the nearest limits for the erection of buildings in relation to a roadway.
Bulbing	A widened portion of the median or outer separation, usually at an intersection.
Channelization	The separation and direction of traffic movements and pedestrians into defined paths at an at-grade intersection through the use of geometric features, pavement markings and traffic control devices.
Choker (curb bulb)	A narrowing of a roadway, either at an intersection or mid-block, in order to reduce the width of the roadway surface.
Clear Zone	The roadside area immediately adjacent to the outer travelled lane, clear of hazards, which may be used safely by errant vehicles.
Climbing Lane	A lane added on the right side of a roadway on an upgrade intended for use by trucks and other slow vehicles to discourage these vehicle types from using the through lanes.
Collector Lanes	Lanes on a freeway used for entering and exiting traffic, physically separated from the through or express lanes except at specific weaving locations.
Collector Road	A road on which traffic movement and access have similar importance.
Collision	An event in which travel by a vehicle results in the vehicle being in an inappropriate location, or in an appropriate location at an inappropriate time, culminating in unwanted contact with a fixed object, vehicle, other roadway user or other obstacle.
Collision-Free	Circumstances under which a collision will never occur, i.e. "absolute" safety.
Continuous Right-Turn Auxiliary Lane	A right-turn lane that is continuous for a significant distance serving a number of driveways.



Controlled Access The condition where the opportunity for access to a roadway is controlled by

public authority.

Corner Clearance The distance between the near curb of a street intersection and the near

edge of a driveway throat or public lane.

Crash (not used - see Collision)

Crash Cushion A device that prevents an errant vehicle from impacting fixed object hazards

by gradually decelerating the vehicle to a safe stop or by redirecting the

vehicle away from the hazard.

Crest Vertical Curve A vertical curve having a convex shape in profile when viewed from above.

Criterion A value, determined either by mathmatical relationships or by experience,

that represents the degree of excellence required for a particular application, acknowledged as appropriate for that application where prevailing conditions are normal and typical, recognizing that in atypical circumstances some variation may be appropriate. It may be regarded as a basis for assessing existing designs and formulating opinion on their quality, but is not treated as a rigid value to which there is any obligation for designs to conform.

Cross Section The transverse profile of a roadway.

Cross-Slope The average grade between edges of a cross section element.

Cross Street A street of lower classification that crosses a roadway of higher classification,

either at grade or passing over or beneath.

Crosswalk Any part of a roadway specifically intended for pedestrian crossing, which

may be so indicated by signs, lines, markings or other devices.

Crown The highest break point of the surface of a roadway in cross section.

Cul-de-sac A roadway open at one end only.

Curb A structure with a vertical or sloping face along the edge of a lane or shoulder

strengthening or protecting the edge or clearly defining the edge.

Curb Drop The transition length required to decrease the curb height to accommodate

a driveway or sidewalk ramp.

Curb Return The curved section of curb used at intersections or driveways in joining

straight sections of curb.

Curve to Spiral (CS) The point of alignment change from circular curve to spiral curve, in the

direction of stationing.

Curvilinear Alignment
An alignment predominantly made up of circular and spiral curves.

Deceleration Lane An auxiliary lane to enable a vehicle that is to make an exit from a roadway

to reduce speed after it has left the through traffic lanes.

September 1999 Page 4.2.3



Decision Sight Distance	The distance required for a driver to detect an information source or hazard, recognize the hazard or its potential threat, select appropriate action, and complete the manoeuvre safely and efficiently.
Deflection Angle	The angle between a line and the projection of the preceding line.
Departure Taper	The taper required beyond a flared intersection to laterally shift the through lanes to the left, back to a normal alignment or cross section.
Design Consistency	An indication of the quality of design offered by a roadway.
Design Hour Volume (DHV)	An hourly traffic volume selected for use in geometric design.
Design Speed	A speed selected for purposes of design and correlation of the geometric features of a road.
Development Roadway	A roadway whose primary purpose is to provide access to undeveloped areas.
Double Left-Turn Lanes	A pair of adjacent lanes intended for the exclusive use of vehicles about to turn left. Interchangeable with dual left-turn lane.
Drainage Channel	A channel intended to control and conduct storm water runoff.
Earth Roadway	A roadway that has a driving surface consisting of subgrade material.
Easement	A right acquired by public authority to use or control property for a designated purpose.
Effective Wheelbase (EWB)	The distance from the centroid of the front axle group to the centroid of the rearmost axle group, which significantly influences the turning envelope. For two-axle vehicles, total and effective wheelbase are the same.
End Treatment	The method by which the end of a barrier facing on-coming traffic is treated to minimize its hazard.
Energy Attenuator	See Crash Cushion.
Entrance	The general area where turning roadway traffic enters the main roadway.
Entrance Terminal	The part of an entrance comprised of auxiliary or speed change lanes including the ramp proper up to the ramp-controlling curve.
Exit	The general area where turning roadway traffic departs from the main roadway.
Exit Terminal	That part of an exit comprised of auxiliary lanes or speed change lanes, including the ramp-controlling curve.
Express Lanes	Lanes on a freeway used for through traffic, physically separated from the collector lanes, except at specific weaving locations.



Express-Collector

System

A freeway in which the through or express lanes are physically separated

from the collector lanes.

Expressway A divided arterial roadway for through traffic with full or partial control of access

and with some interchanges.

False Grading The practice of distorting the profile of a roadway, relative to the top of curb,

so as to avoid flat grades in order to effect drainage.

Flare The variable offset distance of a barrier to place it further from the travelled

way.

Flexible Barrier A form of longitudinal barrier that is intended to redirect an errant vehicle by

rail tension, usually through a system of cables installed in tension.

Frangible Readily or easily broken upon impact.

Freeway A road limited to through traffic, with access only through interchanges.

Friction Factor The coefficient of friction between the tire and roadway, measured either

longitudinally or laterally.

Front Overhang

(FOH)

The distance from the front bumper of a vehicle to the centroid of its front

axle group.

Frontage Roadway
A roadway contiguous to a through roadway so designed as to intercept,

collect and distribute traffic desiring to cross, enter or leave the through

roadway and to furnish access to property.

Geometric Design The selection of the visible dimensions of the elements of a roadway.

Gore Area An area of pavement, usually delineated by paint lines, between the edge of

the through lane and an entry or exit roadway or ramp.

Grade Separation Vertical separation of two intersecting roadways or a roadway and a railway.

Gradient The rate of rise or fall with respect to the horizontal distance.

Gravel Roadway A roadway that has a driving surface consisting of granular material.

Guardrail/Guiderail See Longitudinal Barrier.

Guidelines Outlines of acceptable practice.

Gutter A paved shallow waterway provided for carrying surface drainage.

Gutter Line The bottom of the curb face where it meets the concrete gutter, or the paved

surface where a gutter is not employed.

Gutter Lip The edge of a concrete gutter opposite the curb where it meets the paved

roadway.



Hazard Any obstacle or other feature such as an embankment, or a body of water of

depth greater than 1 m which, without protection, may cause significant injury

to the occupants of a vehicle encountering it.

Heuristic An aid to design based on experience - a "rule of thumb".

High-Occupancy-Vehicle (HOV) Lane A lane designated for the exclusive use of high-occupancy vehicles.

Highway Synonymous with roadway but generally limited to higher-speed roadways in

rural areas.

Horizontal Alignment The configuration of a road or roadway as seen in plan.

Horizontal Curve A curve in plan to provide for change of direction.

Independent Alignment A divided roadway in which each direction of travel is designed independently, both in horizontal and vertical alignments, to take advantage of topographical

features.

Inside lane The left lane in one direction of a roadway with two or more lanes in that

direction, also referred to as an inner lane.

Interchange A grade-separated intersection with one or more turning roadways for travel

between the through roadways.

Intersection The general area where two or more roads join or cross, within which are

included the roadway and roadside facilities for traffic movements.

Intersection Approach That part of an intersection leg used by traffic approaching the intersection.

Intersection Sight Distance (ISD) The sight distance to left and right available to a driver intending to execute a $\,$

SD) manoeuvre onto a through roadway from an intersecting roadway.

Island A defined area between traffic lanes for control of vehicle movements or for

pedestrian refuge.

Lane A part of the travelled way intended for the movement of a single file of

vehicles.

Left-Turn Lane A lane added on the approach to an intersection for the exclusive use of

left-turning vehicles.

Length of Need Total length of a longitudinal barrier needed to shield an area of concern.

Local Roadway A roadway with the primary function of providing land access.

Long Combination Vehicle (LCV)

A combination of a tractor and trailer(s) used for special purposes, with an overall length greater than 25 m. Examples are 'triples' and 'turnpike doubles'.

Longitudinal Barrier A barrier whose primary function is to prevent penetration and to safely redirect

an errant vehicle away from a roadside or media hazard.



Low-Volume Roadway A roadway with average daily traffic of 1000 veh/d or less, and whose service

functions are oriented toward rural roadway systems, roadways to or within isolated communities, recreation roadways and resource development.

LRT Light rail transit.

Mainline The principal route.

Median A reserve, including shoulders, between lanes carrying traffic in opposite

directions.

Median Barrier A longitudinal barrier used to prevent an errant vehicle from crossing the

median.

Merging-End The physical end of an entrance terminal between the outer travel lane and

the ramp, beyond which traffic merges. Also known as the painted wedge.

Minimum Passing Sight Distance The least sight distance required to make a passing manoeuvre safely, based

on a given set of circumstances.

Minimum Stopping Sight Distance

The least sight distance required to come to a stop under a given set of

prevailing vehicle, pavement and climatic conditions.

Minimum Turning Radius (TR)

The radius of the path of the outside of the outer front wheel for the minimum radius turning condition. In former TAC Design Guides, this dimension was

used to denote the minimum design turning radius.

Noise Berm A physical barrier, consisting of compacted earth in a trapezoidal shape,

used as a means of minimizing the transmission of traffic sounds.

Normal Crown A cross section in which adjacent surfaces slope in opposite directions from

the centre line or a lane edge to effect drainage to the sides.

Obstacle Any object impeding the path of a vehicle.

One-Lane

One-Way Roadway

A roadway with one lane that carries one-directional traffic.

One-Lane

Two-Way Roadway

A roadway that does not provide sufficient width for the safe passing of opposing

vehicles at normal driving speed.

Outer Separation The area between the edge of the travelled lanes of a roadway and the edge

of the travelled lanes of an adjacent, parallel roadway.

Outside Lane The right lane in one direction on a roadway with two or more lanes in that

direction (also referred to as an outer lane).

Overall Length The distance between the front bumper of the power vehicle and the rear

bumper on the rear unit of a vehicle or trailer combination. It equals the sum

of its effective wheelbases, front overhand and rear overhang.

December 2009 Page 4.2.7



Overpass A grade separation in which the subject roadway passes over an intersecting

(vehicle) roadway or railway.

Painted Wedge See Merging-End.

Parameter A quantity that is a variable in the general case and is constant in the specific

case under consideration. (Radius of circular curve is an example, in which radius varies from one curve to another but for one particular circular curve

is the same at any point on the curve.)

Parclo An abbreviation for the PARtial CLOverleaf interchange, a grade separation

having loop ramps in fewer than all four quadrants.

Parking Lane A supplementary lane intended for parking.

Passing Lane A supplementary lane intended for passing.

Passing Opportunity The opportunity expressed as a percentage of a given length of roadway

section where the passing sight distance is adequate to initiate a passing

manoeuvre safely.

Passing Sight Distance The sight distance required for a driver in a vehicle travelling at a given speed

to carry out a passing manoeuvre safely.

Pedestrian Z Crossing A pedestrian crossing on a divided roadway in which the alignment of the

crossing is staggered at the median.

Platform Intersection An intersection in which the area common to the two roadways is at the

same elevation as the top of curb or sidewalk.

Policy Principle, course of action, or strategy adopted by government, government

agency or technical organization that reflects prevailing community values, intended to provide direction and guidance in the selection of technical and non-technical criteria for general application, and specific dimensions in the planning and design process. Policy necessarily incorporates some element

of political or other non-technical community viewpoints.

Public Lane (Alley) A narrow minor street, usually without sidewalks, located at the rear of lots

for vehicle access to garages or other parking spaces and which also serves

as a utility right of way.

Raised Crosswalk A crosswalk on a curbed street whose elevation is the same as the top of

curb or sidewalk.

Ramp A turning roadway to permit the movement of traffic from one through

roadway to another.

Reaction Time The time that elapses from the instant a visual stimulus is perceived by a

driver to the instant the driver takes remedial action.

Rear Overhang (ROH) The distance from the rear bumper of a vehicle to the centroid of its rearmost

axle group.



Recovery Area Generally synonymous with clear zone.

Retrofit The reconstruction of an existing roadway with geometric improvements.

Reverse Crown A typical surface cross section in which adjacent surfaces slope in the same

direction at the normal crown.

Reverse Curve Two curves, curving in opposite directions from a common point.

Right of Way

The area of land acquired for or devoted to the provision of a road.

Right-Turn Lane A lane added on the approach to an intersection for the exclusive use of

right-turning vehicles.

Right-Turn Taper The taper from the edge of the through lane to the beginning of a right-

turning roadway at an intersection, where an auxiliary lane is not used.

Rigid Barrier A form of longitudinal barrier that is intended to redirect an errant vehicle

with minimum deflection in the barrier system. It usually consists of a

continuous concrete mass.

Road The entire right-of-way comprising a common or public thoroughfare,

including a highway, street, lane, alley, bridge and any other structure

incidental thereto.

Roadside The area adjoining the outer edge of the travelled way.

Roadside Barrier A longitudinal barrier used to shield roadside obstacles or non-traversable

terrain features. It may occasionally be used to protect pedestrians from

vehicle traffic.

Roadway That portion of a street or highway which is improved, designed or ordinarily

used for vehicular travel, inclusive of the shoulder.

Roadway Hump A speed control device in which the roadway surface is raised over a length

of about 3.5 to 4.0 m to a maximum height of 80 mm.

Roundabout A channelized intersection in which traffic moves counterclockwise around

a centre island of sufficient size to induce weaving movements in place of

direct crossings. It is sometimes referred to as a rotary or traffic circle.

Rounding The introduction of a vertical curve between two transverse slopes to

minimize the abrupt slope changes.

Rumble Strips Indentations in the surface of a paved shoulder that provide an audible or

tactile warning to a driver that the vehicle has left the travelled lane.

Safety Zone A protected area within a roadway for the exclusive use of pedestrians.

Sag Vertical Curve A vertical curve having a concave shape in profile viewed from above.

September 1999 Page 4.2.9



Semi-Rigid Barrier	A form of longitudinal barrier that is intended to redirect an errant vehicle by rail tension and bending, by means of a system of posts and rails or by a longitudinal bin.
Service Roadway	Same as frontage roadway but not necessarily contiguous with the through roadway.
Shared Street	A street that is shared by motor vehicles and bicycles that is not designated as a bike route.
Shielding	The introduction of a barrier or crash cushion between a vehicle and an obstacle or area of concern to reduce the severity of impacts of errant vehicles.
Shoulder	That part of a roadway contiguous with the travelled way intended for emergency stopping, and/or lateral support of the roadway structure.
Shy-Line Offset	A distance beyond which a roadside object will not be perceived by a driver to be a threat, to the extent of changing lane position or speed.
Sidewalk	A travelled way intended for pedestrian use, following an alignment generally parallel to that of the adjacent roadway.
Sight Distance	From any given point, the unobstructed distance a driver can see, usually along the roadway ahead.
Sight Triangle	The triangle formed by the line of sight and the two sight distances of drivers, cyclists or pedestrians approaching an intersection on two intersecting streets.
Slot Left-Turn Lane	On a divided roadway, a left-turn lane which is angled and situated entirely within a wide median to accommodate a divisional island between the left-turn lane and the adjacent through lane.
Speed-Change Lane	A deceleration or acceleration lane.
Speed Hump	See Roadway Hump
Spiral Parameter (A)	A measure of the flatness of a spiral. It is the square root of the product of radius and distance from the beginning of a spiral, where the radius is infinity. It has the units of length.
Spiral to Curve (SC)	The point of change from spiral curve to circular curve, in the direction of stationing.
Spiral to Tangent (ST)	The point of change from spiral curve to tangent, in the direction of stationing.
Spline	A flexible drafting tool used to draw curved lines of varying radii.
Standard	A value for a specific design feature, which practice or theory has shown to be appropriate for a specific set of circumstances, where no unusual constraints influence the design.



Steering Angle The angle between the longitudinal axis of the vehicle and the direction of the

steering wheels, limited by the dimensions of parts of the steering mechanism.

Stopping Distance The distance travelled by a vehicle from the instant the driver decides to stop,

to coming to a stop.

Stopping Sight Distance The sight distance required for a driver in a vehicle travelling at a given speed

to safely bring the vehicle to a stop after seeing an obstacle on the roadway.

Street Synonymous with road, but generally limited to lower speed roads in urban

areas.

Street Furniture Practical and decorative features introduced into the streetscaping, intended

to enhance the comfort, convenience and aesthetic quality of the roadway

environment.

Streetscaping The practice of applying aesthetic treatments to the street and its facilities,

intended to enhance the quality of the roadway environment.

Superelevation The gradient measured at right angles to the centre line across the roadway

from the inside to the outside edge of a curve.

Superelevation

Runoff

The length of a roadway needed to accomplish a change in cross-slope from

a section with adverse crown removed to a fully superelevated section.

Surfaced Roadway A roadway in which the travelled lanes have been hard surfaced, usually by

some form of bituminous or concrete surface.

Swale A shallow drainage channel.

Tangent Runout The length of roadway needed to accomplish the change in cross-slope

from a normal crown to a location with the adverse crown removed. See

also Superelevation Runoff.

Tangent to Spiral (TS) The point of alignment change from tangent to spiral curve, in the direction

of stationing.

Throat Length The required unobstructed on-site driveway length to prevent stopped vehicles

from blocking the pasth of entering vehicles or vehicles travelling along the

circulation roadways on site.

Through Lane A lane intended for through traffic movement.

Toll Road A road open to traffic only upon payment of a direct toll or fee; sometimes

called tollway, throughway, turnpike or autoroute.

Total Wheelbase

(TWB)

The centre-to centre distance from the front axle to the rearmost axle of a tractor-trailer combination. (The nomenclature used for design vehicles is

based on total wheelbase, for example "WB-19" refers to a tractor-semitrailor

having a total wheelbase of approximately 19 m.)

December 2009 Page 4.2.11



Transit lane A lane intended primarily for public transit vehicles.

Transition Curve A curve whose radius continuously changes (eg. spiral).

Travelled Way That part of a roadway intended for vehicular uses, excluding shoulders.

Truck Escape Ramp (TER) A ramp provided on the right side of a long downhill section of roadway to allow vehicles (usually trucks) to escape in the event of brake failure.

interchange of two roads.

Turnout A widened section of roadway provided for passing of vehicles travelling in

opposite directions on a one-lane roadway, or in the same direction on a

two-lane roadway.

Two-Lane Roadway A roadway that provides for two lanes of traffic, one in each direction.

Two-Way Left-Turn Lane

The middle lane on a two-way undivided street intended for the exclusive use of vehicles about to turn left from either direction into property accesses.

Underpass A grade separation in which the subject roadway passes under a roadway

or railway.

Vertical Alignment The configuration of a road or roadway as seen in longitudinal section.

Vertical Curvature The horizontal distance along a parabolic curve required to effect a one

percent change in gradient.

Vertical Curve A curve on the longitudinal profile of a roadway to provide for change of

gradient.

Warrant A criterion that identifies a potential need for a physical feature, such as a

traffic barrier, extra lane, or other item.

Weaving The condition in which vehicles move obliquely from one lane to another,

and cross the paths of other vehicles moving in the same direction.

Weaving Lane A lane added to provide additional capacity and operational improvement in

sections of roadway experiencing weaving.

Weaving Section A section of roadway between an entrance and an exit, such that the

frequency of lane changing exceeds that for open highway conditions.