

GLOSSARY

General

1. Access Control. The condition where the public authority fully or partially controls the right of abutting owners to have access to and from the public highway.
2. Accessible Route. An accessible route is a continuous, unobstructed path connecting all accessible elements and spaces in a building, facility or site. A “site” is defined as a parcel of land bounded by a property line or a designated portion of a public right-of-way. A “facility” is defined as all or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property on a site.
3. Arterials. Highways that are characterized by a capacity to quickly move relatively large volumes of traffic but often provide limited access to abutting properties. The arterial system typically provides for high travel speeds and the longest trip movements.
4. Average Running Speed. The distance summation for all vehicles over a specified section of highway divided by the running time summation for all vehicles.
5. Average Travel Speed. The distance summation for all vehicles divided by the total time summation for all vehicles.
6. Bicycle Lane. A portion of a roadway that has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists.
7. Bicycle Path. A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way.
8. Bikeway. Any road, path or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or will be shared with other transportation modes.
9. Bridge. A structure, including supports, erected over a depression or obstruction, such as water, a highway, or a railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 ft between undercopings of abutments or spring lines or arches or extreme ends of openings for multiple boxes; may include multiple pipes where the clear distance between openings is less than half of the smaller contiguous opening.
10. Bridge Roadway Width. The clear width of the structure measured at right angles to the center of the roadway between the bottom of curbs or, if curbs are not used, between the inner faces of parapet or railing.

11. Bridge to Remain in Place. An “existing bridge to remain in place” refers to any bridge work which does not require the total replacement of both the substructure and superstructure.
12. Built-up. An urban classification that refers to the central business district within an urbanized or small urban area. The roadside development has a high density and is often commercial. Access to property is the primary function of the road network in built-up areas; the average driver rarely passes through a built-up area for mobility purposes. Pedestrian considerations may be as important as vehicular considerations, especially at intersections. Right-of-way for roadway improvements is usually not available.
13. Bus. A heavy vehicle involved in the transport of passengers on a for-hire, charter or franchised transit basis.
14. Collectors. Highways that are characterized by a roughly even distribution of their access and mobility functions.
15. Control by Regulation. Where the public authority determines where private interests may have access to and from the public road system.
16. Controlling Design Criteria. A list of geometric criteria requiring FHWA or ConnDOT approval if they are not met or exceeded.
17. Crosswalk. A marked lane for passage of pedestrians, bicycles, etc., traffic across a road or street.
18. Curb Cuts or Curb Ramps. The treatment at intersections for gradually lowering the elevation of sidewalks with curbs to the elevation of the street surface. The term “curb ramps” is used in this Manual.
19. Department. Connecticut Department of Transportation.
20. Design Exception. The process of receiving approval from the FHWA or Department for using design criteria which does not meet the criteria set forth in this Manual.
21. Design Speed. The selected speed used to determine the various geometric design features of the roadway.
22. Divided Highway. A highway with separated roadways for traffic moving in opposite directions.
23. 85th-Percentile Speed. The speed below which 85 percent of vehicles travel on a given highway.
24. Expressways. Divided highway facilities that are characterized by full or partial control of access.

25. Freeways. The highest level of arterial. Full control of access, high design speeds, and a high level of driver comfort and safety characterize these facilities.
26. Frontage Road. A road constructed adjacent and parallel to but separated from the highway for service to abutting property and for control of access.
27. Full Control (Access Controlled). Full control of access is achieved by giving priority to through traffic by providing access only at grade separation interchanges with selected public roads. No at-grade crossings or approaches are allowed. The freeway is the common term used for this type of highway. Full control of access maximizes the capacity, safety and vehicular speeds on the freeway.
28. Grade Separation. A crossing of two highways, or a highway and a railroad, at different levels.
29. High Speed. For geometric design applications, high speed is defined as greater than or equal to 45 mph.
30. Highway, Street or Road. A general term denoting a public way for purposes of vehicular travel, including the entire area within the right of way. (Recommended usage: in urban areas – highway or street, in rural areas – highway or road).
31. Intermediate. As urban classification that falls between suburban and built-up. The surrounding environment may be either residential, commercial or industrial or some combination of these. On roads and streets in intermediate areas, the extent of roadside development will have a significant impact on the selected speeds of drivers. Pedestrian activity is a significant design consideration, and sidewalks and crosswalks at intersections are common. The available right-of-way will often restrict the practical extent of roadway improvements.
32. Interchange. A system of interconnecting roadways in conjunction with one or more grade separations, providing for the movement of traffic between two or more roadways on different levels.
33. Intersection. The general area where two or more highways join or cross, within which are included the roadway and roadside facilities for traffic movements in that area.
34. Local Roads and Streets. All public roads and streets not classified as arterials or collectors.
35. Low-Moderate Density. A rural classification where the roadside development has increased to a level where the prudent driver will instinctively reduce his/her speed as compared to an open roadway. The driver must be more alert to the possibility of entering and exiting vehicles, but he/she is still able to maintain a relatively high travel speed. The estimated number of access points will average between 15 and 30 per mile per side. Right-of-way may be difficult to attain.

36. Low Speed. For geometric design applications, low speed is defined as less than 45 mph.
37. Major Strategic Highway Network Connectors. Highways that provide access between major military installations and highways that are part of the Strategic Highway Network.
38. Moderate/High Density. A rural classification where the roadside development has increased to a level that is comparable to a suburban area within an urbanized boundary. The extent of the development will have a significant impact on the selected travel speed of a prudent driver. Exiting and entering vehicles are frequent, and traffic signals are typical at major intersections. The estimated number of access points will average greater than 30 per mile per side. Right-of-way is usually quite difficult to attain.
39. National Highway System (NHS). A system of highways determined to have the greatest national importance to transportation, commerce and defense in the United States. It consists of the Interstate highway system, selected other principal arterials, and other facilities which meet the requirements of one of the subsystems within the NHS.
40. Noise Barrier. A structure designed to reduce the noise level of traffic adjacent to an existing building to an acceptable level.
41. Open. A rural classification that fits the traditional concept of a rural area. The driver has almost total freedom of movement and is generally not affected by occasional access points along the highway or road. For the purpose of determining the classification, access points will average less than 15 per mile per side. Right-of-way is usually not a problem.
42. Operating Speed. The highest overall speed at which a driver can safely travel a given highway under favorable weather conditions and prevailing traffic conditions while at no time exceeding the design speed.
43. Overpass. A grade separation where the subject highway passes over an intersecting highway or railroad.
44. Partial Control. The authority to control access is exercised to give preference to through traffic to a degree that, in addition to access connections with selected frontage or local roads, there may be some crossing at grade and some private approach connections.
45. Posted Speed Limit. The recommended speed limit for a highway as determined by engineering and traffic investigations.
46. Ramp. A short roadway connecting two or more legs of an intersection or connecting a frontage road and main lane of a highway.

47. Recreational Vehicle. A heavy vehicle, generally operated by a private motorist, engaged in the transportation of recreational equipment or facilities; examples include campers, boat trailers, motorcycle trailers, etc.
48. Right-of-Way (R/W). A general term denoting land, property, or interest therein, usually a strip acquired for or devoted to a highway use.
49. Roadway. (General) The portion of a highway including shoulders, for vehicular use. A divided highway has two or more roadways. (Construction) The portion of a highway within limits of construction.
50. Running Speed. The average speed of a vehicle over a specified section of highway. It is equal to the distance traveled divided by the running time (the time the vehicle is in motion).
51. Rural Areas. Those places outside the boundaries of urban areas.
52. Shared Roadway. Any roadway upon which a bicycle lane is not designated and which may be legally used by bicycles regardless of whether such facility is specifically designated as a bikeway.
53. Signalized Intersection. An intersection where all legs are controlled by a traffic signal.
54. State Highway System. The highway system under the jurisdiction of the Connecticut Department of Transportation consisting of those inter-municipality and Interstate highways, including their extensions through incorporated areas.
55. Stopped Controlled Intersection. An intersection where one or more legs are controlled by a stop sign.
56. Strategic Highway Network. This is a network of highways that are important to the United States strategic defense policy and which provide defense access, continuity and emergency capabilities for defense purposes.
57. Suburban. An urban classification that is usually located at the fringes of urbanized and small urban areas. The predominant character of the surrounding environment is usually residential, but it will also include a considerable number of commercial establishments. There may also be a few industrial parks in suburban areas. On suburban roads and streets, drivers usually have a significant degree of freedom, but nonetheless, they must also devote some of their attention to entering and exiting vehicles. Roadside development is characterized by low to moderate density. Pedestrian activity may or may not be a significant design factor. Right-of-way is often available for roadway improvements.
58. Surface Transportation Program (STP). A block-grant program that provides Federal-aid funds for any public road not functionally classified as a minor rural collector or a local road or street.

59. Truck. A heavy vehicle engaged primarily in the transport of goods and materials, or in the delivery of services other than public transportation.
60. Underpass. A grade separation where the subject highway passes under an intersecting highway or railroad.
61. Urban Areas. Those places within boundaries set by the responsible State and local officials having a population of 5000 or more.

Qualifying Words

1. Acceptable. Design criteria that do not meet values in the upper range, but yet are considered to be reasonable and safe for design purposes.
2. Criteria. A term typically used to apply to design values, usually with no suggestion on the criticality of the design value. Because of its basically neutral implication, this Manual frequently uses “criteria” to refer to the design values presented.
3. Desirable, Preferred. An indication that the designer should make every reasonable effort to meet the criteria and should only use a “lesser” design after due consideration of the “better” design.
4. Guideline. Indicating a design value that establishes an approximate threshold that should be met if considered practical.
5. Ideal. Indicating a standard of perfection (e.g., traffic capacity under “ideal” conditions).
6. Insignificant, Minor. Indicating that the consequences from a given action are relatively small and not an important factor in the decision-making for road design.
7. May, Could, Can, Suggest, Consider. A permissive condition. Designers are allowed to apply individual judgment and discretion to the criteria when presented in this context. The decision will be based on a case-by-case assessment.
8. Minimum, Maximum. Representative of generally accepted limits within the design community, but not necessarily suggesting that these limits are inviolable. However, where the criteria presented in this context will not be met, the designer will in many cases need approval.
9. Policy. Indicating ConnDOT practice that the Department generally expects the designer to follow, unless otherwise justified.
10. Possible. Indicating that which can be accomplished. Because of its rather restrictive implication, this word will not be used in this Manual for the application of design criteria.
11. Practical, Feasible, Cost-effective, Reasonable. Advising the designer that the decision to apply the design criteria should be based on a subjective analysis of the anticipated

- benefits and costs associated with the impacts of the decision. No formal analysis (e.g., cost-effectiveness analysis) is intended, unless otherwise stated.
12. Shall, Require, Will, Must. A mandatory condition. Designers are obligated to adhere to the criteria and applications presented in this context or to perform the evaluation indicated. For the application of geometric design criteria, this Manual limits the use of these words.
 13. Should, Recommend. An advisory condition. Designers are strongly encouraged to follow the criteria and guidance presented in this context, unless there is reasonable justification not to do so.
 14. Significant, Major. Indicating that the consequences from a given action are obvious to most observers and, in many cases, can be readily measured.
 15. Standard. Indicating a design value that cannot be violated without severe consequences. This suggestion is generally inconsistent with geometric design criteria. Therefore, “standard” will not be used in this Manual to apply to geometric design criteria.
 16. Trigger Value. The minimum geometric value at which the element should be considered for improvement.
 17. Typical. Indicating a design practice that is most often used in application and which is likely to be the “best” treatment at a given site.
 18. Warranted, Justified. Indicating that some well-accepted threshold or set of conditions has been met. As used in this Manual, “warranted” or “justified” may apply to either objective or subjective evaluations. Note that, once the warranting threshold has been met, this is an indication that the design treatment should be considered and evaluated not that the design treatment is automatically required.

Abbreviations

1. AASHTO. American Association of State Highway and Transportation Officials.
2. ADA. Americans with Disabilities Act.
3. CADD. Computer-Aided Drafting and Design.
4. CBD. Central Business Districts.
5. CGS. *Connecticut General Statutes*.
6. CONNDOT. Connecticut Department of Transportation.
7. FHWA. Federal Highway Administration.

8. HBRRP. Highway Bridge Replacement/Rehabilitation Program.
9. HCM. Highway Capacity Manual.
10. ITE. Institute of Transportation Engineers.
11. MUTCD. Manual of Uniform Traffic Control Devices.
12. NCHRP. National Cooperative Highway Research Program.
13. NHS. National Highway System.
14. PS&E. Plans, Specifications and Estimates.
15. 3R. Resurfacing, restoration and rehabilitation.
16. 4R. Resurfacing, restoration, rehabilitation and reconstruction.
17. R/W. Right-of-way.
18. STC. State Traffic Commission.
19. STP. Surface Transportation Program.
20. TRB. Transportation Research Board.
21. TSM. Transportation Systems Management
22. USDOT. United States Department of Transportation.

Planning

1. Average Annual Daily Traffic (AADT). The total yearly volume in both directions of travel divided by the number of days in a year.
2. Average Daily Traffic (ADT). The calculation of average traffic volumes in both directions of travel in a time period greater than one day and less than one year and divided by the number of days in that time period.
3. Capacity. The maximum number of vehicles which can reasonably be expected to traverse a point or uniform section of a road during a given time period under prevailing roadway, traffic and control conditions.
4. Categorical Exclusion (CE). A classification for projects that will not induce significant environmental impacts or foreseeable alterations in land use, planned growth, development patterns, traffic volumes, travel patterns, or natural or cultural resources.

5. Delay. The criteria performance measure on interrupted flow facilities, especially at signalized intersections. For this element, average stopped-time delay is measured, which is expressed in seconds per vehicle.
6. Density. The number of vehicles occupying a given length of lane, averaged over time. It is usually expressed as vehicles per mile.
7. Design Hourly Volume (DHV). The 1-hour volume in both directions of travel in the design year selected for determining the highway design.
8. Design Service Flow Rate. The maximum hourly vehicular volume that can pass through a highway element at the selected level of service.
9. Directional Design Hourly Volume (DDHV). The 1-hour volume in one direction of travel during the DHV.
10. Directional Distribution (D). The division, by percent, of the traffic in each direction of travel during the DHV, ADT or AADT.
11. Environmental Assessment (EA). A study to determine if the environmental impacts of a project are significant, thus requiring the preparation of an EIS.
12. Environmental Impact Statement (EIS). A document which is prepared when it has been determined that a project will have a significant impact on the environment.
13. Equivalent Single-Axle Loads (ESAL's). The summation of equivalent 18-kip single-axle loads used to combine mixed traffic to design traffic for the design period.
14. Finding of No Significant Impact (FONSI). A result of an EA that shows a project will not cause a significant impact to the environment.
15. Level of Service (LOS). A qualitative concept that has been developed to characterize acceptable degrees of congestion as perceived by motorists.
16. New Construction. Horizontal and vertical alignment construction, intersections at-grade, interchanges and bridges on new locations.
17. Peak-Hour Factor (PHF). A ratio of the total hourly volume to the maximum 15-minute rate of flow within the hour.
18. Peak-Rate of Flow. The highest equivalent hourly rate at which vehicles pass over a given point or direction of a lane or roadway during a given time interval less than one-hour, usually 15 minutes.
19. Project Scope of Work. The basic intent of the highway project which determines the overall level of highway improvement.

20. Reconstruction. Reconstruction of an existing highway mainline will typically include the addition of travel lanes, reconstruction of the existing horizontal and vertical alignment, and reconstruction of intersections, interchanges and bridges.
21. 3R. Resurfacing, restoration and rehabilitation of a non-freeway facility which is mainly on an existing highway alignment.
22. 4R. Any work (resurfacing, restoration, rehabilitation and reconstruction) on an existing freeway.
23. Spot Improvement. Improvements that are intended to correct an identified deficiency at an isolated location on non-freeways.
24. Traffic Composition. A factor reflecting the percentage of heavy vehicles (trucks, buses and recreational vehicles) in the traffic stream during the DHV.

Geometric

1. Acceleration Lanes. An auxiliary lane used by an entering vehicle to accelerate before entering the traveled way.
2. Auxiliary Lane. The portion of the roadway adjoining the through traveled way for purposes supplementary to through traffic movement including parking, speed change, turning, storage for turning, weaving or truck climbing.
3. Axis of Rotation. The superelevation axis of rotation is the line about which the pavement is revolved to superelevate the roadway. This line will maintain the normal highway profile throughout the curve. The axis of rotation is generally located at the point of grade application.
4. Back Slope. The side slope created by the connection of the ditch bottom, upward and outward, to the natural ground.
5. Broken-Back Curves. Two closely spaced horizontal curves with deflections in the same direction and a short intervening tangent.
6. Buffer Areas. The area or strip between the roadway and a sidewalk.
7. Channelization. The moving or directing of traffic through an intersection by the use of pavement markings (including striping, raised reflectors, etc.) or raised islands.
8. Cloverleaf Interchange. An interchange with loop ramps in one or more quadrants. Full cloverleaf interchanges have loop ramps in all quadrants.
9. Collector-Distributor Roads. A set of roadways at an interchange used to eliminate the weaving and reduce the number of exit and entrance points from the main through lanes of a freeway.

10. Comfort Criteria. Criteria that is based on the comfort effect of change in vertical direction in a sag vertical curve because of the combined gravitational and centrifugal forces.
11. Compound Curves. These are a series of two or more simple curves with deflections in the same direction immediately adjacent to each other.
12. Critical Length of Grade. The maximum length of a specific upgrade on which a loaded truck can operate without an unreasonable reduction in speed.
13. Critical Parallel Slope. Slopes upon which a vehicle is likely to overturn. Under the Department's roadside criteria, slopes steeper than 1:4 and 1:4 with curbing at the top are critical.
14. Crossover Line. The lane line between any two adjacent lanes of traffic.
15. Cross Slope. The slope in the cross section view of the travel lanes, expressed as a percent based on the change in vertical compared to the change in horizontal.
16. Cross Slope Rollover. The algebraic difference between the slope of the through lane and the slope of the adjacent lane or shoulder within the traveled way or gore.
17. Cuts. Sections of highway located below natural ground elevation thereby requiring excavation of earthen material.
18. Deceleration Lane. An auxiliary lane used by an exiting vehicle to reduce its speed.
19. Decision Sight Distance. Sight distance, which may be required in a complex environment, which is based on the driver's reaction time.
20. Depressed Median. A median that is lower in elevation than the traveled way and so designed to carry a certain portion of the roadway water.
21. Design Vehicle. The vehicle used to determine turning radii, off-tracking characteristics, pavement designs, climbing lanes, etc.
22. Diamond Interchange. An interchange with one-way diagonal ramps in each quadrant and two at-grade intersections on the minor road.
23. Driveway. A road providing access from a public way to a highway, street, road, etc., or abutting property.
24. Fill Slopes. Slopes extending outward and downward from the hinge point to intersect the natural ground line.
25. Flush Median. A median that is level with the surface of the adjacent roadway pavement.

26. Gore Area. The paved triangular area between the through lane and the exit lane, plus the graded area beyond the gore nose.
27. Grade Separation. A crossing of two highways, or a highway and a railroad, at different levels.
28. Grade Slopes. The rate of slope between two adjacent VPI's expressed as a percent. The numerical value for percent of grade is the vertical rise or fall in meters for each 100 m of horizontal distance. Upgrades in the direction of stationing are identified as plus (+). Downgrades are identified as minus (-).
29. Horizontal Sight Distance. The sight distance required across the inside of a horizontal curve.
30. Intersection Sight Distance (ISD). The sight distance required within the corners of intersections to safely allow a variety of vehicular maneuvers based on the type of traffic control at the intersection.
31. K-Values. The horizontal distance needed to produce a 1% change in gradient.
32. Landing Area. The area approaching an intersection for stopping and storage of vehicles.
33. Level Terrain. Level terrain is generally considered to be flat, which has minimal impact on vehicular performance. Highway sight distances are either long or could be made long without major construction expense.
34. Low-Speed Urban Streets. All streets within urbanized and small urban areas with a design speed of less than 45 mph.
35. Maximum Side Friction (f_{\max}). Limiting values selected by AASHTO for use in the design of horizontal curves. The designated f_{\max} values represent a threshold of driver discomfort and not the point of impending skid.
36. Maximum Superelevation (e_{\max}). The overall superelevation control used on a specific facility. Its selection depends on several factors including overall climatic conditions, terrain conditions, type of area (rural or urban) and highway functional classification.
37. Median. The portion of a divided highway separating the two traveled ways for traffic in opposite directions. The median width includes both inside shoulders.
38. Median Opening. An at-grade opening in the median to allow vehicles to cross from one roadway to the next.
39. Mountainous Terrain. Longitudinal and transverse changes in elevation are abrupt, and benching and side hill excavation are frequently required to provide the highway alignment. Mountainous terrain aggravates the performance of trucks relative to passenger cars, resulting in some trucks operating at crawl speeds.

40. Non-Recoverable Parallel Slope. Slopes that are steeper than 1:4. Most drivers will not be able to recover and return to the highway. The Department has decided to treat this range of cross slopes as critical.
41. Normal Crown (NC). The typical cross section on a tangent section (i.e., no superelevation).
42. Open Roadways. All urban facilities with a design speed greater than 45 mph and all rural facilities regardless of design speed.
43. Parking Lane. An auxiliary lane primarily for the parking of vehicles.
44. Partial Cloverleaf Interchange. An interchange with loop ramps in one, two or three quadrants.
45. PC. Point of curvature (beginning of curve).
46. PCC. Point of compound curvature.
47. Performance Curves. A set of curves that illustrate the effect grades will have on the design vehicle's acceleration and/or deceleration.
48. PI. Point of intersection of tangents.
49. Point of Grade Application. The point on the cross section where the elevation of the calculated profile grade line is located.
50. PRC. Point of reverse curvature.
51. PT. Point of tangency (end of curve).
52. PVC (Point of Vertical Curvature). The point at which a tangent grade ends and the vertical curve begins.
53. PVI (Point of Vertical Intersection). The point where the extension of two tangent grades intersect.
54. PVT (Point of Vertical Tangency). The point at which the vertical curve ends and the tangent grade begins.
55. Raised Median. A median that contains a raised portion within its limits.
56. Recoverable Parallel Slope. Slopes which can be safely traversed and upon which an errant motorist has a reasonable opportunity to stop and return to the roadway. The Department considers slopes flatter than 1:4 and slopes of 1:4 without curbing at their top recoverable.

57. Relative Longitudinal Slope. In superelevation transition sections on two-lane facilities, the relative gradient between the profile grade and edge of traveled way.
58. Reverse Adverse Crown (RC). A superelevated roadway section that is sloped across the entire traveled way in the same direction and at a rate equal to the cross slope on a tangent section.
59. Reverse Curves. These are two simple curves with deflections in opposite directions that are joined by a relatively short tangent distance.
60. Roadside. A general term denoting the area adjoining the outer edge of the roadway. Extensive areas between the roadways of a divided highway may also be considered roadside.
61. Roadway Section. The combination of the traveled way, both shoulders and any auxiliary lanes on the highway mainline.
62. Rolling Terrain. The natural slopes consistently rise above and fall below the roadway grade and, occasionally, steep slopes present some restriction to the highway alignment. In general, rolling terrain generates steeper grades, causing trucks to reduce speeds below those of passenger cars.
63. Shoulder. The portion of the roadway contiguous to the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.
64. Shoulder Slope. The slope in the cross section view of the shoulders, expressed as a percent.
65. Shoulder Width. The width of the shoulder measured from the edge of travelway to the outside edge of shoulder or face of curb.
66. Side Friction (f). The interaction between the tire and the pavement surface to counterbalance, in combination with the superelevation, the centrifugal force of a vehicle traversing a horizontal curve.
67. Sidewalk. That portion of the highway section constructed for the use of pedestrians.
68. Simple Curves. These are continuous arcs of constant radius that achieve the necessary highway deflection without an entering or exiting transition.
69. Single Point Urban Interchange. A diamond interchange where all the legs of the interchange meet at a single point on the minor road.
70. Sloping Curb. A longitudinal element placed at the roadway edge for delineation, to control drainage, to control access, etc. Sloping curbs have a height of 6 in or less with a face no steeper than 3 vertical to 1 horizontal.

71. Spiral Curves. These are curvature arrangements, used to transition between a tangent section and a simple curve, that are consistent with the transitional characteristics of vehicular turning paths. When moving from the tangent to the simple curve, the sharpness of the spiral curve gradually increases from a radius of infinity to the radius of the simple curve.
72. Stopping Sight Distance (SSD). The sum of the distance traveled during a driver's perception/reaction or brake reaction time and the distance traveled while braking to a stop.
73. Superelevation (e). The amount of cross slope or "bank" provided on a horizontal curve to help counterbalance, in combination with side friction, the centrifugal force of a vehicle traversing the curve.
74. Superelevation Rollover. The algebraic difference (A) between the superelevated travel lane slope and shoulder slope on the outside of a horizontal curve.
75. Superelevation Runoff (L). The distance needed to change in cross slope from the end of the tangent runout (adverse crown removed) to a section that is sloped at the design superelevation rate.
76. Superelevation Transition Length. The distance required to transition the roadway from a normal crown section to the full superelevation. Superelevation transition length is the sum of the tangent runout and superelevation runoff (L) distances.
77. Tangent Runout (TR). The distance needed to change from a normal crown section to a point where the adverse cross slope of the outside lane or lanes is removed.
78. Toe of Slope. The intersection of the fill slope or inslope with the natural ground or ditch bottom.
79. Top of (Cut) Slope. The intersection of the back slope with the natural ground.
80. Travel/Traffic Lane. The portion of the traveled way for the movement of a single line of vehicles.
81. Traveled Way. The portion of the roadway for the through movement of vehicles, exclusive of shoulders and auxiliary lanes.
82. Turning Roadways. Channelized (painted or raised) turn lanes at intersection at-grade.
83. Turning Template. A graphic representation of a design vehicle's turning path for various angles of turns.
84. Turn Lane. The portion of the roadway adjoining the through traveled way for speed change, turning and storage for turning vehicles.

85. Vertical Curb. A longitudinal element placed at the roadway edge for delineation, to control drainage, to control access, etc. Barrier curbs may range in height between 6 in and 12 in with a face steeper than 3 vertical to 1 horizontal.