

GLOSSARY

Acceleration Lane - An additional lane provided to allow traffic to merge onto a roadway.

Deceleration Lane - An additional lane provided to allow traffic to exit off of a roadway.

Access Control - the restriction of direct access between a roadway and an immediately adjacent property. These restrictions are generally categorized as full control of access, partial control of access and access management.

Full control of access allows access to the highway facility via interchanges only (i.e., no at-grade crossings), eliminates all median crossovers except for emergency vehicles and eliminates private driveway access (e.g. Interstate-495).

Partial control of access allows access to the highway facility only from public roads (no private driveways) through intersections or interchanges (e.g. MD 5).

Access management limits and/or removes the number of points at which a vehicle may enter or exit a highway. Access management may include combining entrances and parking lots and adding service roads.

Aerial Photography - High resolution photographs taken from aircraft which are used to assess features in a study area, which are also used to produce topographic base maps of varying scales for alignment studies, engineering, and final design work.

Affected Environment - The physical features, land, area, or areas to be influenced, affected or created by an alternative alignment under consideration; also includes various social and environmental factors and conditions pertinent to an area.

Alignment - The actual location of a highway or transit facility or improvement.

Alternatives - Alternatives are potential solutions that are evaluated to determine whether or not they will address the purpose and need of the project. Each alternative is developed and evaluated in relation to the purpose and need of the project. Sometimes, the term “alternate” is used interchangeably with the term “alternative”.

Anadromous – Refers to fish which migrate upstream to spawn in freshwater.

Aquifer – A water-bearing unit or stratum of permeable rock, sand, or gravel capable of yielding considerable quantities of water to wells or springs.

Area of Potential Effect (APE) - The geographical area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of the undertaking, and there may be different kinds of effects caused by the undertaking.

At-Grade Intersection - The location where roadways meet or cross at the same level.

Average Daily Traffic (ADT) - The average number of vehicles passing a location on a road during a 24-hour period. Typical types of ADT's given include:

- Existing ADT – Today's ADT on an existing road
- Future ADT – The ADT forecasted for a future year

Avoidance Alternative – Any alignment proposal that has been developed, modified shifted or downsized specifically in order to avoid affecting any one or more resources regarded as significant.

Best Management Practices (BMPs) – Measures used to control the quantity and quality of stormwater leaving a drainage basin. Local and state jurisdictions have adopted BMPs to counteract physical development and construction activity that may concentrate stormwater or produce soil erosion.

Bypass- A roadway, typically a freeway or arterial, that permits traffic to avoid part or all of an urban area.

Capacity – The maximum number of vehicles that can reasonably be expected to pass over a lane or roadway during a given time period under prevailing roadway and traffic conditions. Typically, the maximum expressway capacity for automobiles is 2000 vehicles per lane per hour.

Categorical Exclusions (CE) – 1. A classification given to federal aid projects or actions that do not have a significant effect on the environment either individually or cumulatively. Categorical Exclusions do not require extensive levels of environmental documentation. 2. The written documentation to support a Class of Action that satisfies federal criteria describing non-significant impacts.

Channelized Intersection - An at-grade intersection in which traffic is directed into definite paths by islands and/or medians.

Circulator Bus- Collector buses which serve local trips and make frequent stops on demand.

Cloverleaf - A form of interchange that provides indirect right-turn movements in all four quadrants by means of loops.



Full Cloverleaf.

Cluster Development – Concentration of development on one part of a site or area, including reducing the size of residential lots, to preserve open space on the remainder of the site or area.

Collector – Distributor Road (C/D) A one-way road, parallel to the main traffic lanes, that provides access to or from more than one ramp. The C/D road collects traffic from on-ramps or the main lanes, and distributes traffic to off-ramps or back to the main lanes.



Comment Period – Usually a minimum of 30 days during which a document (e.g. the Draft and Final Environmental Impacts Statements) is reviewed by agencies and the public, who may submit verbal or written comments. It can be applicable to all types of engineering and environmental documents which are circulated, as well to formal presentations such as those which may be given by the Maryland Department of Transportation (MDOT) officials at a Public Hearing.

Commenting Agency – Agency responsible for reviewing and commenting on Environmental Impact Statements (EISs). Their comments are considered by the lead agency in the preparation of the Draft EIS, Final EIS and Record of Decision.

Community Impact Assessment (CIA) - The Community Impact Assessment is an evaluation of the effects of a transportation action on a community and its quality of life. The assessment includes items such as mobility, safety, employment effects, relocation, isolation, and other community issues. Information from this assessment provides documentation regarding the current and anticipated social environment with and without a build alternative. The CIA will be incorporated as part of the Socio-economic analyses for the US 301 Waldorf Area Transportation Improvement Project. The assessment results will be summarized in the Environmental Impact Statement.

Conformity – The U.S. Clean Air Act stipulates that any approved transportation project, plan, or program must conform to the State Implementation Plan (SIP), a document which prescribes procedures for the implementation, maintenance and enforcement of primary and secondary pollutants.

Constrained Areas – Targeted areas within the corridor surrounded by imminent development. These areas are thought to contain sensitive environmental resources, where detailed wetland delineation studies are required.

Constraints – (More commonly described as environmental features) Significant resources, facilities, or other features or study areas located in or adjacent to an existing or proposed transportation corridor that serve to restrain, restrict, or prevent the ready implementation of proposed transportation improvements in a given area; may include natural or physical resources, important structures, communities facilities, or topographic features.

Cooperating Agency – As defined in the Council on Environmental Quality’s (CEQ) *Regulations for Implementing the Procedural Provisions of the NEPA.*, Any organization other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in [a] major Federal action significantly affecting the quality of the human environment. The CEQ emphasizes that agency cooperation should begin early in the NEPA process.

Corridor – A band width of 300 feet encompassing certain areas within the project limits.

Corridor Preservation – Cooperative planning efforts and/or specific administrative, fiscal, or legal methods for reserving land area for future transportation needs.

Cultural/Historic Resources - According to Section 106 of the National Historic Preservation Act, a historic resource is any resource listed on or determined eligible for listing in the National Register of Historic Places. Historic properties can include sites, objects, structures, buildings, districts or archeological sites.

State Highway Administration (SHA) has a staff of professional architectural historians and archeologists who ensure that cultural resources are considered during the planning and design process for proposed highway projects. By following federal and state historic preservation laws, the SHA historians and archeologists determine whether highway projects could affect properties that are on or eligible for the National Register of Historic Places (NRHP). All efforts are coordinated closely with the Maryland Historical Trust and other consulting parties, such as local and county historical societies or planning departments. Typically, SHA projects follow these steps:

- Identification of cultural resources such as sites, objects, structures, buildings, bridges and districts or archeological sites
- Evaluation of NRHP Eligibility
- Documentation of historic significance for the public and performing archeological studies
- Determination of the effect of the alternatives on cultural resources
- Planning of avoidance, minimization and protection techniques
- Development of measures to offset any unavoidable adverse impacts cultural resources

Cumulative Impact – The sum of all direct, indirect, and secondary impacts resulting from a transportation improvement project.

Cycle Length - A signal cycle is the number of seconds it takes for one complete sequence of phases (red, yellow, green) to occur.

Density - The number of vehicles occupying a given length of highway or lane at a given time.

Design Approval - Following receipt of Location Approval from FHWA, a Design Approval Memorandum is prepared. This memorandum defines the design features associated with the selected build action, defines elements that conform to AASHTO criteria and identifies any design exceptions required. Approval of this memorandum by the Director of Planning and Preliminary Engineering, Deputy Chief Engineer – Highway Development, Chief Engineer and State Highway Administrator constitutes Design Approval, which is the Administration’s acceptance of design features described therein for use in the preparation of contract plans.

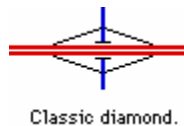
Design Criteria – Established state and national standards and procedures that guide the establishment of roadway layouts, alignments, geometry, and dimensions for specified types of highways in certain defined conditions. The principal design criteria for highways are traffic volume, design speed, the physical characteristics of vehicles, the classification of vehicles, and the percentage of various vehicle classification types that use the highway.

Design Exception – An approval issued by a state or federal agency to permit certain deviation from a specified, accepted standard granted on the basis of a report explaining the need for the exception and the consequences that will result from the action.

Design Speed - The speed used for design and relationship of the physical features of a highway that influence vehicle operation. It is the maximum safe speed that can be maintained over a specified section of highway when conditions are favorable (i.e. – clear, dry, daylight)

Designated Development Areas – Areas designated by local governments in master, comprehensive or general plans as the primary areas for future development, usually planned for urban densities of development and served by water and sewer systems.

Diamond Interchange - A four-ramp interchange between a freeway and a surface street. The four diagonal ramps, one in each quadrant, suggest a diamond shape.



Diverge - The dividing of a single lane of traffic into separate streams without traffic signals or other right-of-way controls.

Draft Environmental Impact Statement (DEIS) - A Draft Environmental Impact Statement (DEIS) is a type of environmental document prepared that includes examination of the natural, cultural and socioeconomic environmental impacts of various alternatives.

Ecosystem – A functional system which includes the organisms of a total community together with their environment.

Environmental Assessments (EA) – A type of environmental document prepared for a federal action where the significance of the environmental impact is not clearly established.

Environmental Justice - Executive Order 12898 “Federal action to address Environmental Justice (EJ) in Minority Populations and Low-income Populations” was issued to ensure that there are no disproportionately high and adverse effects on low income and minority populations. Throughout the project, SHA will outreach to the public in order to identify EJ populations and avoid disproportionate adverse impact to these populations.

Environmental Streamlining - Environmental streamlining is an initiative aimed at identifying ways that transportation and environmental agency representatives can more effectively work together in a collaborative and cooperative manner to avoid unnecessary delays in processing environmental documents, approvals and permits. The environmental streamlining provision is contained in the Federal transportation law passed in 1998, the Transportation Equity Act for the 21st Century (TEA-21). This provision calls on Federal agencies to jointly develop a coordinated environmental review process for transportation projects. Because major transportation projects are affected by dozens of Federal, State, and local requirements administered by a multitude of agencies, improved interagency cooperation is critical to the success of environmental streamlining.

Environmental Traffic - Data used to do environmental impact studies (air quality and noise analysis). It includes items such as forecasted build year and design year volumes, diurnal curves, and Level of Service information.

Express Bus Service – Service which is usually associated with longer distance commuter travel. Outside the downtown area, these buses normally only stop at Park and Ride facilities or densely developed town centers.

Expressway - A divided highway, to which access is controlled, where all crossing roads are grade separated so that all entrances and exits are made via interchange ramps.

Feeder Bus Service – Local bus service serving communities and transporting people generally from residential developments to locations where commuters can access express bus service or other forms of high speed transit.

Final Environmental Impact Study (FEIS) - The Environmental Impact Statement is a full disclosure document that provides a full description of the proposed project, the existing environment, and analysis of the anticipated beneficial and adverse environmental and social effects of reasonable alternatives. A Draft (DEIS) and Final (FEIS) document are prepared.

The FEIS must address comments received on the DEIS, making any appropriate revisions or decisions and, identify (if not identified in the DEIS) and describe the preferred alternative and the basis for the decision.

Finding of No Significant Impact (FONSI) – A types of environmental document prepared for proposed projects where it has been determined through the circulation of an Environmental Assessment that a project will not have a significant impact on the environment.

Floodplain – A flat or nearly flat lowland that borders a stream and is covered by its waters at flood stage.

Flyover - A directional or semi-directional ramp which usually handles left turns (instead of using a loop ramp) and often passes over the main traffic lanes.

Free Flow - The continuous movement of traffic.

Freeway – A facility designed to carry the highest traffic volumes and the longest trips.

Frontage Road - A local street or road located next to an arterial highway which provides access to properties along the roadway and controls access to the arterial highway from the properties.

Grade - The rate of upward or downward slope of a roadway, expressed as a percent.

Grade Separation - An intersection in which one road passes over the other on a bridge.

Groundwater – Naturally occurring water that moves through the earth’s crust, usually at a depth of several feet to several hundred feet below the earth’s surface.

Frontage Road - A local street or road located next to an arterial highway which provides access to properties along the roadway and controls access to the arterial highway from the properties.

High Occupancy Vehicle (HOV) - A vehicle carrying more than one person, or a minimum of its designated number (i.e., HOV-3 must have a minimum of three people in order to qualify). HOVs are sometimes given preferential treatment, such as an HOV-only travel lane, because they carry people more efficiently than vehicles with a single occupant.

Interagency Working Group (IAWG) - A monthly meeting held with the environmental review and regulatory agencies to review and discuss the status of the US 301 Waldorf Area Transportation Improvement Project and to obtain concurrence and/or comments at the concurrence points for Purpose and Need, Alternatives Retained for Detailed Study, and SHA’s Selected Alternative and Mitigation.

Interchange - A grade-separated intersection with ramps to connect them

Intermittent – Carries water a considerable portion of the time, but which ceases to flow occasionally or seasonally.

Intersection - The area within vehicles traveling on different roadway may come in conflict. They may be at grade or grade separated. (Interchanges are a type of intersection.)

Level-of-Service (LOS) - A measure of the congestion experienced by drivers. LOS ranges from A (free flow with little or no congestion) to F (failure with stop-and-go conditions).

Level of Service – Combinations of operating conditions that can occur on a given lane or roadway when it is accommodating various traffic volumes.

Light Rail Transit – A rail transit system which includes electrically powered, low-to-medium speed trains operating in an exclusive or shared right-of-way. Light rail is characterized by short-to-medium trip lengths, 2-3 car trains, and frequent station stops.

Link - The section of roadway between two intersections.

Local Road - A street or road which primarily provide access to residences, businesses, or other properties

Logical Termini – Known features (land uses economic areas, population concentrations, cross route locations, etc.) at either end of a proposed transportation route that enhance good planning and which serve to make the route usable. Logical termini are considered rational end points for a transportation improvement.

Major Investment Study (MIS) – A cooperative process to establish a range of alternatives including the effectiveness and cost effectiveness, direct and indirect costs, mobility improvements, environmental effects, safety, operating efficiencies, land use and economic development, financing and energy consumption. The goal of a MIS is to have results adopted by MPO to be included in the Comprehensive Long Range Transportation Plan.

Maryland Environmental Policy Act (MEPA) - Mandate that state agencies, in balancing economic development and environmental quality, engage in thoughtful consideration of the environmental effects of proposed actions.

Median - The area that divides traffic moving in opposite directions on a single roadway.

Median opening - A gap in a median provided for crossing and/or turning traffic.

Median turn lane - A separate lane, within the median, primarily used to accommodate left turn vehicles.

Merge - A movement in which two separate lanes of traffic combine to form a single lane without the aid of traffic signals or other right-of-way controls. Merging – The process by which two separate traffic streams moving in to the same general direction combine to form a single stream.

Metropolitan Planning Organization (MPO) - A group of metropolitan area government representatives charged with the responsibility to promote the development of transportation systems, embracing various modes of transportation in a manner which will efficiently maximize mobility of people and goods through the urbanized area. They are required to develop a long-range transportation plan and a transportation improvement program. By federal law, any urban area with at least 50,000 population should have a planning process with an MPO.

Mitigation Measures – Specified design commitments made during the environmental evaluation and study process that serve to moderate or lessen impacts deriving from the proposed action. These measures may include planning and development commitments, environmental measures, right-of-way improvements, and agreements with resource or other agencies to effect construction or post construction action.

Multi-modal – The provision of alternatives for transportation of people and goods, including bus, pedestrians, bicycles, trains, light rail, highways, etc. Recent federal legislation ties transportation funding to the incorporation of multi-modal considerations in the planning of transportation improvements.

National Environmental Policy Act – The National Environmental Policy Act (NEPA) of 1969 establishes a legislative mandate to federal agencies to consider the environment in all major federal actions. The NEPA process involves the detailed study of alternatives and the evaluation of environmental impacts and mitigation measures.

National Register (NR) – Cultural resources (e.g. historic or archeological sites) which are on the National Register of Historic Places.

National Register Eligible (NRE) – Cultural resources (e.g. historic or archeological sites) which are eligible for listing on the National List of Historic Places.

Natural Environment – occurs naturally and is not man made ie streams, forest and natural wetlands.

No-Action ("No-Build") Alternative - The "no-action" (some times called “no-build”) alternative is always studied. Discussion of this alternative serves two purposes. First, it may be a reasonable alternative, especially where the impacts of build alternatives are high and the need is relatively minor. Second, no-action serves as a benchmark against which the impacts of the other alternatives can be compared. As part of this alternative, short-term minor reconstruction, such as safety upgrading and maintenance projects, can be considered.

Noise Abatement - State Highway Administration (SHA) recognizes that noise from roadway traffic close to communities can impact quality of life. The Federal Highway Administration (FHWA) provides regulations and guidance for mitigation for highway traffic noise in the planning and design of federally aided highway projects.

Noise Sensitive Area/Receptor Site (NSA) - An area involving regular human use or activities which would be susceptible to adverse impacts due to highway traffic-generated noise. NSAs typically include such land areas as residences, churches, schools, parklands, hospitals, etc. The NSA may include an individual residence, a group of residences on a street, or an entire community. Individual analysis sites within the NSA are called Noise Receptor Sites.

Nontidal Wetlands of Special State Concern (COMAR 08.05.04) – Provide unique habitat types or contain rare, threatened or endangered species.

Normal circumstances – Under the definition of wetlands, refers to the soil and hydrology conditions that are normally present, without regard to whether the vegetation has been removed.

Northern Corridor – Project limits which extend from the US 301/MD 5 Interchange at T.B. to US 50.

Notice of Intent (NOI) - The Notice of Intent (NOI) is an announcement to the public and to interested agencies that a project is being developed and that an EIS will be prepared. It briefly describes the Study Area, the proposed action, its proposed purpose and need, the agency's proposed public scoping process, and identifies the agency contact person (name and address).

Origin-Destination Survey - Use of any one of several methods to determine where trips are coming from and going to or where they desire to travel.

Overpass - A grade separation where a highway passes over an intersecting highway, railroad or watercourse.

Partial cloverleaf (parclo) - An interchange with one or more loop ramps, but fewer than the eight ramps needed to form a full cloverleaf.



Peak Period – Time when a highway carries its highest volume of traffic, usually the morning or evening rush period when commuters travel to and from work.

Preferred Alternative - A preferred alternative is the recommended alternative put forth no later than the FEIS. A recommended Preferred Alternative can be identified in the DEIS.

Priority Funding Area (PFA) - Locations where the State and local governments want to target their efforts to encourage and support economic development and new growth. The Smart Growth legislation designated certain areas as PFAs (i.e., existing municipalities, Baltimore City, areas within the Baltimore and Washington beltways, Department of Housing and Community Development revitalization areas, Enterprise Zones, certified Heritage Areas, etc.) Counties may also designate areas as PFAs if they

meet guidelines for intended use, availability of plans for sewer and water systems, and permitted residential density.

Project Limits – The physical end points of a proposed project, usually designated at geographic or municipal boundaries, at intersections, at roadway segments where cross sections change, or at the beginning or end of numbered state traffic routes.

Public Hearing – A meeting designed to afford the public the fullest opportunity to express support of or opposition to a transportation project in an open forum at which a verbatim record (transcript) of the proceeding is kept.

Public Involvement – Coordination events and informational materials geared at encouraging the public to participate in the Project Planning process. A successful Public Information Plan facilitates the exchange of information among project sponsors and outside groups and the general public, and includes meetings, surveys, committees, presentations, etc.

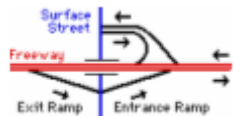
Public Meeting – An announced meeting conducted by transportation officials designed to facilitate participation in the decision-making process and to assist the public in gaining an informed view of a proposed project at any level of the Project Planning Process. Also, such a gathering may be referred to as Public Information Meeting.

Purpose and Need Statement - The Purpose and Need Statement establishes why the project is proposed and is the foundation to determine if alternatives meet the needs in the area. The Purpose and Need Statement is developed in consultation with local, state and federal agencies as well as the public.

Quadrant - One of four slices of land created when two roads intersect. This term is used when talking about ramp placement.

Queue - A line of vehicles stopped at an intersection, merge or diverge point.

Ramp - A connecting roadway providing access in one direction from one road to another.



Record of Decision (ROD) – A document prepared by the Division Office of the Federal Highway Administration (FHWA) that presents the basis for selecting and approving a specific transportation proposal that has been evaluated through the various environmental and engineering studies of the Transportation Project Development Process. Typically, the Record of Decision (ROD) identifies the alternative selected in the FEIS, the alternatives considered, measure to minimize harm, monitoring or enforcement programs, and in itemized of commitments and mitigation measures.

Right-of-Way - A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

Riparian – Pertaining to anything connected with or immediately adjacent to the banks of a stream.

Scoping - Scoping is a formal coordination process conducted to assist in determining the issues to be addressed and for identifying the significant issues related to the proposed action. Scoping occurs early in the process, after the Notice of Intent (NOI) is published, and involves both agencies and the public. Scoping is an iterative process that continues throughout the study.

Section 4(f) – Enacted as a portion of the Department of Transportation Act of 1966, Section 4(f) declares “that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.” Section 4(f) applies to all historic sites, but only to publicly-owned parks, recreation areas, and wildlife/waterfowl refuges.

Section 106 Procedures – Derived from Section 106 of the National Historic Preservation Act of 1996 which governs the identification, evaluation, and protection of historical and archaeological resources affected by state and federal transportation projects. Principal areas identified included required evaluations to determine the presence or absence of sites, the eligibility based on National Register of Historic Places criteria and the significance and effect of a proposed project upon such a site.

Section 404 Alternatives Analysis – Examines practical alternatives to the possible discharge or dredged or fill material into certain aquatic ecosystems, such as wetlands, mudflats, vegetated shallows or other special aquatic system. Practical means available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes. Criteria guiding such an analysis are derived from the provisions of Section 404(b)(1) of the 1972 Federal Clean Water Act as amended in 1977. The analysis is performed during the environmental studies of the Project Planning Process and is required before the issuance of a permit by the Army Corps of Engineers (ACOE) for the discharge of dredged or fill materials.

Semi-anadromous fish – Fish which live in brackish water but spawn in freshwater.

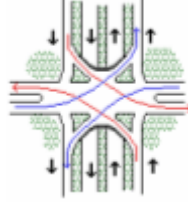
Service Roads – Parallel roadways constructed on the outside of major highways to accommodate local traffic and provide access to adjacent land owners.

Shoulder - The portion of the roadway primarily used for accommodation of stopped vehicles or emergency use.

Sight Distance - The length of roadway ahead visible to the driver

Significant Impact – Any number of social, environmental, or economic effects or influences that may result from the implementation of a transportation improvement; classified as direct, secondary, or cumulative. The FHWA mandates environmental clearance documents based upon the significance of impacts. Categorical exclusions, for example, are those actions which do not involve significant effects. In most cases, Environmental Impact Statement projects do involve significant impacts.

Single Point Urban Interchange (SPUI) Or Single-Point Diamond - A newer type of diamond interchange where the diagonal ramps are instead placed as close as possible paralleling the freeway, so that ramp traffic in effect meets at a single point on the surface street directly below (or above) the freeway.



Slip Ramp - An angular connection between an expressway and a parallel (frontage) road.

Socio-Economic Environment - Socio-economic or human environmental factors include, but are not limited to: residences and businesses, minority, elderly, handicapped and low income individuals; community facilities; community or neighborhood cohesion; access to services and facilities; travel patterns; emergency vehicle response times; farm operations; employment opportunities; tax base and revenues; land use; local and regional economic activities and development; and secondary development areas.

Southern Corridor – MD 5/US 301 interchange at TB to I-495 and the MD 5/US 301 interchange at TB along US 301 to the Potomac River.

Stormwater Management (SWM) - Physical design features such as ponds or drainage swales which are incorporated into a highway project as measures to retain or direct stormwater run-off in a manner that controls discharge volumes and/or water quality, replicating the pre-construction drainage conditions.

Study Area – A geographic area selected and defined at the outset of engineering or environmental evaluations, which is sufficiently adequate in size to address all pertinent project matters occurring within it.

Stream Restoration & Enhancement - State Highway Administration's stream reconstruction techniques are based on a state-of-the-art science termed Fluvial Geomorphology. This science provides tools to engineers and designers to transfer knowledge of stable and natural stream channels to stabilize or reconstruct unstable stream segments. In other words, intricate patterns and details found in nature are artificially reproduced to establish a stable stream that can support aquatic life.

Sub-corridor – Alternative corridors within the Northern Corridor or Southern Corridor.

Surface Street - In our context (interchange diagrams), a surface street allows access by traffic signal or stop sign, or allows turns across opposing traffic.

System Linkage – Interconnection of roadway segments that comprise an overall transportation network. Also, a discussion of how a proposed project fits into the existing and future transportation system (network) and how it contributes to developing a sound transportation network in an area or region. The terms connector road, missing link, gap completion, or circumferential link, or beltway segment are sometimes used to describe this concept.

Systems Planning – A methodical approach to the formation of plans and programs for a safe, efficient, and balanced transportation network; involves setting goals and objectives, collecting data on existing conditions, simulating future activities, formulating alternative feasible, desirable, and appropriate action.

Transferable Development Rights – The sale of property development rights by landowners in non-development areas to landowners in areas designated for development. The transferred rights can be used to increase the amount of permitted development in designated development areas while preserving land in non-development areas.

Transit Oriented Development – A development pattern designed to provide proximity and convenient access to bus routes, rail stations, and nearby day-to-day services such as shops and schools through a network of interconnected streets, pedestrian walks, and bicycle paths.

Transportation Control Measures (TCM) – Also known as Travel Demand Management (TDM), TCMs focus on reducing the number of vehicles on a roadway by changing the behavior of motorists. The Clean Air Act Amendments of 1990 mandate consideration of certain TCMs as ways to reduce vehicle emissions in air quality non-attainment areas, for example, promoting the use of public transit, encouraging ridesharing and carpooling, and organizing employer-sponsored flexible work hour programs.

Transportation Demand Management (TDM) - Actions that result in reduction in either peak period and /or overall travel demand. TDM includes policies, programs and actions implemented to increase the use of high occupancy vehicles (public transit, carpooling and vanpooling), cycling and walking; to encourage commuting outside congested time periods; and to encourage telecommuting as an alternative to driving.

Transportation Management Associations (TMAs) – Public or private non-profit organizations that provide TDM-oriented services to employers and businesses in designated activity centers. Traditionally, TMAs have concentrated on providing TDM support services such as rideshare matching, guaranteed ride home, etc.

Transportation Systems Management (TSM) – A transportation alternative which seeks to reduce traffic congestion without altering the existing roadway. This alternative considers options such as improvements to the mass transit system, minor intersection improvements, and traffic management TSM is considered to be a viable alternative only in urban areas.

Travel Time - The average time spent by vehicles traveling along a highway segment, including the delays at intersection.

Trip Generation - The analysis and application of the relationships that exist between land uses and people's desire to travel.

Turning Movement Count - A manual count to determine what direction vehicles take after approaching an intersection.

Underpass - A grade separation where one highway passes underneath an intersection highway or railroad.

Upgrade Alternative –A study alternative or a proposed action in which all proposed improvement efforts are focused within the corridor or land area of a facility that is already built. This alternative is examined and studied first, often in conjunction with a TSM Alternative, before other alignments that may be on a new location are considered.

Weave - A type of conflict where traffic veering right and traffic veering left must cross paths within a limited distance. Typically this occurs when an exit ramp closely follows an entrance ramp, between two closely spaced interchanges or two loops of a cloverleaf. Weaving introduces safety and capacity problems, and is a primary reason some older full cloverleaf's are being converted to other types of interchanges. Loop ramps are either removed outright (diagonal ramps assume their traffic) or replaced by flyovers

Wetland - Lands that are transitional between terrestrial (land) and aquatic (water) systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands serve an important environmental function such as filtering runoff and providing high quality natural habitats.

Wetland Creation & Protection - Protecting existing wetlands is a major consideration during the planning, design and construction of highway projects. In planning our roadways, extensive efforts are made to avoid and/or minimize impacts to wetlands whenever reasonable and practicable. Unavoidable wetland impacts are mitigated.