



# Appendix E

## Glossary of Terms

### A

#### Accessibility

(1) The ability of vehicles and facilities to accommodate the disabled and comply with the Americans with Disabilities Act (ADA). (2) A measure of the ability or ease of all persons to travel among various origins and destinations.

#### Advisory Council on Historic Preservation (ACHP)

An independent federal agency that provides a forum for influencing federal policy, programs, and activities as they affect historic and archaeological resources in communities and on public lands nationwide.

#### Adverse

A negative or unfavorable condition.

#### Alignment

The horizontal and vertical location of a roadway, railroad, transit route, or other linear transportation facility.

#### Alternatives Analysis (AA)

An analysis of the engineering, environmental, and financial feasibility of alternatives for major transit projects; required before federal funds can be allocated to a project. The AA can be combined with the Draft Environmental Impact Statement and evaluated with analysis of environmental resources and impacts.

#### Alternatives

The set of transportation improvements or projects that are compared in the EIS to determine their effectiveness in serving as potential solutions to a transportation problem. Along with the set of “Build” Alternatives, there is a “No- Build,” which tests the effects of not building a project, and a “TSM/TDM baseline” alternative, which tests a series of smaller incremental steps toward accomplishing the purposes of the build alternatives. Alternatives may consist of different configurations, alignments, type of access control, or transportation modes and strategies.

#### Anadromous

Pertaining to fish that spend a part of their life cycle in the sea and return to freshwater streams to spawn.

#### Aquifer

A layer of permeable rock, sand, or gravel through which ground water flows, containing enough water to supply wells and springs.

#### Area of Potential Effect (APE)

The geographic area within which a transportation project may cause changes in the character of, or use of, historic properties. The APE is influenced by the scale and nature of the project, and there may be different kinds of effects caused by the undertaking.

#### At Grade

On the ground, at surface level.

## At-Grade Crossing

Same as a “grade crossing.” A rail crossing with roadways or streets on the same level as the tracks, resulting in a level intersection of both modes. See grade separation.

## Avoidance

The act of avoiding or keeping away from impacting on something or someone.

## B

### Baseline Alternative

In the AA/DEIS, an alternative that seeks to attain as many as possible of the goals of the build alternatives through a series of smaller, less expensive measures. Under NEPA, the baseline is called the Transportation System Management (TSM) alternative. The Federal New Starts process requires a robust alternative called the (New Starts) Baseline Alternative.

### Below grade

Placed below the ground surface, as with a subway or tunnel.

## BIBI

Benthic Index of Biotic Integrity. An index that compares the macroinvertebrate community within a given stream to reference macroinvertebrate communities in the least-impaired streams using a series of metrics.

### Build Alternative

A project alternative that involves a major capital investment.

## Bus

Rubber-tired vehicles operating on fixed routes and schedules on roadways. Buses are powered by diesel, gasoline, battery, or alternative fuel engines contained within the vehicle.

## Bus Rapid Transit (BRT)

A rubber-tired rapid transit mode that is a permanently integrated system of facilities, services, and amenities that collectively improve the travel time, reliability, and identity of traditional bus transit. BRT routes may be in exclusive right of way, reserved lanes in streets, or lanes shared with other traffic. These systems often use intelligent transportation systems technology, priority for transit, rapid and convenient fare collection, and integration with land use policy in order to substantially upgrade bus system performance.

## Busway

Exclusive roadway reserved for buses and emergency vehicles.

## C

### Capital Costs

The one-time expenses incurred to design and build a transit system.

### Catadromous fish

Fish that live most of their lives in freshwater, but migrate to seawater to spawn. American eels are catadromous.

### Catenary System

An electric power system using an overhead contact wire and its supporting cables and wires. The contact wire provides an electrical power source for vehicles via pantographs, the contact mechanism on the roof of the vehicles.

### Clean Air Act (CAA)

Federal legislation that sets air quality standards. Sometimes cited as CAAA, Clean Air Act and Amendments of 1990.

### Conductivity

A measure of the ability of water to conduct an electric current. It is related to the type and concentrations of dissolved ions in the water.

### Connectivity

Connecting various transportation modes and services to minimize wait times between transfers and reduce overall travel time.

### Constrained Long Range Plan (CLRP)

Responds to federal requirements that funding sources be identified for all strategies and projects included in long-range plans. Updated at least every three years, the CLRP lists those projects and strategies that can be implemented over the planning period with funds that are reasonably expected to be available. The CLRP also lists aspiration projects that are not funded.

### Consolidated Transportation Program (CTP)

The Maryland CTP presents the detailed listings and descriptions of the capital projects that are proposed for construction, or for development and evaluation during the next six-year period.

### Construction Impact

Temporary impact that would occur while a project is under construction.

### Constructive Use Impact

An impact adversely impacting activities on or enjoyment of a property without directly acquiring the property or any portion of the property. A new noisy project adjacent to a previously quiet outdoor theater would be an example of a constructive use impact.

### Corridor

A long, generally slender land area surrounding an existing or planned transportation facility. In relation to transit projects, the corridor generally defines the area that would be served by the facility. The general purpose of a corridor is to define a study area for future transportation planning improvements.

### Cost Effectiveness Index

A measure of the effectiveness of a transit project using measured cost per new rider. The Federal Transit Administration has replaced this measure with Transportation System User Benefit.

### Cultural Resources

Archaeological and historic resources eligible for or listed on the National Register of Historic Places. Cultural resources include buildings, sites, districts, structures, or objects having historical, architectural, archaeological, cultural, or scientific importance.

### Cumulative Impact

Impact that “results from incremental consequences of an action when added to other past and reasonably foreseeable future actions.” The cumulative effects of an action may be undetectable when viewed in the individual context of direct and indirect impacts but can add to other changes and eventually lead to a measurable environmental change. Potential cumulative effects on the environment must be assessed as required by the National Environmental Policy Act (NEPA).

### Cut and Cover

A tunnel construction method that involves excavating a large trench, building a roof structure, and then covering it with earth.

## D

### *de minimis*

Of insufficient significance. A *de minimis* contribution means that the environmental conditions would essentially be the same whether or not the proposed project is implemented. Used to evaluate impacts to parks under a 4(f) evaluation.

### Dedicated Lanes

Travel lanes used solely for transit vehicles, separated and protected from parallel traffic, but which crosses roads, driveways, and pedestrian pathways at-grade. Separation may be achieved by mountable or un-mountable curbs, barriers, or fences. If the transit is light rail, protection at grade-crossings would be provided at some locations by railroad-style flashers and gates if required, or traffic signals at others.

## Demand Forecasting

A technique of estimating the number and travel times of potential users of a system.

## Design Speed

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

## Design Year

The year for which the facility is designed. The transit facility should be able to handle the traffic forecasted for that year, which is generally 20 to 25 years in the future.

## Determination of Eligibility

The process of assembling documentation to render professional evaluation of the historical significance of a property. Departments of Transportation, in consultation with the State Historic Preservation Office, apply the National Register of Historic Places criteria when deciding matters of historical significance.

## Dissolved Oxygen (DO)

The amount of free (not chemically combined) oxygen dissolved in water, wastewater, or other liquid, usually expressed in milligrams per liter, parts per million, or percent of saturation.

## Double Track

Two sets of tracks side by side, most often used for travel in opposite directions.

## Draft Environmental Impact Statement

See Environmental Impact Statement.

## Dwell Time

The time, in seconds, that a transit vehicle spends at each stop waiting for passengers to alight and board.

# E

## Easement

A temporary or permanent right to use the land of another for a specific purpose sometimes referred to as a “deed restriction.” Easements may be purchased from the property owner or donated by the owner.

## Effects

“Effects” and “impacts” are synonymous. Effects include ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial. Effects include (1) direct effects that are caused by the action and occur at the same time and place and (2) indirect effects that are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

## Electrofishing

A method of collecting fish in which fish are momentarily stunned by an electrical current passing through the water, allowing for capture and examination.

## Elevated Guideway

A guideway that is positioned above the normal activity level (e.g. elevated over a street) either on an embankment or on a bridge.

## Eminent Domain

Authority of an agency to acquire property at fair market value for public purposes. Also known as condemnation.

## Endangered

An organism of very limited numbers that may be subject to extinction and is protected by law under the Endangered Species Act.

## Envelope

Definition of the vertical and horizontal space required for both the transit vehicle and/or the guideway. Also called operating envelope.

## Environmental Impact Statement

A public document that a federal agency prepares under NEPA to document the expected impacts of a development or action on the surrounding natural and human environment. The document must detail efforts to avoid, minimize, or mitigate any adverse impacts.

## Environmental Justice (EJ)

Presidential Executive Order 12898 requires federal agencies to ensure that their actions (or actions they oversee) do not disproportionately discriminate against or impact minority populations and low income populations.

## Ephemeral Stream

Have flowing water only during and for a short duration after precipitation events in a typical year. Groundwater is not a source of water for the stream.

## Epifaunal

“Epi” means surface, and “fauna” means animals. Thus, “epifaunal substrate” is a structure in a stream (on the stream bed) that provides surfaces on which animals can live. In this case, the animals are aquatic invertebrates (such as aquatic insects) or benthic fish species. These insects live on or under cobbles, boulders, logs, and snags, and the many cracks and crevices found in these structures.

## Exclusive Lanes

A right-of-way that is solely for use of transit vehicles and is not occupied by any other type of vehicle or by pedestrians. Exclusive lanes may be either grade-separated or protected by a fence or substantial permanent barrier. All crossings are grade-separated.

## Express

Express transit service is characterized by making few or no intermediate stops between origin and destination and traveling faster than regular or local service.

## F

### Fare Box Revenue

Value of cash, tickets, tokens, and pass receipts given by passengers as payment for rides; excludes charter revenue.

### Feasible

Feasible means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

### Feeder Service

Local bus service that moves passengers to collection points for express bus or rail service.

### FEMA

Federal Emergency Management Agency. FEMA has ten regional offices and two area offices. Each region serves several states, and regional staff work directly with the states to help plan for disasters, develop mitigation programs, and meet needs when major disasters occur.

### FIBI

Fish Index of Biotic Integrity. An index that compares the fish community within a given stream to reference fish communities in the least-impaired streams using a series of metrics.

### Financially Constrained

A term used to describe the financial requirement that all projects must have an identified funding source.

### Finding of No Significant Impact (FONSI)

A document prepared by a federal agency showing why a proposed action would not have a significant impact on the environment and thus would not require preparation of an Environmental Impact Statement (EIS). A FONSI results from the preparation of an Environmental Assessment and completes the NEPA process.

### FIRM

Flood Insurance Rate Maps. Maps produced by the Federal Emergency Management Agency (FEMA) to determine the locations of flood risks and hazards.

### Fixed Guideway

For rail transit systems, fixed guideways are the rail tracks. For bus systems, fixed guideways are roadways that can only be used by the buses. Federal usage in funding legislation also includes exclusive right-of-way bus operations as “fixed guideway” transit.

### Floodplain (100-year)

The area adjacent to a stream that contains a flood event that has a 1 percent probability of occurring in any given year.

## G

### Geographic Information System (GIS)

A computer system capable of storing and manipulating spatial data.

### Grade

(1) Refers to a rise in elevation within a specified distance. For example, a one-percent grade is a one-foot or 0.305 meter rise in elevation in 100 feet or 30.5 meters of horizontal distance. (2) The rate of upward or downward slope of a roadway, expressed as a percent. (3) “At grade” refers to a transportation facility built at ground level in a level intersection of both modes. See grade separation.

### Grade Separated Crossings

Facilities such as overpasses, underpasses, skywalks, or tunnels that allow pedestrians or vehicles to cross paths at different levels; also referred to as grade separations.

### Grade Separation

The crossing of transportation rights-of-way that are separated vertically and for which there is no shared common intersection. A transit right-of-way may be fully grade-separated or partially grade-separated.

### Groundwater

Subsurface water and underground streams that can be collected with wells or that flow naturally to the earth’s surface through springs.

### Groundwater Recharge

A hydraulic process where water moves downward from surface water to groundwater.

## H

### Hazardous Materials

Material, often waste, that poses a threat to human health and/or the environment.

### Headway

The time interval between transit vehicles operating in the same direction along a fixed route.

### Heavy Rail (HRT, Metro, or Subway)

An electric railway with the capacity for a heavy volume of traffic. This mode is characterized by high speed and rapid acceleration passenger rail cars operating singularly or in multi-car trains on fixed rails, separate rights-of-way (at, above or below grade) from which all other vehicle and pedestrian traffic are excluded. Often uses a third rail for power.



## I

**Impacts**

See Effects.

**Independent Utility**

A project is said to have independent utility if it will provide functional transportation improvements that can stand alone and serve a major purpose, even if no other improvements are made in the region.

**Indirect Effects (Secondary Impacts)**

Impacts on the environment resulting from the primary impact of the proposed action but occurring later in time or farther removed in distance, although still reasonably foreseeable. Potential indirect or secondary and cumulative effects on the environment must be assessed as required by the National Environmental Policy Act (NEPA).

**Intelligent Transportation Systems (ITS)**

Computer-based technology applications designed to increase capacity, to move traffic and transit more safely and efficiently, and to supply information to travelers. Examples include global positioning systems for locating vehicles and traffic signal priority for giving preferential green time to transit vehicles at intersections.

**Intermittent Stream**

Streams that have flowing water during certain times of the year with groundwater as the source; runoff from rainfall or snowmelt is a supplemental source of water.

**Intermodal**

The ability to connect, and the connections between, different modes of transportation.

## J

**Joint Development**

Ventures undertaken together by the public and private sectors for development of land around transit stations or stops. See also transit oriented development.

**Jurisdictional Determination (JD)**

A written statement, issued by the U.S. Army Corps of Engineers, that identifies areas within a discrete project area that are subject to Clean Water Act regulation. Usually refers to the regulation of a wetland or stream and its boundaries.

## K

**Kiss-and-Ride**

A drive-through area, sometimes with short-term parking, to allow passengers to be dropped off or picked up at a transit station, with or without a kiss.

## L

**Level of Service (LOS)**

Level of service (LOS) is a measure of the quality of operations of a roadway. It looks at speed, traffic volume and road geometry. LOS A represents free flow conditions and LOS F represents a breakdown of vehicular flow. Typically, in urbanized areas LOS D or better is considered adequate.

**Light Rail (streetcar, trolley car, and tramway)**

An electric railway with a “light volume” traffic capacity compared to heavy rail. Light rail is characterized by passenger rail cars operating individually or in short, usually two-car trains. Light rail vehicles are typically driven electrically with power being drawn from an overhead electric line. They can run on either exclusive rights-of-way without grade crossings, dedicated lanes with grade crossings, or in mixed traffic lanes on city streets.

**Limits of Disturbance**

The horizontal boundary where soil will be exposed during construction activities. The limits of disturbance includes, but is not limited to, the limits of excavation, borrow areas, storage areas, staging areas, areas to be cleared and grubbed, and roadways.

## Line Haul

The trunk portion of a transit trip, as distinguished from local distribution.

## Locally Preferred Alternative (LPA)

The project alternative chosen by a sponsoring agency as a result of the federal project development process. It defines the alternative that is deemed best suited to meet the region's transportation goals, is responsive to community concerns and input and has been examined and declared superior to the other alternatives that are identified and studied in relation to its social, economic and environmental impacts.

## Logical Termini

Rational endpoint for consideration of transportation improvements and for review of environmental impacts.

## Low Floor Vehicles

Transit vehicles with lower floors that have a step-less entry that allow wheelchairs to roll directly into the vehicle. In addition to improving accessibility, low floors also allow fully-mobile passengers to board more quickly. Passenger compartment floors are generally no more than 14 inches above the rail or street surface through at least a major portion of the vehicle

## Low-Income Household

A low-income household is one where the median household income is below the Department of Health and Human Services poverty guidelines.

## Low-Income Population

Any readily identifiable group of low-income persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed federal transportation program, policy, or activity.

## M

### Macroinvertebrate

Invertebrates visible to the naked eye, such as insect larvae and crayfish.

### Maintenance Facility

A site with facilities and buildings for the cyclical maintenance of vehicles, the repair of damaged vehicles, and the storage of other system maintenance equipment. Commonly includes facilities such as locker rooms and break facilities for onsite employees.

### Minimum Operating (or Operable) Segment

A smaller, cost-effective portion of the locally preferred alternative with independent utility. Often, the locally preferred alternative is too large or too costly to construct in a single phase. The minimum operating segment is the segment identified as first to construct.

### Minimization

Measures taken to reduce the severity of adverse impacts.

### Minority

A person who is (1) Black (having origins in any of the black racial groups of Africa); (2) Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race); (3) Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or (4) American Indian and Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).

### Minority Population

Any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed federal transportation program, policy, or activity.



## Mitigation

Measures taken to alleviate adverse impacts that remain after minimization.

## Mixed-Use Development

Development with multiple categories of land use typically including residential, commercial, retail, and entertainment. Mixed-use areas generally have higher population densities and are pedestrian friendly.

## Mixed-Use Lanes

Lanes in which the transit vehicles operate in mixed traffic, sharing the same space with other types of road users. Transit vehicles in mixed-use lanes would be controlled by the existing traffic signals and signs.

## Modal Split

A term that describes the measure of how many people use alternative forms of transportation. Frequently used to describe the percentage of people using private automobiles as opposed to the percentage using public transportation and alternative modes.

## Mode

Refers to a specific form of transportation (auto, bus, LRT, heavy rail, pedestrian, bicycle, etc.).

## Model

An analytical tool (often mathematical) used by transportation planners to assist in making forecasts of land use, economic activity, travel activity and their effects on the quality of resources such as land, air, and water.

## Monorail

An electric railway in which a rail car or train of cars is suspended from or straddles a guideway formed by a single beam or rail.

## Multimodal

Having or involving several modes of transportation.

## N

### National Environmental Policy Act (NEPA)

The federal law that requires every federal agency to evaluate the effect of its proposed actions on the natural and man-made environment by preparing an Environmental Assessment or Environmental Impact Statement.

### National Register Eligible

Cultural resources eligible for inclusion on the National Register of Historic Places. Eligible resources receive the same protection as listed resources.

### National Register of Historic Places

A federal listing of historic resources protected under the National Historic Preservation Act of 1966. Properties include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

### New Start

Discretionary federal funding program for the construction of new fixed guideway systems or extensions of existing fixed guideway systems, based on cost effectiveness, alternatives analysis results and the degree of local financial commitment.

### No Build Alternative

The alternative describing projected future conditions of an area in the absence of the proposed project. It serves as a benchmark to which the impacts of the build alternatives can be compared. As part of this alternative, financially constrained and programmed projects are considered together with existing conditions.



### Off-Board Fare Collection

Collection of transit fares off the vehicle, typically at a station. Boarding time is greatly reduced with off-board fare collection. When off-board fare collection is used, verification of fare payment is often made by random inspection onboard the vehicles.

### Off-Peak Period

Periods of the day when travel activity is lower.

### Operating and Maintenance Costs (O&M Costs)

All costs involved with running a transit system, including labor for operations and for vehicle and fixed facility maintenance, fuel and electric power, spare parts and other supplies, insurance premiums and claims payments, direct supervision, and general and administrative expenses.

### Operating Plan

For transit, an operating plan details characteristics such as running times, frequency, required number of vehicles, changes in frequency throughout the day, and assumptions pertaining to stations.

### Origin-Destination Study

A method to determine where trips are coming from and going to, or where they desire to travel.

## P

### P3

Acronym for Public Private Partnership, a financing and project delivery option for major transportation investment projects. A P3 involves a contract between a public agency and private entity, allowing for greater private sector participation in financing, designing, and building the project.

### Park-and-Ride Lot

A parking lot to which passengers drive their cars, leave them for the day, and either board transit vehicles or carpool.

### Peak (Peak Period, Rush Hours)

The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon or evening (p.m.) peak.

### Performance Measures

Indicators of how well the transportation system is performing with regard to such things as average speed, reliability of travel, and accident rates. Used as feedback in the decision-making process.

### Perennial Streams

Streams that flow year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow.

### Preliminary Engineering

At the preliminary engineering phase the design is approximately 30 percent complete. The deliverables at the 30 percent submittal includes contract drawings, specifications, design calculations and a preliminary cost estimate.

### Public Hearing

A formal meeting held to receive public comment on proposed action.

### Public Meeting

An informal meeting held to present information about the proposed action and to discuss it with the public.

### pH (power of hydrogen)

The negative logarithm of the molar concentration of the hydrogen ion, or, more simply, acidity.

### Portal

The structure through which a highway or railroad enters or exits a tunnel to or from the surface.

## Purpose and Need Statement

A project purpose is a broad statement of the overall objective to be achieved by a proposed action. Need is a more detailed explanation of the specific transportation problems that exist or are expected to occur in the future. It is the foundation to determine if alternatives meet the needs in the area.

## Q

### Queue

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

### Queue Jump Lane

A short, exclusive lane that allows buses to move to the head of a line of traffic.

## R

### Record of Decision (ROD)

The final approval of an Environmental Impact Statement which is issued by the responsible federal agency, in this case the Federal Transit Administration. It is a public document that explains the reasons for a project decision and summarizes any mitigation measures that will be incorporated in the project. Obtaining the ROD is the last step in the NEPA process. After a ROD is received, permits can be obtained and right-of-way can be acquired.

### Ridership

The number of rides taken by people using a public transportation system in a given time period.

### Riprap

Rock or other material with a specific mixture of sizes referred to as a “gradation,” used to stabilize streambanks or riverbanks from erosion or to create habitat features in a stream.

## (Public) Right-of-Way (ROW)

The area over which a legal right of passage exists; land used for public purposes in association with the construction or provision of transportation projects or other linear infrastructure and the associated facilities.

## S

### Scoping

This is the first step in the NEPA process that determines the range of proposed actions, alternatives, and impacts to be discussed in a DEIS. The required scoping process provides agencies and the public opportunity to comment. Scoping is used to encourage cooperation and early resolutions of potential conflicts, to improve decisions, and to reduce paperwork and delay.

### Secondary and Cumulative Effects Analysis (SCEA)

See Indirect Effects and Cumulative Effects.

### Section 106

The section of the National Historic Preservation Act that requires federal agencies to consider the potential effects of proposed federal action on any known or potential historic, architectural, or archaeological resources and to consult with the SHPO.

### Section 4(f)

Section 4(f) of the US Department of Transportation Act of 1966 includes a national policy to make special effort to preserve the natural beauty of the countryside, public parks and recreation lands, wildlife and waterfowl refuges, and significant historic sites. Use of these lands for a transportation project will be permitted only when it has been determined that there is no feasible and prudent alternative and the project includes all possible planning to minimize harm to the property resulting from such use.

### Shared Lanes

Surface streets in which transit operates in lanes with regular traffic.

### SHPO (State Historic Preservation Office)

The office of the State Historic Preservation Officer, a state official in each state that is responsible under the National Historic Preservation Act of 1966 to review potential impacts to cultural resources by federal actions and to supervise the mitigation of adverse impacts.

### Signal Prioritization

Technique of altering the sequence or timing of traffic signals at intersections to provide priority treatment for transit vehicles.

### Spawning

The depositing and fertilizing of eggs (or roe) by fish and other aquatic life.

### Stakeholders

Individuals and organizations involved in, or affected by, the transportation planning process, including federal/state/local officials, MPOs, transit operators, freight companies, shippers, and the general public.

### State Transportation Improvement Program (STIP)

The STIP is the accumulation of Transportation Improvement Programs (TIP) of the state's MPOs and the projects programmed in the non-MPO areas of the state. In Maryland, it is primarily the Program of Projects included in the State's Six Year Consolidated Transportation Program. The first two years of the program are projects incorporated into the state's annual budget. The remaining four years are projects programmed with a level of certainty that funding will be approved in subsequent state budget bills. The STIP is financially constrained and the projections of revenues in future years are analyzed and approved by the state's (non-partisan) revenue forecasting committee.

### Stormwater Management (SWM)

Physical design features such as ponds, bioretention, or drainage swales that retain or direct stormwater run-off in a manner that controls discharge volumes and/or water quality.

### Streetscape

The space between the buildings on either side of a street that defines its character. The elements of a streetscape can be natural or man-made and include buildings, set back of buildings, sidewalks, signs, public furnishings, trees, landscaping, street lights, above-ground utilities, bus stop shelters and street furniture.

## T

### Terminal Station

The bus or rail station where a route or line begins and ends.

### Traction Power Substation (TPSS)

Facilities that convert alternating current from the power grid to the voltage and type of direct current needed for the LRT or streetcar vehicle.

### Traffic Analysis Zone (TAZ)

A geographic area typically ranging in size from a city block to a one-square-mile section (or larger) used in computer models that project changes in traffic flow based on estimated land use changes, population growth, employment growth, and other factors.

### Transfer

The portion of a trip between two connecting transit routes.

### Transit Center

A station in a multi-destination transit system where passengers may conveniently transfer among trunk lines, local feeder routes, or modes. Also referred to as intermodal transfer facilities, transportation centers, stations.

### Transit Dependent Population

Generally those without their own means of transportation (e.g., zero-car households, children, low-income groups, some elderly, and those who are unable to operate a vehicle due to a physical disability).

### Transit Oriented Development (TOD)

A term used for urban development that encompasses a direct and planned access to transit facilities.

### Transportation Demand Management (TDM)

A program that improves transportation system efficiency by altering transportation system demand using such strategies and facilities as pricing, ridesharing; park-and-ride facilities, transit friendly development/zoning; and employer-based programs such as staggered work hours and telecommuting. TDM programs improve the efficiency of existing facilities by changing demand patterns rather than embarking on capital improvements.

### Transportation System Management (TSM)

That part of the urban transportation process undertaken to improve the efficiency of the existing transportation system. The intent is to make better use of the existing transportation system by using short term, low capital transportation improvements that generally cost less and can be implemented more quickly than system development actions. TSM strategies consider such options as improvements to public transit systems, minor intersection improvements, signal timing improvements, and traffic management.

### Transportation System User Benefit

A measurement of the project value. The measurement divides the cost (including capital, and operations and maintenance) by the travel time savings of all users of the transit system (including existing and new riders). This measure is part of the FTA New Starts evaluations.

### Travel Demand Forecast

A projection for travel demand on future or modified transportation system alternatives using existing or projected land use, socioeconomic, and transportation services data.

### Travel Time

The average time required to travel between two points, including delays at intersections, but not including terminal or waiting time.

### Tunnel

An underground alignment constructed using either cut and cover or deep boring methods.

### Turbidity

An optical measure of the clarity of water by light scattering from suspended and dissolved constituents in the water column.

## V

### Viewshed

An area visible from a specific vantage point.

## W

### Wetlands

As defined by the U.S. Army Corps of Engineers, areas that are inundated or saturated by surface water or groundwater sufficiently to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and similar areas and are subject to protection under Executive Order 11990 and Section 404 of the Clean Water Act.

## Y

### Yard

A site with facilities and buildings for the daily cleaning and light maintenance (e.g., replacing lighting components) and the storage of vehicles not in service. Frequently it is the location of the dispatching office. Commonly includes facilities such as locker rooms and break facilities for both on-site employees and vehicle operators.

