



Glossary and Acronyms

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Glossary

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.

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

Alternative 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 is usually combined with the Draft Environmental Impact Statement and evaluated with analysis or 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.

Anthropogenic: Induced or altered by human activity.

Aquifer: A water-bearing rock, rock formation, or group of rock formations.

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.

Baseline Alternative: An alternative in the AA/EIS process that seeks to attain as much 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/TDM) 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 Priority System: A system of traffic controls in which buses are given special treatment over other forms of transportation (e.g., bus priority lanes or preemption of traffic signals).

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.

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: 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 includes only those projects and strategies that can be implemented over the planning period with funds that are reasonably expected to be available.

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 over a short period of time 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. 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 disturbances and eventually lead to a measurable environmental change.

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

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 in a roadway which are reserved for transit use, often by striping or signage. These lanes are not physically separated from regular traffic and can be crossed by other vehicles. Lanes can be dedicated during peak hours only.

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.

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 to an agency.

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 the Agency to acquire property at fair market value for public purposes (not to be confused with meaning public buildings and improvements only). 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” are structures in the stream (on the stream bed) that provide 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. In general, older decaying logs are better suited for insects to live on/in than newly fallen “green” logs and trees.

Exclusive Rights-of-Way: Roadways, guideways, or other right-of-way reserved at all times for transit use.

Express: Express transit service is characterized by making few or no intermediate stops, and traveling faster than regular or local service.

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.

Final Design: The final engineering phase of a project's design process. During final design, contract plans and specifications necessary for bidding are prepared. These contract documents provide all the necessary information needed by suppliers and contractors to construct the project.

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 is on average inundated once a century.

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 1 percent grade is a 1-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 and/or motor vehicles to cross a street at different levels.

Grade Separation: Two 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: Increases in groundwater storage by natural conditions or by human activity. See also artificial recharge.

Guideway: A fixed facility for the operation of transit vehicles

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 (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 (either above or below ground) from which all other vehicle and pedestrian traffic are excluded, and high platform loading. Often uses a third rail for power.

Impacts: See Effects.

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

Indirect Effects: 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.

Intelligent Transportation Systems (ITS): Computer-based technology applications designed to increase capacity, 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. Groundwater driven; runoff from rainfall or snowmelt is a supplemental source of water.

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

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 regulating of a wetland or stream and its boundaries.

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.

Level of Service (LOS): A qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. LOS A represents free flow and LOS F represents gridlock.

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 via a trolley or a pantograph. They can run on either exclusive rights-of-way with or without grade crossings, or in mixed traffic lanes on city streets.

Limited English Proficient (LEP): The limited ability to read, write, speak or understand English.

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 in relation to its social, economic and environmental impacts.

Logical Termini: Rational endpoints 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 and so 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 Population: 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.

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

Maintenance and Storage Facility: A site with facilities and buildings for the storage, maintenance, and cleaning of transit vehicles and the storage of other system maintenance equipment. May also include crew facilities such as locker rooms and break facilities.

Minimum Operating (Or Operable) Segment: A smaller, cost-effective portion of the locally preferred alternative with independent utility (meaning it can function as a stand-alone project and not be dependent on the construction of any future segments). Often, the locally preferred alternative is too large or too costly to construct in a single phase. The minimum operable segment is the segment identified as first to construct.

Minimization: Measures taken to reduce adverse impacts on the environment.

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: Mitigation refers to measures undertaken when impacts remain after efforts to avoid or minimize the impacts.

Mixed Traffic: The operation of rail vehicles on public roads with car and truck traffic. Where rail tracks are embedded in the road, rail vehicles and cars can share the same road. Rail vehicles must obey all traffic laws, such as speed restrictions and stoplights, when operating in areas of mixed traffic.

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.

Modal Split: A term that describes 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.

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.

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 doing 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 registered 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: A reasonable alternative showing projected future conditions of an area in the absence of the proposed project, which serves as a benchmark to which the impacts of the build alternatives can be compared. As part of this alternative, short-term minor reconstruction, such as safety upgrading and maintenance projects, can be considered.

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 vehicles.

Off-Peak Period: Non-rush periods of the day when travel activity is lower, also called "base period."

Operating And Maintenance Costs (O&M Costs): All cost involved with running a transit system, including labor for operations and for vehicle and fixed facility maintenance, fuel

and/or 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 detailing 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.

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. Environmental impacts and property impacts/requirements will be noted on the plans.

Public Hearing: A formal meeting called to receive public comment on proposed action.

Public Meeting: An informal meeting called to present information about and to discuss proposed action.

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.

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 an underground 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.

Record of Decision (ROD): The final approval of an Environmental Impact Statement which will be issued by 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 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 or R/W): The area over which a legal right of passage exists; land used for public purposes in association with the construction or provision of public facilities, transportation projects, or other infrastructure.

Scoping: This is the first step in the NEPA process and 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): Secondary or indirect impacts are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Cumulative effects are "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (Federal, or non-Federal) or person undertakes such other actions." Potential secondary and cumulative effects on the environment must be assessed as required by the National Environmental Policy Act (NEPA).

Secondary Effects: Secondary (or indirect) effects are those that are caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable. Secondary effects can include changes in land use, water quality, economic vitality or population density. An example of a secondary effect of a transit project would be new housing or commercial development near station areas – development that is not constructed as part of the project itself, but that occurs as a result of the project.

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.

Section 4(f): Section 4(f) of the US Department of Transportation Act of 1966, which 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.

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. Include 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 of the state's (6) 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 level of certainty that funding will be approved in subsequent state budget bills. The STIP is financially constrained and the



projection 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.

Terminal Station: The last bus or rail station where a route or line terminates.

Traction Power Substation (TPSS): Substations converting alternating current from the power grid to the voltage and type of 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, both of which are used for completion of the trip.

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

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 benefit. 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 forecast 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 intersection, but not including terminal or waiting time.

Tunnel: an underground alignment which can be 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.

Viewshed: A viewshed is an area visible from a fixed vantage point. A viewshed can be an area of particular scenic or historic value deemed worthy of preservation. A viewshed can be an area viewed from a transportation facility or can be an area viewed from the area near or looking at the transportation facility including the facility.

Wetlands: As defined by the U.S. Army Corps of Engineers, wetlands are 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.

Yard and Shop: See Maintenance and Storage Facilities.

Acronyms

AA	Alternatives Analysis
AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ACHP	Advisory Council on Historic Preservation
ADT	Average Daily Traffic
APE	Area of Potential Effect
BIBI	Benthic Index of Biotic Integrity
BMPs	Best Management Practices
BRAC	Base Realignment and Closure
BRT	Bus Rapid Transit
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
CAA	Federal Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLRP	Constrained Long Range Plan
CTP	Consolidated Transportation Plan
CWA	Clean Water Act
CWP	Center for Watershed Protection
CZMA	Coastal Zone Management Act
DBP	Disinfection By-Product
DEIS	Draft Environmental Impact Statement
DNR	Maryland Department of Natural Resources
DO	Dissolved Oxygen
EIS	Environmental Impact Statement
EJ	Environmental Justice

EPA	United States Environmental Protection Agency	MDE	Maryland Department of the Environment	PFO	Palustrine Forested Wetland	TTF	Maryland Transportation Trust Fund
EPT	Ephemeroptera, Plecoptera, Trichoptera	MGS	Maryland Geological Survey	PM2.5	Particulate Matter with an Aerodynamic Diameter less than 2.5 Micrometers	UM	University of Maryland
ESA	Endangered Species Act	MHT	Maryland Historical Trust	PM10	Particulate Matter with an Aerodynamic Diameter less than Ten Micrometers	USACE	United States Army Corps of Engineers
FCA	Maryland Forest Conservation Act	M-NCPPC	Maryland-National Capital Park and Planning Commission	POW	Palustrine Open Water Wetland	USC	United States Code
FEIS	Final Environmental Impact Statement	MOA	Memorandum of Agreement	PSS	Palustrine Scrub-Shrub Wetland	USDA	United States Department of Agriculture
FEMA	Federal Emergency Management Agency	MOS	Minimum operable segment	QA/QC	Quality Assurance/Quality Control	USDOJ	United States Department of the Interior
FHWA	Federal Highway Administration	MOU	Memorandum of Understanding	ROD	Record of Decision	USFWS	United States Fish and Wildlife Service
FIBI	Fish Index of Biotic Integrity	MPO	Metropolitan Planning Organization	ROW	Right-of-Way	USGS	United States Geological Survey
FIDS	Forest Interior Dwelling Species	MTA	Maryland Transit Administration	RTE	Rare, Threatened, and Endangered	UST	Underground Storage Tank
FIRM	Flood Insurance Rate Maps	MTBE	Methyl Tertiary Butyl Ether	SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users	VMT	Vehicle Miles Traveled
FONSI	Finding of No Significant Impact	MWCOG	Metropolitan Washington Council of Governments	SAV	Submerged Aquatic Vegetation	VOC	Volatile Organic Compound
FTA	Federal Transit Administration	NAAQS	National Ambient Air Quality Standards	SCC	FTA's Standard Cost Categories	WHD	DNR Wildlife and Heritage Division
GIS	Geographic Information System	NEPA	National Environmental Policy Act	SCEA	Secondary and Cumulative Effects Analysis	WMATA	Washington Metropolitan Area Transit Authority
GPS	Global Positioning System	NHPA	National Historic Preservation Act	SHPO	State Historic Preservation Officer	WSSC	Washington Suburban Sanitary Commission
ITS	Intelligent Transportation Systems	NMFS	National Marine Fisheries Service	SPA	Special Protection Area	YOY	Young of the Year
HOV	High Occupancy Vehicle Lanes	NPDES	National Pollutant Discharge Elimination System	STIP	State Transportation Improvement Program		
JD	Jurisdictional Determination	NPS	National Park Service	SWM	Stormwater Management		
L₁₀	Noise level equaled or exceeded 10 percent of the time	NRCS	Natural Resources Conservation Service	TAZ	Traffic Analysis Zone		
L_{eq}	Equivalent Sound Level	NRHP	National Register of Historic Places	TDS	Total Dissolved Solids		
LEP	Limited English Proficient	NTD	National Transit Data	TIP	Transportation Improvement Program		
LOS	Level of Service	NTU	Nephelometric Turbidity Units	TMD	Transportation Demand Management		
LPA	Locally Preferred Alternative	NWI	National Wetlands Inventory	TMDL	Total Maximum Daily Load		
LRT	Light Rail Transit	O&M	Operations and Maintenance	TOD	Transit Oriented Development		
LRV	Light Rail Vehicle	PCBs	Polychlorinated Biphenyls	TPSS	Traction Power Substation		
MBSS	Maryland Biological Stream Survey	PGDER	Prince George's County Department of Environmental Resources	TSM	Transportation System Management		
MCDEP	Montgomery County Department of Environmental Protection	PEM	Palustrine Emergent Wetland				
MCL	Maximum Contaminant Load						