

**Central Link Light Rail Transit Project  
Final Supplemental Environmental Impact Statement  
North Link**

**APPENDIX D**  
***Glossary***



## Appendix D    Glossary

**Accessibility:** The ease by which an individual can reach desired activities in any location by use of the transportation system.

**Access Time:** The time required to walk, bike, or drive from the origin of the trip (for example, from home) to a (boarding) transit stop, plus the waiting time based on the frequency of transit service, and/or the transfer time and the walking or driving time from the transit (de-boarding) stop to the destination. For auto trips, it is the time required to walk to and from parking places, and delays within parking facilities, if any.

**Air Pollutant (also, Air Contaminant):** Smoke, dust, fumes, or odors in the ambient air that have potential for harmful effects.

**Air Quality Maintenance Area (AOMA):** An area having the potential to violate a federal or state ambient air quality standard, based on expected growth and development in the area.

**Alignment:** Horizontal and vertical geometric elements, which define the location of the light rail alignment or roadway.

**Alluvium:** An unconsolidated, terrestrial sediment composed of sorted or unsorted sand, gravel, and clay that have been deposited by water.

**Ambient Air:** Surrounding air.

**Annualized Capital Cost:** A one-time capital cost converted into an annual value which incorporates both the depreciation on the capital item and the foregone interest on the money invested in the project.

**Area Source:** A general classification of the origin of an air pollutant (e.g., park-and-ride lots are area sources of CO emissions).

**Arterial Street:** A street with partial control of access, with some intersections at-grade and intended to move high volumes of traffic over long distances at high speed.

**Artifacts:** Any portable object used and/or modified by civilization (particularly during prehistoric times).

**At-grade Crossing:** Any intersection of two or more flows of traffic at the same elevation (possibly involving more than one mode of transportation), such as light rail/road crossing.

**Atmospheric Stability:** A measure of the capacity of the ambient air to disperse air pollutants.

**Average Annual Megawatt:** The average hourly demand for or supply of electricity measured in megawatts over a year.

**Average Daily Traffic (ADT):** The total volume of traffic during a given time period divided by the number of days in that time period, representative of average traffic in a one-day time period.

**Average Time (also, Exposure Time):** The duration of exposure to a given concentration of an air contaminant, specified in ambient air quality standards, (e.g., the two national standards of 9 parts per million (ppm) and 35 ppm specify averaging times of 8 hours and 1 hour).

**Average Wait Time (AWT):** Average time spent by passengers at a station or bus stop waiting for transit service.

**Average Weekday (AWD):** A measurement of average conditions during one weekday, i.e., Monday through Friday.

**A-weighted Sound Level (dBA):** To approximate the way humans interpret sound, a filter circuit with frequency characteristics similar to the human hearing system is built into sound measurement equipment. Measurements with this filter enacted are referred to as A-weighted sound levels, expressed in dBA.

**Background Concentration:** The pollutant level that would exist at a site in the absence of air pollution sources in the neighborhood of the site (different from Modeled Concentration).

**Baseline Energy Consumption:** Energy consumption, usually for a No-Build Alternative, that is used as a reference against which energy consumption for a Build Alternative is compared.

**Boarding Trips:** A trip on a transit line or group of lines where each boarding of a transit vehicle is considered the start of a new trip. Number of trips boarding (entering) transit vehicles, regardless of whether the trip involved a transfer from another transit vehicle. Equivalent to unlinked trips. A fare may or may not be collected for each boarding trip, depending on whether a transfer is used.

**British Thermal Unit (Btu):** An energy unit equal to the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit. One therm equals 1,000,000 Btu.

**Capital Costs:** Nonrecurring costs required to construct transit systems, including costs of right-of-way, facilities, rolling stock, power distribution and the associated administrative and design costs, and financing charges during construction.

**Car Pool:** A group of passengers and drivers organized to utilize one automobile on a regular basis, riding together, for the same trip purpose (generally the work trip).

**Carbon Monoxide (CO):** A colorless, odorless, tasteless gas, and one of the criteria air pollutants released from automobile exhaust.

**Catenary:** The system of overhead wires suspended over the track to provide power for the electric light rail vehicles.

**Commuter Rail:** A passenger-rail, diesel-powered system which will offer service for commuters from Lakewood to Seattle and Everett to Seattle. The locomotives will use the existing Burlington Northern/Santa Fe railroad network.

**Concentration (also, level):** A measure of the air pollutant in the ambient air, having the units of mass per volume.

**Construction Energy:** In transportation analysis, the energy used to build stations, terminals, roadbeds, trackbeds, tunnels, vehicles and other equipment and facilities. Construction energy includes the energy content of materials and the energy used to haul and place them.

**Construction Staging Area:** During construction, a site temporarily used for materials or equipment storage, assembly, or other temporary, construction-related activities.

**Criteria Air Pollutants:** Those air pollutants which have been recognized by the EPA as potentially harmful and for which standards have been set to protect the public health and welfare. The criteria air pollutants are carbon monoxide, sulfur dioxide, particulates, nitrogen dioxide, ozone, hydrocarbons and lead.

**Day Night Sound Level ( $L_{dn}$ ):**  $L_{dn}$ , also abbreviated DNL, is a 24-hour  $L_{eq}$ , but with a 10 dB penalty assessed to noise events occurring at night. Nighttime is defined as 10 PM to 7 AM. This strongly weights  $L_{dn}$  toward nighttime noise to reflect most people being more easily annoyed by noise during the nighttime hours when background noise is lower and most people are sleeping.

**dBA:** The sound level obtained through the use of A-weighting characteristics specified by the American National Standards Institute (ANSI) Standard S1.4-1971. The unit of measure is the decibel (dB), commonly referred to as dBA when A-weighting is used. The "A" weighting scale closely resembles human response to noise.

**Decibel:** The unit used to measure the loudness of noise (see dBA).

**Displacement:** A property encroachment, which would require full acquisition of the parcel and structure if any in order to build and operate the light rail system.

**Disturbed Habitat:** A habitat in which naturally occurring ecological processes and species interactions have been significantly disrupted by the direct or indirect results of human presence and activity.

**Drop-off Zone:** A station that provides temporary loading and unloading facilities for autos and/or buses. The station may be combined with feeder bus stations.

**Ecologically Sensitive Area:** An area, valued locally for its rare or sensitive habitat, existing in a relatively undisturbed, natural state and supporting indigenous species.

**Efficiency:** In energy systems, the quotient of energy outputs to energy inputs, being in the range from zero to one (e.g., the energy efficiency of U.S. electric power generation plants is approximately 0.3). In transportation systems, the degree of goal attainment measured relative to cost, indicative of the productivity of a given level of investment.

**Elasticity:** In economic analysis, the sensitivity of the demand or supply of a commodity to changes in another variable, (e.g., the price elasticity of gasoline is the ratio of the percent change in consumption to percent change in price).

**Elevated Guideway:** A guideway which is positioned above the normal activity level (e.g., elevated structure for light rail to cross over a street).

**Emission:** Particulate, gaseous, noise, or electromagnetic by-products of the transit system or vehicle.

**Emission Control:** Method by which emissions are governed in an effort to minimize the pollutants and/or noise emitted.

**Emission Inventory:** A listing by emission source of the amounts of air pollutants released into the atmosphere (generally, in tons or kilograms per day).

**Emission Source:** The origin of an air pollutant, (e.g., automobiles and trucks are sources of carbon monoxide, hydrocarbons, and nitrogen oxides).

**Emission Standards:** A limitation on the release of an air contaminant into the ambient air (e.g., the federal government limits CO, HC, and NO<sub>x</sub> emissions per mile of travel in new automobiles).

**Endangered Species:** According to the Federal Endangered Species Act of 1973, an endangered species is any species in danger of extinction throughout all or a significant portion of its range, other than an insect determined by the Secretary of the Interior to constitute a pest whose protection under the provisions of this act would present an overwhelming and overriding risk to man.

**Energy Content of Materials:** A total energy value equal to the sum of the latent energy of a material and the energy used in its manufacture.

**Energy Factor:** A number which when multiplied by the appropriate usage units (e.g., vehicle miles, tons, dollars) yields a measure of energy consumption (e.g., 0.5 gallons per vehicle mile x 10 miles = 5.0 gallons consumed for propulsion).

**Energy System:** The network of major and minor routes, vehicles, facilities, and other energy-consuming entities that are considered in energy analysis.

**Equity:** The incidence of fairness and the distribution of benefits, costs, and impacts among population subgroups except as defined for subareas per allocations set out in *Sound Move*.

**Equivalent Level (L<sub>eq</sub>):** L<sub>eq</sub> is a measure of sound energy over a period of time. It is referred to as the equivalent sound level because it is equivalent to the level of a steady sound which, over a referenced duration and location, has the same A-weighted sound energy as the fluctuating sound.

**Express Service:** Transit service where a very limited number of stops is made.

**Executive Order 11991 (1977):** Directed the CEQ Guidelines to be rewritten as regulations binding on all Federal actions, and to reduce paperwork.

**Facilities Energy (also, Station Energy):** A portion of the operational energy that includes the energy to operate parking lots, administration buildings, and other facilities. It does not include propulsion or maintenance energy.

**Fare Box:** A device that accepts and, in some cases, registers coins and tokens used by passengers as payment for rides.

**Fare Structure:** The methodology of determining the fare which a passenger pays for service.

**Fare:** The authorized amount (cash or token) paid or valid transfer, pass, etc., presented for a transit ride.

**Feeder bus station:** A station that provides lateral bus transportation service for riders to transfer to a light rail mode.

**Feeder service:** Local transit service which feeds trunkline (usually faster and at higher capacity) transit service.

**Forest or Woodland Habitat:** A habitat type generally dominated by Douglas fir, western redcedar, and western hemlock, frequently with a hardwood understory. The ground cover is generally lush. Birds and small mammals abound, and larger mammals are common in large stands.

**Frequency, Vehicle:** Time rate of vehicle arrivals at a station stop or along a transit line.

**Full displacement:** A type of property encroachment that would require the acquisition of the full parcel and displace the current use in order to build and operate the light rail system.

**Full Funding Grant Agreement (FFGA):** This is the principal means FTA uses to manage New Starts projects. The FFGA is a contract between FTA and the local agency, and defines the project, including cost, schedule, maximum level of federal financial assistance (subject to appropriation), and terms and conditions of federal participation.

**Grade-Separated:** Parallel or crossing lines of traffic that are vertically or horizontally physically separated from each other and do not share a common intersection.

**Ground-borne Noise:** Noise which is transmitted through the ground, typically reported in decibels (dBA).

**Ground-borne Vibration:** A small but rapidly fluctuating motion transmitted through the ground, typically reported as velocity or acceleration.

**Guideway:** Specifically designed way traversed by transit vehicles constrained to the way.

**Headway:** The time between transit vehicles at any particular point along the route.

**High Occupancy Vehicle (HOV):** Typically includes carpools with two or more people, vanpools, and buses.

**Hydrocarbons (HC):** Specifically, non-methane hydrocarbons that contribute to the formation of photochemical oxidants (commonly known as smog), primarily ozone.

**Impedance Value:** A factor used to weight the time spent waiting for transit. Often computed as 2.1 times the in-vehicle time.

**Indirect Energy:** A term used to denote all energy inputs for the construction, operation, and maintenance of a system.

**Indirect Source:** An entity that does not directly emit pollutants but attracts emission sources such as automobiles and trucks. Shopping centers, stadiums, and highways are examples of indirect sources.

**Induced Trips:** Trips generated because of the construction of a new (transportation) facility. (Different from Shifted Trips).

**Intactness:** The visual integrity of a landscape's natural and built features.

**Integration with Other Modes:** Method by which a transit system interfaces with other modes of transportation.

**Interchange:** The system of interconnecting ramps between two or more intersecting roadways or guideways which are grade-separated.

**Joint Development:** Opportunities for the development or redevelopment of adjacent parcels (in station areas) in a manner which would support both the transit investment and the community objectives through the use of both public and private funds.

**Kilowatt (KW):** A unit of electrical energy.

**Kilowatt-hour (KWH):** One kilowatt of energy (measured over one hour).

**L<sub>10</sub>:** The sound level that is exceeded 10 percent of the time (the 90<sup>th</sup> percentile) for the period under consideration. This value is an indicator of both the magnitude and frequency of occurrence of the loudest noise events.

**L<sub>10</sub>(h):** The hourly value of L<sub>10</sub>.

**Lacustrine soils:** A soil which has been formed in a lake bed.

**Land Development Pattern:** The use, types, and intensity of development. Land development patterns affect trip demand, average trip length, and therefore, energy consumption.

**Landscaped Habitat:** A habitat in urban areas having limited native species. Vegetation generally consists of mowed lawns and exotic trees and bushes.

**L<sub>dn</sub>:** The day/night average noise level.

**Lead (Pb):** A component of total suspended particulates released in the combustion of gasoline containing lead.

**L<sub>eq</sub>:** The equivalent steady-state sound level that, in a specified time period, would contain the same acoustic energy as the varying sound level during the same period; considers volume capacity, travel speeds and delay.

**L<sub>eq</sub>(h):** The hourly value of L<sub>eq</sub>.

**Level of Service (LOS):** A qualitative measure that represents the collective factors of travel under a particular volume condition. A measure of traffic congestion.

**Light Rail Transit:** A mode of mass transportation comprising light rail vehicles, which travel on steel tracks and are powered by electricity from overhead wires. This mode is characterized by its ability to operate in both at-grade and/or grade-separated environments.

**Line Haul:** A transit system that offers service along a line or corridor.

**Line Source:** A general classification of the origin of an air pollutant (e.g., highways and other roads are line sources of CO emissions).

**Link:** Sound Transit's proposed light rail system.

**Load Factor:** The average ratio of passengers to seats, during some specified period of operation of a public transit route.

**Local service:** A type of transit operation involving frequent stops and consequent low speeds, the purpose of which is to deliver and pick up transit passengers as close to their destinations or origins as possible.

**Locally Preferred Alternative (LPA):** Following the publication of the Draft EIS, the Sound Transit Board identified a preferred alternative, consisting of routes and station preferences. This is known as a "locally" preferred alternative because FTA has not yet selected a preferred alternative.

**Maintenance Energy:** A portion of operational energy that is applied to repair and maintenance of vehicles and buildings in the system. It does not include propulsion or facilities energy.

**Megawatt (MW):** 1,000,000 watts.

**Microgram Per Cubic Meter ( $\mu\text{g}/\text{m}^3$  or  $\text{mcg}/\text{m}^3$ ):** A unit of concentration equal to one thousandth of a gram per cubic meter.

**Minimum Operable Segment (MOS):** A shorter segment of the project route that could be successfully operated on an interim or long-term basis if necessary, and could be extended at a later time.

**Minimum Turn Radius:** Generally assumed to be the minimum horizontal turn radius (tightest curve).

**Minority Residents:** Those persons who, in responding to the 1990 U.S. Census, indicated their race to be something other than "White" or reported entries that the Bureau of the Census categorized as something other than "White."

**Mobility:** The ease of continuous movement along the transportation system.

**Mobility Limited:** As defined for 1990 U.S. Census data, persons who had a health condition (physical and/or mental) that had lasted for 6 or more months and which made it difficult to go outside the home alone.

**Mode:** A particular form or method of travel, such as pedestrian, bicycle, automobile, bus, or light rail.

**Mode Split:** Forecast of proportion of total person-trips that would use each of the various modes of transportation that include transit and cars.

**Modeled Concentration:** An air pollutant level, excluding the background level, predicted by a model (see Background Concentrations).

**National Ambient Air Quality Standards (NAAQS):** Federal limits on levels of atmospheric contamination necessary to protect the public from adverse effects on health (primary standards) and welfare (secondary standards).

**National Historic Preservation Act of 1966:** The Act which established the National Register of Historic Places and State Historic Preservation program and set forth guidelines and regulations for environmental review of projects involving federal funding.

**National Register of Historic Places:** The official list of the nation's cultural resources determined to be worthy of preservation; the register is maintained by the National Park Service.

**Network:** A system of real or hypothetical interconnecting links that forms the configuration of transit routes and stops which constitute the total system.

**New Starts** - Refers to a federal funding program administered by the Federal Transit Administration. Section 5309 New Starts funds are discretionary federal funds available for new fixed guideway systems and extensions to existing systems.

**Non-attainment Area:** An area designated by the EPA as presently violating the National Ambient Air Quality Standards, based on archival air quality data.

**NO<sub>x</sub>:** Oxides of nitrogen (nitrogen oxide and nitrogen dioxide). The pollutants released during high-temperature combustion of fossil fuels such as diesel.

**Off-peak:** Those periods of the day where demand for transit service is not at a maximum.

**Open Field Habitat:** A habitat characterized by various species of perennial and annual grasses, forbs, small and large birds, small mammals, and snakes. This habitat is especially important in providing nesting sites and food for various song and predatory birds.

**Operating Costs:** Recurring costs incurred in operating transit systems, including wages and salaries, maintenance of facilities and equipment, fuel, supplies, employee benefits, insurance, taxes, and other administrative costs. Amortization of facilities and equipment is not included.

**Operating Revenue:** The gross income from operation of the transit system including fares, charter income, concessions, advertising, etc. Does not include interest from securities, non-recurring income from sale of capital assets, etc.

**Operational Energy:** The energy used for vehicle propulsion, facilities, and maintenance for a specified period, usually one year.

**Originating Ride (or Trip):** A one-way trip taken on a transit line or group of lines, where a transfer from one line to another is not considered to be the start of a new trip.

**Overhead Catenary System (OCS):** Electrical transmission poles and lines which supply power to the light rail system.

**Ozone:** A gas consisting of three oxygen atoms formed in reactions of non-methane hydrocarbons and nitrogen oxides in the presence of sunlight. Ozone is one of the Criteria Air Pollutants.

**Palustrine Wetland:** Freshwater wetlands dominated by trees, shrubs, and emergent vegetation.

**Park-and-Ride (P&R) Lot:** A lot that provides parking for patrons of a transit facility.

**Partial Encroachment:** A property which would be partially acquired in order to build and operate the light rail. A partial encroachment would not displace the existing use.

**Pasquill Stability Class:** A category of atmospheric stability ranging from Class A (extremely unstable conditions) to Class F (moderately stable conditions).

**Passenger Mile:** A measure of travel equivalent to one passenger traveling one mile.

**Patronage:** The number of person-trips carried by a transit system over a specified time period.

**Payback Period (also, Break-even Period):** The period over which the initial energy cost of a project is recuperated. The period is calculated by dividing the construction energy consumption of a project by the forecasted annual operational energy savings attributable to the project. Savings are measured against baseline energy consumption, and are the net of savings (losses) in propulsion, savings (losses) in maintenance, and savings (losses) in facilities.

**Peak Hour:** The hour of the day in which the maximum demand for service is experienced, accommodating the largest number of automobile or transit patrons.

**Peak Particle Velocity (ppv):** Specifications for allowable levels of vibration from blasting, pile-driving, and other construction processes with the potential of causing building damage are almost always expressed in terms of peak particle velocity since this is thought to be well correlated with maximum stresses in buildings. Peak particle velocity is the instantaneous positive or negative peak in the vibration signal.

**Peak Period:** A specified time period for which the volume of traffic is greater than that during other similar periods.

**Person-trip:** A trip from a point of origin to a destination made by a person by any travel mode. Within transit, transfers are not counted. That is, a person traveling from home to work on a bus with one transfer creates only one-person trip.

**Photochemical Oxidants (Smog):** Gaseous pollutants formed from reactions of non-methane hydrocarbons (HC) and nitrogen oxides (NO<sub>x</sub>) in the presence of sunlight (e.g., ozone).

**Place Miles:** A unit of transportation carrying capacity that equals the capacity of a vehicle (including seats and standees for transit vehicles) multiplied by the miles the vehicle travels.

**Platform Hours:** Elapsed time from when a transit bus or train pulls out of the garage into service to when it returns to the garage after completing its service.

**Point Source:** A general classification of the origin of an air or water pollutant, usually characterized as smokestacks or outfalls.

**Polychlorinated Biphenyl (PCBs):** Hazardous environmental pollutants upon which the federal government has placed additional controls regulating disposal.

**Potentially Affected Area:** This is defined differently by each technical discipline. It includes the area that could be affected by the Alternatives.

**Poverty-level Household:** As used for 2000 U.S. Census data, the average poverty threshold for a family of four persons was \$17,603 in 2000. The defined family poverty level threshold varied by total number of family members, number of children under 18 years, and number of persons over age 65. For a detailed discussion of the poverty definition, see U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 171, Poverty in the United States: 1988 and 1989.

**Power:** The time rate of energy use.

**Preferred Alternative:** Following publication of the Draft EIS, the Sound Transit Board identified a preferred alternative including route and station options. The Final EIS further evaluates the preferred alternative as well as other alternatives.

**Propulsion Energy (also, Direct Energy):** In transportation analysis, a portion of operational energy that includes fuels and electricity to propel vehicles and provide lighting, heating, and air conditioning within them.

**Pulsing:** The coordinated arrival and departure of buses on a number of different bus lines at a transit center to facilitate transferring of passengers among those bus lines. Usually, local feeder bus lines are scheduled to arrive at the transit center just ahead of the trunkline bus or train and then depart just after the trunkline bus or train.

**Radial System:** A network of transit lines that meet in the downtown area.

**Region:** The four-county PSRC region, including King, Pierce, Snohomish, and Kitsap Counties.

**Right-of-Way:** The corridor (horizontal and vertical space) owned by the transit agency for the transportation way.

**Riparian Habitat:** A habitat type associated with stream and lake margins and characterized by dense vegetation consisting primarily of willow, alder, and cottonwood species, supporting a wide variety of waterfowl, songbirds, amphibians, and small mammals.

**Route Miles:** The length of a route measured in miles between its end points.

**Route:** The course followed by a transit vehicle as a part of the transit system.

**Runoff:** The rainwater that directly leaves an area in surface drainage, as opposed to the amount that seeps out as groundwater.

**Seat Mile:** A measure of transit capacity that is an amount of potential travel equivalent to one transit seat traveling one mile. A bus with forty seats traveling one mile would produce forty seat miles.

**Section 4(f):** Section 4(f) of the Department of Transportation Act restricts USDOT's approval of projects affecting the following properties: publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge, or any land from a significant historic site.

**Section 6(f):** Section 6(f) of the Land and Water Conservation Act of 1965 established restrictions on, and replacement requirements for, the use of land acquired with funds authorized under the Land and Water Conservation Fund Act.

**Section 9:** Section 9 of the Rivers and Harbors Act of 1899, established authority to issue permits for bridges and causeways across any navigable waters of the United States – Section 9 Permits are administered by the U.S. Coast Guard.

**Section 10:** Section 10 of the Rivers and Harbors Act of 1899 established authority to issue permits for obstructions or alterations of any navigable waters of the United States. This permit program is administered by the Corps of Engineers.

**Section 106:** Section 106 of the National Historic Preservation Act of 1966 established a procedure to review the potential effects on cultural resources by projects receiving federal funds.

**Section 404:** Section 404 of the Clean Water Act is a permit program administered by the Corps of Engineers under guidelines by EPA to protect the nation's waters from dredged and fill sources.

**Segment:** This refers to the six sections of the Central Link Corridor, as defined in Chapter 2 of the Draft EIS.

**Sensitive Receptor:** A local area or site that supports activities easily disrupted by audio or visual intrusions or distractions, such as a park, school, historic landmark, or residential neighborhood.

**Signal Progression:** A series of traffic signals timed and coordinated to optimize the flow of selected traffic movements.

**Signal Preemption:** Traffic signal options that may modify normal traffic signal phasing for preferential treatment of transit vehicles.

**Smog:** See Photochemical Oxidants.

**Social Interaction:** Intra-neighborhood communication and circulation using street, sidewalk, and bikeway connections between residential areas and community facilities, retail businesses, and employment centers. Also includes verbal interaction and telecommunications facilities.

**Sounder:** Sound Transit's commuter rail system, which will travel from Everett to Lakewood, through Seattle.

**Staging Area:** A holding area where transit vehicles wait until they can depart the location in a specific scheduled sequence (not to be confused with "Construction Staging Area").

**State Implementation Plan (SIP):** A plan required of each state by the Clean Air Act that describes how the state will attain and maintain the National Ambient Air Quality Standards.

**Subarea:** A unique portion of the Regional Transit Authority taxing district, one of five as defined in *Sound Move* (Snohomish County, North King County, East King County, South King County, and Pierce County).

**Subduction Zone:** An area where one crustal plate is descending below another. The Puget Sound area is in close proximity to a subduction zone, which is formed by the Juan de Fuca plate descending below the North American plate. This action can cause significant seismic activity.

**Terminal:** The terminating point of transportation routes with transfer facilities and, often, amenities for passenger convenience.

**Terminus:** A transit station located at the end of a transit (including light rail) line.

**Title 23, Code of Federal Regulations, Part 771 (23 CFR Part 771) (Revised 1987):** Federal Highway Administration and Federal Transit Administration regulations governing the preparation of environmental impact statements and related documents.

**Title 23, Code of Federal Regulations, Part 777 (23 CFR Part 777) (Revised 1980):** Federal Highway Administration and Federal Transit Administration regulations providing policy and procedures for evaluation and mitigation for impacted, privately owned wetlands.

**Threatened Species:** According to the Federal Endangered Species Act of 1973, any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

**Through-route:** Interconnected transit lines in the downtown area, or a transit center, that allow buses (or trains) entering downtown or the transit center on one line to pass through and exit on another line. This eliminates the need to turn transit vehicles around downtown or at the transit center and allows some passengers to continue without transferring.

**Total Suspended Particulates (TSP):** Air pollutants that consist of solid particles (dust, lead, salts, etc.) suspended in the atmosphere. TSP is a criteria air pollutant.

**Total Travel Time:** The total elapsed time between trip beginning and end, including travel, terminal, and waiting time.

**Traction Power Substation (TPSS):** Electrical stations which provide the power needed to drive the trains. The substations are housed in either standalone structures, or within transit stations, typically within or adjacent to the right-of-way. The substations would typically be built about one and a half miles apart.

**Transfer:** The portion of a trip between two connecting transit lines, both of which are used for completion of the trip.

**Transfer Ratio:** The number of boarding trips divided by originating trips.

**Transfer Time:** The elapsed trip time required to change between modes (e.g., bus to light rail) or to transfer between routes of the same mode (e.g., bus to bus).

**Transit:** A transportation system principally for moving people in an urban area and made available to the public usually through paying a fare.

**Transit Center:** A station with shelters where a large number of transit vehicles and passengers can be brought together with safety and convenience.

**Transit Street Classification System:** The City of Seattle's system for designating certain streets as being important for transit. This is part of the City's overall street classification system.

**Transportation Corridor (also, Corridor):** The group of travel movements (or travel flows) between two or more locations. A corridor may have components, or subcorridors. A corridor includes all facilities, transit and highway, that may be used to accommodate the specified travel movement.

**Transportation Systems Management (TSM):** Incorporates relatively low-cost approaches to improving mobility without constructing major new transportation facilities. TSM generally emphasizes smaller physical improvements and operational changes such as intersection improvements, minor widenings, traffic engineering actions, operational changes such as queue jumps or queue bypass lanes for buses, expanded bus service, transit centers, and improved transit access.

**Travel Time (in vehicle):** The time required to travel between two points, not including terminal or waiting time.

**Trip:** The one-way movement of one person between his origin and his destination, including transfers and the walk to and from the means of transportation.

**Trip Demand:** The number and type (public or private origin and destination) of trips measured, calculated, or forecasted in a specified area having a given land development pattern. Trip demand also depends on prevailing economic, behavioral, and attitudinal conditions.

**Trip Length:** The number of miles per trip. This is usually an average number for a specified trip type, area and analysis year.

**Trunkline:** A relatively high-frequency, high-capacity transit line that connects outlying activity centers and/or transit centers to the downtown area (also Line Haul Route).

**Unity:** In visual analysis, the visual coherence and compositional harmony of the landscape.

**Use of Section 4(f) Land:** According to regulations of the U.S. Department of Transportation, use of Section 4(f) land is defined as: (1) acquisition of title or easement to land, or (2) in unusual circumstances, serious indirect impacts, such as increase in noise, visual intrusion, or access obstruction.

**Vehicle Mile:** An amount of travel equivalent to one vehicle traveling one mile.

**Vehicle Occupancy:** The number of persons per vehicle. Usually an average number for a specified trip type, area and analysis year.

**Vent (also Remote Vent):** Vent structures provide emergency ventilation and access for tunnel sections, and are often located adjacent to station entrances. Vents that are not adjacent to the station are called Remote Vents. Surface vent buildings enclose the vent and include an exhaust and intake in the roof, a fan room, and space for electrical and communications equipment.

**Vibration Propagation:** The transfer of vibration through soil or other media.

**Vibration Propagation Test:** A test that provides an estimate of vibration levels as a function of distance from a vibration source, in this case the light rail vehicle. Tests are done on the surface to evaluate propagation at-grade, or at the bottom of a bore hole for tunnel routes.

**Vibration Velocity:** Vibration velocity is the basic measure of ground-borne vibration. It is a measure of the rate at which particles in the ground are oscillating relative to the equilibrium point.

**Vibration Velocity Level:** It is generally accepted that, over the frequency range important for ground-borne vibration from transit systems, human response to vibration is best correlated to the root-mean square (rms) vibration velocity. In this report, rms vibration velocity is always expressed as decibels relative to 1 micro-inch per second. A one-second rms time constant is assumed. The units are abbreviated as VdB to avoid any confusion with noise decibels.

**Visual Amenity:** An object or element (such as buildings or vegetation) that enhances the visual character of a view or area.

**Visual Encroachment:** The imposition of an object, or objects, on a view such that the view is disrupted, obstructed, or otherwise modified from its original state.

**Visual Resource Management:** An inventory, analysis, and planning process that, through the identification of values and establishment of associated objectives, is employed to establish future management practices.

**Walk-on Station:** A station where the primary mode of arrival is by walking. This type of station will be targeted at high-density residential areas and employment concentrations.