Washington State Department of Transportation Glossary

The Washington State Department of Transportation (WSDOT) Glossary centralizes terms from WSDOT Manuals, documents, and areas of expertise within the agency. Its purpose is to provide authoritative definitions and source information to support understanding and clear communication among WSDOT practitioners, agency partners and the public.
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A

abandoned facilities

Definition

Those facilities located within WSDOT right of way, on an easement or other property right of the utility, that remain in the right of way after the utility has given the state a quitclaim deed to the property right. The utility is no longer responsible for the facility, and all costs for future impacts created by the facility are now borne by the state.

WSDOT Source

Utilities Manual

abatement

Definition

Reduction in degree or intensity.

WSDOT Source

Environmental Manual

accelerated climax plant community

Definition

The process of restoring a site to a desirable climax plant community in reduced time when compared to natural processes.

WSDOT Source

Roadside Manual

acceptance of assignment

WSDOT Source

Roadside Manual

Synonym

transfer of ownership

access

Definition
A means of entering or leaving a public road, street, or highway with respect to abutting property or another public road, street, or highway.

WSDOT Source
Design Manual

access break (Design)

Definition
Any point from inside or outside the state limited access right of way limited access hachures that crosses over, under, or physically through the plane of the limited access, is an access break or 'break in access,' including, but not limited to, locked gates and temporary construction access breaks.

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Design Manual

access break (Utilities)

Definition
Creation of an ingress or egress point at a location other than a designated interchange or intersection, such as the construction or installation of a utility.

WSDOT Source
Utilities Manual

access connection

Definition
An access point, other than a public road/street, that permits access to or from a managed access highway on the state highway system.

WSDOT Source
Design Manual

access connection permit

Definition
A written authorization issued by the permitting authority for a specifically designed access connection to a managed access highway at a specific location; for a specific type and intensity of property use; and for a specific volume of traffic for the access connection based on the final stage of the development of the applicant’s property. The actual form used for this authorization is determined by the permitting authority.

WSDOT Source
Design Manual

access control

Definition
The limiting and regulating of public and private access to Washington State's highways, as required by state law. A design control (see Design Manual Chapter 1103) – there are two categories of controlling access to state highways limited access and managed access.

WSDOT Source
Design Manual, Right of Way Manual

Related Term
See also: limited access (Design), managed access highway (Design)

Access Control Tracking System Limited Access and Managed Access Master Plan (Design)

Definition
A database list, related to highway route numbers and mileposts, that identifies either the level of limited access or the class of managed access.

WSDOT Source
Design Manual

Access Control Tracking System Limited Access and Managed Access Master Plan (Utilities)

Definition
A database system used to determine the access level of highway right of way and identify existing approach rights, which is managed by the HQ Design Office, Access and Hearings Section.

WSDOT Source
Utilities Manual

access density

Definition
The number of access points (driveways) per mile.

WSDOT Source
Design Manual

access design analysis

Definition
A design analysis (see Design Manual Chapter 300) that authorizes deferring or staging acquisition of limited access control, falling short of a 300-foot requirement, or allowing an existing access point to stay within 130 feet of an intersection on a limited access highway.

Approval by the Director & State Design Engineer, Development Division, or designee is required (see Design Manual Chapter 530).

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Design Manual

access hearing plan

Definition
A limited access plan prepared for presentation at an access hearing.

WSDOT Source
Design Manual

access management

Definition
The programmatic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway.

WSDOT Source
Design Manual

access point

Definition
Any point that allows private or public entrance to or exit from the traveled way of a state highway, including 'locked gate' access and maintenance access points.

WSDOT Source
Design Manual

access point

Definition
An ingress and/or egress location to/from a limited access toll road or lane(s).

WSDOT Source
Toll Division

access point revision

Definition
A new access point or a revision of an existing interchange/ intersection configuration. Locked gates and temporary construction breaks are also access point revisions.

WSDOT Source
Design Manual

access point spacing

Definition
On a managed access highway, the distance between two adjacent access points on one side of the highway, measured along the edge of the traveled way from one access point to the next.

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Design Manual

Related Term
See also: corner clearance

access report plan

Definition
A limited access plan prepared for presentation to local governmental officials at preliminary meetings before preparation of the access hearing plan.

WSDOT Source
Design Manual

access revision report (ARR)

Definition
A technical report which documents specific analyses in order to approve or reject a proposed revision to freeway access. See Design Manual Chapter 550.

WSDOT Source
Design Manual

access rights

Definition
Property rights that allow an abutting property owner to enter and leave the public roadway system.

WSDOT Source
Design Manual

accessible

Definition
Usable by persons with disabilities (ADA compliant).

WSDOT Source
Design Manual, Design - ADA/Pedestrian

accessible pedestrian signal (APS)

Definition

A device that communicates information about the 'WALK' phase in audible and vibrotactile (vibrating surface that communicates information through touch, located on the accessible pedestrian signal button) formats.

WSDOT Source

Design Manual, Design - ADA/Pedestrian

accessible route

Related Term

See: pedestrian access route (PAR)

accessible route of travel

Definition

This is defined in the Washington Administrative Code (WAC) 51-40 as "a continuous unobstructed path connecting all accessible elements and spaces in an accessible building or facility that can be negotiated by a person using a wheelchair and that is usable by persons with other disabilities."

WSDOT Source

Roadside Manual

Citation

Accessibility Design for All, p. 6.

accommodation application

Definition

An application submitted by a utility, or a utility's agent working on behalf of the utility, requesting permission to install a utility within the operating highway right of way.

WSDOT Source

Utilities Manual

accommodation document

Definition

A generic term denoting a utility franchise, Franchise Amendment, Franchise Renewal, Franchise Consolidation, or permit. Accommodation documents are legal and binding agreements between the utility and WSDOT that describe in detail the terms and conditions under which a utility organization will be allowed to install a utility within the operating highway right of way.

WSDOT Source

Utilities Manual

accommodation process

Definition

The process of receiving, reviewing, approving, inspecting, and accepting a utility installation.

WSDOT Source

Utilities Manual

acquired

Definition

For the purpose of this chapter, 'acquired' means WSDOT obtained legal possession of the real property. The date of such possession is the date on which final payment for the property is made available to the owner(s) or to the court. Where WSDOT has obtained early possession under a Possession and Use Agreement, legal possession is the time specified in the pertinent document or, if not specified in such document, upon making payment as required by such document.

WSDOT Source

Right of Way Manual

acquired dwelling unit

Definition

The portion of the lands acquired for a public works project that includes all improvements of a residential nature serving the displaced person.

WSDOT Source

Right of Way Manual

acquisition (Consultant Services)

Definition

The acquiring by contract, with appropriated funds, services (including construction) by and for the use of the government through purchase, whether the services are already in existence or must be created, developed, demonstrated, and evaluated. Acquisition begins at the point when agency needs are established and includes the description of requirements to satisfy agency needs; solicitation and selection of WSDOT Sources; award of contracts; contract financing; contract performance; contract administration; and those technical and management functions directly related to the process of fulfilling agency needs by contract.

WSDOT Source

Consultant Services Manual

acquisition (Right of Way)

Definition

The acquisition of real property in fee or by leasehold interest.

WSDOT Source
Right of Way Manual

acquisition cost

Definition
For the purpose of computing replacement housing payments, the 'acquisition cost' is the cost WSDOT pays for the property acquired. The amount is determined from the Real Property Voucher. The amount of any administrative settlement is included and remains a part of the final settlement. Any amount paid by the displaced person for salvage rights is considered an expenditure by the displaced person toward the purchase of replacement housing. The amount of the 'final settlement' in the case of a donation is considered to be fair market value. For court award cases or cases involving an administrative settlement, the amount of the just compensation is analyzed to determine acquisition cost.

WSDOT Source
Right of Way Manual

acquisition planning

Definition
The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency's need in a timely manner and at a reasonable cost. It includes developing the overall strategy for managing the acquisition.

WSDOT Source
Consultant Services Manual

active accounts

Definition
These are GoodtoGo! customer accounts that have sufficient funds to cover the cost of a toll applied directly to their account. This includes all GoodtoGo! account types: Registered, Unregistered, Government, Commercial, Pay-By-Plate, and Short Term. Accounts with any other status (proposed, suspended, pending-to-close, and closed) cannot accept toll transaction postings and are considered inactive.

WSDOT Source
Toll Division

active project

Definition
A project where offers have been made to property owners for the acquisition of real property interests.

WSDOT Source
Right of Way Manual

active transponder

Definition

A transponder (aka. tag, pass) that is assigned to a GoodtoGo! customer account and the assignment effective dates are inclusive of the current (or reference) date. Assigned transponders in active status can be used to post associated toll transactions to an account. An active transponder can only be assigned to one account at a time. All other tag assignment records for the tag must have an appropriate alternative status (inactive, lost, stolen, returned (to inventory), defective, or damaged). (NOTE: Some tag assignments have a status of "proposed" – this is not a proper status and should be corrected by the Customer Service Center.)

WSDOT Source

Toll Division

AD copy

Definition

The AD copy is the contract document advertised to prospective bidders. The AD Copy may include, but not be limited to, the following as component parts: Bid Proposal Form, Special Provisions, Amendments, Plans, and Appendices including test hole boring logs, and environmental permit conditions.

WSDOT Source

Bridge Design Manual

ADA (Design)

Definition

An abbreviation for the Americans with Disabilities Act of 1990. The ADA is a civil rights law that identifies and prohibits discrimination based on disability. Title II of the ADA requires public entities to design new pedestrian facilities or alter existing pedestrian facilities to be accessible to and usable by people with disabilities.

WSDOT Source

Design Manual, Design - ADA/Pedestrian

Related Term

See also: ADA (Roadside)

ADA (Roadside)

Definition

Americans with Disabilities Act 42 U.S.C. 12101.

WSDOT Source

Roadside Manual

Related Term
See also: ADA (Design)

adaptive lighting system

Definition
A lighting system with a control system connected, allowing for dimming, on/off operation by time of night, and independent scheduling of individual lights for select hours of operation during nighttime hours.

WSDOT Source
Design Manual

addendum

Definition
A written or graphic document, issued to all Bidders and identified as an Addendum prior to Bid opening, which modifies or supplements the Bid Documents and becomes a part of the Contract.

WSDOT Source
Design Manual, Standard Specifications

addendum

Definition
An addendum is any document or plan that revises, modifies, or supplements a previously approved utility accommodation document, becoming part of the approved utility installation.

WSDOT Source
Utilities Manual

adjustment

Definition
An adjustment is a change in the expected amount due for a toll, where the adjustment is made to make a toll more accurate or correct or reflect proper implementation of existing business rules governing a particular toll facility. This change may occur at any stage of the toll process, and the alteration impacts the sub-ledger. (Example: include Class 2 vehicle being errantly recorded and charged as if they were Class 3 vehicle.)

WSDOT Source
Toll Division

administrative appeal hearing

Definition
A formal process whereby a property owner may appeal WSDOT's implementation of access management legislation. The appeal is heard by an administrative law judge (ALJ), who renders a decision. (See Design Manual Chapter 540 for administrative appeal hearing procedures.)

WSDOT Source
Design Manual

administrative hearing

Definition
An in-person hearing before an administrative law judge to contest a notice of civil penalty (NOCP).

WSDOT Source
Toll Division

administrative law judge (ALJ)

Definition
A judge provided by the Office of Administrative Hearings. An ALJ makes rulings on civil penalty hearings.

WSDOT Source
Toll Division

Administrative Offer Summary (AOS)

Definition
The approved form used as a basis for offers on low-value, uncomplicated process. Also referred to as a waiver of an appraisal for such properties.

WSDOT Source
Right of Way Manual

advance mitigation

Definition
Compensatory mitigation that is accepted by regulatory authorities as being established before an impact occurs. This is a form of permittee-responsible mitigation.

WSDOT Source
Environmental Manual

advance payment

Definition
Amount paid to WSDOT in advance for work to be performed under a reimbursable (receivable) agreement.

WSDOT Source
Consultant Services Manual

adverse effect

Definition
Occurs when an effect on an historic property diminishes the integrity of the property's aspects of integrity.

WSDOT Source
Environmental Manual

Related Term
determination of effect

adverse possession

Definition
A method of acquiring title to the land of another by actual, open, notorious, continuous, hostile, and exclusive holding of the land for a statutory period. An easement acquired by this method is a 'prescriptive easement'. Title reports are often silent on adverse possession; therefore, these rights are determined by actual inspection of the property. To be compensable these rights must be perfected by a court action.

WSDOT Source
Right of Way Manual

Advisory Council on Historic Preservation

Definition
An independent federal agency, established under the NHPA, which: (1) advises the President and Congress on matters of historic preservation; (2) carries out Section 106 reviews; and (3) provides technical assistance in historic preservation actions

WSDOT Source
Environmental Manual

aesthetics

Definition
Evaluations and considerations with the sensory quality of resources (sight, sound, smell, taste, and touch) and especially with respect to judgment about their pleasurable qualities.

WSDOT Source
Roadside Manual

Citation
U. S. Department of the Interior, Bureau of Land Management. 'BLM Manual: visual resource management', Washington, D.C. 1977.

affect (verb)

Definition
Action that may change the character of an historic property.

WSDOT Source
Environmental Manual

affidavit of publication

Definition
A notarized written declaration stating that a notice of hearing (or notice of opportunity for a hearing) was published in the legally prescribed manner.

WSDOT Source
Design Manual

Related Term
notice of hearing

affidavit of service by mailing

Definition
A notarized written declaration stating that the limited access hearing packet was mailed at least 15 days prior to the hearing and entered into the record at the hearing.

WSDOT Source
Design Manual

agency head or head of the agency

Definition
The Secretary, Attorney General, Administrator, Governor, Chairperson, or other chief official of an executive agency, unless otherwise indicated, including any deputy or assistant chief official of an executive agency.

WSDOT Source
Consultant Services Manual

agreement

Definition
A meeting of minds with the understanding and acceptance of reciprocal legal rights and duties regarding particular actions or obligations the parties intend to exchange; a mutual assent to do or refrain from doing something; or under certain circumstances, a contract. The writing or document that records the meeting of the minds of the parties. An agreement is not always synonymous with a contract because it might lack an essential element of a contract, such as consideration. An on-call (task order) agreement is not a contract. An on-call agreement lacks both an offer and consideration (see FAR 16.7). It is only after a task order document is executed for specific work and consideration that a binding contract exists. Where the term contract is meant, contract should be used. Within this manual, occasionally the terms agreement and contract will be used interchangeably.

WSDOT Source
Consultant Services Manual

Related Term
See also: contract

agreement (contract) closure

Definition
The process for closing a contract at WSDOT, including closure in WSDOT's financial system.

WSDOT Source
Consultant Services Manual

agreement (contract) manager

Definition
The person normally responsible for setting up any needed work orders, monitoring the progress of work and costs, and closing the contract, in accord with state and federal regulations.

WSDOT Source
Consultant Services Manual

agreement cancellation

Definition
Any discontinuance of the agreement process prior to it becoming a contract.

WSDOT Source
Consultant Services Manual

agreement execution date

Definition
The signature date of the final party to sign the agreement.

WSDOT Source
Utilities Manual

agreement termination

Definition
Terms that specify how and when an executed agreement will expire and when the parties are no longer obligated under the agreement. This is usually triggered by an agreed-upon end date, completion of work, expenditures reaching certain funding limits, or at the discretion of one or both parties. Note that an on-call agreement can terminate without any work having been authorized, thus without the agreement leading to a contract.

WSDOT Source
Consultant Services Manual

agreement writer

Definition
The person responsible for developing the agreement language, coordinating required reviews, and providing to the parties a final agreement that is ready for execution.

WSDOT Source
Consultant Services Manual

air quality analysis

Definition
An evaluation of various air pollutants at the project level based on specific project location and type. This evaluation should include discussion of construction phase emissions such as fugitive dust, odors, and asbestos if applicable. This evaluation may include discussion of other air related concerns identified in project development.

WSDOT Source
Environmental Manual

alignment

Definition
Horizontal and vertical geometric elements that define the location of a roadway.

WSDOT Source
Highway Runoff Manual

allogenic succession

Definition
Changes in the composition of the plant community as a result of environmental forces.

WSDOT Source
Roadside Manual

Citation
Chadwick D. Oliver and Bruce C. Larson, 'Forest Stand Dynamics', Updated Edition, New York, John Wiley & Sons, Inc., 1996, p29.

allowance

Definition
Additional resources included in an estimate to cover the cost of known but undefined requirements for an activity or work item. Allowance is a base cost item.

WSDOT Source
Cost Estimating Manual for WSDOT Projects

alluvial fan

Definition
A sloping fan-shaped mass of sediment deposited by a stream where it emerges from an upland onto a plain.

WSDOT Source
Roadside Manual

alteration

Definition
A change to a facility in the public right of way that affects or could affect access, circulation, or use. Alterations include but are not limited to renovation; rehabilitation; reconstruction; historic restoration; resurfacing of circulation paths or vehicular ways; or changes or rearrangement of structural parts or elements of a facility. Alterations do not include: Spot pavement repair; liquid-asphalt sealing, chip seal (bituminous surface treatment), or crack sealing; or lane restriping that does not alter the usability of the shoulder.

WSDOT Source
Design - ADA/Pedestrian

alternate measures

Definition
Alternatives to the relocation of nontraversable utility objects to outside the Control Zone; methods used to protect, reduce, or eliminate Location I or II Objects

WSDOT Source
Utilities Manual

alternate pedestrian access route

Definition
A temporary accessible route to be used when the existing pedestrian access route is blocked by construction, alteration, maintenance, or other temporary condition(s).

WSDOT Source
Design - ADA/Pedestrian

alternative countermeasures

WSDOT Source
Utilities Manual

Synonym
alternate measures

alternative(s)

Definition

Possible solutions to accomplish a defined purpose and need. These include local and state transportation system mode and design options, locations, and travel demand management and transportation system management-type improvements such as ramp metering, mass transit, and high occupancy vehicle (HOV) facilities.

WSDOT Source

Design Manual

Alternatives Comparison Table (ACT)

Definition

A table that documents and presents the tradeoffs among those performance metrics identified for each alternative under consideration on a project. The ACT is used to assist in analyzing the baseline and contextual performance tradeoffs and ultimately to select an alternative. It is a supplemental document to the 'Alternatives Analysis' section of the Basis of Design.

WSDOT Source

Design Manual

amendments (Bridge Design)

Definition

Amendments are revisions to specific sections of the Standard Specifications, which are approved and enacted during the two-year period that a specific edition of the Standard Specifications is in force. Amendments are published normally three times during a calendar year in April, August, and December.

WSDOT Source

Bridge Design Manual

amendments (Consultant Services)

Definition

A written document used to modify the contents of an existing task order document previously issued under a master on-call agreement. An amendment may be used to add new elements, make up for a deficiency, or extend or strengthen the task order.

WSDOT Source

Consultant Services Manual

anadromous

Definition

Born in fresh water, migrating to and living in salt water, and then returning to freshwater to reproduce.

WSDOT Source
Roadside Manual

Related Term
See also: anadromous fish species

anadromous fish species

Definition
Fish that are born and reared in freshwater, migrate to the ocean to grow to maturity, and return to freshwater to reproduce (such as salmon and steelhead).

WSDOT Source
Roadside Manual

Related Term
See also: anadromous

ancillary facilities

Definition
Roadway user facilities located within the WSDOT right of way, including rest areas; roadside parks; viewpoints; historic and interpretive markers; pedestrian and bicycle facilities; wetland or stream mitigation areas; park & ride lots; transit facilities; quarries and pit sites; and maintenance facilities adjacent to the roadway. Ancillary facilities are included in the definition of roadside.

WSDOT Source
Roadside Policy Manual

ancillary services

Definition
Those secondary services provided at safety rest areas that include, but are not limited to, vending machines, interpretive signing, telephones, recreational vehicle (RV) sanitary disposal facilities, trails, scenic viewpoints, commercial and public information displays, and visitor information centers.

WSDOT Source
Design Manual, Roadside Manual

angle of repose

Definition
The angle between the horizontal and the maximum slope that a soil assumes through natural processes.

WSDOT Source
Roadside Manual

annexation

Definition
The process of expansion of a city's boundaries to include land previously outside its jurisdiction.

WSDOT Source
Utilities Manual

annual average daily traffic (AADT)

Definition
The total volume of traffic passing a point or segment of a highway facility in both directions for one year divided by the number of days in the year. Normally, periodic daily traffic volumes are adjusted for hours of the day counted, days of the week, and seasons of the year to arrive at average annual daily traffic.

WSDOT Source
Design Manual, Safety Performance Manual

annual daily traffic (ADT)

Definition
The average 24-hour volume, being the total volume during a stated period divided by the number of days in that period. Normally, this would be periodic daily traffic volumes over several days, not adjusted for days of the week or seasons of the year.

WSDOT Source
Design Manual

anoxic

Definition
Devoid of oxygen.

WSDOT Source
Highway Runoff Manual

antecedent moisture conditions

Definition
The degree of wetness of a watershed or the soil at the beginning of a storm.

WSDOT Source
Highway Runoff Manual

antiseepage collar

Definition
A device constructed around a pipe or other conduit and placed through a dam, levee, or dike for the purpose of reducing seepage losses and piping failures.

WSDOT Source
Highway Runoff Manual

application

Definition
A completed Statement of Qualifications together with a request to be considered for the award of one or more contracts for professional services (RCW 39.80.020).

WSDOT Source
Consultant Services Manual

application for an access connection

Definition
An application provided by the permitting authority to be completed by the applicant for access to a managed access highway.

WSDOT Source
Design Manual

appraisal

Definition
An opinion of value; the act or process of developing an opinion of value.

WSDOT Source
Right of Way Manual

approach

Definition
An access point, other than a public road/street, that allows access to or from a limited access highway on the state highway system.

WSDOT Source
Design Manual

approach and access connection

Definition
These terms are listed under the specific access section to which they apply. The first section below is for limited access highways and uses the term approach. The second section below is for managed access highways and uses the term access connection. Approaches and access connections include any ability to leave or enter a highway right of way other than at an intersection with another road or street.

WSDOT Source
Design Manual

approach design speed

Definition
The design speed of the roadway leading into the roundabout.

WSDOT Source
Design Manual

approach lanes

Definition
The lane or set of lanes for traffic approaching the roundabout (see Design Manual Chapter 1320).

WSDOT Source
Design Manual

approval

Definition
General term referring to any document other than a permit that needs a signature by someone in authority at the agency having statutory jurisdiction over that activity. The document may be called an approval, certification, concurrence, easement, or license, all of which represent an agency signifying, 'Yes we authorize you to conduct this activity as long as you do it in this manner.' An approval may specify conditions under which the activity is performed.

WSDOT Source
Environmental Manual

approval as to form

Definition
Verification of the legality of a document by the Attorney General's Office.

WSDOT Source
Utilities Manual

appurtenance

Definition
Something which is joined or attached to property. When an easement benefits a property, it is an 'appurtenance'. In order to be an appurtenance, an easement must be necessary for the enjoyment of the lands benefitted. A warranty deed conveys the appurtenant easement even if the easement is not mentioned in the deed.

WSDOT Source
Right of Way Manual

architect-engineer services

Definition

For the purposes of federal regulation, architect-engineer services are defined in 48 CFR 36.601-4.

WSDOT Source

Consultant Services Manual

architectural and engineering services

Definition

Professional services, including A&E services, rendered by any person, other than as an employee of the agency, contracting to perform activities within the scope of the general definition of professional practice in Chapter 18 RCW.

WSDOT Source

Consultant Services Manual

area of influence

Definition

The area that will be directly impacted by the proposed action: freeway main line, ramps, crossroads, immediate off-system intersections, and state and local roadway systems.

WSDOT Source

Design Manual

area of potential effect (APE)

Definition

The geographic area or areas which an undertaking may directly or indirectly cause alterations in the character or use of historic properties. The APE is three dimensional including auditory, visual and ground disturbing activities. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking. The APE should be defined before historic properties are identified and not on land ownership (36 CFR 800.2(c).

WSDOT Source

Environmental Manual

arid

Definition

Excessively dry; having insufficient rainfall to support agriculture without irrigation.

WSDOT Source

Highway Runoff Manual

Army Corps permits

Definition

The US Army Corps of Engineers issues two major permits: the Clean Water Act Section 404 permit for discharge of dredge and fill material into waters of the U.S., and the Rivers and Harbors Act Section 10 permit for work in navigable waters. They are commonly referenced together because similar procedures apply to both, and they are often issued as a combined permit. WSDOT usually can obtain coverage under a Nationwide Permit, issued for common activities having minimal impact, but occasionally must obtain an Individual Permit for a project having significant impacts.

WSDOT Source

Environmental Manual

arterial

Definition

A road or street intended to move high volumes of traffic over long distances at high speed, with partial control of access, having some intersections at grade. A major arterial connects an interstate highway to cities and counties. A minor arterial connects major arterials to collectors. A collector connects an arterial to a neighborhood (a collector is not an arterial). A local access road connects individual residences to a collector.

WSDOT Source

Highway Runoff Manual

arterial rate sign

Definition

Signs used on local (non-interstate) arterial roadway gantries that display toll rate information for customers.

WSDOT Source

Toll Division

articulated bus

Definition

A two-section bus that is permanently connected at a joint.

WSDOT Source

Design Manual

as-built drawings

Definition

Engineering plans that have been revised to reflect all changes to the plans that occurred during construction.

WSDOT Source
Highway Runoff Manual

assigns

Definition
Those who take from the assignor whether by conveyance, devise, descent, or operation of law.

WSDOT Source
Right of Way Manual

Assistant Attorney General (AAG)

Definition
An attorney assigned to WSDOT by the Attorney General's Office.

WSDOT Source
Utilities Manual

at-risk utility object

Definition
A fixed-surface utility object considered to be installed in a location where the probability of collision by a motor vehicle is high. Examples include a rural Location 1 utility object located within the Control Zone or an urban utility installation located within 10 feet of the face of curb.

WSDOT Source
Right of Way Manual

atmospheric vacuum breaker (AVB)

Definition
A device that contains a float check (poppet), a check seat and an air inlet vent. When water pressure is reduced to a gauge pressure of zero or below, the float check drops. This allows air to enter the device to prevent backsiphonage. It is designed to protect against backsiphonage only.

WSDOT Source
Roadside Manual

attorney in fact

Definition
A fiduciary (agent, representative) appointed by and empowered to act for a principal (a person or a corporation). The attorney in fact for a person is empowered by the principals having executed a power of attorney. The power of attorney may be either for a general or for a specific purpose. The attorney in fact may act only while the principal is alive and of sound mind, when the power of attorney permits the act, and provided that the power of attorney has not been superseded or revoked. The Attorney(s) in Fact of a corporation are those officers of the corporation who are empowered by the corporation’s articles of incorporation to act for the corporation.

WSDOT Source
Right of Way Manual

audit

Definition
A formal examination, in accordance with professional standards, of a consultant's accounting systems, incurred cost records, and other cost presentations to test the reasonableness, allowability, and allocability of costs in accordance with the Federal Cost Principles as specified in 48 CFR Part 31.

WSDOT Source
Consultant Services Manual

authorized use

Definition
The occupation of WSDOT's right of way may be allowed by an executed permit, lease or other appropriate document.

WSDOT Source
Right of Way Manual

autogenic succession

Definition
Changes in the composition of a plant community due to interplant interactions (facilitation or competition).

WSDOT Source
Roadside Manual

Citation
Chadwick D. Oliver and Bruce C. Larson, 'Forest Stand Dynamics', Updated Edition, New York, John Wiley & Sons, Inc., 1996, p 29.

auxiliary aids and services

Definition
1. Qualified interpreters, notetakers, transcription services, written materials, telephone handset amplifiers, assistive listening devices, assistive listening systems, telephones compatible with hearing aids, open and closed captioning, telecommunications devices for persons with hearing or speech difficulties (TDDs), videotext displays, or other effective methods for making aurally delivered materials available to individuals with hearing limitations;
2. Qualified readers, taped texts, audio recordings, Brailled materials, large print materials, or other effective methods for making visually delivered materials available to individuals with visual impairments;
3. Acquisition or modification of equipment or devices;

4. Other similar services and actions; and
5. Providing and disseminating information, written materials, and notices in languages other than English, where appropriate.

WSDOT Source
Design Manual

auxiliary lane

Definition
That portion of the roadway adjoining the traveled way for parking, speed change, turning, storage for turning, weaving, truck climbing, or for other purposes supplementary to the main line traveled way.

WSDOT Source
Design Manual, Standard Specifications, Utilities Manual

Related Term
traveled way

average daily traffic (ADT) (Design)

Definition
The average 24-hour volume, being the total volume during a stated period divided by the number of days in that period. Normally, this would be periodic daily traffic volumes over several days, not adjusted for days of the week or seasons of the year.

WSDOT Source
Design Manual

Related Term
See also: average daily traffic (ADT) (Highway Runoff)

average daily traffic (ADT) (Highway Runoff)

Definition
The volume of traffic passing a point on a highway in both directions during an average day of the year (or design year). ADT counts must be estimated using Trip Generation, published by the Institute of Transportation Engineers, or using a traffic study prepared by a professional engineer or transportation specialist with expertise in traffic volume estimation. ADT counts can be used to forecast future volumes for the design life of a particular project. For project sites with seasonal or varied use, the highest period of expected traffic impacts is evaluated.

WSDOT Source
Highway Runoff Manual

Related Term
See also: average daily traffic (ADT) (Design)

average light level

Definition

The average of all light intensities within the design area.

WSDOT Source

Design Manual

average weekday vehicle trip ends (AWDVTE)

Definition

The estimated total of all trips entering plus all trips leaving a road approach on a weekday for the final stage of development of the property served by the road approach.

WSDOT Source

Design Manual

avulsion

Definition

A sudden, dramatic shift of the river into a new course or channel.

WSDOT Source

Environmental Manual

award

Definition

The formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

WSDOT Source

Standard Specifications

B

backflow

Definition

Refers to the flow of water or other liquids, gases, or solids from any source back into the customer's plumbing system or the serving utility's water distribution system.

WSDOT Source

Roadside Manual

backflow prevention assembly

Definition

Refers to a backflow preventer that is designed to be in-line tested and repaired, and to meet the head loss and flow requirements of the recognized approval authority. The assembly consists of the backflow prevention unit, two resilient seated shutoff valves, and test cock(s).

WSDOT Source

Roadside Manual

background

Definition

The distant part of a landscape. Generally, the landscape area located from 4 miles to infinity from the viewer.

WSDOT Source

Roadside Manual

Citation

U.S. Department of Agriculture, U.S. Forest Service, 'Landscape Aesthetics: A Handbook for Scenery Management', December 1995.

background noise

Definition

All noise in an area that is not associated with state highway traffic.

WSDOT Source

Environmental Manual

backpressure

Definition

Refers to water pressure that exceeds the operating pressure of the purveyor's potable water supply.

WSDOT Source

Roadside Manual

backsiphonage

Definition

Backflow due to a negative or reduced pressure within the purveyor's potable water supply.

WSDOT Source

Roadside Manual

backslope

Definition

A sideslope that goes up as the distance increases from the roadway (cutslopes).

WSDOT Source
Utilities Manual

backwater

Definition
Water upstream from an obstruction that is deeper than it would normally be without the obstruction.

WSDOT Source
Highway Runoff Manual

baffle

Definition
A device to check, deflect, or regulate flow.

WSDOT Source
Highway Runoff Manual

bargain and sale deed

Definition
A deed in which the grantor makes no warranty. Any title that the grantor has or later acquires passes under this deed to the grantee.

WSDOT Source
Right of Way Manual

barrier

Definition
A solid wall or earth berm located between the roadway and receiver location that provides noise reduction.

WSDOT Source
Environmental Manual

barrier terminal

Definition
A crash-tested end treatment for longitudinal barriers that is designed to reduce the potential for spearing, vaulting, rolling, or excessive deceleration of impacting vehicles from either direction of travel. Barrier terminals include applicable anchorage.

WSDOT Source
Design Manual

base cost estimate

Definition

The term 'base cost estimate' was developed by WSDOT for cost risk analysis and represents the reviewed and/or validated project cost estimate to be used in the quantitative risk analysis for a project. The base cost represents the cost that can reasonably be expected if the project materializes as planned, including PE, RW, and CN costs. The base cost estimate is unbiased and neutral - it is not optimistic and it is not conservative. It does not include any risks, but does include the WSDOT standard construction contingency, since that amount is based upon historical usage. Base costs reported to program management shall be in current-year dollars (the un-inflated estimate). Refer to the Plans Preparation Manual 800.03(2).

WSDOT Source

Cost Estimating Manual for WSDOT Projects

base flood

Definition

A flood having a 1% chance of being equaled or exceeded in any given year (also called the 100-year flood).

WSDOT Source

Highway Runoff Manual

base flood elevation (BFE)

Definition

The calculated or estimated 100-year flood water surface elevation.

WSDOT Source

Environmental Manual

base flow

Definition

The portion of stream flow that is not attributable to storm runoff and is supported by groundwater seepage into a channel.

WSDOT Source

Highway Runoff Manual

baseline

Definition

The approved time phased plan (for a project, a work breakdown structure component, a work package, or a schedule activity), plus or minus approved project scope, cost, schedule, and technical changes. Generally refers to the current baseline, but may refer to the original or some other baseline. Usually used with a modifier (e.g., cost baseline, schedule baseline, performance measurement baseline, technical baseline).

WSDOT Source
Design Manual

baseline performance metric

Definition
A description of need in terms that can be measured or assessed in both the existing and proposed (future) state.

WSDOT Source
Design Manual

baseline performance need

Definition
The primary reason a project has been proposed. It refers to the threshold determination at the project location resulting from a statewide biennial prioritization and funding process. It may also be the specific issue to be addressed by the project described by a partnering agency that is providing the funding.

WSDOT Source
Design Manual

baseline preliminary engineering (PE)

Definition
The effort (budget/cost) of taking a project from planning through the scoping and design phases of project development. Planning and scoping typically have separate budgets but are encompassed under Design or Preliminary Engineering (PE). The terms 'Design' or 'Design Phase' are sometimes used interchangeably with PE.

WSDOT Source
Cost Estimating Manual for WSDOT Projects

basic (water quality) treatment

Definition
The Washington State Department of Ecology's performance goal is to achieve 80% removal of total suspended solids for influent concentrations that are greater than 100mg/l, but less than 200mg/l. For influent concentrations greater than 200mg/l, a higher treatment goal may be appropriate. For influent concentrations less than 100mg/l, the facilities are intended to achieve an effluent goal of 20mg/l total suspended solids.

WSDOT Source
Highway Runoff Manual

Related Term
enhanced runoff treatment, enhanced water quality treatment

basic number of lanes

Definition

The minimum number of general purpose lanes designated and maintained over a significant length of highway

WSDOT Source

Design Manual

basin

Definition

The area of land drained by a river and its tributaries that drains water, organic matter, dissolved nutrients, and sediments into a lake or stream (see watershed). Basins typically range in size from 1 to 50 square miles.

WSDOT Source

Highway Runoff Manual

Related Term

watershed (Environment)

basin plan

Definition

A plan that assesses, evaluates, and proposes solutions to existing and potential future impacts on the physical, chemical, and biological properties and beneficial uses of waters of the state within a drainage basin. A plan should include but not be limited to recommendations for the following elements:

- Stormwater requirements for new development and redevelopment
- Capital improvement projects
- Land use management through identification and protection of critical areas, comprehensive land use and transportation plans, zoning regulations, site development standards, and conservation areas
- Source control activities, including public education and involvement, and business programs
- Other targeted stormwater programs and activities, such as maintenance, inspections, and enforcement
- Monitoring
- An implementation schedule and funding strategy.

WSDOT Source

Highway Runoff Manual

basis of design (BOD)

Definition

A document and template used to record information, decisions, and analysis needed in the development of a project design, including all factors leading to the development and selection of a project alternative, and the selection of design elements associated with that alternative.

WSDOT Source

Design Manual

basis of estimate (BOE)

Definition

Documentation to enable the agency to easily track changes to project scope, cost, and schedule. A well-documented estimate basis and documentation of assumptions used can eliminate overlap of future estimate assumptions. This document provides a trail about what is known about the project. This allows project 'knowns' as well as 'unknowns' to be clearly identified. This documentation is important because multiple estimators may be involved on the project; complex projects in particular take years to develop and estimates must be completed multiple times.

WSDOT Source

Cost Estimating Manual for WSDOT Projects

Bayesian statistics

Definition

A method of analysis which bases statistical inference on knowledge from history or other sites, considers the likelihood of certain types of events as part of the analysis process, and uses Bayes' theorem to translate probabilistic statements into degrees of belief.

WSDOT Source

Safety Performance Manual

Citation

Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-1.

beautification area

Definition

These areas have been renamed Resource Conservation Areas.

WSDOT Source

Roadside Policy Manual

before-after study (Safety Performance)

Definition

An observational study method comparing frequency and/or severity of crashes before and after implementation of a safety treatment.

WSDOT Source
Safety Performance Manual

Synonym
BA studies

behavioral framework for speeding

Definition
Factors related to driver speed choices, including their relationship to potential speeding countermeasures.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-1.

BEISt

Definition
Bridge Engineering Information System. The WSDOT internal website that holds electronic bridge files.

WSDOT Source
Bridge Design Manual

bench

Definition
A relatively level step excavated into earth material on which fill is to be placed.

WSDOT Source
Highway Runoff Manual

beneficial uses

Definition
Those water uses identified in state water quality standards that must be achieved and maintained as required under the federal Clean Water Act. 'Beneficial use' and 'designated use' are often used interchangeably.

WSDOT Source
Highway Runoff Manual

benefit/cost analysis

Definition
A method of valuing a proposition by first monetizing all current expenditures to execute - cost - as well as the expected yields into the future - benefit - then dividing the total benefit by the

total cost, thus providing a ratio. Alternatives may be rendered and compared in this fashion where, typically, a higher ratio is preferable, indicating a better return on investment.

WSDOT Source
Design Manual

berm (Highway Runoff)

Definition
A constructed barrier of compacted earth, rock, or gravel. In a stormwater facility, a berm may serve as a vertical divider, typically built up from the bottom.

WSDOT Source
Highway Runoff Manual

Related Term
See also: berm (Roadside)

berm (Roadside)

Definition
The continuous artificial contouring of a slope or water channel bank.

WSDOT Source
Roadside Manual

Citation
Hugo Schiechtl, 'Bioengineering for Land Reclamation and Conservation', University of Alberta Press, 1980.

Related Term
See also: berm (Highway Runoff)

best available science

Definition
The best available scientific knowledge and practices.

WSDOT Source
Highway Runoff Manual

best management practice (Roadside)

Definition
Physical, structural, and/or managerial practices that, when used singly or in combination, reduce the downstream quality and quantity impacts of stormwater.

WSDOT Source
Roadside Manual

Related Terms
See also: best management practice (Utilities), best management practices (Highway Runoff)

best management practice (Utilities)

Definition
Generally accepted standards of operation that have been tested and proven desirable for future use.

WSDOT Source
Utilities Manual

Related Term
See also: best management practice (Roadside), best management practices (Highway Runoff)

best management practices (Highway Runoff)

Definition
The structural devices, maintenance procedures, managerial practices, prohibitions of practices, and schedules of activities that are used singly or in combination to prevent or reduce the detrimental impacts of stormwater, such as pollution of water, degradation of channels, damage to structures, and flooding.

WSDOT Source
Highway Runoff

Related Terms
See also: best management practice (Roadside), best management practice (Utilities)

best value

Definition
A measure of short term and long-term usefulness, quality, expandability, richness of function, customer support structure and options and confidence that the consultant will continue to aggressively support and enhance the product or service offered. This aspect is part of the advertisement for services and requires the consultant or vendor to describe in detail what value its product and/or service will provide to WSDOT. Examples include robustness, supportability, flexibility, and extensibility of the proposed solution, compliance with industry standards, and ease of use of the proposed solution. Best Value is often used in Professional Services selection processes.

WSDOT Source
Consultant Services Manual

betterment

Definition

Any upgrading of the facility being relocated that is not attributable to the highway construction or to meeting current requirements or standards, and that is made solely for the benefit of and at the election of the utility.

WSDOT Source

Utilities Manual

bicycle

Definition

Any device propelled solely by human power upon which a person or persons may ride, having two tandem wheels, either of which is 16 inches or more in diameter, or three wheels, any one of which is more than 20 inches in diameter.

WSDOT Source

Design Manual

bicycle route

Definition

A system of facilities that is used or has a high potential for use by bicyclists or that is designated as such by the jurisdiction having the authority. A series of bicycle facilities may be combined to establish a continuous route and may consist of any or all types of bicycle facilities.

WSDOT Source

Design Manual

bid documents

Definition

The component parts of the proposed Contract which may include, but are not limited to, the Proposal Form, the proposed Contract Provisions, the proposed Contract Plans, Addenda, and for projects with Contracting Agency subsurface investigations; the Summary of Geotechnical Conditions and subsurface boring logs (if any).

WSDOT Source

Standard Specifications

bid, proposal

Definition

The offer of a Bidder on a properly completed Proposal Form to perform the Contract.

WSDOT Source

Standard Specifications

bidder

Definition

An individual, partnership, firm, corporation, or joint venture, submitting a Proposal or Bid. When required by law or otherwise the individual, partnership, firm, corporation, or joint venture shall be prequalified.

WSDOT Source

Standard Specifications

bike lane

Definition

A portion of a highway or street identified by signs and pavement markings as reserved for bicycle use.

WSDOT Source

Design Manual

bilateral contract

Definition

Contract in which a promise is exchanged for a promise. (For example, I promise to fix your car by Thursday, and you promise to pay $500 on Thursday.).

WSDOT Source

Consultant Services Manual

biodegradable

Definition

Capable of being readily broken down by biological means, especially by microbial action. Microbial action includes the combined effects of bacteria, fungi, flagellates, amoebae, ciliates, and nematodes. Degradation can be rapid or may take many years, depending on such factors as available oxygen and moisture.

WSDOT Source

Highway Runoff Manual

bioengineering

Definition

The combination of biological, mechanical, and ecological concepts (and methods) to control erosion and stabilize soil through the use of vegetation alone or in combination with construction materials.

WSDOT Source

Highway Runoff Manual

biofilter

Definition

A designed treatment facility using a combined soil and vegetation system for filtration, infiltration, adsorption, and biological uptake of pollutants in stormwater when runoff flows over and through it. Vegetation growing in these facilities acts as both a physical filter that causes gravity settling of particulates by regulating velocity of flow, and as a biological sink when direct uptake of dissolved pollutants occurs. The former mechanism is probably the most important in western Washington, where the period of major runoff coincides with the period of lowest biological activity.

WSDOT Source

Highway Runoff Manual

biofiltration (Highway Runoff)

Definition

The process of reducing pollutant concentrations in water by filtering the polluted water through biological materials, such as vegetation.

WSDOT Source

Highway Runoff Manual

Related Term

See also: biofiltration (Roadside)

biofiltration (Roadside)

Definition

The cleaning of surface water using plants and other biological methods to extract or retain sediment and pollutants.

WSDOT Source

Roadside Manual

Related Term

See also: biofiltration (**Highway Runoff**)

biological assessment (Highway Runoff)

Definition

A document prepared under the direction of a federal agency to determine whether a proposed action involving major construction activities is likely to (1) adversely affect species protected under the Endangered Species Act or their designated critical habitats, (2) jeopardize the continued existence of species that are proposed for listing as threatened or endangered, or (3) adversely modify proposed critical habitat.

WSDOT Source

Highway Runoff Manual

Related Term
See also: biological assessment (Utilities)

biological assessment (Utilities)

Definition
The process used to evaluate the potential impacts of project work on listed and proposed wildlife, fish, plant species, and critical habitats in the vicinity of the project area.

WSDOT Source
Utilities Manual

bioregion

Definition
A geographic region based on topography and biological similarities such as watersheds, plant/animal ecosystems, or relative elevations.

WSDOT Source
Roadside Manual

bioretention

Definition
The removal of stormwater runoff pollutants using the chemical, biological, and physical properties afforded by a natural terrestrial community of plants, microbes, and soil. The typical bioretention system is set in a depressional area and consists of plantings, mulch, and an amended planting soil layer underlain with more freely draining granular material.

WSDOT Source
Highway Runoff Manual

biosolids

Definition
Treated wastewater residuals or solids used as a soil amendment.

WSDOT Source
Roadside Manual

bituminous surface treatment (BST)

Definition
A thin, protective wearing surface that is applied to a pavement or base course (also known as a seal coat or chip seal).

WSDOT Source
Highway Runoff Manual

blend (Roadside Policy)

Definition
To combine adjacent elements in a way that creates a balanced, visually harmonious landscape. A roadside restoration strategy that integrates roadside elements with adjacent desirable landscape features.

WSDOT Source
Roadside Policy Manual

Related Term
See also: blend (Roadside)

blend (Roadside)

Definition
To create a balanced, visually harmonious interface between adjacent elements. A roadside treatment strategy that integrates roadside elements to preserve roadside character continuity.

WSDOT Source
Roadside Manual

Related Term
See also: blend (Roadside Policy)

bollard

Definition
A post (which may or may not be removable) used to prevent vehicular access.

WSDOT Source
Highway Runoff Manual

bore pit

Definition
Defined as both a receiving and a launching pit for trenchless construction methods.

WSDOT Source
Utilities Manual

borings

Definition
Cylindrical samples of a soil profile used for analysis of soils or determination of infiltration capacity.

WSDOT Source
Highway Runoff Manual

borrow area

Definition
A source of earth fill material used in the construction of embankments or other earth fill structures.

WSDOT Source
Highway Runoff Manual

bottom of ditch

Definition
The bottom of an open, natural, or constructed drainage route, which may be adjacent to the roadway structure, with the purpose of directing stormwater away from the roadway.

WSDOT Source
Utilities Manual

bridge

Definition
All reportable structures that include bridges, culverts, and tunnels.

WSDOT Source
Bridge Design Manual

Related Term
See also: reportable structure

bridge approach embankments

Definition
An embankment beneath a Structure and extending 100 feet beyond a Structure's end (at Subgrade elevation for the full embankment width) plus an access ramp on a 10:1 slope to the original ground elevation. Also, any embankment that replaces unsuitable foundation soil beneath the Bridge Approach Embankment.

WSDOT Source
Standard Specifications

Bridge Condition Inspection Training (BCIT)

Definition
A comprehensive ten-day training course offered by WSDOT based on the 2012 FHWA 'Bridge Inspectors Reference Manual (BIRM)'. The BCIT is an FHWA accepted equivalent to the course offered by the National Highway Institute (NHI), entitled 'Safety Inspection of In-Service Bridges' with a course code of FHWA-NHI-130055.

WSDOT Source
Bridge Design Manual

bridge file

Definition

A file containing historic and current information about a bridge and meeting the intent of Chapter 2 of the AASHTO Manual for Bridge Evaluation.

WSDOT Source

Bridge Design Manual

bridge inspection

Definition

The act to assess the structural condition and collect pertinent data while on site of in-service bridges.

WSDOT Source

Bridge Design Manual

bridge inspection certification

Definition

A process by which a Program manager, Team Leader and Underwater Bridge Inspection Diver is certified in the state of Washington to perform bridge inspections.

WSDOT Source

Bridge Design Manual

Bridge Inspection Committee (BIC)

Definition

A committee of state and local agency representatives that provides overall advisory input to the bridge inspection manual content and organization within the state of Washington.

WSDOT Source

Bridge Design Manual

bridge inspection program

Definition

An organizational unit that functions as part of the Bridge Inspection Organization and that meets the requirements of 23 CFR 650.307, 23 CFR 650.507, and this manual. Agencies involved with the Bridge Inspection Program are led by delegated program managers, who work in coordination with the Statewide Program Manager.

WSDOT Source

Bridge Design Manual

Bridge Inspection Refresher Training (BIRT)

Definition

A training course designed to refresh the skills of practicing bridge inspectors. The course is offered by the National Highway Institute (NHI). The course code is FHWA-NHI-130053.

WSDOT Source

Bridge Design Manual

Bridge Preservation Office Bridge Inventory

Definition

The inventory of state bridges kept in the BPO database. The Bridge Reporting Database draws data from this database regularly for inclusion into WSBIS.

WSDOT Source

Bridge Design Manual

Bridge Reporting Database (BRD)

Definition

The database which stores the Washington State Bridge Inventory System (WSBIS) data, combining data from the Bridge Preservation Office (BPO) and Local Programs (LP) databases.

WSDOT Source

Bridge Design Manual

BridgeWorks

Definition

The software application that is used to record, process and report bridge inspections and which updates data in the inventory databases.

WSDOT Source

Bridge Design Manual

buffer

Definition

The zone contiguous with a sensitive area that is required for the continued maintenance, function, and structural stability of the sensitive area. The critical functions of a riparian buffer (those associated with an aquatic system) include shading, input of organic debris and coarse sediments, uptake of nutrients, stabilization of banks, interception of fine sediments, overflow during high water events, protection from disturbance by humans and domestic animals, maintenance of wildlife habitat, and room for variation of aquatic system boundaries over time due to hydrologic or climatic effects. The critical functions of terrestrial buffers include protection of slope stability, attenuation of surface water flows from storm water runoff and precipitation, and erosion control.

WSDOT Source
Roadside Manual

Related Term
See also: buffer (Environment)

buffer (Design: ADA)

Definition
A space measured from the back of the curb to the edge of the sidewalk that could be treated with plantings or alternate pavement or be used for needs such as drainage treatment or utility placement.

WSDOT Source
Design Manual, Design - ADA/Pedestrian

buffer (Environment)

Definition
An upland, wetland, or riparian area that protects or enhances wetlands or aquatic resource functions from disturbances associated with adjacent land uses.

WSDOT Source
Environmental

Related Term
See also: buffer

buffer-separated HOV lane

Definition
An HOV lane that is separated from the adjacent same direction general purpose freeway lanes by a designated buffer.

WSDOT Source
Design Manual

building

Definition
A construction created to shelter any form of human activity, including animal husbandry.

WSDOT Source
Environmental Manual

built character

Definition
A roadside character category indicating a landscape in which human elements and structures are notable or predominant. 'Built' character includes rural, suburban, and urban roadside character classifications.

WSDOT Source
Roadside Policy Manual

bus

Definition
A rubber-tired motor vehicle used for transportation, designed to carry more than ten passengers.

WSDOT Source
Design Manual

bus pullout

Definition
A bus stop with parking area designed to allow transit vehicles to stop wholly off the roadway.

WSDOT Source
Design Manual

bus rapid transit (BRT)

Definition
An express rubber-tired transit system operating predominantly in roadway managed lanes. It is generally characterized by separate roadway or buffer-separated HOV lanes, HOV direct access ramps, and a high-occupancy designation (3+ or higher).

WSDOT Source
Design Manual

bus shelter

Definition
A facility that provides seating and protection from the weather for passengers waiting for a bus.

WSDOT Source
Design Manual

bus stop

Definition
A place designated for transit vehicles to stop and load or unload passengers.

WSDOT Source
Design Manual

business

Definition
In addition to the definition found in WAC 468-100-002, a business is also referred to as 'nonresidential.'

WSDOT Source
Right of Way Manual

business access transit (BAT) lanes

Definition
A transit lane that allows use by other vehicles to access abutting businesses.

WSDOT Source
Design Manual

bypass

Definition
A channel or conveyance constructed to divert water around a stormwater facility or series of stormwater facilities.

WSDOT Source
Highway Runoff Manual

C

call

Definition
A part of a legal description which combines a direction and a distance, e.g., "thence North 0°17' East 506 feet" or "thence along the said easterly boundary to the county road." A series of 'calls' locate and enclose a tract in a 'metes and bounds' description.

WSDOT Source
Right of Way Manual

call for bids (advertisement for bids)

Definition
The published public notice soliciting Proposals or Bids for Work stating, among other things, the time, place, and date for receiving and opening the Bids.

WSDOT Source
Standard Specifications

candidate species

Definition
Any species of fish, wildlife, or plant considered for possible addition to the list of endangered and threatened species. These are taxa for which NMFS or USFWS has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions.

WSDOT Source
Environmental Manual

canopy cover

Definition
A measure of plant coverage of the ground by all forms of vegetation, including grasses, groundcovers, shrubs, and trees.

WSDOT Source
Roadside Manual

capacity

Definition
The maximum sustainable flow rate at which vehicles or persons can reasonably be expected to traverse a point or uniform segment of a lane or roadway during a specified time period under given roadway, geometric, traffic, environmental, and control conditions. Capacity is usually expressed as vehicles per hour (vph), passenger cars per hour (pcph), or persons per hour (pph).

WSDOT Source
Design Manual

capital costs

Definition
Nonrecurring costs required to construct infrastructure, including costs of right of way, facilities, drainage systems, utilities, and associated administrative and design costs, as well as financing charges during construction.

WSDOT Source
Highway Runoff Manual

Capital Improvement and Preservation Program (CIPP)

Definition
WSDOT's program of projects developed each biennium that delivers capital investments in highway, marine, and rail facilities that have been funded in part or in whole by the state Legislature. The CIPP is submitted to the Governor and, ultimately, by the Governor to the Legislature.

WSDOT Source
Design Manual

Capital improvement project or program (CIP)

Definition
A project prioritized and scheduled as a part of an overall construction program or the actual construction program.

WSDOT Source
Highway Runoff Manual

Capital Program Management System (CPMS)

Definition

A computer database used to develop and manage the highway and marine construction programs. The CPMS allows users to establish and maintain project data and is used to manage and deliver statewide construction programs.

WSDOT Source

Design Manual

carbon monoxide (CO)

Definition

A by-product of the burning of fuels in motor vehicle engines. Though this gas has no color or odor, it can be dangerous to human health. Motor vehicles are the main source of carbon monoxide, which is generally a wintertime problem during still, cold conditions.

WSDOT Source

Environmental Manual

carrier pipe

Definition

A pipe used to transmit a fluid, liquid, gas, or other nonstatic material.

WSDOT Source

Utilities Manual

carve out

Definition

A 'Carve-out' is a term commonly used to describe the method for determining what portion of property occupied by a residential owner of 90 days or more is to be used in computing a replacement housing payment. A carve-out is typically used if the displaced person is situated on a site either larger than typical for residential purposes; if the property is actually occupied by or used for other purposes; or the property contains a major exterior attribute which the comparable does not contain.

WSDOT Source

Right of Way Manual

casing

Definition

A larger pipe enclosing a carrier pipe, conduit, or duct.

WSDOT Source

Utilities Manual

catch basin

Definition
A chamber or well, usually built at the curb line of a street, for the admission of surface water to a sewer or subdrain, having at its base a sediment sump designed to retain grit and detritus below the point of overflow.

WSDOT Source
Highway Runoff Manual

catch basin insert (CBI)

Definition
A device installed under a storm drain grate to provide runoff treatment through filtration, settling, or adsorption.

WSDOT Source
Highway Runoff Manual

catchment

Definition
Surface area associated with pavement drainage design.

WSDOT Source
Highway Runoff Manual

categorical exclusion

Definition
A NEPA action defined by a specific agency through CFR or FR that does not individually or cumulatively have a significant environmental effect.

WSDOT Source
Environmental Manual

Categorical Exclusion (CE) (NEPA) or Categorical Exemption (CE) (SEPA)

Definition
Actions that do not individually or cumulatively have a significant effect on the environment.

WSDOT Source
Design Manual

category

Definition
The installation category as determined by the impact a proposed utility installation will have upon the operating highway right of way and the transportation facilities located there.

WSDOT Source
Utilities Manual

cation exchange capacity (CEC)

Definition
The amount of exchangeable cations that a soil can adsorb at pH 7.0, typically expressed in units of milliequivalents per 100 grams of dry soil.

WSDOT Source
Highway Runoff Manual

Centennial Accord

Definition
The Centennial Accord Plan was created in accordance with the 1989 Centennial Accord and the 1999 Centennial Accord Implementation Guidelines. The Centennial Accord mandated that each state agency must have a procedure to implement effective government-to-government relations.

WSDOT Source
Environmental Manual

central island

Definition
The area of the roundabout, including the truck apron, surrounded by the circulating roadway.

WSDOT Source
Design Manual

central island diameter

Definition
The diameter of the central island, including the truck apron.

WSDOT Source
Design Manual

certification (Consultant Services)

Definition
A formal release of the state's jurisdiction over a state highway designated to become part of a local agency road or street network to a county, city, or town. The certification process for abandoned state highways may be the result of legislative changes to route designations, or because a section of state highway has been replaced or relocated during construction, or a frontage road or other modification to a local road or street is relinquished to the local jurisdiction (commonly called a turnback).

WSDOT Source
Consultant Services Manual

certification (Right of Way)

Definition
A statement certifying that all right-of-way clearance, including relocation assistance, has been completed or that all necessary arrangements have been made for it to be undertaken and completed as required for proper coordination with the physical construction schedule. The purpose of this certification is to inform the contractor of the status of right-of-way clearance and to certify that the requirements of the Uniform Act have been met on federally-funded projects.

WSDOT Source
Right of Way Manual

certified copy

Definition
A 'certified copy' is a copy (often a photocopy) of a ‘filed’ document, legal or other, in its entirety (everything within a staple) that is sworn to be a true and correct copy by the individual who prepared it, i.e., accountant, attorney, business owner. The statement can be as simple as the following: "I hereby certify that this document is a true and correct copy."

WSDOT Source
Right of Way Manual

change in expected average crash frequency

Definition
In before-after studies, the difference between the expected average crash frequency in the absence of treatment and with the treatment in place.

WSDOT Source
Safety Performance Manual

Citation
American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-6.

channel

Definition
A feature that conveys surface water and is open to the air.

WSDOT Source
Highway Runoff Manual

channel erosion

Definition
The widening, deepening, and headward cutting of small channels and waterways resulting from erosion caused by moderate-to-large floods.

WSDOT Source
Highway Runoff Manual

channel stabilization

Definition
Erosion prevention and stabilization of velocity distribution in a channel using vegetation, jetties, drops, revetments, or other measures.

WSDOT Source
Highway Runoff Manual

channelization

Definition
The separation or regulation of conflicting traffic movements into definite paths of travel by traffic islands or pavement markings to facilitate the orderly movement of both vehicles and pedestrians.

WSDOT Source
Safety Performance Manual

Citation
American Association of State Highway and Transportation Officials. *AASHTO Transportation Glossary*. AASHTO, 2009, p. 20.

check dam (Highway Runoff)

Definition
A small dam constructed in a ditch, gully, grass swale, or other small watercourse to decrease the stream flow velocity, enhance infiltration, minimize channel scour, and promote deposition of sediment; or a log or gabion structure placed perpendicular to a stream to enhance aquatic habitat.

WSDOT Source
Highway Runoff Manual

Related Term
check dam (Roadside)

check dam (Roadside)

Definition
A small barrier, such as quarry spalls, sand bags, or silt fencing, that slows water velocity and allows solids to settle out behind the barrier.

WSDOT Source
Roadside Manual

Related Term
Check dam (Highway Runoff)

check valve

Definition
A generic term used for a variety of valves that specifically allow flow in only one direction.

WSDOT Source
Roadside Manual

circulating lane

Definition
A lane used by vehicles circulating in the roundabout.

WSDOT Source
Design Manual

circulating roadway

Definition
The traveled lane(s) adjacent to the central island and outside the truck apron, including the entire 360° circumference of the circle.

WSDOT Source
Design Manual

circulating roadway width

Definition
The total width of the circulating lane(s) measured from inscribed circle to the central island.

WSDOT Source
Design Manual

civil penalty

Definition
The penalty assessed (in addition to any toll amount and fee amount already due) for failure to pay a toll bill within the allotted time, provided in RCW 46.63.460. (Also referred to as “NOCP” or “NOCP Fee”.)

WSDOT Source
Toll Division

Citation
RCW 46.63.460

classification criteria

Definition
Criteria used to define how utilities are documented and managed on highway right of way.

WSDOT Source
Utilities Manual

Related Term
See also: utility classification criteria

clay

Definition
Mineral soil particles with a diameter of less than 0.002 millimeter. A fine-grained soil that has a high plasticity index in relation to liquid limits.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 509.

clear date

Definition
Discipline specific dates displayed in the parcel summary in IRIS indicating that the parcel is ready to certify as available for construction.

WSDOT Source
Right of Way Manual

clear run-out area

Definition
The area beyond the toe of a nonrecoverable slope available for use by an errant vehicle.

WSDOT Source
Design Manual

clear width

Definition
The unobstructed width within a pedestrian circulation path. The clear width within a pedestrian circulation path must meet the accessibility criteria for a pedestrian access route.

WSDOT Source
Design Manual

clear zone (Design)

Definition
The total roadside border area, available for use by errant vehicles, starting at the edge of the traveled way and oriented from the outside or inside shoulder (in median applications) as applicable. This area may consist of a shoulder, a recoverable slope, a nonrecoverable slope, and/or a clear run-out area. The clear zone cannot contain a critical fill slope, fixed objects, or water deeper than 2 feet.

WSDOT Source
Design Manual

clear zone (Roadside)

Definition
The total roadside border area, starting at the edge of the traveled way, available for use by errant vehicles.

WSDOT Source
Roadside Manual

clearing

Definition
The removal and disposal of all unwanted natural material from the ground surface such as trees, brush, and downed timber by manual, mechanical, or chemical methods.

WSDOT Source
Highway Runoff Manual

climate change vulnerability

Definition
The risk a transportation facility will be impacted by the effects of climate change.

WSDOT Source
Design Manual

climax vegetation

Definition
Relatively stable vegetation in equilibrium with its environment and with good reproduction of the dominant plants.11 A stable end-point to plant succession (“steady state”) where a group of species predominate and replaces itself.

WSDOT Source
Roadside Manual

climbing lane

Definition
An auxiliary lane used for the diversion of slow traffic from the through lane.

WSDOT Source
Design Manual

closed account

Definition
A GoodtoGo! account that has been closed.

WSDOT Source
Toll Division

closed depression

Definition
A low-lying area that has either no surface water outlet or such a limited surface water outlet that, during storm events, the area acts as a retention basin.

WSDOT Source
Highway Runoff Manual

closing order date

Definition
The date on which the acquisition instrument(s) and appropriate instructions are sent to the title company for processing and recording.

WSDOT Source
Right of Way Manual

Coastal Zone Management (CZM) Act Certification

Definition
The Act, administered by NOAA's Office of Ocean and Coastal Resource Management, provides for management of the nation's coastal resources, including the Great Lakes, and balances economic development with environmental conservation and applies to fifteen coastal counties in WA which are located adjacent to salt water.

WSDOT Source
Environmental Manual

Code of Federal Regulations (CFR)

Definition
The CFR is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

WSDOT Source
Consultant Services Manual

cognition

Definition
The mental process or function by which knowledge is acquired.

WSDOT Source
Roadside Manual

cognizant agency

Definition

Any governmental agency that, on behalf of all state agencies, has performed an audit in accordance with auditing standards to establish final indirect cost rates (ICR) and forward pricing rates, if applicable, and administering cost accounting standards for a firm's particular business unit. This can be either a Federal agency or a State transportation agency, as outlined in 23 CFR 172.11.

WSDOT Source

Consultant Services Manual

coherence

Definition

Quality of state of being united in principles and relationships or to be logically and aesthetically connected.

WSDOT Source

Roadside Manual

coir

Definition

Coconut fiber used for erosion control blankets and wattles.

WSDOT Source

Highway Runoff Manual

collector

Definition

A context description of a roadway intended to provide a mix of access and mobility performance. Typically low speed, collecting traffic from local roads and connecting them with destination points or arterials. This term is used in multiple classification systems but is most commonly associated with the Functional Classification System.

WSDOT Source
Design Manual

collector system

Definition

Routes that primarily serve the more important intercounty, intracounty, and intraurban travel corridors; collect traffic from the system of local access roads and convey it to the arterial system; and on which, regardless of traffic volume, the predominant travel distances are shorter than on arterial routes (RCW 47.05.021).

WSDOT Source

Design Manual

collector-distributor road (C-D road)

Definition
A parallel roadway designed to remove weaving from the main line and reduce the number of main line entrances and exits.

WSDOT Source
Design Manual

collision data

Definition
Data that has been collected by Washington State Patrol or other law enforcement agencies on the Police Traffic Collision Report (PTCR) or in the Statewide Electronic Collision and Ticket Online Records system (SECTOR). Note: This is not the same as crash data.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Washington State Department of Transportation. *Safety Analysis Guide.* WSDOT, 2020, p.11.

color

Definition
The property of reflecting light of a particular wavelength that enables the eye to differentiate otherwise indistinguishable objects. A hue (red, green, yellow, blue, and so on). as contrasted with a value (black, white, or gray).

WSDOT Source
Roadside Manual

Citation
U.S. Department of Agriculture, U.S. Forest Service, 'Landscape Aesthetics: A Handbook for Scenery Management', December 1995.

color of title

Definition
An instrument or set of facts that give the appearance of title, but do not prove title.

WSDOT Source
Right of Way Manual

combination of relocation types

Definition
This is when there is more than one type of relocation on a project. Specifically, this is when there is some combination of residential and non-residential relocation, including PPO. This type of relocation is project-wide, not parcel specific.

WSDOT Source
Right of Way Manual

combined hearing

Definition
A hearing held when there are public benefits to be gained by combining environmental, corridor, design, and/or limited access subjects.

WSDOT Source
Design Manual

Commercial Vehicle Information Systems and Networks (CVISN)

Definition
A network that links intelligent transportation systems (ITS) to share information on commercial vehicles. When in operation at a weigh site, it can enable commercial vehicles to clear the facility without stopping.

WSDOT Source
Design Manual

commercially useful function

Definition
A term used to describe whether a contractor or subcontractor, most often a disadvantaged business that is certified in the Disadvantaged Business Enterprise program, is actually doing the work identified in a WSDOT contract as work to be performed by that firm.

WSDOT Source
Consultant Services Manual

Commission, Washington State Transportation Commission

Definition
The appointive body having authority over state transportation matters as provided by law.

WSDOT Source
Standard Specifications

commitment

Definition
An obligation that WSDOT makes within an environmental document or agreement for the project; or an expectation imposed upon WSDOT by another agency through a permit or approval for the project. Commitments can be either the agency's or contractor's responsibility to implement.

WSDOT Source
Environmental Manual

commitment status

Definition

The status of commitments (opened, closed, cancelled, etc.) in the WSDOT Commitment Tracking System.

WSDOT Source

Environmental Manual

commitment tracking system

Definition

The Commitment Tracking System is a WSDOT database that allows you to store commitments in a secure computer network server, plus manage the responsibility (WSDOT or contractor) and implementation method (guidance document or contract) for the commitment. It also allows you to store compliance records, document the status, and report details about commitments from their inception through project delivery and on to maintenance.

WSDOT Source

Environmental Manual

compaction

Definition

The densification, settlement, or packing of soil in such a way that its permeability is reduced. Compaction effectively shifts the performance of a hydrologic group to a lower-permeability hydrologic group. Compaction may also refer to the densification of a fill by mechanical means.

WSDOT Source

Highway Runoff Manual

comparison group (Safety Performance)

Definition

In before-after studies, a set of untreated sites similar in nature to treated sites, used to control for changes in crash frequency not influenced by a safety treatment.

WSDOT Source

Safety Performance Manual

Citation

American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-2.

comparison ratio (Safety Performance)

Definition

In before-after studies, the ratio of expected number of “after” to the expected number of “before” target crashes in the comparison group.

WSDOT Source

Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-2.

compensatory mitigation (Environment)

Definition
The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, or in certain circumstances preservation of wetlands or other aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

WSDOT Source
Environmental Manual

Related Term
See also: compensatory mitigation (Roadside)

compensatory mitigation (Roadside)

Definition
The attempt to compensate for wetlands impacts. It usually involves the creation, preservation, restoration, or enhancement of a wetland to replace functions lost due to unavoidable impacts.

WSDOT Source
Roadside Manual

Related Term
See also: compensatory mitigation (Roadside)

compensatory rights

Definition
The right of a utility owner to be compensated for impacts to a utility that may need to be modified or relocated as a result of a WSDOT highway improvement project or other work.

WSDOT Source
Utilities Manual

Related Term
See also: Property Right

compensatory storage

Definition
A provision of some local floodplain ordinances requiring the excavation of floodplain storage area as compensatory mitigation for fill placed in floodplains. The ordinances may also stipulate elevation requirements for the location of the compensatory storage area.

WSDOT Source
Environmental Manual

competitive negotiations

Definition

Refers to the process of A&E consultant acquisition as specified in federal law 23 CFR 172, which utilizes the qualifications-based procedures delineated in federal law Title 40 USC 1101-1104 and Washington State law RCW 39.80.

WSDOT Source

Consultant Services Manual

completion dates

Definition

Substantial Completion Date is the day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, all the initial plantings are completed and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract. Physical Completion Date is the day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date. Completion Date is the day all the Work specified in the Contract is completed and all the obligations of the Contractor under the Contract are fulfilled by the Contractor. All documentation required by the Contract and required by law must be furnished by the Contractor before establishment of this date.

WSDOT Source

Standard Specifications

completion of construction

Definition

The date when authorized utility work within the operating right of way is completed to the satisfaction of WSDOT as defined by the provisions of the approved accommodation document.

WSDOT Source

Utilities Manual

complex bridge

Definition

Complex bridges are defined in the NBIS as movable, suspension, cable stayed, and other bridges with unusual characteristics. Complex bridges in Washington are referred to as 'Special Feature' bridges where discussed in other chapters of this manual.

WSDOT Source

Bridge Design Manual

complex ramp alignment and grade

Definition
As related to Design Manual Chapter 1040 'Illumination.' The exit advisory speed is 35 mph or lower than the posted main line speed, or there is a 6% or greater change in grade from existing main line grade to the ramp grade.

WSDOT Source
Design Manual

complex tunnel

Definition
A tunnel characterized by advanced or unique structural elements or functional systems.

WSDOT Source
Bridge Design Manual

complexity

Definition
The multiple qualities in a landscape that provide visual interest such as the combination of form, color, and texture.

WSDOT Source
Roadside Manual

compliance

Definition
When a recipient has correctly implemented the requirements of a contract or an agreement.

WSDOT Source
Consultant Services Manual

compost (Highway Runoff)

Definition
Organic residue, or a mixture of organic residues and soil, that has undergone biological decomposition until it has become relatively stable humus. The Washington State Department of Ecology's Interim Guidelines for Compost Quality (1994) defines compost as 'the product of composting; it has undergone an initial, rapid stage of decomposition and is in the process of humification (curing).' Compost to be used should meet specifications shown in Standard Specification 9-14.4(8).

WSDOT Source
Highway Runoff Manual

Related Term
See also: compost (Roadside)

compost (Roadside)

Definition
Stable, mature, decomposed organic solid waste that is the result of the accelerated, aerobic biodegradation and stabilization under controlled conditions. The result has a uniform, dark, soillike appearance.

WSDOT Source
Roadside Manual

Related Term
See also: compost (Highway Runoff)

concentrated flow

Definition
Water flowing in a channel as opposed to a thin sheet.

WSDOT Source
Highway Runoff Manual

concurrent mitigation

Definition
Compensatory mitigation established at the same time as project impacts. This is a form of permittee-responsible mitigation.

WSDOT Source
Environmental Manual

condemnation

Definition
The department's use of eminent domain through court proceedings for lands and/or property rights needed for highway projects.

WSDOT Source
Right of Way Manual

conduit (Roadside)

Definition
A pipe containing electrical wiring.

WSDOT Source
Roadside Manual

Related Term
See also: Conduit (Utilities)

conduit (Utilities)

Definition
A tubular enclosure for protecting wires or cables.

WSDOT Source
Utilities Manual

Related Term
See also: duct

conflict

Definition
An event involving two or more road users in which the action of one user causes the other user to make an evasive maneuver to avoid a crash.

WSDOT Source
Design Manual

conflict point

Definition
A point where road user paths cross, merge, or diverge.

WSDOT Source
Design Manual

conformity

Definition
Projects are in conformity when they do not (1) cause or contribute to any new violation of any standards in any area, (2) increase the frequency or severity of any existing violation of any standard in any area, or (3) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

WSDOT Source
Environmental Manual

consider

Definition
To think carefully about, especially in order to make a decision. The decision to document a consideration is left to the discretion of the engineer.

WSDOT Source
Design Manual

consolidated franchise

Definition
A utility franchise that results from the consolidation of multiple utility accommodation documents into a single utility franchise based on the Utility Classification Criteria.

WSDOT Source
Utilities Manual

consolidation

Definition
The process of combining two or more utility accommodation documents into a single utility franchise.

WSDOT Source
Utilities Manual

consolidation plan

Definition
A plan developed cooperatively between a utility and WSDOT for researching and combining all utility accommodation documents into a single consolidated franchise based on the Utility Classification Criteria.

WSDOT Source
Utilities Manual

Related Term
See also: utility classification criteria

conspicuity

Definition
The quality of a given object or condition to attract attention and to be distinguished from its surrounding environment.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. Washington, D.C. AASHTO. 2010. p. G-2 and Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-2.

constructed stormwater treatment wetland

Definition
A wetland intentionally created on a site that is not a wetland, for the primary purpose of wastewater or stormwater treatment. Constructed wetlands are normally considered part of the stormwater collection and treatment system.

WSDOT Source
Highway Runoff Manual

constructed wetlands

Definition
Areas 'created or restored specifically to treat either point or nonpoint source pollution wastewater.' Although a constructed wetland might look the same as a created wetland, different regulations apply. Design and maintenance of constructed wetlands is determined according to their stormwater and hydraulic functions. Vegetation is used to maximize the desired functions.

WSDOT Source
Utilities Manual

construction

Definition
For highway purposes, the actual building and all related work, including utility relocation or adjustments, incidental to the construction or reconstruction of a highway project, except for preliminary engineering or right of way work programmed and authorized as a separate phase of work. For utility purposes, the installation of approved utility facilities on highway right of way.

WSDOT Source
Utilities Manual

construction contingency

Definition
A standardized markup applied to the construction cost of a project that accounts for uncertainties in quantities, unit costs, and minor risk events that typically take place during construction.

WSDOT Source
Cost Estimating Manual

Construction Contract Information System (CCIS)

Definition
A WSDOT database managed by the HQ Construction Office to track contract costs.

WSDOT Source
Highway Runoff Manual

construction engineering

Definition
The project management effort (budget/cost) applied to the contract execution and construction phases of the project. Refer to the Plans Preparation Manual, Section 800.03, for guidance on estimating the CE cost.

WSDOT Source
Cost Estimating Manual

construction GHG emissions

Definition
Primarily GHG emissions from the fuel used by the equipment that builds the project.

WSDOT Source
Environmental Manual

construction impact zone

Definition
The area in which an alteration to an existing facility takes place (also known as the project footprint). If a crosswalk (marked or unmarked) will be reconstructed, paved (overlay or inlay), or otherwise altered as part of a project, then the curb ramps that serve that crosswalk are within the construction impact zone.

WSDOT Source
Design Manual

construction permit

Definition
A temporary right of entry to construct highway improvements on local agency rights of way. WSDOT has no property rights or utility accommodation approval authority within construction permit areas.

WSDOT Source
Utilities Manual

construction staging area

Definition
A site used temporarily during construction for materials or equipment storage, assembly, or other temporary construction activities.

WSDOT Source
Highway Runoff Manual

consultant

Definition
Any person providing expert services or advice who is not an employee of the agency for which the services are provided.

WSDOT Source
Consultant Services Manual

consulting party

Definition
In the Section 106 process, consulting parties include the State Historic Preservation Officer (SHPO), Indian Tribes, representatives of local governments, applicants for federal assistant or

approvals, and organizations and individuals with legal or economic relation to the undertaking, or who have concerns with the undertaking's effect on historic properties.

WSDOT Source
Environmental Manual

contamination

Definition
An impairment of the quality of potable water (by sewage, industrial fluids, or waste) that creates an actual hazard to the public health through poisoning or the spread of disease.

WSDOT Source
Roadside Manual

context (Design)

Definition
Interrelated built and natural conditions that impact the design because of their potential influence on travel and operational characteristics and/or project scope. Context is identified by an interdisciplinary team through observation and interpretation of the built and natural environment that is adjacent to or that the team determines would affect the project design.

WSDOT Source
Design Manual

Related Term
See also: context (Environment)

context (Environment)

Definition
This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant. (40 CFR 1508.27(a)).

WSDOT Source
Environmental Manual

Related Term
See also: context (Design)

context categories

Definition
The naming convention used to describe either a land use or transportation context.

WSDOT Source
Design Manual

context characteristic

Definition
A distinguishing trait within a context, either land use or transportation.

WSDOT Source
Design Manual

context sensitive design

Definition
A collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. Context Sensitive Design is an approach that considers the total context within which a transportation improvement project will exist. U.S. Department of Transportation, Federal Highway Administration.

WSDOT Source
Roadside Manual

context sensitive solutions (CSS)

Definition
A collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources while maintaining safety and mobility. CSS is an approach that considers the total context within which a transportation improvement project will exist.

WSDOT Source
Design Manual

contextual performance metric

Definition
A restatement of a contextual performance need in terms that can be measured or assessed in both the existing and proposed (future) state.

WSDOT Source
Design Manual

contextual performance need

Definition
A statement of need that applies to a project location which has not been identified as a baseline need.

WSDOT Source
Design Manual

contiguous parcels

Definition
Two or more pieces of real property, under the same ownership, with one or more boundaries that touch and have similarity of use.

WSDOT Source
Design Manual

continued portion of the contract

Definition
The portion of a contract that the contractor must continue to work on following a partial termination.

WSDOT Source
Consultant Services Manual

continuing contract

Definition
A contract where a consultant or contractor performs specific services at an agreed price for an organization for a specific time period. The time period would normally be for one year or more.

WSDOT Source
Utilities Manual

continuous load

Definition
The electrical load on a circuit that lasts for a duration of three or more hours on any day.

WSDOT Source
Design Manual

contour

Definition
An imaginary line on the surface of the earth connecting points of the same elevation.

WSDOT Source
Roadside Manual

contour interval

Definition
The difference in elevation between two contours.

WSDOT Source
Roadside Manual

Citation
Morris M. Thompson, 'Maps for America', U.S. Department of Interior, Geological Survey National Center, Reston, Virginia, 1987.

contract

Definition
The written agreement between the Contracting Agency and the Contractor. It describes, among other things: (1) What work will be done, and by when; (2) Who provides labor and materials; and (3) How Contractors will be paid. The Contract includes the Contract (agreement) Form, Bidder's completed Proposal Form, Contract Provisions, Contract Plans, Standard Specifications, Standard Plans, Addenda, various certifications and affidavits, supplemental agreements, change orders, and subsurface boring logs (if any).

WSDOT Source
Standard Specifications

Related Term
See also: agreement

contract (agreement) manager

Definition
The person normally responsible for setting up any needed work orders, monitoring the progress of work and costs, and closing the contract.

WSDOT Source
Consultant Services Manual

contract administration

Definition
The process of handling the administrative functions of the contract, such as invoice documentation, verification, and authorization for payment. It also includes the contractual functions such as change management documentation, funding and programmatic administration, and verification of contract terms such as insurance coverage, payroll documentation, and reporting requirements. The contract terms, references to state and federal regulations, policy manuals, and budgetary exhibits govern contract administration.

WSDOT Source
Consultant Services Manual

contract bond

Definition
The approved form of security furnished by the Contractor and the Contractor's Surety as required by the Contract, that guarantees performance of all the Work required by the Contract and payment to anyone who provides supplies or labor for the performance of the Work.

WSDOT Source
Standard Specifications

contract closure

Definition
The process for closing a contract in TRAINS, WSDOT's financial system.

WSDOT Source
Consultant Services Manual

contract form

Definition
The form provided by the Contracting Agency that requires the authorized signatures of the Contractor and the Contracting Agency to result in formal execution of the Contract.

WSDOT Source
Standard Specifications

contract management

Definition
The process of managing the contract based on the negotiated statement of work and project schedule. Contract management may include providing verification and approval of the monthly progress reports and earned value calculations prior to approving the invoice and includes project meetings with the consultant project manager. Contract management includes the responsibility to be aware of any changes which may require supplements or task order amendments and requesting the closure of an agreement or task order prior to closing the contract in the WSDOT's financial system.

WSDOT Source
Consultant Services Manual

contract plans

Definition
A publication addressing the Work required for an individual project. At the time of the call for Bids, the Contract Plans may include, but are not limited to, the following: a vicinity map, a summary of quantities, structure notes, signing information, traffic control plans, and detailed drawings; all for a specific individual project. At the time of the Contract execution date, the Contract Plans include any Addenda.

WSDOT Source
Standard Specifications

contract provisions

Definition
A publication addressing the Work required for an individual project. At the time of the call for Bids, the Contract Provisions may include, for a specific individual project, the amendments to the Standard Specifications, the Special Provisions, a listing of the applicable Standard Plans, the prevailing minimum hourly wage rates, and an informational Proposal Form with the listing of Bid items.

WSDOT Source
Standard Specifications

contract supplement

Definition
A contract that modifies the provisions of another contract. It adds to, subtracts from, clarifies the intent of, or modifies the original contract in some manner without stepping outside the scope of the original contract.

WSDOT Source
Consultant Services Manual

contracting agency

Definition
Agency of Government that is responsible for the execution and administration of the Contract.

WSDOT Source
Standard Specifications

contractor

Definition
One who participates, through a contract or subcontract (at any tier), in a DOT-assisted highway, transit, or airport program.

WSDOT Source
Consultant Services Manual, Standard Specifications

contrast

Definition
Diversity or distinction of adjacent parts. Effect of striking differences in form, line, color, or texture of a landscape.

WSDOT Source
Roadside Manual

contributing factors

Definition
Those operational conditions, human factors, context conditions, design elements, design controls, or actions identified by data, engineering judgment, or the community that contribute to a performance need under evaluation.

WSDOT Source
Design Manual

control

Definition
The driver's ability to safely drive the vehicle.

WSDOT Source
Roadside Manual

control group (Safety Performance)

Definition
In before-after studies, a set of randomly selected sites that do not receive safety treatments.

WSDOT Source
Safety Performance Manual

Source
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-3.

control zone

Definition
The roadside area defined by a calculated Control Zone distance where the placement of utility objects is controlled or prohibited. In this manual the term is used interchangeably with clear zone.

WSDOT Source
Utilities Manual

control zone alternative countermeasures

WSDOT Source
Utilities Manual

Synonym
See: alternate measures

control zone guidelines

Definition
A guide jointly developed by the utility industry and WSDOT defining the safe placement of aboveground utility objects within the highway right of way.

WSDOT Source
Utilities Manual

control zone variance

Definition
Any aboveground utility installation installed or proposed to be installed inside the Control Zone as an exception to policy. Variance request documentation must be submitted by the utility and reviewed and approved by WSDOT.

WSDOT Source
Utilities Manual

controlled density fill (CDF)

Definition
A lean concrete mixture that may be broken and removed easier than regular concrete mixes and frequently cures rapidly. CDF is used for certain trench backfill applications.

WSDOT Source
Utilities Manual

controlled low-strength material (CLSM)

WSDOT Source
Utilities Manual

Synonym
See: Controlled density fill

controlled releasing terminal (CRT) post

Definition
A standard-length guardrail post that has two holes drilled through it so it might break away when struck.

WSDOT Source
Design Manual

conventional traffic signal

Definition
A permanent or temporary installation providing alternating right of way assignments for conflicting traffic movements. At least two identical displays are required for the predominant movement on each approach.

WSDOT Source
Design Manual

converted pervious surface

Definition
Land cover changed from native vegetation to lawn, landscape, or pasture areas.

WSDOT Source
Highway Runoff Manual

Related Term
See also: pollution-generating impervious surface (PGIS)

conveyance (Consultant Services)

Definition
A legal document, such as a quitclaim deed, supporting a relinquishment or certification of real property, which WSDOT conveys to a local agency.

WSDOT Source
Consultant Services Manual

Related Term
See also: conveyance (Highway Runoff)

conveyance (Highway Runoff)

Definition
A mechanism for transporting water from one point to another, including pipes, ditches, and channels.

WSDOT Source
Highway Runoff Manual

Related Term
See also: conveyance (Consultant Services)

conveyance system

Definition
The drainage facilities, both natural and constructed, that collect, contain, and provide for the flow of surface water and stormwater from the highest points on the land down to a receiving water. The natural elements of the conveyance system include swales and small drainage courses, streams, rivers, lakes, and wetlands. Constructed elements of the conveyance system include gutters, ditches, pipes, channels, and most retention/detention facilities.

WSDOT Source
Highway Runoff Manual

corner clearance

Definition
On a managed access highway, the distance from an intersection of a public road or street to the nearest access connection along the same side of the highway. The minimum corner clearance distance (see Design Manual Chapter 540) is measured from the closest edge of the intersecting road or street to the closest edge of the traveled way of the access connection, measured along one side of the traveled way (through lanes).

WSDOT Source
Design Manual

corrective action plan

Definition
A document that identifies utility objects located in Location I or II areas to define where, how, and when noncompliant utilities will be relocated or mitigated. A Corrective Action Plan shall be required when a utility reconstruction project is proposed or when a franchise is being renewed or consolidated. The plan and schedule shall be developed cooperatively between the utility and WSDOT.

WSDOT Source
Utilities Manual

corridor continuity (Roadside Policy)

Definition
The overall coordination and sequence of visual features as experienced by the roadway user. Corridor continuity contributes to positive guidance and navigation, and a positive traveling experience, while preserving the visual integrity of the roadside environment.

WSDOT Source
Roadside Policy Manual

Related Term
See also: corridor continuity (Roadside)

corridor continuity (Roadside)

Definition
The overall coordination and sequence of visual features as experienced by the roadway user.

WSDOT Source
Roadside Manual

Related Term
See also: corridor continuity (Roadside Policy)

corridor hearing

Definition
A formal or informal hearing that presents the corridor alternatives to the public for review and comment before a commitment is made to any one route or location. This type of hearing is beneficial for existing corridors with multiple Improvement projects programmed over a long duration.

WSDOT Source
Design Manual

corridor management plans

Definition
A written document that specifies the actions, procedures, controls, operational practices, and administrative strategies to maintain the scenic, historic, recreational, cultural, archeological, and natural qualities of a Scenic and Recreational Highway.

WSDOT Source
Roadside Manual

corridor sketch

Definition

An information source that describes the attributes of a state highway corridor, its current and future function, as well as its performance expectations. It will ultimately identify cost effective strategies for future consideration. A completed corridor sketch may have information that is valuable at the project level in determining contextual performance needs, and project alternatives. A corridor sketch is not a substitute for detailed planning and analysis, nor is it a list of investments or projects.

WSDOT Source

Design Manual

corridor vision

Definition

The future transportation context from a regional perspective. Practical Design considers and accounts for the contextual needs of the longer section of highway in the development and evaluation of alternatives to ensure a favorable outcome for the greater system.

WSDOT Source

Design Manual

cost estimate (Consultant Services)

Definition

The estimated cost of work to be performed based on the most current information available at the time the agreement is prepared.

WSDOT Source

Consultant Services Manual

Related Term

See also: cost estimate (Cost Estimating)

cost estimate (Cost Estimating)

Definition

A prediction of quantities, cost, and/or price of resources required by the scope of an asset investment option, activity, or project. As a prediction, an estimate must address risks and uncertainties. Estimates are used primarily as inputs for budgeting; cost or value analysis; decision making in business; asset and project planning; or for project cost and schedule control processes. Cost estimates are determined using experience and calculating and forecasting the future cost of resources, methods, and management within a scheduled time frame.

WSDOT Source

Cost Estimating Manual

Citation

AACE International Recommended Practices, Number 10S-90.

Related Term
See also: cost estimate (Consultant Services)

cost factors

Definition
All the costs associated with a contract, including direct labor, indirect costs or overhead, and fixed fee. Cost factors are regulated under the Federal Acquisition Regulation, or FARs.

WSDOT Source
Consultant Services Manual

cost to cure

Definition
Value of real property or rights to which a damaged party is entitled.

WSDOT Source
Utilities Manual

cost-effective

Definition
Economical in terms of fulfilling roadside functions and meeting policy objectives at the least feasible cost, including design, construction, and maintenance for the life of the facility.

WSDOT Source
Roadside Policy Manual

Cost-Effectiveness Selection Procedure (CESP)

Definition
A rational methodology developed by AASHTO for comparing roadside improvement alternatives. AASHTO's methodology, published as Appendix A to its 2002 (see current version) Roadside Design Guide, can be used manually or through a computer program (ROADSIDE or the newer Roadside Safety Analysis Program-RSAP). Refer to Utilities Manual Chapter 9, Control Zone, for detailed information.

WSDOT Source
Utilities Manual

Council on Environmental Quality (CEQ)

Definition
Coordinates Federal environmental efforts and works closely with agencies and other White House offices on the development of environmental policies and initiatives.

WSDOT Source
Environmental Manual

counter slope

Definition
The slope of the gutter or roadway at the foot of a curb ramp or landing where it connects to the roadway, measured along the axis of the running slope extended.

WSDOT Source
Design Manual

countermeasure

Definition
An action taken to counteract an existing or anticipated condition.

WSDOT Source
Design Manual

countermeasure service life

Definition
The number of years in which a safety treatment is expected to have a noticeable and quantifiable effect on the crash occurrence at the site.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-13.

court reporter

Definition
A person with a license to write and issue official accounts of judicial or legislative proceedings.

WSDOT Source
Design Manual

cover

Definition
The depth of material above the top of a buried utility installation up to the finished surface, either ground line or roadway surface.

WSDOT Source
Utilities Manual

crash

Definition
An event involving at least one motorized vehicle on a public roadway within which one or more road users are injured or killed, or that meets a particular property damage threshold (per WAC-446-85-010). This does not include any intentional acts or legal intervention.

WSDOT Source
Safety Performance Manual

crash-accepted device

Definition
A feature that has been proven acceptable for use under specified conditions, either through crash testing or in-service performance.

WSDOT Source
Design Manual

Crash Analysis Report (CAR)

Definition
A template that is used for documenting required analysis for I-2 CAL/CAC/IAL projects, as described in Design Manual Chapter 321.

WSDOT Source
Design Manual

crash analysis segment

Definition
A portion of a facility, defined by two endpoints, on which a crash analysis is performed.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-13.

crash data

Definition
The engineering crash data WSDOT maintains and uses for analysis, initially based on data elements from Police Traffic Collision Reports, which is augmented with engineering information. Note: This is not the same as collision data.

WSDOT Source
Safety Performance Manual

crash estimation

Definition
Any methodology used to forecast or predict the crash frequency of:

- an existing roadway for existing conditions during a past or future period
- an existing roadway for alternate conditions during a past or future period
- a new roadway for given conditions for a future period.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-3.

crash modification factor (CMF)

Definition
An index of how safety performance is anticipated to change following a modification in design or operations. CMF is the ratio between the number of crashes per unit of time expected after a modification or measure is implemented and the number of crashes per unit of time estimated if the change does not take place.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-4.

crash rate (Design)

Definition
Crashes per one million vehicle miles traveled and fatal rates per one hundred million vehicle miles.

WSDOT Source
Design Manual

crash rate (Safety Performance)

Definition
The number of crashes per unit of exposure. For an intersection, this is typically the number of crashes divided by the total entering Annual Average Daily Traffic (AADT); for road segments, this is typically the number of crashes per million vehicle miles traveled on the segment.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-4.

crash reduction factor (CRF)

Definition
The percentage crash reduction that might be expected after implementing a modification in design or traffic control. The CRF is equivalent to (1 – Crash Modification Factor).

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-4.

crash severity KABCO

Definition
The injury severity level of a crash as determined by the most severe injury sustained in the crash: fatal injury (K), suspected serious injury (A), suspected minor injury (B), possible injury (C), and no apparent injury (O).

WSDOT Source
Safety Performance Manual

Citation
Adapted from U. S. Department of Transportation, National Highway Traffic Safety Administration. *MMUCC Guideline: Model Minimum Uniform Crash Criteria*. NHTSA, 2017, p. 155.

Synonym
crash severity

created wetlands

Definition
Those wetlands that have been constructed on a non-wetland site specifically to compensate for wetland losses permitted under Section 404 of the Clean Water Act. Created wetlands can also be created to compensate for impacts under local permits or WSDOT directive. Wetlands can also be accidentally created as a result of construction activities.

WSDOT Source
Roadside Manual

criteria for evaluation (National Register Eligibility Criteria)

Definition
Standards used for determining the eligibility of properties for inclusion in the National Register of Historic Places (36 CFR 60.4(a-d)). See National Register Bulletin 15, pp. 11-24.

WSDOT Source
Environmental Manual

criteria pollutants

Definition
Carbon monoxide, sulfur dioxide, particulate matter, ground level ozone, lead, and nitrogen dioxide.

WSDOT Source
Environmental Manual

Critical Aquifer Recharge Area (CARA)

Definition
An area designated by a city or county for protection under the Growth Management Act that has a critical recharging effect on aquifers used for potable water.

WSDOT Source
Environmental Manual

critical areas

Definition
At a minimum: areas that include wetlands; areas with a critical recharging effect on aquifers used for potable water; fish and wildlife habitat conservation areas; frequently flooded areas; geologically hazardous areas, including unstable slopes; and associated areas and ecosystems.

WSDOT Source
Highway Runoff Manual

Related Term
See also: sensitive area (Roadside)

critical fill slope

Definition
A slope on which a vehicle is likely to overturn. Slopes steeper than 3H:1V are considered critical fill slopes.

WSDOT Source
Design Manual, Utilities Manual

critical finding

Definition
The NBIS gives the following definition: 'A structural or safety related deficiency that requires immediate follow-up inspection or action.' WSDOT defines a critical finding/critical damage as a condition that necessitates closing, posting, or restriction of a bridge or a portion of a bridge due to an identified structural deficiency requiring structural repair(s) before it can be reopened to unrestricted traffic in the original configuration.

WSDOT Source
Bridge Design Manual

critical habitat (Environment)

Definition
Under the Endangered Species Act, (1) the specific areas within the geographic area occupied by a federally listed species on which are found physical or biological features essential to conserving the species, and that may require special protection or management considerations; and (2) specific areas outside the geographic area occupied by a federally listed species when it is determined that such areas are essential for the conservation of the species.

WSDOT Source
Environmental Manual

Related Term
See also: critical habitat (Roadside)

critical habitat (Roadside)

Definition
(A) Specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features both essential to the conservation of the species, and which may require special management considerations or protection. (B) Specific areas outside the geographical area occupied by the species, at the time it is listed, that the U. S. Secretary of the Interior or the U. S. Secretary of Commerce determines are essential for the conservation of the species.

WSDOT Source
Roadside Manual

Citation
Endangered Species Act (ESA), 1973

Related Term
See also: critical habitat (Environment)

cross connection

Definition
Any actual or potential physical connection between a potable water line and any pipe, vessel, or machine containing a nonpotable fluid, or having the possibility of containing a nonpotable fluid, such that it is possible for the non-potable fluid to enter the water system by backflow.

WSDOT Source
Roadside Manual

cross section

Definition
The representation of a landform as it would appear if cut by an intersecting plane.

WSDOT Source
Roadside Manual

cross-sectional studies (Safety Performance)

Definition
An observational study comparing the crash frequency or severity of a group of sites with a common feature (e.g., stop-controlled intersections) to the frequency/severity of sites with a different common feature (e.g., yield-controlled intersections) to assess the different outcomes between the two features.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-4.

cross slope

Definition
The slope measured perpendicular to the direction of travel.

WSDOT Source
Design Manual

crossroad

Definition
The minor roadway at an intersection. At a stop-controlled intersection, the crossroad has the stop.

WSDOT Source
Design Manual

crosswalk

Definition
A marked or unmarked pedestrian crossing, typically at an intersection, that connects the pedestrian access routes on opposite sides of a roadway. A crosswalk must meet accessibility criteria. A crosswalk is also defined as:

- "the portion of the roadway between the intersection area and a prolongation or connection of the farthest sidewalk line or in the event there are no sidewalks then between the intersection area and a line ten feet therefrom, except as modified by a marked crosswalk" (RCW 46.04.160).
- "(a) That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs or in the absence of curbs, from the edges of the traversable roadway, and in the absence of a sidewalk on one side of the roadway, the part of the roadway included within the extension of the lateral lines of the sidewalk at right angles to the center line; (b) any portion of a roadway at an intersection or elsewhere distinctly indicated as a pedestrian crossing by lines on the surface, which might be supplemented by contrasting pavement texture, style, or color" (MUTCD, 2003; Guide for the Planning, Design, and Operation of Pedestrian Facilities, AASHTO, 2004).

WSDOT Source
Design Manual

cultural element

Definition
Attributes in a human-altered landscape; generally, scenically positive cultural elements, most of which have historical backgrounds or nostalgic connotations. Examples include split-rail fences, stone walls, barns, orchards, hedgerows, and cabins.

WSDOT Source
Roadside Manual

Citation
U.S. Department of Agriculture, U.S. Forest Service, 'Landscape Aesthetics: A Handbook for Scenery Management', December 1995.

cultural resource

Definition
A place, object, location or site of an event that is important to a community or region's history, traditions, beliefs, customs, or social institutions.

WSDOT Source
Environmental Manual

cultural resource specialist (CRS)

Definition
A WSDOT employee meeting the Secretary of the Interior's Professional Qualification Standards (per 36 CFR 61) who advises department staff on policies relating to items of historic/archaeology significance that may be affected by a project and who conducts regulatory compliance procedures.

WSDOT Source
Environmental Manual

cultural resources management

Definition
The body of laws and regulations pertaining to historic, archaeological, and cultural properties, and the manner in which those directives are implemented.

WSDOT Source
Environmental Manual

culvert (Bridge Inspection)

Definition
A curved or rectangular buried conduit for conveyance of water, vehicles, utilities, pedestrians or animals.

WSDOT Source
Bridge Design Manual

Related Term
See also: culvert (Highway Runoff)

culvert (Highway Runoff)

Definition
A pipe or concrete box structure that drains open channels, swales, or ditches under a roadway or embankment. Typically, a culvert is not connected to a catch basin or manhole along its length.

WSDOT Source
Highway Runoff Manual

Related Term
See also: culvert (Bridge Inspection)

cumulative effects (ESA)

Definition
Effects of future state or private activities, not involving federal activities, that are reasonably certain to occur within the action area of the federal action subject to consultation (50 CFR 402.02).

WSDOT Source
Environmental Manual

Citation
50 CFR 402.02

cumulative impact/effect

Definition
The impact on the environment that results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.8).

WSDOT Source
Environmental Manual

Citation
40 CFR 1508.8

curb extension

Definition
A curb and sidewalk bulge or extension out into the parking lane used to decrease the length of a pedestrian crossing and increase visibility for the pedestrian and driver.

WSDOT Source
Design Manual

curb ramp

Definition

A combined ramp and landing to accomplish a change in level at a curb. This element provides street and sidewalk access to pedestrians with mobility impairments.

WSDOT Source

Design Manual

curb section

Definition

A roadway cross section with curb and sidewalk.

WSDOT Source

Design Manual

customer service center

Definition

Facility (walk-in center, call center, or online at mygoodtogo.com) where a customer can manage their account, submit disputes, obtain general tolling information, or purchase transponders.

WSDOT Source

Toll Division

cut

Definition

That part of the ground surface that, when graded, is lower than the original ground.

WSDOT Source

Roadside Manual

Citation

Steven Strom and Kurt Nathan, 'Site Engineering for Landscape Architects', Van Nostrand Reinhold, New York, 1992.

cut slope

Definition

A slope formed by excavating overlying material to connect the original ground surface with a lower ground surface created by the excavation. A cut slope is distinguished from a bermed slope, which is constructed by importing soil to create the slope.

WSDOT Source

Highway Runoff Manual

cut-and-fill

Definition

The process of moving earth by excavating part of an area and using the excavated material for adjacent embankments or fill areas.

WSDOT Source
Highway Runoff Manual

cuttings

Definition
Live plant material without a previously developed root system. Source materials for cuttings should be dormant when the cutting is taken.

WSDOT Source
Roadside Manual

D

dangerous waste (Environment)

Definition
Solid wastes designated in WAC 173-303-070 through 173-303-100 as dangerous or extremely hazardous or mixed waste. Dangerous waste includes all federal hazardous waste, plus certain wastes exhibiting specific characteristics based on toxicity and persistence. The regulatory requirements for disposal of dangerous waste are more complex than the requirements for disposal of problem waste and place additional responsibility both on WSDOT as the generator and on the contractor for safe handling and disposal.

WSDOT Source
Environmental Manual

Related Term
See also: dangerous waste (Highway Runoff)

dangerous waste (Highway Runoff)

Definition
Any discarded, useless, unwanted, or abandoned substances, including (but not limited to) certain pesticides, or any residues or containers of such substances that are disposed of in such quantity or concentration as to pose a substantial current or potential hazard to human health, wildlife, or the environment (RCW 70.105.010). These wastes may have short-lived, toxic properties that may cause death, injury, or illness; may have mutagenic, teratogenic, or carcinogenic properties; may be corrosive, explosive, or flammable; or may generate pressure through decomposition or other means.

WSDOT Source
Highway Runoff Manual

Related Terms
See also: dangerous waste (Environment), hazardous waste

date

WSDOT Source
Right of Way Manual

Related Terms
See also: clear date, closing order date, initiation of negotiations, date of, payment available date, Property Management Certified Clear Date, relocation certified clear date

datum

Definition
In surveying, a reference point, line, or surface for computing or correlating the results of surveys. In surveying, there are two principal types of datums: vertical and horizontal.

WSDOT Source
Roadside Manual

dBA (A-Weighted Sound Level)

Definition
The sound pressure levels in decibels measured with a frequency weighting network corresponding to the A-scale on a standard sound level meter as specified by ANSI S1.4-1971. The A-scale tends to suppress lower frequencies (below 1,000 Hz) and best approximates the sound as heard by the normal human ear.

WSDOT Source
Roadside Manual

deactivated facilities

Definition
Those facilities that are no longer active but remain in WSDOT right of way. They are still owned by the utility and the utility is responsible for all costs for impacts caused by these facilities to a project or to another utility's relocation efforts. At the discretion of the state, the utility will still be required to relocate or remove deactivated facilities.

WSDOT Source
Utilities Manual

dead storage

Definition
The volume of water in a pond, reservoir, or infiltration facility that is stored below the elevation of the lowest outlet or operating level of the structure; the volume available in a depression in the ground below any conveyance system, surface drainage pathway, or outlet invert elevation that could allow the discharge of surface and stormwater runoff.

WSDOT Source
Highway Runoff Manual

decibel

Definition
A decibel is a unit used to measure and describe the intensity of sound. A decibel is one-tenth of a Bel. A Bel is defined as the common logarithm of the ratio of two powers. Mathematically, a decibel is defined as: dB = 10 log10 (P1/P2), Where P2 is the reference pressure and is equal to 2 x 10-5 N/m2 (0.0002 μ bars).

WSDOT Source
Roadside Manual

decision sight distance (Design)

Definition
The distance needed for a driver to detect an unexpected or difficult-to-perceive condition, recognize the condition, select an appropriate maneuver, and complete the maneuver based on design conditions and design speed.

WSDOT Source
Design Manual

Related Term
See also: decision sight distance (Roadside)

decision sight distance (Roadside)

Definition
The sight distance required for a driver to (1) detect an unexpected or difficult-to-perceive information source or hazard, (2) interpret the information, (3) recognize the hazard, (4) select an appropriate maneuver, and (5) complete the maneuver safely and efficiently.

WSDOT Source
Roadside Manual

Related Term
See also: decision sight distance (Design)

deed

WSDOT Source
Right of Way Manual

Related Term
See also: bargain and sale deed, sheriff's deed, trust deed

deflection

Definition
(in respect to roundabouts) The change in the path of a vehicle imposed by the geometric features of a roundabout resulting in a slowing of vehicles.

WSDOT Source
Design Manual

delineated wetland

Definition
A wetland whose boundary has been identified by a qualified biologist using a standard delineation methodology evaluating soils, vegetation, and hydrology. A right of entry might be required to formally delineate a wetland for project purposes if it does not occur entirely on WSDOT right of way. The delineated boundary is flagged in the field and surveyed. The biology report will include the delineation survey with flag locations and numbering.

WSDOT Source
Roadside Manual

delineation

Definition
Any method of defining the roadway operating area for the driver.

WSDOT Source
Design Manual

deliverable

Definition
Any unique and verifiable product, result or capability to perform a service that must be produced to complete a process, phase, or project.

WSDOT Source
Design Manual

Department of Archaeology and Historic Preservation (DAHP)

Definition
This agency houses the Washington State Historic Preservation Officer (SHPO) who serves as SHPO and director of the agency. SHPO locations in state governments are unique to each state.

WSDOT Source
Environmental Manual

Department of Licensing (DOL)

Definition
State agency that maintains registered vehicle owner information.

WSDOT Source
Toll Division

department policy

Definition

In this manual, those policies established by WSDOT for the use of the highway right of way based on applicable federal and state laws, codes, and other accepted guidelines.

WSDOT Source

Utilities Manual

Department, Department of Transportation

Definition

The State Agency authorized by law to administer transportation-related work.

WSDOT Source

Standard Specifications

departure lanes

Definition

The lane or set of lanes for traffic leaving the roundabout (see Design Manual Chapter 1320).

WSDOT Source

Design Manual

dependent variable

Definition

A variable (often denoted by y) whose value depends on that of another (often denoted as x or x1, ..., xn). In safety performance analysis, the dependent variable (y) is the annual crash frequency for a roadway segment or intersection.

WSDOT Source

Safety Performance Manual

Citation

Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-5.

Related Term

Independent variable

depression storage

Definition

The amount of precipitation trapped in depressions on the surface of the ground.

WSDOT Source

Highway Runoff Manual

design analysis

Definition
A process and tool to record design element changes where the dimensions chosen do not meet the value, or lie within the range of values, provided for that element in the Design Manual. (See Design Manual Chapters 300 and 1106.)

WSDOT Source
Design Manual

design approval

Definition
Documented approval of the design at this early milestone locks in design policy for three years. Design approval becomes part of the Design Documentation Package (see Design Manual Chapter 300).

WSDOT Source
Design Manual

design clear zone (Design)

Definition
The minimum clear zone target value used in highway design.

WSDOT Source
Design

Related Term
See also: design clear zone (Roadside)

design clear zone (Roadside)

Definition
The minimum target value used in highway design.

WSDOT Source
Roadside Manual

Related Term
See also: design clear zone (Design)

design consistency

Definition
Conformance of a highway's geometric and operational features with driver expectancy.

WSDOT Source
Safety Performance Manual

Citation
Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-3.

design controls

Definition

Key parameters that critically shape design decisions and effect calculated dimensions for some design elements. Design controls are conscientiously selected and work together with the context characteristics to achieve a particular outcome (see Design Manual Chapter 1103).

WSDOT Source

Design Manual

Design Documentation Package (DDP)

Definition

The portion of the Project File, including Design Approval and Project Development Approval that will be retained long term in accordance with WSDOT document retention policies. Depending on the scope of the project, it contains the Project Summary and some or all of the other documents discussed in Design Manual Chapter 300. Technical reports and calculations are part of the Project File, but they are not designated as components of the DDP. Include estimates and justifications for decisions made in the DDP (see Design Manual Chapter 300). The DDP explains how and why the design was chosen and documents approvals. See Project File.

WSDOT Source

Design Manual

Related Term

See also: project file (PF)

design element

Definition

Any component or feature associated with roadway design that becomes part of the final product. Examples include lane width, shoulder width, alignment, and clear zone (see Design Manual Chapter 1105).

WSDOT Source

Design Manual

design flow rate

Definition

The maximum flow rate to which certain runoff treatment BMPs are designed for required pollutant removal. Biofiltration swales, vegetated filter strips, and oil/water separators are some of the runoff treatment BMPs that are sized based on a design flow rate.

WSDOT Source

Highway Runoff Manual

design hearing

Definition
A formal or informal hearing that presents the design alternatives to the public for review and comment before the selection of a preferred alternative.

WSDOT Source
Design Manual

design hourly volume (DHV)

Definition
Computed by taking the annual average daily traffic times the K-factor. It can only be accurately determined in locations where there is a permanent traffic recording device active 365 days of the year. It correlates to the peak hour (see peak hour), but it is not equivalent. In some circumstances, it is necessary to use the peak hour data instead of DHV because peak hour can be collected using portable traffic recorders.

WSDOT Source
Design Manual

Related Term
See also: peak hour

design speed

Definition
A design control: the speed used to determine the various geometric design features of the roadway.

WSDOT Source
Design Manual

design storm

Definition
A rainfall event of specified size and return frequency that is used to calculate the runoff volume and peak discharge rate to a stormwater facility. A prescribed hyetograph and total precipitation amount (for a specific duration recurrence frequency) are used to estimate runoff for a hypothetical storm for the purposes of analyzing existing drainage, designing new drainage facilities, or assessing other impacts of a proposed project on the flow of surface water. (A hyetograph is a graph of percentages of total precipitation for a series of time steps representing the total time during which the precipitation occurs.)

WSDOT Source
Highway Runoff Manual

design storm frequency

Definition
The anticipated period in years that will elapse before a storm of a given intensity or total volume will recur, based on the average probability of storms in the design region. For instance, a 10-year storm can be expected to occur on the average once every 10 years. Facilities designed to handle flows that occur under such storm conditions would be expected to be surcharged by any storms of greater amount or intensity.

WSDOT Source
Highway Runoff Manual

design up

Definition
An approach to developing project alternatives utilizing the smallest dimensions that meet the need by providing the desired performance.

WSDOT Source
Design Manual

design users

Definition
A broad term intended to capture all modal users that currently utilize or are legally permitted on a roadway segment or node.

WSDOT Source
Design Manual

design variance

WSDOT Source
Design Manual

Synonym
design analysis

Design Variance Inventory (DVI)

Definition
A list of design variances for a project. Only approved variances should be included on this list (see Design Manual Chapter 300).

WSDOT Source
Design Manual

Design Variance Inventory System (DVIS)

Definition
A database application developed to generate the DVI form. The DVIS also provides query functions, giving designers an opportunity to search for previously granted variances. The Design Manual is constantly being refined and guidelines change over time. What may have been a

design variance previously may not be one today. The DVIS database is intended for internal WSDOT use only.

WSDOT Source
Design Manual

design vehicle

WSDOT Source
Design Manual

Synonym
intersection design vehicle

design volume

Definition
For western Washington, the water quality design volume is the 91st percentile, 24-hour runoff volume indicated by MGSFlood or an approved continuous runoff model (see Highway Runoff Manual Table 3-3). In eastern Washington, the water quality design volume is the volume of runoff predicted from a 24-hour storm with a 6-month return frequency (see Highway Runoff Manual Table 3-4).

WSDOT Source
Highway Runoff Manual

design year (Design)

Definition
The forecast year used for design as described in Design Manual Chapter 1103. See also horizon year.

WSDOT Source
Design Manual

Related Term
See also: design year (Environment)

design year (Environment)

Definition
The future year used to estimate the probable traffic volume for which a highway is designed, usually 20 years from the beginning of construction for WSDOT projects.

WSDOT Source
Environmental Manual

Related Term
See also: design year (Design)

design-bid-build

Definition
The project delivery method where design and construction are sequential steps in the project development process (23 CFR 636.103).

WSDOT Source
Design Manual

design-build contract

Definition
An agreement that provides for design and construction of improvements by a consultant/contractor team. The term encompasses design-build-maintain, design-build-operate, design-build-finance, and other contracts that include services in addition to design and construction. Franchise and concession agreements are included in the term if they provide for the franchisee or concessionaire to develop the project that is the subject of the agreement (23 CFR 636.103).

WSDOT Source
Design Manual

design-builder

Definition
The firm, partnership, joint venture, or organization that contracts with WSDOT to perform the work.

WSDOT Source
Design Manual

designated lands

Definition
Lands that have been officially recognized or identified for their special functions. Many of these are managed for environmental functions as well as other uses, such as recreation. These can include National Wildlife Refuges; National Forests; National Parks; state, county, and local jurisdiction parks; Wild and Scenic Rivers; Scenic and Recreational Highways; designated critical habitat for threatened or endangered species such as spotted owls; or priority habitat areas such as oak woodlands, agricultural lands, and sensitive plant habitat.

WSDOT Source
Roadside Manual

designer

Definition
This term applies to WSDOT design personnel. Wherever 'designer' appears in this manual, design-build personnel shall deem it to mean: Engineer of Record, Design Quality Assurance Manager, design-builder, or any other term used in the design-build contract to indicate design-

build personnel responsible for the design elements of a design-build project, depending on the context of information being conveyed.

WSDOT Source
Design Manual

desirable

Definition
Design criteria that are recommended for inclusion in the design.

WSDOT Source
Design Manual

detectable warning surface

Definition
A tactile surface feature of truncated dome material built into or applied to the walking surface to alert persons with visual impairments of vehicular ways. Federal yellow is the color used on WSDOT projects to achieve visual contrast. Colors other than federal yellow that meet the light-on-dark/dark-on-light requirement may be used on projects where cities have jurisdiction. (Detectable warning surfaces are detailed in the Standard Plans.)

WSDOT Source
Design Manual, Design Manual- ADA/Pedestrian

detention

Definition
The temporary storage of stormwater runoff in a stormwater facility, which is used to control the peak discharge rates and provide gravity settling of pollutants; the release of stormwater runoff from the site at a slower rate than it is collected by the stormwater facility system, with the difference held in temporary storage.

WSDOT Source
Highway Runoff Manual

detention facility

Definition
An above or below ground facility, such as a pond or tank, that temporarily stores stormwater runoff and subsequently releases it at a slower rate than it is collected by the drainage facility.

WSDOT Source
Highway Runoff Manual, Roadside Manual

detention pond

Definition
A type of drainage facility designed to hold surface and stormwater runoff for a short period of time and then release it over time via adjacent surface water bodies or aquifers.

WSDOT Source
Roadside Manual

determination of effect

Definition
A finding, by a federal agency in consultation with SHPO and consulting parties, pursuant to compliance with Section 106 (see definition) that a proposed undertaking will have an effect on historic properties. If an effect is identified, the Criteria of Adverse Effect is applied to determine potential Adverse Effect (see definition). Other possibilities are determinations of No Effect and No Adverse Effect.

WSDOT Source
Environmental Manual

Related Term
See also: adverse effect

determination of eligibility

Definition
Per Section 106 of the NHPA, formal recognition of a property's eligibility for inclusion, but not actual listing, in the National Register of Historic Places. Determinations of Eligibility may be prepared on National Register Registration Forms (NPS 10-900).

WSDOT Source
Environmental Manual

Determination of Nonsignificance (DNS) (SEPA)

Definition
The written decision by the Regional Administrator that a proposal will not have a significant impact and no EIS is required.

WSDOT Source
Design Manual

Determination of Significance (DS) (SEPA)

Definition
A written decision by the Regional Administrator that a proposal could have a significant adverse impact and an EIS is required.

WSDOT Source
Design Manual

dewatering

Definition
Removing water by pumping, drainage, or evaporation.

WSDOT Source
Highway Runoff Manual

direct bury

Definition
Placement of a utility without the protection of a conduit or similar protection; or, a cable or conduit placement method where a vibrating hollow tooth creates a void area and the cable or conduit, fed from a spool, is placed at the lower portion of the ripper without excavating material.

WSDOT Source
Utilities Manual

direct effects

Definition
The Council on Environmental Quality (CEQ) states that direct effects are those 'caused by the action and occur at the same time and place' (CEQ 1978). A good example of a direct land use impact of a highway project is acquisition of right of way.

WSDOT Source
Environmental Manual

direct impact / effect

Definition
A direct impact (or effect) is caused by the proposed action and occurs at the same time and place. Direct effects may occur during construction or operation of the project. Effects may be ecological, aesthetic, historic, cultural, economic, social, or health related. For example, a highway crossing a stream may directly affect its water quality, though such impacts can be mitigated (40 CFR 1508.8).

WSDOT Source
Environmental Manual

directional design hour volume (DDHV)

Definition
The traffic volume for the design hour in the peak direction of flow, in vehicles per hour. For example, if during the design hour, 60% of the vehicles traveled eastbound and 40% traveled westbound, then the DDHV for the eastbound direction would be the DHV x 0.60.

WSDOT Source
Design Manual

Disadvantaged Business Enterprise (DBE)

Definition
A for-profit small business concern:

- That is at least 51% owned and controlled by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51% of the stock is owned by one or more such individuals; and
- Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

WSDOT Source
Consultant Services Manual

discharge

Definition
Runoff leaving a new development or redevelopment via overland flow, built conveyance systems, or infiltration facilities; a hydraulic rate of flow, specifically fluid flow; or a volume of fluid passing a point per unit of time, commonly expressed in cubic feet per second, cubic meters per second, gallons per minute, gallons per day, or millions of gallons per day.

WSDOT Source
Highway Runoff Manual

discipline report

Definition
A detailed WSDOT report or memo that may be prepared by region offices or divisions to document the environmental analysis in the rare cases where the environmental impacts are so substantial, the required analysis is so complex, or the pertinent data is so voluminous that the analysis cannot reasonably be included within the environmental document. A discipline report is typically included in the appendix of the environmental document. A discipline report may also be written if the subject specific analysis is needed to support some other permit or approval requirement independent of the NEPA/SEPA process.

WSDOT Source
Environmental Manual

disconnected facilities

WSDOT Source
Utilities Manual

Synonym
deactivated facilities

dismissal

Definition
Represents toll transactions that have determined not to be viable (e.g. no tag or plate could be successfully captured or read). Subsequently this transaction is reversed as a dismissal in the accounting records. Examples are:

- Tolls having unusable or rejected Images
- Unidentified Registered Owner

- Judicial action, where the ALJ has dismissed the transaction.

WSDOT Source
Toll Division

dispersion

Definition
Release of surface water and stormwater runoff in such a way that the flow spreads over a wide area and is located so as not to allow flow to concentrate anywhere upstream of a drainage channel with erodible underlying granular soils.

WSDOT Source
Highway Runoff Manual

displacement

Definition
A property encroachment that requires full acquisition of a parcel in order to build and operate public transportation facilities.

WSDOT Source
Highway Runoff Manual

district

Definition
A significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. May be an archaeological or historic district or may contain elements of both.

WSDOT Source
Environmental Manual

ditch(es) (Highway Runoff)

Definition
A long, narrow excavation dug in the earth for drainage, having a top width less than 10 feet at design flow.

WSDOT Source
Highway Runoff Manual

Related Term
See also: ditch(es) (Roadside)

ditch(es) (Roadside)

Definition
Narrow depressions designed to collect, convey, and discharge stormwater runoff from roadway surfaces, adjacent right of way, and groundwater discharge from adjacent slopes. Many ditches

are diverted streams and creeks. Because of this hydraulic function, it is not uncommon to see wetland (hydrophytic) vegetation growing in roadside ditches.

WSDOT Source
Roadside Manual

Related Term
See also: ditch(es) (Highway Runoff)

divided multilane

Definition
A roadway with two or more through lanes in each direction and a median that physically or legally prohibits left turns, except at designated locations.

WSDOT Source
Design Manual

document

Definition
The act of including a short note to the Design Documentation Package that explains a design decision.

WSDOT Source
Design Manual

dooring

Definition
Describes a conflict with a parked vehicle door opening into a roadway bike facility.

WSDOT Source
Design Manual

DOT (USDOT)

Definition
The United States Department of Transportation.

WSDOT Source
Consultant Services Manual

DOT-assisted contract

Definition
Any contract between a recipient and a contractor (at any tier) funded in whole or in part with DOT financial assistance, including letters of credit or loan guarantees, except a contract solely for the purchase of land.

WSDOT Source
Consultant Services Manual

double check valve assembly (DCVA)

Definition

An approved assembly consisting of two independently operating check valves, loaded to the closed position by springs or weights, and having suitable connections for testing. It is installed as a unit with and between two resilient seated shutoff valves.

WSDOT Source

Roadside Manual

double-lane roundabout

Definition

A roundabout with a two-lane circulating roadway and one or more entry or exit legs with two lanes.

WSDOT Source

Design Manual

down payment allowance

Definition

The amount, determined by the displacing agency, which is necessary to enable an eligible displaced person to make a down payment (including incidental purchase expenses) on the purchase of an eligible replacement dwelling.

WSDOT Source

Right of Way Manual

drainage easement

Definition

A legal encumbrance placed against a property's title to reserve specified privileges for the users and beneficiaries of the drainage facilities contained within the boundaries of the easement.

WSDOT Source

Highway Runoff Manual

drawdown

Definition

The gradual reduction in water level in a pond due to the combined effects of infiltration and evaporation; the lowering of the water surface (in open-channel flow), the water table, or the piezometric surface (in groundwater flow) resulting from a withdrawal of water.

WSDOT Source

Highway Runoff Manual

driver fatigue

Definition

Psychological or physical exhaustion that diminishes an individual’s ability to perform the driving task by reducing alertness and vigilance.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-3.

driveway

Definition
A vehicular access point that provides access to or from a public roadway.

WSDOT Source
Design Manual

drop and ride

Definition
An area of a park & ride lot or other multimodal facility where patrons are dropped off or picked up by private auto or taxi.

WSDOT Source
Design Manual

drop service connection

Definition
A utility service connection, usually originating from an overhead distribution line that drops from the pole line and continues underground to the service location.

WSDOT Source
Utilities Manual

drop structure

Definition
A structure for dropping water to a lower level and dissipating its surplus energy (a fall). A drop may be vertical or inclined.

WSDOT Source
Highway Runoff Manual

dry pond

Definition
A facility that provides stormwater quantity control by containing excess runoff in a detention basin, then releasing the runoff at allowable levels.

WSDOT Source
Highway Runoff Manual

dry vault or tank

Definition
A facility that provides stormwater quantity control by detaining runoff in underground storage units and then releasing reduced flows at established standards.

WSDOT Source
Highway Runoff Manual

drywell

Definition
A well completed above the water table so that its bottom and sides are typically dry except when receiving fluids. Drywells are designed to disperse water below the land surface and are commonly used for stormwater management in eastern Washington.

WSDOT Source
Highway Runoff Manual

Related Term
See also: underground injection control (UIC) well

duct

Definition
A tubular enclosure for protecting wires or cables.

WSDOT Source
Utilities Manual

Related Term
See also: conduit (Utilities)

duff

Definition
The naturally occurring layer of dead and decaying plant material that develops on the ground surface under established plant communities.

WSDOT Source
Highway Runoff Manual

durability

Definition
A measure of a traffic line's resistance to the wear and deterioration associated with abrasion and chipping.

WSDOT Source
Design Manual

E

easement (Design)

Definition
A documented right, as a right of way, to use the property of another for designated purposes.

WSDOT Source
Design Manual

Related Term
See also: easement (Highway Runoff)

easement (Highway Runoff)

Definition
The legal right to use a parcel of land for a particular purpose. It does not include fee ownership but may restrict the owner's use of the land.

WSDOT Source
Highway Runoff

Related Term
See also: easement (Design)

easement (Utilities)

Definition
A legal document transferring a defined property right to a third party for a specific purpose. WSDOT generally does not grant easements for utility installations within the operating right of way.

WSDOT Source
Utilities Manual

eastern Washington high-use road

Definition
Eastern Washington roadways with ADT >30,000.

WSDOT Source
Highway Runoff Manual

EBASE (Estimates and Bid Analysis System)

Definition
WSDOT's system for developing project cost estimates.

WSDOT Source
Consultant Services Manual

ecological succession

Definition
The natural tendency of plant communities to evolve over time.

WSDOT Source
Roadside Manual

Related Term
See also: plant succession

ecology

Definition
Washington State Department of Ecology.

WSDOT Source
Highway Runoff Manual

ecology embankment

WSDOT Source
Highway Runoff Manual

Related Term
See also: media filter drain

ecosystem

Definition
A complex of biological communities and the physical and chemical environment forming a functioning whole in nature. Wetlands, upland forests, lakes, and streams are examples of types of ecosystems.

WSDOT Source
Roadside Manual

Citation
Transportation Research Board. “Report 379: Guidelines for the Development of Wetland Replacement Areas." Washington D.C., National Academy Press. 1996. p. 72.

edge of traveled way

Definition
The outside edge of the roadway designated for normal vehicular travel (also referred to as the fog line).

WSDOT Source
Utilities Manual

effect

Definition
Occurs when an undertaking may alter characteristics that qualify a property for inclusion in the National Register (Criteria of Effect: 36 CFR 800.9(a)).

WSDOT Source
Environmental Manual, Utilities Manual

Related Term
See also: impact

effective impervious surface

Definition
For determining whether a particular TDA has exceeded Minimum Requirement 6 (Flow Control), the net-new impervious surfaces plus any applicable replaced impervious surfaces minus those new and applicable replaced impervious surfaces that are flowing into an existing dispersion area (noneffective new impervious surfaces and noneffective replaced impervious surfaces).

effective impervious surface = net new impervious surface + applicable replaced impervious surface - noneffective new impervious surface - noneffective replaced impervious surface

WSDOT Source
Highway Runoff Manual

Related Term
See also: net-new impervious surface

effective pollution-generating impervious surface (PGIS)

Definition
For determining whether a particular TDA has exceeded Minimum Requirement 5 (Runoff Treatment), the new PGIS plus applicable replaced PGIS minus those new PGIS areas and applicable replaced PGIS areas that are flowing into an existing dispersion area (noneffective new PGIS and noneffective replaced PGIS).

effective PGIS = new PGIS + applicable replaced PGIS – noneffective new PGIS – noneffective replaced PGIS

WSDOT Source
Highway Runoff Manual

egress

Definition
Right to go out or exit.

WSDOT Source
Right of Way Manual

electronic toll collection (ETC)

Definition
A means of collecting a toll automatically, electronically, at normal variable speeds of traffic, without need for stopping or without manual intervention at the time of use of toll facility.

WSDOT Source
Toll Division

element

Definition
An architectural or mechanical component or design feature of a space, site, or public right of way.

WSDOT Source
Design Manual

elevation

Definition
Vertical distance of a point above or below a reference surface or datum.

WSDOT Source
Roadside Manual

Citation
Morris M. Thompson, 'Maps for America', U.S. Department of Interior, Geological Survey National Center, Reston, Virginia, 1987.

eligible

Definition
A property is eligible for inclusion in the National Register of Historic Places if it meets the National Register Criteria.

WSDOT Source
Environmental Manual

Citation
See also: criteria for evaluation (National Register Eligibility Criteria)

embankment

Definition
A structure of earth, gravel, or similar material raised to form a pond bank or foundation for a road.

WSDOT Source
Highway Runoff Manual

embodied GHG emissions

Definition

Greenhouse gas emissions generated from the energy used to extract materials, fabricate them for construction, and transfer them to construction site. Embodied GHG emissions are also referred to as 'cradle to site' GHG emissions.

WSDOT Source

Environmental Manual

emergency escape ramp

Definition

A roadway leaving the main roadway designed for the purpose of slowing and stopping out-of-control vehicles away from the main traffic stream.

WSDOT Source

Design Manual

emergency overflow spillway

Definition

A vegetated earth or rock-lined channel used to safely convey flood discharges in excess of the capacity of the principal spillway.

WSDOT Source

Highway Runoff Manual

emergency repair

Definition

Damage to a utility that requires immediate repair. Immediate repair is defined as work that, if not undertaken as soon as possible, will cause severe or catastrophic damage to a utility's facilities or its customers, or place the general public in danger of being harmed.

WSDOT Source

Utilities Manual

emergency vehicle signal

Definition

A special adaptation of a conventional traffic signal installed to allow for the safe movement of authorized emergency vehicles. Usually, this type of signal is installed on the highway at the entrance into a fire station or other emergency facility. The signal ensures protected entrance onto the highway for the emergency vehicle. When not providing for this movement, the signal either operates continuously (consistent with the requirements for a conventional traffic signal) or displays continuous green, which is allowed at non-intersection locations only. At least two identical displays are required per approach.

WSDOT Source

Design Manual

emergent plants

Definition

Aquatic plants that are rooted in the sediment but whose leaves are at or above the water surface. These wetland plants often have high habitat value for wildlife and waterfowl and can aid in pollutant uptake.

WSDOT Source

Highway Runoff Manual

emerging BMP technologies

Definition

Best Management Practice technologies that have not been evaluated using approved protocols, but for which preliminary data indicate they may provide a desirable level of stormwater pollutant removal. In some instances, an emerging technology may have already received a pilot use or conditional use designation from the Washington State Department of Ecology but does not have a general use designation.

WSDOT Source

Highway Runoff Manual

Empirical Bayes methodology

Definition

A statistical method in which empirical data are used to estimate conditional probability distributions, for example: combining crash frequency data for a given site with predicted crash frequency data from similar sites to estimate the given site's expected crash frequency.

WSDOT Source

Safety Performance Manual

Citation

Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-5.

encasement

Definition

A structural element surrounding a pipe.

WSDOT Source

Utilities Manual

enclose

Definition

A roadside treatment strategy, the aim of which is a more or less permeable buffer between two adjacent elements, typically the roadway and adjoining lands. Roadside treatments, such as berms, structures, or vegetation, are used to provide visual buffers along both sides of the road.

WSDOT Source
Roadside Manual

encroachment

Definition
An encroachment is any installation, device, object or occupancy that is located at, above or below the grade line of the highway and within the right of way limits, and that is not installed as part of the highway facility, and which has not been authorized by the execution of a permit, lease or other appropriate document.

WSDOT Source
Right of Way Manual

endangered species

Definition
Any species which is in danger of extinction throughout all or a significant portion of its range.

WSDOT Source
Environmental Manual, Roadside Manual

Endangered Species Act (ESA) of 1973

Definition
An act 'To provide for the conservation of endangered and threatened species of fish, wildlife, and plants, and for other purposes.'

WSDOT Source
Highway Runoff Manual

energy dissipater

Definition
A means by which the total energy of flowing water is reduced, such as rock splash pads, drop manholes, concrete stilling basins or baffles, and check dams. In stormwater design, an energy dissipater is usually a mechanism that reduces velocity prior to or at discharge from an outfall in order to prevent erosion.

WSDOT Source
Highway Runoff Manual

enforcement observation point

Definition
A place where a law enforcement officer may park and observe traffic.

WSDOT Source
Design Manual

engineer

Definition
The Contracting Agency's representative who directly supervises the engineering and administration of a construction Contract.

WSDOT Source
Standard Specifications

engineering and economic feasibility (EEF)

Definition
An assessment of whether a project will experience practical limitations in fully meeting certain minimum requirements, particularly runoff treatment and flow control, within the project right of way. Limitations may be infrastructural, geographical, geotechnical, hydraulic, environmental, or benefit/cost related.

WSDOT Source
Highway Runoff Manual

enhanced runoff treatment, enhanced water quality treatment

Definition
The use of runoff treatment BMPs designed to capture dissolved metals at a higher rate than basic treatment BMPs.

WSDOT Source
Highway Runoff Manual

enhancement (Environment)

Definition
Changing a wetland to improve specific aquatic resource functions. Enhancement results in a gain in aquatic function but does not result in a gain in wetland area.

WSDOT Source
Environmental Manual

Related Term
See also: enhancement (Roadside)

enhancement (Roadside)

Definition
Any improvement of a structural component to increase the level of ecological functioning of a site.

WSDOT Source
Roadside Manual

Related Term
See also: enhancement (Environment)

entity pool

WSDOT Source
Utilities Manual

Related Term
See: governmental entity pool

entry angle

Definition
The angle between the entry roadway and the circulating roadway measured at the yield point.

WSDOT Source
Design Manual

entry curve

Definition
The curve of the left edge of the roadway that leads into the circulating roadway.

WSDOT Source
Design Manual

entry width

Definition
The width of an entrance leg at the inscribed circle measured perpendicular to travel.

WSDOT Source
Design Manual

Environmental Assessment (EA) (NEPA)

Definition
A document prepared for federally funded, permitted, or licensed projects that are not categorical exclusions (CE), but do not appear to be of sufficient magnitude to require an Environmental Impact Statement (EIS). The EA provides enough analysis to determine whether an EIS or a Finding of No Significant Impact (FONSI) should be prepared.

WSDOT Source
Design Manual

Environmental Checklist (SEPA)

Definition
A standard form used by all state and local agencies to obtain information about a proposal and to assist them in making a threshold determination. It includes questions about the proposal, its location, possible future activities, and questions about potential impacts of the proposal on each element of the environment. The SEPA (State Environmental Policy Act) rules under WAC 197-11-960 list the information required in an environmental checklist.

WSDOT Source
Environmental Manual

environmental commitments meeting

Definition
A project-level meeting between the Design, Construction, Plans, and Environmental Offices used to incorporate commitments into contracts.

WSDOT Source
Environmental Manual

Environmental Designation for Noise Abatement (EDNA)

Definition
An area or zone within which maximum permissible noise levels are established.

WSDOT Source
Environmental Manual

environmental document (Environment)

Definition
Includes documents prepared in response to state and federal environmental requirements such as: Environmental Impact Statements (NEPA and SEPA), Environmental Assessments (NEPA), SEPA Threshold Determinations (DS, DNS, and MDNS) and associated Environmental Checklists (SEPA), Section 4(f) Evaluations, Section 106 Reports, Environmental Justice Reports and other documents.

WSDOT Source
Environmental Manual

Related Term
See also: environmental document (Utilities)

environmental document (Utilities)

Definition
Documents prepared by a project owner acknowledging impacts that will result from a proposed project. Documents are reviewed and approved by regulatory agencies prior to any work being performed. They include Environmental Assessments (NEPA), SEPA Threshold Determinations, (Determination of Significance or Determination of Non-Significance) and associated Environmental SEPA Checklists, Draft and Final Environmental Impact Statements (EISs), Section 4(f) Evaluations, Section 106 Reports, Environmental Justice Reports, and other documents prepared in response to state or federal environmental requirements.

WSDOT Source
Utilities Manual

Related Term
See also: environmental document (Environment)

environmental hearing

Definition
A formal or informal hearing documenting that social, economic, and environmental impacts have been considered and that public opinion has been solicited.

WSDOT Source
Design Manual

Environmental Impact Statement (EIS)

Definition
A detailed written statement of a proposed course of action, project alternatives, and possible impacts of the proposal.

WSDOT Source
Design Manual

environmental justice

Definition
The fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. This includes using an intersectional lens to address disproportionate environmental and health impacts by prioritizing highly impacted populations, equitably distributing resources and benefits, and eliminating harm.

WSDOT Source
Environmental Services Office and other WSDOT business units

Citation
Environmental Justice Task Force, Report to the Washington State Governor and Legislature: Environmental Justice Task Force: Recommendations for Prioritizing EJ in Washington State Government, 2020.

environmental permit

Definition
A document required by law that authorizes a specific type of activity under certain environmental conditions. If required, environmental permits are generally needed prior to the start of any highway construction work, including utility work. Such work is to be included under WSDOT's environmental permits.

WSDOT Source
Utilities Manual

Environmental Resource Area

Definition
Areas that have been identified in the field by a biologist as having high environmental resource value. Environmental Resource Areas may include (but are not limited to): stream corridors; oak

woodlands, or other high quality habitat areas designated as locally or regionally important; known habitats for state or federal endangered, threatened, or priority species; and rare or sensitive plant communities.

WSDOT Source
Roadside Manual

environmental review

Definition
The consideration of environmental factors required by NEPA and SEPA. The 'environmental review process' is the procedure used by agencies and others to give appropriate consideration to the environment in decision making.

WSDOT Source
Environmental Manual

Environmental Review Summary (ERS)

Definition
Part of the Project Summary document, the ERS identifies environmental permits and approvals. It is prepared in the region and is required for Design Approval.

WSDOT Source
Design Manual

Related Term
See also: project summary

ephemeral stream

Definition
A stream or portion of a stream that flows in direct response to precipitation, receiving little or no water from groundwater or snowmelt (also known as a seasonal stream).

WSDOT Source
Highway Runoff Manual

equivalent area

Definition
An impervious surface area equal in size, located in the same drainage basin (threshold discharge area), and having similar use characteristics (for example, similar average daily traffic) to the impervious surface. The equivalent area concept generally applies to engineered dispersion areas and may apply to natural dispersion areas, as described in the following: The existing site currently collects runoff in a ditch or pipe and discharges to a surface water. By changing this condition to natural dispersion (BMP FC.01), a surface discharge is eliminated, resulting in a flow control improvement. Equivalent area trades for natural dispersion are allowed for this specific case.

WSDOT Source
Highway Runoff Manual

erosion (Highway Runoff)

Definition
The detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

WSDOT Source
Highway Runoff Manual

Related Term
See also: erosion (Roadside)

erosion (Roadside)

Definition
The wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep. Also, detachment and movement of soil or rock fragments by human and animal activities.

WSDOT Source
Roadside Manual

Related Term
See also: erosion (Highway Runoff)

erosion (prevention) and sedimentation control

Definition
Any temporary or permanent measures taken to reduce erosion, trap sediment, and ensure sediment-laden water does not leave the site.

WSDOT Source
Highway Runoff Manual, Roadside Manual

erosion control blanket

Definition
A blanket made of natural plant material or synthetic fibers that is rolled out and fastened to the soil surface to protect soil from raindrop and sheet erosion.

WSDOT Source
Highway Runoff Manual

essential public facilities

Definition
As defined under Growth Management Act, essential public facilities that are typically difficult to site, including airports, state or regional transportation facilities, and services of statewide significance as defined in RCW 47.06.140 (including improvements to such facilities and services

identified in the statewide multimodal plan) and other public facilities that are typically difficult to site.

WSDOT Source
Environmental Manual

establishment

Definition
Converting an upland area to a wetland or other aquatic resource. Establishment results in a gain in wetland area and functions.

WSDOT Source
Environmental Manual

estimator

Definition
A knowledgeable professional assigned to evaluate the probable cost of projects.

WSDOT Source
Cost Estimating Manual for WSDOT Projects

estuarine wetland

Definition
Generally, an eelgrass bed, salt marsh, or rocky sand flat or mudflat intertidal area where freshwater and saltwater mix (specifically, a tidal wetland with salinity greater than 0.5 parts per thousand, usually partially enclosed by land, but with partially obstructed or sporadic access to the open ocean).

WSDOT Source
Highway Runoff Manual

eutrophication

Definition
The addition of nutrients, especially nitrogen and phosphorus, to a body of water, resulting in high organic production rates that may overcome natural self-purification processes. Frequently resulting from pollutant sources on adjacent lands, eutrophication produces undesirable effects, including algal blooms, seasonally low oxygen levels, and reduced survival opportunities for fish and invertebrates.

WSDOT Source
Highway Runoff Manual

evapotranspiration

Definition
The collective term for the processes of evaporation and plant transpiration by which water is returned to the atmosphere.

WSDOT Source
Highway Runoff Manual

excepted parcel certificate #3s

Definition
Projects where the right of way has not been cleared and it is necessary for the contractor to work around certain parcels. This type of certificate can only be used in very unusual circumstances and with prior approval of FHWA. Under this type of certificate, the agency ensures that both property owners and occupants of residences, businesses, farms, or nonprofit organizations who have not yet moved from the R/W are protected against unnecessary inconvenience and disproportionate injury or any action coercive in nature.

WSDOT Source
Right of Way Manual

excess expected average crash frequency

Definition
The difference beyond the expected average crash frequency, for a site and for a reference population, where the value for the site is higher than the value for the reference population.

WSDOT Source
Safety Performance Manual

excess right of way

Definition
Property acquired as operating right of way (R/W) but no longer needed as such. A plan revision mapping the excess R/W area is necessary prior to disposal.

WSDOT Source
Right of Way Manual

exempt projects

Definition
Listed in federal and state regulations (40 CFR 93.126 and WAC 173- 420-110), these are mostly projects outside nonattainment/maintenance areas that maintain existing transportation facilities or are considered to have a neutral impact on air quality. See also WAC 173-420-120 for projects exempt from regional analysis.

WSDOT Source
Environmental Manual

exfiltration

Definition
The downward movement of runoff through the bottom of an infiltration facility into the soil layer, or the downward movement of water through soil.

WSDOT Source
Highway Runoff Manual

existing land cover / existing site conditions

Definition
The conditions (ground cover, slope, drainage patterns) of a site as they existed on the first day the project entered the design phase.

WSDOT Source
Highway Runoff Manual

existing noise level

Definition
Modeled traffic noise level(s) based the existing year traffic data.

WSDOT Source
Environmental Manual

existing R/W

Definition
Land that is already incorporated into the roadway facility or land certified under a previous federal aid project. Permits, easements, temporary construction easements (TCE), and slope easements are generally considered R/W acquisition.

WSDOT Source
Right of Way Manual

existing roadway prism

Definition
The limit of embankment or excavation work required to construct the roadway. This limit is further defined as the catch point of a cut or fill with the existing ground.

WSDOT Source
Highway Runoff Manual

exit curve

Definition
The curve of the left edge of the roadway that leads out of the circulating roadway (see Design Manual Chapter 1320).

WSDOT Source
Design Manual

exit width

Definition
The width of an exit leg at the inscribed circle (see Design Manual Chapter 1320).

WSDOT Source
Design Manual

exotic species

Definition
A species found in but not native to a particular area.

WSDOT Source
Roadside Manual

expectancy

Definition
The driver's readiness to respond to events, situations, or the presentation of information. It is primarily a function of the driver's experience.

WSDOT Source
Roadside Manual

explanatory variable

Definition
A variable that is observed or manipulated to affect the dependent variable.

WSDOT Source
Safety Performance Manual

Synonyms
independent variable, predictor variable (non-preferred)

Related Term
dependent variable

expose (Roadside)

Definition
A roadside treatment strategy, the aim of which is to preserve or open a visual sight line, or remove vegetation for operational purposes, such as in the Design Clear Zone.

WSDOT Source
Roadside Manual

Related Term
See also: expose (Roadside Policy)

expose (Roadside Policy)

Definition
A roadside restoration strategy, the intent of which is to preserve or open a visual sightline, or to remove vegetation for operational purposes.

WSDOT Source
Roadside Policy Manual

Related Term
See also: expose (Roadside)

expressway

Definition
A divided highway that has a minimum of two lanes in each direction for the exclusive use of traffic and that may or may not have grade separations at intersections. A transportation context characteristic that is designated for a divided highway with limited access that provides regional mobility.

WSDOT Source
Design Manual

extension of time

Definition
An extension of the one-year allotted time period to begin construction of an approved utility installation.

WSDOT Source
Utilities Manual

extrude

Definition
A procedure for applying marking material to a surface by forcing the material through a die to give it a certain shape.

WSDOT Source
Design Manual

F

Facilities Control Record Number (FCR#)

Definition
The number assigned to each site and building owned, leased, and/or operated by WSDOT.

WSDOT Source
Right of Way Manual

facility (Design)

Definition
All or any portion of buildings, structures, improvements, elements, and pedestrian or vehicular routes located in a public right of way.

WSDOT Source
Design Manual

See also
facility (Roadside)

facility (Roadside)

Definition
All or any portion of buildings, structures, vehicles, equipment, roads, walks, parking lots, or other real or personal property or interest in such property.

WSDOT Source
Roadside Manual

See also
facility (Design)

facility (Utilities)

Definition
A general term referring to highway appurtenances necessary for the operation of the highway, such as structures, drainage facilities, traffic signals, and similar objects or devices. For highway real estate purposes, the term does not include pit sites, park & ride lots located outside the highway right of way, or other sundry sites. For utility purposes, the term refers to delivery lines and all appurtenances necessary or incidental to the operation of the utility system, such as poles, valves, junction boxes, conduits, and so on.

WSDOT Source
Utilities Manual

fair market value

Definition
The amount in cash which a well-informed buyer, willing but not obligated to buy the property, would pay, and which a well-informed seller, willing but not obligated to sell it, would accept, taking into consideration all uses to which the property is adapted or may be reasonably adaptable. (WPI 150.08)

WSDOT Source
Right of Way Manual

farmland of statewide or local importance

Definition
As defined in the Farmland Protection Policy Act, farmland of statewide or local importance is land used for the production of food, feed, fiber, forage, or oil, seed crops, as determined by the state or local government agency or agencies, using U.S. Department of Agriculture guidelines.

WSDOT Source
Environmental Manual

fascine

Definition
A tied bundle of plant stems or branches, laid in a trench or a terrace on the contour and staked into position. Used to slow water velocities, trap sediment and establish vegetation. Used on basically stable slopes that have a shallow, unstable surface layer.

WSDOT Source
Roadside Manual

feasibility

Definition
See engineering and economic feasibility.

WSDOT Source
Highway Runoff Manual

Citation
engineering and economic feasibility (EEF)

feasible and prudent avoidance alternative

Definition
A feasible and prudent avoidance alternative avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property.

WSDOT Source
Environmental Manual

feature (Design)

Definition
A component of a pedestrian access route, such as a curb ramp, driveway, crosswalk, or sidewalk.

WSDOT Source
Design Manual

feature (Roadside)

Definition
A visually distinct or outstanding part, quality, or characteristic of a landscape.

WSDOT Source
Roadside Manual

Federal Highway Administration (FHWA) (Design)

Definition
The division of the U.S. Department of Transportation with jurisdiction over the use of federal transportation funds for state highway and local road and street improvements.

WSDOT Source
Design Manual

Related Term
See also: Federal Highway Administration (FHWA) (Standard Specs)

Federal Highway Administration (FHWA) (Standard Specs)

Definition
The Federal Agency authorized to approve plans and contracts for Federal-Aid Highway projects. They also inspect such projects to ensure Contract compliance.

WSDOT Source
Standard Specifications

Related Term
See also: Federal Highway Administration (FHWA) (Design)

federal nexus

Definition
A project has a federal nexus when a federal agency must take an action on a project. Before the federal agency takes an action, environmental impacts must be evaluated under NEPA. Common actions that create a Federal Nexus include:

- Federal land decision required within the project area.
- Federal money is used on the project.
- Federal permits or approvals are required.

WSDOT Source
Environmental Manual

Federal Transit Administration (FTA)

Definition
The division of the U.S. Department of Transportation with jurisdiction over the use of federal funds for financial assistance to develop new transit systems and improve, maintain, and operate existing systems.

WSDOT Source
Design Manual

feeder service

Definition
Bus service that provides connections with other bus or rail services.

WSDOT Source
Design Manual

FHWA

Definition
The U.S. Department of Transportation Federal Highway Administration, which oversees federal funding to the states. The FHWA controls all full control limited access Interstate freeways and has oversight for NHS highways.

WSDOT Source
Utilities Manual

fill

Definition
That part of the ground surface that, when graded, is higher than the original ground.

WSDOT Source
Roadside Manual

Citation:
Steven Strom and Kurt Nathan, 'Site Engineering for Landscape Architects', Van Nostrand Reinhold, New York, 1992.

fill slope

Definition
That portion of the roadway built upon existing ground to support the structural roadbed. Extends from the top of the shoulder to a point where the slope meets existing ground.

WSDOT Source
Utilities Manual

filter berm

Definition
A berm of compost, mulch, or gravel to detain and filter sediment from sheet flow.

WSDOT Source
Highway Runoff Manual

filter fabric

Definition
A woven or nonwoven water-permeable material, typically made of synthetic products such as polypropylene, used in stormwater management and erosion and sediment control applications to trap sediment or to prevent fine soil particles from clogging the aggregates.

WSDOT Source
Highway Runoff Manual

filter strip

Definition
A grassy area with gentle slopes that treats stormwater runoff from adjacent paved areas before it can concentrate into a discrete channel.

WSDOT Source
Highway Runoff Manual

final design

Definition
Any design activities following preliminary design; expressly includes the preparation of final construction plans and detailed specifications for the performance of construction work (23 CFR 636.103). Final design is also defined by the fact that it occurs after NEPA/SEPA approval has been obtained.

WSDOT Source
Design Manual

final order

Definition
The decision provided by the administrative law judge (ALJ) in response to an administrative hearing or written dispute in lieu of a hearing to contest an NOCP.

WSDOT Source
Toll Division

Finding of No Significant Impact (FONSI) (NEPA)

Definition
A federal document indicating that a proposal will not significantly affect the environment and an EIS is not required.

WSDOT Source
Design Manual

findings and order

Definition
A document containing the findings and conclusions of a limited access hearing approved by the Assistant Secretary, Engineering & Regional Operations (see Design Manual Chapter 210).

WSDOT Source
Design Manual

findings and order plan

Definition
A limited access plan, prepared after a limited access hearing, which is based on the hearing record.

WSDOT Source
Design Manual

finish grading

Definition
Minor changes to finalize a prepared earth surface to its desired grade.

WSDOT Source
Roadside Manual

fish-bearing stream

Definition
According to WAC 222-16-030: Type S, F, and Np waters are fish habitat streams. Until fish habitat water type maps are available, an interim water-typing system applies (see WAC 222-16-031). Type 1, 2, 3, and 4 waters are fish habitat streams.

WSDOT Source
Highway Runoff Manual

Related Term
See also: non-fish-bearing stream

fixed feature

Definition
A fixed feature that, when struck, can result in unacceptable impact forces on a vehicleís occupants. A fixed feature can be either natural or constructed. Fog Line The outside edge of the roadway designated for normal vehicular travel (also referred to as the edge of traveled way or edge stripe).

WSDOT Source
Utilities Manual

fixed fee

Definition
The sum expressed in US dollars which covers the consultantís profit and other business expenses not allowable or included as a direct or indirect cost.

WSDOT Source
Consultant Services Manual

fixed object (object to be mitigated)

Definition
A fixed object, a side slope, or water that, when struck, can result in impact forces on a vehicleís occupants that may result in injury or place the occupants in a situation that has a high likelihood of injury. A fixed feature can be either constructed or natural.

WSDOT Source
Design Manual

fixed service item

Definition
A stationary facility or structure such as a utility box or light standard.

WSDOT Source
Roadside Manual

flangeway gap

Definition
The gap for the train wheel at a railroad crossing. The space between the inner edge of a rail and the pedestrian crossing surface.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

flare

Definition
The widening of the approach to the roundabout to increase capacity and facilitate natural vehicle paths.

WSDOT Source
Design Manual

flasher warning assembly

Definition
Flashing beacons that are used only to supplement an appropriate warning or regulatory sign or marker. The displays consist of two alternating flashing yellow indications.

WSDOT Source
Design Manual

flood

Definition
An overflow or inundation that comes from a river or any other source, including but not limited to streams, tides, wave action, storm drains, or excess rainfall; any relatively high stream flow overtopping the natural or artificial banks in any reach of a stream.

WSDOT Source
Environmental Manual, Highway Runoff Manual

flood control project

Definition
A structural system installed to protect land and improvements from floods by the construction of dikes, river embankments, channels, or dams.

WSDOT Source
Highway Runoff Manual

flood frequency

Definition
The frequency at which the flood of interest may be expected to occur.

WSDOT Source
Highway Runoff Manual

flood peak

Definition
The highest value of the stage or discharge attained by a flood; thus, peak stage or peak discharge.

WSDOT Source
Highway Runoff Manual

floodplain (Environment)

Definition
Any land area susceptible to being inundated by flood waters from any source; usually the flat or nearly flat land on the bottom of a stream valley or tidal area that is covered by water during floods.

WSDOT Source
Environmental Manual

Related Term
See also: floodplain (Highway Runoff)

floodplain (Highway Runoff)

Definition
The total area subject to inundation by a flood, including the flood fringe and floodway.

WSDOT Source
Highway Runoff

Related Term
See also: floodplain (Environment)

floodplain boundaries

Definition
Lines on flood hazard maps that show the limits of the 100- and 500-year floodplains.

WSDOT Source
Environmental Manual

floodway (Environment)

Definition
The channel of a river or watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively raising the water surface elevation more than a designated height. Normally, the base flood is defined as the 1 percent chance flood and the designated height is one foot above the pre floodway condition.

WSDOT Source
Environmental Manual

Related Term
See also: floodway (Highway Runoff)

floodway (Highway Runoff)

Definition
The channel of the river or stream and those portions of the adjoining floodplains that are reasonably required to carry and discharge the base flood flow. The "reasonably required" portion of the adjoining floodplains is defined by flood hazard regulations.

WSDOT Source
Highway Runoff Manual

Related Term
See also: floodway (Environment)

flow control

Definition
(formerly called water quantity treatment or detention)

WSDOT Source
Highway Runoff Manual

flow control facility

Definition
A drainage facility (BMP) designed to mitigate the impacts of increased surface water and stormwater runoff flow rates generated by development. Flow control facilities are designed to either hold water for a considerable length of time and then release it by evaporation, plant transpiration, or infiltration into the ground, or to hold runoff for a short period of time and then release it to the conveyance system at a controlled rate.

WSDOT Source
Highway Runoff Manual

flow duration

Definition

The aggregate time that peak flows are equal to or above a particular flow rate of interest. For example, the amount of time that peak flows are equal to or above 50% of the 2-year peak flow rate for a period of record.

WSDOT Source

Highway Runoff Manual

flow frequency

Definition

The inverse of the probability that the flow will be equaled or exceeded in any given year (the exceedance probability). For example, if the exceedance probability is 0.01 or 1 in 100, that flow is referred to as the 100-year flow.

WSDOT Source

Highway Runoff Manual

flow path

Definition

The route that stormwater runoff follows between two points of interest.

WSDOT Source

Highway Runoff Manual

flow rate

Definition

The amount of a fluid passing a certain point in a given amount of time. In stormwater applications it is usually expressed in cubic feet per second or gallons per minute.

WSDOT Source

Highway Runoff Manual

flow splitter

Definition

A device with multiple outlets, each sized to pass a specific flow rate at a given head.

WSDOT Source

Highway Runoff Manual

flow spreader

Definition

A device with a wide enough outlet to efficiently distribute concentrated flows evenly over a large area, having common components such as trenches, perforated pipes, and berms.

WSDOT Source

Highway Runoff Manual

flyer stop

Definition

A transit stop inside the limited access boundaries.

WSDOT Source

Design Manual

footcandle (fc)

Definition

The illumination of a surface one square foot in area on which a flux of one lumen is uniformly distributed. One footcandle equals one lumen per square foot.

WSDOT Source

Design Manual

forb

Definition

An herbaceous plant, such as clover, which is not a grass, sedge, or rush.

WSDOT Source

Roadside Manual

force majeure

Definition

Language that provides for assignment of liability in the event that agreement obligations cannot be performed due to causes that are outside the control of the parties and could not be avoided by the exercise of due care, such as 'acts of God,' which include adverse weather, earthquakes, fires, floods and other natural disasters; or such as acts of war and strikes.

WSDOT Source

Consultant Services Manual

forebay

Definition

An easily maintained extra storage area provided near an inlet of a stormwater facility to trap incoming sediments before they accumulate in a pond or wetland.

WSDOT Source

Highway Runoff Manual

forecast

Definition

An estimate of future transactions, costs, revenues and adjustments to revenue based on historical analysis, forward looking economic variables, and industry benchmarks.

WSDOT Source

Toll Division

foreground

Definition
Detailed landscape generally found from the observer to 100 meters (300 feet) away.

WSDOT Source
Roadside Manual

foreslope

Definition
A sideslope that goes down as the distance increases from the roadway (fill slopes and ditch inslopes).

WSDOT Source
Design Manual, Utilities Manual

forest roadside character

Definition
A roadside classification in the natural character category, indicating predominantly natural or naturalized forest. A roadside classified as 'Forest' is characterized by natural-appearing landforms and native trees and/or understory vegetation. Zone 2 may be meadow or woody vegetation.

WSDOT Source
Roadside Policy Manual

form

Definition
The mass or shape of an object. Usually considered to be three dimensional.

WSDOT Source
Roadside Manual

formal hearing format

Definition
A hearing conducted by a moderator using a formal agenda, overseen by a hearing examiner, and recorded by a court reporter, as required by law. Limited access hearings require the use of the formal hearing format (see Design Manual Chapter 210).

WSDOT Source
Design Manual

four-leg intersection

Definition
An intersection formed by two crossing roadways.

WSDOT Source
Design Manual

fracture critical member

Definition
A steel load path member in tension, or with a tension element, whose failure would probably cause a portion of or the entire bridge to collapse.

WSDOT Source
Bridge Design Manual

frame

Definition
To design and manage roadside elements to delineate, expose, and enhance a scenic or otherwise desirable view.

WSDOT Source
Roadside Policy Manual

franchise

Definition
A utility accommodation document that defines utility ownership, type, size, location, construction methods, maintenance, duration, and other information related to the utility installation operating on highway right of way, toll facilities, and the state ferry system.

WSDOT Source
Environmental Manual

franchise consolidation

Definition
A franchise that has combined all franchises, franchise amendments, and permits into a single franchise document based on the Utility Classification Criteria.

WSDOT Source
Utilities Manual

Related Term
See also: utility classification criteria

franchise period

Definition
The amount of time a franchise is authorized before it expires: usually 25 years or as determined by WSDOT.

WSDOT Source
Utilities Manual

freeboard

Definition
The vertical distance between the design water surface elevation and the elevation of the barrier that contains the water.

WSDOT Source
Highway Runoff Manual

freeway

Definition
A divided highway that has a minimum of two lanes in each direction for the exclusive use of traffic and with full control of access.

WSDOT Source
Design Manual

freight corridor type

Definition
Designations for a highway facility found in the Freight and Goods Transportation System (FGTS).

WSDOT Source
Design Manual

frequency method (Safety Performance)

Definition
A network screening method that produces a ranking of sites according to total crashes or crashes by type or severity, or both over a given period of time, usually one year.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-6.

friable

Definition
Readily crumbled.

WSDOT Source
Roadside Manual

frontage road (Design)

Definition
An auxiliary road that is a local road or street located beside a highway for service to abutting property and adjacent areas and for control of access.

WSDOT Source
Design Manual

Related Term
See also: frontage road (Standard Specs)

frontage road (Standard Specs)

Definition
A local street or road usually next to an arterial Highway that serves abutting property and adjacent areas and controls access.

WSDOT Source
Standard Specifications

Related Term
See also: frontage road (Design)

fugitive dust

Definition
Particulate matter that is suspended in the air by wind or human activities and does not come out of an exhaust stack

WSDOT Source
Environmental Manual

full access control, limited access right of way

Definition
Highways or freeways wherein access rights have been acquired by WSDOT, where the facility is accessible only from designated locations (interchanges).

WSDOT Source
Utilities Manual

functional classification

Definition
The grouping of streets and highways according to the character of the service they are intended to provide.

WSDOT Source
Design Manual

functions, wetland

Definition
The ecological (physical, chemical, and biological) processes or attributes of wetlands without regard for their importance to society. Wetland functions include food chain support; provision of ecosystem diversity and fish and wildlife habitat; flood flow alteration; groundwater recharge and discharge; water quality improvement; and soil stabilization.

WSDOT Source
Highway Runoff Manual

G

gabion

Definition
A rectangular or cylindrical wire mesh cage (a chicken wire basket) filled with rock and used as a protection or revetment against erosion. Soft gabions, often used in streams and ponds to stabilize banks or change flow patterns, are made of geotextiles filled with soil, with cuttings placed between.

WSDOT Source
Highway Runoff Manual

gage or gauge

Definition
A device for registering precipitation, water level, discharge, velocity, pressure, or temperature. Also, a measure of the thickness of metal (for example, diameter of wire or wall thickness of steel pipe).

WSDOT Source
Highway Runoff Manual

general permit

Definition
Also referred to as a 'Programmatic Permit,' a general permit is issued by a federal or state agency to cover a specific type of activity in a certain geographic area (national, statewide, or regional). For certain NPDES general permits, WSDOT must submit a 'Notice of Intent' (NOI) to request coverage under the permit for a particular activity; the agency may approve or disapprove coverage.

WSDOT Source
Environmental Manual

genotype

Definition
The genetic make-up of an organism.

WSDOT Source
Roadside Manual

geocomposites

Definition

Prefabricated edge drains, wall drains, and sheet drains that typically consist of a cuspated or dimpled polyethylene drainage core wrapped in a geotextile. The geotextile wrap keeps the core clean so that water can freely flow through the drainage core, which acts as a conduit. Prefabricated edge drains are used in place of shallow geotextile-wrapped trench drains at the edges of the roadway to provide subgrade and base drainage. Wall drains and sheet drains are typically placed between the back of the wall and the soil to drain the soil retained by the wall.

WSDOT Source

Design Manual

Geographic Information System (GIS) (Design)

Definition

A computerized geographic information system used to store, analyze, and map data. Data may be used with GIS if the data includes the Accumulated Route Mile (ARM) or State Route Milepost (SRMP) programs. Global Positioning System (GPS) technology provides a means of collecting data and is an alternative to ARM and SRMP. WSDOT's primary desktop tool to view and analyze GIS data is ArcGIS software. GIS is used to gather and analyze data to support the purpose and need as described in the Project Summary.

WSDOT Source

Design Manual

Geographic Information System (GIS) (Right of Way)

Definition

A system of people, institutions, and information technologies for collection, storage, analysis, transformation, and presentation of geographic information.

WSDOT Source

Right of Way Manual

Geographic Information System (GIS) (Utilities)

Definition

An electronic mapping system used by WSDOT to detail boundaries of tribal organizations, environmentally sensitive areas, and numerous other items using global positioning techniques.

WSDOT Source

Utilities Manual

geogrids

Definition

A polymer grid mat constructed either of coated yarns or a punched and stretched polymer sheet. Geogrids usually have high strength and stiffness and are used primarily for soil reinforcement.

WSDOT Source
Design Manual

geologically hazardous areas

Definition
Areas that, because of their susceptibility to erosion, sliding, earthquakes, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

WSDOT Source
Highway Runoff Manual

geologist

Definition
A person who has earned a degree in geology from an accredited college or university (or who has equivalent educational training) and has at least five years of experience as a practicing geologist or four years of experience in practice and at least two years of post-graduate study, research, or teaching. The practical experience must include at least three years working in applied geology and landslide evaluation, in close association with qualified practicing geologists or geotechnical professional/civil engineers.

WSDOT Source
Highway Runoff Manual

geomembranes

Definition
Impervious polymer sheets that are typically used to line ponds or landfills. In some cases, geomembranes are placed over moisture-sensitive swelling clays to control moisture.

WSDOT Source
Design Manual

geonets

Definition
Similar to geogrids, but typically lighter weight and weaker, with smaller mesh openings. Geonets are used in light reinforcement applications or are combined with drainage geotextiles to form a drainage structure.

WSDOT Source
Design Manual

geosynthetic erosion control

Definition
The minimizing of surficial soil particle movement due to the flow of water over the surface of bare soil or due to the disturbance of soil caused by construction activities under or near bodies of water. This is the primary function of geotextiles used as silt fences or placed beneath riprap

or other stones on soil slopes. Silt fences keep eroded soil particles on the construction site, whereas geotextiles placed beneath riprap or other stones on soil slopes prevent erosion from taking place at all. In general, the permanent erosion control methods described in Design Manual Chapter 630 are only used where more natural means (like the use of biodegradable vegetation mats to establish vegetation to prevent erosion) are not feasible. These functions control some of the geosynthetic properties, such as apparent opening size (AOS) and permittivity, and in some cases load-strain characteristics. The application will also affect the geosynthetic installation conditions. These installation conditions influence the remaining geosynthetic properties needed, based on the survivability level required.

WSDOT Source
Design Manual

geosynthetic filtration

Definition
The passage of water through the geosynthetic relatively unimpeded (permeability or permittivity) without allowing passage of soil through the geosynthetic (retention). This is the primary function of geotextiles in underground drainage applications.

WSDOT Source
Design Manual

geosynthetic survivability

Definition
The ability of the geosynthetic to resist installation conditions without significant damage, such that the geosynthetic can function as intended. Survivability affects the strength properties of the geosynthetic required.

WSDOT Source
Design Manual

geotextile

Definition
Durable synthetic fabrics used to reinforce soils and construct temporary sediment control BMPs for detaining runoff and trapping sediment.

WSDOT Source
Highway Runoff Manual

geotextiles (nonwoven)

Definition
A sheet of continuous or staple fibers entangled randomly into a felt for needle-punched nonwovens and pressed and melted together at the fiber contact points for heatbonded nonwovens. Nonwoven geotextiles tend to have low-to-medium strength and stiffness with high elongation at failure and relatively good drainage characteristics. The high elongation characteristic gives them superior ability to deform around stones and sticks.

WSDOT Source
Design Manual

geotextiles (woven)

Definition
Slit polymer tapes, monofilament fibers, fibrillated yarns, or multifilament yarns simply woven into a mat. Woven geotextiles generally have relatively high strength and stiffness and, except for the monofilament wovens, relatively poor drainage characteristics.

WSDOT Source
Design Manual

GIS Workbench

Definition
An ArcView geographic information system tool maintained by the WSDOT HQ Geographic Services Office and the HQ Office of Information Technology to provide staff with access to comprehensive, current, and detailed environmental and natural resource management data.

WSDOT Source
Highway Runoff Manual

glare

Definition
A visual phenomenon which occurs when the intensity of a light source within the visual field is substantially greater than the visual adaptation level, causing physical discomfort and/or reduced visibility.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-4.

glass beads

Definition
Small glass spheres used in highway pavement markings to provide the necessary retroreflectivity.

WSDOT Source
Design Manual

good faith efforts

Definition
The efforts taken to achieve a DBE goal or other requirement of a contract/agreement, which, by their scope, intensity, and appropriateness to the objective, can be reasonably expected to fulfill the program goal or requirement.

WSDOT Source
Design Manual

goodness-of-fit statistics (GOF)

Definition
The goodness of fit of a statistical model describes how well it fits a set of observations, typically measuring the discrepancy between observed values and the values expected under the model in question. GOF measures are not statistical tests.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-7.

gore (area) (Design)

Definition
The area downstream from the intersection of the shoulders of the main line and exit ramp. Although generally referring to the area between a main line and an exit ramp, the term may also be used to refer to the area between a main line and an entrance ramp.

WSDOT Source
Design Manual

Related Term
See also: gore (area) (Highway Runoff)

gore (area) (Highway Runoff)

Definition
The tapering paved area between two lanes, on which travel is not allowed.

WSDOT Source
Highway Runoff Manual

Related Term
See also: gore (area) (Design)

gore nose

Definition
At an exit ramp, the point at the end of the gore area where the paved shoulders of the main line and the ramp separate (see Design Manual Chapter 1360) or the beginning of traffic barrier, not including any impact attenuator. Also, the similar point at an entrance ramp.

WSDOT Source
Design Manual

governmental entity pool

Definition

A group of public agencies joined together for the purpose of sharing risk and reducing insurance expenses.

WSDOT Source

Utilities Manual

grade

Definition

The slope of a road, channel, or natural ground; the finished surface of a canal bed, roadbed, top of embankment, or bottom of excavation; or any surface prepared for the support of construction such as paving or the laying of a conduit.

WSDOT Source

Highway Runoff Manual

grade break

Definition

The intersection of two adjacent surface planes of different grade.

WSDOT Source

Design Manual, Design - ADA/Pedestrian

gradient terrace

Definition

A terrace cut horizontally into a slope, designed according to criteria that consider slope, length, and height.

WSDOT Source

Highway Runoff Manual

grading

Definition

Modification of the ground surface by cuts and/or fills.

WSDOT Source

Roadside Manual

greenhouse gases (GHG)

Definition

Greenhouse gases absorb and emit radiation within the thermal infrared range. Common GHGs in the Earth's atmosphere include water vapor, carbon dioxide, methane, nitrous oxide, ozone, and chlorofluorocarbons.

WSDOT Source

Environmental Manual

groundcover

Definition
Low-growing plants that form a dense, extensive growth and tend to prevent weeds and soil erosion.

WSDOT Source
Roadside Manual

groundwater

Definition
Water that occurs below the surface of the earth, which is contained in pore spaces. It is either passing through or standing in the soil and underlying strata and is free to move under the influence of gravity.

WSDOT Source
Environmental Manual, Roadside Manual

Related Term
See also: groundwater (Highway Runoff)

groundwater (Highway Runoff)

Definition
Water in a saturated zone or stratum beneath the land surface or a surface water body.

WSDOT Source
Highway Runoff Manual

Related Term
See also: groundwater

groundwater recharge

Definition
Inflow to a groundwater reservoir.

WSDOT Source
Highway Runoff Manual

groundwater table

Definition
The free surface of the groundwater, which is subject to atmospheric pressure under the ground and is seldom static, generally rising and falling with the season, the rate of withdrawal, the rate of restoration, and other conditions.

WSDOT Source
Highway Runoff Manual

grubbing

Definition

The removal and disposal of all unwanted vegetative matter from underground, such as sod, stumps, roots, buried logs, or other debris.

WSDOT Source

Highway Runoff Manual

guidance

Definition

The process of directing the course of the driver through signing and other visual clues.

WSDOT Source

Roadside Manual

gully (Highway Runoff)

Definition

A channel caused by the concentrated flow of surface and stormwater runoff over unprotected erodible land.

WSDOT Source

Highway Runoff Manual

Related Term

See also: gully (Roadside)

gully (Roadside)

Definition

A channel or miniature valley cut by concentrated runoff but through which water commonly flows only during and immediately after heavy rains or snowmelt.

WSDOT Source

Roadside Manual

Related Term

See also: gully (Highway Runoff)

H

habitable floor space

Definition

That space used for sleeping, living, cooking, or dining purposes. Excludes such enclosed places as closets, pantries, bath or toilet rooms, service rooms, connection corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

WSDOT Source
Right of Way Manual

habitat (Highway Runoff)

Definition
The specific area or environment in which a particular type of plant or animal lives. An organism's habitat must provide all the basic requirements for life and should be protected from harmful biological, chemical, and physical alterations.

WSDOT Source
Highway Runoff Manual

Related Terms
See also: habitat (Roadside), habitat (Utilities)

habitat (Roadside)

Definition
The environment occupied by individuals of a particular species, population, or community.

WSDOT Source
Roadside Manual

Citation
Transportation Research Board. “Report 379: Guidelines for the Development of Wetland Replacement Areas." Washington D.C. National Academy Press. 1996. p. 72.

Related Terms
See also: habitat (Highway Runoff), habitat (Utilities)

habitat (Utilities)

Definition
The physical or natural environment where a species or population may live.

WSDOT Source
Utilities Manual

Related Terms
See also: habitat (Roadside), habitat (Highway Runoff)

hardpan

Definition
A cemented or compacted and often clay-like layer of soil that is impenetrable by roots (also known as glacial till).

WSDOT Source
Highway Runoff Manual

hazard tree

Definition
A tree that has been assessed as having characteristics that, in the opinion of a qualified tree risk assessor, make it an unacceptable risk for continued retention. To be a hazard tree, there must be probability of failure of either the whole tree or a large limb, and there must be a target. 'Targets are people and/or property.'

WSDOT Source
Roadside Policy

hazardous substance (Environment)

Definition
Hazardous substance designated under CERCLA in 42 USC 9601(14) and 40 CFR 116 that pose a threat to public health or the environment. Federal regulation of hazardous substances excludes petroleum, crude oil, natural gas, natural gas liquids or synthetic gas usable for fuel. State regulation of hazardous substances is more stringent and includes petroleum products, as addressed in WAC 173-340-200. Hazardous Waste & Solid wastes designated in 40 CFR 261 and regulated as hazardous and/or mixed waste by the USEPA. Mixed waste includes both hazardous and radioactive components; waste that is solely radioactive is not regulated as hazardous waste. Hazardous waste includes specific listed waste that is generated from particular processes or activities or exhibits certain reactive, corrosive, toxic, or ignitable characteristics. Hazardous waste is also regulated by Ecology as dangerous waste and State-only dangerous waste.

WSDOT Source
Environmental Manual

Related Term
See also: hazardous substance (Highway Runoff)

hazardous substance (Highway Runoff)

Definition
Any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the characteristics or criteria of hazardous waste (RCW 70.105.010).

WSDOT Source
Highway Runoff Manual

Related Terms
See also: dangerous waste (Environment), hazardous substance (Environment)

hazardous waste

Definition
All dangerous and extremely hazardous waste, including substances having radioactive or hazardous components (RCW 70.105.010). (See also dangerous waste.)

WSDOT Source
Highway Runoff Manual

Related Term
See also: dangerous waste (Highway Runoff)

head (hydraulic)

Definition
The height of water above any plane of reference; the energy, either kinetic or potential, possessed by each unit weight of a liquid, expressed as the vertical height through which a unit weight would have to fall to release the average energy possessed; used in various compound terms such as pressure head, velocity head, and head loss.

WSDOT Source
Highway Runoff Manual

hearing

Definition
An assembly to which the public is invited and at which participation is encouraged.

WSDOT Source
Design Manual

hearing agenda

Definition
An outline of the actual public hearing elements, used with formal hearings. (See Design Manual Chapter 210 for contents.)

WSDOT Source
Design Manual

hearing coordinator

Definition
The Development Services & Access Manager within the HQ Access and Hearings Section.

WSDOT Source
Design Manual

hearing examiner

Definition
An administrative law judge from the Office of Administrative Hearings, or a WSDOT designee, appointed to moderate a hearing.

WSDOT Source
Design Manual

hearing script

Definition
A written document of text to be presented orally by department representatives at a hearing.

WSDOT Source
Design Manual

hearing summary

Definition
Documentation prepared by the region and approved by Headquarters that summarizes environmental, corridor, and design hearings. (See Design Manual Chapter 210 for content requirements.)

WSDOT Source
Design Manual

hearing transcript

Definition
A document prepared by the court reporter that transcribes verbatim all oral statements made during the hearing, including public comments. This document becomes part of the official hearing record.

WSDOT Source
Design Manual

heavy metals

Definition
Metals of high specific gravity, present in municipal and industrial wastes, that pose long-term environmental hazards. Such metals include cadmium, chromium, cobalt, copper, lead, mercury, nickel, and zinc.

WSDOT Source
Highway Runoff Manual

herbaceous plant

Definition
Any flowering plant except those developing persistent woody bases and stems above ground.

WSDOT Source
Roadside Manual

high-occupancy toll (HOT) lane

Definition
A managed lane that combines a high-occupancy vehicle lane and a toll lane.

WSDOT Source
Design Manual

high-occupancy vehicle (HOV)

Definition
A vehicle that meets the occupancy requirements of the facility as authorized by WAC 468-510-010.

WSDOT Source
Design Manual

high pavement type

Definition
Portland cement concrete pavement or hot mix asphalt (HMA) pavement on a treated base.

WSDOT Source
Design Manual

high proportion of crashes method

Definition
A network screening technique based on the probability of a higher-than-threshold crash frequency or type.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-7.

high-risk utility object

Definition
A fixed-surface utility object that has documented collision history.

WSDOT Source
Utilities Manual

high-speed roadway

WSDOT Source
Design Manual

Related Term
See also: speed

high-use roadway and parking area

Definition
Roadways and parking areas that the Washington State Department of Ecology presumes will generate concentrations of oil that need to be managed. With respect to oil control, absorptive BMPs (CAVFS, bioinfiltration pond) should be used on these high-use roads and parking areas. Examples of high-use roadways and parking areas include the following:

- Rest areas with an expected trip end count greater than or equal to 300 vehicles per day
- Eastern Washington roads with ADT > 30,000

WSDOT Source
Highway Runoff Manual

high-use site, high-use intersection

Definition
A site that the Washington State Department of Ecology presumes will generate high concentrations of oil due to high traffic turnover or the frequent transfer of oil. Examples of high-use sites include the following:

- An intersection where either ≥15,000 vehicles (ADT) must stop to cross a roadway with ≥25,000 vehicles (ADT) or vice versa
- Maintenance facilities that park, store, or maintain 25 or more vehicles (trucks or heavy equipment) that exceed 10 tons gross weight each

WSDOT Source
Highway Runoff Manual

highway (Design)

Definition
A general term denoting a street, road, or public way for the purpose of vehicular travel, including the entire area within the right of way.

WSDOT Source
Design Manual

Related Terms
See also: highway (Highway Runoff), highway (Standards Specs)

highway (Highway Runoff)

Definition
A main public road connecting towns and cities.

WSDOT Source
Highway Runoff Manual

Related Terms
See also: highway (Design), highway (Standards Specs)

highway (Standard Specs)

Definition
A public way for vehicles, including the entire Right of Way.

WSDOT Source
Standard Specifications

Related Terms
See also: highway (Design), highway (Highway Runoff)

Highway Construction Program (HCP)

Definition
A comprehensive multiyear program of highway Improvement and Preservation projects selected by the Legislature.

WSDOT Source
Design Manual

Highway Engineers Station (HES)

Definition
A precisely located survey point measured in increments of 100 feet. When noted on the map these usually have the station ID plus some distance from that station, for example 63 + 34.21. These are specific to WSDOT.

WSDOT Source
Right of Way Manual

highway facility

Definition
A length of roadway that may consist of connected sections, segments, and intersections.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-6.

highway LID

Definition
A structure built with green space which interconnects neighborhoods otherwise cut off or impacted by freeways, with or without local roads. If carrying local roads, the structure must have a deck area at least twice the area of the roads it carries. Highway 'LIDS' shall be inventoried as tunnels under the NTIS.

WSDOT Source
Bridge Design Manual

Highway Runoff Manual (HRM)

Definition
WSDOTs Highway Runoff Manual M 31-16 directs the planning and design of stormwater management facilities that meet state and Federal regulations for new and redeveloped Washington state highways, rest areas, park-and-ride lots, ferry terminals, and highway maintenance facilities throughout the state.

WSDOT Source
Environmental Manual

highway safety holistic approach

Definition
A multidisciplinary approach to the reduction of the number and/or severity of crashes.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-7.

Highway System Plan (HSP)

Definition
A WSDOT planning document that addresses the state highway system element of the Washington Transportation Plan (WTP). The HSP defines the service objectives, action strategies, and costs to maintain, operate, preserve, and improve the state highway system for 20 years. The HSP is the starting point for the state highway element of the CIPP and the state Highway Construction Program. It is periodically updated to reflect completed work and changing transportation needs, policies, and revenues. It compares highway needs to revenues, describes the 'constrained' costs of the highway programs, and provides details of conceptual solutions and performance in the improvement program.

WSDOT Source
Design Manual

Highways of Statewide Significance (HSS)

Definition
Includes interstate highways and other principal arterials that are needed to connect major communities in the state. The designation helps assist with the allocation and direction of funding.

WSDOT Source
Design Manual

historic land cover

Definition
The native vegetation and soils that existed at a site prior to the influence of Euro-American settlement. The predeveloped condition shall be assumed to be forested land cover unless reasonable historic information is provided that indicates the site was prairie prior to settlement.

WSDOT Source
Highway Runoff Manual

historic preservation

Definition
Identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance and reconstruction, or any combination of the foregoing activities relating to historic properties.

WSDOT Source
Environmental Manual

historic property

Definition
A property or cultural resource that is listed in or eligible for listing in the National Register of Historic Places, and, under SEPA, in state and local historic registers, including eligible properties that have not yet been discovered or evaluated (such as archaeological sites). Historic properties may be buildings or other structures, objects, sites, districts, archaeological resources, and traditional cultural properties (landscapes).

WSDOT Source
Environmental Manual

HMA

Definition
Hot Mix Asphalt (also known as ACP or Asphalt Concrete Pavement).

WSDOT Source
Utilities Manual

hog fuel

Definition
Wood residues processed through a chipper or mill to produce coarse chips. Residues may include bark, sawdust, planer shavings, wood chunks, and small amounts of mineral material.

WSDOT Source
Highway Runoff Manual

holder table

Definition
A part of the UFP database table that contains the names of utility owners that have utility accommodation documents with WSDOT (also known as the UFP Holder Table).

WSDOT Source
Utilities Manual

horizon year

Definition
Typically considered to be 20 years from the year construction is scheduled to begin, as described in Design Manual Chapter 1103.

WSDOT Source
Design Manual

Related Term
See also: design year (Design)

horizontal directional drilling (HDD)

Definition
A trenchless construction method allowing a driller to 'steer' the drill head and thus place pipe material along a desired path (also used as an alternative to open cutting). Allows utilities to be installed and avoid obstacles such as structure elements or environmentally sensitive areas.

WSDOT Source
Utilities Manual

hot spot analysis

Definition
Estimate of future localized CO and PM (10, 2.5) pollutant concentrations and a comparison of those concentrations to the National Ambient Air Quality Standards. Uses an air quality dispersion model to analyze the effects of emissions on air quality near the project on a scale smaller than the entire nonattainment or maintenance area (e.g., roadway intersections or transit terminal). (See 40 CFR 93.101 and 40 CFR 93.116.)

WSDOT Source
Environmental Manual

household income, gross

Definition
Household Income, Gross Income from all sources, including amounts paid directly to the family (or individual) through public assistance agencies or programs.

WSDOT Source
Right of Way Manual

HOV direct access ramp

Definition
An on- or off-ramp exclusively for the use of HOVs that provides access between a freeway HOV lane and a street, transit support facility, or another freeway HOV lane without weaving across general-purpose lanes.

WSDOT Source
Design Manual

HOV facility

Definition
A priority treatment for HOVs.

WSDOT Source
Design Manual

HQ

Definition
The WSDOT Headquarters in Olympia.

WSDOT Source
Consultant Services Manual

human factors

Definition
The application of knowledge about human abilities, limitations, and other human characteristics to the design of equipment, tasks, and jobs. Human factors study provides an understanding of how people perform as a system component influenced by many environmental, psychological, and other factors.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-4.

human factors coding

Definition
Organizing and displaying information with similar content (warning signs, regulatory information, etc.) in the same style to enhance the viewer's comprehension of the information.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-2.

humus

Definition
Decomposed organic matter that remains once visible plant structure can no longer be determined.

WSDOT Source
Roadside Manual

hydraulic conductivity

Definition
The quality of saturated soil that enables water or air to move through it (also known as permeability coefficient).

WSDOT Source
Highway Runoff Manual

hydraulic conveyance system

Definition
Natural and man-made drainage facilities that collect, contain, and provide for the flow of surface and stormwater from the highest elevations down to a receiving water. The natural elements of the conveyance system include swales, and small drainage courses, streams, rivers, lakes, and wetlands. The man-made elements of the conveyance system include gutters, ditches, pipes, channels, and most retention/detention facilities.

WSDOT Source
Roadside Manual

hydraulic gradient

Definition
Slope of the potential head relative to a fixed datum.

WSDOT Source
Highway Runoff Manual

hydraulic residence time

Definition
The time required for a slug of water to move through a system. In the most simplistic situation, once inflows to a water body cease, the hydraulic residence time is equal to the volume of the water body divided by the discharge rate (assuming no short-circuiting of the system).

WSDOT Source
Highway Runoff Manual

hydrograph

Definition
A graph of runoff rate, inflow rate, or discharge rate past a specific point over time.

WSDOT Source
Highway Runoff Manual

hydrologic cycle

Definition
The circuit of water movement from the atmosphere to the earth and returning to the atmosphere through various stages or processes such as precipitation, interception, runoff, infiltration, percolation, storage, evaporation, and transpiration.

WSDOT Source
Highway Runoff Manual

hydrologic soil groups

Definition
A soil characteristic classification system defined by the U.S. Soil Conservation Service in which a soil may be categorized into one of four soil groups (A, B, C, or D) based upon infiltration rate and other properties (based on Water Quality Prevention, Identification, and Management of Diffuse Pollution by Vladimir Novotny and Harvey Olem, page 109). Soil groups include:

- Type A - Low runoff potential. Soils having high infiltration rates, even when thoroughly wetted and consisting chiefly of deep, well-drained to excessively drained sands or gravels. These soils have a high rate of water transmission.
- Type B - Moderately low runoff potential. Soils having moderate infiltration rates when thoroughly wetted and consisting chiefly of moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.
- Type C - Moderately high runoff potential. Soils having slow infiltration rates when thoroughly wetted and consisting chiefly of soils with a layer that impedes downward movement of water, or soils with moderately fine to fine textures. These soils have a slow rate of water transmission.
- Type D - High runoff potential. Soils having very slow infiltration rates when thoroughly wetted and consisting chiefly of clay soils with a high swelling potential; soils with a permanent high-water table; soils with a hardpan, till, or clay layer at or near the surface; soils with a compacted subgrade at or near the surface; and shallow soils or nearly impervious material. These soils have a very slow rate of water transmission.

WSDOT Source
Highway Runoff Manual

Hydrological Simulation Program Fortran (HSPF)

Definition
A continuous simulation hydrologic model that transforms an uninterrupted rainfall record into a concurrent series of runoff or flow data by means of a set of mathematical algorithms that represent the rainfall-runoff process at some conceptual level.

WSDOT Source
Highway Runoff Manual

hydrology (Highway Runoff)

Definition
The science of the behavior of water in the atmosphere, on the surface of the earth, and below ground.

WSDOT Source
Highway Runoff Manual

Related Term
See also: hydrology (Roadside)

hydrology (Roadside)

Definition
The science that relates to the occurrence, properties, and movement of water on the earth. It includes water found in the oceans, lakes, wetlands, streams, and rivers, as well as in upland areas, above and below ground, and in the atmosphere.

WSDOT Source
Roadside Manual

Related Term
See also: hydrology (Highway Runoff)

hydroperiod

Definition
A seasonal occurrence of flooding or soil saturation; it encompasses the depth, frequency, duration, and seasonal pattern of inundation.

WSDOT Source
Highway Runoff Manual

hyetograph

Definition
A graph of percentages of total precipitation for a series of time steps representing the total time during which the precipitation occurs.

WSDOT Source
Highway Runoff Manual

I

illicit discharge

Definition
All non-stormwater discharges to stormwater drainage systems that cause or contribute to a violation of state water quality, sediment quality, or groundwater quality standards, including but not limited to sanitary sewer connections, industrial process water, interior floor drains, car washing, and gray-water systems.

WSDOT Source
Highway Runoff Manual

imminent threat

Definition
In roadside forestry, immediate danger of harm to people, the traveling public, or the facility by a leaning, cracked, or split tree or branches.

WSDOT Source
Roadside Policy Manual

impact

Definition
An action that adversely affects a wetland or other ecosystem; for example, road construction, timber clearing, or agricultural activities that result in wetland conversion or degradation.

WSDOT Source
Roadside Manual

Citation
Transportation Research Board. “Report 379: Guidelines for the Development of Wetland Replacement Areas." Washington D.C. National Academy Press. 1996. p. 72.

impact (wetlands)

Definition
Adverse effect, whether direct, indirect, temporary, or cumulative. Typical adverse effects to wetlands or other waters include filling, draining, altering natural drainage patterns, increasing or decreasing water levels, discharging sediment or toxicants from runoff, mechanically removing wetland vegetation, altering wetland or stream buffers, or compacting wetland soils.

WSDOT Source
Environmental Manual

impact attenuator system

Definition
A device that acts primarily to bring an errant vehicle to a stop at a deceleration rate tolerable to the vehicle’s occupants or to redirect the vehicle away from a fixed feature.

WSDOT Source
Design Manual

Impacted Community

Definition
Noise sensitive receptor sites (such as schools or neighborhoods) where people would be exposed to substantially increased noise levels or noise levels that approach abatement criteria due to a project.

WSDOT Source
Environmental Manual

impaired waters

Definition

Water bodies not fully supporting their beneficial uses, as defined under the federal Clean Water Act, Section 303(d). See the Washington State Department of Ecology 303(d) list.

WSDOT Source

Highway Runoff Manual

impervious surface

Definition

A hard surface area that either prevents or retards the entry of water into the soil mantle as occurs under natural conditions (prior to development) and from which water runs off at an increased rate of flow or in increased volumes. Common impervious surfaces include but are not limited to rooftops, walkways, patios, driveways, parking lots, storage areas, concrete or asphalt paving, gravel roads, packed earthen materials (such as compact dirt), and oiled or macadam surfaces. Open, uncovered retention/detention facilities are not considered impervious surfaces for the purpose of determining whether the thresholds for application of minimum requirements are exceeded. Open, uncovered retention/detention facilities are considered impervious surfaces for the purpose of runoff modeling. For Minimum Requirement determination, permeable pavement is considered an impervious surface.

WSDOT Source

Highway Runoff Manual

implementing agreement

Definition

The Implementing Agreement between the Washington State Department of Ecology and the Washington State Department of Transportation Regarding Compliance with the State of Washington Surface Water Quality Standards (also abbreviated as WQIA: Water Quality Implementing Agreement).

WSDOT Source

Highway Runoff Manual

impoundment

Definition

A natural or constructed containment for surface water.

WSDOT Source

Highway Runoff Manual

improvement

Definition

Streets (with or without curbs or gutters), sidewalks, crosswalks, parking lots, water mains, sanitary and storm sewers, drainage facilities, street trees, and other appropriate items.

WSDOT Source
Highway Runoff Manual

in-lieu fee program

Definition
A program administered by a governmental or nonprofit natural resources management entity that provides compensatory mitigation and sells mitigation credits. With regulatory approval, the obligation to provide compensatory mitigation is transferred from the permittee to the in-lieu fee entity when the credit purchase is complete.

WSDOT Source
Environmental Manual

Incidental Purchase Expense

Definition
The amount necessary to pay or reimburse an eligible displaced persons for certain actual costs incurred incidental to the purchase of an eligible replacement dwelling. These include, but are not limited to, recording fees, escrow fees, title insurance premiums, appraisal fees, credit report fees, home inspection fees, revenue stamps, and transfer taxes. (Does not include prepayment of any expenses.)

WSDOT Source
Right of Way Manual

incidental take (ESA)

Definition
Effects that are caused by the proposed action and are later in time but are still reasonably certain to occur. (50 CFR 402.02)

WSDOT Source
Environmental Manual

incorporated city or town

Definition
A city or town operating under RCW 35 or RCW 35A.

WSDOT Source
Design Manual

independent variable

Definition
A variable that is observed or manipulated to affect the dependent variable.

WSDOT Source
Safety Performance Manual

Synonyms
explanatory variable, predictor variable (non-preferred)

Related Term
dependent variable

indicator

Definition
One of the specific environmental attributes measured or quantified through field sampling, remote sensing, or compilation of existing data from maps or land use reports, used to assess ecosystem condition or functions or exposure to environmental stress agents.

WSDOT Source
Roadside Manual

Citation
Transportation Research Board. “Report 379: Guidelines for the Development of Wetland Replacement Areas." Washington D.C. National Academy Press. 1996.

indirect cost rate

Definition
The overhead percentage rate applied to the total cost of work performed by WSDOT for another entity under a reimbursable agreement. (See the Accounting Manual for more information).

WSDOT Source
Consultant Services Manual

Related Term
See also: reciprocal overhead agreement

indirect effects

Definition
The indirect land use effects involve potential development, or redevelopment of buildable lands within the influence of the transportation project. These changes are driven and constrained by social and economic factors beyond WSDOT or the local public agencyís control. Such effects are difficult to predict and often controversial. Projects that do not increase capacity, change the level of service, or significantly reduce travel time are unlikely to change land use.

WSDOT Source
Environmental Manual

indirect impacts / effects (NEPA)

Definition
Effects or impacts caused by the proposed action or alternative that occur later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include effects

related to 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 (40 CFR 1508.8).

WSDOT Source
Environmental Manual

individual permit

Definition
A permit issued to WSDOT by a regulatory agency for a particular activity or project that is not covered by a General Permit; usually needed for more complex or extensive projects.

WSDOT Source
Environmental Manual

Induced Growth or Growth Inducing Effect

Definition
Terms used as examples of an indirect effect related to changes in the pattern of land use, population density, or growth rate. (WSDOT discourages the use of these terms because they are vague and confuse the local decisions regarding planned growth under the Washington State Growth Management Act with project-specific effects).

WSDOT Source
Environmental Manual

infiltration

Definition
The downward movement of water from the surface to the subsoil.

WSDOT Source
Highway Runoff Manual, Roadside Manual

infiltration facility or system

Definition
A drainage facility designed to use the hydrologic process of surface and stormwater runoff soaking into the ground (commonly called percolation), to dispose of surface and stormwater runoff.

WSDOT Source
Highway Runoff Manual

infiltration pond

Definition
A facility that provides stormwater quantity control by containing excess runoff in a detention facility, then percolating that runoff into the surrounding soil.

WSDOT Source
Highway Runoff Manual

infiltration rate

Definition

The rate, usually expressed in inches per hour, at which water moves downward (percolates) through the soil profile. Short-term infiltration rates may be inferred from soil analysis or texture or derived from field measurements. Long-term infiltration rates are affected by variability in soils and subsurface conditions at the site, the effectiveness of pretreatment or influent control, and the degree of long-term maintenance of the infiltration facility.

WSDOT Source

Highway Runoff Manual

informal hearing format

Definition

A hearing where oral comments are recorded by a court reporter, as required by law. An informal hearing often uses the 'open house' format (see Design Manual Chapter 210). A formal agenda and participation by a hearing examiner are optional.

WSDOT Source

Design Manual

information display

Definition

A kiosk that includes a map of Washington, local travel services, and attractions. In selected safety rest areas, commercial travel information is provided. The display may be free standing or mounted.

WSDOT Source

Roadside Manual

ingress

Definition

Right or permission to enter.

WSDOT Source

Right of Way Manual

initial franchise

Definition

The first franchise issued to a utility for a particular installation.

WSDOT Source

Utilities Manual

initial franchise period

Definition

The period of time - up to, but not exceeding, 25 years - for which an initial franchise is issued.

WSDOT Source
Utilities Manual

initiation of negotiations, date of

Definition
The date on which the state makes the first personal contact with the parcel owner (or his designated representative) where price is discussed. This is also the date of the state's initial Firm Offer Letter. The 'date of initiation of negotiations' for a project is the earliest date of initiation of negotiations for any parcel (except advance acquisitions) on the project.

WSDOT Source
Right of Way Manual

injection well

Definition
Any disposal system designed to place fluids, including highway runoff and treated wastewater from on-site sewage disposal systems, into the subsurface. Such systems include bored, drilled, or dug holes; for example dry wells, French drains, and drain fields.

WSDOT Source
Environmental Manual

inlet

Definition
A form of connection between the surface of the ground and a drain or sewer for the admission of surface and stormwater runoff.

WSDOT Source
Highway Runoff Manual

inner corridor access

Definition
A means of entering or leaving a roadside area inside of the state limited access right of way without crossing over, under, or physically through the plane of limited access.

WSDOT Source
Design Manual

inner harbor line

Definition
A line determined by the State Harbor Line Commission which is located and established in navigable tidal waters between the line of ordinary high tide and the outer harbor line and constituting the inner boundary of the harbor area.

WSDOT Source
Right of Way Manual

innerduct

Definition
A multitubular enclosure for protecting wires or cables, located inside a larger conduit or duct.

WSDOT Source
Utilities Manual

inscribed circle

Definition
The outer edge of the circulating roadway.

WSDOT Source
Design Manual

inscribed circle diameter (ICD)

Definition
The diameter of the inscribed circle (see Design Manual Chapter 1320).

WSDOT Source
Design Manual

insertion loss

Definition
The actual acoustical benefit derived from a noise barrier.

WSDOT Source
Roadside Manual

inspector

Definition
The Engineer’s representative who inspects Contract performance in detail.

WSDOT Source
Standards and Specifications

Citation
U. S. Department of the Interior, Bureau of Land Management. 'BLM Manual: visual resource management', Washington D. C. 1977.

intactness

Definition
Untouched or unaltered, especially by anything that harms or diminishes its character.

WSDOT Source
Roadside Manual

Integrated Realty Information System (IRIS)

Definition

The computerized inventory system used by RES to track all real property owned and leased for the benefit of ITS Communications and Wireless Technology.

WSDOT Source

Right of Way Manual

integrated vegetation management (IVM) (Roadside)

Definition

A vegetation management approach focusing on using long-term solutions to establish stable, low-maintenance roadside plant communities compatible with highway safety, maintenance objectives, neighbors' concerns, and environmental quality, while at the same time deterring invasion of undesirable plants.

WSDOT Source

Roadside Manual

integrated vegetation management (IVM) (Roadside Policy)

Definition

The establishment of low-maintenance beneficial vegetation and the suppression of unwanted vegetation through the integration of biological, cultural, manual, mechanical, and educational methods. Chemical controls are used only when needed. IVM uses plant growth characteristics, principles of plant succession, and knowledge of natural and human-related factors affecting environmental change to achieve management goals, while minimizing impacts on the environment.

WSDOT Source

Roadside Policy Manual

intelligent transportation systems (ITS)

Definition

An integrated system of advanced sensor, computer, electronics, and communication technologies and management strategies, used to increase the safety and efficiency of the surface transportation system.

WSDOT Source

Design Manual

intensity

Definition

This refers to the severity of a proposed action's impact on the environment. CEQ NEPA Regulations (40 CFR 1508.27(b)) list several factors to consider. Context and intensity are considered together in determining the significance of an impact (the more sensitive the environmental context, the less intense an impact needs to be to have a potentially significant effect).

WSDOT Source
Environmental Manual

interception (hydraulic)

Definition
The process by which precipitation is caught and held by foliage, twigs, and branches of trees, shrubs, and other vegetation. Often used to mean interception loss or the amount of water evaporated from the precipitation intercepted.

WSDOT Source
Highway Runoff Manual

interceptor dike

Definition
A soil berm used to intercept and redirect stormwater runoff to a treatment facility.

WSDOT Source
Highway Runoff Manual

interchange

Definition
A system of interconnecting roadways, in conjunction with one or more grade separations, providing for the exchange of traffic between two or more intersecting highways or roadways.

WSDOT Source
Design Manual

Interchange Justification Report (IJR)

Definition
The document used to propose a revision to limited access freeways.

WSDOT Source
Design Manual

interflow

Definition
That portion of rainfall that infiltrates into the soil and moves laterally through the upper soil horizons until intercepted by a stream channel or until it returns to the surface, for example, in a roadside ditch, wetland, spring, or seep. Interflow is a function of soil system depth, permeability, and water-holding capacity.

WSDOT Source
Highway Runoff Manual

interim use improvement value

Definition
(1) The difference, if any, between the value of land under a highest and best use premise if vacant and the value of the property under its present use as improved.

(2) The amount of value contributed by a building which is an under-improvement by reason of a change in the highest and best use of the land on which it is located.

WSDOT Source
Right of Way Manual

intermediate pavement type

Definition
Hot mix asphalt pavement on an untreated base.

WSDOT Source
Design Manual

intermediate speed roadway

WSDOT Source
Design Manual

Related Term
See also: speed

intermittent stream or channel

Definition
A stream or portion of a stream that flows only in direct response to precipitation; receives little or no water from springs and no continual supply from melting snow or other sources; and is dry for a large part of the year, ordinarily more than three months.

WSDOT Source
Highway Runoff Manual

interpolation

Definition
The determination of the elevation of a location between two known points. Done by calculating the slope between known points and using the horizontal distance from the known point to the intermediate point to calculate the elevation of the intermediate point.

WSDOT Source
Roadside Manual

intersection

Definition
An at-grade access point connecting a state highway with a road or street duly established as a public road or public street by the local governmental entity.

WSDOT Source
Design Manual

intersection angle

Definition
The angle between any two intersecting legs at the point the centerlines intersect.

WSDOT Source
Design Manual

intersection area

Definition
The area of the intersecting roadways bounded by the edge of traveled ways and the area of the adjacent roadways to the farthest point: (a) the end of the corner radii, (b) through any marked crosswalks adjacent to the intersection, (c) to the stop bar, or (d) 10 feet from the edge of shoulder of the intersecting roadway (see Design Manual Chapter 1310).

WSDOT Source
Design Manual

intersection at grade

Definition
The general area where a roadway or ramp terminal is met or crossed at a common grade or elevation by another roadway.

WSDOT Source
Design Manual

intersection control beacon

Definition
(also flashing beacon) A secondary control device, generally suspended over the center of an intersection, that supplements intersection warning signs and stop signs. One display per approach may be used; however, two displays per approach are desirable. Intersection control beacons are installed only at intersections that control two or more directions of travel.

WSDOT Source
Design Manual

intersection density

Definition
The ratio of intersections per mile.

WSDOT Source
Design Manual

intersection design vehicle

Definition
A specific selection of the vehicle to be used to dimension intersection design elements at an individual intersection.

WSDOT Source
Design Manual

intersection leg

Definition
Any one of the roadways radiating from and forming part of an intersection.

WSDOT Source
Design Manual

intersection sight distance

Definition
The length of roadway visible to the driver of a vehicle entering an intersection.

WSDOT Source
Design Manual

Interstate System

Definition
A network of routes designated by the state and the Federal Highway Administration (FHWA) under terms of the federal-aid acts as being the most important to the development of a national system. The Interstate System is part of the principal arterial system.

WSDOT Source
Design Manual

invasive vegetation

Definition
Those (typically) nonnative plant species that will often outcompete native plant communities.

WSDOT Source
Roadside Manual

Inventory Control Number (IC No.)

Definition
An identification number assigned to each parcel of real property or real property interest owned or controlled by WSDOT entered into the Real Property Inventory.

WSDOT Source
Right of Way Manual

inventory record

Definition
Data which has been coded according to this manual for each structure carrying public road traffic and/or for each inventory route which goes under a structure.

WSDOT Source
Bridge Design Manual

inventory route

Definition
The route for which the applicable inventory data is to be recorded. The inventory route may be on the structure or under the structure. Generally, inventories along a route are made from west to east and south to north.

WSDOT Source
Bridge Design Manual

invert

Definition
The lowest point on the inside of a sewer or other conduit.

WSDOT Source
Highway Runoff Manual

invert elevation

Definition
The vertical elevation of a pipe or orifice in a pond that defines the water level.

WSDOT Source
Highway Runoff Manual

irretrievable

Definition
Impossible to retrieve or recover.

WSDOT Source
Environmental Manual

irreversible

Definition
Impossible to reverse.

WSDOT Source
Environmental Manual

island

Definition
A defined area within an intersection, between traffic lanes, for the separation of vehicle movements or for pedestrian refuge.

WSDOT Source
Design Manual

isopluvial map

Definition
A map with lines representing constant depth of total precipitation for a given return frequency.

WSDOT Source
Highway Runoff Manual

ITS Communications and Wireless Technology Site Comparison Form

Definition
A form used to document all the pertinent date for site comparison purposes.

WSDOT Source
Right of Way Manual

ITS Communications Strategic Plan

Definition
The 10-year strategic plan to identify the direction of the wireless program. One of the objectives of the strategic plan is to create individual regional communications plans. The regional communications plans will provide detailed regional communications projects. The ITS communications project process will provide proposed schedules, general scopes, and budgets for each project.

WSDOT Source
Right of Way Manual

J

JARPA

Definition
JARPA is a single permit application for development activities in or among aquatic environments. Multiple regulatory agencies (federal, state, and local) created one application that people can use to apply for more than one permit at a time. However, some state and local agencies may require separate permit applications. See the Complete Permit Application Guidance for more information.

WSDOT Source
Environmental Manual

Joint-use agreement

Definition
An agreement between two utility organizations defining the terms of use of one utility's facilities by a third party; for example, attachment of fiber optic cable to an existing aerial utility pole plant.

WSDOT Source
Utilities Manual

Judgment and Decree of Appropriation (J&D)

Definition
A court order setting over to the state of Washington, for the benefit of the public, the title to personal and/or real property or property rights. The State Constitution requires that just compensation must be paid for the acquisition of the property or property right.

WSDOT Source
Right of Way Manual

Judgment and Decree of Appropriation (J&D), Court

Definition
The order resulting from a nonjury trial in which the judge decides the just compensation.

WSDOT Source
Right of Way Manual

Judgment and Decree of Appropriation (J&D), Jury

Definition
The order resulting from a jury trial in which the judge decides the just compensation.

WSDOT Source
Right of Way Manual

Judgment and Decree of Appropriation (J&D), Stipulated

Definition
Following an out-of-court settlement between the condemning agency and the property owner, the court approves the stipulation and the order is entered in accordance with the terms of the stipulation.

WSDOT Source
Right of Way Manual

jurisdiction

Definition
Governing authority which interprets and applies laws and regulations.

WSDOT Source
Environmental Manual

jurisdictional wetlands

Definition
All naturally occurring wetlands, wetlands unintentionally created as the result of construction activities, and those created specifically for the compensation of wetland losses. These wetlands are regulated by the Army Corps of Engineers and local jurisdictions.

WSDOT Source
Roadside Manual

justify

Definition
Preparing a memo to the DDP identifying the reasons for the decision: a comparison of advantages and disadvantages of all options considered. A more rigorous effort than document.

WSDOT Source
Design Manual

K

K-factor

Definition
The proportion of AADT (annual average daily traffic) occurring in the analysis hour is referred to as the K-factor, expressed as a decimal fraction (commonly called 'K,' 'K30,' or 'K100'). The K30 is the thirtieth (K100 is the one hundredth) highest peak hour divided by the annual average daily traffic. Normally, the K30 or K100 will be in the range of 0.09 to 0.10 for urban and rural areas. Average design hour factors are available on the web in the Transportation Data, GIS & Modeling Office's Annual Peak Hour Report.

WSDOT Source
Design Manual

kiosk

Definition
A conveniently located structure accommodating ancillary services such as vending machines, traveler information, or telephones. The kiosk might also include a sheltered area for serving refreshments on a donation basis.

WSDOT Source
Roadside Manual

L

laboratory

Definition

The laboratories of the Contracting Agency, or other laboratories the Contracting Agency authorizes to test Work, soils, and materials.

WSDOT Source

Standard Specifications

lake

Definition

An area permanently inundated by water in excess of two meters deep and greater than 20 acres in size as measured at the ordinary high-water marks.

WSDOT Source

Highway Runoff Manual

lamp lumens

Definition

The total light output from a lamp, measured in lumens.

WSDOT Source

Design Manual

land-disturbing activity

Definition

Any activity that results in a movement of earth or a change in the existing soil cover (both vegetative and nonvegetative) or the existing soil topography, including but not limited to clearing, grading, filling, and excavation. Compaction that is associated with stabilization of structures and road construction is also considered a land-disturbing activity. Vegetation maintenance practices are not considered land-disturbing activities.

WSDOT Source

Highway Runoff Manual

landforms

Definition

All (or any portion of) the geological features of the earth, including soil, rock outcrops, and the surface and subsurface configurations of land, including human-placed earth features, such as berms or swales.

WSDOT Source

Roadside Policy Manual

landing

Definition
A level paved area, within or at the top and bottom of a stair or ramp, designed to provide turning and maneuvering space for wheelchair users and as a resting place for pedestrians.

WSDOT Source
Design – ADA/Pedestrian Manual

landscape (Roadside)

Definition
An area composed of interacting ecosystems that are repeated because of geology, landform, soils, climate, biota, and human influences throughout the area. Landscapes are generally of a size, shape, and pattern that is determined by interacting ecosystems.

WSDOT Source
Roadside Manual

Related Term
See also: Landscape (Roadside Policy)

landscape (Roadside Policy)

Definition
A section or expanse of the earth, including natural and built elements, composing a viewshed that can be seen from a given location.

WSDOT Source
Roadside Policy Manual

Citation
U.S. Department of Agriculture, U.S. Forest Service, 'Landscape Aesthetics: A Handbook for Scenery Management,' December 1995.

Related Term
See also: Landscape (Roadside)

landscape area

WSDOT Source
Roadside Policy Manual

Related Term
See: Resource Conservation Areas (updated term).

landslide hazard areas

Definition
Those areas subject to a severe risk of landslide.

WSDOT Source
Highway Runoff Manual

lane

Definition
A strip of roadway used for a single line of vehicles.

WSDOT Source
Design Manual

lane control signal

Definition
(reversible lanes) A special overhead signal that permits, prohibits, or warns of impending prohibition of lane use.

WSDOT Source
Design Manual

lane transaction

Definition
A time-framed event occurring in the toll lane representing either a cash or electronic toll. The transaction is identified by all or a combination of the following parameters: location, time, date, vehicle class, vehicle ID, toll amount, etc. (Also called a “trip-transaction” or a “toll”.)

WSDOT Source
Toll Division

lane width

Definition
The lateral design width for a single lane, striped as shown in the Standard Plans and the Standard Specifications. The width of an existing lane is measured from the edge of traveled way to the center of the lane line or between the centers of adjacent lane lines.

WSDOT Source
Design Manual

lateral clearance

Definition
The distance from the edge of traveled way to a roadside object.

WSDOT Source
Design Manual

layered networks

Definition
Roadway network arrangement where the objective is to separate modes onto different facilities with planned interconnection locations.

WSDOT Source
Design Manual

leachate

Definition
Liquid that has percolated through soil and contains substances in solution or suspension.

WSDOT Source
Highway Runoff Manual

leaching

Definition
The removal of materials (CaCO3, MgCO3, and other more soluble materials) in solution from the soil.

WSDOT Source
Roadside Manual

lead agency

Definition
The public agency that has the principal responsibility for carrying out or approving a project.

WSDOT Source
Design Manual

leakage

Definition
Any toll that is dismissed due to a system error is considered leakage. (Examples: Type 99 transactions, missed vehicles, etc.) Note: Write-offs, which are a result of a conscious decision not to collect a toll (example, dismissed by an ALJ during the adjudication process) are not considered leakage.

WSDOT Source
Toll Division

Related Terms
See also: dismissal, lost revenue

least cost planning

Definition
An approach to making planning decisions that considers a variety of conceptual solutions to achieve desired system performance targets at the least cost. Least cost planning results in the best mix of practical policy and capital investments to optimize the total transportation system performance. The solution may or may not be on a state corridor.

WSDOT Source
Design Manual

Related Terms
See also: practical design/practical solutions

left-cross

Definition

Describes the intersection conflict between a motor vehicle left-turn and bicycle through movement in the opposing direction.

WSDOT Source

Design Manual

legal road approach

Definition

A road approach that complies with the requirements of Design Manual Chapter 530 for limited access facilities and Design Manual Chapter 540 for managed access facilities.

WSDOT Source

Design Manual

legibility

Definition

The quality in a landscape that allows the viewer to understand or comprehend it and to make decisions about future actions.

WSDOT Source

Roadside Manual

length of need

Definition

The length of a traffic barrier used to shield a fixed feature.

WSDOT Source

Design Manual

leq

Definition

A statistical descriptor that provides a single number to describe the varying traffic noise levels. It is a constant, average sound level that, over the specified period of time, contains the same amount of sound energy as the varying levels of the traffic noise.

WSDOT Source

Roadside Manual

letter of understanding

Definition

A letter prepared by WSDOT and countersigned by the utility owner that describes the scope of, schedule, and responsibility for utility relocation work associated with a highway project.

WSDOT Source

Utilities Manual

level of service (LOS) (Design)

Definition
LOS is based on peak hour, except where noted. LOS assigns a rank (A-F) to facility sections based on traffic flow concepts like density, delay, and/or corresponding safety performance conditions. (See the Highway Capacity Manual and AASHTO's Geometric Design of Highways and Streets [Green Book] for further details.)

WSDOT Source
Design Manual

Related Term
See also: level of service (LOS) (Environment)

level of service (LOS) (Environment)

Definition
An established minimum capacity of public facilities or services that must be provided per unit of demand or other appropriate measure of need. For transportation facilities and services, level of service may be measured at an intersection, road segment, traffic corridor or zone, and may be based on traffic volume compared to facility capacity, travel time, or multiple variables (e.g., distance traveled, road conditions, or safety hazards). The method for calculating level of service varies depending on the transportation mode. Level of service is usually designated by five letter grades with LOS A representing the best service (free flow conditions of vehicular traffic) and LOS F representing the worst service (stop and go conditions).

WSDOT Source
Environmental Manual

Related Term
See also: level of service (LOS) (Design)

level playing field (LPF)

Definition
Software WSDOT currently adopted and installed computer software facilitating statewide communications.

WSDOT Source
Utilities Manual

level pool routing

Definition
The basic technique of storage routing used for sizing and analyzing detention storage and determining water levels for ponding water bodies. The level pool routing technique is based on the continuity equation: inflow - outflow = change in storage.

WSDOT Source
Highway Runoff Manual

level spreader

Definition
A temporary erosion and sedimentation control device used to distribute stormwater runoff uniformly over the ground surface as sheet flow (not through channels), in order to enhance infiltration and prevent concentrated, erosive flows.

WSDOT Source
Highway Runoff Manual

life cycle cost (Design)

Definition
The total cost of a project or item over its useful life. This includes all of the relevant costs that occur throughout the life of a project or item, including initial acquisition costs (such as right of way, planning, design, and construction), operation, maintenance, modification, replacement, demolition, financing, taxes, disposal, and salvage value as applicable.

WSDOT Source
Design Manual

Related Term
See also: life cycle cost (Roadside Policy)

life cycle cost (Roadside Policy)

Definition
An assessment of all the significant costs (planning, design, construction, and maintenance) of ownership throughout the anticipated life of an asset.

WSDOT Source
Roadside Policy Manual

Related Term
See also: life cycle cost (Design)

life estate

Definition
A freehold, i.e., a real property estate, the duration of which is measured by the life of the person holding it or by the life of some other person.

WSDOT Source
Right of Way Manual

lifecycle GHG emissions

Definition
Referred to as 'cradle to grave emissions' that include embodied GHG emissions and GHG from energy used to demolish and/or dispose of materials after completion of usable life.

WSDOT Source
Environmental Manual

light emitting diode (LED)

Definition
A two-lead semiconductor light source.

WSDOT Source
Design Manual

limited access (Design)

Definition
Full, partial, or modified access control is planned and established for each corridor and then acquired as the right to limit access to each individual parcel.

WSDOT Source
Design Manual

Related Term
See also: limited access (Environment)

limited access (Environment)

Definition
WSDOT controls access to and from the state highway to preserve the safety and efficiency of the facility. Limited access control is accomplished by purchasing the access rights from adjacent property owners.

WSDOT Source
Environmental Manual

Related Term
See also: limited access (Design)

Limited Access and Managed Access Master Plan

Definition
A map of Washington State that shows established and planned limited access highways.

WSDOT Source
Design Manual

limited access hearing

Definition
A formal hearing that gives local public officials, owners of abutting properties, and other interested persons an opportunity to be heard about the limitation of access to the highway system.

WSDOT Source
Design Manual

limited access highway (Design)

Definition
All highways listed as 'Established L/A' on the Limited Access and Managed Access Master Plan and where the rights of direct access to or from abutting lands have been acquired from the abutting landowners.

WSDOT Source
Design Manual

Related Term
See also: limited access highway (Right of Way)

limited access highway (Right of Way)

Definition
All highways listed as Established L/A on the Master Plan for Limited Access Highways only where the rights of direct access to or from abutting lands have been acquired from the abutting landowners. Levels of limited access include: full, partial, modified.

WSDOT Source
Right of Way Manual

Related Term
See also: limited access highway (Design)

limited access right of way

Definition
Right of way for which ingress and egress rights to the highway facility have been purchased by WSDOT. For the purposes of utility accommodation, the term limited access includes partial and modified levels of access control.

WSDOT Source
Utilities Manual

line

Definition
The path, real or imagined, that the eye follows when perceiving abrupt differences in form, color, or texture. Within landscapes, lines may be found as roads, ridges, skylines, structures, changes in vegetative types, or individual trees and branches.

WSDOT Source
Roadside Manual

Citation
U. S. Department of the Interior, Bureau of Land Management. 'BLM Manual: visual resource management', Washington D. C. 1977.

listed species (Environment)

Definition
Any species of fish, wildlife, or plant which has been determined to be endangered or threatened under Section 4 of the ESA.

WSDOT Source
Environmental Manual

Related Term
See also: listed species (Roadside)

listed species (Roadside)

Definition
Any species listed by a state or federal agency as threatened or endangered under the Endangered Species Act of 1973.

WSDOT Source
Roadside Manual

Related Term
See also: listed species (Environment)

live poles

Definition
A form of cutting taken from woody vegetation with a diameter greater than 50 mm (2 inches).

WSDOT Source
Roadside Manual

live stakes

Definition
A form of cutting taken from one- to two-year-old woody vegetation with a diameter of less than 50 mm (2 inches).

WSDOT Source
Roadside Manual

live storage

Definition
The volume of the flow control BMP that is released over a long period of time.

WSDOT Source
Highway Runoff Manual

loam

Definition
A soil texture class that contains 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 536.

local agency (Bridge Inspection)

Definition
Generally refers to city or county bridge owners but also includes all bridge owners other than state and federal.

WSDOT Source
Bridge Design Manual

Related Term
See also: local agency (Consultant Services)

local agency (Consultant Services)

Definition
A non-State governmental agency or other eligible entity allowed/authorized to receive federal funds through WSDOT.

WSDOT Source
Consultant Services Manual

Related Term
See also: local agency (Bridge Inspection)

local government, local jurisdiction

Definition
Any county, city, town, or special-purpose district having its own incorporated government for local affairs.

WSDOT Source
Highway Runoff Manual

Local Improvement District (LID)

Definition
A minor governmental subdivision having the power of taxation established to install a public improvement (e.g., water, sewer) in an area. The improvement is funded by assessments against

the parcel's real property in the LID area. These assessments become encumbrances against the respective parcels.

WSDOT Source
Right of Way Manual

Local Programs Bridge Inventory

Definition
The inventory of local agency bridges kept in the LP database. The Bridge Reporting Database draws data from this database regularly for inclusion into the Washington State Bridge Inventory System (WSBIS).

WSDOT Source
Bridge Design Manual

local roads

Definition
Non-state highways that are publicly owned.

WSDOT Source
Design Manual

location I utility objects

Definition
Aboveground fixed (unyielding, nontraversable) objects located within the Control Zone in the following areas:

- Outside of horizontal curves where advisory speeds for the curve are 15 mph or more below the posted speed limit of that section of highway (the Control Zone is established using the posted speed limit of the highway, not the advisory speed limit).
- Within the turn radius area of public road grade intersections.
- Where a barrier, embankment, rock outcropping, ditch, or other roadside feature is likely to direct a vehicle into a utility object.
- Closer than 5 feet horizontal beyond the edge of the usable shoulder

WSDOT Source
Utilities Manual

location II utility objects

Definition
Fixed utility objects located within the Control Zone that are not classified as Location I or Location III Objects. Location III Utility Objects Fixed utility objects that are:

- Located outside the Control Zone.
- Within the Control Zone and mitigated by an Alternate Countermeasure.
- Location II Objects that have been classified as Location III Objects using the Cost-Effective Selection Procedure (see Utilities Manual section 900.10.)

WSDOT Source
Utilities Manual

long range guidance

Definition
Signage or other alerts giving travelers a preview time of 5 seconds or more to anticipate a feature or maneuver.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-5.

long tunnel

Definition
A tunnel, lid, or underpass that is greater than 80' in length and has a length to vertical clearance ratio greater than 10:1.

WSDOT Source
Design Manual

lost revenue

Definition
There are two (2) categories which are considered lost revenue, dismissals and write-offs.

WSDOT Source
Toll Division

Related Term
See also: dismissal

low pavement type

Definition
Bituminous surface treatment (BST).

WSDOT Source
Design Manual

low-impact development (LID) (Highway Runoff)

Definition
An evolving approach to land development and stormwater management that uses a site's natural features and specially designed BMPs to manage stormwater; it involves assessing and understanding the site, protecting native vegetation and soils, and minimizing and managing stormwater at the source. Low-impact development practices are appropriate for a variety of development types.

WSDOT Source
Highway Runoff Manual

Related Term
See also: low-impact development (LID) (Roadside Policy)

low-impact development (LID) (Roadside Policy)

Definition
A land planning and engineering design approach that avoids or minimizes impacts on hydrology and water quality. If impacts cannot be avoided, the design compensates for altered hydrology and water quality by mimicking natural processes. Low impact development is sometimes referred to as Green Stormwater Infrastructure.

WSDOT Source
Roadside Policy Manual

Related Term
See also: low-impact development (LID) (Highway Runoff)

low-permeability liner

Definition
A layer of compacted till or clay or a geomembrane.

WSDOT Source
Highway Runoff Manual

low-speed roadway

WSDOT Source
Design Manual

Related Term
See also: speed

lumen

Definition
The unit used to measure luminous flux.

WSDOT Source
Design Manual

luminaire

Definition
A complete lighting unit comprised of a light bulb or light emitting Diode (LED) module, wiring, and a housing unit.

WSDOT Source
Design Manual

luminance

Definition
The quotient of the luminous flux at an element of the surface surrounding the point and propagated in directions defined by an elementary cone containing the given direction, by the product of the solid angle of the cone and area of the orthogonal projection of the element of the surface on a plane perpendicular to the given direction. The luminous flux may be leaving, passing through, and/or arriving at the surface.

WSDOT Source
Design Manual

luminous flux

Definition
The time rate of the flow of light.

WSDOT Source
Design Manual

M

M2D2

Definition
Multimodal Development and Delivery.

WSDOT Source
Design Manual

maintenance area (air quality)

Definition
Area previously in nonattainment now in compliance with NAAQS.

WSDOT Source
Environmental Manual

maintenance plan

Definition
A plan defining maintenance methods, frequencies, environmental considerations, and traffic control proposals for utility facilities installed within the highway right of way.

WSDOT Source
Utilities Manual

maintenance pull-off

Definition
A widened shoulder area near fixed service items. Suggested width 4 meters minimum. Suggested length 30 meters maximum.

WSDOT Source
Roadside Manual

managed access highway (Design)

Definition
Highways where the rights of direct access to or from abutting lands have not been acquired from the abutting landowners.

WSDOT Source
Design Manual

Related Term
See also: managed access highway (Right of Way)

managed access highway (Right of Way)

Definition
Any highway not listed as 'Established L/A' on the Master Plan for Limited Access Highways and any highway or portion of a highway designated on the Master Plan as 'Established L/A' until such time as the limited access rights are acquired. Under managed access legislation, the property owner's access rights are regulated through an access connection permitting process.

WSDOT Source
Right of Way Manual

Related Term
See also: managed access highway (Design)

managed access right of way

Definition
Highway right of way that has no specified access control measure planned or in place.

WSDOT Source
Utilities Manual

managed lane

Definition
A lane that increases efficiency by packaging various operational and design actions. Lane management operations may be adjusted at any time to better match regional goals.

WSDOT Source
Design Manual

management reserve fund

Definition

Additional funds set aside in the contract/agreement at the request of management. This fund is limited to Cost Plus Fixed Fee agreements.

WSDOT Source

Consultant Services Manual

managing project delivery

Definition

A WSDOT management process for project delivery from team initiation through project closing.

WSDOT Source

Design Manual

maneuver time

Definition

The amount of time required by a traveler to safely complete an action, primarily affected by the circumstances of a situation (e.g., vehicle performance capabilities, tire condition, road surface conditions, road grade, etc.) and affected by driver-related factors. These factors are highly situation-specific because maneuvers encompass a broad range of actions (e.g., emergency stop, passing, left turn through traffic).

WSDOT Source

Safety Performance Manual

Citation

Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-5.

Manning's equation

Definition

An equation used to predict the velocity of water flow in a pipeline or an open channel:

V = (1.486(R^2/3)(S^1/2))/n

where:

V = the mean velocity of flow in feet per second

R = the hydraulic radius in feet

S = the slope of the energy gradient or, for assumed uniform flow, the slope of the channel in feet per foot

n = Manning's roughness coefficient or retardance factor of the channel lining

WSDOT Source

Highway Runoff Manual

manual toll collection

Definition
A toll collection method wherein a Toll Service Attendant is present to accept cash or credit card as toll payment from a customer.

WSDOT Source
Toll Division

master agreement

Definition
Provides all the necessary general terms and conditions for a general type of work and an overall beginning and ending date. It will not contain specifics for individual elements of work (tasks). This information will be in each individually executed task order (see task order). Between the master agreement and the task order, the task's statement of work, beginning and ending dates, and estimate for the work must be completely defined.

WSDOT Source
Consultant Services Manual

Related Term
See also: task order document

maximum extent feasible (MEF)

Definition
From the U.S. Department of Justice, 28 CFR Part 36.402, Alterations. The phrase 'to the maximum extent feasible' applies to 'the occasional case where the nature of an existing facility makes it virtually impossible to comply fully with applicable accessibility standards through a planned alteration.' This phrase also refers to a stand-alone piece of design documentation that WSDOT uses to record its reasons for not being able to achieve full ADA compliance in alteration projects (called a Maximum Extent Feasible document).

WSDOT Source
Design - ADA/Pedestrian Manual

maximum uniformity ratio

Definition
The average light level within the design area divided by the minimum light level within the design area (see Design Manual Chapter 1040).

WSDOT Source
Design Manual

maximum veiling luminance ratio

Definition
The maximum veiling luminance divided by the average luminance over a given design area for an observer traveling parallel to the roadway centerline (see Design Manual Chapter 1040).

WSDOT Source
Design Manual

mcd/m2/lux

Definition
Pavement marking retroreflectivity is represented by the coefficient of retroreflected luminance (RL) measured in millicandelas per square meter.

WSDOT Source
Design Manual

meander line

Definition
A 'meander line' is a surveyed line made up of straight segments which theoretically approximate the line ordinary high tide or line of ordinary high water to delineate between uplands and tidelands or shorelands.

WSDOT Source
Right of Way Manual

measures of effectiveness (MOEs)

Definition
In the context of Design Manual Chapter 320, examples are: speed, delay, density, LOS, QOS, person or vehicle throughput, cost vs. benefit, and queue. (See FHWA's MOE List.)

WSDOT Source
Design Manual

media filter

Definition
A filter that includes material for removing pollutants (such as compost, gypsum, perlite, zeolite, or activated carbon).

WSDOT Source
Highway Runoff Manual

media filter drain

Definition
(previously known as the ecology embankment) A stormwater treatment facility typically constructed in the pervious shoulder area of a highway, consisting of a novegetation zone, a grass strip, a filter media mix, and a drain component that keeps the facility free draining.

WSDOT Source
Highway Runoff Manual

median

Definition
The portion of a divided highway separating vehicular traffic traveling in opposite directions.

WSDOT Source
Design Manual

median functions

Definition
one or more reason(s) for a median as described in Design Manual Chapter 1230

WSDOT Source
Design Manual

median opening

Definition
An opening in a continuous median for the specific purpose of allowing vehicle movement.

WSDOT Source
Design Manual

memorandum of understanding (MOU)

Definition
A written document executed between two or more parties that establishes each partyís intent, objectives, and/or requirements regarding some future action. An MOU is also known as a Letter of Understanding (LOU). MOUs and LOUs differ from agreements in that they do not create a legally binding commitment.

WSDOT Source
Consultant Services Manual

Related Term
See also: memorandum of understanding (MOU) for a road approach

memorandum of understanding (MOU) for a road approach

Definition
There is a MOU (Highways Over National Forest Lands) between the United States Forest Service (USFS) and WSDOT that requires the USFS to obtain a road approach permit for new access to a state highway that is crossing Forest Service land.

WSDOT Source
Design Manual

Related Term
See also: memorandum of understanding (MOU)

meta-analysis (Safety Performance)

Definition

A statistical technique that combines the independent estimates of crash reduction effectiveness from separate studies into one estimate by weighing each individual estimate according to its variance.

WSDOT Source

Safety Performance Manual

Citation

Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-8.

metering signal

Definition

A signal used to control the predominant flow rate of traffic at an at-grade facility.

WSDOT Source

Design Manual

methods and assumptions document

Definition

A mandatory document developed at the beginning of the ARR phase to record ARR assumptions, methodologies, criteria, and decisions (see Design Manual Chapter 550).

WSDOT Source

Design Manual

metropolitan planning organization (MPO)

Definition

A lead agency designated by the Governor to administer the federally required transportation planning process in a metropolitan area with a population over 50,000. The MPO is responsible for the 20-year long-range plan and Transportation Improvement Program (TIP).

WSDOT Source

Design Manual

Metropolitan Transportation Improvement Program

Definition

A fiscally constrained prioritized listing/program of transportation projects covering a period of four years and formally adopted by an MPO in accordance with 23 CFR 450, as required for all regionally significant projects and projects requesting federal funding.

WSDOT Source

Environmental Manual

microorganisms

Definition
Forms of life that are either too small to be seen with the unaided eye or are barely discernible.

WSDOT Source
Roadside Manual

Citation:
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 538.

midblock pedestrian crossing

Definition
A marked pedestrian crossing located between intersections.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

middleground

Definition
The zone between the foreground and the background in a landscape. The area located from 100 meters to 4 miles from the observer.

WSDOT Source
Roadside Manual

migration corridor

Definition
An area that is usually used by migrating wildlife to move between suitable habitat.

WSDOT Source
Roadside Manual

mil

Definition
Unit of measurement equivalent to 0.001 inches.

WSDOT Source
Design Manual

minimum average light level

Definition
The average of all light intensities within the design area, measured just prior to relamping the system (see Design Manual Chapter 1040).

WSDOT Source
Design Manual

minimum light level

Definition

The minimum light intensity of illumination at any single point within the design area measured just prior to relamping the system (see Design Manual Chapter 1040).

WSDOT Source

Design Manual

minor arterial system

Definition

A rural network of arterial routes linking cities and other activity centers that generate long distance travel and, with appropriate extensions into and through urban areas, form an integrated network providing interstate and interregional service (RCW 47.05.021).

WSDOT Source

Design Manual

minor operational enhancement projects

Definition

These projects usually originate from the Q2 component of the Q Program and are quick responses to implement low-cost improvements. They are typically narrow in scope and focus on improvements to traffic operations and modifications to traffic control devices. Guidance on the type of work included in the Q subprograms is in the Chart of Accounts.

WSDOT Source

Design Manual

mitigated area

Definition

The drainage area from which stormwater runoff is to be detained or treated.

WSDOT Source

Highway Runoff Manual

mitigated object

Definition

An aboveground utility object within the Control Zone located in an inaccessible area or behind a protective device, or that utilizes breakaway design. The location and design of mitigation must be acceptable to and approved by WSDOT.

WSDOT Source

Utilities Manual

mitigation (Environment)

Definition

Avoiding adverse impacts to wetlands, streams and other aquatic resources, where practical; minimizing unavoidable impacts; and compensating for all remaining unavoidable impacts.

WSDOT Source
Environmental Manual

Related Term
See also: mitigation (Highway Runoff)

mitigation (Highway Runoff)

Definition
Measures to reduce adverse impacts on the environment, in the following order of preference:

- Avoid the impact altogether by not taking a certain action or part of an action.
- Minimize the impact by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
- Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
- Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.
- Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.

WSDOT Source
Highway Runoff Manual

Related Term
See also: mitigation (Environment)

mitigation - NEPA/SEPA

Definition
Mitigation means avoiding, minimizing, rectifying, rehabilitating, restoring, reducing or eliminating the environmental impact over time by preservation and maintenance operations during the life of the action. Mitigation can also mean compensating for the impact by replacing or providing substitute resources or environments for those impacted by the project.

WSDOT Source
Environmental Manual

mitigation bank

Definition
A property developed for the purpose of providing compensatory mitigation in advance of authorized impacts to aquatic resources where wetlands are established, restored, enhanced, or preserved. A mitigation bank may sell credits to and assume the mitigation obligations of third parties. With regulatory approval, the mitigation obligation is transferred when the credit purchase is finalized.

WSDOT Source
Environmental Manual

mitigation sequence

Definition

An ordered approach to mitigation that involves analyzing the affected environment, determining the effects of projects, avoiding and minimizing adverse impacts, and compensating for the remaining unavoidable impacts.

WSDOT Source

Environmental Manual

mitigation wetland

Definition

A wetland that is created, enhanced, restored, or preserved to offset the unavoidable environmental impacts of development actions on natural wetlands.

WSDOT Source

Highway Runoff Manual

mobile source

Definition

Any nonstationary source of air pollution such as cars, trucks, motorcycles, buses, airplanes, and locomotives.

WSDOT Source

Environmental Manual

mobile source air toxic (MSAT)

Definition

Any one of six priority volatile gases or small particulate compounds coming from the tailpipe of a vehicle. The six compounds are formaldehyde, 1,3-butadiene, acrolein, naphthalene, benzene, and diesel emissions.

WSDOT Source

Environmental Manual

modal compatibility

Definition

An assessment to determine which mode(s) need to be considered strictly based on the context characteristics present or planned. The assessment is independent of whether any particular mode is present on the segment and intended to guide strategic investment opportunities on a segment.

WSDOT Source

Design Manual

modal priority

Definition
Mode(s) that will be prioritized when making design decisions for the project, guided by the outcome of the modal compatibility assessment.

WSDOT Source
Design Manual

mode

Definition
A specific type or form of transportation. Typically for roadway design the modes are automobiles, transit, truck freight, pedestrians, skateboards, and bicycles.

WSDOT Source
Design Manual

monitoring (Highway Runoff)

Definition
The collection of data by various methods for the purposes of understanding natural systems and features, evaluating the impacts of development proposals on such systems, and assessing the performance of mitigation measures imposed as conditions of development.

WSDOT Source
Highway Runoff Manual

Related Term
See also: monitoring (Right of Way)

monitoring (Right of Way)

Definition
Systematic and purposeful observation that occurs on a regular basis to determine if any changes to the right of way have occurred.

WSDOT Source
Right of Way Manual

Related Term
See also: monitoring (Highway Runoff)

monitoring (Roadside)

Definition
The collection of information after construction to assess if the replacement project is successful and to keep the regulatory agencies and construction agency informed about the status of the replacement project.

WSDOT Source
Roadside Manual

Related Term
See also: monitoring (Highway Runoff)

monument

Definition
As defined in Design Manual Chapter 410, a monument is any physical object or structure that marks or references a survey point. This includes, but is not limited to, a point of curvature (P.C.), a point of tangency (P.T.), a property corner, a section corner, a General Land Office (GLO) survey point, a Bureau of Land Management (BLM) survey point, and any other permanent reference set by a governmental agency or private surveyor.

WSDOT Source
Design Manual

monument removal or destruction

Definition
The physical disturbance or covering of a monument such that the survey point is no longer visible or readily accessible.

WSDOT Source
Design Manual

mortgage balance

Definition
The amount of the principal balance on the date that the mortgage is paid off by the acquiring agency.

WSDOT Source
Right of Way Manual

mortgage interest differential payment (MIDP)

Definition
The amount, as determined by the agency, necessary to compensate an eligible 180-day owner occupant for increased costs required to obtain a replacement mortgage for the purpose of purchasing an eligible replacement dwelling.

WSDOT Source
Right of Way Manual

mottling

Definition
Soils irregularly marked with spots of color. The presence of orange mottling usually indicates soils that have been though periods of saturation interspersed with periods where the soil had dried out.

WSDOT Source
Roadside Manual

mounting height - luminaire

Definition

The vertical distance between the surface of the design area and the center of the light source of the luminaire. Note: This is not to be confused with pole height (H1), but is the actual distance that the luminaire is located above the roadway edge line.

WSDOT Source

Design Manual

movable bridge signal

Definition

(also drawbridge signal) A signal installed to notify traffic to stop when the bridge is opened for waterborne traffic. Movable bridge signals display continuous green when the roadway is open to vehicular traffic.

WSDOT Source

Design Manual

multilane approach

Definition

An approach that has two or more lanes, regardless of the lane use designation.

WSDOT Source

Design Manual

multimodal connection

Definition

The point where multiple types of transportation activities occur; for example, where transit buses and van pools drop off or pick up passengers (including passengers with bicycles).

WSDOT Source

Design Manual

mycorrhizae

Definition

A beneficial group of fibrous fungi that engulf soil particles and pore spaces to absorb water and nutrients in solution and transfer this solution to the roots of plants. In effect, they multiply the plants' root systems many times.

WSDOT Source

Roadside Manual

mystery

Definition

Characteristics in a landscape that excite wonder, curiosity, or surprise.

WSDOT Source
Roadside Manual

N

National Bridge Inspection Standards (NBIS)
Definition
Title 23 Code of Federal Regulations 650 Subpart C defines the NBIS regulations, and establishes requirements for inspection procedures, frequency of inspections, qualifications of personnel, inspection reports, and preparation and maintenance of a state bridge inventory. The NBIS apply to all structures defined as bridges located on all public roads.

WSDOT Source
Bridge Design Manual

National Bridge Inventory (NBI)
Definition
The aggregation of structure inventory and appraisal data collected nationally to fulfill the requirements of the National Bridge Inspection Standards. The state of Washington shall prepare and maintain an inventory of all bridges subject to the NBIS.

WSDOT Source
Bridge Design Manual

National Environmental Policy Act (NEPA)
Definition
The Policy that requires assessment and publication of environmental impacts related to any federally funded project.

WSDOT Source
Utilities Manual

National Highway System (NHS) (Design)
Definition
The NHS was developed by the U.S. Department of Transportation (DOT) in cooperation with the states, local officials, and metropolitan planning organizations (MPOs).

WSDOT Source
Design Manual

Related Term
National Highway System (Utilities)

National Highway System (NHS) (Utilities)

Definition
Federally funded highways that are part of the National Defense Highway System.

WSDOT Source
Utilities Manual

Related Term
National Highway System (Design)

National Pollution Discharge Elimination System (NPDES) (Environment)

Definition
Pollution control permits that require point source dischargers to obtain permits. These are issued to WSDOT and other entities, by Ecology, for construction stormwater, municipal separate storm sewer systems, industrial, and sand and gravel operations.

WSDOT Source
Environmental Manual

Related Term
National Pollution Discharge Elimination System (Highway Runoff)

National Pollution Discharge Elimination System (NPDES) (Highway Runoff)

Definition
The part of the federal Clean Water Act that requires point source dischargers to obtain permits, called NPDES permits, which in Washington State are administered by the Washington State Department of Ecology.

WSDOT Source
Highway Runoff Manual

Related Term
National Pollution Discharge Elimination System (Environment)

National Tunnel Inspection Standards (NTIS)

Definition
Title 23 Code of Federal Regulations 650 Subpart E defines the NTIS regulations, and establishes requirements for inspection procedures, frequency of inspections, qualifications of personnel, inspection reports, and preparation and maintenance of a state tunnel inventory. The NTIS apply to all structures defined as highway tunnels located on all public roads.

WSDOT Source
Bridge Design Manual

National Tunnel Inventory (NTI)

Definition

The aggregation of structure inventory and appraisal data collected to fulfill the requirements of the National Tunnel Inspection Standards. Tunnel Operations, Maintenance, Inspection, and Evaluation Manual (TOMIE) - The TOMIE provides uniform and consistent guidance on the operation, maintenance, inspection, and evaluation of tunnels. See Bridge Design Manual Section 1.01.A for additional definitions used in this manual.

WSDOT Source

Bridge Design Manual

nationwide permit

Definition

A type of General Permit issued by the US Army Corps of Engineers under Section 404 and/or Section 10.

WSDOT Source

Environmental Manual

native growth protection easement (NGPE)

Definition

An easement granted for the protection of native vegetation within a sensitive area or its associated buffer. The easement should be recorded on the appropriate documents of title and filed with the county records division.

WSDOT Source

Highway Runoff Manual

native plant (Roadside Policy)

Definition

Occurring naturally in a particular region, ecosystem, or habitat, without human cause or influence. Includes all plant species indigenous to, or known to exist in, a region at the time of European settlement.

WSDOT Source

Roadside Policy Manual M3110

Related Term

Native plant (Roadside)

native plant (Roadside)

Definition

A plant occurring naturally in a particular region, ecosystem, or habitat at the time of European settlement.

WSDOT Source

Roadside Manual

Related Term
Native plant (Roadside Policy)

native vegetation

Definition
Vegetation consisting of plant species other than noxious weeds that are indigenous to the region and that could be reasonably expected to occur naturally on the site.

WSDOT Source
Highway Runoff Manual

Related Terms
Native plant (Roadside Policy); Native plant (Roadside)

Natural Resources Conservation Service (NRCS) curve number

Definition
A number that describes the runoff characteristics of a particular soil type.

WSDOT Source
Highway Runoff Manual

natural vehicle path

Definition
The natural path that a driver navigates a vehicle given the layout of the intersection and the ultimate destination.

WSDOT Source
Design Manual

natural wetlands

Definition
Wetlands in existence due to natural forces alone, or unintentionally developed through construction or management practices. Natural wetlands can be found in unusual areas, including filled areas, ditches, borrow pits, ponds, and agricultural fields. Natural wetlands are protected by federal, state, and local regulations as well as WSDOT's internal policies. (See Roadside Manual Division 2.)

WSDOT Source
Roadside Manual

navigable waters or navigable waters of the United States

Definition
As defined by the Army Corps of Engineers are those waters of the United States including the territorial seas that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the water

body, and is not extinguished by later actions or events which impede or destroy navigable capacity. (33 USC 1362(7) and 33 CFR 329.4)

WSDOT Source
Environmental Manual

need

Definition
A statement that identifies the transportation problem(s) or other performance gap.

WSDOT Source
Design Manual

Related Term
Performance Gap

negative illumination

Definition
Lighting the background and leaving the object dark to contrast with the light behind it as the driver views it.

WSDOT Source
Design Manual

net-new impervious surface

Definition
The total area of new impervious surface being added to the TDA minus the total area of existing impervious surface being removed from the TDA. In order to use this concept, the existing impervious surface removal area must fully revert to a natural condition as specified in Highway Runoff Manual Section 4-3.5.1. The concept of net-new impervious surface applies only to Minimum Requirement 6 (Flow Control) and is applied at the threshold discharge area level. (See the definition for effective impervious surface and Figure 3.3, Step 8.)

WSDOT Source
Highway Runoff Manual

Related Term
Effective impervious surface

network connectivity

Definition
How the various roadways and other transportation facilities within a network interconnect in a defined geographic area.

WSDOT Source
Design Manual

network screening

Definition

A collection of analysis methods that objectively consider crash history, roadway factors, and traffic characteristics that may contribute to future crashes and helps agencies identify and prioritize locations for potential safety investment.

WSDOT Source

Safety Performance Manual

Citation

Adapted from U. S. Department of Transportation, Federal Highway Administration. "Screening Your Network to Improve Roadway Safety Performance – Getting Started." FHWA, 2022.

new impervious surfaces

Definition

Those surfaces that receive direct, run-on, or blow-in of rainfall and (1) expand the existing roadway prism or (2) are upgraded from gravel to bituminous surface treatment (BST), asphalt, or concrete pavement. Note that existing gravel surfaces are considered impervious surfaces. However, a gravel surface that is upgraded to a more impervious surface (gravel to BST, ACP, or PCCP) is defined as a new impervious surface. Also note that for Minimum Requirement determination, permeable pavement is considered an impervious surface.

WSDOT Source

Highway Runoff Manual

nighttime

Definition

The period of time from one-half hour after sunset to one-half hour before sunrise and any other time when persons or objects may not be clearly discernible at a distance of 500 feet (RCW 46.04.200).

WSDOT Source

Design Manual

no right of way acquisition

Definition

This is where the proposed project can be built entirely within the existing roadway facility (the facility may be something other than roadway for transportation enhancement projects). Note: If any property interest is required outside the existing right of way, such as a temporary construction easement or a slope easement, the project cannot be certified as 'no right of way required'. Also, if property was acquired specifically for the project, but was acquired under any of the 'early acquisition' options, this will necessitate a right of way certification 1, 2 or 3 - it does not meet the criteria for a 'no right of way required' determination.

WSDOT Source

Right of Way Manual

no-build condition

Definition
The baseline, plus state transportation plan and comprehensive plan improvements, expected to exist, as applied to the year of opening or the design year.

WSDOT Source
Design Manual

no-vegetation zone (NVZ)

Definition
A shallow gravel trench located directly adjacent to the highway pavement.

WSDOT Source
Highway Runoff Manual

NOAA Fisheries

Definition
National Oceanic and Atmospheric Administration, National Marine Fisheries Service.

WSDOT Source
Highway Runoff Manual

NOCP fee

Definition
A civil penalty that charged when a toll has remained unpaid after 80 days. Current civil penalty fee is $40 per unpaid toll transaction.

WSDOT Source
Toll Division

NOCP summary

Definition
A summary of a set of unresolved NOCP Transactions.

WSDOT Source
Toll Division

NOCP transaction

Definition
Toll Bill Transaction which has aged at least 80 days, remains unpaid and has been certified as a viable transaction by a Toll Enforcement Officer.

WSDOT Source
Toll Division

noise abatement criteria

Definition
Noise levels that when approached or exceeded are considered to be traffic noise impacts. NAC vary by activities and/or land use.

WSDOT Source
Environmental Manual

nominal safety

Definition
The extent to which a site meets accepted design standards, independent of the perceived or substantive safety of the site.

WSDOT Source
Safety Performance Manual

nonattainment area

Definition
An area that does not meet one or more of the NAAQS for the criteria pollutants designated in the Clean Air Act.

WSDOT Source
Environmental Manual

noncompetitive

Definition
The method of procurement of services when it is not feasible to award a contract using competitive negotiations or small purchase procurement methods.

WSDOT Source
Consultant Services Manual

noncompliance

Definition
When a recipient has not correctly implemented the requirements of a contract/agreement.

WSDOT Source
Consultant Services Manual

nonconforming road approach

Definition
A road approach that does not meet current requirements for location, quantity, spacing, sight distance, or geometric elements.

WSDOT Source
Design Manual

noneffective impervious surfaces

Definition
Those new, applicable replaced, or existing impervious surfaces that are being managed by existing natural dispersion areas meeting the natural dispersion BMP criteria in Highway Runoff Manual Section 5-4.1.2.

WSDOT Source
Highway Runoff Manual

noneffective pollution-generating impervious surface

Definition
Those new, applicable replaced, or existing PGIS surfaces that are being managed by existing natural dispersion areas meeting the natural dispersion BMP criteria in Highway Runoff Manual Section 5-4.1.2.

WSDOT Source
Highway Runoff Manual

non-fish-bearing stream

Definition
According to WAC 222-16-030: type Ns waters are non-fish-habitat streams. Until the fish habitat water type maps are available, an interim water-typing system applies (see WAC 222-16-031). Type 5 waters are non-fish-habitat streams. (See fish-bearing stream definition for more details.)

WSDOT Source
Highway Runoff Manual

Related Term
fish-bearing stream

nonjurisdictional wetlands

Definition
Nonjurisdictional wetlands include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, canals excavated in uplands, stormwater detention ponds, wastewater treatment facilities created in uplands, and certain agricultural activities and landscape amenities created in uplands. Grass-lined swales and wastewater treatment facilities can be constructed in wetlands but must be so designated and specifically designed for water treatment purposes. Mitigation will be required to compensate for the wetland lost to such a facility.

WSDOT Source
Roadside Manual

nonmitigated area

Definition
The area not included as part of the stormwater treatment.

WSDOT Source
Highway Runoff Manual

non-motorist

Definition
Any person afoot or using a wheelchair (manual or motorized) or means of conveyance propelled by human power, such as skates or a skateboard, micromobility devices, or bicycles.

WSDOT Source
Safety Performance Manual

nonoperating property (Utility)

Definition
Property held by a public or private utility by fee title, easement, lease, etc., and which is not presently integrated as a part of a public service network.

WSDOT Source
Utilities Manual

Related Terms
nonoperating property, departmental (Consultant Services); nonoperating property, departmental (Right of Way)

nonoperating property, departmental (Consultant Services)

Definition
Waste sites, pit sites, stockpile sites, maintenance sites, and other such lands required or used in support of the construction and/or operation of a highway.

WSDOT Source
Consultant Services Manual

Related Terms
nonoperating property (Utility); nonoperating property, departmental (Right of Way)

nonoperating property, departmental (Right of Way)

Definition
Waste sites, pits, stockpile sites, maintenance sites, drainage and stream easements, and other such lands or easements required or used in the support of the construction and/or operation of a vehicular public way.

WSDOT Source
Right of Way Manual

Related Terms
nonoperating property (Utility); nonoperating property, departmental (Consultant Services)

non-operating right of way

Definition
Property owned by WSDOT not strictly used for highway purposes, such as pit sites, park & ride lots, transit facilities, and other sundry sites located outside of operating right of way.

WSDOT Source
Utilities Manual

non-pollution-generating surface (NPGS)

Definition
A surface that, based on its use, is an insignificant or low source of pollutants in stormwater runoff. For example, roofs that are subject only to atmospheric deposition or have normal heating, ventilation, and air conditioning vents; paved bicycle pathways and pedestrian sidewalks that are separated from roads used by motor vehicles; fenced fire lanes; infrequently used maintenance access roads; and in-slope areas of roads. Sidewalks that are regularly treated with salt or other deicing chemicals are considered pollution-generating impervious surfaces.

WSDOT Source
Highway Runoff Manual

nonproject action

Definition
Governmental actions involving decisions on policies, plans, or programs that contain standards controlling the use or modification of the environment, or that will govern a series of connected actions.

WSDOT Source
Environmental Manual

nonrecoverable slope

Definition
A slope on which an errant vehicle will continue until it reaches the bottom, without having the ability to recover control. Fill slopes steeper than 4H:1V, but no steeper than 3H:1V, are considered nonrecoverable.

WSDOT Source
Utilities Manual; Design Manual

non-residential relocation

Definition
Relocation/displacement of businesses, farms, and nonprofit organizations. PPO relocations are usually treated as non-residential relocations because they do not require DSS assurances.

WSDOT Source
Right of Way Manual

non-revenue (toll exemption contra-revenue)

Definition
Revenue not collected per exemption. Example: Transit is included in this category on most toll facilities.

WSDOT Source
Toll Division

non-road-related project

Definition
A project involving structures, including rest areas, maintenance facilities, and ferry terminal buildings.

WSDOT Source
Highway Runoff Manual

nonseparated HOV lane

Definition
An HOV lane that is adjacent to and operates in the same direction as the general-purpose lanes with unrestricted access between the HOV lane and the general-purpose lanes.

WSDOT Source
Design Manual

nonstandard agreement

Definition
Any agreement that is not a WSDOT standard form. Any revision to a standard form will constitute a nonstandard agreement.

WSDOT Source
Consultant Services Manual

notice of appearance

Definition
A form provided by WSDOT for anyone wanting to receive a copy of the findings and order and the adopted limited access plan (see Design Manual Chapter 210).

WSDOT Source
Design Manual

notice of civil penalty (NOCP)

Definition
A notice that is sent to notify the registered vehicle owner of a toll violation for failure to pay a toll by the toll payment due date, and for which a civil penalty is assessed.

WSDOT Source
Toll Division

Citation
WAC 468-305-136

notice of hearing

Definition
A published advertisement that a public hearing will be held.

WSDOT Source
Design Manual

notice of opportunity for a hearing

Definition
An advertised offer to hold a public hearing.

WSDOT Source
Design Manual

O

obligation of federal funding

Definition
The obligation of federal funding is the approval (authorization) by FHWA to participate in a share or portion of federally eligible expenditures on an agreed-upon scope of work (also known as a project). This commitment occurs when a project phase or additional funding for a phase is approved, and the project agreement is authorized by FHWA. The dollar amount of federal funds approved on the project agreement is known as the obligation of federal funds. Only after the agency receives written authorization from LP are costs incurred eligible for reimbursement.

WSDOT Source
Right of Way Manual

observational studies

Definition
A comparison study of sites receiving a safety treatment to evaluate change in safety performance. There are two kinds of observational studies: before-after studies and cross-sectional studies.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010. p. G-9.

observed crash frequency

Definition
The annual number of crashes reported at a site.

WSDOT Source
Safety Performance Manual

occupancy designation

Definition
The minimum number of occupants required for a vehicle to use the HOV facility.

WSDOT Source
Design Manual

off-line facilities

Definition
Runoff treatment facilities to which stormwater runoff is restricted to some maximum flow rate or volume by a flow-splitter.

WSDOT Source
Highway Runoff Manual

off-site

Definition
Any area lying upstream of the project site that drains onto the site and any area lying downstream of the site to which the site drains.

WSDOT Source
Highway Runoff Manual

oil control

Definition
The treatment of stormwater runoff with BMPs (Best Management Practices) to remove oil, grease, and total petroleum hydrocarbons (TPH).

WSDOT Source
Highway Runoff Manual

oil/water separator

Definition
A vault, usually underground, designed to provide a quiescent environment to separate oil from water.

WSDOT Source
Highway Runoff Manual

old growth forest

Definition
A late successional or climax stage in forest development. In western Washington, ancient or old growth forests have a canopy of very large living conifers, shade tolerant trees beneath the canopy, and abundant large snags and logs.

WSDOT Source
Roadside Manual

Citation
Norse, Elliott A. 'Ancient Forests of the Pacific Northwest', Washington, DC: Island Press. 1990. p. 287.

on-line facilities

Definition
Runoff treatment facilities that receive all the stormwater runoff from a drainage area. Flows above the runoff treatment design flow rate or volume are passed through at a lower-percentage removal efficiency.

WSDOT Source
Highway Runoff Manual

on-site

Definition
The entire property that includes the proposed development.

WSDOT Source
Highway Runoff Manual

one buyer-seller concept

Definition
An appraisal theory which holds that the total value of the separated remainders of a severed parcel is limited to the amount which one buyer would pay and one seller would accept, under the market value definition, for all of such remainders in a single transaction. This is distinguished from the sum of the amounts which multiple buyers would pay for the remainders if sold individually.

WSDOT Source
Right of Way Manual

open character

Definition
A roadside classified as 'Open' has broad views and open skies, with low growing native vegetation or agricultural crops associated with adjacent farming.

WSDOT Source
Roadside Policy Manual

open cut

Definition
Cutting of the existing paved roadway surface as a construction method for open trench placement of a utility.

WSDOT Source
Utilities Manual

open trench

Definition
Trenched construction method for placement of a utility (also referred to as trenched construction).

WSDOT Source
Utilities Manual

operating highway right of way

Definition
WSDOT property set aside strictly for highway purposes, and may include rest areas, viewpoints, and turn-outs.

WSDOT Source
Utilities Manual

operating property (departmental)

Definition
The space above, at, or below the grade line of all completed highways, as well as the area alongside the traveled way within the right of way lines.

WSDOT Source
Right of Way Manual

Related Term
See also: operating property (utility)

operating property (utility)

Definition
Property held by a public or private utility by fee title, easement, lease, etc., and which is presently a part of a functioning public service network, e.g., a railroad or power transmission right of way.

WSDOT Source
Right of Way Manual

Related Term
See also: operating property (departmental)

operating speed

Definition
The speed at which drivers are observed operating their vehicles during free flow conditions.

WSDOT Source
Design Manual

operation of law

Definition
A change or transfer that occurs automatically due to existing laws and not due to an agreement or court order. For example, WSDOT buys right of way for a project on a managed access state highway within a city. After construction is complete, the city will automatically own the purchased right of way in accordance with RCW 47.24.020(15).

WSDOT Source
Consultant Services Manual

operational BMP

Definition
A type of source control BMP (Best Management Practice) that includes schedules of activities, prohibition of practices, and other managerial actions to prevent or reduce pollutants entering stormwater. Operational BMPs include formation of a pollution prevention team; good housekeeping; preventive maintenance procedures; spill prevention and cleanup; employee training; inspections of pollutant sources and BMPs; recordkeeping; process changes; raw material and product changes; and recycling of wastes.

WSDOT Source
Highway Runoff Manual

operational GHG emissions

Definition
'Tailpipe' GHG (greenhouse gas) emissions from vehicles using the project facility or nearby facilities affected by the project.

WSDOT Source
Environmental Manual

Optical character recognition (OCR)

Definition
This is a computer program that can translate photographic images of a license plate, with measurable accuracy, and convert the image into a series of numbers and letters, enabling automatic value matching to an account or allowing match identification of that license plate number, state, and plate type through state motor vehicle registration and licensing agencies.

WSDOT Source
Toll Division

order adjudicating public use and necessity (OAPU)

Definition
A court order establishing that the property and/or property rights sought are necessary for use by and for the benefit of the general public.

WSDOT Source
Right of Way Manual

order of hearing

Definition
The official establishment of a hearing date by the Director & State Design Engineer, Development Division.

WSDOT Source
Design Manual

order of immediate possession and use (OIPU)

Definition
A court order confirming a written agreement between the condemning agency and the property owner which has been entered in the court. The written agreement stipulates that, upon payment of a specific amount of money into the registry of the court, the condemning agency is entitled to take possession of the property and that the just compensation will be decided by a later court action. Subject to the interests of other interested parties, the property owner is entitled to withdraw the funds from the court.

WSDOT Source
Right of Way Manual

Related Term
See also: possession and use agreement

ordinary high water mark (OHWM)

Definition
The line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil destruction on terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding area. The ordinary high water mark is found by examining the bed and banks of a stream and ascertaining where the presence and action of waters are so common and usual, and so long maintained in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation. In any area where the ordinary high water mark cannot be found, the line of mean high water is substituted. In any area where neither can be found, the channel bank is

substituted. In braided channels and alluvial fans, the ordinary high water mark or substitute must be measured to include the entire stream feature.

WSDOT Source
Highway Runoff Manual

organic matter

Definition
Decomposed animal or vegetable matter, measured by ASTM D 2974. Organic matter is an important reservoir of carbon and a dynamic component of soil and the carbon cycle. It improves soil and plant efficiency by improving soil physical properties including drainage, aeration, and other structural characteristics. It contains the nutrients, microbes, and higher-form soil food web organisms necessary for plant growth. The maturity of organic matter is a measure of its beneficial properties. Raw organic matter can release water-soluble nutrients (similar to chemical fertilizer). Beneficial organic matter has undergone a humification process either naturally in the environment or through a composting process.

WSDOT Source
Highway Runoff Manual

organizational conflict of interest (OCOI)

Definition
OCOI means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the government, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage (FAR 2.101).

WSDOT Source
Consultant Services Manual

orifice

Definition
An opening with closed perimeter, usually sharp-edged, and of regular form in a plate, wall, or partition through which water may flow; generally used for the purpose of measurement or control of water.

WSDOT Source
Highway Runoff Manual

outer harbor line

Definition
A line determined by the State Harbor Line Commission which is located and established in navigable tidal waters beyond which the state shall never sell or lease any rights whatsoever.

WSDOT Source
Right of Way Manual

outer separation

Definition
The area between the outside edge of traveled way for through traffic and the nearest edge of traveled way of a frontage road or collector-distributor (C-D) road.

WSDOT Source
Design Manual

outfall

Definition
Point source as defined by 40 CFR 122.2 at the point where a discharge leaves the permittee's MS4 and enters a receiving water body or receiving waters. Outfall also includes the permittee's MS4 facilities/BMPs designed to infiltrate stormwater.

WSDOT Source
Highway Runoff Manual

outlet

Definition
The point of water disposal from a stream, river, lake, tidewater, or artificial drain.

WSDOT Source
Highway Runoff Manual

outlet channel

Definition
A waterway constructed or altered primarily to carry water from manufactured structures, such as terraces, tile lines, and diversions.

WSDOT Source
Highway Runoff Manual

outlet protection

Definition
A protective barrier of rock, erosion control blankets, vegetation, or sod constructed at a conveyance outlet.

WSDOT Source
Highway Runoff Manual

outwash soils

Definition
Soils formed from highly permeable sands and gravels.

WSDOT Source
Highway Runoff Manual

overdispersion parameter

Definition

Within an analysis model, the set of frequencies or probabilities assigned to various outcomes of a particular event or trial.

WSDOT Source

Safety Performance Manual

Citation

Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-9.

overflow

Definition

A pipeline or conduit device with an outlet pipe that provides for the discharge of portions of combined sewer flows into receiving waters or other points of disposal, after a regular device has allowed the portion of the flow that can be handled by interceptor sewer lines and pumping and treatment facilities to be carried by and to such water pollution control structures.

WSDOT Source

Highway Runoff Manual

overhead costs

Definition

Those utility costs that are not readily identifiable with one specific task, job, or work order. Such costs may include indirect labor, benefits, taxes, insurance, and general office expenses.

WSDOT Source

Utilities Manual

overlapped displays

Definition

Overlapped displays allow a traffic movement to operate with one or more nonconflicting phases. Most commonly, a minor street's exclusive right-turn phase is overlapped with the nonconflicting major street's left-turn phase. An overlapped display can be terminated after the parent phase (the main phase the overlap is associated with) terminates. An overlapped display programmed for two or more parent phases continues to display until all of the parent phases have terminated. An overlap is made up of two or more phases - not one phase controlling two movements.

WSDOT Source

Design Manual

oversized pile shaft

Definition

A drilled shaft foundation that is larger in diameter than the supported column and has a reinforcing cage larger than and independent of the columns. The size of the shaft shall be in accordance with Bridge Design Manual Section 7.8.2.

WSDOT Source

Bridge Design Manual

overtime

Definition

Time worked by a contractor's employee in excess of the employee's normal work week.

WSDOT Source

Consultant Services Manual

overtime premium

Definition

The difference between the contractor's regular rate of pay to an employee for the shift involved and the higher rate paid for overtime. It does not include shift premium (the difference between the contractor’s regular rate of pay to an employee and the higher rate paid for extra-pay shift work).

WSDOT Source

Consultant Services Manual

owner

Definition

Person or agency having jurisdiction over the bridge. For WSDOT projects, regardless of delivery method, the term 'Owner' in these Guide Specifications shall be the WSDOT Bridge Design Engineer or/and the WSDOT Geotechnical Engineer.

WSDOT Source

Bridge Design Manual

ozone (O3)

Definition

Ground level ozone forms in the atmosphere as a result of complex sunlight activated chemical transformations between nitrogen oxides (NOX) and hydrocarbons (i.e., O3 precursors).

WSDOT Source

Environmental Manual

P

P.E.

Definition

Licensed Professional Engineer (also the general title of Project Engineer).

WSDOT Source

Utilities Manual

painted nose

Definition

The point where the main line and ramp lanes separate.

WSDOT Source

Design Manual

PAM

Definition

A large class of polymers (polyacrylamides), some of which have applications in highway construction. PAM products are used as soil stabilizers to prevent erosion, flocculants to remove sediments from stormwater, drilling lubricants, and soil moisture retention enhancers.

WSDOT Source

Highway Runoff Manual

parallel curb ramp

Definition

A curb ramp design where the sidewalk slopes down to a landing at road level with the running slope of the ramp in line with the direction of sidewalk travel.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

parametric estimate

Definition

A method of estimating the cost of a project (or part of a project) based on one or more project-based cost factors. Historical bid data is commonly used to define parameters related to the cost of a typical transportation facility construction, such as cost per lane mile, cost per interchange or cost per square foot. Percentages can also be used to estimate the cost of project elements based on historical cost information. Parametric methods are often used in early estimating, such as planning and scoping estimates.

WSDOT Source

Cost Estimating Manual

Citation
WSDOT working definition

parent franchise

WSDOT Source
Utilities Manual

Synonym
Initial Franchise

participation

Definition
To the extent provided by law, funds may be used to reimburse or to make payments to the utility on projects. It also refers to the sharing of expenses proportioned in relation to the legal responsibility of the parties.

WSDOT Source
Utilities Manual

particle size

Definition
The effective diameter of a particle as measured by sedimentation, sieving, or micrometric methods.

WSDOT Source
Highway Runoff Manual

particulate matter (PM10 and PM2.5)

Definition
Naturally occurring and artificial particles with a diameter of less than 10 microns or 2.5 microns, respectively. Sources of particulate matter include sea salt, pollen, smoke from forest fires and wood stoves, road dust, industrial emissions, and agricultural dust. These particles are small enough to be drawn deep into the respiratory system where they can contribute to infection and reduced resistance to disease.

WSDOT Source
Environmental Manual

pass

Definition
An alternative term acceptable to use in reference to a transponder.

WSDOT Source
Toll Division

Related Term
See also: transponder

pass-by trips

Definition

Pass-by trips are intermediate stops between an origin and a primary trip destination, for example, home to work, home to shopping.

WSDOT Source

Design Manual

passenger loading zone

Definition

An area provided for pedestrians to board/disembark a vehicle.

WSDOT Source

Design Manual

passing lane

Definition

An auxiliary lane on a two-lane highway used to provide the desired frequency of passing zones.

WSDOT Source

Design Manual

passing sight distance

Definition

The distance (on a two-lane highway) needed for a vehicle driver to execute a normal passing maneuver based on design conditions and design speed.

WSDOT Source

Design Manual

path analysis study

Definition

A computerized analysis carried out by ITS Communications and Wireless Technology as an initial test to determine the feasibility of point-to-point communications between radio facilities.

WSDOT Source

Right of Way Manual

pavement marking

Definition

A colored marking applied to the pavement to provide drivers with guidance and other information.

WSDOT Source

Design Manual

Pay By Mail

Definition
A higher toll rate paid by drivers who do not have a billable GoodtoGo! account. These drivers will have a photo taken of their license plate. The license plate number will be used to send a Toll Bill to the address of the registered owner of the vehicle.

WSDOT Source
Toll Division

Pay By Plate account

Definition
A GoodtoGo! account type that does not require a pass. Instead, the vehicle's license plate is registered on the account. Pay-By-Plate transactions are charged a Pay by Plate fee in addition to the toll. Pay-By-Plate does not operate on SR 167 HOT lanes.

WSDOT Source
Toll Division

Related Term
See also: Pay by Plate transaction

Pay by Plate fee

Definition
A $0.25 fee which is assessed for all Pay by Plate transactions that post to a GoodtoGo! account.

WSDOT Source
Toll Division

Pay by Plate transaction

Definition
If a GoodtoGo! account holder uses a photo tolled facility but does not have a recognizable or valid transponder in the vehicle, or their account has zero or low balance, or the customer has a Pay by Plate account, a photo of their license plate is taken. The license plate is identified by ICRS, which then is linked to the customer's account and a toll is posted to the account. A Pay-By-Plate transaction can occur on any account type which has a registered license plate listed. The customer's license plate must be registered on their account, and a Pay by Plate fee is assessed in addition to the toll.

WSDOT Source
Toll Division

payable agreement

Definition
An agreement where WSDOT agrees to pay for goods and/or services provided by another entity.

WSDOT Source
Consultant Services Manual

payable cost

Definition
The estimated or lump sum dollar amount WSDOT will pay under the terms of an agreement.

WSDOT Source
Consultant Services Manual

payment available date

Definition
The estimated date on which the owner receives the state's payment, or the date of payment into the court or out of an escrow closing.

WSDOT Source
Right of Way Manual

peak discharge, peak flow

Definition
The maximum instantaneous rate of flow during a storm, usually in reference to a specific design storm event.

WSDOT Source
Highway Runoff Manual

peak hour

Definition
The 60-minute interval that contains the largest volume of traffic during a given time period. If a traffic count covers consecutive days, the peak hour can be an average of the highest hour across all of the days. An a.m. peak is simply the highest hour from the a.m., and the p.m. peak is the highest from the p.m. The peak hour correlates to the DHV but is not the same. However, it is close enough on items such as intersection plans for approval to be considered equivalent.

WSDOT Source
Design Manual

Related Term
See also: design hourly volume (DHV)

pedestrian

Definition
Any person afoot or using a wheelchair (manual or motorized) or means of conveyance (other than a bicycle) propelled by human power, such as skates or a skateboard.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

pedestrian access route (PAR)

Definition

A continuous, unobstructed walkway within a pedestrian circulation path that provides accessibility. Pedestrian access routes consist of one or more of the following pedestrian facilities: walkways/sidewalks, curb ramps (excluding flares), landings, crosswalks, pedestrian overpasses/underpasses, access ramps, elevators, and platform lifts. Note: Not all transportation facilities need to accommodate pedestrians. However, those that do accommodate pedestrians need to have an accessible route.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

pedestrian circulation path

Definition

A prepared exterior or interior way of passage provided for pedestrian travel. Includes independent walkways, shared-use paths, sidewalks, and other types of pedestrian facilities. All pedestrian circulation paths are required to contain a continuous pedestrian access route that connects to all adjacent pedestrian facilities, elements, and spaces that are required to be accessible.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

pedestrian facilities

Definition

Walkways such as sidewalks, walking and hiking trails, shared-use paths, pedestrian grade separations, crosswalks, and other improvements provided for the benefit of pedestrian travel. Pedestrian facilities are intended to be accessible routes.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

pedestrian overpass or underpass

Definition

A grade-separated pedestrian facility, typically a bridge or tunnel structure over or under a major highway or railroad that allows pedestrians to cross.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

pedestrian refuge island

Definition

An island in the roadway that physically separates the directional flow of traffic, provides pedestrians with a place of refuge, and reduces the crossing distance. Note: Islands with cut-through paths are more accessible to persons with disabilities than are raised islands with curb ramps.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

pedestrian signal

Definition
An adaptation of a conventional traffic signal installed at established pedestrian crossings. It is used to provide a protected phase for pedestrians by terminating the conflicting vehicular movements to allow for pedestrian crossings.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

perceived safety

Definition
Subjective awareness of one's ability to travel from origin to destination without experiencing physical harm. This awareness is drawn from personal experience and varies among individuals and groups.

WSDOT Source
Safety Performance Manual

percolation

Definition
The movement of water through soil.

WSDOT Source
Highway Runoff Manual

percolation rate

Definition
The rate, often expressed in minutes per inch, at which clear water maintained at a relatively constant depth seeps out of a standardized test hole that has been previously saturated - often used synonymously with infiltration rate (short-term infiltration rate).

WSDOT Source
Highway Runoff Manual

Related Term
See also: infiltration rate

performance category

Definition
Any broad area of performance important to an organization, project, or place. WSDOT's six performance categories: Economic Vitality, Preservation, Safety, Mobility, Environment, and Stewardship are the result of legislative policy per RCW 47.04.280.

WSDOT Source
Design Manual

performance evaluation tools

Definition
Quantitative tools used to measure performance. Examples of these tools currently being used by WSDOT are Highway Safety Manual methodology (for safety performance) and Highway Capacity Manual (for mobility performance).

WSDOT Source
Design Manual

performance gap

Definition
The difference between the measured and targeted performance unit for a performance metric. This gap is another way of describing the performance need(s) at a location.

WSDOT Source
Design Manual

performance metric

Definition
Any measurable indicator used to assess the achievement of outcomes.

WSDOT Source
Design Manual

performance need

Definition
See baseline performance need and contextual performance need.

WSDOT Source
Design Manual

Citation
baseline performance need

performance target(s)

Definition
An outcome or desired state intended for a project. Performance targets are identified as either baseline or contextual (see Design Manual Chapter 1101).

WSDOT Source
Design Manual

performance-based decisions

Definition

Decisions that are made based on performance, performance metrics, performance targets, and performance gaps. Also, decisions made using performance evaluation tools, such as the Highway Safety Manual predictive methods for evaluating safety performance.

WSDOT Source

Design Manual

permanent loads

Definition

Loads and forces that are, or are assumed to be, either constant upon completion of construction or varying only over a long-time interval.

WSDOT Source

Bridge Design Manual

permeable pavement

Definition

A permeable surface that readily transmits fluids into the underlying base material. The pavement may be permeable concrete, permeable asphalt, or manufactured systems such as interlocking brick or a combination of sand and brick lattice. Note that for Minimum Requirement determination, permeable pavement is considered an impervious surface. Permeable pavement is also considered a pollution-generating impervious surface if subjected to vehicular use and is used regularly by motor vehicles.

WSDOT Source

Highway Runoff Manual

permeable soils

Definition

Soil materials having a sufficiently rapid infiltration rate so as to greatly reduce or eliminate surface and stormwater runoff; generally classified as Soil Conservation Service hydrologic soil types A and B.

WSDOT Source

Highway Runoff Manual

permit

Definition

A document required by law and issued by a regulatory agency or tribe that authorizes a specific type of activity under certain conditions.

WSDOT Source

Environmental Manual

permit holder

Definition

The abutting property owner or other legally authorized person to whom an access connection permit is issued by the permitting authority.

WSDOT Source

Design Manual

permitted access connection

Definition

A connection for which an access connection permit has been issued by a permitting authority.

WSDOT Source

Design Manual

permittee-responsible mitigation

Definition

Compensatory mitigation for which the permittee retains full responsibility.

WSDOT Source

Environmental Manual

permitting authority

Definition

The agency that has legal authority to issue managed access connection permits. For access connections in unincorporated areas, the permitting authority is WSDOT; for access connections within corporate limits, the permitting authority is a city or town.

WSDOT Source

Design Manual

perpendicular curb ramp

Definition

A curb ramp design where the ramp path is perpendicular to the curb and meets the gutter grade break at a right angle.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

person (Consultant Services)

Definition

Any individual, organization, group, association, partnership, firm, joint venture, corporation, or any combination thereof (RCW 39.80.020).

WSDOT Source

Consultant Services Manual

Related Term
See also: person (Right of Way)

person (Right of Way)

Definition
Or the purposes of the Relocation Assistance Program, includes a partnership, company, corporation, or association as well as an individual or family.

WSDOT Source
Right of Way Manual

Related Term
See also: person (Consultant Services)

person with disability

Definition
Per the U.S. Department of Justice: An individual with a disability is defined by the ADA as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment. It is defined by law through the American with Disabilities Act.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

personal injury KABCO

Definition
The injury severity level for a person involved in a crash. The personal injury severity categories are fatal injury (K), suspected serious injury (A), suspected minor injury (B), possible injury (C), and no apparent injury (O).

WSDOT Source
Safety Performance Manual

Citation
Adapted from U. S. Department of Transportation, National Highway Traffic Safety Administration. *MMUCC Guideline: Model Minimum Uniform Crash Criteria*. NHTSA, 2017, p. 160.

Synonym
personal injury severity

Related Term
most severe injury

personal injury severity

Synonym
See: personal injury KABCO

pervious pavement

WSDOT Source
Highway Runoff Manual

Related Term
See also: permeable pavement

pH

Definition
A measure of the alkalinity or acidity of a substance that is determined by measuring the concentration of hydrogen ions in the substance. A pH of 7.0 indicates neutral water. A 6.5 reading is slightly acidic.

WSDOT Source
Highway Runoff Manual

photo toll

Definition
A charge associated with a particular vehicle that is identified by its license plate. Vehicles identified with this method are charged according to their method of payment.

WSDOT Source
Toll Division

See also
Pay By Mail, Pay By Plate account

physical nose

Definition
The point, upstream of the gore, with a separation between the roadways of 16 to 22 feet (see Design Manual Chapter 1360).

WSDOT Source
Design Manual

physiographic

Definition
Geographic unit with discrete physical characteristics, such as elevation, aspect, and rainfall patterns.

WSDOT Source
Roadside Manual

pioneer species

Definition
Fast growing plants that are quick to establish on poor soils. Nodules on their roots fix nitrogen giving them a competitive edge in disturbed soil environments.

WSDOT Source
Roadside Manual

pipe slope drain

Definition
A pipe extending from the top to the bottom of a cut or fill slope and discharging into a stabilized water course, a sediment-trapping device, or a stabilized outfall.

WSDOT Source
Highway Runoff Manual

pipeline

Definition
Any pipe, regardless of material, that conveys a utility across or along the highway operating right of way. This includes innerducts, conduit, carrier pipe, and encasement pipe.

WSDOT Source
Utilities Manual

planning

Definition
Transportation planning is a decision-making process required by federal and state law used to solve complex, interrelated transportation and land use problems.

WSDOT Source
Design Manual

planning and environmental linkage (PEL)

Definition
A collaborative and integrated approach to transportation decision-making that (1) considers environmental, community, and economic goals early in the planning process, and (2) uses the information, analysis, and products developed during planning to inform the environmental review process. See Environmental Manual Chapter 200 and the NEPA/SEPA webpage for additional PEL guidance.

WSDOT Source
Design Manual, Environmental Manual

plans

Definition
The Contract Plans or Standard Plans which show location, character, and dimensions of prescribed Work including layouts, profiles, cross-sections, and other details.

WSDOT Source
Standard Specifications

plans, specifications, and estimates (PS&E)

Definition
The project development activity that follows Project Definition and culminates in the completion of contract-ready documents and the engineering cost estimate.

WSDOT Source
Design Manual

plant association

Definition
A particular, consistent group of species growing in a particular, consistent type of habitat.

WSDOT Source
Roadside Manual

plant community

Definition
A general term describing the group of plants growing in an area.

WSDOT Source
Roadside Manual

plant establishment

Definition
Caring for all plants planted on a project and caring for the planting and seeding areas within the project limits to ensure continued healthy growth to achieve a sustainable condition prior to transfer to maintenance staff. Plant establishment includes weed control.

WSDOT Source
Roadside Policy Manual

plant material

Definition
Trees, shrubs, ground covers, cuttings, live stakes, live poles, rhizomes, tubers, rootstock, and seedlings are referred to collectively as 'plants' or 'plant material.'

WSDOT Source
Roadside Manual

plant succession

Definition
(see ecological succession, succession) Directional, cumulative change in the species that occupy a given area through time.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 546.

Related Term
See also: ecological succession

plowed installation

WSDOT Source
Utilities Manual

Related Term
See also: direct bury

point of compliance

Definition
The location at which compliance with a discharge performance standard or a receiving water quality standard is measured.

WSDOT Source
Highway Runoff Manual

point of interest

Definition
A scenic, historical, natural, or other attraction of sufficient interest to travelers to warrant construction of a pullout and/or viewing area within WSDOT right of way. The site might include interpretive displays, potable water, or other ancillary services. A Point of Interest might be located within a larger roadside park or safety rest area.

WSDOT Source
Roadside Manual

point source

Definition
A general classification of the origin of an air or water pollutant, usually characterized as smokestacks or outfalls.

WSDOT Source
Highway Runoff Manual

pole height (H1)

Definition
The vertical distance from the light source to the pole base. This distance is specified in contracts and used by the pole manufacturers to fabricate the light standard.

WSDOT Source
Design Manual

pollutant

Definition

An element that enters a biological pathway or becomes concentrated to the extent that it might cause injury to living organisms or the functioning of environmental systems.

WSDOT Source

Roadside Manual

pollution-generating impervious surface (PGIS)

Definition

An impervious surface that is considered a significant source of pollutants in stormwater runoff, including surfaces that receive direct rainfall (or run-on or blow-in of rainfall) and are subject to vehicular use; industrial activities; or storage of erodible or leachable materials, wastes, or chemicals. Erodible or leachable materials, wastes, or chemicals are substances that, when exposed to rainfall, measurably alter the physical or chemical characteristics of the rainfall runoff. Examples include erodible soils that are stockpiled, uncovered process wastes, manure, fertilizers, oily substances, ashes, kiln dust, and garbage container leakage. Metal roofs are also considered pollution generating impervious surfaces unless they are coated with an inert, nonleachable material (such as a baked-on enamel coating). A surface, whether paved or not, is considered subject to vehicular use if it is regularly used by motor vehicles. The following are considered regularly used surfaces: roads, permeable pavement, unvegetated road shoulders, bicycle lanes within the travel lane of a roadway, driveways, parking lots, unfenced fire lanes, vehicular equipment storage yards, and airport runways. The following are not considered regularly used surfaces: paved bicycle pathways separated from roads for motor vehicles, fenced fire lanes, and infrequently used maintenance access roads.

WSDOT Source

Highway Runoff Manual

Related Term

See also: converted pervious surface

pollution-generating pervious surface (PGPS)

Definition

Any nonimpervious surface subject to the ongoing use of pesticides and fertilizers or loss of soil, such as lawns, landscaped areas, golf courses, parks, cemeteries, and sports fields. Grass highway shoulders and medians are not subject to such intensive landscape maintenance practices and are not considered pollution generating pervious surfaces. It is WSDOT policy to create self-sustaining, native plant communities that require no fertilizer and little to no weed control after they are established. During the plant establishment period, usually the first three years after planting, WSDOT revegetation and mitigation projects are intensely managed to aid plant establishment. However, throughout the life of the project, WSDOT practices integrated vegetation management (IVM), which recognizes herbicides as tools in maintaining planting are as (one of many tools available). Questions regarding whether a specific area may be considered a pollution-generating pervious surface should be directed to the local maintenance area superintendent or the region landscape architect.

WSDOT Source
Highway Runoff Manual

pore space

Definition
Total space not occupied by soil particles in a bulk volume of soil, commonly expressed as a percentage.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 546.

porous pavement

WSDOT Source
Highway Runoff Manual

Related Term
See also: permeable pavement

portable traffic signal

Definition
A type of conventional traffic signal used in work zones to control traffic. This signal is most commonly used on two-way two-lane highways where one lane has been closed for roadwork. This signal is most commonly operated in pairs, with one signal at each end of the work zone. This eliminates the need for 24-hour flagger control. The traffic signal provides alternating right of way assignments for conflicting traffic movements. The signal has an adjustable vertical support with two three-section signal displays and is mounted on a mobile trailer with its own power source.

WSDOT Source
Design Manual

positive illumination

Definition
Lighting the surface of the object as the driver views it.

WSDOT Source
Design Manual

possession and use agreement

Definition
A negotiated instrument in which the state and the property owner agree that, upon payment of a certain amount to the property owner, the state is entitled to immediate (or dated) possession and use of the property and that the final settlement will be decided at a later date.

WSDOT Source
Right of Way Manual

Related Term
See also: order of immediate possession and use (OIPU)

posted speed

Definition
The maximum legal speed as posted on a section of highway using regulatory signs.

WSDOT Source
Design Manual

Postproject

Definition
Description of project site conditions after development.

WSDOT Source
Highway Runoff Manual

potable water

Definition
Water that is safe for human consumption and free from harmful or objectionable materials as described by the jurisdictional health authority.

WSDOT Source
Roadside Manual

potential for safety improvement (PSI)

Definition
An estimate of how much the long-term crash frequency could be reduced at a particular site.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-10.

practical design/practical solutions

Definition
An approach to making project decisions that focuses on the specific problems the project is intended to address. This performance-based approach looks for lower cost solutions that meet outcomes that WSDOT, partnering agencies, communities and stakeholders have identified. With practical solutions, decision-making focuses on maximum benefit to the system, rather than maximum benefit to the project. Focusing on the specific project need minimized the scope of

work for each project so that systemwide needs can be optimized. For additional information see Design Manual Chapter 1100 and the WSDOT Practical Solutions webpage.

WSDOT Source
Design Manual, Environmental Manual

Related Term
See also: least cost planning

predeveloped condition
Definition
The modeled site conditions prior to development to which post development runoff flow rates are matched. (See Minimum Requirement 6 in Highway Runoff Manual Chapter 3.)

WSDOT Source
Highway Runoff Manual

prehearing packet
Definition
A concise, organized collection of all necessary prehearing data, prepared by the region and approved by the HQ Access and Hearings Section Manager prior to the hearing (see Design Manual Chapter 210).

WSDOT Source
Design Manual

preliminary engineering (Design)
Definition
A term used to describe the Project Delivery process from project scoping through PS&E review.

WSDOT Source
Design Manual

preliminary engineering (Utilities)
Definition
Locating; surveying; preparing Plans, Specifications, and Estimates (PS&E); and other related preparatory work in advance of construction operations.

WSDOT Source
Utilities Manual

preproject
Definition
Description of project site conditions prior to development.

WSDOT Source
Highway Runoff Manual

prescriptive right

Definition

A property right, granted by a court of law, that provides certain property rights to an individual, company, or corporation. If no judgment has been issued, there is no Prescriptive Right, only a Prescriptive Claim. The claim must be brought and argued before a court for a judgment to be issued. For a Prescriptive Claim to be valid, it must be open, notorious, and adverse. Contact the HQ Utilities Unit for additional guidance.

WSDOT Source

Utilities Manual

preservation

Definition

Removing a threat to or preventing a decline of aquatic resources by implementing legal or physical mechanisms to provide permanent protection. Preservation does not result in a gain of wetland area or functions.

WSDOT Source

Environmental Manual

pressure vacuum breaker assembly

Definition

An approved assembly consisting of a spring-loaded check valve loaded to the closed position, an independently operating air inlet valve loaded to the open position, and suitable connections for testing. It is installed as a unit with and between two resilient seated shutoff valves. It is designed to protect against backsiphonage only.

WSDOT Source

Roadside Manual

presumptive approach

Definition

(versus demonstrative approach) See Highway Runoff Manual Section 1-2.2.

WSDOT Source

Highway Runoff Manual

pretreatment

Definition

The removal of material such as solids, grit, grease, and scum from flows to improve treatability prior to biological or physical treatment processes; may include screening, grit removal, settling, oil/water separation, or application of a basic treatment BMP prior to infiltration.

WSDOT Source

Highway Runoff Manual

preview sight distance (PVSD)

Definition
A measure of the driver's sight distance to the roadway surface and other cues ahead to obtain the information needed for vehicular control and guidance.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Gattis, J. L. and J. Duncan. "Geometric Design for Adequate Operational Preview of Road Ahead." Transportation Research Record 1500, pp.139-145 and Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-6.

price differential

Definition
That amount, in addition to the acquisition cost paid by the acquiring agency, which is necessary to enable an eligible displaced person to purchase an eligible replacement dwelling.

WSDOT Source
Right of Way Manual

primary industry classification

Definition
The North American Industrial Classification System (NAICS) designation, which best describes the primary business of a firm. The NAICS is described in the North American Industry Classification Manual, United States, 1997.

WSDOT Source
Consultant Services Manual

primary recipient

Definition
A recipient who receives DOT financial assistance and passes some or all of it on to another recipient.

WSDOT Source
Consultant Services Manual

prime farmland

Definition
As defined in the Farmland Protection Policy Act, is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oil, seed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Prime farmland includes land that possesses the above characteristics

and may include land currently used as cropland, pastureland, rangeland, or forestland. It does not include land already in or committed to urban development or water storage.

WSDOT Source
Environmental Manual

principal arterial system

Definition
A connected network of rural arterial routes with appropriate extensions into and through urban areas, including routes designated as part of the Interstate System, that serves corridor movements with travel characteristics indicative of substantial statewide and interstate travel (RCW 47.05.021).

WSDOT Source
Design Manual

principal place of business

Definition
The business location where the individuals who manage the firm's day-to-day operations spend most working hours and where top management's business records are kept. If the management offices and the offices where business records are kept are in different locations, the recipient will determine the principal place of business for DBE program purposes.

WSDOT Source
Consultant Services Manual

priority array

Definition
A collection of similar needs identified in the HSP, prioritized based on the methodology adopted by WSDOT to meet the requirements of RCW 47.05.

WSDOT Source
Design Manual

Priority Array Tracking System (PATS)

Definition
A database that allows tracking of highway needs and their solutions. The system is designed to ensure WSDOT addresses the highest-ranked transportation needs. Deficiencies are tracked for each strategy in the HSP.

WSDOT Source
Design Manual

priority programming process

Definition
The rational selection of projects and services according to factual need and an evaluation of life cycle costs and benefits.

WSDOT Source
Design Manual

private facilities

Definition
Those facilities that are privately owned, located on the owner's land, devoted exclusively to private use, and that do not directly or indirectly serve the public. When relocation of private facilities is necessary, the relocation shall be handled as part of the right of way negotiations, using the provisions of 23 CFR Part 645A as a guide to establish a cost to cure. Project In this manual, may refer to a highway improvement project or a utility installation project.

WSDOT Source
Utilities Manual

private party agreement

Definition
An agreement between WSDOT and a nonpublic entity or individual.

WSDOT Source
Consultant Services Manual

problem waste

Definition
Pursuant to WAC 173-304, problem wastes are defined as soil, sediment, sludge, and liquids (groundwater, surface water, decontamination water, etc.) that are removed during the cleanup of a remedial action site, or other cleanup efforts and actions, that contain hazardous substances but are not designated as dangerous waste pursuant to WAC 173-303.

WSDOT Source
Environmental Manual

product or service

Definition
Any element of a project from concept through maintenance and operation. In all instances, the required function should be achieved at the lowest life cycle cost based on requirements for performance, maintainability, safety, environment, and aesthetics.

WSDOT Source
Design Manual

profile

Definition
The representation of a landform seen from the side.

WSDOT Source
Roadside Manual

programmatic biological assessment

Definition
A biological assessment that establishes conditions allowing multiple actions on a program, regional or other basis to proceed through streamlined consultation processes with the Services.

WSDOT Source
Environmental Manual

programmatic permit

Definition
Also referred to as a 'General Permit' a programmatic permit is issued to WSDOT to cover a certain type of activity such as bridge and ferry terminal washing/cleaning, culvert maintenance, or use of insecticides for mosquito control.

WSDOT Source
Environmental Manual

project (Design)

Definition
The Project Management Institute defines a project to be a temporary endeavor undertaken to create a unique product or service.

WSDOT Source
Design Manual

Related Term
See also: project (Highway Runoff)

project (Highway Runoff)

Definition
Any proposed action to alter or develop a site; the proposed action of a permit application or an approval, which requires drainage review.

WSDOT Source
Highway Runoff Manual

Related Term
See also: project (Design)

project (Utilities)

Definition
In this manual, may refer to a highway improvement project or a utility installation project.

WSDOT Source
Utilities Manual

project change request form

Definition
A form used to document and approve revisions to project scope, schedule, or budget from a previously approved Project Definition. Include copies in the Design Documentation Package.

WSDOT Source
Design Manual

Related Term
See also: project summary

project control and reporting (PC&R)

Definition
The Headquarters (HQ) Project Control and Reporting Office is responsible for monitoring, tracking, and reporting delivery of the Highway Construction Program in coordination with the Program Management offices in each of the six WSDOT regions and the Urban Corridors Office.

WSDOT Source
Design Manual

project definition

WSDOT Source
Design Manual

Related Term
project summary

project description

Definition
A narrative written by the proponent to describe the project proposal. It may include explanations of the existing physical, environmental, social, and economic setting around the proposed project, a legal description of the location, and an explanation of the intended improvements.

WSDOT Source
Environmental Manual

project development approval

Definition
Final approval of all project development documents by the designated representative of the approving organization prior to the advertisement of a capital transportation project (see Design Manual Chapter 300).

WSDOT Source
Design Manual

project engineer

Definition

This term applies to WSDOT personnel. Wherever 'Project Engineer' appears in this manual, the design-builder shall deem it to mean 'Engineer of Record.'

WSDOT Source

Design Manual

project file (PF)

Definition

A file containing all documentation and data for all activities related to a project (see Design Manual Chapter 300).

WSDOT Source

Design Manual

Related Term

See also: Design Documentation Package (DDP)

project limits

Definition

For road projects, the beginning project station to the end project station and from right of way line to right of way line. For nonroad projects, the legal boundaries of land parcels that are subject to project development (also called the project area perimeter).

WSDOT Source

Highway Runoff Manual

project management plan

Definition

A formal, approved document that defines how the project is executed, monitored, and controlled. It may be in summary or detailed form and may be composed of one or more subsidiary management plans and other planning documents. For further information, see the Project Management Online Guide.

WSDOT Source

Design Manual

project need statement

Definition

A statement identifying the baseline performance need for the project. For each identified project need, there may be one or more performance metrics, targets, and gaps.

WSDOT Source

Design Manual

project number construction project number

Definition
A seven-digit alphanumeric identifier that correlates the construction project with right of way project.

WSDOT Source
Right of Way Manual

project scoping

WSDOT Source
Design Manual

Related Term
See also: scoping phase

project site (Highway Runoff)

Definition
The portion of a site to undergo development or redevelopment. For road projects, it is the area between the beginning and ending mileposts within WSDOT right of way. It is defined in the formal project definition agreed upon by the region and Headquarters as to the work to be done, the estimated cost, and the project schedule. For nonroad projects, refer to the definitions for project limits.

WSDOT Source
Highway Runoff Manual

project site (Safety Performance)

Definition
Any location selected for analysis consisting of, but not limited to, intersections and interchanges, ramps, at-grade rail crossings, roadway segments, sidewalks, bikeways, etc.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-13.

project summary

Definition
A set of documents consisting of the Environmental Review Summary (ERS) and Project Definition (PD). The Project Summary is part of the design documentation required to obtain Design Approval and is ultimately part of the design documentation required for Project Development Approval (see Design Manual Chapter 300)

WSDOT Source
Design Manual

Related Term
See also: Environmental Review Summary (ERS)

projects of air quality concern (POAQC)

Definition
Add capacity or re-align roads with more than 125,000 AADT and 8 percent trucks, more than 10,000 truck AADT (8 percent of 125,000), or that contribute to substantial increases or concentrations of diesel exhaust emissions (such as bus terminals and transfer points, designated truck routes, and freight intermodal terminals).

WSDOT Source
Environmental Manual

projects of division interest (PoDIs)

Definition
A primary set of projects for which FHWA determines the need to exercise oversight and approval authority, as described in Chapter 300.

WSDOT Source
Design Manual

propagation study

Definition
A computerized analysis carried out by ITS Communications and Wireless Technology as an initial test to determine the feasibility of point-to-point communications between radio facilities.

WSDOT Source
Right of Way Manual

Property Management Certified Clear Date

Definition
The date upon which no one other than the state has a valid interest in any remaining improvements on the parcel.

WSDOT Source
Right of Way Manual

property right

Definition
The right or interest that a party (grantee) has in a parcel of real property.

WSDOT Source
Utilities Manual

Related Term
See also: compensatory rights

proposal

Definition
The combination of projects/actions selected through the study process to meet a specific transportation system need.

WSDOT Source
Design Manual

proposal form

Definition
The form provided to Bidders by the Contracting Agency for submittal of a Proposal or Bid to the Contracting Agency for a specific project. The form includes the item number, estimated plan quantity, and item description of the Bid items along with blank spaces to be completed by the Bidder for the unit prices, extensions, the total Bid amount, signatures, date, acknowledgment of Addenda, and the Bidder's address. The required certifications and declarations are part of the form.

WSDOT Source
Standard Specifications

proposed species

Definition
Any species of fish, wildlife, or plant that is proposed by NMFS or USFWS for federal listing under Section 4 of the ESA.

WSDOT Source
Environmental Manual

public agencies

Definition
Any agency, political subdivision, or unit of local government of this state, including, but not limited to, municipal corporations, quasi-municipal corporations, special-purpose districts, and local service districts; any agency of the state government; any agency of the United States; any Indian tribe recognized as such by the federal government; and any political subdivision of another state (see RCW 39.34.020).

WSDOT Source
Consultant Services Manual

public art

Definition
An enhancement to a functional element, feature, or place within a transportation facility to provide visual interest. The enhancement could be an addition to a functional element, integrated into a design, or for purely aesthetic purposes. An element is considered 'public art' if it is beyond WSDOT standard practice for architectural treatment.

WSDOT Source
Design Manual

public involvement plan

Definition
A plan to collaboratively involve the public in decision making, tailored to the specific needs and conditions of a project and the people and communities it serves. It is often part of a broader communications plan.

WSDOT Source
Design Manual

public road

Definition
Any road under the jurisdiction of and maintained by a public authority and open to public travel.

WSDOT Source
Bridge Design Manual

public transportation

Definition
Passenger transportation services available to the public, including buses, ferries, rideshare, and rail transit.

WSDOT Source
Design Manual

public utility

Definition
A 'not for profit' public, locally regulated utility service provider.

WSDOT Source
Utilities Manual

Puget Sound basin

Definition
Puget Sound south of Admiralty Inlet (including Hood Canal and Saratoga Passage); the waters north to the Canadian border, including portions of the Strait of Georgia; the Strait of Juan de Fuca south of the Canadian border; and all the lands draining into these waters, as mapped in water resource inventory areas (WRIAs) 1 through 19, set forth in WAC 173-500-040.

WSDOT Source
Highway Runoff Manual

purpose

Definition

General project goals such as improve safety, enhance mobility, or enhance economic development.

WSDOT Source

Design Manual

Q

quality assurance (QA)

Definition

The use of sampling and other measures to assure the adequacy of QC procedures to verify or measure the quality level of the entire bridge inspection and load rating program. QA is administered from outside a work group.

WSDOT Source

Design Manual

quality of service (QOS)

Definition

Defined by the Highway Capacity Manual or by agreement. Intended to describe how well a facility or service operates or functions from the perspective of the user.

WSDOT Source

Design Manual

quantitative safety analysis

Definition

An analysis of quantitative safety performance based on data-driven science-based tools and techniques that model modal crash potential.

WSDOT Source

Design Manual

quantitative tools

Definition

Analytical tools used to measure performance.

WSDOT Source

Design Manual

queue cutter traffic signal

Definition

A traffic signal used at highway-rail grade crossings where the queue from a downstream traffic signal is expected to extend within the Minimum Track Clearance Distance. It is used to keep vehicles from an adjacent signalized intersection from queuing on the railroad tracks.

WSDOT Source

Design Manual

quitclaim deed (QCD)

Definition

A legal document that transfers a grantor's interest in a land parcel to a second party, a grantee. The QCD must be signed by the state and the utility/grantor and recorded with the appropriate jurisdiction. It conveys the rights, title, and interest of the utility/grantor in a particular piece of property or property right, owned by the utility/grantor on the effective date of the deed, as fully and effectively as a Warranty Deed (may also convey rights from the state to others).

WSDOT Source

Utilities Manual

R

race-conscious

Definition

A measure or program that is focused specifically on assisting only Disadvantaged Business Enterprises (DBEs), including women-owned DBEs.

WSDOT Source

Consultant Services Manual

race-neutral

Definition

A measure or program that is, or can be, used to assist all small businesses. For the purposes of this part, race-neutral includes gender neutrality.

WSDOT Source

Consultant Services Manual

raised median

Definition

A raised island in the center of a road used to restrict vehicle left turns and side street access. Note: Islands with cut-through paths are more accessible to persons with disabilities than are raised islands with curb ramps.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

ramp (Design)

Definition
(in relation to a roadway) A short roadway connecting a main lane of a highway with another facility, such as a road, parking lot, or transit stop, for vehicular use.

WSDOT Source
Design Manual

ramp (Design: ADA)

Definition
A walking surface with a running slope steeper than 20H:1V (5%).

WSDOT Source
Bridge Design Manual, Design Manual, Design - ADA/Pedestrian Manual

ramp (Roadside)

Definition
Any directional route of pedestrian travel having a running slope between 2% and 8.3%.

WSDOT Source
Roadside Manual

ramp connection

Definition
The pavement at the end of a ramp, connecting to a main lane of a roadway.

WSDOT Source
Design Manual

ramp meter

Definition
A traffic signal at a freeway entrance ramp that allows a measured or regulated amount of traffic to enter the freeway.

WSDOT Source
Design Manual

ramp terminal

Definition
An intersection at the end of a ramp.

WSDOT Source
Design Manual

rational method

Definition

A means of computing storm drainage flow rates (Q) by using the formula Q = CIA, where C is a coefficient describing the physical drainage area, I is the rainfall intensity, and A is the area. (This method is no longer used in the Washington State Department of Ecology technical manual.)

WSDOT Source

Highway Runoff Manual

reach

Definition

A length of channel with uniform characteristics.

WSDOT Source

Highway Runoff Manual

Real Estate Services (RES)

Definition

The department responsible for the acquisition of land acquired in fee or by leasehold interest for placement of radio communications towers or radio equipment buildings to support the office of ITS Communications and Wireless Technology.

WSDOT Source

Right of Way Manual

real property inventory

Definition

An itemized list or catalog of all real property or real property interests owned or controlled by WSDOT and located outside the operating right of way limits.

WSDOT Source

Right of Way

reasonably foreseeable

Definition

An action is reasonably foreseeable if it is considered "likely to occur" and isn't too "speculative." Factors that indicate whether an action or project is 'reasonably foreseeable' for the purposes of cumulative impacts analysis include whether the project has been federally approved; whether there is funding pending before any agency for the project; and whether there is evidence of active preparation to make a decision on alternatives to the project. Clairton Sportmen’s Club v. Pennsylvania Turnpike Commission, 882 F. Supp 455 (W.D. Pa 1995).

WSDOT Source

Environmental Manual

receiver

Definition

Any human that could potentially experience wayside noise from vehicles on a roadway at a given location.

WSDOT Source
Roadside Manual

receiving waters or receiving water body

Definition
Naturally and/or reconstructed naturally occurring surface water bodies, such as creeks, streams, rivers, lakes, wetlands, estuaries, and marine waters, to which a discharged occurs via an outfall or via sheet/dispersed flow. Receiving waters may also include ground water to which a discharge occurs via facilities/BMPs designed to infiltrate stormwater.

WSDOT Source
Highway Runoff Manual

receptor

Definition
A coordinate point in three-dimensional space for which the decibel level is either measured or calculated. Receptor may also be referred to as a 'receiver point.'

WSDOT Source
Roadside Manual

recharge

Definition
The addition of water to the zone of saturation (that is, an aquifer).

WSDOT Source
Highway Runoff Manual

recipient

Definition
Any entity, public or private, to which DOT financial assistance is extended, whether directly or through another recipient, through the programs of the Federal Aviation Administration, the Federal Highway Administration, or the Federal Transit Administration, or an entity that has applied for such assistance.

WSDOT Source
Consultant Services Manual

reciprocal overhead agreement

Definition
An agreement between a local governmental agency (city, town, or county) and WSDOT where each agree not to charge an indirect cost rate (see indirect cost rate) when performing work or services for the other party.

WSDOT Source
Consultant Services Manual

Related Term
See also: indirect cost rate

reconciliation

Definition
In accounting, reconciliation refers to a process that compares two sets of records to make sure they are in agreement.

WSDOT Source
Toll Division

record of decision (ROD)

Definition
Under the National Environmental Policy Act, the Record of Decision accompanies the Final Environmental Impact Statement; explains the reasons for the project decision; discusses alternatives and values considered in selection of the preferred alternative; and summarizes mitigation measures and commitments that will be incorporated in the project.

WSDOT Source
Design Manual

recoverable slope

Definition
A slope on which the driver of an errant vehicle can regain control of the vehicle. Slopes of 4H:1V or flatter are considered recoverable.

WSDOT Source
Design Manual, Utilities Manual

recovery area (Design)

Definition
The minimum target value used in highway design when a fill slope between 4H:1V and 3H:1V starts within the Design Clear Zone.

WSDOT Source
Design Manual

Related Term
See also: recovery area (Utilities)

recovery area (Utilities)

Definition
In reference to the Control Zone, the Recovery Area is the minimum target value used in utility object location when a fill slope between 4H:1V and 3H:1V starts within the Control Zone.

WSDOT Source
Utilities Manual

recreational vehicle (RV)

Definition
A general term used to describe motorized vehicles designed for pleasure travel. The cabin design frequently includes sleeping, eating, and toilet facilities.

WSDOT Source
Roadside Manual

recreational vehicle account

Definition
In 1980 the RV account was established for use by the department of transportation for the construction, maintenance, and operation of recreational vehicle sanitary disposal systems at safety rest areas (RCW 46.68.170).

WSDOT Source
Design Manual, Roadside Manual

Recreational Vehicle Citizens Advisory Committee

Definition
A volunteer advisory committee established under RCW 46.10.063, which provides for input from 'citizen representatives of the recreational vehicle user community.' The committee provides guidance on the expenditure of funds from the Recreational Vehicle Account and advises WSDOT on operation of sanitary disposal facilities.

WSDOT Source
Roadside Manual

redemption

Definition
The right given to a judgment debtor (and to certain others) to redeem the property foreclosed within a time period specified by statute. The property is subject to the right of redemption from the time of the sheriff's sale until the sheriff's deed is delivered.

WSDOT Source
Right of Way Manual

redevelopment

Definition
On a site that is already substantially developed (has 35% or more of existing impervious surface coverage): the creation or addition of impervious surfaces; the expansion of a building footprint or addition or replacement of a structure; structural development, including construction, installation, or expansion of a building or other structure; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities.

WSDOT Source
Highway Runoff Manual

reduced pressure backflow assembly

Definition
An approved assembly consisting of two independently operating check valves, spring loaded to the closed position, separated by a spring-loaded differential pressure relief valve loaded to the open position, and having four suitable test cocks for checking the water tightness of the check valves and the operation of the relief valve. It is installed as a unit with and between two resilient seated shutoff valves.

WSDOT Source
Roadside Manual

reference information

Definition
Information provided to the Contractor by the Contracting Agency that is not part of the Contract.

WSDOT Source
Standard Specifications

reference site

Definition
An established undisturbed natural site that is used as a comparative design guide to help determine the desired plant composition and species densities for the created, or enhanced project site. It should be located near the project site, preferably within the same watershed, and have similar landscape setting, hydrology and topography.

WSDOT Source
Roadside Manual

region

Definition
As used in this manual, the region shall refer to WSDOT's seven organizational areas: Northwest-NWR in Seattle; Olympic-OR in Olympia; North Central-NCR in Wenatchee; Southwest-SWR in Vancouver; South Central-SCR in Yakima; Eastern-ER in Spokane; and Urban Corridors Office-UCO in Seattle.

WSDOT Source
Utilities Manual

Region Utilities Engineer

Definition
WSDOT representative responsible for oversight and coordination of the state Utilities Accommodation Policy within a designated region of the state. Coordinates with local

transportation engineering elements, utility representatives, the State Utilities Engineer, and others as needed.

WSDOT Source
Utilities Manual

regional detention facility

Definition
A stormwater quantity control structure designed to correct surface water runoff problems within a drainage basin or subbasin, such as regional flooding or erosion problems; a detention facility sited to detain stormwater runoff from a number of new developments or areas within a catchment.

WSDOT Source
Highway Runoff Manual

Regional Transportation Improvement Program (RTIP)

Definition
A fiscally constrained prioritized listing/program of transportation projects for a period of six years that is formally adopted by a Regional Transportation Planning Organization in accordance with RCW 47.80, as required for all regionally significant projects and projects requesting federal funding.

WSDOT Source
Environmental Manual

Regional Transportation Planning Organization (RTPO)

Definition
A planning organization authorized by the Legislature in 1990 as part of the Growth Management Act. The RTPO is a voluntary organization with representatives from state and local governments that are responsible for coordinating transportation planning activities within a region.

WSDOT Source
Design Manual

regionally significant project

Definition
A nonexempt transportation project that serves regional transportation needs, major activity centers in the region, major planned developments, or transportation terminals and most terminals themselves. Such projects are normally included in the modeling of a metropolitan area's transportation network, including, at a minimum, all principal arterial highways and all fixed guide way transit facilities that offer an alternative to regional highway travel (40 CFR 93.101).

WSDOT Source
Environmental Manual

regression to the mean

Definition

A statistical phenomenon where, if one sample of a random variable is extreme, the next sampling of the same random variable is likely to be closer to its mean. In safety performance, it is the tendency for the occurrence of crashes at a particular site to fluctuate up or down, over the long term, and to converge to a long-term average.

WSDOT Source

Safety Performance Manual

regression to the mean bias

Definition

A tendency in statistical analysis to attribute the causes of variations in results to a specific factor rather than due to regression to the mean. Its effect can be alleviated through awareness of this tendency and careful study design.

WSDOT Source

Safety Performance Manual

reimbursable agreement

Definition

An agreement under which WSDOT receives payment from another entity for goods and/or services provided by the department.

WSDOT Source

Consultant Services Manual

reimbursable costs (Consultant Services)

Definition

The total estimated or lump sum gross dollar amount a party will pay WSDOT under the terms of an agreement. This amount is entered on the Agreement Edit Information form (WSDOT Form 130-005).

WSDOT Source

Consultant Services Manual

reimbursable costs (Utilities)

Definition

Any expended costs the state or utility is legally entitled to recover from the other party. Utility reimbursable agreements, both preliminary engineering and construction, are limited to those costs incurred subsequent to the state's written authorization to proceed.

WSDOT Source

Utilities Manual

release rate

Definition

The computed peak discharge rate in volume per unit time of surface and stormwater runoff from a site.

WSDOT Source
Highway Runoff Manual

reliction

Definition
The uncovering of land formerly covered by water.

WSDOT Source
Right of Way Manual

relinquishment

Definition
The turning back to a county, city, or town that portion of a facility constructed by WSDOT and designated by agreement to become the property of the local agency upon completion of construction.

WSDOT Source
Consultant Services Manual

Related Term
See also: certification (Consultant Services)

relocation

Definition
The adjustment of utility facilities required by the highway project. This includes removing and reinstalling the facilities; acquiring necessary property rights on the new location; moving or rearranging existing facilities; or changing the type of facility, including any necessary safety and protective measures. It shall also mean constructing a replacement facility functionally equal to the existing facility, where necessary, for continuous operation of the utility service, the project economy, or staging highway construction.

WSDOT Source
Utilities Manual

relocation assistance program

Definition
A program that establishes uniform procedures for relocation assistance that will ensure legal entitlements and provide fair, equitable, and consistent treatment to persons displaced by WSDOT-administered projects, as defined in the Right of Way Manual.

WSDOT Source
Design Manual

relocation certified clear date

Definition

The date upon which all displaced persons and/or personalty are off the parcel.

WSDOT Source

Right of Way Manual

relocation reconstruction criteria

Definition

Defines when proposed utility reconstruction must include relocation of the aboveground utility to meet Control Zone Guidelines (related to WSDOT's Control Zone Policy).

WSDOT Source

Utilities Manual

rent supplement

Definition

The amount, determined by the displacing agency, necessary to compensate an eligible displaced person for the increased cost of leasing or renting an eligible replacement dwelling.

WSDOT Source

Right of Way Manual

replaced impervious surface

Definition

Those roadway areas that are excavated to a depth at or below the top of the subgrade (pavement repair work excluded) and replaced in kind. The subgrade is taken to be the crushed surfacing directly below the pavement layer (ACP, PCCP, BST). If the removal and replacement of existing pavement does not go below the pavement layer, as with typical PCCP grinding, ACP planing, or 'paver' projects, the new surfacing is not considered 'replaced impervious surface.' Certain situations that do not include excavation of the existing roadway are also considered replaced impervious surface. (See the HRM Revisions website's FAQs for a discussion of these situations.)

WSDOT Source

Highway Runoff Manual

replaced PGIS

Definition

Those PGIS (pollution-generating impervious surface) areas that are removed and replaced in kind by the project, or for roadway areas that are excavated to a depth at or below the top of the subgrade (pavement repair work excluded) and replaced in kind. The subgrade is taken to be the crushed surfacing directly below the pavement layer (ACP, PCCP, BST). If the removal and replacement of existing pavement does not go below the pavement layer, as with typical PCCP grinding, ACP planing, or 'paver' projects, the new surfacing is not considered 'replaced PGIS.' Certain situations that do not include excavation of the existing roadway are also considered replaced PGIS. (See the HRM Revisions website's FAQs for a discussion of these situations.)

WSDOT Source
Highway Runoff Manual

replacement housing payment (RHP)

Definition
Any one or certain combinations of payments authorized to be paid to an eligible displaced persons to enable such displaced persons to obtain replacement housing.

WSDOT Source
Right of Way Manual

replacement in kind

Definition
A replacement that satisfies the design specifications.

WSDOT Source
Utilities Manual

replenishment (automatic)

Definition
Account replenishment method whereby a credit card, labeled debit card, or an auto-draft via an institutional account is used to re-add funds to a GoodtoGo! account when an established minimum balance is reached.

WSDOT Source
Toll Division

replenishment (manual)

Definition
An alternative GoodtoGo! account replenishment method to Automatic Replenishment. Customer initiated account replenishments can be made on a non-recurring basis using cash, check, credit card, or debit card. Manual replenishments can be made in person, by phone, through mail or via the web.

WSDOT Source
Toll Division

reportable structure

Definition
The NBIS gives the following definition: "A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between undercopings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes; it may also include multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening."

WSDOT Source
Bridge Design Manual

Related Term
See also: bridge

request for proposal (RFP)

Definition
The document package issued by WSDOT requesting submittal of proposals for the project and providing information relevant to the preparation and submittal of proposals, including the instructions to proposers, contract documents, bidding procedures, and reference documents.

WSDOT Source
Design Manual

residential relocation

Definition
Relocation/displacement of individuals and families from a dwelling.

WSDOT Source
Right of Way manual

resource

Definition
Referred to in NEPA and SEPA implementing regulations as 'natural or depletable' resources (CEQ 1502.16, WAC 197-11-440(6)) and renewable or nonrenewable resources (WAC 197-11-444). FHWA Technical Advisory T 6640.8A (October 30, 1987) refers to "natural, physical, human, and fiscal resources" in guidance on irreversible and irretrievable commitments of resources.

WSDOT Source
Environmental manual

resource conservation areas (Environment)

Definition
Natural areas outside of the limited access hachures that were purchased or set aside to provide a natural, vegetated buffer between the highway and adjacent land uses. They serve a highway purpose, which is defined in RCW 47.40.010. 23 CFR 752.2 states that "preservation of valuable adjacent scenic lands is a necessary component of highway development." These areas were previously called Beautification Areas, Landscape Areas, Landscape or Conservation Easements, or Environmental Commitment Areas on Right of Way Plans and Real Estate Services Maps.

WSDOT Source
Environmental Manual

resource conservation areas (Roadside Policy)

Definition
Natural areas, purchased to provide a vegetated buffer between the highway and adjacent land

uses. These areas are generally outside limited access hachures and were not acquired for the operation of the interstate, but rather as buffers. These areas have previously been called Beautification Areas, Landscape Areas, and environmental commitment areas on Right of Way Plans and Real Estate Services Maps. They serve a highway purpose, which is defined in RCW 47.40.010. 23 CFR 752.2 states that "preservation of valuable adjacent scenic lands is a necessary component of highway development."

WSDOT Source
Roadside Policy Manual

resource study area

Definition
A Resource Study Area is specific for each resource and focused on the area where cumulative effects on the resource are expected to occur. It may be the same or larger than the study area for direct and indirect effects.

WSDOT Source
Environmental Manual

responsible official

Definition
Official of the lead agency who has been delegated responsibility for complying with NEPA and SEPA procedures.

WSDOT Source
Environmental Manual

rest area

Definition
An area to the side of a path.

WSDOT Source
Design Manual

restoration (Environment)

Definition
Changing a site so natural or historic functions are returned to a former or degraded wetland. For the purpose of tracking net gains in wetland area, restoration is divided into Re-establishment and Rehabilitation. Re-establishment results in a gain in wetland area; rehabilitation results in a gain in aquatic resource function, but not in area.

WSDOT Source
Environmental manual

Related Term
See also: restoration (Highway Runoff)

restoration (Highway Runoff)

Definition

In an area that no longer meets wetland criteria, actions performed to reestablish wetland functional characteristics and processes that have been lost through alterations, land uses, or catastrophic events.

WSDOT Source

Highway Runoff Manual

Related Term

See also: restoration (Environment)

restoration (Roadside)

Definition

Ecological restoration is the process of assisting the recovery and management of ecological integrity. Ecological integrity includes a critical range of variability in biodiversity, ecological processes and structures, regional and historical context, and sustainable cultural practices.

WSDOT Source

Roadside Manual

Related Term

See also: restoration (Environment)

résumé

Definition

An official notification of action taken by WSDOT following adoption of a findings and order (see Design Manual Chapter 210).

WSDOT Source

Design Manual

retention

Definition

The process of collecting and holding surface and stormwater runoff with no surface outflow.

WSDOT Source

Highway Runoff Manual, Roadside Manual

retention pond

Definition

A type of drainage facility designed to hold water for a considerable length of time allowing it to evaporate or infiltrate into the soil.

WSDOT Source

Roadside Manual

retention/detention facility (R/D)

Definition

A type of drainage facility designed either to hold water for a considerable length of time and then release it by evaporation, plant transpiration, and /or infiltration into the ground; or to hold surface and stormwater runoff for a short period of time and then release it to the surface and stormwater management system.

WSDOT Source

Highway Runoff Manual, Roadside Manual

retrofit

Definition

The renovation of an existing structure or facility to meet changed conditions or to improve performance.

WSDOT Source

Highway Runoff Manual

retroreflection

Definition

The phenomenon of light rays striking a surface and being returned directly back to the source of light.

WSDOT Source

Design Manual

retroreflectometer

Definition

An instrument used to measure retroreflectivity.

WSDOT Source

Design Manual

return frequency (recurrence interval)

Definition

A statistical representation of the average time between storm events of a given intensity or size (for example, a stormwater flow that occurs every two years on average).

WSDOT Source

Highway Runoff Manual

revenue

Definition

When an entity has a legal right to collect tolls and fees the monies from those activities create revenue. Revenue is recognized at various points in the tolling process, (at time of CSC posting, when a toll bill is created, etc.), and does not always equate to the actual cash collected.

WSDOT Source
Toll Division

reversion of existing impervious surfaces

Definition
Removing an existing impervious surface and restoring that area to a pervious state using the methods shown in Highway Runoff Manual Section 4-3.5.1. The flow control benefits for reversion of an existing impervious surface will depend on the level of reversion (Step 1 or Step 2). At this time, the reversion of an existing impervious surface only applies to meeting flow control thresholds. It does not apply to runoff treatment thresholds.

WSDOT Source
Highway Runoff Manual

Revised Code of Washington (RCW)

Definition
The law of the state as enacted by the Washington State Legislature.

WSDOT Source
Consultant Services Manual

rhizome

Definition
A root-like, usually horizontal stem, growing under or along the ground that sends out roots from its lower surface and leaves, or shoots from its upper surface. The primary means by which some plants spread or reproduce.

WSDOT Source
Roadside Manual

right of entry

Definition
A personal right that gives the agency the right to perform certain tasks or work defined within the document. If a right of entry is proposed for construction activities, it should only be used in emergency situations (slides, floods, culverts) or when the property is owned by another state or local agency and additional time is needed to get through their process.

WSDOT Source
Right of Way Manual

right of way (Design)

Definition
A general term denoting land or interest therein, acquired for or designated for transportation purposes. More specifically, lands that have been dedicated for public transportation purposes or land in which WSDOT, a county, or a municipality owns the fee simple title, has an easement devoted to or required for use as a public road/street and appurtenant facilities, or has established ownership by prescriptive right.

WSDOT Source
Design Manual

Related Term
See also: right of way (Highway Runoff)

right of way (Highway Runoff)

Definition
Public land devoted to the passage of people and goods. State highway rights of way include state limited access highways inside or outside cities or towns, but not city or town streets forming part of state highway routes that are not limited access highways. The term does not include state property under WSDOT jurisdiction that is outside the right of way lines of a state highway (RCW 90.03.520).

WSDOT Source
Highway Runoff Manual

Related Term
See also: right of way (Design)

right of way (Standard Specifications)

Definition
Land, property, or property interest, usually in a strip, acquired for or devoted to transportation purposes.

WSDOT Source
Standard Specifications

Related Term
See also: right of way (Design)

right of way and limited access plan (R/W and L/A plan)

Definition
A right of way plan that also shows limited access control details.

WSDOT Source
Design Manual

right of way project title

Definition
The generic description of the route and termini of a right of way project. The specific wording is shown in the title block of the right of way plan and is exactly duplicated whenever used to identify the project.

WSDOT Source
Right of Way Manual

right of way work order (RW Work Order)

Definition

Job numbers used to accumulate costs for appraisal, review appraisal, title information, land purchase, acquisition costs, necessary related labor expenses, production of sundry site plan, and document recording.

WSDOT Source

Right of Way Manual

right-hook

Definition

Potential intersection conflicts between motor vehicles making a right turn and the bicycle through movement.

WSDOT Source

Design Manual

rill(s)

Definition

A small, intermittent watercourse with steep sides, usually only a few inches deep; often caused by an increase in surface water flow where soil is cleared of vegetation.

WSDOT Source

Highway Runoff Manual, Roadside Manual

riparian (Highway Runoff)

Definition

Pertaining to the banks of streams, wetlands, lakes, or tidewater.

WSDOT Source

Highway Runoff Manual

Related Term

See also: riparian (Roadside)

riparian (Roadside)

Definition

The interface of aquatic and terrestrial systems in flood plains, rivers, and streams. Riparian systems are valued for diverse functions such as flood reduction, groundwater supply, streambank stabilization, habitat and migration corridors for wildlife, erosion control, and preservation of water habitats.

WSDOT Source

Roadside Manual

Citation

Transportation Research Board. “Report 379: Guidelines for the Development of Wetland Replacement Areas". Washington D.C., National Academy Press. 1996, p 76.

Related Term
See also: riparian (Highway Runoff)

ripping
Definition
Deep cultivation using specialized soil ripping equipment, usually done on compacted soils to increase pore space and improve soil structure for plant growth and infiltration of surface water.

WSDOT Source
Roadside Manual

riprap
Definition
A facing layer or protective mound of rocks placed to prevent erosion or sloughing of a structure or embankment due to flow of surface and stormwater runoff.

WSDOT Source
Highway Runoff Manual

riser
Definition
A vertical pipe extending from the bottom of a pond that is used to control the discharge rate from a stormwater facility for a specified design storm.

WSDOT Source
Highway Runoff Manual

risk
Definition
The effect of uncertainty on objectives.

WSDOT Source
Cost Estimating Manual for WSDOT Projects

Citation
ISO 31000, Risk management - Principles and Guidelines

risk-based estimate
Definition
An approach that involves simple or complex risk modeling based on inferred and probabilistic relationships among cost, schedule, and events related to the project. Risk-based estimating uses historical data and/or cost-based estimating techniques and an expert's best judgment to develop the project 'base cost' (project cost if the project proceeds as planned). Risk elements (defined as opportunities or threats) are then defined and applied to the Base Cost through risk modeling to provide a probable range for both project cost and schedule.

WSDOT Source
Cost Estimating Manual for WSDOT Projects

road approach (Design)

Definition

An access point, other than a public road/street, that allows access to or from a limited access highway on the state highway system.

WSDOT Source

Design Manual

road approach (Utilities)

Definition

An access point from a public road or private property adjacent to the highway. Access permits are issued by WSDOT for some types of road approaches.

WSDOT Source

Utilities Manual

road approach design template

Definition

The design geometric criteria for a road approach based on the usage, types of vehicles, and traffic volume.

WSDOT Source

Design Manual

roadbed

Definition

The graded part of the roadway within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

WSDOT Source

Standard Specifications

roadside (Roadside Policy)

Definition

The roadside along all Washington State routes is considered the area outside the edge of pavement of the traveled way and inside the right of way line. The roadside includes unpaved areas of medians, roundabouts, and ancillary facilities such as rest areas; viewpoints; heritage markers; pedestrian and bicycle facilities; transit facilities; stormwater treatment facilities; and park & ride lots. In addition to roadway roadsides, roadsides are defined as lands owned and managed by WSDOT, such as environmental mitigation sites and their associated buffer areas, Beautification Areas, quarries, and pit sites.

WSDOT Source

Roadside Policy Manual

Related Term

See also: roadside (Roadside)

roadside (Roadside)

Definition

The roadside is the area outside the traveled way. This applies to all lands managed by WSDOT and may extend to elements outside the right of way boundaries. This includes unpaved median strips and auxiliary facilities such as rest areas, roadside parks, viewpoints, heritage markers, pedestrian and bicycle facilities, wetlands and their associated buffer areas, stormwater treatment facilities, park and ride lots, and quarries and pit sites.

WSDOT Source

Roadside Manual

Related Term

See also: roadside (Roadside Policy)

roadside (Standard Specs)

Definition

The area outside the traveled way.

WSDOT Source

Standard Specifications

Related Term

See also: roadside (Roadside Policy)

roadside (Utilities)

Definition

The area between the edge of the roadway shoulder and the right of way line and unpaved medians on multilane highways. (See WAC 468-34-110(9) for roadside and WAC 468-34-110(13) for clear roadside policy.)

WSDOT Source

Utilities Manual

roadside character

Definition

The general character of the roadside landscape, seen from the user's visual perspective.

WSDOT Source

Roadside Policy Manual

roadside classification

Definition

Any of five classifications given to a route or stretch of roadway through a review process conducted by WSDOT and documented in the WSDOT 'Roadside Classification Log.' Roadside character classifications fall within two categories: natural and built. Natural includes the Open and Forest roadside character classification. Built includes the Rural, Semiurban, and Urban roadside character classifications.

WSDOT Source
Roadside Manual

roadside function

Definition
Any activity or role for which the roadside is specifically required, suited and used.

WSDOT Source
Roadside Manual

roadside management

Definition
WSDOT management encompassing the planning, design, construction, and maintenance of roadsides.

WSDOT Source
Roadside Policy Manual

roadside park (Design)

Definition
A roadside user facility for safe vehicular parking off the traveled way and separated from the highway by some form of buffer. These sites might be equipped with features or elements such as points of interest, picnic tables, and/or vault toilet buildings. Unlike a safety rest area, a roadside park does not always provide a permanent restroom building.

WSDOT Source
Design Manual

Related Term
See also: roadside park (Roadside)

roadside park (Roadside)

Definition
A roadside user facility for safe vehicular parking off the traveled way. These sites might be equipped with features or elements such as a point of interest, picnic tables, and/or chemical toilets. Unlike a safety rest area, a roadside park does not necessarily provide a permanent rest room building.

WSDOT Source
Roadside Manual

Related Term
See also: roadside park (Design)

roadside partner

Definition
A person whose work influences or impacts the roadside either directly or indirectly. Examples

include but are not limited to: Architects, Environmental Offices, Heritage Corridors Program, Hydraulics Office, Landscape Architects, and Maintenance personnel.

WSDOT Source
Roadside Manual

roadside restoration (Roadside Policy)

Definition
The use of planning, design, construction, and maintenance activities to protect and/or restore the roadside and to bring back or develop desired operational and/or environmental function(s).

WSDOT Source
Roadside Policy Manual

Related Term
See also: roadside restoration (Roadside)

roadside restoration (Roadside)

Definition
The use of planning, design, construction, and maintenance activities to restore roadside plant communities according to designated roadside character and Roadside Classification Plan provisions.

WSDOT Source
Roadside Manual

Related Term
See also: roadside restoration (Roadside Policy)

roadside treatment strategies

Definition
Conceptual design strategies used to coordinate implementation of roadside guidelines and fulfill roadside functions. The three basic treatment strategies are enclose/screen, expose, and blend.

WSDOT Source
Roadside Manual

roadway (Design)

Definition
The portion of a highway, including shoulders.

WSDOT Source
Design

Related Term
See also: roadway (Environment)

roadway (Environment)

Definition

The entire width between the right of way boundary lines of every publicly maintained travel way when any part thereof is open to the public use for purposes of motorized vehicular travel. May also be referred to as a street, road, or highway.

WSDOT Source
Environmental Manual

Related Term
See also: roadway (Design)

roadway (Roadside)
Definition
Conceptual design strategies used to coordinate implementation of roadside guidelines and fulfill roadside functions. The three basic treatment strategies are enclose/screen, expose, and blend.

WSDOT Source
Roadside Manual

Related Term
See also: roadway (Design)

roadway (Standard Specifications)
Definition
The portion of the Right of Way within the outside limits of the side slopes.

WSDOT Source
Standard Specifications

Related Term
See also: roadway (Design)

roadway (Utilities)
Definition
The portion of a highway, including shoulders, for vehicular use. A divided highway has two or more roadways, per WAC 468-34-110(7). The portion of the right of way within the outside limits of the sideslopes (see the Construction Manual).

WSDOT Source
Utilities Manual

roadway luminance
Definition
The light projected from a luminaire that travels toward a given area, represented by a point on the pavement surface, and then back toward the observer, opposite to the direction of travel. The units of roadway luminance are footcandles.

WSDOT Source
Design Manual

roadway prism

Definition

The area within the right of way that supports the paved roadway between the bottom of ditch and the toe of slope. Includes subgrade, base courses, surfacing courses, pavement, and roadway sideslopes.

WSDOT Source

Utilities Manual

rotational failure

Definition

A slide that moves along a surface of rupture that is curved and concave.

WSDOT Source

Roadside Manual

Citation

Turner & Schuster, eds, 'Landslides: Investigation and Mitigation', Special Report 247, Transportation Research Board, 1996, pp. 56-57.

roundabout

Definition

A circular intersection at grade with yield control of all entering traffic, channelized approaches with raised splitter islands, counter-clockwise circulation, and appropriate geometric curvature to force travel speeds on the circulating roadway generally to less than 25 mph.

WSDOT Source

Design Manual

route jurisdiction transfer (RJT)

Definition

A roadway whose jurisdictional ownership is transferred from a local agency to WSDOT or from WSDOT to a local agency.

WSDOT Source

Utilities Manual

rumble strips

Definition

Rumble strips are grooves or rows of raised pavement markers placed perpendicular to the direction of travel, or ground in a continuous sinusoidal pattern. They are used to alert inattentive drivers.

WSDOT Source

Design Manual

running slope

Definition

A slope measured in the direction of travel, normally expressed as a percent.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

runoff (Highway Runoff)

Definition

Rainwater or snowmelt that directly leaves an area as a surface drainage.

WSDOT Source

Highway Runoff Manual

Related Term

See also: runoff (Roadside)

runoff (Roadside)

Definition

That portion of the precipitation on a drainage area that is discharged as overland flow. Types include surface flow, groundwater flow, and seepage.

WSDOT Source

Roadside Manual

Related Term

See also: runoff (Highway Runoff)

runoff treatment

Definition

Pollutant removal to a specified level via engineered or natural stormwater management systems.

WSDOT Source

Highway Runoff Manual

runoff treatment BMP (best management practice)

Definition

A BMP specifically designed for pollutant removal.

WSDOT Source

Highway Runoff Manual

rural design area

Definition

An area that meets none of the conditions to be an urban design area.

WSDOT Source
Design Manual

rural intersection

Definition
An intersection in a rural design area.

WSDOT Source
Design Manual

S

safety analyst

Definition
A program developed to implement the Highway Safety Manual methodology.

WSDOT Source
Design Manual

safety context

Definition
Physical and operational conditions of a corridor, segment or intersection, including, but not limited to operating speed; cross-section of the roadway; roadside characteristics; adjacent land use; presence of transit, pedestrian and bicycle facilities; operational characteristics of segments and intersections; and the nature of conflicts between different users of the corridor.

WSDOT Source
Safety Performance Manual

safety performance

Definition
The relative measure of crash or injury potential.

WSDOT Source
Safety Performance Manual

safety performance diagnosis

Definition
The identification of factors that may contribute to a crash.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-5.

safety rest area (Design)

Definition
A roadside facility equipped with permanent restroom building(s), a parking area, picnic tables, refuse receptacles, illumination, and other ancillary services. SRAs typically include potable water and might include traveler information and telephones.

WSDOT Source
Design Manual

Related Term
See also: safety rest area (Roadside)

safety rest area (Roadside)

Definition
A roadside facility equipped with permanent rest room building(s), parking area, potable water, picnic tables, refuse receptacles, illumination, telephones, and other ancillary services. SRAs might include traveler information.

WSDOT Source
Roadside Manual

Related Term
See also: safety rest area (Design)

Safety Rest Area Roadside Master Plan

Definition
A map of existing and projected safety rest areas and roadside parks. The Master Plan considers a 20-year planning horizon.

WSDOT Source
Roadside Manual

Safety Rest Area Strategic Plan

Definition
Developed in 2008 under a stakeholder-coordinated effort of executive and advisory team members, this plan provides guidance for current and future management of the SRA program.

WSDOT Source
Design Manual

safety rest area team

Definition
A WSDOT working group representing various divisions, regions, service centers, and offices responsible for safety rest area planning, programming, design, construction, maintenance, and operation. The team assists the Heritage Corridors Program in the development of short- and long-term plans and budgets.

WSDOT Source
Roadside Manual

salmonid

Definition
A member of the fish family Salmonidae, including Chinook, coho, chum, sockeye and pink salmon; cutthroat, brook, brown, rainbow, and steelhead trout; and Dolly Varden, kokanee, and char species.

WSDOT Source
Highway Runoff Manual

salvage credit

Definition
The amount received by the utility from the sale of any portion of a utility's facility that has been removed or the amount at which the recovered material (if retained for reuse) is credited to the utility's accounts.

WSDOT Source
Utilities Manual

same-side service connection

Definition
A visual scaling system that defines the scenic quality of various portions of a roadway and limits, to varying degrees, the ability to install an aerial utility upon the right of way.

WSDOT Source
Utilities Manual

sand

Definition
A mineral soil particle between 0.05 and 2.0 mm in diameter. A soil textural class.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 550.

sand filter

Definition
A constructed depression or basin with a layer of sand that treats stormwater as it percolates through the sand and is discharged via a central collector pipe.

WSDOT Source
Highway Runoff Manual

Sanitary Control Area (SCA) (Environment)

Definition
An area (minimum radius 100 ft) maintained around a public water source (surface or well) for the purpose of protecting that source from existing and potential sources of contamination. No sources of contamination may be constructed within the sanitary control area without the permission of the Washington Department of Health (DOH) and the water purveyor. DOH guidance identifies stormwater runoff and spills resulting from vehicular accidents on roadways as potential sources of contamination.

WSDOT Source
Environmental Manual

Related Term
See also: Sanitary Control Area (SCA) (Highway Runoff)

Sanitary Control Area (SCA) (Highway Runoff)

Definition
Well protection buffers.

WSDOT Source
Highway Runoff Manual

Related Term
See also: Sanitary Control Area (SCA) (Environment)

Santa Barbara Urban Hydrograph method (SBUH)

Definition
A single-event hydrologic analysis technique for estimating runoff based on the curve number method. The curve numbers are published by the Natural Resources Conservation Service (NRCS) in Urban Hydrology for Small Watersheds, 55 TR, June 1976. Updated curve numbers are provided in Highway Runoff Manual Appendix 4-B.

WSDOT Source
Highway Runoff Manual

Citation
Natural Resources Conservation Service (NRCS), 'Urban Hydrology for Small Watersheds', 55 TR, June 1976

satisfaction of mortgage

Definition
Either an instrument or a marginal notation on the face of the mortgage itself which shows that the mortgage lien has been released.

WSDOT Source
Right of Way Manual

sawtooth berth

Definition
A series of bays that are offset from one another by connecting curb lines, constructed at an angle from the bus bays. This configuration minimizes the amount of space needed for vehicle pull in and pull out.

WSDOT Source
Design Manual

SBA-Certified Firm

Definition
A firm that has a current, valid certification from or is recognized by the SBA under the 8(a) BD or SDB programs.

WSDOT Source
Consultant Services Manual

scale

Definition
The degree of resolution at which ecological processes, structures, and changes across space and time are observed and measured.

WSDOT Source
Roadside Manual

scenic and recreational highways

Definition
A public road having special scenic, historic, recreational, cultural, archeological, and/or natural qualities that have been recognized as such through legislation or some other official declaration. The terms 'byway,' 'road,' and 'highway' are synonymous. They are not meant to define higher or lower functional classifications or wider or narrower cross-sections. Moreover, the terms State Scenic Byway, National Scenic Byway, or All American Road refer not only to the road or highway itself but also to the corridor through which it passes.

WSDOT Source
Roadside Manual

scope of work

Definition
All services, work activities and actions required of the consultant by the obligations of the contract.

WSDOT Source
Consultant Services Manual

scoping (public and agency scoping)

Definition
A formal process for engaging the public and agencies to comment on the project purpose and need statement, identify the range of alternatives, environmental elements and impacts, and mitigation measures to be analyzed in an environmental impact statement (EIS) or an environmental assessment (EA). It should not be confused with internal scoping to set a project's budget.

WSDOT Source
Environmental Manual

scoping phase

Definition
An initial phase of project development for a specific project. The scoping phase precedes the design and/or preliminary engineering phase and is intended to support priority programing and budget building scenarios. The Project Summary is the documentation developed during this phase.

WSDOT Source
Design Manual

scour

Definition
Erosion of channel banks due to excessive velocity of the flow of surface and stormwater runoff.

WSDOT Source
Highway Runoff Manual

screen (Roadside)

Definition
The use of roadside treatments such as vegetation, berms, or walls to visually block undesirable views.

WSDOT Source
Roadside Manual

Related Term
See also: screen (Roadside Policy)

screen (Roadside Policy)

Definition

A buffer between two points or areas, used to obscure or lessen the impact of a distracting or otherwise objectionable view or sound, or to protect privacy.

WSDOT Source

Roadside Policy Manual

Related Term

See also: screen (Roadside)

SCS

Definition

Soil Conservation Service (now the Natural Resources Conservation Service), U.S. Department of Agriculture.

WSDOT Source

Highway Runoff Manual

SCS method

Definition

A single-event hydrologic analysis technique for estimating runoff based on the curve number method. The curve numbers are published by the Natural Resources Conservation Service (NRCS) in Urban Hydrology for Small Watersheds, 55 TR, June 1976. With the change in name from Soil Conservation Service (SCS) to Natural Resources Conservation Service, the method may be referred to as the NRCS method.

WSDOT Source

Highway Runoff Manual

seasonal stream

Definition

An ephemeral stream.

WSDOT Source

Highway Runoff Manual

Secretary, Secretary of Transportation

Definition

The chief executive officer of the Department and other authorized representatives.

WSDOT Source

Standard Specifications

section

WSDOT Source

Roadside Manual

Related Term
See also: cross section

section 401 water quality certification

Definition
Applicants receiving a Section 404 Permit from the US Army Corps of Engineers, a Coast Guard permit or a license from the Federal Energy Regulatory Commission (FERC), are required to obtain a Section 401 Water Quality Certification from the Department of Ecology (Ecology). Issuance of a certification means that Ecology anticipates that the applicant's project will comply with state water quality standards and other requirements of state law.

WSDOT Source
Environmental Manual

section 6(f) property

Definition
Any property acquired or developed with financial assistance under Section 6(f) of the federal Land and Water Conservation Fund Act.

WSDOT Source
Environmental Manual

security lighting

Definition
A minimal amount of lighting used to illuminate areas for public safety or theft reduction. Security lighting for walkways is the lighting of areas where shadows and horizontal and vertical geometry obstruct a pedestrian's view.

WSDOT Source
Design Manual

sediment

Definition
Fragmented material that originates from weathering and erosion of rocks or unconsolidated deposits and is transported by, suspended in, or deposited by water.

WSDOT Source
Highway Runoff Manual

seedlings

Definition
Plants grown from cuttings, seeds, or other approved propagation methods. They are generally under 3 years old and under 600 mm (2 ft) in height. Measurement is by height, in 75mm (3inch) increments, or by age and number of times transplanted.

WSDOT Source
Roadside Manual

select zone analysis

Definition
A traffic model run, where the related project trips are distributed and assigned along a populated highway network. This analysis isolates the anticipated impact on the state highway network created by the project.

WSDOT Source
Design Manual

semiarid

Definition
Description of a geographical area characterized by light rainfall and having about 10 to 20 inches of annual precipitation.

WSDOT Source
Highway Runoff Manual

sensitive area (Highway Runoff)

Definition
Any area designated by a federal, state, or local government as having unique or important environmental characteristics that may require additional protective measures (also see critical areas). These areas include but are not limited to:

- 'Critical habitat' as defined in Section 3 of the federal Endangered Species Act of 1973.
- Designated 'critical water resources' as defined in 33 CFR Part 330, Nationwide Permit Program.
- Water bodies designated as 'impaired' under the provision of Section 303d of the federal Clean Water Act enacted by Public Law 92-500.
- Sole-source aquifers as defined under the federal Safe Drinking Water Act, Public Law 93-523.
- Wellhead protection zones as defined under WAC 246-290, Public Water Supplies.
- Areas identified in local critical area ordinances or in an approved basin plan.

WSDOT Source
Highway Runoff Manual

Related Term
See also: sensitive area (Roadside)

sensitive area (Roadside)

Definition
(also called critical areas) Places in the landscape that are subject to natural hazards or that support unique, fragile, or valuable natural resources. In many cases, these areas have been designated as sensitive by local jurisdictions under the state Growth Management Act (GMA) and thus may have special regulations attached to them. Each jurisdiction has its own definition of what constitutes a sensitive area and has its own set of regulations that address the

restrictions associated with these areas. The Shoreline Management Act and Growth Management Act include as nonjurisdictional those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. WSDOT has a 'no net loss' policy regarding wetlands and will mitigate impacts to wetlands created after that date. These areas can be highly susceptible to disturbance. Examples of sensitive areas include streams, wetlands, steep slopes, erosion hazard areas, coal mine hazard areas, landslide hazard areas, seismic hazard areas, and floodplains, and smaller watersheds feeding into shellfish harvest areas.

WSDOT Source
Roadside Manual

Related Terms
See also: critical areas, sensitive area (Highway Runoff)

separated HOV facility

Definition
An HOV roadway that is physically separated from adjacent general-purpose lanes by a barrier or median or is on a separate right of way.

WSDOT Source
Design Manual

serial processing

Definition
A series of decisions or events in which one step does not begin until the previous step is complete.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-7.

service connection (Roadside)

Definition
The piping connection by means of which water is conveyed from the serving utility's distribution main to a customer's premises.

WSDOT Source
Roadside Manual

service connection (Utilities)

Definition
A connection from a utility main to a customer service.

WSDOT Source
Utilities Manual

service life

Definition
The service life of a pavement marking is the time or number of traffic passages required for its retroreflectivity to decrease from its initial value to a minimum threshold value indicating that the marking needs to be refurbished or replaced.

WSDOT Source
Design Manual

service stub-out

Definition
Preinstalled service connection from a utility main at a predetermined location that allows the utility to make a service connection to the main without the need to access the main itself. They are usually associated with longitudinal utility installations within the roadway that would otherwise involve an open cut for the connection.

WSDOT Source
Utilities Manual

settleable solids (SS)

Definition
Settleable solids are the materials which settle out of suspension within a defined period (typically one hour). It is reported on a volume basis (milliliter per liter, mL/L), but can also be reported on a weight basis (milligrams per liter, mg/L).

WSDOT Source
Roadside Manual

shape

Definition
Contour, spatial form, or configuration of a figure. Shape is similar to form, but shape is usually considered to be two-dimensional.

WSDOT Source
Roadside Manual

shared roadway

Definition
A roadway that is open to both bicycle and motor vehicle travel. This may be a new or existing roadway/highway, a street with wide curb lanes, or a road with paved shoulders.

WSDOT Source
Design Manual

shared use-landing

Definition

A level (0 to 2% grade cross slope and running slope) paved area within the shared-use path, designed to provide turning and maneuvering space for wheelchair users and as a resting place for pedestrians.

WSDOT Source

Design Manual

shared use-path

Definition

A facility physically separated from motorized vehicular traffic within the highway right of way or on an exclusive right of way with minimal crossflow by motor vehicles. Shared-use paths are primarily used by bicyclists and pedestrians, including joggers, skaters, and pedestrians with disabilities, including those who use nonmotorized or motorized wheeled mobility devices. With appropriate design considerations, equestrians may also be accommodated by a shared-use path facility.

WSDOT Source

Design Manual

sheet flow

Definition

Runoff that flows over the ground surface as a thin, even layer, not concentrated in a channel.

WSDOT Source

Highway Runoff Manual

sheriff’s certificate of sale

Definition

The document given to the purchaser at a sheriff's sale under foreclosure.

WSDOT Source

Right of Way Manual

sheriff’s deed

Definition

A deed given to the holder of the sheriff's certificate after expiration of the redemption period. The certificate results from the foreclosure of a lien or mortgage.

WSDOT Source

Right of Way Manual

short-circuiting

Definition

The passage of runoff through a stormwater treatment facility in less than the design treatment time.

WSDOT Source
Highway Runoff Manual

short range guidance

Definition
Signage or other alerts giving travelers a preview time of 3 seconds or less to anticipate a feature or maneuver.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-7.

short tunnel

Definition
A tunnel, lid, or underpass that is shorter than 80' in length and has a length to vertical clearance ratio of 10:1 or less.

WSDOT Source
Design Manual

shotcrete

Definition
Concrete that is placed by means of a spray nozzle, pneumatically applied.

WSDOT Source
Highway Runoff Manual

shoulder (Design)

Definition
The portion of the roadway contiguous with the traveled way, primarily for accommodation of stopped vehicles, emergency use, lateral support of the traveled way, and where allowed, use by pedestrians and bicycles.

WSDOT Source
Design Manual

Related Term
See also: shoulder (Standard Specs)

shoulder (Standard Specs)

Definition
The part of the Roadway next to the Traveled Way or Auxiliary Lanes. It provides lateral support of base and surface courses and is an emergency stopping area for vehicles.

WSDOT Source
Standard Specifications

Related Term
See also: shoulder (Design)

shoulder (Utilities)

Definition
That portion of a roadway beyond the normal travel width.

WSDOT Source
Utilities Manual

shoulder width

Definition
The lateral dimension of the shoulder, measured from the edge of traveled way to the edge of roadway or the face of curb.

WSDOT Source
Design Manual

shoulder, usable

Definition
That portion of the roadway extending beyond the traveled way or auxiliary lanes that can be used for emergency parking by motorists. Usable shoulder is the average width being used as a shoulder along a section of highway, exclusive of intermittent widened areas, but not to exceed 10 feet in width.

WSDOT Source
Utilities Manual

shrub

Definition
A low, woody plant having several stems.

WSDOT Source
Roadside Manual

shy distance

Definition
The distance from the edge of the traveled way beyond which a roadside object might not be perceived by a typical driver as an immediate feature to be avoided to the extent that the driver will change the vehicle's placement or speed.

WSDOT Source
Design Manual

sideslope

Definition
The foreslope or backslope.

WSDOT Source
Utilities Manual

sidewalk

Definition
A walkway along a highway, road, or street intended for use by pedestrians.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

sight distance

Definition
The length of highway visible to the driver.

WSDOT Source
Design Manual, Roadside Manual

sign comprehension

Definition
A traveler's ability to interpret the meaning of a sign. The ability to comprehend and use signs is associated with three stages: legibility, recognition, and interpretation. Sign comprehension can also consist of the sign reading task plus the process of making the resultant decision, e.g., right or left turn in response to the sign's information.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-7.

Signal Maintenance Management System (SIMMS)

Definition
A database used for traffic signals, illumination, and Intelligent Transportation Systems (ITS). SIMMS is used to establish an inventory base, enter work reports, print timesheets, and store maintenance records for electrical/electronic systems within WSDOT right of way.

WSDOT Source
Design Manual

signed shared roadway

Definition
A shared roadway that has been designated by signing as a route for bicycle use.

WSDOT Source
Design Manual

significance

Definition
The significance of a potential impact on the natural or built environment depends upon context, setting, likelihood of occurrence, and severity, intensity, magnitude, or duration of the impact. Almost every transportation project that would be recognized as major federal action, no matter how limited in scope, has some adverse impact on the environment.

WSDOT Source
Environmental Manual

significant impact

Definition
Under NEPA (40 CFR 1500-1508) the determination of a significant impact is a function of both context and intensity.

WSDOT Source
Environmental Manual

silt

Definition
A mineral soil separate consisting of particles of 0.05 and 0.002 mm in diameter. A soil textural class.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 552.

silt fence

Definition
A temporary sediment barrier consisting of a geotextile fabric stretched across and attached to supporting posts, which are entrenched. Adding rigid wire fence backing can strengthen silt fence.

WSDOT Source
Highway Runoff Manual

simplified acquisition (small purchase)

Definition
Small purchase procedures are those relatively simple and informal procurement methods where an adequate number of qualified sources are reviewed and the total contract costs do not exceed the simplified acquisition threshold fixed in 41 USC 403(11).

WSDOT Source
Consultant Services Manual

single-lane roundabout

Definition
A roundabout having single-lane entries at all legs and one circulating lane.

WSDOT Source
Design Manual

single-occupant vehicle (SOV)

Definition
Any motor vehicle other than a motorcycle carrying one occupant.

WSDOT Source
Design Manual

site (Design)

Definition
Parcel(s) of land bounded by a property line or a designated portion of a public right of way.

WSDOT Source
Design Manual

Related Term
See also: site (Design: ADA)

site (Design: ADA)

Definition
A parcel of land bounded by a property line or a designated portion of a public right of way.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

Related Term
See also: site (Design)

site (Highway Runoff)

Definition
The area within the legal boundaries of a parcel (or parcels) of land that is subject to the development project. For road projects, the site is defined by the length of the project and the right of way boundaries.

WSDOT Source
Highway Runoff Manual

Related Term
See also: site (Design)

site design

Definition
Style and configuration of the built environment or parcel(s).

WSDOT Source
Design Manual

sleeve

Definition
A pipe containing other irrigation pipe. Also called casing pipe. (See Roadside Manual Figure 840.1.)

WSDOT Source
Roadside Manual

sliding window approach

Definition
An approach to network screening that examines a length of roadway in sliding increments. The section most likely to benefit from a safety treatment is used to represent the whole.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-13.

slip base

Definition
Under SEPA, WAC 197-11-330 specifies a process, including criteria and procedures, for determining whether a proposal is likely to have a significant adverse environmental impact.

WSDOT Source
Environmental Manual

slip lane

Definition
A lane that separates heavy right-turn movements from the roundabout circulating traffic (see Design Manual Chapter 1320).

WSDOT Source
Design Manual

slip ramp

Definition

A connection between legs of an intersection that allows right-turning vehicles to bypass the intersection or a connection between an expressway and a parallel frontage road. These are often separated by an island.

WSDOT Source

Design Manual

slope

Definition

Degree of deviation of a surface from the horizontal, measured as a numerical ratio, percent, or in degrees. Expressed as a ratio, the first number is the horizontal distance (run) and the second is the vertical distance (rise); for example, 2H:1V. A 2H:1V slope is a 50% slope. Expressed in degrees, the slope is the angle from the horizontal plane, so that a 90° slope is vertical (maximum), and a 45° slope is 1H:1V (a 100% slope).

WSDOT Source

Highway Runoff Manual

slope gradient

Definition

The angle of the slope as expressed in a percentage.

WSDOT Source

Roadside Manual

slow-moving vehicle turnout

Definition

A shoulder area widened to provide room for a slow-moving vehicle to pull out of the through traffic, allow vehicles to pass, and then return to the through lane.

WSDOT Source

Design Manual

Small Business Administration (SBA)

Definition

The United States Small Business Administration.

WSDOT Source

Consultant Services Manual

small business concern

Definition

With respect to firms seeking to participate as Disadvantaged Business Enterprises in USDOT-assisted contracts, a small business concern is defined pursuant to Section 3 of the Small Business Act (Public Law 85536) and Small Business Administration regulations implementing it

(13 CFR 121) that also does not exceed the cap on average annual gross receipts specified in 49 CFR 26.65(b).

WSDOT Source
Consultant Services Manual

socially and economically disadvantaged individual

Definition
Any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is:

- Any individual who a recipient finds to be a socially and economically disadvantaged individual on a case-by-case basis.
- Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:
- 'Black Americans,' which includes persons having origins in any of the Black racial groups of Africa.
- 'Hispanic Americans,' which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race.
- 'Native Americans,' which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians.
- 'Asian-Pacific Americans,' which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong.
- 'Subcontinent Asian Americans,' which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal, or Sri Lanka.
- Women.
- Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

WSDOT Source
Consultant Services Manual

soil

Definition
The unconsolidated mineral and organic matter on the surface of the earth that has been subjected to and influenced by genetic and environmental factors of parent material, climate (including moisture and temperature effects), macro and microorganisms, and topography, all acting over a period of time and producing a product - soil - that differs from the material from which it is derived in many physical, chemical, biological, and morphological properties and characteristics.

WSDOT Source
Highway Runoff Manual, Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 553

Related Term
See also: topsoil (Highway Runoff)

soil amendments

Definition
Materials that improve soil fertility for establishing vegetation or permeability for infiltrating runoff.

WSDOT Source
Highway Runoff Manual

soil bioengineering

Definition
The use of live plant materials and engineering techniques to reinforce soil and stabilize slopes.

WSDOT Source

Roadside Manual

soil drainage

Definition
As a natural condition of the soil, the frequency and duration of periods when the soil is free of saturation. In well-drained soils, the water is removed readily, but not rapidly; in poorly drained soils, the root zone is waterlogged for long periods unless artificially drained, and the roots of ordinary crop plants cannot get enough oxygen; and in excessively drained soils, the water is removed so completely that most crop plants suffer from lack of water. Strictly speaking, excessively drained soils are a result of excessive runoff due to steep slopes or low available water-holding capacity due to small amounts of silt and clay in the soil material. The following classes are used to express soil drainage:

- Well drained - Excess water drains away rapidly; no mottling occurs within 36 inches of the surface.
- Moderately well drained - Water is removed from the soil somewhat slowly, resulting in small but significant periods of wetness; mottling occurs between 18 and 36 inches.
- Somewhat poorly drained - Water is removed from the soil slowly enough to keep it wet for significant periods but not all the time; mottling occurs between 8 and 18 inches.
- Poorly drained - Water is removed so slowly that the soil is wet for a large part of the time; mottling occurs between 0 and 8 inches.

- Very poorly drained - Water is removed so slowly that the water table remains at or near the surface for a greater part of the time. There may also be periods of surface ponding. The soil has a black-to-gray surface layer with mottles up to the surface.

WSDOT Source
Highway Runoff Manual

soil erosion

Definition
The part of the overall process of denudation that includes the physical breakdown, chemical dissolving, and transportation of material by agents such as water, wind, ice, and gravity.

WSDOT Source
Roadside Manual

Citation
Transportation Research Board. “Report 379: Guidelines for the Development of Wetland Replacement Areas." Washington D.C.. National Academy Press. 1996.

soil horizons

Definition
A layer of soil approximately parallel to the land’s surface and differing from adjacent genetically related layers in physical, chemical, and biological properties or characteristics, such as color, structure, texture, consistency, amount of organic matter, and degree of acidity or alkalinity.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 558.

soil organic matter

Definition
The organic fraction of the soil that includes plant and animal residues at various stages of decomposition, cells and tissues of soil organisms, and substances synthesized by the soil population.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 561.

soil permeability

Definition
The ease with which gases, liquids, or plant roots penetrate or pass through a layer of soil.

WSDOT Source
Highway Runoff Manual

soil stabilization

Definition
The use of measures such as rock lining, vegetation, or other engineering structures to prevent the movement of soil when loads are applied to the soil.

WSDOT Source
Highway Runoff Manual

soil structure

Definition
The combination or arrangement of primary soil particles into secondary particles or units. The secondary units are characterized and classified on the basis of size, shape, and degree of distinctness into classes, types, and grades respectively. Examples are platy, prismatic, columnar, blocky, granular, and crumb. Donahue, et al., p. 561.

WSDOT Source
Roadside Manual

solar exposure

Definition
Refers to the exposure of the road surface to the rays of the sun. Solar exposure can be blocked by landforms, structures, and vegetation adjacent to the roadway.

WSDOT Source
Roadside Manual

Sole Source Aquifer (SSA) (Environment)

Definition
An aquifer designated by USEPA that (1) supplies 50 percent or more of the drinking water to the population living over the aquifer, (2) has distinct hydrogeological boundaries, and (3) for which there is no economically feasible alternative source of drinking water if it should become contaminated.

WSDOT Source
Environmental Manual

Related Term
See also: Sole Source Aquifer (SSA) (Highway Runoff)

Sole Source Aquifer (SSA) (Highway Runoff)

Definition
An aquifer or aquifer system that supplies 50% or more of the drinking water for a given service area and for which there are no reasonably available alternative sources should the aquifer become contaminated, and the possibility of contamination exists. The U.S. Environmental

Protection Agency designates sole-source aquifers, and Section 1424(e) of the Safe Drinking Water Act is the statutory authority for the Sole-Source Aquifer Protection Program.

WSDOT Source
Highway Runoff Manual

Related Term
See also: Sole Source Aquifer (SSA) (Environmental)

solid waste

Definition
State regulation WAC 173-350 define solid waste as all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, problem wastes as defined below, and recyclable materials. Federal regulations define solid waste as any garbage, refuse, or sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities. Solid waste includes hazardous and problem wastes.

WSDOT Source
Environmental Manual

source control

Definition
A structure or operation intended to prevent pollutants from coming into contact with stormwater, either through physical separation of areas or through careful management of activities that are sources of pollutants.

- Structural source control BMPs are physical, structural, or mechanical devices or facilities intended to prevent pollutants from entering stormwater.
- Operational BMPs are nonstructural practices that prevent or reduce pollutants entering stormwater.

WSDOT Source
Highway Runoff Manual

Source Water Protection Area

Definition
Area protected for drinking water supplies; these include Wellhead Protection Areas and Sanitary Control Areas.

WSDOT Source
Environmental Manual

Special Flood Hazard Area

Definition
An area with a one percent chance of being flooded in any given year. You may also hear this called 100-year floodplain. FEMA further defines a variety of zones within special flood hazard areas which describe whether the determination is based on approximate or detailed flood studies, and whether formal BFEs have been established.

WSDOT Source
Environmental Manual

special provisions

Definition
Special Provisions are supplemental specifications and modifications to the Standard Specifications, including Amendments, which apply to a specific project.

WSDOT Source
Bridge Design Manual, Standard Specifications

species

Definition
Includes any subspecies of fish, wildlife, or plants; any distinct population segment of any species of vertebrate fish or wildlife that interbreeds when mature.

WSDOT Source
Roadside Manual

Citation
Endangered Species Act, 1973

specifications

Definition
Provisions and requirements for the prescribed Work.

WSDOT Source
Standard Specifications

Specifications for the National Tunnel Inventory (SNTI)

Definition
The SNTI is intended to supplement the NTIS and provide the specifications for coding data required to be submitted to the National Tunnel Inventory (NTI). Data in the NTI will be used to meet legislative reporting requirements and provide tunnel owners, the Federal Highway Administration (FHWA) and the general public with information on the number and condition of the Nation's tunnels.

WSDOT Source
Bridge Design Manual

speed

Definition

The operations or target or posted speed of a roadway. There are three classifications of speed established:

- Low speed is considered 35 mph and below.
- Intermediate speed is considered 40-45 mph.
- High speed is considered 50 mph and above

WSDOT Source

Design Manual

speed limit sign beacon

Definition

A beacon installed with a fixed or variable speed limit sign. The preferred display is two flashing yellow indications.

WSDOT Source

Design Manual

speed management

Definition

An engineered effort to achieve a targeted speed.

WSDOT Source

Design Manual

speed transition segment

Definition

An engineered segment of road intended to lower the operating speed between contexts with different target speeds.

WSDOT Source

Design Manual

spill control device

Definition

A tee section or down-turned elbow designed to retain a limited volume of a pollutant that floats on water, such as oil or antifreeze. Spill control devices are passive and must be cleaned out in order to remove the spilled pollutant.

WSDOT Source

Highway Runoff Manual

spill prevention, control, and countermeasures (SPCC) plan

Definition
A plan prepared by a construction contractor, as required in Standard Specifications 1-07.15(1), to prevent sediment and other pollutants associated with construction activity from affecting soil, air, and water quality.

WSDOT Source
Highway Runoff Manual

Related Term
See also: spill prevention, control, and countermeasures (SPCC) Plan (Roadside)

spill prevention, control, and countermeasures (SPCC) plan (Roadside)

Definition
A plan prepared by a construction contractor, as required in Standard Specification 1-07.15(1), to prevent sediment and other pollutants associated with construction activity from affecting soil, air, and water quality.

WSDOT Source
Roadside Manual

Related Term
See also: spill prevention, control, and countermeasures (SPCC) Plan

spill prevention, control, and countermeasures (SPCC) plan (Utilities)

Definition
A project-specific plan to prevent, control, and correct possible contamination from spills of 'Hazardous Substances' as defined in RCW 70.105.010.

WSDOT Source
Utilities Manual

spillway

Definition
A passage, such as a paved apron or channel carrying surplus water over or around a dam or similar obstruction, or an open or closed channel used to convey excess water from a reservoir. A spillway may contain gates, either manually or automatically controlled, to regulate the discharge of excess water.

WSDOT Source
Highway Runoff Manual

split tee

Definition
A four-leg intersection with the crossroad intersecting the through roadway at two tee intersections offset by at least the width of the roadway.

WSDOT Source
Design Manual

splitter island

Definition
The raised island at each two-way leg between entering and exiting vehicles, designed primarily to control the entry and exit speeds by providing deflection. They also discourage wrong way movements and provide pedestrian refuge.

WSDOT Source
Design Manual

spraying

Definition
A procedure for applying marking material to a surface as a jet of fine liquid particles.

WSDOT Source
Design Manual

stabilized construction entrance

Definition
A construction site entrance that is reinforced or finished with media such as riprap, gravel, or hog fuel to minimize the tracking of sediment onto adjacent streets.

WSDOT Source
Highway Runoff Manual

staging area (construction)

Definition
A site used temporarily during construction for materials or equipment storage, assembly, or other temporary construction activities.

WSDOT Source
Highway Runoff Manual

stairstep grading

Definition
A technique of grading slopes to minimize erosion, in which continuous slopes are replaced with a series of terraces.

WSDOT Source
Highway Runoff Manual

Standard Form Agreement (Bridge Inspection)

Definition
A preapproved agreement format that contains a form number assigned by WSDOT forms management. Any revision to a standard form agreement will constitute a nonstandard agreement and will require further review (see nonstandard agreement).

WSDOT Source
Consultant Services Manual

Related Term
See also: nonstandard agreement

Standard Form Agreement (Utilities)

Definition
An agreement prepared using one of the preprinted standard forms available, containing language that complies with applicable state law and WSDOT policy. The agreement form is not to be revised, directly or indirectly, in any manner.

WSDOT Source
Utilities Manual

Standard Plans (Highway Runoff)

Definition
WSDOT Standard Plans for Road, Bridge, and Municipal Construction. Standardized design drawings for commonly used structures that can be referenced in contracts. The Headquarters Design Office maintains the Standard Plans.

WSDOT Source
Highway Runoff Manual

Related Term
See also: Standard Plans (Standard Specs)

Standard Plans (Standard Specs)

Definition
A manual of specific plans or drawings adopted by the Contracting Agency which show frequently recurring components of Work that have been standardized for use.

WSDOT Source
Standard Specifications

Related Term
See also: Standard Plans (Highway Runoff)

Standard Specifications (Bridge Design)

Definition
The Standard Specifications is published biannually by the WSDOT Engineering Publications Office, is maintained by the WSDOT Construction Office, and is used as the governing construction specification for all WSDOT construction projects.

WSDOT Source
Bridge Design Manual

Related Term
See also: Standard Specifications (Highway Runoff)

Standard Specifications (Highway Runoff)

Definition
WSDOT Standard Specifications for Road, Bridge, and Municipal Construction. Construction requirements for commonly used structures that can be referenced in contracts. The Headquarters Construction Office maintains the Standard Specifications.

WSDOT Source
Highway Runoff Manual

Related Term
See also: Standard Specifications (Bridge Design)

Standard Specifications (Utilities)

Definition
As used in this manual, shall refer to the current edition of and amendments to WSDOT's Standard Specifications for Road, Bridge, and Municipal Construction.

WSDOT Source
Utilities Manual

State Environmental Policy Act (SEPA) (Highway Runoff)

Definition
The Washington State law (RCW 43.21C) intended to minimize environmental damage; modeled after the National Environmental Policy Act (NEPA). SEPA requires that state agencies and local governments consider environmental factors when making decisions on development proposals over a certain size, comprehensive plans and zoning requirements, and other programmatic proposals. As part of this process, environmental documents are prepared and opportunities for public comment are provided.

WSDOT Source
Highway Runoff Manual

Related Term
See also: State Environmental Policy Act (SEPA) (Utilities)

State Environmental Policy Act (SEPA) (Utilities)

Definition
The policy that directs state and local decision makers to consider the environmental consequences of actions. The Environmental Policy Act Rules (WAC 468-12) integrate the procedures of SEPA into the programs, activities, and actions of WSDOT.

WSDOT Source
Utilities Manual

Related Term
See also: State Environmental Policy Act (SEPA) (Highway Runoff)

state highway log

Definition
A planning report (available online) prepared by WSDOT's Traffic Data Office that provides statewide roadway data.

WSDOT Source
Utilities Manual

state highway system

Definition
All roads, streets, and highways designated as state routes in compliance with Chapter 47.17 RCW.

WSDOT Source
Design Manual, Right of Way Manual

state highway viewer

Definition
A computer system (available online) that displays a photo log of highways; it is generally updated every two years.

WSDOT Source
Utilities Manual

State Historic Preservation Officer (SHPO)

Definition
Coordinates cultural resource preservation activities in each state; one SHPO per state, usually appointed by the governor. SHPO is charged with reflecting the interests of the state and its citizens in preserving their cultural heritage, which involves a variety of responsibilities (36 CFR 61.4(b)). In Washington State, the SHPO is a governor appointed position housed in the Department of Archaeology and Historic Preservation (DAHP), which reviews projects for compliance with Section 106 of the National Historic Preservation Act.

WSDOT Source
Environmental Manual

State Implementation Plan (SIP)

Definition
Framework for complying with federal law (40 CFR Part 51) requiring that the state take action to quickly reduce air pollution in a nonattainment area and provide controls to keep the area clean for 20 years. WSDOT projects must conform to the SIP before the FHWA and the EPA can approve construction.

WSDOT Source
Environmental Manual

state route mile post

Definition
A linear referencing system measurement value used to assign a logical number to a given point along a state route.

WSDOT Source
Right of Way Manual

State Utilities Engineer

Definition
State representative responsible for management, oversight, and coordination of the state Utilities Accommodation Policy, who works with region representatives, state utility representatives, federal government representatives, and WSDOT executives.

WSDOT Source
Utilities Manual

state-generated funds

Definition
Revenues that are collected and dispensed by the state, such as cash receipts and receivables derived from taxes and other sources.

WSDOT Source
Consultant Services Manual

Statewide Transportation Improvement Program (STIP)

Definition
A planning document that includes all federally funded projects and other regionally significant projects for a three-year period.

WSDOT Source
Design Manual

static pricing

Definition
A toll rate pricing scenario that is fixed and does not vary.

WSDOT Source
Toll Division

static scale

Definition
A scale that requires a vehicle to stop for weighing.

WSDOT Source
Design Manual

statistical distribution

Definition
Within an analysis model, the set of frequencies or probabilities assigned to various outcomes of a particular event or trial.

WSDOT Source
Safety Performance Manual

Citation
Adapted from American Association of State Highway and Transportation Officials. *Highway Safety Manual*. AASHTO, 2010, p. G-5.

statutory authority

Definition
The specific law or rule, resolution, or ordinance that authorizes an entity to enter into an agreement to perform an action, take on an obligation, and/or make payment for services and/or products received.

WSDOT Source
Consultant Services Manual

steep slope

Definition
A grass covered semi-arid plain, such as those found in Washington east of the Cascade mountain range.

WSDOT Source
Roadside Manual

stoloniferous

Definition
Description of a type of plant having a long shoot that grows from the central rosette and droops to the ground, where it roots to form a new plant.

WSDOT Source
Highway Runoff Manual

stop sign beacon

Definition

A beacon installed above a stop sign. The display is a flashing red indication.

WSDOT Source

Design Manual

stopping sight distance

Definition

The distance needed for a driver to stop a vehicle traveling at design speed based on design conditions.

WSDOT Source

Design Manual

storm frequency

Definition

The time interval between major storms of predetermined intensity and volumes of runoff that storm sewers and other structures are designed to handle hydraulically without surcharging and backflooding (for example, a 2-year, 10-year, or 100- year storm).

WSDOT Source

Highway Runoff Manual

storm sewer system

Definition

A sewer that carries stormwater and surface water, street wash, and other washwaters or drainage, but excludes sewage and industrial wastes (also called a storm drain).

WSDOT Source

Highway Runoff Manual

stormwater

Definition

That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, channels, or pipes into a defined surface water body or infiltration facility.

WSDOT Source

Environmental Manual, Highway Runoff Manual, Roadside Manual

stormwater facility

Definition

A constructed component of a stormwater drainage system, designed or constructed to perform a particular function or multiple functions. Stormwater facilities include but are not limited to pipes, swales, ditches, culverts, street gutters, detention ponds, retention ponds, constructed wetlands, infiltration devices, catch basins, oil/water separators, and biofiltration swales.

WSDOT Source
Highway Runoff Manual

Stormwater Management Manual for Eastern Washington (SWMMEW)

Definition
A technical manual prepared by the Washington State Department of Ecology containing BMPs intended to prevent, control, and treat pollution in stormwater and to reduce other stormwater-related impacts on waters of the state. The stormwater manual provides guidance on measures necessary in eastern Washington to control the quantity and quality of stormwater runoff from new development and redevelopment.

WSDOT Source
Highway Runoff Manual

Related Term
See also: Stormwater Management Manual for Western Washington (SWMMWW)

Stormwater Management Manual for Western Washington (SWMMWW)

Definition
A technical manual prepared by the Washington State Department of Ecology containing BMPs intended to prevent, control, and treat pollution in stormwater and to reduce other stormwater-related impacts on waters of the state. The stormwater manual provides guidance on measures necessary in western Washington to control the quantity and quality of stormwater runoff from new development and redevelopment.

WSDOT Source
Highway Runoff Manual

Related Term
See also: Stormwater Management Manual for Eastern Washington (SWMMEW)

stormwater outfall

Definition
Any location where concentrated stormwater runoff leaves WSDOT right of way. Outfalls may discharge to surface waters or groundwater.

WSDOT Source
Highway Runoff Manual

Stormwater Pollution Prevention Plan (SWPP)

Definition
The proposed efforts to reduce the downstream quality and quantity impacts of stormwater. May include TESC and SPCC plans.

WSDOT Source
Utilities Manual

Stormwater Site Plan (SSP)

Definition

A plan that shows the measures that will be taken during and after project construction to provide erosion, sediment, and stormwater control. Specific elements of the plan are outlined in the Highway Runoff Manual.

WSDOT Source

Roadside Manual

stream

Definition

An area where surface waters flow sufficiently to produce a defined channel or bed. A defined channel or bed is an area that demonstrates clear evidence of the passage of water, indicated by hydraulically sorted sediments or the removal of vegetative litter or loosely rooted vegetation by the action of moving water. The channel or bed need not contain water year-round. This definition does not include irrigation ditches, canals, stormwater runoff devices, or other entirely artificial watercourses unless they are used to convey streams naturally occurring prior to construction. Topographic features that resemble streams but have no defined channels (swales) are considered streams when hydrologic and hydraulic analyses performed pursuant to a development proposal predict formation of a defined channel after development.

WSDOT Source

Highway Runoff Manual

streambanks

Definition

The usual boundaries, not the flood boundaries, of a stream channel. Right and left banks are named facing downstream.

WSDOT Source

Highway Runoff Manual

street furniture

Definition

Sidewalk equipment or furnishings, including garbage cans, benches, parking meters, and telephone booths.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

streetside zone

Definition

The portion of the public right of way dedicated to the pedestrian thoroughfare and supporting the accessibility, activities and functions of the local land use. The streetside zone is comprised of a frontage zone, pedestrian zone, furnishing zone and parking zone (see Design Manual Chapter 1230). Note some local agencies may divide the streetside zone.

WSDOT Source
Design Manual

structural BMPs

Definition
Physical, structural, or mechanical devices or facilities intended to prevent pollutants from entering stormwater.

WSDOT Source
Highway Runoff Manual

structural roadbed

WSDOT Source
Utilities Manual

Related Term
See also: roadway prism

structure (Roadside)

Definition
Something constructed, such as a wall, fence, abutment, sign bridge, or cantilever support, a built element.

WSDOT Source
Roadside Policy Manual

Related Term
See also: structures (Environment)

structures (Environment)

Definition
Functional constructions made usually for purposes other than creating shelter.

WSDOT Source
Environment Manual

Related Term
See also: structure (Roadside)

structures (Standard Specs)

Definition
Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, endwalls, buildings, service pipes, sewers, underdrains, foundation drains, and other features found during Work that the Contract may or may not classify as a Structure.

WSDOT Source
Standard Specifications

Related Term
See also: structure (Roadside)

study area

Definition
The transportation system area to study in the study process and for an ARR. The study area is a minimum of one interchange upstream and downstream from the proposal. The study area shall also include the intersecting roadway in the area to the extent necessary to ensure its ability to collect and distribute traffic to and from the interchange. The study area should be expanded as necessary to capture operational impacts of adjacent interchanges in the vicinity that are, or will be, bottlenecks or chokepoints that influence the operations of the study interchange.

WSDOT Source
Design Manual

study plan

Definition
A term associated with environmental procedures, this plan proposes an outline or 'road map' of the environmental process to be followed during the development of a project that requires complex NEPA documentation (see Design Manual Chapter 210 and the Environmental Manual).

WSDOT Source
Design Manual

subconsultant

Definition
The individual or firm contracted by a consultant to provide a portion of the services for which the consultant is responsible in its contract with WSDOT.

WSDOT Source
Consultant Services Manual

subcontractor

Definition
An individual, partnership, firm, corporation, or joint venture who is sublet part of the Contract by the Contractor.

WSDOT Source
Standard Specifications

subgrade (Highway Runoff)

Definition
A layer of stone or soil used as the underlying base for a BMP.

WSDOT Source
Highway Runoff Manual

subgrade (Standard Specs)

Definition

The top surface of the Roadbed on which subbase, base, surfacing, pavement, or layers of similar materials are placed.

WSDOT Source

Standard Specifications

subject matter expert

Definition

A person who is an authority in a particular area or topic and understands the data and the limitations on the use and application of the data.

WSDOT Source

Design Manual

subsequent franchise period

Definition

That period of time (up to, but not exceeding, 25 years) for which an initial franchise is renewed.

WSDOT Source

Utilities Manual

subsoil

Definition

The soil layers below the topsoil that contain little or no organic matter.

WSDOT Source

Roadside Manual

substantive safety

Definition

The actual, quantitative and objective, long term or expected safety performance of a site measured in terms of crash frequency, severity, or both.

WSDOT Source

Safety Performance Manual

substrate

Definition

The natural soil base underlying a BMP measure.

WSDOT Source

Highway Runoff Manual

substructure

Definition
The part of the Structure below:

- The bottom of the grout pad for the simple and continuous span bearing, or
- The bottom of the girder or bottom slab soffit, or
- Arch skewbacks and construction joints at the top of vertical abutment members or rigid frame piers. Substructures include endwalls, wingwalls, barrier and railing attached to the wingwalls, and cantilever barriers and railings

WSDOT Source
Standard Specifications

subsurface utility engineering (SUE)

Definition
To collect, identify, and depict existing underground utility facilities, recognizing the risks at precision levels A through D, with A being the most precise.

WSDOT Source
Utilities Manual

suburban area

Definition
A term for the area at the boundary of an urban design area. Suburban settings may combine higher speeds common in rural design areas with activities more common to urban settings.

WSDOT Source
Design Manual

succession

Definition
The natural tendency of plant communities to change over time.

WSDOT Source
Roadside Policy Manual

Related Term
See also: ecological succession

successional species

Definition
A plant species that can grow in full sun and that produces many seeds is generally an early successional, or pioneer, species. Alder and Cottonwood are examples of pioneer species. These are replaced over time by plants that are shade-tolerant and long-lived. These are referred to as climax species. Western Red Cedar and Western Hemlock are examples of climax species.

WSDOT Source
Roadside Policy Manual

successor

Definition
One who assumes the place of another and fills the role or position.

WSDOT Source
Right of Way Manual

sufficient property rights

Definition
Per 23 CFR 1.23 and 23 CFR 710.201(e), the real property interest acquired for federal aid projects by the acquiring agency must be adequate for the construction, operation, and maintenance of the resulting facility and for the protection of both the facility and the traveling public. For instance, if there is a highway embankment, the acquiring agency must acquire permanent property rights for the slope area, since the slope area is integral to the structural integrity of the roadbed.

The acquiring agency must acquire any property needed for mitigation and any staging areas required by the NEPA document in the certification. This also means R/W shown as needed on the PS&E, not just the R/W plan, needs to be certified.

For property that is not permanently needed for the project, but is necessary for construction of the project, temporary construction easements, leases, license agreements, permits, and/or rights of entry may be appropriate. See Right of Way Manual Chapter 6 for appropriate use of these instruments.

WSDOT normally acquires fee simple title for R/W and limited access. This policy should be considered by local agencies. There are instances where something less than full fee acquisition is sufficient, such as when the property is owned by the federal or state government, railroads, and Indian Nations or if it is only needed to construct the project (e.g., temporary construction easements or driveway reconnect permits).

WSDOT Source
Right of Way Manual

sundry site

Definition
Any site under the authority of the department which is used (or is intended for use) for pit, quarry, stockpile, common borrow, riprap, maintenance, park and ride, ferry terminals, airports, etc.

WSDOT Source
Right of Way Manual

sundry site project title

Definition

Projects involving sundry sites are identified by the name of the county. A materials site for use on a roadway project is identified by two titles: (l) The Sundry Site Plan name and site number; (2) The words 'For use on' followed by the official name of the related right of way project, e.g., "Thurston County Sundry Sites, Pit Site No. PSJ-100. For use on SR 5, Lewis County Line to Tumwater."

WSDOT Source

Right of Way Manual

superelevation

Definition

The rotation of the roadway cross section in such a manner as to overcome part of the centrifugal force that acts on a vehicle traversing a curve.

WSDOT Source

Design Manual

superelevation runoff

Definition

The length of highway needed to accomplish the change in cross slope from a section with adverse crown removed (level) to a fully superelevated section, or vice versa.

WSDOT Source

Design Manual

superelevation transition length

Definition

The length of highway needed to change the cross slope from normal crown or normal pavement slope to full superelevation.

WSDOT Source

Design Manual

superstructure

Definition

The part of the Structure above:

- The bottom of the grout pad for the simple and continuous span bearing, or
- The bottom of the block supporting the girder, or
- Arch skewbacks and construction joints at the top of vertical abutment members or rigid frame piers.
- Longitudinal limits of the Superstructure extend from end to end of the Structure in accordance with the following criteria:
- From the face of end diaphragm abutting the bridge approach embankment for end piers without expansion joints, or

- From the end pier expansion joint for bridges with end pier expansion joints

Superstructures include, but are not limited to, the bottom slab and webs of box girders, the bridge deck and diaphragms of all bridges, and the sidewalks when shown on the bridge deck. The Superstructure also includes the girders, expansion joints, bearings, barrier, and railing attached to the Superstructure when such Superstructure components are not otherwise covered by separate unit measured or lump sum bid items. Superstructures do not include endwalls, wingwalls, barrier and railing attached to the wingwalls, and cantilever barriers and railings unless supported by the Superstructure.

WSDOT Source
Standard Specifications

support team

Definition
An integral part of the ARR process consisting of an assemblage of people from the regions, FHWA (for Interstates), WSDOT HQ Access and Hearings, and other representatives organized to develop and analyze alternatives to meet the need of a proposal, including approval authorities.

WSDOT Source
Design Manual

surety

Definition
A company that is bound with the Contractor to ensure performance of the Contract, payment of all obligations pertaining to the Work, and fulfillment of such other conditions as are specified in the Contract, Contract Bond, or otherwise required by law.

WSDOT Source
Standard Specifications

surety agent

Definition
The bonding company or banking institution where the surety amount is held in trust.

WSDOT Source
Utilities Manual

surety duration

Definition
The period during which a surety is held before release. Surety Holder The utility owner who has engaged a Surety Agent to hold a surety on the Holder's behalf.

WSDOT Source
Utilities Manual

Surface Transportation Program (STP)

Definition
A federal program established by Congress in 1991 that provides a source of federal funding for highway and bridge projects.

WSDOT Source
Design Manual

surface water

Definition
All water naturally open to the atmosphere, such as rivers, lakes, reservoirs, ponds, streams, wetlands, seas, and estuaries.

WSDOT Source
Environmental Manual

surplus property

Definition
Property not acquired as operating right of way (e.g., pit sites, maintenance sites, uneconomic remnants) and is no longer needed. Disposal proceeds without a plan revision, unless part of the surplus area, is to be used as operating right of way.

WSDOT Source
Right of Way Manual

sustainable roadside

Definition
A roadside that fulfills design intent and roadside functions over the long term, preserving the environment wherever possible, within available present and future funding, personnel, equipment, and methodologies.

WSDOT Source
Roadside Policy Manual

swale (Highway Runoff)

Definition
A natural depression or shallow drainage conveyance with relatively gentle side slopes, generally with flow depths less than 1 foot, used to temporarily store, route, or filter runoff.

WSDOT Source
Highway Runoff Manual

Related Term
See also: swale (Roadside)

swale (Roadside)

Definition
A shallow drainage conveyance with relatively gentle side slopes, generally with flow depths less than one foot. May be designed for infiltration, biofiltration, or water conveyance.

WSDOT Source
Roadside Manual

Related Term
See also: swale (Highway Runoff)

System for Award Management (SAM)

Definition
Per federal regulations, CSO is required to ensure, to the best of its knowledge and belief, that none of the principals, affiliates, third party Contractors and subcontractors selected for work by the State are suspended, debarred, ineligible or voluntarily excluded from participation in federally assisted transactions or procurements. Federal regulations require CSO to review records of excluded parties in the federal System for Award Management (SAM) before entering into any third-party Contracts exceeding $25,000.00. This system combines several existing registries and agency lists into one search engine that is updated on a regular basis to ensure that companies selected for work are not excluded.

WSDOT Source
Consultant Services Manual

T

tackifier

Definition
A plant-based or synthetic polymer used to help hydroseed mixes stick together and adhere to the soil. Some tackifiers directly stabilize soil.

WSDOT Source
Highway Runoff Manual

tag

Definition
An alternative term acceptable to use in reference to a transponder.

WSDOT Source
Toll Division

Related term
See also: transponder

tag ID

Definition

A unique number identifying the tag agency and individual tag number of a transponder. A tag ID number does not include the security check-digit value, located at a specific position in the unique number string printed on the tag itself.

WSDOT Source

Toll Division

Tag Validation List (TVL)

Definition

A comprehensive list of transponders and their corresponding tag status, and customer account status.

WSDOT Source

Toll Division

take

Definition

Defined under the federal Endangered Species Act as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct," including modification to a species habitat. The habitat could be a riparian area, spawning bed, or a rearing area. Changing the hydraulic characteristics of a stream system may result in a habitat alteration and could be considered a take. Release of physical, chemical, or biological pollutants into a stream system may result in a take.

WSDOT Source

Environmental Manual, Highway Runoff Manual

tangent runout

Definition

The length of highway needed to change the cross slope from normal crown to a section with adverse crown removed (level).

WSDOT Source

Design Manual

target speed

Definition

A proactive approach to establishing a speed consistent with the context characteristics. Target speed is the design operating speed, which aligns design, posted and operating speed as the same value.

WSDOT Source

Design Manual

task analysis

Definition
Identification of basic activities performed by drivers as they navigate different driving scenarios by breaking driving segments successively into tasks and subtasks/information processing elements.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-8.

task order document

Definition
A contract that is a derivative document, from a master agreement, containing all the elements that make it a contract, including a statement of work, beginning and ending dates of the work, and a specific dollar amount for the work to be completed. A task order cannot be used to make changes or additions to the terms of the master agreement. Task orders are executed and monitored individually (see master agreement).

WSDOT Source
Consultant Services Manual

Related Term
See also: master agreement

tax roll

Definition
A record of all taxable property which includes the assessed value, the current mileage rate, and the resulting tax.

WSDOT Source
Right of Way Manual

team management

Definition
The direction of a group of individuals that work as a unit. Effective teams are results-oriented and are committed to project objectives, goals, and strategies.

WSDOT Source
Design Manual

Technology Assessment Protocol Ecology (TAPE)

Definition
A Washington State Department of Ecology process for reviewing and approving new stormwater treatment technologies.

WSDOT Source
Highway Runoff Manual

tee (T) intersection

Definition
An intersection formed by two roadways where one roadway terminates at the point it meets a through roadway.

WSDOT Source
Design Manual

Temporary Erosion and Sediment Control Manual M 3109

Definition
The WSDOT manual that outlines how to meet the requirements of the NPDES Construction Stormwater General Permit and Volume II of the stormwater management manuals published by the Washington State Department of Ecology.

WSDOT Source
Environmental Manual

temporary traffic signal

Definition
A conventional traffic signal used during construction to control traffic at an intersection while a permanent signal system is being constructed. A temporary traffic signal is typically an inexpensive span-wire installation using timber strain poles.

WSDOT Source
Design Manual

tenancy in common

Definition
A form of co-ownership of real or personal property by two or more persons without survivorship and property interests pass by devise and descent to the heirs of a deceased co-owner or as directed by the will of the deceased.

WSDOT Source
Right of Way Manual

tenancy, joint

Definition
A form of coownership of real or personal property by two or more persons permitting the right of survivorship where said property passes to the surviving co-owner(s) without probate proceedings.

WSDOT Source
Right of Way Manual

terrace

Definition
An embankment or combination of an embankment and channel across a slope to control erosion by diverting or storing surface runoff instead of permitting it to flow uninterrupted down the slope.

WSDOT Source
Highway Runoff Manual

TESC plan (Highway Runoff)

Definition
A plan that includes all physical and procedural BMPs for preventing erosion and turbid discharges throughout a project and during construction.

WSDOT Source
Highway Runoff Manual

Related Term
See also: TESC plan (Roadside)

TESC plan (Roadside)

Definition
A plan required on any project involving earthwork. The specific elements are outlined in the Highway Runoff Manual.

WSDOT Source
Roadside Manual

Related Term
See also: TESC plan (Highway Runoff)

TESC plan (Utilities)

Definition
A formal plan designed for an individual project for erosion and sediment control.

WSDOT Source
Utilities Manual

texture

Definition
The visual interplay of light and shadow created by variations in the surface of an object. Grain or nap of a landscape or a repetitive pattern of tiny forms. Visual texture can range from smooth to coarse as seen in the sketch below.

WSDOT Source
Roadside Manual

The State (Bridge Design)

Definition

The Washington State Department of Transportation (WSDOT).

WSDOT Source

Bridge Design Manual

The State (Standard Specifications)

Definition

The state of Washington acting through its representatives.

WSDOT Source

Standard Specifications

thread of a stream

Definition

The center of the fastest moving part of the main channel of a stream.

WSDOT Source

Right of Way Manual

threatened (species) (Environment)

Definition

Any species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

WSDOT Source

Environmental Manual

threatened (species) (Highway Runoff)

Definition

Any species (other than pest insects) likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

WSDOT Source

Highway Runoff Manual

threatened (species) (Roadside)

Definition

Any species of plant or animal that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of it range.

WSDOT Source

Roadside Manual

threshold determination (SEPA)

Definition

The threshold determination process is the process used to evaluate the environmental consequences of a proposal and determine whether the proposal is likely to have any 'significant adverse environmental impacts.' The SEPA lead agency makes this determination and documents it as either a Determination of Nonsignificance (DNS), or a Determination of Significance (DS). A DS requires preparation of an EIS. State and local agencies use the environmental checklist (see above) to help make a threshold determination.

WSDOT Source

Environmental Manual

threshold discharge area (TDA)

Definition

An on-site area draining to a single natural discharge location or multiple natural discharge locations that combine within 1/4 mile downstream (as determined by the shortest flow path).

WSDOT Source

Highway Runoff Manual

tide lines

Definition

Each day there are two high tides and two low tides. The two low tides are the 'short run out' which is called the LOW TIDE, and the 'long run out' which is called the LOWER LOW TIDE. By the same token, the two high tides are call HIGH TIDE and the HIGHER HIGH TIDE. The average of all 'low' and 'lower low' tides is called the MEAN LOW TIDE. The average of all 'lower low' tides is called the MEAN LOWER LOW TIDE. The lowest line on the land reached by a receding tide is called the EXTREME LOW TIDE. Likewise, the MEAN HIGH TIDE is the average of all 'high' and 'higher high' tides; MEAN HIGHER HIGH TIDE is the average of all 'higher high' tides; and EXTREME HIGH TIDE is the highest line on the land reached by an incoming tide.

WSDOT Source

Right of Way Manual

tight-line

Definition

A continuous length of aboveground pipe that conveys water from one point to another (typically down a steep slope) with no inlets or collection points in between.

WSDOT Source

Highway Runoff Manual

till

Definition

A layer of poorly sorted soil deposited by glacial action that generally has very low infiltration rates.

WSDOT Source
Highway Runoff Manual

tilth

Definition
The physical condition of soil as related to its ease of tillage, fitness as a seedbed, and ease of seedling emergence and root penetration.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson, 'Soils: An Introduction to Soils and Plant Growth', Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 570.

time of concentration

Definition
The time necessary for surface runoff to reach the outlet of a subbasin from the hydraulically most remote point in the tributary drainage area.

WSDOT Source
Highway Runoff Manual

time-based certificate #3s

Definition
Projects where agreements have been reached on all parcels and there is a reasonable expectation that payment and relocation will be completed prior to bid opening. It is expected that the certificate will be upgraded to a #1 or #2 prior to bid opening.

WSDOT Source
Right of Way Manual

tire wash

Definition
A facility for washing mud off vehicles to prevent track-out of sediment.

WSDOT Source
Highway Runoff Manual

titles (or headings)

Definition
The titles or headings of the Sections and Subsections herein are intended for convenience of reference and shall not be considered as having any bearing on their interpretation.

WSDOT Source
Standard Specifications

toe of slope

Definition
The point where the roadway structure meets existing ground line - usually related to a fill section or fill slope.

WSDOT Source
Utilities Manual

toll bill notice

Definition
An invoice of one or multiple toll bill trip-transactions that has been (or will be) sent to a vehicle's registered owner or other designee.

WSDOT Source
Toll Division

toll bill transaction

Definition
A single trip-transaction which could not be assigned to a valid, billable GoodtoGo! customer account, where a photo is applied to a bill, printed and mailed to the registered owner or other specified designee.

WSDOT Source
Toll Division

Related Term
See also: Pay By Mail

toll information signs

Definition
Variable message display that shows ancillary information used by toll lane customers, such as HOV occupancy requirements.

WSDOT Source
Toll Division

toll point

Definition
The location where equipment is installed to detect and record the presence of a vehicle, either by transponder, license plate, or toll booth attendant.

WSDOT Source
Toll Division

toll point transaction

Definition
A triggered and captured record of activity created by Roadway Toll System equipment (RTS equipment) as a result of a vehicle traveling into and through a toll point.

WSDOT Source
Toll Division

toll rate brick

WSDOT Source
Toll Division

Related Term
See also: VMS panel

toll rate plan

Definition
A set of configurations that schedule specific toll rates or other display messages, or algorithm configurations used for dynamic price calculations.

WSDOT Source
Toll Division

toll rate signs

Definition
Signs that display toll rate dollar values or other toll system status messages. May have one or more variable message displays and includes toll rate bricks and may include toll information signs.

WSDOT Source
Toll Division

toll revenue

Definition
Represents the revenue earned, net of any adjustments, from vehicles traveling through a toll zone and identified by the RTS. Expressed entirely into fund 495 and then redistributed out to the specific facility funds (09F, 16J, 511, 595, etc.).

WSDOT Source
Toll Division

toll setting authority

Definition
Periodically reviews toll rates and discounts to determine if financial, traffic management and other toll system objectives are being adequately met. The Washington State Transportation Commission is the toll setting authority for Washington State.

WSDOT Source
Toll Division

toll signs

Definition
General term for any sign (whether automated, variable, or printed) installed as part of any toll system.

WSDOT Source
Toll Division

toll system

Definition
Comprised of one or more toll facilities, which may be tolled in one or both directions, or which may only toll specifically identified lanes.

WSDOT Source
Toll Division

toll trip-transactions

Definition
A count of Trips, less duplicates and non-revenue which are processed by the CSC as financial transactions.

WSDOT Source
Toll Division

topsoil (Highway Runoff)

Definition
Surface soil presumed to be fertile and used to cover planting areas. Topsoil must meet ASTM D 5268 Standard Specification, and water permeability must be 0.6 inches per hour or greater. Organic matter must have no more than 10% of nutrients in mineralized water-soluble forms. Topsoil must not have phytotoxic characteristics.

WSDOT Source
Highway Runoff Manual

Related Term
See also: soil

topsoil (Roadside)

Definition
The original or present, dark-colored, upper soil that ranges from a few millimeters to a meter thick at different locations.

WSDOT Source
Roadside Manual

Citation
Donahue, Roy L., John C. Shickluna, and Lynn S. Robertson. *Soils: An Introduction to Soils and Plant Growth*. Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, p. 570.

total entering vehicles

Definition
The total number of vehicles entering the intersection within a given timeframe.

WSDOT Source
Safety Performance Manual

Citation
Adapted from U. S. Department of Transportation, Federal Highway Administration. "Improving Safety on Rural Local and Tribal Roads: Safety Toolkit." FHWA, 2014, p.32.

total maximum daily load (Environment)

Definition
A requirement of the Clean Water Act, TMDLs consist of a watershed-based pollution control plan developed to address water quality impairment.

WSDOT Source
Environmental Manual

total maximum daily load (Highway Runoff)

Definition
A calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards and an allocation of that amount to the pollutant's sources. A TMDL (also known as a Water Cleanup Plan) is the sum of allowable loads of a single pollutant from all contributing point sources and nonpoint sources. The calculation must include a margin of safety to ensure the water body can be used for the purposes the state has designated. The calculation must also account for seasonal variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body; for example, drinking water supply, contact recreation (such as swimming), and aquatic support (such as fishing) and the scientific criteria to support each use. The federal Clean Water Act, Section 303, establishes the water quality standards and TMDL programs.

WSDOT Source
Highway Runoff Manual

total million entering vehicles (TMEV)

Definition
The total number of vehicles entering the intersection within a given timeframe, divided by 1,000,000. TMEV is a scaling factor used to manage large numbers.

WSDOT Source
Safety Performance Manual

Citation
Adapted from U. S. Department of Transportation, Federal Highway Administration. "Improving Safety on Rural Local and Tribal Roads: Safety Toolkit." FHWA, 2014, p.32.

total petroleum hydrocarbons (TPH)

Definition
TPH-Gx: the qualitative and quantitative method (extended) for volatile (gasoline) petroleum products in water; and TPH-Dx: the qualitative and quantitative method (extended) for semivolatile (diesel) petroleum products in water.

WSDOT Source
Highway Runoff Manual

total project costs

Definition
The costs of all phases of a project, including environmental, design, right of way, utilities, and construction.

WSDOT Source
Design Manual

total suspended solids (TSS) (Highway Runoff)

Definition
That portion of the solids carried by stormwater that can be captured on a standard glass filter.

WSDOT Source
Highway Runoff Manual

total suspended solids (TSS) (Roadside)

Definition
(TSS) The entire weight of organic and inorganic particles dispersed in a volume of water, expressed in milligrams per liter (mg/L).

WSDOT Source
Roadside Manual

toxic

Definition
Poisonous, carcinogenic, or otherwise directly harmful to life.

WSDOT Source
Highway Runoff Manual

track walking

Definition
A technique for roughening soils on slopes to reduce erosion, involving systematically covering soils with cleat marks that run perpendicular to the slope, for detaining and infiltrating runoff.

WSDOT Source
Highway Runoff Manual

tradeoffs analysis

Definition
An analysis method for balancing factors, performance or outcomes, which are not attainable at the same time.

WSDOT Source
Design Manual

traditional cultural property

Definition
A place eligible for inclusion in the National Register of Historic Places because of its association with cultural practices or beliefs of a living community that are (a) rooted in that community's history, and (b) important in maintaining the cultural identity of the community. The concept is based upon the introductory section of the National Historic Preservation Act, which states that "the historical and cultural foundations of the Nation should be preserved as a living part of our community life in order to give a sense of orientation to the American people."

WSDOT Source
Environmental Manual

traffic

Definition
A count of all vehicles using a roadway at a specific location for a specified time period.

WSDOT Source
Toll Division

traffic barrier (Design)

Definition
A longitudinal barrier, including bridge rail or an impact attenuator, used to redirect vehicles from fixed features located within an established Design Clear Zone, help mitigate median crossovers, reduce the potential for errant vehicles to travel over the side of a bridge structure, or (occasionally) protect workers, pedestrians, or bicyclists from vehicular traffic.

WSDOT Source
Design Manual

Related Term
See also: traffic barrier (Roadside)

traffic barrier (Roadside)

Definition
Any type of longitudinal barrier, including bridge rails, guardrails, earthen berms, or impact attenuators used to redirect vehicles from hazards located within the Design Clear Zone; to

prevent median crossovers; to prevent errant vehicles from going over the side of a bridge structure; or to protect workers, pedestrians, or bicyclists from vehicular traffic.

WSDOT Source
Roadside Manual

Related Term
See also: traffic barrier (Design)

traffic barrier / longitudinal barrier

Definition
A device oriented parallel or nearly parallel to the roadway whose primary function is to contain or safely redirect errant vehicles away from fixed features or to (occasionally) protect workers, pedestrians, or bicyclists from vehicular traffic.

WSDOT Source
Design Manual

Related Term
See also: traffic barrier (Design)

traffic calming

Definition
Design techniques that have been shown to reduce traffic speeds and unsafe maneuvers. These techniques can be stand-alone or used in combination, and they include lane narrowing, curb extensions, surface variations, and visual clues in the vertical plane.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

traffic calming treatments

Definition
Treatments along the roadway that can be used to reduce speeds through a section of roadway (see Design Manual Chapter 1103).

WSDOT Source
Design Manual

Traffic Impact Analysis (TIA)

Definition
(sometimes called Traffic Impact Study (TIS)) If a traffic analysis is not an ARR, it is a TIA. TIAs are used for environmental reviews and developer projects (see Design Manual Chapter 320).

WSDOT Source
Design Manual

Traffic Improvement Program (Design)

Definition
A three-year transportation improvement strategy required from MPOs by Congress, which includes all federally funded or regionally significant projects.

WSDOT Source
Design Manual

Traffic Improvement Program (Environment)

Definition
A staged, multiyear intermodal program of transportation projects covering a metropolitan planning area consistent with the state and metropolitan transportation plan and developed pursuant to 23 CFR 450. The entire program must conform to the NAAQS before any federal funding can be used for nonexempt projects.

WSDOT Source
Environmental Manual

traffic noise impacts

Definition
When the predicted Design Year traffic noise levels approach (≤ 1 dBA) or exceed the NAC or when the predicted Design Year traffic noise levels substantially exceed (≥ 10 dBA) the Existing Year noise levels.

WSDOT Source
Environmental Manual

traffic paint

Definition
A pavement marking material that consists mainly of a binder and a solvent. The material is kept in liquid form by the solvent, which evaporates upon application to the pavement, leaving the binder to form a hard film.

WSDOT Source
Design Manual

transfer of ownership

Definition
The process that transfers ownership of a utility from one entity to another. This process was previously known as Acceptance of Assignment.

WSDOT Source
Utilities Manual

transient loads

Definition
Loads and forces that can vary over a short time interval relative to the lifetime of the structure.

WSDOT Source
Bridge Design Manual

transit

Definition
A general term applied to passenger rail and bus service used by the public.

WSDOT Source
Design Manual

transit facility

Definition
A capital facility that improves the efficiency of public transportation or encourages the use of public transportation.

WSDOT Source
Design Manual

transit flyer stop

Definition
A multimodal connection located within the boundaries of a limited access facility.

WSDOT Source
Design Manual

transit lane

Definition
A lane for the exclusive use of transit vehicles.

WSDOT Source
Design Manual

transit stop

Definition
A facility for loading and unloading passengers that is set aside for the use of transit vehicles only.

WSDOT Source
Design Manual

transit vehicle

Definition
A bus or other motor vehicle that provides public transportation (usually operated by a public agency).

WSDOT Source
Design Manual

transition

Definition
A section of barrier used to produce the gradual stiffening of a flexible or semirigid barrier as it connects to a more rigid barrier or fixed object.

WSDOT Source
Design Manual

transitional segments

Definition
Segments of a pedestrian circulation path that blend between existing undisturbed pedestrian facilities and newly altered pedestrian facilities. Use of transitional segments may permit the work of the alteration to more nearly meet the new construction standards. At a later time, when other segments of the pedestrian circulation path are altered, the noncomplying transitional segments can be removed and replaced with pedestrian facilities that meet the accessibility criteria.

WSDOT Source
Design Manual, Design - ADA/Pedestrian Manual

translational failure

Definition
A slide mass that displaces along a planar or undulating surface of rupture and slides out over the original ground surface. Translational slides frequently grade into flows or spreads. Generally, translational slides are relatively shallower than rotational slides.

WSDOT Source
Roadside Manual

Citation
Turner & Schuster, eds, 'Landslides Investigation and Mitigation', Special Report, Transportation Research Board, pp. 56-57

transmittant

Definition
Of, or relating to, a transmission; the object being transmitted, such as electrical current, gas, water, and so on.

WSDOT Source
Utilities Manual

transponder

Definition
The in-vehicle or on-vehicle RFID-tag device which allows the customer to be identified as it passes through a toll point. Also referred to as a ‘tag’ or ‘pass.’

WSDOT Source
Toll Division

Related Terms
See also: pass, tag

transportation facilities and services of statewide significance

Definition
Defined in RCW 47.06.140 to include the interstate highway system, interregional state principal arterials including ferry connections that serve statewide travel, intercity passenger rail services, intercity high-speed ground transportation, major passenger intermodal terminals excluding all airport facilitates and services, the freight railroad system, the Columbia/Snake navigable rifer system, marine port facilities, and services that are related solely to marine activities affecting international and interstate trade, and high capacity transportation systems serving regions as defined in RCW 81.104.015.

WSDOT Source
Environmental Manual

Transportation Improvement Program (TIP)

Definition
A three-year transportation improvement strategy required from MPOs by Congress, which includes all federally funded or regionally significant projects.

WSDOT Source
Design Manual

Transportation Information and Planning Support (TRIPS)

Definition
A mainframe computer system designed to provide engineering, maintenance, planning, and accounting staff with highway inventory, traffic, and accident data.

WSDOT Source
Design Manual

Transportation Management Area (TMA)

Definition
Urbanized areas with populations of 200,000 or greater are federally designated as Transportation Management Areas.

WSDOT Source
Design Manual

transportation management plan (TMP)

Definition

A set of traffic control plans, transportation operations plans, and public information strategies for managing the work zone impacts of a project. A TMP is required for all projects to address work zone safety and mobility impacts.

WSDOT Source

Design Manual

transportation planning studies

Definition

These studies identify the current functions of a corridor and forecast future demands on the system. Data collection and public involvement are used to forecast future needs that will improve the function of a state route.

WSDOT Source

Design Manual

Transportation Reporting Accounting and InformatioN System (TRAINS)

Definition

Agency-wide WSDOT database which houses agency financial data.

WSDOT Source

Toll Division

transportation system management/transportation demand management (TSM/TDM)

Definition

Actions that improve the operation and coordination of transportation services and facilities to make the most efficient use of the existing transportation system. Demand management strategies, such as ramp meters, are a type of TSM action.

WSDOT Source

Environmental Manual

trash rack

Definition

A structural device used to prevent debris from entering a spillway or other hydraulic structure.

WSDOT Source

Highway Runoff Manual

travel demand

Definition

The demand travelers will make on the system based on the number and types of trips they will take and the mode and routes they will use. Local travel demand represents short trips that

should be made on the local transportation system, such as intracity roads and streets. Regional travel demand represents long trips that are made on the regional transportation system, such as Interstate, regional, and/or intercity/interregional roads, streets, or highways.

WSDOT Source
Design Manual

travel time

Definition
The estimated time for surface water to flow between two points of interest.

WSDOT Source
Highway Runoff Manual

traveled way

Definition
The portion of the roadway intended for the movement of vehicles, exclusive of shoulders and lanes for parking, turning, and storage for turning. The beginning point for measuring the Control Zone, it does not include shoulders, parking lanes, turning lanes, storage for turning lanes, bike lanes, or adjacent pedestrian paths. Generally described as the area between the outer edge stripes (also known as fog lines).

WSDOT Source
Design Manual, Standard Specifications, Utilities Manual

Related Term
See also: auxiliary lane

traveled way zone

Definition
The portion of the roadway intended for the movement of people and goods, exclusive of shoulders, roadsides, on-street parking, medians and streetside zones.

WSDOT Source
Design Manual

traveler information

Definition
Commercial and non-commercial information that informs and orients the traveling public. Examples include access information for food, gas, lodging, local attractions, regional tourist attractions, roadway conditions, and construction schedules.

WSDOT Source
Design Manual, Roadside Manual

traveling public

Definition

Motorists, motorcyclists, bicyclists, pedestrians, and pedestrians with disabilities.

WSDOT Source

Design Manual

treatment liner

Definition

A layer of soil designed to slow the rate of infiltration and provide sufficient pollutant removal to protect groundwater quality.

WSDOT Source

Highway Runoff Manual

treatment train

Definition

A combination of two or more treatment facilities connected in series.

WSDOT Source

Highway Runoff Manual

trenched construction

Definition

Cutting an open trench for direct placement of a utility.

WSDOT Source

Utilities Manual

Related Term

See also: open trench

trenchless construction

Definition

Installation of an underground utility that does not require the need to use open trench construction methods. Trenchless construction may include, but is not limited to, boring, jacking, auguring, horizontal directional drilling, slip-lining, pipe bursting, or other methods.

WSDOT Source

Utilities Manual

trial attorney's certificate

Definition

A statement signed by the Assistant Attorney General who is assigned to the particular case reciting the findings and orders of a court and certifying that the award is due and payable. The certificate is accompanied by a request for a warrant.

WSDOT Source
Right of Way Manual

trial attorney's closing report

Definition
A statement signed by the Assistant Attorney General who is assigned to a particular case, setting forth the circumstances which resulted in the J&D. If the J&D was stipulated, this statement includes the rationale for entering into the stipulation.

WSDOT Source
Right of Way Manual

triangular silt dike

Definition
A geotextile-encased foam check dam.

WSDOT Source
Highway Runoff Manual

tribal consultation

Definition
As defined in WSDOT Executive Order E 1025, tribal consultation means "respectful, effective communication in a cooperative process that works towards a consensus, before a decision is made or action is taken . . . on actions that affect identified tribal rights and interests."

WSDOT Source
Environmental Manual

Tribal Historic Preservation Officer (THPO)

Definition
Authorized by the 1992 Amendments to the National Historic Preservation Act. When approved by NPS, THPO replaces SHPO in compliance process on 'tribal' lands (Section 101(d)(2)).

WSDOT Source
Environmental Manual

tribally owned concern

Definition
Any concern at least 51% owned by a Native American tribe as defined in this section.

WSDOT Source
Consultant Services Manual

trip (Design)

Definition
Short trips are normally local. Long trips are normally interstate, regional, or interregional.

WSDOT Source
Design Manual

trip (Toll)

Definition
A series of one or more Toll Point Transactions, within the same toll-facility, as defined by business rules, that are matched together by the Roadway Toll System (RTS). Trips are made during toll hours and represent a count of all vehicles using the toll-facility and are sent from the RTS to the Customer Service Center (CSC). Type 1s (Photo), Type 2s (AVI), Type 99s, and manual toll booth transactions are included.

WSDOT Source
Toll Division

trip end

Definition
The expected number of vehicles using a parking area, represented by the projected trip end counts for the parking area associated with a proposed land use. Trip end counts are estimated using either Trip Generation (published by the Institute of Transportation Engineers) or a traffic study prepared by a professional engineer or transportation specialist with expertise in traffic volume estimation. Trip end counts must be made for the design life of the project. For project sites with seasonal or varied use, the highest period of expected traffic impacts is evaluated.

WSDOT Source
Highway Runoff Manual

truck apron

Definition
The optional mountable portion of the central island of a roundabout between the raised nontraversable area of the central island and the circulating roadway (see Design Manual Chapter 1320).

WSDOT Source
Design Manual

trust agreement

Definition
Generally associated with federal agencies such as the Bonneville Power Administration (BPA), U.S. Army Corps of Engineers, and U.S. Forest Service. An agreement that establishes a trust account funded by WSDOT and accessed by the federal agency to pay for ongoing costs associated with the relocation of existing facilities or environmental documentation for a highway improvement project. For use only when the federal agency has property rights or regulatory responsibilities.

WSDOT Source
Utilities Manual

trust deed

Definition

A deed in which the grantor conveys legal title to property to a trustee and states the authority and conditions binding the trustee in dealing with the property. Similar to a mortgage, this deed secures a debt to real property.

WSDOT Source

Right of Way Manual

tuber

Definition

A swollen, usually underground stem, such as the potato, bearing buds from which new plant shoots arise.

WSDOT Source

Roadside Manual

tunnel

Definition

The term 'tunnel' means an enclosed roadway for motor vehicle traffic with vehicle access limited to portals, regardless of type of structure or method of construction, that requires, based on the owner's determination, special design considerations that may include lighting, ventilation, fire protection systems, and emergency egress capacity. The term 'tunnel' does not include bridges or culverts inspected under the National Bridge Inspection Standards (Title 23 Code of Federal Regulations 650 Subpart C). The state of Washington shall prepare and maintain an inventory of all tunnels subject to the NTIS.

WSDOT Source

Bridge Design Manual

turbidity (Highway Runoff)

Definition

Dispersion or scattering of light in a liquid, caused by suspended solids and other factors; commonly used as a measure of suspended solids in a liquid. Turbidity is a stateregulated parameter. Turbidity can be measured in the field with a hand-held meter and is recorded in nephelometric turbidity units (NTU).

WSDOT Source

Highway Runoff Manual

turbidity (Roadside)

Definition

The visual clarity of the water as measured in Nephelometric Turbidity Units (NTUs). The turbidity, or clarity, of surface streams is an important determinant of its condition and productivity. Turbidity in water is caused by suspended and colloidal matter, such as clay, silt, organic and inorganic matter, and microorganisms. Turbidity does not settle out of water in a

reasonable time period. The turbidity of drinking water is less than 1 NTU, while the turbidity of stream water can vary from fewer than 10 NTUs to greater than a few hundred NTUs.

WSDOT Source
Roadside Manual

turnback

Definition
A general term including certifications and relinquishments used to describe the conveyance of real property to local agencies. Property used during construction phase returned to a party after work is complete.

WSDOT Source
Right of Way Manual

turnback area

Definition
New or existing rights of way belonging to WSDOT that are planned to be transferred to a local agency once highway construction is complete. The department maintains utility accommodation approval and oversight authority for these areas prior to completion of the turnback procedure.

WSDOT Source
Utilities Manual

turning radius

Definition
The radius that the front wheel of the intersection design vehicle on the outside of the curve travels while making a turn (see Design Manual Chapter 1320).

WSDOT Source
Design Manual

turning roadway

Definition
A curve on an open highway, a ramp, or the connecting portion of the roadway between two intersecting legs of an intersection.

WSDOT Source
Design Manual

TVL status

Definition
The acronym “TVL” translates to Transponder Validation List. The statuses on this dataset indicate a combined ‘valid’ status of the tag’s viability status, account viability status, and an indicator of whether or not there is sufficient account balance.

WSDOT Source
Toll Division

two-way left-turn lane (TWLTL)

Definition
A lane, located between opposing lanes of traffic, to be used by vehicles making left turns from either direction, from or onto the roadway.

WSDOT Source
Design Manual

U

UFP Holder Table

WSDOT Source
Utilities Manual

Related Term
See also: holder table

uncollectable

Definition
Refers to revenue loss resulting from non-payment of toll transactions after a license plate and vehicle owner have been identified, invoiced, sent to the civil penalty process and collections. This also includes Toll Bills and NOCPs. Write-Offs represent “uncollectables” that have been acknowledged as a loss and may be written off.

WSDOT Source
Toll Division

underdrain

Definition
Plastic pipes with holes drilled through the top, installed on the bottom of an infiltration facility, that are used to collect and remove excess runoff.

WSDOT Source
Highway Runoff Manual

underground injection control (UIC) well

Definition
A bored, drilled, or driven shaft whose depth is greater than the largest surface dimension; a dug hole whose depth is greater than the largest surface dimension; an improved sinkhole; a subsurface fluid distribution system that includes an assemblage of perforated pipes, drain tiles, or other similar mechanisms intended to distribute fluids below the surface of the ground.

Examples of UIC wells or subsurface infiltration systems are drywells, drainfields, and french drains that include pipes and other similar devices that discharge to ground. Underground Injection Control is a federal regulatory program established to protect underground sources of drinking water from UIC well discharges.

WSDOT Source
Highway Runoff Manual

undertaking

Definition
Any activity that can result in changes in the character or use of historic properties. The activity must be under the direct or indirect jurisdiction of a federal agency or licensed or assisted by a federal agency (36 CFR 800.2(o)).

WSDOT Source
Environmental Manual

undivided multilane

Definition
A roadway with two or more through lanes in each direction on which left turns are not controlled.

WSDOT Source
Design Manual

uneconomic remainder

Definition
Due to a WSDOT acquisition, the portion of real property, lying outside the right of way, left in such shape or condition as to be of little value to its owner. WSDOT may acquire an uneconomic remainder if its value does not exceed its potential severance claims or damages.

WSDOT Source
Consultant Services Manual

Related Term
See also: uneconomic remnant

uneconomic remnant

Definition
A parcel of real property in which the owner is left with an interest after the partial acquisition of the ownerís property and which the agency has determined has little or no value or utility to the owner (49 CFR Part 24.2(27)).

WSDOT Source
Right of Way Manual

Related Term
See also: uneconomic remainder

unidentifiable registered owner

Definition

Refers to leakage resulting from inability to obtain billable, registered vehicle owner information after a valid license plate has been identified and prevents the pursuit of the toll transaction revenue (includes identified but foreign-registered vehicles (Canadian, etc.), tribal, diplomatic or other government license plates as well as standard plates lacking a DOL record).

WSDOT Source

Toll Division

unidentifiable vehicle

Definition

Refers to system leakage resulting from a missed or evading vehicle, or an inability to identify a vehicle's license plate due to various factors (toll system, environmental, or user-related factors).

WSDOT Source

Toll Division

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended

Definition

This is the federal statute that sets forth the requirements for appraisals, acquisitions, and relocation assistance for federal projects. Note: The project certification process is not addressed in the Uniform Act.

WSDOT Source

Right of Way Manual

uniformity ratio

Definition

The ratio of the minimum average light level on the design area to the minimum light level of the same area (see Design Manual Chapter 1040).

WSDOT Source

Design Manual

unilateral contract

Definition

A contract in which there is a promise to pay or give other consideration in return for actual performance. (For example, I will pay you $500 to fix my car by Thursday; the performance is fixing the car by that date.)

WSDOT Source

Consultant Services Manual

unique farmland

Definition

As defined in the Farmland Protection Policy Act, is land other than prime farmland that is used for production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods. Examples of such crops include lentils, nuts, annually cropped white wheat, cranberries, fruits, and vegetables.

WSDOT Source

Environmental Manual

United States Code (USC)

Definition

The USC is the codification by subject matter of the general and permanent laws of the United States based on what is printed in the Statutes at Large. It is divided by broad subjects into 50 titles and published by the Office of the Law Revision Counsel of the U.S. House of Representatives. Since 1926, the USC has been published every six years. Between editions, annual cumulative supplements are published in order to present the most current information.

WSDOT Source

Consultant Services Manual

unity

Definition

Landscape with a quality or state of being made whole or a condition of harmony.

WSDOT Source

Roadside Manual

universal access

Definition

Access for all persons regardless of ability or stature.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

unstable slope

Definition

A sloping area of land that at any time exhibits mass movement of earth.

WSDOT Source

Highway Runoff Manual

unsuitable soils

Definition
Generally organic soils that are not appropriate for engineering functions. These soils might be ideal for roadside restoration and revegetation functions.

WSDOT Source
Roadside Manual

upgrade

Definition
The replacement of paved areas with a better surface or in a way that enhances the traffic capacity of the road.

WSDOT Source
Highway Runoff Manual

urban area

Definition
An area designated by the Washington State Department of Transportation (WSDOT) in cooperation with the Transportation Improvement Board (TIB) and Regional Transportation Planning Organizations (RTPO), subject to the approval of the Federal Highway Administration (FHWA).

WSDOT Source
Design Manual

Urban Growth Area (Environment)

Definition
As defined in the Growth Management Act, those areas designated by a county pursuant to the Washington State Growth Management Act, which are planned to support urban type development and densities within the next 20 years.

WSDOT Source
Environmental Manual

Related Term
See also: Urban Growth Area (Highway Runoff)

Urban Growth Area (Highway Runoff)

Definition
Those areas designated by a county according to RCW 36.70A.110.

WSDOT Source
Highway Runoff Manual

Related Term
See also: Urban Growth Area (Environment)

urban intersection

Definition
An intersection in an urban design area.

WSDOT Source
Design Manual

urbanized area (Design)

Definition
An urban area with a population of 50,000 or more.

WSDOT Source
Design Manual

Related Term
See also: urbanized area (Highway Runoff)

urbanized area (Highway Runoff)

Definition
An area designated and identified by the U.S. Bureau of Census according to the following criteria: a densely settled area that has a minimum residential population of 50,000 people and a minimum average density of 1,000 people per square mile.

WSDOT Source
Highway Runoff Manual

Related Term
See also: urbanized area (Design)

usable shoulder (Design)

Definition
The width of the shoulder that can be used by a vehicle for stopping.

WSDOT Source
Design Manual

Related Term
See also: usable shoulder (Utilities)

usable shoulder (Utilities)

Definition
That portion of the roadway extending beyond the traveled way or auxiliary lanes that can be used for emergency parking by motorists. Usable shoulder is the average width being used as a shoulder along a section of highway, exclusive of intermittent widened areas, but not to exceed 10 feet in width.

WSDOT Source
Utilities Manual

Related Term
See also: usable shoulder (Design)

utility (Environment)

Definition
Privately, publicly, or cooperatively owned lines, facilities, and systems for producing, transmitting, or distributing communications, cable television, electric power, light, heat, gas, oil, crude products, water, steam, waste, stormwater (not connected to highway drainage) and other similar commodities, including any fire or police signal systems, street light systems, and traffic control system interties, which directly or indirectly serve the public (see Utilities Manual Chapter 2).

WSDOT Source
Environmental Manual

Related Term
See also: utility (Utilities)

utility (Utilities)

Definition
A term denoting electric power, communication, cable television, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation, fire or police signal systems, and similar lines. Also, the term 'utility' includes those utility type facilities that are owned or leased by a government agency for its own use or otherwise dedicated solely to governmental use. The term utility does not include utility-type facilities required for the support, control, operation, and maintenance of the highway system if they are owned and controlled by the highway authority. The facilities may be privately, publicly, or cooperatively owned.

WSDOT Source
Utilities Manual

Related Term
See also: utility (Environment)

utility accommodation

Definition
A generic term describing an allowance for a utility installation within the operating highway right of way.

WSDOT Source
Utilities Manual

utility classification criteria

Definition
The four elements of the Utility Classification Criteria are: Highway Number, County, Utility Type, and Utility Owner.

WSDOT Source
Utilities Manual

utility classification criteria consolidation

Definition
The process by which all existing utility accommodation documents are combined into a single utility Franchise based on the Utility Classification Criteria.

WSDOT Source
Utilities Manual

Utility Franchise and Permit (UFP)

Definition
A database maintained by WSDOT to track existing utility accommodation documents and existing utility facilities located within and abutting highway right of way.

WSDOT Source
Utilities Manual

utility installation project

Definition
Any authorized utility installation within the operating highway right of way.

WSDOT Source
Utilities Manual

utility maintenance

Definition
Routine or other work necessary for the continued operation of a utility. Some highways require a preapproved Utility Maintenance Plan.

WSDOT Source
Utilities Manual

utility mitigation plan

Definition
A plan that identifies and provides for mitigation of various utility installations within the operating highway right of way.

WSDOT Source
Utilities Manual

Related Term
See also: corrective action plan

utility object

Definition

Utility objects are defined for the purpose of these guidelines as utility facilities that exist aboveground and are located within state highway right of way.

WSDOT Source

Utilities Manual

utility object relocation record (UORR)

Definition

A document that provides the location and identification of aboveground utility objects, their relation in respect to Control Zone requirements, and planned adjustment if needed.

WSDOT Source

Utilities Manual

utility of record

Definition

The utility company documented in WSDOT records as the current entity responsible for a specific utility installed within the operating highway right of way.

WSDOT Source

Utilities Manual

utility of reconstruction

Definition

Replacement work where more than 25% of poles, towers, or other aboveground utilities are replaced within any 1 mile of highway. Does not include individual poles or towers replaced for cause.

WSDOT Source

Utilities Manual

V

Vactor truck

Definition

A vacuum truck used to remove the waste material found in the bottom of a catch basin.

WSDOT Source

Highway Runoff Manual

validation

Definition
A process to confirm the reasonableness, accuracy and completeness of estimated costs and quantities.

WSDOT Source
Design Manual

value engineering (VE) analysis

Definition
A systematic approach to identifying and removing unnecessary costs which do not contribute to a desired result by analyzing cost versus function.

WSDOT Source
Design Manual

value engineering (VE) job plan

Definition
A systematic and structured action plan (see Design Manual Chapter 310) for conducting and documenting the results of the VE analysis. While each VE analysis shall address each phase in the VE Job Plan, the level of analysis conducted, and effort expended for each phase should be scaled to meet the needs of each individual project. The WSDOT VE analysis uses the Seven-Phase Job Plan shown in Design Manual Exhibit 310-1.

WSDOT Source
Design Manual

value engineering change proposal (VECP)

Definition
A construction contract change proposal submitted by the construction contractor based on a VECP provision in the contract. The intent of these types of proposals is to (1) improve the project's performance, value, and/or quality, (2) lower construction costs, or (3) shorten the delivery time, while considering their impacts on the project's overall life-cycle cost and other applicable factors.

WSDOT Source
Design Manual

variable pricing

Definition
A method of varying a toll rate, either by time of day or dynamically based on a set of inputs.

WSDOT Source
Toll Division

variance

Definition
Proposal that varies from, or is contrary to, applicable laws, codes, or policies.

WSDOT Source
Utilities Manual

variance, variability

Definition
Inherent fluctuations due to random events that result in a range of potential values for a quantity.

WSDOT Source
Design Manual

vault

WSDOT Source
Highway Runoff Manual

Related Terms
See also: dry vault or tank and wet vault or tank.

vegetated filter strip

Definition
A facility designed to provide runoff treatment of conventional pollutants (but not nutrients) through the process of biofiltration.

WSDOT Source
Highway Runoff Manual

veiling luminance

Definition
The stray light produced within the eye by light sources produces a veiling luminance that is superimposed on the retinal image of the objects being observed. This stray light alters the apparent brightness of an object within the visual field and the background against which it is viewed, thereby impairing the ability of the driver to perform visual tasks. Conceptually, veiling luminance is the light that travels directly from the luminaire to the observer's eye.

WSDOT Source
Design Manual

vertical curve

Definition
The up and down component of a roadway curve.

WSDOT Source
Highway Runoff Manual

veteran business enterprise (VBE)

Definition

A business which is at least 51% owned by a veteran of foreign wars.

WSDOT Source

Consultant Services Manual

viability

Definition

Ability of a population to maintain sufficient size so it persists over time in spite of normal fluctuations in numbers; usually expressed as a probability of maintaining a specific population for a defined period.

WSDOT Source

Environmental Manual

vicinity zones

Definition

Areas on the National Highway System and on Scenic and Recreational Highways that need a safety rest area or roadside park facility in order to meet WSDOT service objectives.

WSDOT Source

Roadside Manual

view

Definition

Something that is looked toward or kept in sight, especially a broad landscape or panorama. Act of looking toward an object or scene.

WSDOT Source

Roadside Manual

viewpoint

Definition

A roadside stopping opportunity with a view of some point of interest or area scenery. This area is not typically separated from the traveled way by some form of highway buffer.

WSDOT Source

Design Manual

violation rate

Definition

The total number of violators divided by the total number of vehicles on an HOV facility.

WSDOT Source

Design Manual

visioning exercises

Definition
A process of determining the goals for a facility or place.

WSDOT Source
Design Manual

visitor information center

Definition
A staffed or non-staffed booth or separate building that displays and dispenses free tourist travel maps and brochures. These are typically located at border-entry SRAs to provide travel information to highway users as they enter the state.

WSDOT Source
Design Manual

vista

Definition
A confined view, especially one seen through a long passage, as between rows of trees or down a canyon. A vista often focuses upon a specific feature in the landscape.

WSDOT Source
Roadside Manual

visual cone

Definition
The portion of the roadway scene on the right-hand side of the roadway where a driver would typically look for road signs.

WSDOT Source
Safety Performance Manual

Citation
Adapted from Transportation Research Board. "NCHRP Report 600: Human Factors Guidelines for Road Systems." Washington D.C. National Academy Press, 2012, p. 24-2.

visual distraction

Definition
Any element in the roadway, roadside, or surrounding environment that detracts from essential aspects of the prudent driving task.

WSDOT Source
Roadside Policy Manual

VMS panel

Definition

A single variable message display, usually on a gantry above a roadway, which displays estimated travel time or toll cost information for a specific trip. (Sometimes referred to as “Toll Rate Brick”).

WSDOT Source

Toll Division

Volunteer Refreshment Program

Definition

A program that allows non-profit service organizations to serve refreshments to the traveling public on a donation basis.

WSDOT Source

Roadside Manual

W

walk interval

Definition

That phase of a traffic signal cycle during which the pedestrian is to begin crossing, typically indicated by a WALK message or the walking person symbol and its audible equivalent.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

walkway

Definition

The continuous portion of the pedestrian access route that is connected to street crossings by curb ramps.

WSDOT Source

Design Manual, Design - ADA/Pedestrian Manual

warning beacon

Definition

A beacon that supplements a warning or regulatory sign or marking. The display is a flashing yellow indication. These beacons are not used with STOP, YIELD, or DO NOT ENTER signs or at intersections that control two or more lanes of travel. A warning identification beacon is energized only during those times when the warning or regulation is in effect.

WSDOT Source

Design Manual

warrant

Definition
A minimum condition for which an action is authorized. Meeting a warrant does not attest to the existence of a condition that needs attention. Further justification is required.

WSDOT Source
Design Manual

warranty deed

Definition
A deed that conveys the title to property whereby the seller guarantees the title to be good and unencumbered, except as stated, and agrees to defend and protect the purchaser against any loss that may arise in the future from any defect in the title at the time of conveyance.

WSDOT Source
Utilities Manual

Washington Administrative Code (WAC)

Definition
Rules and regulations that apply to individual state agencies that are developed by each agency according to the Administrative Procedures Act.

WSDOT Source
Consultant Services Manual

Washington Pattern Jury Instructions (WPI)

Definition
The collection of instructions that are given to a jury by the judge for deliberation during a trial. The instructions are based on case law resulting from civil lawsuits.

WSDOT Source
Right of Way Manual

Washington State Bridge Inventory System (WSBIS)

Definition
The aggregation of structure inventory, and appraisal data collected and used to fulfill the requirements of the NBIS and additional data used to manage the state and local bridge inventories. This data is stored in the Bridge Reporting Database.

WSDOT Source
Bridge Design Manual

Related Term
See also: Bridge Reporting Database (BRD)

Washington State Department of Transportation (WSDOT)

Definition
State transportation agency headquartered in Olympia.

WSDOT Source
Utilities Manual

Related Term
See also: region

Washington State Pavement Management System (WSPMS)

Definition
A computer system that stores data about the pavement condition of all the highways in the state. Information available includes the latest field review and past contracts for every main line mile of state highway. Calculations are used to determine whether a given section of pavement is a past due, due, or future due preservation need.

WSDOT Source
Design Manual

Washington Transportation Plan (WTP)

Definition
A WSDOT planning document developed in coordination with local governments, regional agencies, and private transportation providers. The WTP addresses the future of transportation facilities owned and operated by the state as well as those the state does not own but in which it has an interest. It identifies needed transportation investments, which are defined by service objectives and specific desired outcomes for each transportation mode.

WSDOT Source
Design Manual

water bar(s) (Highway Runoff)

Definition
A small ditch cut perpendicular to the flow of water in roads or hillsides. A cross-sectional view reveals a ditch with the excavated material placed on the downslope side.

WSDOT Source
Highway Runoff Manual

Related Term
See also: water bar(s) (Roadside)

water bar(s) (Roadside)

Definition
Small logs, or concrete barriers, usually less than 15cm in diameter, placed along a trail or slope to intercept the downhill flow of precipitation and direct it to a desired location

WSDOT Source
Roadside Manual

Related Term
See also: water bar(s) (Highway Runoff)

water body

Definition
Surface waters including rivers, streams, lakes, marine waters, estuaries, and wetlands.

WSDOT Source
Highway Runoff Manual

water cleanup plan

WSDOT Source
Highway Runoff Manual

Related Term
See also: total maximum daily load (Highway Runoff)

water quality

Definition
A term used to describe the chemical, physical, and biological characteristics of water, usually in respect to its suitability for a particular purpose.

WSDOT Source
Highway Runoff Manual

water quality standards (Highway Runoff)

Definition
The minimum requirements for water purity for uses like drinking water supply, contact recreation (such as swimming), and aquatic support (such as fishing). The Washington State Department of Ecology sets water quality standards for Washington State. Surface water and groundwater standards are established in WAC 173-201A and WAC 173-200, respectively.

WSDOT Source
Highway Runoff Manual

water quality standards (Roadside)

Definition
The discharge of polluted waters to waters of the state is a violation of the Washington State Water Pollution Control Law (RCW 90.48.080). Ecology establishes surface water quality standards (WAC 173-201A) as required by the Environmental Protection Agency (EPA). These standards are intended to protect surface waters of the state for beneficial uses including public health, enjoyment, and the propagation and protection of fish, shellfish, and wildlife. State water quality criteria are defined for classifications of waters and include turbidity, fecal coliforms, dissolved oxygen, temperature, and pH. All water discharged from construction sites shall meet

the water quality standards for turbidity at the discharge point into the surface water resource. There is not a 'dilution' or 'mixing zone.' Turbidity shall not exceed 5 NTUs over the water resource's turbidity when the water resource's turbidity is 50 NTUs or less, or have more than a 10 percent increase in turbidity when the water resource's turbidity is more than 50 NTUs

WSDOT Source
Roadside Manual

water quality treatment

WSDOT Source
Highway Runoff Manual

Related Term
See also: runoff treatment

water table

Definition
The upper surface or top of the saturated portion of the soil or bedrock layer, indicating the uppermost extent of groundwater.

WSDOT Source
Highway Runoff Manual

waters of the state or state waters

Definition
Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses located within the jurisdiction of the state of Washington. (RCW 90.48.020)

WSDOT Source
Environmental Manual

waters of the United States

Definition
Briefly, all waters that are:

- Used in interstate commerce, including tidally influenced waters.
- Interstate waters including interstate wetlands.
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs,
- Prairie potholes, wet meadows, playa lakes, or natural ponds.
- Some impoundments.
- Tributaries of the above.
- Territorial seas.
- Wetlands adjacent to waters.

Excludes prior converted croplands and waste treatment ponds.

WSDOT Source
Environmental Manual

watershed (Environment)

Definition
The land area that drains into a surface waterbody; the watershed for a major river may encompass a number of smaller watersheds that ultimately combine at a common point.

WSDOT Source
Environmental Manual

Related Term
See also: basin

watershed (Highway Runoff)

Definition
A geographic region within which water drains into a particular river, stream, or body of water. Watersheds can be as large as those identified and numbered by the state of Washington as water resource inventory areas (WRIAs), defined in WAC 173-500.

WSDOT Source
Highway Runoff Manual

Related Term
See also: basin

watershed (Roadside)

Definition
An area of land surface defined by a topographic divide that collects precipitation into a stream or river. Sometimes referred to as a drainage basin.

WSDOT Source
Roadside Manual

Related Term
See also: basin

wattle (Highway Runoff)

Definition
Temporary erosion and sediment control barriers consisting of any plant material that is wrapped in biodegradable fiber, tubular plastic, or similar encasing material. Wattles are typically 8 to 10 inches in diameter and 25 to 30 feet in length.

WSDOT Source
Highway Runoff Manual

Related Term
See also: wattle (Roadside)

wattle (Roadside)

Definition

A length of straw contained in a sausage-shaped netting. These are biodegradable and are generally buried to half their depth along the contour to slow water flow and trap sediment.

WSDOT Source

Roadside Manual

Related Term

See also: wattle (Highway Runoff)

weaving section

Definition

A length of highway over which one-way traffic streams cross by merging and diverging maneuvers.

WSDOT Source

Design Manual

weed

Definition

Any plant growing in a location in which it is not desired. A plant growing out of place.

WSDOT Source

Roadside Manual

weigh in motion (WIM)

Definition

A scale facility capable of weighing a vehicle without the vehicle stopping.

WSDOT Source

Design Manual

weir

Definition

A device for measuring or regulating the flow of water.

WSDOT Source

Highway Runoff Manual

wellhead protection area

Definition

Area managed by a community to protect groundwater drinking water supplies.

WSDOT Source

Environmental Manual

wellhead protection areas (WPA)

Definition

A portion of the zone of contribution for a Group A well or spring, as determined by delineation criteria based on the estimated time of travel for a particle of water from the zone boundary to its eventual arrival at the well. Water purveyors are required to inventory all known and potential groundwater contamination sources within the WHPA and complete a susceptibility assessment every five years. Additional information is available in DOH's Wellhead Protection Guidance Document.

WSDOT Source

Environmental Manual

wet film thickness

Definition

Thickness of a pavement marking at the time of application without glass beads.

WSDOT Source

Design Manual

wet pond

Definition

A facility that provides water quality treatment for stormwater by using a permanent pool of water to remove conventional pollutants from runoff through sedimentation, biological uptake, and plant filtration. Wet ponds are designed to (1) optimize water quality by providing retention time in order to settle out particles of fine sediment to which pollutants such as heavy metals absorb and (2) to allow biological activity to occur that metabolizes nutrients and organic pollutants.

WSDOT Source

Highway Runoff Manual

wet vault or tank

Definition

Underground storage facility that treats stormwater for water quality through the use of a permanent pool of water that acts as a settling basin. It is designed (1) to optimize water quality by providing retention time in order to settle out particles of fine sediment that absorb pollutants such as heavy metals and (2) to allow biological activity to occur that metabolizes nutrients and organic pollutants

WSDOT Source

Highway Runoff Manual

wetland (Environment)

Definition

In general, wetlands are areas that are normally wet enough to support plants typically adapted for life in saturated soil conditions. Washington State and federal jurisdictional definitions of wetlands are slightly different.

WSDOT Source

Environmental Manual

Related Term

See also: wetland (Highway Runoff)

wetland (Highway Runoff)

Definition

Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. They do not include artificial wetlands intentionally created from nonwetland sites, including but not limited to irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities; or wetlands unintentionally created after July 1, 1990, as a result of construction of a road, street, or highway. Wetlands may include artificial wetlands intentionally created from nonwetland areas to mitigate adverse impacts resulting from the conversion of wetlands. (Water bodies not included in this definition of wetlands, as well as those mentioned in the definition, are still waters of the state.)

WSDOT Source

Highway Runoff Manual

Related Term

See also: wetland (Environment)

wetland (Roadside)

Definition

Wetlands are defined under the Clean Water Act as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Areas do not need to have surface water throughout the year to qualify as wetlands.

WSDOT Source

Roadside Manual

Related Term

See also: wetland (Environment)

Wetland and Stream Assessment Report

Definition

Describes measures taken to avoid and minimize wetland impacts and the way compensatory mitigation will be accomplished. This plan may have several iterations and levels of detail depending on the stage of design and discussions with regulatory agencies. It is finalized as permits are issued, and often is incorporated into the permit conditions.

WSDOT Source

Environmental Manual

wetland banking

Definition

A form of compensatory mitigation where typically a large mitigation site is developed using creation and/or restoration. This is developed in advance of project wetland impacts. Credit is withdrawn from the bank to compensate for unavoidable wetland impacts. This is generally accomplished through a written agreement signed by regulatory agencies governing the use of the bank.

WSDOT Source

Roadside Manual

wetland buffer

Definition

The area adjacent to a wetland that serves to protect the wetland from outside influences. Wetland buffers also contribute to the integral functions of the wetland. Regulated buffer widths vary depending upon the quality of the wetland and guidelines established by the local jurisdiction under the state Growth Management Act. Required buffer widths will be identified in the project's wetland/biology report. Wetland buffers must be shown on contract plans sheets. No work may occur within an identified wetland buffer area unless it has been approved by the appropriate permitting agency.

WSDOT Source

Roadside Manual

Wetland Discipline Report

Definition

Uses the wetland boundaries and categories in the Wetland and Stream Assessment Report and the project footprint for each alternative to estimate impacts to wetlands and other waters. It may be updated as design modifications change the adverse impacts.

WSDOT Source

Environmental Manual

wetland functions

Definition

The physical, chemical, and biological processes that can be attributed to a wetland ecosystem. Wetland functions are generally grouped into three categories:

- habitat (providing the factors and conditions necessary to support wetland-dependent species);
- water quality (improving the quality of downstream surface and groundwaters through the uptake of contaminants, sediment retention, nutrient retention, supply, and so forth);
- hydrology (moderating surface and groundwater flows, including flood attenuation, maintenance of base flow, and so forth).

WSDOT Source

Roadside Manual

Citation

Transportation Research Board. "Report 370: Guidelines for the Development of Wetland Replacement Areas." Washington, D.C.: National Academy Press, 1996. pp 71-8.

Wetland Inventory Report

Definition

Describes the presence or absence of wetlands based on a brief field visit. The project area for this report should include the potential work areas for all alternatives.

WSDOT Source

Environmental Manual

wildflowers

Definition

Native flowering plants including flowering forbes, shrubs and trees.

WSDOT Source

Roadside Manual

wildlife

Definition

Any undomesticated animals, including vertebrates and invertebrates.

WSDOT Source

Roadside Manual

work

Definition

The provision of all labor, materials, tools, equipment, and everything needed to successfully complete a project according to the Contract.

WSDOT Source
Standard Specifications

work authorization date

Definition
Date utility work is authorized to begin.

WSDOT Source
Utilities Manual

work order

Definition
An account set up as the central collection point for recording all WSDOT payments or receivables associated with a particular project or activity. (See the Accounting Manual for details.)

WSDOT Source
Consultant Services Manual

Work Order Authorization (WOA)

Definition
An accounting system document used to authorize, set up, and revise a work order. (See the Accounting Manual for details.)

WSDOT Source
Consultant Services Manual

work zone

Definition
An area of a highway with construction, maintenance, or utility work activities. A work zone is identified by the placement of temporary traffic control devices that may include signs, channelizing devices, barriers, pavement markings, and/or work vehicles with warning lights. It extends from the first warning sign or high-intensity rotating, flashing, oscillating, or strobe lights on a vehicle to the END ROAD WORK sign or the last temporary traffic control device (MUTCD).

WSDOT Source
Design Manual

work zone impact

Definition
Highway construction, maintenance, or utility work operations in the traveled way, adjacent to the traveled way, or within the highway's right of way that creates safety and mobility concerns for workers or the traveling public.

WSDOT Source
Design Manual

work zone traffic control

Definition
The planning, design, and preparation of contract documents for the modification of traffic patterns due to work zone impacts.

WSDOT Source
Design Manual

working drawings

Definition
Drawings, plans, diagrams, or any other supplementary data or calculations, including a schedule of submittal dates for Working Drawings where specified, which the Contractor must submit to the Engineer.

WSDOT Source
Standard Specifications

written dispute and waiver of hearing

Definition
A completed form containing a written statement disputing a Notice of Civil Penalty that is reviewed and decided by an administrative law judge. There is no appeal of a decision in response to a written dispute.

WSDOT Source
Toll Division

WSDOT

Definition
Washington State Department of Transportation.

WSDOT Source
Consultant Services Manual

WSDOT Parcel Number

Definition
A number assigned to a parcel geometry. Parcels have a region code (1-6) and then a dash followed by a five-digit number.

WSDOT Source
Right of Way Manual

wye (Y) intersection

Definition
An intersection formed by three legs in the general form of a 'Y' where the angle between two legs is less than 60°.

WSDOT Source
Design Manual

X

xeriscape

Definition
A landscaping concept based on water conservation through the use of plant materials and techniques appropriate for dry climates or site conditions.

WSDOT Source
Roadside Manual

Y

yield point

Definition
The point at which entering traffic must yield to circulating traffic before entering the circulating roadway.

WSDOT Source
Design Manual

yield-at-entry

Definition
The requirement that vehicles on all entry lanes yield to vehicles within the circulating roadway.

WSDOT Source
Design Manual

Z

zero rise (floodplain)

Definition
A provision of many local floodplain ordinances that disallows any increase in base flood elevation in excess of 0.05 ft.

WSDOT Source
Environmental Manual

zone of influence

Definition

The area under and around a structure generally considered to be influenced by the load of that structure.

WSDOT Source

Utilities Manual