



**Washington State  
Department of Transportation**

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# **Environmental Manual**

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**Engineering and Regional Operations**

Development Division, Environmental Services Office

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### **455.01 Land Use, Transportation and Practical Solutions**

Practical Solutions is a two-part strategy that includes least cost planning and practical design, as defined in WSDOT Executive Order (EO) [E 1090](#) and described in detail in Division 11 of the *Design Manual* M 22-01.

WSDOT's practical design process consists of seven primary procedural steps listed below. The land use and transportation analysis is a core element, providing the basis for modal choice, alternative development and selection of design elements. The process resembles the NEPA process and every effort should be made to minimize re-work by documenting the Practical Design process in enough detail to fulfill the NEPA documentation requirements.

WSDOT's Practical Design Process Steps:

1. Assemble a Multiagency Interdisciplinary and Stakeholder Advisory (MAISA) Team. Environmental staff will usually be invited to participate in the MAISA by the Project Engineer (see *Design Manual Chapter* 1100).
2. Clearly identify the baseline and contextual needs (see *Design Manual Chapter* 1101).
3. Identify the land use and transportation context for the project location (see *Design Manual Chapter* 1102). Context includes the environmental, economic, and social features that influence livability and travel characteristics.
  - The land use context describes the built, natural and resource lands immediately adjacent to the facility (see *Design Manual* Section 1102.05(2)). Both the existing and future land use must be considered.
  - The transportation context describes the facility's function, type, and use (modes and type of trips). The future transportation context is based on the regional corridor vision (see *Design Manual* Section 1102.05(1)).
4. Select design controls compatible with the context (see *Design Manual Chapter* 1103).

5. Formulate and evaluate potential alternatives that resolve the baseline need and are bound by the selected context and design controls (see *Design Manual Chapter 1104*).
6. Select design elements employed and/or changed by the selected alternative (see *Design Manual Chapter 1105*).
7. Determine design element dimensions consistent with the alternatives performance needs, context, and design controls (see *Design Manual Chapter 1106*).

The Basis of Design (BOD) is used to document the outcomes of applying these procedural steps. A BOD is required for all projects that require an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). The BOD should serve as the foundation for the environmental documentation for these types of projects

Simple projects that are Categorically Excluded and Categorically Exempt (CEs as defined in Sections 300.04 and 300.05) usually need minimal analysis for environmental documentation of land use and transportation impacts. In such cases, document:

- The potential direct project impacts to resource lands (critical areas, shorelines, forest/timber lands, mineral resource lands, farm land, and parks and recreation lands) by completing the appropriate section of the ERS/ECS form and/or a SEPA Checklist.
- The temporary construction impacts to transportation and ways to minimize those impacts in the ERS/ECS form (see *Design Manual Chapter 1010*) or by completion of a SEPA checklist. If the project has significant construction impacts to traffic, as defined in *Design Manual Chapter 1010*, attach a copy of the Transportation Management Plan to the ECS form.
- Completion of a BOD is not required for Preservation Projects (see *Design Manual Chapter 1120*).

### **(1) MAISA Team Roles and Responsibilities**

As a member of the MIAASA Team established in Step 1 of the Practical Design Process, environmental staff:

- Research and provide information describing the environmental context for the project commensurate with the level of design detail provided and the potential environmental impacts of the project (e.g. Right size the research and analysis using GIS data, windshield surveys, coordination with subject matter experts, or site specific analysis as appropriate).
- Communicate environmental information to the MIAASA Team so that potential budget, schedule and permitting issues are clearly understood and taken into consideration throughout the process.
- Work with the project team to ensure that the Practical Design process is documented in the project in sufficient detail to support the administrative record and environmental documentation.

## 455.02 Requirements for Land Use Analysis

The Code of Federal Regulations ([40 CFR 1502.16\(c\)](#)) requires that EAs and EISs include a discussion of possible conflicts between the proposed action and the federal, tribal, regional, state, and local land use plans objectives, policies, controls and regulations. The goal of the analysis is to help decision makers understand the effect the transportation project has on land use and development patterns. The analysis must:

- Describe any direct project impacts resulting from the conversion of land to transportation uses. The analysis should include a discussion of the temporary (construction) impacts and long term (operational) impacts. It is best to include a map showing the existing and proposed right of way lines, existing land use (as described in the adopted comprehensive plan) and acreage to be converted to transportation uses in support of the analysis.
- Determine if the project is consistent with the existing adopted comprehensive plans and development policies. In Washington State, land use is controlled by city and county governments through the comprehensive planning process under the Growth Management Act. The state Local Project Review Act of 2001 precludes WSDOT from revisiting land use decisions included in the adopted comprehensive plan during project review. In order to receive Federal funding, a transportation project must be consistent with local planning (i.e. the goals and objectives of the project should match the goals and objectives stated in the comprehensive plan.)
- Describe development trends in the study area and any indirect project impacts caused by development occurring in response to the project. Indirect land use effects involve potential development, or redevelopment of buildable lands within the influence area of the transportation project. These changes are driven and constrained by social and economic factors beyond WSDOT or the local public agency's 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.
- Discuss actions that were taken to avoid, minimize or mitigate direct land use impacts. Potential or recommended mitigation measures for indirect impacts should also be described. The discussion should include the party responsible for such mitigation and the likelihood of implementation of such measures.
- Evaluate and compare the potential impact for all alternatives, including the no build. The results of this analysis should inform the indirect effects analysis conducted for other disciplines and support the cumulative effects analysis.

The level of effort should be commensurate with the complexity and scope of the project. More robust analysis may be needed for complex projects:

- With substantial direct land use effects (positive or negative) despite proposed mitigation (e.g., a project with a large number of right of way acquisitions or displacements).
- With substantial indirect effects (positive or negative) on land use despite proposed mitigation (e.g., a project that would cause sizable changes in planned development within the study area, or a project found to be inconsistent with planned growth).
- In fast growing areas with significant amounts of undeveloped land, where additional analysis is needed to determine probable effects. (e.g., construction of a new interchange in a rural area).

Projects classified as Categorical Exclusions / Categorical Exemptions (CE – see Sections [300.04](#) and [300.05](#)) typically do not require analysis for potential land use impacts under [23 CFR 771.117\(a\)](#) because, by definition, these projects:

- Do not induce significant impacts to planned growth or land use.
- Do not require relocation of significant numbers of people.
- Do not have significant impacts on travel patterns.
- Do not have significant environmental impacts.

### 455.03 Requirements for Transportation Analysis

Transportation projects are designed to improve the overall transportation network for all modes of travel. The Practical Solutions initiative was adopted to enable more flexible and sustainable transportation investment decisions, including, but not limited to: operational improvements, off-system solutions, transportation demand management, and incremental strategic capital solutions.

The potential effects of projects on transit, pedestrians, bicycles, rail crossings, ferry operations, airport safety zones, parking, and vehicle traffic on adjacent and connecting roadways need to be evaluated and discussed in the environmental document. The effects can be positive or negative, temporary or long-term. Mitigation for unavoidable impacts, especially construction impacts, should also be discussed.

Section 24 of FHWA's Technical Advisory TA 6640.8A requires the analysis to include:

- A review of the local comprehensive transportation and land use plans (see [Design Manual Chapter 1102](#)).
- An evaluation of the proposed project's consistency with traffic requirements generated by planned land use. The discussion should include effects (both positive and negative) on safety, vehicles, transit, freight, bicycles, pedestrians, and parking.
- A discussion of how the project's short-term impacts and use of resources contribute to the enhancement of the area's long-term productivity.

In NEPA, the transportation analysis supports the Purpose and Need by providing quantitative measures that demonstrate the effectiveness of the proposed project. It may also provide a method of comparing and contrasting the relative merits of the alternatives. FHWA Technical advisory TA 6640.8A emphasizes the need to consider potential construction and operational impacts to pedestrian and bicycle traffic during the environmental review process.

In SEPA, transportation is considered to be an element of the built environment ([WAC 197-11-444](#)). The analysis must consider impacts to:

- Transportation System
- Vehicular traffic
- Parking
- Safety and traffic hazards
- Waterborne, rail, and air traffic
- Movement/circulation of people or goods



The Practical Design process described in Division 11 of the *Design Manual* is consistent with these requirements.

- [Chapter 1101](#) Needs Identification
- [Chapter 1102](#) Context Identification
- [Chapter 1104](#) Alternatives Analysis

Compliance with FHWA's [Interim Guidance on the Application of Travel and Land Use Forecasting in NEPA](#) (March 2010) is recommended, but not required for projects that use a travel demand model.

#### **455.04 Coordination with Federal Agencies other than FHWA**

Federal agencies maintain their own unique NEPA procedures in [CFR](#) and may have different documentation and procedural requirements for complying with NEPA. If your project has a federal nexus with more than one federal agency, it is critically important to meet with each of the federal lead agencies involved in the project and determine how to proceed. In some cases the federal agencies may agree to co-lead the NEPA process. In others, one agency may serve as lead and the other as a cooperating agency. This decision needs to be made very early in the process to ensure timely approval of your environmental document. The exact requirement will vary depending on the nature of the project, federal permits and approvals required, and individual circumstances. Common examples of projects that require coordination with more than one federal agency are:

- An FHWA funded project that crosses federally owned or managed lands.
- A project that receives Federal Highway Administration and Federal Transit Administration funding.
- Any highway project involving Federal Railroad Administration or Federal Aviation Administration.
- An FHWA funded project that requires an Army Corps of Engineers Individual Permit.

##### **(1) Waterborne Navigation and Ferry Facilities**

Ferry Terminals are typically located in navigable waters within the corporate limits of cities where harbor lines have been established by the state Harbor Lines Commission. According to the State Constitution, harbor areas are “forever reserved for landings, wharves, streets, and other conveniences of navigation and commerce.”

The Washington State Department of Natural Resources manages the use of harbor areas in accordance with the Aquatic Lands Act ([RCW 79.105](#)). These areas are also subject to local land use regulations, including shoreline, critical area, and zoning regulations.

U.S. Homeland Security regulations ([33 CFR 165](#)) impose security zones at ferry terminals and around vessels. A 25 yard separation zone is required when vessels are at the dock, and a 100 yard separation zone is required when the vessel is in route. Potential impacts to these security zones should be addressed in the land use analysis.

Ferry Terminal projects often receive Federal Transit Administration funds, and/or the facilities may have received FTA funding. WSF projects may also be subject to Federal Transit Administration requirements. FTA procedures are described on their [website](#) and in the policy document: Environmental Impact and Related Procedures ([23 CFR 771](#)) Effective April 23, 2009.

Road projects typically have little impact on waterborne navigation. However, river crossings may affect shipping routes or access to port facilities. Section 11 of FHWA [Technical Advisory TA 6640.8A](#) requires an analysis of potential impacts to waterborne navigation and a discussion of mitigation for adverse impacts. Any project that requires a Section 9 permit must also show evidence of coordination with the U.S. Coast Guard in accordance with the FHWA/U.S. Coast Guard MOA. Early coordination is required during the project planning phase, prior to formal project initiation (see the table in Section V for specific requirements). Where the preferred alternative requires a Section 9 permit, the NEPA documentation should include an exhibit showing the horizontal and vertical navigational clearances for each permit activity.

Highway projects adjacent to ferry terminals may affect ferry loading and unloading procedures, transit access, or parking. Coordination with WSF terminal operations staff and a discussion of the affects (both beneficial and adverse) to ferry operations should be included in the environmental document. Signal timing, turning movements, access to parking, transit stops, pedestrian flow and bicycle connections may be important factors.

The environmental document must evaluate the effect of proposed ferry operations on the adjacent street system for vehicular traffic, pedestrian flow and bicycle access.

## **(2) Rail Facilities**

Unlike highways, most rail facilities are privately owned. However, there are situations when a transportation project includes work on, over, or adjacent to rail facilities. Types of projects include grade crossing improvements, nearby roadway intersection improvements, and infrastructure improvements to support passenger rail service. When FHWA is the sole lead federal agency, apply the [Design Manual](#) Chapter 1350 policies and procedures for coordinating highway and rail projects. It also includes requirements for conducting a safety analysis for at-grade crossings and signalized intersections in the vicinity of rail crossings.

If FRA is the federal lead, the EA/EIS must assess the direct, indirect, and cumulative impacts on both passenger and freight transportation, by all modes, including bicycles and pedestrians. The analysis should address local, regional, national, and international perspectives and include a discussion of construction and long-term impacts on vehicular traffic congestion. For more information on assessing environmental impacts refer to [FRA Procedures for Considering Environmental Impacts](#). To determine if the project qualifies as a CE see FRA's [Categorical Exclusion Worksheet guidance](#).

The Surface Transportation Board (STB) is an economic-regulatory agency and has jurisdiction over rail related proposals that include construction of new rail lines and connecting track, rail line abandonments, as well as discontinuing rail service. These types of projects are generally proposed by freight railroads and do not typically involve WSDOT. STB's environmental rules can be found at 49 CFR 1105. The environmental rules implement various environmental statutes that include NEPA, the National Historic Preservation Act, the Coastal Zone Management Act, and the Endangered Species Act.



### (3) **Aviation Facilities**

Any proposed highway construction or alteration in the vicinity of a public or military airport will require early coordination with WSDOT's [Aviation Planning Division](#). Projects located within 3.8 miles of an airport may require an [obstruction evaluation](#) and must comply with FAA regulations to ensure that airway highway clearances are adequate for the safe movement of air and highway traffic ([23 USC 318](#) and [23 CFR 620](#) Subpart A, Highway Improvements in the Vicinity of Airports).

The guidance addresses:

- The effect of airports on adjacent land use and appropriate environmental documentation of proposed airport actions.
- The kinds of information on existing and planned land use that should be provided in an environmental document for highway projects within 3.8 miles of an airport, including “significance thresholds” for various land use related topics.

Review of the WSDOT [Aviation Stormwater Design Manual](#) M 3041 is recommended to evaluate potential impacts from the construction and operation of stormwater detention facilities in close proximity to airports.

If FAA is the lead federal agency, the environmental document must evaluate the effect of airport expansion or rehabilitation projects on the local transportation network, including effect on parking, transit, vehicle congestion, travel time, and traffic patterns. FAA guidance on how land use compatibility should be addressed in airport planning and NEPA documents is found in Federal Aviation Administration Orders [1050.1E](#) and [5050.4B](#). See the WSDOT [Environmental Permitting](#) web page for FAA public notice requirements. Contact the WSDOT Aviation Division for assistance.

#### **455.05 Documenting Land Use Analysis for Legal Sufficiency under NEPA**

Large, complex, and/or environmentally controversial projects will need more robust documentation of the land use analysis. Because the land use analysis influences many other disciplines (transportation, noise, air quality, visual, and social) it is important to thoroughly document the participants, assumptions, methodologies, results, and uncertainties to minimize the risk of a successful legal challenge. This may be done in a technical appendix to the environmental document (per [CEQ 40 CFR 1502.18](#)) to ensure this information is included in the project's administrative record. Four key areas should be documented in the project's administrative record.

1. Identify and explain key underlying assumptions (such as growth rates) and explain how those assumptions were made.
2. Describe the methods used to develop forecast results. Explaining the inherent advantages and limitations in the analysis process and data sources can be especially useful in establishing a “reasoned basis” for the methodology.
3. Summarize and explain the results including an explanation of patterns in the data, causal relationships, and anomalous or unexpected results.
4. Systematically review assumptions, data and results to ensure internal consistency across related disciplines (transportation noise, air quality, visual quality, and social) to make sure they do not contradict results of the land use analysis.

## 455.06 Bicycling and Pedestrian Facilities

The FHWA Bicycle and Pedestrian Program requires that pedestrian bicycle facilities be considered as equals with other modes of transportation, ensuring that transportation choices exist for people of all ages and abilities. In urban areas, bicycle and pedestrian ways must be established in new construction and reconstruction projects unless one or more of the following conditions are met:

- Bicyclists and pedestrians are prohibited by law from using the roadway. In this instance a greater effort may be necessary to accommodate bicyclists and pedestrians elsewhere within the right of way or within the same transportation corridor.
- The cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use. Excessively disproportionate is defined as costs exceeding 20 percent of the larger transportation project budget.
- Where low population levels make it unlikely the facility will be used by bicyclists and/or pedestrians.

FHWA Technical Advisory [T 6640.8A](#) (October 1987) requires that the environmental document discuss current and anticipated use of the bicycle and pedestrian facility, potential impacts, and measures to avoid or reduce adverse impacts. This requirement applies to formal trails and informal pathways with identified use by bicyclists and pedestrians. If the preferred alternative would sever an existing major route for non-motorized transportation traffic, the proposed project needs to provide a reasonable alternative route or demonstrate that such a route exists ([23 USC 109\(m\)](#)).

When new bicycle and pedestrian facilities are proposed as part of a highway project, the environmental document should:

- Include sufficient information to explain the basis for providing the facilities (e.g., proposed bicycle facility is a link in the local plan, or sidewalks will reduce project access impact to the community).
  - Identify the facilities to be included in the preferred alternative.
1. **Safe Routes to Schools** – In 2011, the Washington Legislature funded a grant program for Safe Routes to Schools and Safe Routes to Transit. Proposed projects within one mile of a school may impact the Safe Routes to Schools and need to coordinate with the school. Schools are required to identify walking routes, provide a map, and describe identified hazards. Maps of routes are available on the WSDOT [Safe Routes to Schools](#) web page. Efforts to avoid, minimize, or mitigate adverse impacts and coordinate with school officials should be discussed in the environmental document.
  2. **National Trails System Act** – The National Trails System Act 1968 ([16 USC 1241-1251](#)) requires federal agencies that abandon roadways, utility right of way, or other properties suitable for improving or expanding the national trails system to consider the possibility of using the abandoned right of way to extend the national trail system.

## 455.07 Transit

Highway projects have the potential to benefit and impact transit operations by changing traffic flow and travel patterns. Projects may affect travel time, relocate or remove transit stops, or change pedestrian access to transit stops by adding median barriers or relocating of cross walks. The environmental document should discuss:

- Potential benefits and opportunities for greater integration of transit in the corridor. Potential construction impacts, particularly detours and temporary route closures.
- How changes in traffic patterns affect transit operations.
- Proposed mitigation for both construction impacts and operational impacts

The environmental document should include a discussion of potential impacts of the transit improvement on the transportation system. Areas of concern include the effect on existing transit operations (area and frequency of service, travel time, and patronage), changes in traffic distribution, local circulation patterns, and parking. For more information on assessing environmental impacts for transit projects refer to the FTA Transportation Impacts web page.

## 455.08 Farmland

The [Federal Farmland Protection Policy Act \(FPPA\)](#) is intended to minimize the extent to which federal activities contribute to the conversion of farmland to nonagricultural uses. [7 CFR 658.2\(a\)](#) gives general directions that WSDOT has interpreted to mean that soil types not suitable for crops (such as sand dunes), farmland already committed to urban development (land within the adopted Urban Growth Area), and farmland that has already been converted to industrial, commercial, residential, or recreational use is exempt from analysis.

The FPPA requires agencies to examine the impact of their programs and projects before they approve any activity that would convert farmland to other uses. WSDOT complies with this requirement by submitting the appropriate forms to the Natural Resources Conservation Service (NRCS). The procedures for complying with FPPA requirements can be found on the WSDOT [NEPA/SEPA Support](#) web page.

NRCS recognizes three categories of farmland based on their soil types:

- Prime Farmland.
- Unique Farmland.
- Farmland of statewide or local importance.

Because the rating is based on soil type timber land, vacant land, and open space, which has never been farmed, may be designated as prime farmland. Therefore, the WSDOT project office should complete and submit the form to NRCS for all projects. The NRCS will perform a Land Evaluation and Site Assessment and return a Farmland Conversion Impact Rating (FCIR) score for each alternative described on the form. A score of 160 or greater is considered to be a substantial impact. Completed forms should be returned to NRCS.

If the project is a CE, document results in the ERS/ECS. If an EA/EIS is required, summarize the results of early consultation with the NRCS and appropriate state and local agricultural agencies where farmlands are directly or indirectly impacted by any alternative. Include a copy of the FCIR form and a map showing the location of all

farmlands in the project area, the type, and location of impact by alternative. The EA/EIS should discuss alternatives to avoid farmland impacts for any alternative with a score of 160 or greater. If avoidance is not possible, measures to minimize or reduce impacts should be evaluated and included in the proposed action.

**(1) Farmland and Mitigation Sites**

[RCW 47.01.305](#) directs WSDOT to use public lands before using land designated as agricultural land of long-term commercial significance (as defined in [RCW 36.70A](#)) for highway projects. If public lands are unavailable, WSDOT is directed to make every effort to avoid any net loss of agricultural lands.

In an August 2007 letter, Governor Gregoire directed WSDOT to notify the Governor's Chief of Staff when WSDOT is seriously considering using eminent domain for acquiring agricultural resource land pursuant to the Growth Management Act ([RCW 36.70A.170\(a\)](#)) for wetland mitigation purposes. WSDOT's policy is to comply with these directives by avoiding the use of designated agricultural resource lands for mitigation sites whenever possible. If no other suitable sites are available, WSDOT will work with local jurisdictions to avoid conflict with policies and regulations protecting agricultural lands. WSDOT Real Estate Services Office tracks conversions of agricultural resource lands to transportation purposes for WSDOT projects. The WSDOT Director of Environmental Services will ensure that WSDOT provides written notice to the Governor's Office at least two weeks prior to filing any formal action to condemn or purchase designated agricultural resource lands for environmental mitigation purposes as follows:

- For condemnation of designated agricultural lands for wetland mitigation sites, a mandatory notice will be sent to the Governor's Chief of Staff. (This requirement does not apply to local agency projects.)
- For condemnations of designated agricultural lands for other environmental mitigation purposes, a courtesy notice will be sent to the Governor's Office staff. This requirement does not apply to local agency projects.

**(2) State Conservation Commission Memorandum of Understandings**

This MOU between the Washington State Conservation Commission and WSDOT (September, 1982) aims to enhance cooperation to preserve agricultural and forest lands. It requires coordination between WSDOT and appropriate Washington State Conservation Commission and Conservation District personnel to assure that roadway projects minimize agricultural land conversions. A copy of the MOU is available in [Appendix B](#).

## **455.09 Resource Conservation Areas**

Resource Conservation Areas have previously been called Beautification Areas, Landscape Areas, Landscape or Conservation Easements, or Environmental Commitment Areas on Right of Way Plans and Real Estate Services Maps. They are natural areas, outside of limited access, 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 U.S.C. 752.2](#), stating that "preservation of valuable adjacent scenic lands is a necessary component of highway development."

It is FHWA and WSDOT policy that impacts must be avoided. However, due to the constrained, linear character of highway facilities, project impacts may be

unavoidable. If impacts are unavoidable, they must be minimized and mitigated. See the *Roadside Policy Manual* M 3110 for more information.

## 455.10 Recreational Land Conversions Section 6(f)

Projects that impact recreational lands require special consideration. [Chapter 457](#) describes USDOT specific requirements (i.e., Section 4(f) of the Department of Transportation Act of 1966) for considering impacts to recreation and resource lands. However, there are a number of federal and state grants given to recreation managers that require some type of compensation when lands are converted and can no longer be used for recreational purposes.

### (1) Section 6(f) Reviews

The Land and Water Conservation Fund (1965) is a federal grant program which helps pay for the acquisition of outdoor recreation sites and facilities. Grants are awarded to cities, counties, Native American Tribes, state agencies, and park and school districts. Section 6(f) of the act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the Department of Interior's National Park Service (NPS). In Washington State the [Recreation and Conservation Office \(RCO\)](#) oversees many grant programs including the Land and Water Conservation Fund and represents the interests of the National Parks Service to ensure compliance with federal requirements.

If property purchased or improved through LWCF is impacted by a project the property owner (grant sponsor) is responsible for compliance with all 6(f) requirements even if the impact is caused by another party, such as WSDOT. Therefore, conversion of a Section 6(f) property to transportation uses requires early coordination with RCO and the property owner (grant sponsor) to ensure:

- All practical alternatives to property conversion have been evaluated and no reasonable alternative exists to the conversion that would meet the project's purpose and need.
- A mutually acceptable replacement property is found. The replacement property is reasonably equivalent in usefulness and location, and fulfills the same recreational functions as the original property.
- The replacement property has an equal or greater fair market value than the original property.
- The public has been informed of the proposed conversion, been given a minimum of 30 days to comment on the change and their comments have been considered and adequately addressed by RCO/NPS.
- The replacement property is not designated-recreation land owned by another public agency (i.e.; you cannot replace a park with an existing park and thereby reduce the total amount of recreation land available to the community).
- A partial conversion will not adversely affect the recreational function of the remainder. If the remainder is not viable, the whole parcel must be replaced.
- NEPA, ESA, Section 106 and all other Federal approval requirements have been satisfactorily completed for the project as well as the conversion. Remember: the environmental approvals must include review of the portion of the recreation land to be converted and the proposed replacement site (*LWCF State Assistance Program Manual* Section 8(E)(3)(g)).



The Federal regulations stipulate that the environmental review be conducted in a neutral and factual manner and should not include statements that promote or justify the action precipitating the conversion. Coordination with RCO is required as soon as the possibility of conversion is discovered to minimize project delay by ensuring:

- Agreement on the extent of impact caused by the project.
- The replacement property (if proposed) is determined acceptable by RCO prior to expenditure on appraisals or environmental review.

Discovery of an unauthorized conversion requires RCO to notify the project sponsor of the violation. Through RCO's notice it will require that the project cease immediately until the conversion process is satisfactorily completed. The conversion process for unauthorized activities requires additional documentation used by RCO to consider the facts of the conversion. Details could include discussion of alternatives considered and a description of the work that required the use of a Section 6(f) property without prior notification and coordination with RCO. Standard procedures for working with RCO are described in their manual (RCO [Manual 7](#) Section 3(6)).

Conversion approval is normally done by the [Recreation and Conservation Funding Board \(RCFB\)](#). Scheduling a conversion approval may take time and needs to be considered in the overall timeline of the transportation project. RCO advises that any request for a conversion approval be pursued as soon as a potential conversion is identified. RCO must complete a number of administrative tasks to get a proposal in front of the RCFB. Furthermore, the RCFB meets on a quarterly schedule, and the proposal must be received at least six weeks in advance of a decision by the RCFB. Further details regarding the approval process and document requirements should be sought from an [RCO Grant Manager](#).

Small conversions of less than 5 acres or 10 percent of the Section 6(f) property (whichever is smaller) may be accomplished under a less complex process. To qualify, the conversion must meet specific minimum size and cost requirements. Coordination with RCO is still required for small conversions. Size and cost requirement and the review process are described on RCO's website in Section 3, [Manual 7](#)).

Because properties purchased with Land and Water Conservation Funds are to be used for recreation, LWCF properties (Section 6(f) properties) qualify as Section 4(f) properties. Although all Section 6(f) properties are Section 4(f) properties, two different processes are needed to assess a project's impacts to satisfy federal requirements. Here are some things to keep in mind about 4(f) and 6(f) properties:

- Section 6(f) applies only to properties acquired or improved with Land and Water Conservation funds. Section 4(f) applies to all publicly owned parks, recreation areas and wildlife and waterfowl refuges regardless of the funding source.
- Section 6(f) applies to all programs and policies for all federal agencies. Section 4(f) only applies to US DOT programs and policies.
- Mitigation for impacts to Section 6(f) requires replacement with land of equal value, location, usefulness and function as the impaired property. Mitigation for Section 4(f) impacts is much more flexible and may not require replacement.

[Table 455-3](#) summarizes the differences between Section 6(f) and Section 4(f). For more information about Section 4(f) evaluations see [Chapter 457](#).

Law	Section 6(f)	Section 4(f)
Legislative Reference	Land and Water Conservation Fund Act, Section 6(f).	Section 4(f) of DOT Act
Purpose	Preserve, develop and assure the quality and quantity of outdoor parks and recreation areas and refuges for present and future generations.	Avoid use of public parks, waterfowl and wildlife refuges and significant historic sites.
Applies When	All projects that impact recreational lands purchased or improved with land and water conservation funds.	Projects that impact significant public parks, recreation areas, wildlife and waterfowl refuges, and all significant historic sites are “used” for a highway project regardless of funding source.
Final Approval	NPS through RCO	US DOT Agency lead.
Relationship to Each Other	Section 4(f) is not an integral part of the Section 6(f) process.	Section 6(f) may influence the decision making during the consideration of minimization of harm during the Section 4(f) evaluation process, but they are independent processes.

### Comparison of Section 6(f) and Section 4(f)

*Table 455-3*

Different Federal Agencies have different documentation and procedural requirements for complying with NEPA. Conversion of a 6(f) property cannot be accomplished until we have satisfied all of the NEPA, ESA, and Section 106 requirements for both the property proposed to be converted and the proposed replacement property. The exact requirements will vary depending on individual circumstances and the other federal agency involved. Early coordination with RCO, NPS, and any land owning agencies involved is recommended to ensure that our process meets their requirements and eliminate rework.

## (2) **Other Grant Funded Properties**

The [Recreation and Conservation Office \(RCO\)](#) also manages many other state and federal grant programs, aside from the Land and Water Conservation Fund Program. These grants fund public recreation sites and facilities (such as parks, trails, trailheads, boat launches, habitat areas and gun ranges), and habitat improvements. RCO awards grants to counties, cities, nonprofit organizations, lead entities, state and federal agencies and Native American tribes. Decisions on granting and conversion of lands that have received grants occur through one of two funding boards; the Recreation and Conservation Funding Board and the Salmon Recovery Funding Board.

It is important to research potentially impacted trails, parks and habitat areas, etc. to determine if RCO grant funds have been used to purchase and/or support the site. Impacts to these funded sites are handled in a similar manner to what is described in the section above concerning 6(f). Early coordination with RCO and the land owner (grant sponsor) is important to ensure all compliance and conversion policies are followed as outlined in the signed project agreement form, as found in RCO [Manual 7](#) Section 3.

## 455.11 Wild and Scenic Rivers

The [Wild and Scenic Rivers Act](#) (PL 90-542, [16 USC Chapter 28](#)) designates certain rivers (or river segments) for special protection to preserve them in a free-flowing condition for the benefit and enjoyment of present and future generations. The act also identifies various “study rivers” for possible inclusion in the Wild and Scenic Rivers System. Currently, all of the designated Wild and Scenic Rivers in Washington State are administered by the U. S. Forest Service in accordance with [36 CFR 297](#).

A comprehensive management plan is in place for all designated rivers. The plan describes the use and type of construction allowed in each segment of the river. River segments designated for recreational use, segments in publicly owned public parks, recreation areas, or wildlife and waterfowl refuges, and segments with historic or archeological sites, are subject to Section 4(f). Segments that are privately owned (except for historic and archeological sites on private land) and segments on publicly owned lands not open to the general public (e.g. military bases, Indian Reservations, etc.) and whose primary purpose is not a Section 4(f) use, are not subject to Section 4(f). If the management plan does not identify a specific function for the river segment, then Section 4(f) does not apply.

Close examination of the management plan and coordination with the appropriate U. S. Forest Service office is essential early in the environmental review and design process. Projects in a designated or study wild and scenic river that require a Section 404 permit from the Army Corps of Engineers also require completion of a written ESA Section 7 determination by the U. S. Forest Service.

Federally designated Wild and Scenic Rivers within Washington include:

- Skagit River from the pipeline crossing at Sedro-Wooley upstream to and including the mouth of Bacon Creek and tributaries as listed below:
  - The Cascade River from its mouth to the junction of its North and South Forks.
  - The South Fork to the boundary of the Glacier Peak wilderness Area.
  - The Suiattle River from its mouth to the boundary of the Glacier Peak Wilderness Area at Milk Creek.
  - The Sauk River from its mouth to its junction with Elliot Creek.
  - The North Fork of the Sauk River from its junction with the South Fork of the Saul to the boundary of the Glacier Peak Wilderness Area.
- Klickitat River from Wheeler Creek to the confluence with the Columbia River, classified as a recreational river.
- White Salmon River from the confluence of Gilmer Creek (near the town of BZ Corner) to the confluence with Buck Creek; classified as a part wild and part scenic river.

Federally designated Study Rivers within Washington State include:

- Skagit River from Mount Vernon to and including the mouth of Bacon Creek, plus additional segments of the Sauk, Suiattle, and Cascade tributaries.
- Klickitat River upstream of the confluence of the Little Klickitat River to the Yakama Indian Reservation boundary.
- Snake River from the town of Asotin to the Oregon state line.
- White Salmon River upstream of the confluence with Gilmer Creek.



### (1) **National Rivers Inventory**

The 1979 Presidential Directive requires federal agencies to protect and manage rivers in the Nationwide Rivers Inventory (NRI) that are suitable for inclusion in the Wild and Scenic Rivers System as part of their normal planning and environmental review process. The directive, a listing of NRI rivers in Washington State, and the procedure for consulting on projects that may affect these rivers is available on the [National Park Service NRI](#) website.

### (2) **Washington State Scenic River System**

[RCW 79A.55](#) established a scenic river system in Washington State. The system is managed by the State Parks and Recreation Commission to “protect and preserve the natural character of rivers with outstanding natural, scenic, historic, ecological, and recreational values”. The protected lands include river and publicly owned or leased lands up to one quarter mile on each side of the river. The State Parks Commission has developed and adopted management policies for the public lands along designated rivers. [RCW 79A.55.040](#) requires that the management policies be integrated into local Shoreline Management Master Plans.

State designated Scenic Rivers include:

1. The Skykomish River from the junction of the north and south forks of the Skykomish (within the jurisdiction of Snohomish County):
  - a. Downstream approximately fourteen miles to the junction of the Sultan River.
  - b. Upstream approximately twenty miles on the south fork to the junction of the Tye and Foss rivers (within the jurisdiction of King County).
  - c. Upstream approximately eleven miles on the north fork to its junction with Bear Creek (within the jurisdiction of Snohomish County).
2. The Beckler River from its junction with the south fork of the Skykomish River upstream approximately eight miles to its junction with Rapid River (within the jurisdiction of King County).
3. The Tye River from its junction with the south fork of the Skykomish River approximately fourteen miles to Tye Lake (within the jurisdiction of King County).
4. The Little Spokane River from the upstream boundary of the state park boat put in site near Rutter Parkway and downstream to its confluence with the Spokane River (within the jurisdiction of Spokane County).

## 455.12 **Statutes and Regulations**

Federal laws that specifically regulate land use include:

- **Rivers and Harbors Act** – Section 10 of the Rivers and Harbors Act (33 USC 410 et seq.) is administered by the Army Corps of Engineers.
- **Farmland Protection Policy Act (FPPA)** – of 1981 ([7 USC 4201 et seq.](#)) Implementing regulations are in [7 CFR 658](#) is administered by the Natural Resources Conservation Service.

- **Section 6(f)** – Land and Water Conservation Fund Act codified at [16 USC 4601-8\(f\)](#). In Washington State, the Recreation and Conservation Office administers the fund in accordance with [WAC 286-40](#).
- **National Trails System Act** [16 USC 1241-1251](#)
- **Wilderness Act** [16 USC 1131-1136](#)
- **Wild and Scenic Rivers Act** PL 90-542, 16 USC Chapter 28

State laws that affect land use include:

- **Scenic River System Act** [RCW 79A.55](#)
- **Aquatic Lands Act** [RCW 79.105](#). DNRs implementing regulations are in [WAC 332-30](#)
- **Farmland Preservation** [Executive Order 80-01](#)

Federal laws that specifically regulate transportation include:

- **USDOT Bicycle and Pedestrian Policy Statement** – Based on the following CFR [Title 23](#) Highways, [Title 42](#) The Public Health and Welfare, [Title 49](#) Transportation.
- **Section 10 of the River and Harbors Act** – (1899) [33 USC 403](#)
- **General Bridge Act** – [33 USC Section 525](#) (formerly Section 9 of the Rivers and Harbors Act) and implementing regulations [33 CFR Parts 114-115](#)
- **National Trails System Act** – ([16 USC 1241-1251](#))
- **FAA Regulations** – [14 CFR Part 77](#) (January 1975), [23 USC 318](#), and [23 CFR 620 Subpart A](#)
- **FRA Regulations** – [64 Fed. Reg. 28545](#) (May 26, 1999)
- **FHWA and FTA Regulations** – [40 CFR 1500-1508](#)

State laws that specifically regulate transportation include:

- **Aviation** – [RCW 14.12](#), [RCW 36.70A.510](#), and [RCW 36.70.547](#)
- **Bicycle/Pedestrian Traffic** – [RCW 47.30.020](#) and [RCW 47.30.030](#)
- **City Streets as Part of State Highways** – [RCW 47.24](#)
- **Design Standards** – [WAC 468-18-040](#)
- **State Environmental Policy Act (SEPA)** – [WAC 197-11](#) and [WAC 468-12](#) (WSDOT)
- **Transportation Facilities and Services of Statewide Significance** – [RCW 47.06.140](#)
- **Vehicular Traffic – Essential Public Facilities** – (GMA) [RCW 36.70A](#)
- **WDNR Easements** – [RCW 47.12](#) grants WSDOT authority to obtain an easement from DNR highway, ferry, rail and other state transportation projects.
- If a project provides, removes, or relocates parking, the local jurisdiction's zoning, road standards, and off street parking regulations may apply. Links to appropriate city and county regulations can be found from the [MRSC](#) website.

### 455.13 Abbreviations and Acronyms

AASHTO	American Association of Highway and Transportation Officials
BOD	Basis of Design
CE	Categorical Exclusion (NEPA) Categorical Exemption (SEPA)
CEQ	Council for Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	<a href="#">Executive Order</a>
ERS/ECS	Environmental Review Summary / Environmental Classification Summary
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FCIR	Farmland Conversion Impact Rating form
FHWA	Federal Highway Administration
FPPA	Farmland Protection Policy Act
FRA	Federal Rail Administration
FTA	Federal Transit Administration
GMA	Growth Management Act
HOV	High Occupant Vehicle
LOS	Level of Service
LWCF	Land and Water Conservation Fund (1965)
MAISA	Multiagency, Interdisciplinary and Stakeholder Advisory team
MOA	Memorandum of Agreement
MRSC	Municipal Research and Services Center of Washington
NEPA	National Environmental Policy Act
NCHRP	National Cooperative Highway Research Program
NRCS	Natural Resources Conservation Service
NRI	National Rivers Inventory
NPS	National Park Service
RCO	Washington State Recreation and Conservation Office
RCW	Revised Code of Washington
RCFB	Recreation and Conservation Funding Board
SEPA	State Environmental Policy Act
SOV	Single Occupant Vehicle
USC	United States Code
USFS	United States Forest Service
TSM/TDM	Transportation System Management/Transportation Demand Management
USC	United States Code
USDOT	United States Department of Transportation
WAC	Washington Advisory Code
WSF	Washington State Ferries

## 455.14 Glossary

These definitions provide context for the Land Use analysis. Some terms may have other meanings in a different context.

**Concurrency** – As defined under GMA, concurrency requires adequate public facilities and services are available when the impacts of development occur, or within a specified time thereafter. For locally owned transportation facilities, the maximum specified time is six years from the time of development.

**Direct Effects** – 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.

**Essential Public Facilities** – As defined under GMA, 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.

**Farmland of Statewide or Local Importance** – 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.

**Indirect Effects** – 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 agency’s 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.

**Level of Service** – 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).

**Navigable Waters or Navigable Waters of the United States** – 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](#))

**Federal Nexus** – A determination that at least one federal agency is involved as a proponent of a specified proposal and/or as an agency that needs to act on a federal permit, license, or other entitlement (such as a request to use federal funds or federal land) needed

to implement the proposal. A federal nexus (even on an otherwise non-federal proposal) typically triggers the need for the federal agency or agencies to comply with various federal statutes include, but not limited to, NEPA, Section 106 of the Historic Preservation Act, Section 4(f) of the Department of Transportation Act, Section 6(f) of the Land and Water Conservation fund Act, and Section 7 of the Endangered Species Act.

**Prime Farmland** – 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.

**Resource Conservation Areas** – are 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 U.S.C. 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. Refer to the [Roadside Policy Manual](#) M 3110 for more information.

**Section 6(f) Property** – Any property acquired or developed with financial assistance under Section 6(f) of the federal Land and Water Conservation Fund Act.

**Transportation System Management/Transportation Demand Management (TSM/TDM)** – 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.

**Transportation Facilities and Services of Statewide Significance** – 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 facilities and services, the freight railroad system, the Columbia/Snake navigable river 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](#).

**Unique Farmland** – 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.

**Urban Growth Area** – as defined in the Growth Management Act, are 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.

