

41.1 General Discussion

This chapter identifies the design standards document, deviation approval authority and design approval for a specific facility. The deviation process, Value Engineering, and Work Zone Safety and Mobility are also discussed below. This part of the manual is organized into six chapters relating to the design phase General Design Information; City and County Design Standards for Non NHS facilities; Location and Design Approval; Plans, Specifications, and Estimates; State Advertising and Award Procedures; and Local Advertising and Award Procedures.

Compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 is required in the design, construction, operation and maintenance of transportation facilities (i.e., pedestrian facilities, park and ride lots, et al). Where sidewalks are provided, public agencies shall provide pedestrian access features such as continuous, unobstructed sidewalks, and curb cuts with detectable warnings at highway and street crossings. See 28 CFR Part 36, Appendix A for minimum federal requirements for curb ramps.

The design standards document and approving authority are shown in the table below.

Facility	Design Standards	Deviation Approval	Design Approval
Interstate			
New/Reconstruction	WSDOT Design Manual	WSDOT/FHWA	WSDOT/FHWA
ITS Over \$1,000,000	WSDOT Design Manual	WSDOT HQ	WSDOT HQ
All Other	WSDOT Design Manual	WSDOT HQ	WSDOT Region
National Highway System (NHS)			
State Highways outside of incorporated cities, or on a limited access highway	WSDOT Design Manual	WSDOT HQ	WSDOT Region
State Highways within incorporated cities between back of curb to back of back curb	WSDOT Design Manual	WSDOT HQ	WSDOT Region
State Highways within incorporated cities beyond curb line	AASHTO*	WSDOT H&LP	City
City Streets (non-State highways)	AASHTO*	WSDOT H&LP	City
County Roads	AASHTO*	WSDOT H&LP	County
State Highways outside of incorporated cities, or on a limited access highway	WSDOT Design Manual	WSDOT HQ	WSDOT Region

Facility	Design Standards	Deviation Approval	Design Approval
Non-National Highway Systems (Non-NHS)			
State Highways outside of incorporated cities, or on a limited access highway	WSDOT <i>Design Manual</i>	WSDOT HQ	WSDOT Region
State Highways within incorporated cities between back of curb to back of back curb	WSDOT <i>Design Manual</i>	WSDOT HQ	WSDOT Region
State Highways within incorporated cities beyond curb line	*City and County Design Standards See Chapter 42	WSDOT H&LP	City
City Streets (non-State Highways)	*City and County Design Standards See Chapter 42	WSDOT H&LP	City
County Roads	*City and County Design Standards See Chapter 42	WSDOT H&LP	County

*Bicycle Facilities and multi-use facilities per RCW 35.75.060 and 36.82.145 must follow the WSDOT *Design Manual*.

Different standards apply to the design of new construction/reconstruction, 3-R (resurfacing, restoration, and rehabilitation) and 2-R (resurfacing and restoration). Each of these terms is defined in Chapter 42. Local agencies must determine which standards apply before beginning design. See Chapter 42 for design standards on Non-NHS routes.

See Chapter 43.4 for information on Value Engineering.

41.2 Work Zone Safety and Mobility

All projects on the Interstate system must comply with the new FHWA/ WSDOT “Work Zone Safety and Mobility” rules. This rule applies to all federally funded projects advertised on or after October 12, 2007. It is recommended that any other federally funded project over \$10 million or any project that includes a detour also apply the “Work Zone Safety and Mobility” rules. WSDOT *Design Manual* has a list of requirements and key elements as well as a work zone design checklist.

41.3 Deviations

.21 General. The Agency is authorized to design projects to the standards as indicated in the table shown in section 41.1. In the event all design standards cannot be incorporated into the design, the agency shall submit a deviation request for review and approval.

.22 Documentation. An agency shall document their reasons for the deviation. The deviation request shall include a description of the problem and

its proposed solution and a vicinity map in sufficient detail to aid in evaluating the problem. The deviation request document is a stand alone engineering document. If references to other sources or documents are required, the document should use the appropriate quotes and excerpts as necessary.

An analysis of the engineering and financial aspects of the proposal as compared to the standard and options considered shall be provided. The analysis shall specifically address safety issues, including accident history and projections. It shall address applicable operational characteristics, including traffic speeds, traffic volumes, capacity and route continuity. It should include financial considerations such as high construction costs, unusual or extraordinary site conditions, or environmental requirements that may impact the decision. The analysis may include a Benefit/Cost comparison, and/or Life Cycle Costing of alternatives considered. The analysis should also include any other information which may be helpful as a future reference.

The level of detail of the request should be based on the relative complexity and scope of the project and the deviation requested. Requests will be considered based on the merits presented. This analysis and deviation request shall be documented and completed prior to the agency's completion of PS&E documents.

.23 Format. [Appendix 41.41](#) is a Sample Deviation Analysis Format sheet for use on locally owned facilities (deviations approved by WSDOT H&LP). Refer to the WSDOT Design manual for format on all other deviations. The sample is intended to present format only.

41.4 Appendices

41.41 [Sample Deviation Analysis Format](#)

Appendix 41.41

Sample Deviation Analysis Format

Agency: _____

Project Title: _____

Project No.: _____

1. Posted Speed Limit: _____

2. Physical Comparison:

- (a) Standard Geometrics
- (b) Deviation Geometrics
- (c) Discussion

3. Safety Issues

- (a) Accident History
- (b) Accident Projections
- (c) Discussion

4. Cost Comparison:

	Standard Cost	Deviation Cost	Discussion
Roadway			
Structure			
Other			

5. Reasons Standard Cannot be Achieved at This Time:

6. Certification:

I have examined this deviation request and believe it to be in the best public interest that it be granted.

Date Local Agency Engineer