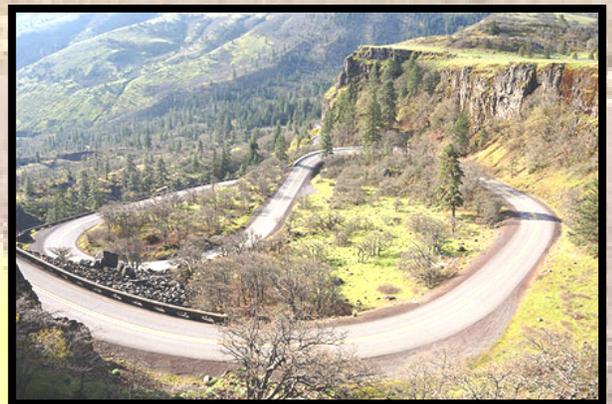




**Oregon
Department
Of Transportation**

***Highway
Design
Manual***

2012



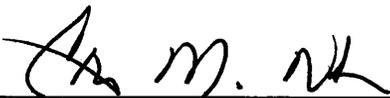
2012 HIGHWAY DESIGN MANUAL

PREFACE

The 2012 Highway Design Manual provides uniform standards and procedures for the Oregon Department of Transportation (ODOT). It is intended to provide guidance for the design of new construction; major reconstruction (4R); resurfacing, restoration, and rehabilitation (3R); or resurfacing (1R) projects. The manual shall be utilized by all Department personnel for planning studies and during project development. It is generally in agreement with the American Association of State Highway and Transportation Officials (AASHTO) document "A Policy on Geometric Design of Highways and Streets - 2011". However, sound engineering judgment must continue to be a vital part in the process of applying the design criteria to individual projects. The flexibility contained in the 2012 Highway Design Manual supports the use of Practical Design concepts and Context Sensitive Design practices.

The 2012 Highway Design Manual is to be used for all projects that are located on the state highways. National Highway System or Federal-aid projects on roadways that are under the jurisdiction of cities or counties will typically use the 2011 AASHTO design standards or ODOT 3R design standards. State and local planners will also use the manual in determining design requirements as they relate to the state highways in Transportation System Plans, Corridor Plans, and Refinement Plans.

The 2012 Highway Design Manual will replace previous versions of the Highway Design Manual and related Technical Bulletins and letters. It is not a legal document,



Catherine M. Nelson, P.E.

Technical Services Manager/Chief Engineer

ACKNOWLEDGEMENTS

There are many teams and individuals that have contributed to this body of work in writing and reviewing. This effort was completed in addition to the existing workload those people have and that is very much appreciated by the users of this manual.

Review teams included the Project Delivery Leadership Team; Planning Business Line Team; Technical Leadership Team, Roadway Leadership Team; and staff members of those groups.

Federal Highway Administration, Oregon Division reviewed and approved the use of this manual.

The Roadway Engineering Unit in Technical Services led the effort in writing, editing, and formatting the text of this document. Specifically these dedicated individuals:

Kent Belleque	Rich Crossler-Laird	Rodger Gutierrez
Christopher Henson	Steve Lindland	Lily Nguyen
Dave Polly	Dave Warrick	

Subsequent additions for 3D Roadway Design were developed by members of the 3D Roadway Design Committee (3D RDC) under the leadership of Della Mosier. Along with support and assistance from Technical Services individuals listed above, these individuals led the effort in writing and editing ODOT's guidelines and best practices for creating roadway digital design data for use in bidding and construction:

Chris Bores (Region 1)	Ray Thwait's (Region 4)
------------------------	-------------------------