

# PREFACE/FOREWORD

## Overview of Manual Purpose

The Analysis Procedures Manual (APM) was created to provide a comprehensive source of information regarding current methodologies, practices and procedures for conducting analysis of Oregon Department of Transportation (ODOT) plans and projects. Although this information is extensive, it is not intended to be exhaustive. For example, this manual does not fully address detailed topics such as Region safety investigations, the traffic signal approval process, or development review policies which are covered elsewhere.

The APM shall be utilized by ODOT staff as well as external consultants and contractors conducting and reviewing plans, projects and/or studies for ODOT. It also applies to work performed under ODOT Grants.

The procedures addressed in this manual have been generally organized to follow the progression of analysis conducted for a typical transportation plan or project. It begins with project scoping and data collection, proceeds through the analysis and concludes with the production of the final report. There are examples provided to “walk” the user through a process.

The APM is generally based on methodologies found in the Highway Capacity Manual (HCM). However, there are many locations in the APM, either because of limitations in the HCM or because of ODOT policies, where the APM recommends different methodologies to address these issues. Traffic analyses shall use the current edition of the HCM in effect at the start of the analysis unless otherwise specified in the APM.

While the direction provided represents recommended practices for producing consistent and accurate results, it should be recognized that every project analysis presents a unique set of opportunities and constraints. Persons applying the APM should consider relevant situation-specific factors including, but not limited to, cost, funding availability, environmental impacts, sustainability, economic development needs, community support, community vision, land use planning context, practical design, and other similar considerations as appropriate. The best alternative from a traffic analysis standpoint, may not be the best alternative for the project.

While working on various types of projects, a number of situations may arise requiring analysis methodologies not discussed in this manual. If ODOT does not have a preferred analysis methodology to offer, there are a number of technical resources available for consultation. Non-standard analysis proposals shall include thorough documentation of assumptions, methods and calculations in a methodology memorandum. Alternative methodologies must be approved by ODOT prior to analysis.

This manual is not intended to replace the need for sound engineering judgment, which must continue to be a vital part in the process of applying the methodologies to individual studies. Thorough documentation of key assumptions, decisions, and findings should be provided and archived with project files for future reference/use. Further, early and frequent collaboration

between jurisdictional staff, consultants, contractors, and stakeholders involved in the analyses will help ensure that the project goals are met.

Note: All references in this manual to the Department refer to ODOT, and all references to Regions relate to ODOT Regions.

### **Manual Structure**

Acronyms are shown in parenthesis after a term, phrase or reference is listed the first time. The acronym is used thereafter in the text.

*Manuals, papers and other publication titles are italicized.*

There are a number of references to web sites, web pages and web accessed documents. Many of these references are links within the document shown with blue, underlined text.

Examples are identified with a solid bar the width of the page at the beginning and end of each example.



*Points that are critical for the analysis process are displayed as a box in italics with the stop sign icon.*



*Additional information to consider is displayed as a box in italics with the yield icon.*

### **Manual Updates**

Analysis techniques and project requirements change over time. The ability to immediately incorporate new information into this manual is essential to providing users with the most current resource possible. To accommodate expedient updating, the APM has been designed as an on-line tool, and the on-line version is the official document.

As this is an on-line document, and will not be published and distributed as a traditional publication, there is no user list for update notifications. It is the user's responsibility to verify they are using the most current version of information as their reference. Updated pages will have the change date as part of the document footer.

Please send your questions, comments and feedback to: [APM@odot.oregon.gov](mailto:APM@odot.oregon.gov).

### **Manual Website**

The on-line version of this document is available at:

<https://www.oregon.gov/ODOT/Planning/Pages/APM.aspx>

Detailed document updates are available on the web page so that users can identify what has changed and when. Supporting information, data and tools used in this manual are available on the Planning Section Technical Analysis and Tools webpages at:

<https://www.oregon.gov/ODOT/Planning/Pages/Technical-Tools.aspx>

### **Periodic Training**

TPAU offers some training related to this manual, generally related to new topics or methodologies. The ODOT APM User Group is a quarterly venue for training and discussion on APM procedures. Contact [APM@odot.oregon.gov](mailto:APM@odot.oregon.gov) to inquire about user group meetings or other training opportunities.