

# **OREGON ITS PERFORMANCE AND BENEFITS PLAN**

## **WORK ORDER #1: ITS BENEFITS WEB PAGE**

Technical Report 2: Web Page Structure and Maintenance

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## **DISCLAIMER**

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## **GLOSSARY OF ABBREVIATIONS**

|      |                                     |
|------|-------------------------------------|
| DOT  | Department of Transportation        |
| ITS  | Intelligent Transportation Systems  |
| JPO  | Joint Program Office                |
| ODOT | Oregon Department of Transportation |

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## 1. INTRODUCTION

The emergence of intelligent transportation systems (ITS) technology within the last dozen years has provided transportation planners and engineers with a new set of tools to address the growing challenges of building and maintaining an effective transportation system. ITS, which consists of a variety of advanced computer and communications technologies that may improve the operations of the transportation system, has been implemented by every state to some level, along with many smaller jurisdictions. The Oregon Department of Transportation (ODOT) has aggressively implemented ITS projects to address both urban and rural transportation needs.

Because most ITS investments have occurred recently, there is limited public awareness of the potential benefits of these technologies. In an environment where government agencies are increasingly held accountable for the quality and benefit of services they provide to the populace, it is critical that this information is readily available. Several organizations, including the U.S. Department of Transportation ITS Joint Program Office and ITS America, have sought to communicate the benefits of ITS to the general public. However, the national scope of these organizations often means that the applicability or relevance of a particular project may not be appreciated by citizens of a given state.

As ODOT continues to invest in deploying ITS technologies, ODOT staffs receive an increased number of questions about the benefits of ITS technologies. They have found that there is not a one-stop source of benefits information that would be accessible and useful to the public. Consequently, ODOT contracted with the Western Transportation Institute to produce a series of web pages that would articulate the benefits of ITS. The goal of this project is to demonstrate the performance and benefits of ODOT's ITS deployments to the traveling public and transportation decision makers in easy-to-understand, non-technical language.

These web pages have been created and will go online before end of August 2003. The software that was used to create and edit all html files (.htm) was Macromedia Dreamweaver MX version 6.1. Dreamweaver was used to make the web pages created in this project to have a format consistent with the ODOT ITS unit's existing web pages. The software that was used to create and edit all image files (.gif, .jpg) was Adobe Photoshop version 6.0. This software was used to minimize the download times for the images online.

This report provides documentation for the structure and maintenance of the web pages. Chapter 2 of this technical memorandum explains the sitemap of the web pages. Snapshot images from Dreamweaver are used to show the file tree for the Benefits of ITS Web Site. Chapter 3 deals with the updating and maintenance of the web pages.

## 2. WEB PAGES SITE MAP

This chapter describes how the web pages are linked together and mapped. Images are used to explain the file tree for the web pages.

### 2.1. File Tree

Figure 2-1 shows the file tree for the Benefits of ITS Web Site. At the highest level, there are three folders: *BenefitsOfITS*, *Images*, and *Templates*. The Images folder contains all of the images that are currently located on ODOT's server. These images have been included in this folder to allow WTI to have a complete working web site on their server. The Templates folder contains the template used on the main benefit category pages. This template, *its.dwt*, has undergone a few minor changes from the template that ODOT sent to WTI. One of the formatting changes eliminated a gap between some of the buttons on the left of the template. In addition, the main benefit and project link were updated to correspond to the new pages created by WTI. Any future changes to the template should be applied using Dreamweaver functions to

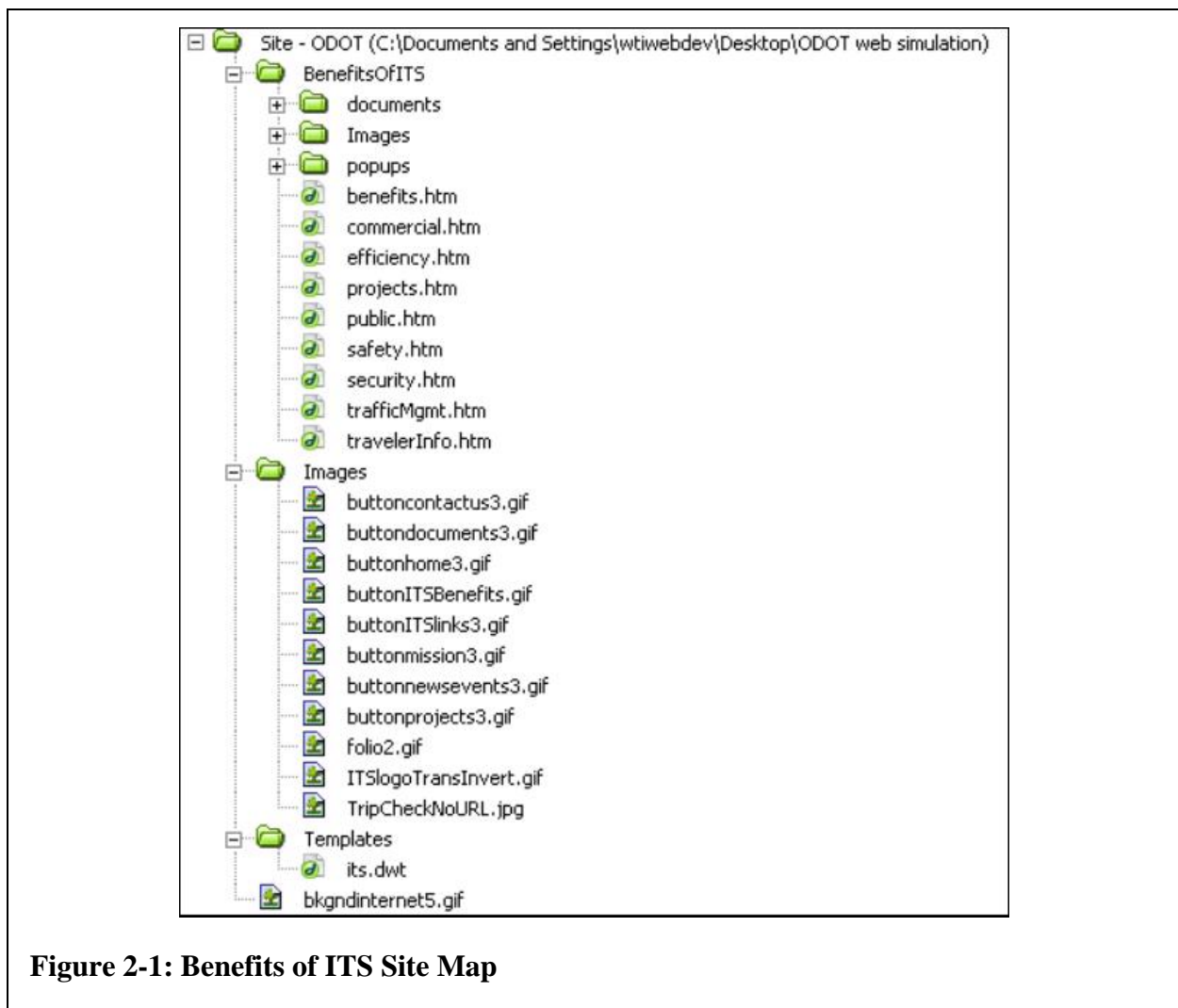


Figure 2-1: Benefits of ITS Site Map

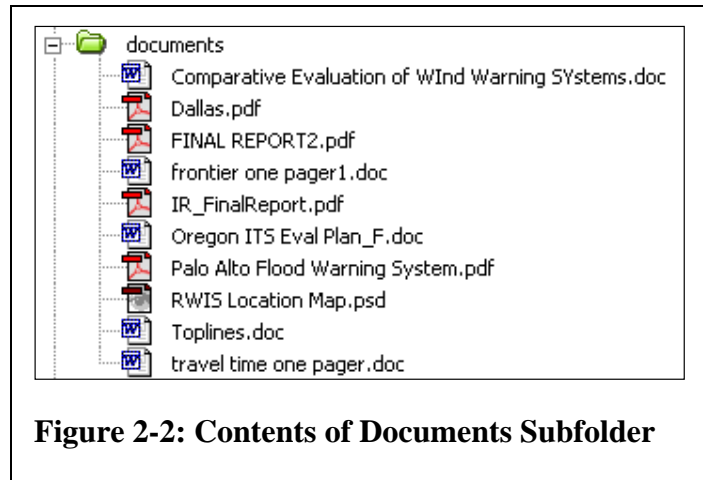
the eight pages located directly in the BenefitsOfITS folder.

## 2.2. Web Pages Structure

There are three subfolders in the BenefitsofITS folder: Documents, Images and Popups. The contents of these folders are described in the sections that follow.

### 2.2.1. Documents Subfolder

The documents that are located in the *documents* subfolder are all linked from various pages throughout the site (Figure 2-2). Any new documents that are to be linked to pages that have either been updated or added to the benefits web site should be inserted into this folder.



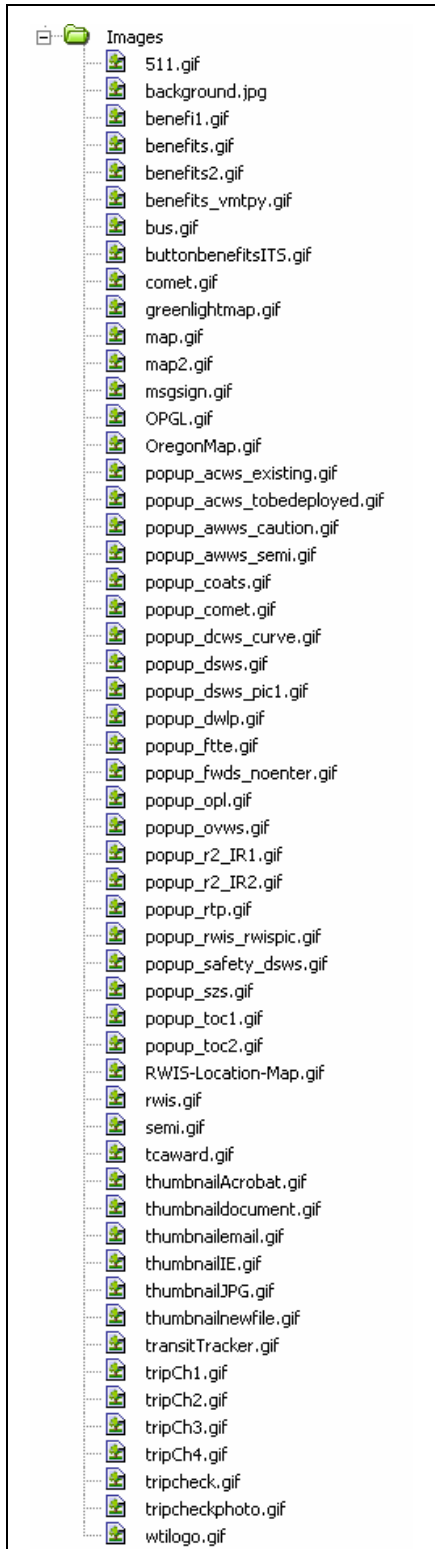
### 2.2.2. Images Subfolder

The Images subfolder located in the BenefitsOfITS folder contains all of the images linked throughout the entire site (Figure 2-3). Any new images should be inserted into this folder and linked to the appropriate page. All of the images in this folder have to be adjusted to allow for a fast download with a quality image.

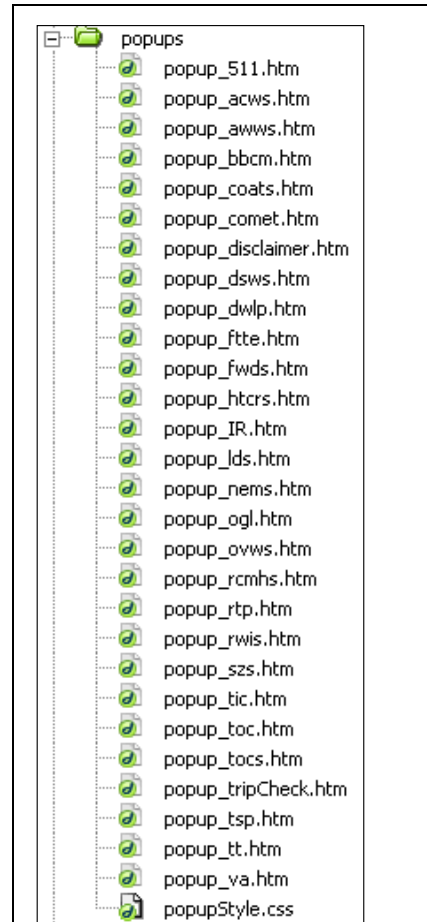
### 2.2.3. Popups Subfolder

The Popups subfolder contains all of the pop-up windows that are referenced throughout the site (Figure 2-4). Each pop-up window corresponds to a project and could be linked from several benefit category main pages. The name for each popup corresponds to the abbreviation of the project directly following the text “popup\_”. For example, “ogl” stands for “Operation Green Light”. The corresponding project name would be popup\_ogl.htm





**Figure 2-3: Contents of Images Sub-folder**



**Figure 2-4: Contents of Popups Subfolder**

### 3. UPDATING AND MAINTENANCE

This chapter contains information on updating and maintaining the web pages. All of the ODOT ITS projects currently included on the benefits and projects web pages are listed in Table 3-1.

**Table 3-1: ODOT Project Status**

| Project   | Underway | Implementation              |                        |
|---|----------|-----------------------------|------------------------|
|   |          | Implementer                 | Status                 |
| 511 in Oregon   | Yes      | ODOT ITS Unit               | In Progress            |
| Advanced Curve Warning System                             | Yes      | ODOT ITS Unit               | In Progress            |
| Automated Wind Warning Systems                            | Yes      | ODOT ITS Unit               | In Progress            |
| California/Oregon Advanced Transportation Systems (COATS) | Yes      | WTI                         | Complete               |
| COMET   | Yes      | ODOT                        | Complete               |
| Downhill Speed Warning System                             | Yes      | ODOT                        | Complete               |
| Dundee Queue Detection System                             | Yes      | ODOT ITS Unit               | Complete               |
| Flood Warning Detection Systems                           | Yes      | ODOT ITS Unit               | In Progress            |
| Frontier Travel Time Estimation                           | Yes      | ODOT and WTI                | In Progress            |
| Highway Travel Conditions Reporting System (HTCRS)        | Yes      | ODOT ITS Unit               | Complete               |
| Interstate 5/Barbur Blvd Corridor Management              | Yes      | ODOT ITS Unit               | Complete               |
| Length Detection System                                   | Yes      | ODOT ITS Unit               | In Progress            |
| National Emergency Messaging System                       | Yes      | ODOT ITS Unit               | In Progress            |
| Operation Green Light                                     | Yes      | ODOT Motor Carrier Services | Complete               |
| Overheight Vehicle Warning System                         | Yes      | ODOT ITS Unit               | In Progress            |
| Region 2 Incident Response                                | Yes      | ODOT                        | Complete               |
| Regional Trip Planner                                     | Yes      | ODOT and WADOT              | In Progress            |
| Remote Control Mobile Home Signs                          | Yes      | ODOT                        | Complete and Expanding |
| Roadway Weather Information Systems (RWIS)                | Yes      | ODOT                        | Complete and Expanding |
| Snow Zone   | Yes      | ODOT                        | Complete and Expanding |
| Transit Signal Priority (Tri-Met)                         | Yes      | TRI-MET                     | Complete               |
| Transit Tracker (Tri-Met and C-TRAN)                      | Yes      | TRI-MET                     | Complete               |
| Transportation Operations Center System                   | Yes      | ODOT ITS Unit               | In Progress            |
| Transportation Operations Centers                         | Yes      | ODOT                        | Complete and Expanding |
| Travel Information Council (TIC) Partnership              | Yes      | ODOT and TIC                | Complete and Expanding |
| TripCheck   | Yes      | ODOT                        | Complete and Expanding |
| Video Architecture  | Yes      | ODOT                        | Complete and Expanding |

### 3.1. Updating

#### 3.1.1. Adding a New Project

There are several steps that need to be followed when adding a new project.

- Insert all new images into the Images folder located in the BenefitsOfITS folder.
- Insert all new documents into the documents folder in the BenefitsOfITS folder.
- Link the new project pop-up window to the stylesheet: popupStyle.css
- Finally, add all of the text content, letting the stylesheet take care of the major formatting.

#### 3.1.2. Adding a New Benefits Category

The steps to add a new benefit category are as follows:

- Follow the instructions for adding a new project for all of the projects relating to the new benefit category.
- Insert all new images into the Images folder located in the BenefitsOfITS folder.
- Insert all new documents into the documents folder in the BenefitsOfITS folder.
- Create the new benefit page using the most recent its.dwt template.
- Insert the content for the benefit category, following the format of the other pages.

### **3.2. Maintenance**

The following table provides a timeline for the first update for each file and the required frequency of updating to keep the web pages current.

Table 3-2: Web Site Maintenance Requirements

| Folder        | Sub Folders | Files          | Description   | Part (s) to be updated                            | First Update   | Update Frequency | Possible Information Resource                    |
|---------------|-------------|----------------|---|---|--|------------------|--|
| BenefitsOfITS |             | benefits.htm   | Benefits Main Page  | VMT and roadmiles growth diagram                  | Jun-04   | Every Year       | ODOT Statistics                                  |
|               |             | commercial.htm | Benefits Category Page for Commercial Vehicle Operations and Safety | 3 <sup>rd</sup> paragraph                         | Upon inclusion of any new weigh stations in Green Light Program                | N/A              | ODOT Motor Carrier Services                      |
|               |             |                |   | 3 <sup>rd</sup> paragraph                         | Upon availability of new statistics for savings through Green Light Program    | N/A              | ODOT Motor Carrier Services                      |
|               |             | efficiency.htm | Benefits Category Page for Maintenance (Efficiency)                 | 3 <sup>rd</sup> paragraph                         | Upon completion of the automated wind warning system                           | N/A              | ODOT ITS Unit                                    |
|               |             | projects.htm   | Comprehensive list of ODOT ITS projects page                        | Insert the new project title                      | Upon the start of any new project  | N/A              | ODOT ITS Unit                                    |
|               |             | public.htm     | Benefits Category Page for Public Transportation                    | Last Paragraph                                    | Upon the completion of Regional Transit Trip Planner                           | N/A              | ODOT ITS Unit                                    |
|               |             | safety.htm     | Benefits Category Page for Traveler Safety                          | NHTSA statistics in the 1 <sup>st</sup> paragraph | Dec-03   | Every Year       | <a href="http://www.nhtsa.org">www.nhtsa.org</a> |
|               |             |                |   | 4 <sup>th</sup> paragraph                         | Upon the completion of "advanced curve warning system at Myrtle Creek" project | N/A              | ODOT ITS Unit                                    |

Table 3-2: Web Site Maintenance Requirements (cont.)

| Folder        | Sub Folders | Files            | Description   | Part (s) to be updated   | First Update  | Update Frequency | Possible Information Resource   |
|---------------|-------------|------------------|---|--|---|------------------|---|
| BenefitsOfITS |             | safety.htm       | Benefits Category Page for Traveler Safety                              | Last Paragraph   | Upon the completion of "Length detection system at McKenzie Pass"   | N/A              | ODOT ITS Unit   |
|               |             | security.htm     | Benefits Category Page for Transportation Security                      | Text box linked to the camera page next to penultimate paragraph | When the camera view page is moved from <a href="http://www.tripcheck.com/RoadCams/roadcams.htm">http://www.tripcheck.com/RoadCams/roadcams.htm</a> | N/A              | ODOT ITS Unit   |
|               |             | trafficMgmt.htm  | Benefits Category Page for Traffic and Incident Management              | 1 <sup>st</sup> paragraph  | Upon availability of new data on economic cost of congestion  | Every Year       | <a href="http://mobility.tamu.edu/ums/">http://mobility.tamu.edu/ums/</a> |
|               |             |                  |   | Text box linked to the camera page on 4 <sup>th</sup> paragraph  | When the camera view page is moved from <a href="http://www.tripcheck.com/RoadCams/roadcams.htm">http://www.tripcheck.com/RoadCams/roadcams.htm</a> | N/A              | ODOT ITS Unit   |
|               |             | travelerInfo.htm | Benefits Category Page for Traveler Information (Pre-Trip and On-Route) | 2 <sup>nd</sup> paragraph  | When the camera view page is moved from <a href="http://www.tripcheck.com/RoadCams/roadcams.htm">http://www.tripcheck.com/RoadCams/roadcams.htm</a> | N/A              | ODOT ITS Unit   |
|               |             |                  |   | 2 <sup>nd</sup> paragraph  | Upon availability of new data on the usage of TripCheck   | Every Year       | ODOT ITS Unit   |
|               |             |                  |   | 6 <sup>th</sup> paragraph  | Upon implementation of 511  | N/A              | ODOT ITS Unit   |

Table 3-2: Web Site Maintenance Requirements (cont.)

| Folder        | Sub Folders | Files                | Description  | Part (s) to be updated | First Update                   | Update Frequency | Possible Information Resource |
|---------------|-------------|----------------------|--|------------------------|--------------------------------|------------------|-------------------------------|
| BenefitsOfITS | Images      |                      | All image files (*.jpg, *.gif) that are linked to either the main category pages or pop up pages are stored in this folder | N/A                    | N/A                            | N/A              | ODOT ITS Unit                 |
|               | Popups      | popup_511.htm        | pop up for 511 project   | N/A                    | Upon completion of the project | N/A              | ODOT ITS Unit                 |
|               |             | popup_acws.htm       | pop up for Advanced Curve Warning project  | N/A                    | Upon completion of the project | N/A              | ODOT ITS Unit                 |
|               |             | popup_awws.htm       | pop up for Automated Wind Warning Systems project  | N/A                    | Upon completion of the project | N/A              | ODOT ITS Unit                 |
|               |             | popup_bbcm.htm       | popup for Interstate 5/Barbur Blvd Corridor Management Project   | N/A                    | N/A                            | N/A              | ODOT ITS Unit                 |
|               |             | popup_coats.htm      | popup for COATS project  | N/A                    | N/A                            | N/A              | ODOT ITS Unit                 |
|               |             | popup_comet.htm      | popup for COMET Project  | N/A                    | N/A                            | N/A              | ODOT ITS Unit                 |
|               |             | popup_disclaimer.htm | Disclaimer popup   | WTI Logo               | Upon any changes in WTI logo   | N/A              | WTI                           |
|               |             | popup_dsws.htm       | popup for Downhill Speed Warning System  | N/A                    | Upon completion of the project | N/A              | ODOT ITS Unit                 |
|               |             | popup_dwlp.htm       | popup for Dundee queue detection system project  | N/A                    | N/A                            | N/A              | ODOT ITS Unit                 |

Table 3-2: Web Site Maintenance Requirements (cont.)

| Folder        | Sub Folders | Files           | Description   | Part (s) to be updated | First Update   | Update Frequency | Possible Information Resource        |
|---------------|-------------|-----------------|---|------------------------|--|------------------|--------------------------------------|
| BenefitsOfITS | Popups      | popup_ftte.htm  | popup for Frontier Travel Time Estimation project   | Not linked yet         | May be linked on traveler information category page upon completion of the project |                  |                                      |
|               |             | popup_fwds.htm  | popup for Flood Warning Detection Systems           | N/A                    | Upon completion of Evaluation  | N/A              | ODOT ITS Unit                        |
|               |             | popup_htcrs.htm | popup for HTCERS project                            | N/A                    | N/A  | N/A              | ODOT ITS Unit                        |
|               |             | popup_IR.htm    | popup for Region 2 Incident Response project        | N/A                    | N/A  | N/A              | ODOT ITS Unit and PSU                |
|               |             | popup_lds.htm   | popup for Length Detection System project           | N/A                    | Upon completion of the project   | N/A              | ODOT ITS Unit                        |
|               |             | popup_nems.htm  | popup for NEMS project                              | N/A                    | Upon completion of the project   | N/A              | ODOT ITS Unit                        |
|               |             | popup_ogl.htm   | popup for Operation Green Light project             | N/A                    | N/A  | N/A              | ODOT Motor Carrier Services          |
|               |             | popup_ovws.htm  | popup for Overheight Vehicle Warning System project | N/A                    | N/A  | N/A              | ODOT and ODOT Motor Carrier Services |
|               |             | popup_rcmhs.htm | popup for Remote Control Mobile Home Signs project  | N/A                    | Upon inclusion of new sites in this project  | N/A              | ODOT ITS Unit                        |
|               |             | popup_rtp.htm   | popup for Regional Trip Planner project             | N/A                    | Upon completion of the project   | N/A              | ODOT ITS Unit and Tri-Met            |

Table 3-2: Web Site Maintenance Requirements (cont.)

| Folder        | Sub Folders | Files               | Description   | Part (s) to be updated | First Update  | Update Frequency | Possible Information Resource |
|---------------|-------------|---------------------|---|------------------------|---|------------------|-------------------------------|
| BenefitsOfITS | Popups      | popup_rwis.htm      | popup for RWIS project                                    | N/A                    | Upon inclusion of new sites in this project                 | N/A              | ODOT ITS Unit                 |
|               |             | popup_szs.htm       | popup for Snow Zone Signs project                         | N/A                    | Upon inclusion of new sites in this project                 | N/A              | ODOT ITS Unit                 |
|               |             | popup_tic.htm       | popup for Travel Information Council Partnership project  | N/A                    | Upon inclusion of new sites in this project                 | N/A              | ODOT ITS Unit                 |
|               |             | popup_toc.htm       | popup for Transportation Operations Center project        | N/A                    | Upon inclusion of new sites in this project                 | N/A              | ODOT ITS Unit                 |
|               |             | popup_tocs.htm      | popup for Transportation Operations Center System project | N/A                    | Upon completion of the project                              | N/A              | ODOT ITS Unit and Tri-Met     |
|               |             | popup_tripCheck.htm | popup for TripCheck project                               | N/A                    | N/A   | Every Year       | ODOT ITS Unit                 |
|               |             | popup_tsp.htm       | popup for Transit Signal Priority project                 | N/A                    | Upon inclusion of new sites in this project                 | N/A              | ODOT ITS Unit and Tri-Met     |
|               |             | popup_tt.htm        | popup for Transit Tracker project                         | N/A                    | N/A   | N/A              | ODOT ITS Unit and Tri-MET     |
|               |             | popup_va.htm        | popup for Video Architecture project                      | N/A                    | Upon inclusion of new sites in this project                 | N/A              | ODOT ITS Unit                 |
|               |             | popStyle.css        | popup style sheet   | N/A                    | When ever the style of the popup windows need to be changed | N/A              | ODOT ITS Unit                 |



**Table 3-2: Web Site Maintenance Requirements (cont.)**

| <b>Folder</b>    | <b>Sub Folders</b> | <b>Files</b>  | <b>Description</b>                                      | <b>Part (s) to be updated</b> | <b>First Update</b> | <b>Update Frequency</b> | <b>Possible Information Resource</b> |
|------------------|--------------------|---|---|-------------------------------|---------------------|-------------------------|--------------------------------------|
| <b>Images</b>    |                    | Temporary Files-<br>Already exist on<br>ODOT ITS Server | These are images<br>on ODOT server                      | N/A                           | N/A                 | N/A                     | ODOT ITS Unit                        |
| <b>Templates</b> |                    | its.dwt   | New template for<br>all the pages<br>except for pop ups | N/A                           | N/A                 | N/A                     | ODOT ITS Unit                        |