3.1.2   ODOT FACS-STIP Asset Web Mapping and Reporting Tools

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Working in cooperation with Critigen the Oregon Department of Transportation (ODOT) has created a suite of web-based GIS tools to view, integrate and distribute roadway asset information to agency employees across the state. Access to asset data is a crucial requirement in the process of scoping potential construction projects and performing many other tasks that ODOT employees complete on a daily basis. The users of the application will range from project managers and planners to maintenance field crews and engineers. They all need the most up-to-date information regarding the highway network and its associated assets to perform their duties. The application created provides a single point of access allowing users statewide to interact with and reference this data.

ODOT roadway assets range from signs and guardrails to culverts and sidewalks, as well as the State Highway network itself. To enhance the distribution of this critical information ODOT chose to leverage its existing GIS investment by creating new web-based tools which allow users to interact with and explore the available asset data utilizing an easy to navigation map interface. This tool consists of interactive maps that deliver a high level of control over map navigation and data display. The map itself has gone beyond the traditional display-only mode to allow users to interact with it as a bulletin board, sharing information with one another. The tools also provide comprehensive asset reporting, allowing users to generate reports for asset groups based on a location of interest, eliminating the need to sift through irrelevant information.

The creation of these tools is allowing ODOT to do "more-with-less" by:

* Investing in the future. By spending the money now on advanced tools for sharing asset information to its users, ODOT is spending less down the road by streamlining work processes and eliminating redundancy.

* Creating modular software. The new software tools may be easily customized by ODOT developers, and the current application may be leveraged in whole or in part by other tools in the future.

* Employing strong community-supported JavaScript frameworks such as Dojo and JQuery in conjunction with ESRI's JavaScript API for ArcGIS Server.