

### 7.3.1

#### **Improved Environmental Review for Project Scoping with Washington State Department of Transportation's Environmental GIS Workbench**

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A geographic information system (GIS) workbench is a customized application providing users with appropriate spatial data and tools that are useful for a variety of their business activities. A GIS workbench can be a key element of an Environmental Information Management and Decision Support System as envisioned by the Transportation Research Board (NCHRP Report 481). Washington State Department of Transportation developed our first GIS workbench specifically for conducting the environmental reviews required for project scoping and program definition, as part of environmental streamlining. Within a year of deploying the Environmental GIS Workbench, over 130 users were trained to access about 100 centrally managed data themes that covered topics from Air Quality and Endangered Species, to Tribal Lands and Water Quality. After 4 years of operational use the original Environmental GIS Workbench has a user base of about 300 users, and provides access to over 250 spatial data themes including imagery and DEMS. Environmental data and users are supported by the Environmental Information Program to ensure that data updates are acquired, that new staff are trained in the use of that data, the data licensing and use agreements are maintained and complied with, and that new business needs are addressed. The workbench and the central coordination of these data free the environmental staff to manage their time better while doing environmental reviews. By popular demand from within the agency, the next version of the tool (being developed by the Cartography and GIS Section) will be an integrated GIS Workbench open to customized data and tools from all DOT business areas, providing a coordinated GIS resource for the agency.