

Session

2.4.3 Web-Based LRS Editing and Dynamic Segmentation Using ArcGIS Server at Rhode Island DOT

Presenter

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Rhode Island Department of Transportation's Project Management Portal (PMP) allows project managers, consultants, contractors, and other interested parties to review and update the status of the design, construction and maintenance of projects statewide. The PMP enhances project planning and communication throughout RIDOT. Together with RIDOT and Plexus Corporation, Geonetics developed an ArcGIS Server-based mapping extension to the PMP that allows project staff to interactively enter project location via a web mapping interface that supports linear referencing and dynamic segmentation. Projects may be entered as points, lines, or areas and may be referenced to RIDOT's linear referencing system (LRS). Once entered, project location information is available for mapping, reporting, and analysis. The mapping extension allows PMP users to address important questions such as, "What are the wetlands and historical areas in the vicinity of the design", "What up coming projects may conflict with my planned project along this stretch of roadway?" and "How will the project impact or be impacted by traffic patterns along the affected section of roadway?" Questions of this type may be readily answered using GIS/LRS analysis, and are notoriously difficult otherwise.