

### 4.3.3

### A GIS Portal for a Multi-State Appalachian Development Highway System

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The Appalachian Regional Commission (ARC) and the Rahall Appalachian Transportation Institute (RTI) have an ongoing project to develop, maintain and update a regional GIS system for the Appalachian Development Highway System (ADHS). After successfully developed a web-based GIS for a major undertaking of the ADHS Cost to Complete Estimate in 2007 used by ARC, Federal Highway Administration (FHWA) and state Departments of Transportation (DOTs) of 13 Appalachian States, with emerging Web 2.0 trends and the release of ESRI ArcGIS Server 9.3, there is a need to update the ADHS Cost to Complete Estimate web-based GIS to the new standards and new functions such as using existing base maps and images well developed and managed by ESRI, Google or Bing.

This success also encouraged the ARC and RTI to look for new ways of leveraging the web-based ADHS GIS towards including economic development aspect in Appalachia. This lead to the vision of extending the ADHS Cost to Complete platform into a new GIS system that would integrate transportation and economic development data into a single web-based GIS - the Appalachian Regional Transportation and Economic Management Information System (ARTEMIS).

To date, RTI has successfully implemented the first phase of implementing these upgrades, creating an updated web-based GIS for the ADHS Cost to Complete and a prototype for the ARTEMIS platform.