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Multimodal Network Analysis for Coal Freight in Kentucky

Presenter

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The Kentucky Transportation Center builds a prototype and tests an integrated freight network model using a portion of the Ohio River Basin, including Kentucky, West Virginia and other cooperating states to build and populate a larger-scale GIS-based network of highway, rail, and waterway routes and their points of articulation (including inland ports) with each other. Using data from the US Army Corps of Engineers, Surface Transportation Board, Energy Information Administration, and Oak Ridge National Laboratory, the team creates an O/D matrix of current coal shipments to and from Kentucky and assigns them to multimodal routes on the network. With this network, the project team can test and calculate outcomes related to changes in transportation rates, system performance, infrastructure investment, and environmental policy.

Bio(s):

John Ripy is a Senior Transportation Investigator at the Kentucky Transportation Center. With a B.S. in Computer Science, much of his research is related to expert system applications in GIS as a member of the Decision Support Team at UK.