Project Summary: In a study sponsored by the U.S. Department of Transportation, Research and Innovative Technology Administration (RITA), new and innovative approaches to streamlining environmental and planning processes (SEPP) for transportation corridors will be demonstrated by the application of commercial remote sensing data and spatial information technologies. Partner research institutions led by Mississippi State University including Oak Ridge National Laboratory and Michigan Tech Research Institute shall collaborate with partner DOT agencies to compare and quantify benefits of new and innovative approaches versus traditional methods for completing tasks in the EIS process. A completed EIS for a planned segment of I-69 that traverses Memphis, TN, and Northwest Mississippi serves as the research test bed to quantify benefits delivered by the technology deployment project. In addition, the project also addresses Hurricane Katrina lessons learned to derive nationally significant motivations toward enhanced geospatial preparedness for application to transportation planning practices.

Project Process: A consortium of research and agency partners will conduct research guided by an FHWA and RITA organized Advisory Panel that comprises local and national representatives spanning the combined competencies of transportation project development processes. Key components of the research project include tasks and activities typical of a transportation corridor planning and environmental assessment process, but each activity will consider how remote sensing and spatial information (RSSI) technologies may add efficiencies, reduce costs, and/or improve the quality and outcomes of the task or activity. Advisory panel input will ensure targeted development of key project aspects to ensure that focus is placed on activities that will deliver the best payoffs and will ensure that the project is highly connected to relevant communities of practice and ensure that communities of practice receive feedback in an ideal manner about project progress and outcomes.

PROJECT TASKS/ACTIVITIES

- Project Scoping
- Public participation plan and process
- Develop resource agency involvement plan
- Analyze current and future projected multi-modal demand and performance
- Map the characteristics and conditions of the existing transportation systems

- Document existing and projected environmental and land use conditions
- Establish purpose and prioritize needs to meet goals
- Generate alternatives that meet goals
- Identify feasible alternatives by evaluating all alternatives
- Compare alternatives to generate preferred alternatives
- Compile results into a corridor plan document