

INTERGRATING NEW AND INNOVATIVE APPROACHES OF STREAMLINING  
EIS TO POLICY IMPLEMENTATION THEORIES

Joseph (Jody) Holland and Dr. Bethany Stich

This paper presents an investigation of new and innovative approaches to streamlining the environmental review process. The process, mandated by The National Environmental Policy Act (NEPA), has developed into a time consuming and costly process. The purpose of this study is to investigate innovative technologies that will streamline the discovery of economic impacts of proposed transportation projects. The researchers utilized a planned segment of I-69/296 corridor that traverses Memphis, Tennessee and Northwest Mississippi as a test bed for the study.

After presenting a background analysis of NEPA and a problem statement regarding Environmental Impact Statement (EIS) streamlining, the authors illustrate how existing regional economic modeling data collected by Mississippi DOT can be retooled in an approach that will benefit planners and engineers as well as a diverse public. By using Regional Economic Modeling, Inc. (REMI) in conjunction with Geographic Information Software (GIS) as well as Remote Sensing applications, the research creates new technology solutions that are designed and implemented based upon detailed analysis of application input and output data. The methodology delivers a rigorous and robust set of capabilities to deploy enhanced simulation and visualization of context scenarios.

Finally, the authors draw from policy implementation theories to determine the factors that can affect the success or failure of implementing new and innovative approaches to streamlining an EIS, especially utilizing a new visualization modeling tool. The findings suggest that a mix implementation approach can benefit implementing agencies. Moreover, the inclusion of stakeholders and developing a concise model for implementation can be beneficial for a successful implementation process.