

Rahall Transportation Institute Research Project Description Form

Project Number: RTI TRP 00-07

Project Title: Opportunities to Improve Transportation Efficiencies Through Enhanced Intermodal Capabilities and Increased Utilization of the Appalachian Development Highway System.

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Project Objective: This is designed to be a multi-phased intermodal freight transport study that will identify strategic opportunities for enhancing the efficiency of intermodal transportation within the Appalachia Region.

Abstract: The Rahall Transportation Institute (RTI), and in conjunction with Wilbur Smith Associates (WSA) and the Appalachian Regional Commission, will complete a multi-phased intermodal freight transport study designed to identify strategic opportunities for enhancing the efficiency of intermodal transportation within Appalachia. A central element in the search for intermodal transport opportunities involves accurately documenting current freight flows within Appalachia. These flows will include movements to from, within, and through the region. The analysis will focus on three surface modes both individually and in combination. These include motor carriage, rail transport, and commercial navigation. Moreover, to the extent that air cargo transport is combined with other modes, airborne transportation will also be included within the analysis. The proposed project will consist of six distinct tasks.

Task Descriptions:

- The identification of mode-specific and intermodal commodity flows to, from, within, and through Appalachia;

- An assessment of the capacity of the modal and intermodal networks that support the freight flows described above;
- A thorough assessment of the domestic and international commercial and institutional factors likely to impact the provision of transportation services in Appalachia. These include, but are not limited to evolving environmental constraints, changes in trade policies, electronic commerce, the modification transport regulations, and post-9/11 security issues;
- A synthesis of existing survey data describing shipper practices, challenges, and expectations;
- A forward-looking forecast of the demand for freight transportation within Appalachia based on current flows, existing and future capacities, and foreseeable changes in the institutional and commercial environment; and
- An analysis of freight flows, network capacities, and foreseeable changes designed to identify specific opportunities for enhancing the efficiency of transportation services in Appalachia. While necessarily comprehensive, this final project component will target strategic opportunities that directly involve Appalachian Development Highway System (ADHS) roadway segments as links in the broader intermodal transport network.

Milestones, Dates, Schedule: Table 1. provides a graphical depiction of the study process, including milestones. Table 1 indicates a 10-month time frame. However, the study team anticipates some schedule slippage, so that the anticipated study length is 12 months. Start Date: March 30, 2003 End Date April 1, 2004.

**Table 1
Project Schedule and Milestones**

<i>Task / Month</i>	1	2	3	4	5	6	7	8	9	10	11	12
A2.1 Commodity Flows	■	■	■									
A2.2 Capacity Assessment		■	■	■	■	■						
A2.3 Commercial / Institutional	■	■	■	■	■	■	■					
PHASE I REPORT												
A2.4 Survey Synthesis				■	■	■	■	■				
A2.5 Forecasting		■	■	■	■	■						
A2.6 Strategies Identification						■	■	■	■			
PHASE II REPORT								■	■	■		

Yearly and Total Budget: Total: \$205,929.36

Student Involvement: At least one undergraduate and one graduate student will be employed to assist the RTI full time research staff.

Relationship to Other Research Projects:

TRP 99-00	Commodity Flows and Transportation Inventory	Dr. Mark Burton
TRP 99-24	Improving Efficiency of Truck/Rail Intermodal Transportation: The Case of West Virginia	Dr. Mark Burton
TRP 99-13	Commodity Flows in Northern West Virginia	Dr. Mark Burton

Technology Transfer Activities: Final report will be disseminated through the web page in addition to distribution to the project advisory committee which has representatives from the entire Appalachian Region.

Potential Benefits of this Project: It is anticipated that the information developed through this project will assist federal, State and local decision makers in better identifying transportation needs in Appalachia and choosing those courses of action that will best meet these transportation needs.

TRB Keywords: Appalachian, Highway, Development, Flows, Freight, Intermodal, Transport.