

UPPER MISSISSIPPI RIVER/ILLINOIS WATERWAY NAVIGATION STUDY
ECONOMIC COORDINATING COMMITTEE
MINUTES OF MEETING
May 11, 1998 1:00PM – 5:00PM
May 12, 1998 8:00AM – 12:00 NOON
RADISON HOTEL
ST. PAUL, MINNESOTA

The Upper Mississippi/Illinois Waterway Navigation Study Economic Coordinating Committee met in St. Paul Minnesota on 11-12 May, 1998. A list of attendees and meeting agenda is attached. Paul Soyke called the meeting to order at 1:00PM. The meeting minutes from the 23 September 1998 meeting were approved without corrections. The agenda was provided to the attendees. Following introductions, the meeting proceeded according to the agenda.

Relative Modal Cost Shift Study

Mark Burton from TVA gave a presentation on the Relative Modal Cost Shift study that he has completed. Mark's methodology was to: assemble data describing dissimilar railroad route segments; statistically relate observed traffic volumes to route characteristics; and to identify least-cost method of adding the desired amount of new capacity. Mark's statistical model considered several variables as shown below:

Observed			Timetable Speed
Segment	=	f	Variation in Train Speeds
Capacity			Signal Type
			Number of Main Tracks
			Number of Sidings
			Siding Size
			Number of Daily Switch Moves
			Route Length
			Interaction Terms
			Carrier Variables

Mark concluded that:

- a. The addition of new transportation capacity in the upper Mississippi basin will be necessary in coming decades.
- b. The evolving incremental increases in transportation demand will place considerable levels of new traffic on the nation's interior rail system.
- c. In most cases, the line haul segments that, together, form the routes over which expanded traffic flows must be accommodated can be modified to do so without placing an undesirable upward pressure on competitively developed rail rates.
- d. At least in the case of the upper Mississippi basin, concerns regarding terminal congestion and the adverse effects this congestion may have on railroad pricing should be limited to operations in and around St. Louis.

- e. With the possible exception of movements to, from and through St. Louis, the traditional Corps assumption of ample alternative modal capacity is valid for use in the analysis of upper Mississippi River navigation.

Spatial Equilibrium Model

Don Sweeney gave a presentation on the concepts underlying the Spatial Equilibrium Model (SEM). He used an example of two shopping malls (attached short presentation) to illustrate the difference between the analysis done in the Reconnaissance study and the current feasibility analysis. Important model assumptions are given in the attached long presentation. The Reconnaissance Study assumed the next best alternative to water was rail to the same destination. The Feasibility Analysis uses the minimum cost alternative of the many alternate destinations/markets considered for grain. Price and Flow data from the State of Iowa have been used to define the shape of the demand curve for Iowa grain. Sensitivity analyses will be conducted on grain from other states and on other commodities to determine the impact. Work on full documentation of SEM is ongoing.

Major Rehabilitation Capacity vs. Condition

Jeff McGrath, St. Paul District Corps of Engineers, gave a presentation on major rehabilitation Capacity vs. Condition. Jeff outlined the process as follows:

1. Engineers identify significant components
2. Engineers evaluate the condition of components and project future degradation rates
3. Engineers define physical consequences of failure (repair costs, lock down time, rehab costs)
4. Economists evaluate life-cycle costs at each lock by condition (Monte Carlo simulation)

Types of components evaluated include:

Geotechnical

Lock wall (landside)
 Lock wall (intermediate)
 Guidewalls
 Dam piers
 Lock U-structure
 Non-overflow structure
 Overflow structure
 Earth dikes
 Overflow dike
 Non-overflow dike
 Storage yard dike
 Pool control dam
 Sheet pile cells
 Regulating weir
 Navigable dam
 Aux lock closure dam
 Low water dam
 Lock chamber (unwatered)

Structural

Miter gate
 Vertical
 Horizontal
 Anchorage
 Lift Gate
 Roller gate
 Tainter gate
 Tainter valves

Mechanical/Electrical

Control center
 Circuitbreaker
 Motor starter
 Control cables
 Miter gate mach
 Sector gear
 Castings
 Reducer
 Tainter valve
 Slide gate mach

Results of the analysis show no major rehabilitation needs until 35-40 years out in the future.

Status Reports

Jack Carr reported that work is on going on Emission and Fuel Use. We have received a draft report and ask for your comments. The Accidents and Spills product is due. Both studies should be near completion by the next Economic Coordinating Committee Meeting. We will have Marty Lipinski give a presentation on both of these studies at the next ECC meeting. Jack Carr also reported that we have a Regional Economic Development (RED) model. As of now there are 8 regions in the MRIO Model. Model outputs will be expressed in terms of industrial output, value added, employment, and income by industrial sector, and by region. Dennis Robinson from the Corps Institute for Water Resources will be at a future ECC meeting to discuss the RED analysis.

Paul Soyke reported that the Recreation-Commercial Conflict study is progressing well. Minimal conflict between commercial and recreational traffic has been identified to date. A full presentation on the results of this study will be made at the next ECC meeting.

Other Business

Paul Soyke said that the next ECC meeting will be August 18, 1998 in La Crosse Wisconsin.

AGENDA

ECONOMIC COORDINATING COMMITTEE MEETING

MAY 11, 1998 1:00PM - 5:00PM

MAY 12, 1998 8:00AM – 12:00 NOON

Raddison Hotel, St. Paul

11 East Kellogg Blvd.

St. Paul, Minnesota

Phone 612/292-1900

1. Introductions and Approval of Minutes of
23 September 1997 ECC Meeting. Paul Soyke, MVR
2. Presentation of Relative Modal Cost Shift Study. Mark Burton, TVA
3. Major Rehabilitation Capacity vs. Condition. Jeff McGrath, MVP
4. Status Reports: Regional Economic Development
Accidents and Spills
Emissions and Fuel Use Jack Carr, MVR
5. Status Report on Recreation/Commercial Conflicts. Paul Soyke, MVR
6. Presentation of Spatial Equilibrium Model. Don Sweeney, MVS

Upper Mississippi River/Illinois Waterway Navigation Study
Economic Coordinating Committee Meeting
May 11-12, 1998 Meeting

Jack Carr	MVR-PD-C	309-794-5396
Paul Bertels	USDA, AMS	202-690-1329
Mark Burton	TVA	423-632-3152
Jerry Fruin	Univ. of Minn.	612-625-8720
David Asbridge	CF Industries	847-438-9500
Stephen Fuller	Texas A&M Univ.	409-845-1941
John Green	National Corn Growers	314-275-9915
Mark Gmitro	COE, Rock Island	309-794-5279
Jesse McDonald	MVD-ET-PE	601-634-5847
Jeffrey McGrath	COE, St. Paul	612-290-5840
Gerry Brown	Cargo Carriers	612-742-6547
Brad Thompson	MVR-PD-W	309-794-5256
Dave Tipple	MVR-PD-W	309-794-5399
Dudley Hanson	MVR-PD	309-794-5260
Jim Hall	IA DOT	515-239-1685
Harold Hommes	IA Dept. of Ag.	515-242-6237
Ellen Fisher	WI DOT	608-267-9319
Chris Brescia	MARC 2000	314-436-7303
Paul Soyke	COE, Rock Island	309-794-5231
Dick Lambert	MN DOT	612-296-1609
Don Sweeney	COE, St. Louis	314-331-8473