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Workshop Summary Proceedings

November 19–20, 1975

TRANSPORTATION IN THE GREAT LAKES REGION

Problems, Issues, and Priorities

Standing Committee on Transportation
GREAT LAKES BASIN COMMISSION

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Summary Proceedings

TRANSPORTATION IN THE GREAT LAKES REGION

Problems, Issues, and Priorities

A WORKSHOP

COASTAL ZONE
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Sponsored by

Standing Committee on Transportation

GREAT LAKES BASIN COMMISSION

November 19-20, 1975

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The SUMMARY PROCEEDINGS of the workshop, TRANSPORTATION IN THE GREAT LAKES REGION: PROBLEMS, PRIORITIES, AND ISSUES, represent only a summary of statements and discussions of the participants. The PROCEEDINGS do not represent the findings or conclusion of the Great Lakes Basin Commission or its Standing Committee on Transportation. Individual workshop participants did not necessarily endorse all of the points discussed by their groups and reported in this booklet.

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ABSTRACT

WORKSHOP ORGANIZATION

The Great Lakes Basin Commission Standing Committee on Transportation held a workshop entitled TRANSPORTATION IN THE GREAT LAKES REGION: PROBLEMS, ISSUES, AND PRIORITIES in Romulus, Michigan, on November 19-20, 1975. The objective of the workshop was to stimulate a vigorous exchange of ideas on transportation in the Great Lakes Region.

The eighty transportation experts invited to attend the workshop represented all major modes of transportation and were drawn from various levels of government, industry, users, and universities in the Region. They were divided into diverse discussion groups of 8-10 people for four discussion sessions. The four topics were:

(1) Great Lakes Regional Transportation Systems: What the Region Has and What the Region Needs

(2) Great Lakes Regional Transportation Deficiencies and Problems

(3) Issues Evolving from the Great Lakes Regional Transportation Deficiencies and Problems

(4) Priorities for Addressing the Problems.

The second discussion session produced a list of 78 regional transportation problems. Although these problems often overlapped, they were divided for convenience into five categories:

(1) Institutional Arrangements and Regulations
(2) Policy and Finance
(3) Data and Research
(4) Environment and Energy
(5) System Condition, Capacity, and Operation

PRIORITIES FOR SOLVING REGIONAL TRANSPORTATION PROBLEMS

In the fourth discussion session, participants ranked the problems within each of these five categories according to their estimation of the problems' importance and urgency. This ranking does not reflect the position of the Great Lakes Basin Commission or its Standing Committee on Transportation, and the individual workshop participants did not specifically endorse all of the points reported or ranked. The process, however, did express key concerns of a majority of the individual participating experts.

Institutional Arrangements and Regulation

The workshop participants were particularly concerned with the lack of a credible regional transportation organization for cooperative transportation planning. The participants indicated concern that regulatory reform take into account transportation planning by encouraging intermodal activities when they are effective and efficient, and that the planning and regulatory sectors of transportation be combined. Other principal concerns were that transportation decisions are made in a fragmented manner and the lack of comprehensive, multimodal planning at the State level.

Policy and Finance

The workshop participants desired a better definition of the objectives of transportation. Related to a better definition of transportation objectives, the participants indicated that balanced transportation capital and subsidy policies were lacking; no regional transportation policy existed to transmit to the national level; a timely resolution of the extension of the Great Lakes–St. Lawrence Seaway winter navigation season should occur; and the States should examine their roles and policies for capital funding and subsidies for all transportation modes.

Data and Research

The participants indicated a particular concern for the difficulty in measuring existing system capacity in ways which allow comparison and analysis of economic benefit and rate structure for the various transportation modes. Also lacking are regional information on energy consumption related to alternative transportation policies, technologies, and design; comparable information on land and monetary resource allocations to transportation modes; standards by which to measure costs and benefits of alternative outcomes of the transportation system; and information on environmental and

social impacts of proposed shifts in transportation modes and policies.

Environment and Energy

The effect of environmental restraints on increasing transportation construction, operation, and maintenance costs was a foremost concern of participants. The participants also assigned high priorities to the emphasis of energy conservation in transportation; the explicit consideration of environmental and energy factors in investment decisions and policies among the different transportation modes; the problems of water quality and constraints on water transport capacity presented by dredge spoil disposal; and the impact of fuel availability on future modal choice.

System Condition, Capacity, and Operation

The workshop participants were particularly concerned that modal interchange did not exist to the degree necessary to facilitate movement of goods. The participants also gave high priority to the problems of the inadequate condition of rural feeder highways and bridges, especially in light of anticipated rail line abandonments; the existing transportation system not receiving maximum use; the railroad beds in the Region being in generally poor condition; and the lack of efficient regional transportation "hubs" for passenger and freight movements.

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PREFACE

The Great Lakes States initially brought to the attention of the Great Lakes Basin Commission the need to establish a Committee on Transportation. The States' original concern was the impact of transportation on the coastal zone. The States were also concerned about the problems of energy, rail abandonment, and freight and intercity passenger movement.

When establishing the Standing Committee on Transportation in May 1975, the Basin Commission stated that:

> *The Basin is located adjacent to but north of the major east-west transportation corridors . . . . The Lakes are both a significant facilitator and a major impediment to the movement of goods and people. These factors present unique transportation problems and opportunities for the Region.*
>
> *The tendency for previous transportation development plans and efforts to be concentrated on single modes and the apparent lack of coordination among concerned interests have encumbered regional transportation planning and precluded . . . the benefits of a comprehensive multimodal system. Many transportation facilities in the Region are in a deteriorated condition and the capacities of these facilities have been or soon will be exceeded by demand. The economic health of the Region is dependent on efficient and effective transportation systems. However, declining revenues and energy shortages will substantially influence future transportation planning and development. Frequent appraisals are needed of the impacts on transportation of actions taken on energy, water, coastal zone management, and land use planning matters.*

The Great Lakes Basin Commission and its staff have a history of participation in transportation planning for the Great Lakes Region. First, in response to the charge of Public Law 89-80, the Great Lakes Basin Commission managed the Great Lakes Basin Framework Study and participated in the preparation of its Appendixes C9 and R9, *Commercial Navigation* and *Recreational Boating.* These two book-length studies are a comprehensive compilation and organization of baseline information concerning commercial navigation and recreational boating in the Great Lakes Region. The Basin Commission is also concerned with Great Lakes levels and flows as they affect transportaion and the resources of the Basin, and has a Standing Committee on Coastal Zone Management which addresses interstate matters concerning the coastal zone of the Great Lakes. Additionally, the Great Lakes Basin Commission Chairman and Executive Director are members of the Winter Navigation Board and Winter Navigation Working Committee, respectively.

One of the legislated objectives of the Great Lakes Basin Commission is the preparation of a comprehensive and coordinated plan for the water and related land resources of Basin, which would include water transportation in the Basin. The preparation of this plan as a future Commission activity will be facilitated by the actions of the Standing Committee on Transportation. A plan of this nature will require consideration of the relationships of all transportation modes. A regional plan will be of substantial value to national transportation policy makers in formulating a national transportation policy.

Among the objectives of the Commission's Standing Committee on Transportation are:

(1) to foster comprehensive transportation planning in the Great Lakes by

(a) identifying and defining unique and common transportation problems for the Great Lakes Basin

(b) analyzing transportation trends and forecasting their impact on the Basin

(c) identifying potential alternatives for future transportation initiatives and regional development

(d) reviewing and commenting on the regional aspects of national, State, local, and private plans, studies, and programs

(2) to provide a forum to discuss issues, policies, and strategies concerning transportation and serve as a catlyst to stimulate and enhance coordination among States and Federal agencies

(3) to bring to the attention of the Great Lakes Basin Commission those transportation concerns on which it may desire to advise the governors and concerned Federal agencies.

The membership of the Standing Committe on Transportation and workshop officers are listed below. The workshop participants are listed in Appendix B.

The *Summary Proceedings* of the workshop were compiled by Charles A. Job, workshop secretary and staff liaison to the Standing Committee.

GREAT LAKES BASIN COMMISSION STANDING COMMITTEE ON TRANSPORTATION

Peter Wise, Illinois Department of Transportation

William J. Watt, Executive Assistant to the Governor of Indiana

G. Robert Adams, Michigan Department of State Highways and Transportation (Committee Vice Chairman)

William D. Marks, Michigan Department of Natural Resources

Archie Chelseth, Minnesota Department of Natural Resources

Henry L. Peyrebrune, New York State Department of Transportation

Ned E. Williams, Ohio Environmental Protection Agency

Louis E. Keefer, Pennsylvania Department of Transportation

Thomas J. Hart, Wisconsin Department of Transportation

Philip J. Winkel, Wisconsin Department of Transportation

Jerome Hinkle, U.S. Energy Research and Development Administration

John Putman, U.S. Department of Agriculture (Michigan)

Brigadier General Robert L. Moore, U.S. Department of the Army, North Central Division

Louis D'Alba, U.S. Army Corps of Engineers, North Central Division

George Lykowsky, U.S. Army Corps of Engineers, North Central Division

George Ryan, U.S. Department of Commerce, Maritime Administration

Vern Palmer, U.S. Department of Commerce, Maritime Administration

Rear Admiral J. S. Gracey, U.S. Department of Transportation, U.S. Coast Guard, Cleveland (Committee Chairman)

Philip Franklin, U.S. Department of Transportation, Office of the Secretary

John L. Craig, U.S. Department of Transportation, Office of the Secretary

David C. N. Robb, St. Lawrence Seaway Development Corporation

Colonel Leonard J. Goodsell, Great Lakes Commission

A. Scheffer Lang, Association of American Railroads

David Buchanan, Lake Carriers Association

Frederick O. Rouse, Great Lakes Basin Commission

Leonard T. Crook, Great Lakes Basin Commission (Secretariat)

Charles A. Job, Great Lakes Basin Commission (Secretariat)

WORKSHOP OFFICIALS

Workshop Chairman

Rear Adm. J. S. Gracey, Commander
U.S. Coast Guard (Ninth District)
Chairman, GLBC Standing Committee on Transportation

Workshop Vice Chairman

G. Robert Adams
Michigan Department of State Highways and Transportation

Guest Speaker

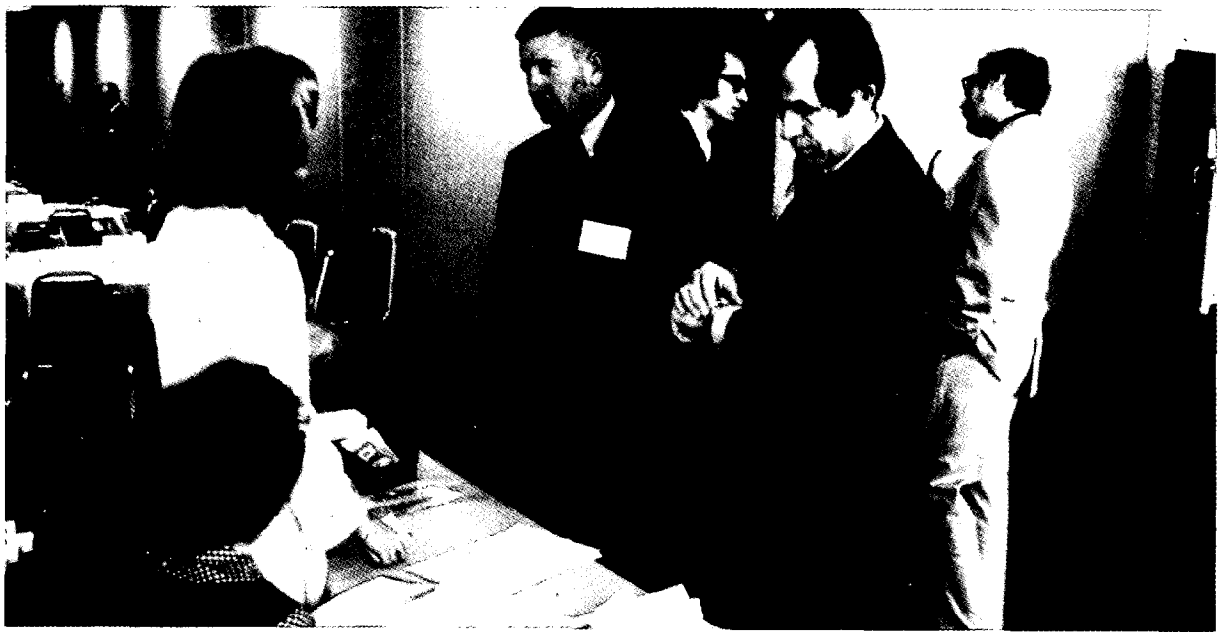
Governor Norman Erbe
U.S. Department of Transportation,
Region V

Host Agency Representative

Frederick O. Rouse, Chairman
Great Lakes Basin Commission

Workshop Secretary

Charles A. Job
Water Resources Planner
Great Lakes Basin Commission



GLBC staff members Lisa Olweean and Beth Click at the registration table greeting Commission Vice Chairman William D. Marks (left) and Commission Chairman Frederick O. Rouse. Shown in background are Leigh Boske (left), Wisconsin Department of Transportation, and Indiana Commissioner William J. Watt.

CHAPTER 1

Introduction

The Great Lakes Basin Commission Standing Committee on Transportation held a workshop entitled TRANSPORTATION IN THE GREAT LAKES REGION: PROBLEMS, ISSUES, AND PRIORITIES, on November 19-20, 1975, at the Hilton Inn in Romulus, Michigan. The Committee intended this workshop to provide an overview of the problems and issues facing all modes of transportation in the Great Lakes Region and the concerns of the various levels of government, industry, users, and the universities. The Standing Committee on Transportation will use the results of the workshop as background information in reviewing regional transportation planning and in making recommendations on transportation to the Great Lakes Basin Commission. The objective of the workshop was to stimulate a vigorous exchange of ideas regarding transportation in the Great Lakes Region. The workshop examined the strengths and weaknesses of the regional transportation system, problems resulting from its deficiencies, issues to be addressed in resolving these problems, and priorities for addressing the problems.

A NOTE ON TRANSPORTATION IN THE GREAT LAKES REGION

A considerable portion of the transportation facilities of the United States are located in the eight Great Lakes States. The concentration of transportation activity in the Great Lakes Region might be measured in several ways. The eight Great Lakes States accounted for 39.8 percent of the total U.S. wage and salary disbursements for transportation in 1970. This same eight-State area includes about 13 percent of the total U.S. land area and 31 percent of the population. Approximately 80% of this population is classified as urban.

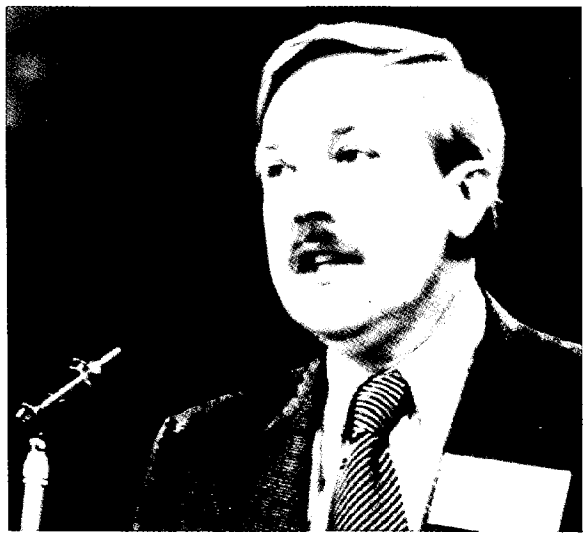
In the Great Lakes States, considerable mileage of transportation facilities exist. In this area, 907,039 miles of highways existed in 1974, which is 23.8 percent of the total highway mileage in the United States. The eight States had 57,407 miles of rail lines in 1973, 28.5 percent of the nation's total rail mileage. Included in this area is the busiest airport in the country, Chicago's O'Hare International Airport. The area is also criss-

crossed by major oil and gas pipelines.

The 95,000 square miles of water surface of the Great Lakes and the locks and channels provide access to 61 Federally maintained harbors and 15 private harbors. In 1974, the total volume of Great Lakes waterborne traffic was 206,844,851 short tons. In comparison to the ton-mileage of freight carried on the other four inland waterways of the United States, the Great Lakes System ranked second with 125,914,126,000 ton-miles in 1974.

A recent major transportation problem in the Great Lakes Region has been that of the financial failure of the railroads in the Region. These railroads are now being reorganized under the Regional Rail Reorganization Act of 1973. The Final System Plan for this reorganization has been approved by Congress and the Consolidated Rail Corporation (ConRail), a U.S. government corporation, will operate the rail lines in this system. Considerable rail mileage is earmarked for abandonment in the Region.

A major ongoing water transportation program in the Great Lakes Region has been the Winter Navigation Season Extension Program, the directing board of which is chaired by the U.S. Army Corps of Engineers, North Central Divison. This program is part of an ongoing investigation to demonstrate the practicability of certain measures for extending the commercial navigation season in the Great Lakes–St. Lawrence Seaway. Ten government agencies are involved in developing and coordinating the program.



(Clockwise from upper left) Commission Vice Chairman William D. Marks; David E. Clark, Wayne County (Michigan) Port Commission; William Buhrmann, U.S. Steel Corporation; and workshop participants in discussion.

CHAPTER 2

Organization of the Workshop

The workshop was designed to encourage the direct participation of all who attended. No papers or formal presentations were given, except for the remarks of the guest dinner speaker, former Iowa Governor Norman Erbe, Region V Representative of the Secretary of the U.S. Department of Transportation. The workshop was divided into four discussion sessions. The topics for these sessions were:

(1) Great Lakes Regional Transportation Systems: What the Region Has and What the Region Needs, morning, November 19

(2) Great Lakes Regional Transportation Deficiencies and Problems, afternoon, November 19

(3) Issues Evolving from Great Lakes Regional Transportation Problems and Deficiencies, early morning, November 20

(4) Priorities for Addressing the Transportation Problems, late morning, November 20.

The topics of the workshop discussion sessions were organized to follow a reasonable sequence. The participants were to:

(1) generally survey the transportation facilities of the Great Lakes Region and identify general areas which need attention in the transportation system

(2) specify the deficiencies and problems of regional transportation

(3) identify issues which have evolved or might evolve in addressing these problems

(4) assign priorities to the problems specified, considering both their importance and their immediacy.

During each workshop session, participants were asked to address a specific topic presented in a concise statement and question format. The statements and questions developed the topic for the particular session so that the workshop participants would all have some common ground on which their discussion could focus. Beyond this simple direction, the discussions were not guided. This structure was chosen to promote maximum participation by each member of the discussion groups. The free and open exchange of ideas which resulted was both the primary substance and the principle benefit of the workshop.

The Standing Committee on Transportation invited 80 experts in the field of transportation from all levels of government, industry, users and the universities in the region to attend the workshop. The workshop participants were divided into discussion groups of 8 to 10 people each during each session. This was thought to be the maximum number of people who could interact with full participation by each group member. Each small discussion group had representatives from the various transportation modes and various levels of government, industry, users and the universities in the Region. Limitations on the size of groups and the availability of participants made it impossible to represent every sector and transportation mode on each group, but efforts were made to include as complete a representation of people as possible. The discussion group participants and their affiliations are listed in Appendixes B and C. By attempting to achieve the widest possible cross-section on each discussion group, workshop organizers hoped to reflect adequately the concerns of various modes of transportation, levels and branches of government, and sectors of public and private interest involved in regional transportation. It was further hoped that such a cross-section would provide perspectives on the interfacing of transportation modes.

DISCUSSION GROUP LEADERS AND RECORDERS

Each discussion group had a discussion group leader and a recorder, who served in these capacities for all four sessions of the workshop. The role of the discussion group leader was central to the operation of the workshop but did not require advance preparation. The responsibility of the discussion group leader was to serve as a catalyst for the discussion of his group rather than to direct the discussion. At the end of each session the discussion group leaders reported on the major points of

their respective groups' discussions to the entire workshop. They were assisted in compiling the major points of discussion by the discussion group recorders. The responsibility of the discussion group recorder was to take notes concerning the major points of discussion in addition to participating in the discussion itself. The notes developed by the recorders served two functions: (1) the notes were submitted to the leaders at the end of each session for use in making a presentation on the major points of the discussion of the group, and (2) the notes were duplicated at the end of each day by the workshop secretary to be used as supplemental material for the workshop's proceedings.

PARTICIPANT PREPARATION

The workshop participants were advised by the workshop secretary that no advance preparation was required for the workshop. It was the belief of the workshop organizers that the participants should only bring with them their knowledge and experience in the various transportation modes to the discussion sessions and be prepared to discuss the relation of those modes to other modes of transportation. The participants received an agenda which indicated the topics of discussion of the four sessions of the workshop. A few days before the workshop, a background paper entitled *Transportation in The Great Lakes Region* was distributed. This paper primarily provided an overview of the existing transportation characteristics of the region and the nation. The participants were not asked to read the background paper in preparation for the workshop, but many did so. Since the participants invited were experts who had worked in the field of transportation for many years, the workshop organizers believed that this experience and expertise was sufficient background for the workshop.

A NOTE ON THE WORKSHOP "PROCEEDINGS"

These SUMMARY PROCEEDINGS represent a synoptic record of the discussions of the workshop participants. The SUMMARY PROCEEDINGS do not represent the findings or conclusions of the Great Lakes Basin Commission or its Standing Committee on Transportation, nor do they necessarily reflect the endorsement of all individual participants. The results of the workshop will be used by the Standing Committee on Transportation as background information only, to provide a regional perspective on transportation problems and issues in the Great Lakes area. The Standing Committee will consider the results of the workshop in organizing future activities and workshops, in reviewing regional transportation planning, and in making recommendations on transportation to the Great Lakes Basin Commission.

Dr. D. E. Cleveland, Department of Civil Engineering, University of Michigan

Louis N. Million, Federal Aviation Administration, U.S. Department of Transportation.

CHAPTER 3

Great Lakes Regional Transportation Systems: What the Region Has and Needs

The workshop discussion groups were asked to respond to the following statement and question during the first session:

> *The Great Lakes Region, and the area peripheral to it, is a major trasnportation center of the United States. This situation is due to the existence of major transportation facilities–the Great Lakes-St. Lawrence Seaway, the Interstate Highway System, the extensive rail trackage, the extensive airport system, the concentration of pipeline systems–serving the agricultural and industrial development, resource base, and population and employment concentrations in the Region.*
>
> *Considering the present transportation system in the Great Lakes Region, what are the needs of the system that have not been met or satisfied?*

The recorded comments of the discussion group leaders are summarized in paragraph form below. Many of the groups discussed similar subjects which were in turn reported by the discussion group leaders during the group reports. These subjects, although mentioned at different times, have been drawn together here to avoid duplication. Subjects have been grouped under five categories: (1) Institutional Arrangements and Regulation; (2) Policy and Finance; (3) Data and Research; (4) Environment and Energy; and (5) System Condition, Capacity, and Operation. The categories were established after the third session of the workshop for reference purposes and are used below to provide a more coherent report of the workshop. The categories are not absolute and do overlap.

INSTITUTIONAL ARRANGEMENTS AND REGULATION

Institutional Arrangements

In the area of institutional arrangements, there is a need to coordinate and facilitate the solution of problems between various modes of transportation and to work out the regulatory controls that encourage the interfacing of these systems. There is also a need for a more precise and more practical regional and multiregional transportation policy and plan to prioritize the allocation of public and private resources to sustain certain parts of the system, build new pieces of the system, and eliminate other pieces of the system in concert with environmental and social values and with the greatest possible cost-effectiveness.

Appropriate institutional frameworks are still needed to deal with many of our transportation problems. Of particular significance are intermodal operations and intermodal freight consolidation. When plans are developed for a single mode, other modes should explicitly be taken into account. This fragmentation of the transportation system is a problem that needs to be resolved in future transportation planning. Furthermore, there is a need for expanded state/interstate coordination of transportation plans within and between modes.

Regulation

The regulatory agencies need to reexamine their regulatory activities in light of the need to promote intermodal operations. With regard to weight controls, there is a need to examine the role of weight controls in rate structures for all modes of transportation. Established rate structures need to follow more closely the total cost of movement. Present rates do not reflect uniform consideration of other modes of transportation or the advantages of one mode for the movement of certain commodities. Carriers need to cooperate in intermodal operation. The carriers only use the intermodal operations when they are required to use them by shippers. Carriers do not cooperate in intermodal ventures and end up competing primarily within their own mode. Furthermore, a careful examination is needed for the policies reflected in rate structures and

other regulations and their effects on urban areas and intercity transportation of freight. It was noted that there is no competition between truck and water modes on the Canadian-Niagara Peninsula, an instance where there could be competition if a rate structure were established. The Canadian government is going to do something about this situation, but the United States is not. This is just one of many cases in which international coordination on regulations needs to occur. There is also a need to examine rail rates as they affect the Great Lakes Region as an export area. Most of these rates were set up before the Seaway existed and should now be reviewed.

POLICY AND FINANCE

Regional Transportation Policy

A regional transportation policy should be developed and incorporated into a national transportation policy because a national transportation policy would not be specific enough for the Region.*

National Transportation Policy

A national transportation policy is needed.* A national transportation policy should include: coordination of State and regional transportation agencies; guidance to decision making for coordination of all individual modes as well as intermodal decision making; trade-offs between modes; trade-offs between personal transit, mass transit, and goods movement; research; and evaluation. Furthermore, a system is needed to identify transportation priorities. Also, national land-use policy and growth policy must precede or parallel transportation policy.

There is a need to question the existing transportation policy continually or periodically and to be more flexible in the development of transportation policies for the future.

Planning for the various modes of transportation needs to be centralized in order that planning can be more consistent and promote efficiency within and between modes.

Finance

There is a need to consider the Great Lakes area as a region in transportation and to develop local and state policies as parts of Great Lakes regional transportation investment policy. A good regional policy base would provide long-term political support to port and terminal development so that the private investor is willing to make capital investments in port development.

George Gera, Ontario Ministry of Transportation and Communication.

The investment made in port facilities in the Great Lakes Region needs to be examined to determine whether the ports will be able to accommodate increased capacity and whether additonal investment can be generated locally for these facilities. If there are not sufficient local funds, then there is a need to examine regional port development in the Great Lakes. One prerequisite to the private and public investment necessary to develop regional ports in the Great Lakes Region is to produce a situation of relative political and seasonal stability in the regional transportation system. Government policy is needed to encourage investments by intermodal companies.

The financial situation in both the air and rail modes is precarious. The situation needs extensive examination, particularly because regulations have affected these modes and their industries.

Generally, the emphasis in the 1950s and 1960s was on passenger movement. In the 1970s and beyond, passenger movement problems will continue to need attention while increased emphasis will have to be given to freight movement.

Public Participation

It is necessary to address the issue of a public, often uninformed about complex transportation problems, who will in the end influence public policy. The question is "What is the role of the public in policy development in the creation of transportation systems?" It appears that the greater degree of public participation in policy development requires that transportation experts have a greater knowledge of the transportation system and transportation planning so that they can translate it to the people. This, in turn, however creates

*"A Statement of National Transportation Policy" was issued by William T. Coleman, Jr., Secretary of Transportation, on September 17, 1975, Washington, D.C. See also Appendix A, containing remarks on national transportation policy by Norman A. Erbe, DOT Regional Representative.

William E. Morrissey, DOW Chemical Corporation.

the need for a greater amount of time for the public to understand the transportation system and transportation planning before it can be effective in transportation policy development. The time required for the public to understand the transportation system and transportation planning adequately may be so great that transportation planners may not be able to decide on actions that should be taken which are crucial to the sustenance of the system. The question of how to bring effectiveness to the public role in transportation systems planning presents a tremendous dilemma.

International

A cooperative effort between United States and Canada is needed in transportation in the Great Lakes Region, in particular water transportation on the Great Lakes.

DATA AND RESEARCH

Research should be directed toward the development of modal as well as intermodal facilities.

There is a need to examine extensively the relative shares of various commodities that each mode carries.

A thorough examination of public transportation in the Great Lakes Region needs to occur, particularly in light of the considerable intraurban movement as well as interurban movements of passengers. Research should address the situation that the public is not using the services provided.

Air movements should be examined in the Region. Air routes do not address market demands.

Energy data and the ramification of energy situations need to be available to transportation managers and operators in order for them to make immediate decisions.

ENVIRONMENT AND ENERGY

Environment

The nation needs to define what it considers a good life. The quality of life in our cities and communities is heavily affected by transportation systems. Substantial examination must be given to the community impact of the financial problems of various modes of transportation. Also, encouragement is needed for multiple use of land involved with transportation, such as land around airports and unused land in rights of ways.

Energy

The Great Lakes Region needs to receive oil, gas, and coal supplies that are most accessible to it.

The availability of energy is seen as a factor affecting the need for additional airports. Reallocation of the use of airports should be investigated.

SYSTEM CONDITION, CAPACITY, AND OPERATION

The discussion groups which addressed the question of whether the present system in the Great Lakes system was adequate could not come to a consensus. There were some problems in defining what was meant by the term "adequacy" as it applied to energy, economics, environment, or other aspects related to transportation. Adequacy varies with the viewpoint used in its determination. However, it was generally believed that the transportation system in the Great Lakes Region is "relatively adequate," especially with regard to the movement of freight.

Capacity

For the Great Lakes movement of bulk commodities, the facilities of the Region were determined to be adequate. With regard to general cargo, the depth of the Seaway may be a constraint because it limits the size of vessels that can enter the Great Lakes. Technological improvement in land and air modes, as it affects their capacity to move freight, may lead not to increased traffic on the Seaway but to the utilization of these other modes for faster movement of general cargo to the east coast.

With regard to grain movement, the rail and highway transportation system in the Great Lakes Region is not adequate. This is particularly the case for highways since the secondary roads have not been constructed to move bulk commodities. While grain production is increasing, a serious problem will exist in moving the grains to areas of grain consolidation and storage.

There is a need to examine unfilled return capacity

of all the various modes of transportation. Much traffic is one way due to supply or production and area of demand. Often transportation facilities and vehicles are nowhere near capacity on a return trip. This is particularly the case for small, local airlines. Lightweight, high-value commodities are very directional one-way freight.

With regard to pipelines, capacity is not as much a problem as supply. There is insufficient supply to fill pipelines at their intake stations. No real need is seen for increasing interstate pipeline capacity over the next five to ten years. However, there will be a need for new pipelines from new energy sources to areas of demand, whether the sources are from coal or from oil and gas.

There will be a need for new intrastate distribution pipelines due to a shift taking place from the industrial use of gas to largely residential and small commercial use.

There is a need for uniformity of axle loadings for truck transport across the nation.

Specific transportation corridors should be examined in the Region.

The Great Lakes Region has a well-developed air transportation system. Future needs at major airports will center not upon longer runways but upon additional runways to meet demand in a manner that is environmentally and socially acceptable. (This does not negate the problem faced by smaller communities with their airports; i.e., runways may be adequate for capacity but not adequate for the larger planes being put into service by some of the carriers.)

Various elements and components of the Region's transportation system, such as certain highways, railroads, pipelines, runways, waterways, ports, and terminals, are under-utilized while others are over-utilized (i.e., there is over-capacity in certain parts of the system, while there is insufficient capacity in other parts.) This situation varies within modes throughout the system. The need is for concentrating on key segments of the transportation system in future planning.

There is a need to examine the use of containers in shipment, particularly the problem of empty container return.

There needs to be more emphasis on railheads at ports.

There is a need to concentrate planning on the inter-urban transport systems to relieve congestion in and around the major cities of the Region.

The Winter Navigation Season Extension Program needs to be continued to improve shipping in the Great Lakes Region.

There is a need for expanded and increased intermodal connections for freight, particularly for water, rail, and truck movements. The carriers of the various modes of transportation could function better with improved intermodal operations.

Lock and channel size need to be increased in the Great Lakes Region. There also needs to be an improvement in interlake movement by water.

The intermodal area is one that needs considerable attention in the Great Lakes Region because of the extensive transportation network in the Region.

The inherent weaknesses and strengths of each mode should be evaluated and used in planning the development of a multimodal transportation system and its intermodal elements.

Condition and Operation

The existing transportation systems have a great need for maintenance at this time. In particular, the interstate and connecting highways and railroads need substantial maintenance. A key need in the rail area is the upgrading of the existing system. Railroad tracks need to be maintained and upgraded so that railroad facilities can support and complement the transportation system.

There is a need to regionalize port planning.

There is a need to concentrate on intermodal passenger transfer centers, particularly with respect to more than one mode in major metropolitan areas. People should be able to use V-STOL aircraft, bus, rail, and auto facilities in various planned locations within urban areas. There is a particular need for improvement of mass transit and airport facilities in the Region during certain peak periods. Highway service improvement in urban areas should be examined. The particular problems of O'Hare Airport in this respect exemplify the need for improved interfacing of land and air transportation systems. An examination of the key rail lines for opportunities to improve freight and passenger movement should be undertaken.

With regard to harbors there should be a regional shift towards fewer but better harbor facilities for water transportation as well as the interfacing of the transportation modes at these harbors.

One discussion leader commented:

> *There are two kinds of needs to be examined: Those needs which are emerging needs, expressed needs, crisis needs that must be dealt with immediately. These needs attract the attention of the public and they demand attention somewhat immediately in terms of technology or policy addressal such as energy or environmental needs. The demands that the addressal of these needs create take considerable amounts of time. The second set of needs are those that are perceived because someone has taken a longer view of things and has identified needs that aren't even emerging yet or that the public knows nothing about. For these needs there is no pressure to address them at the time they have been identified. Therefore, it is extremely important that transportation planners see needs on the more comprehensive basis than just needs that the public perceives in a crisis situation.*

CHAPTER 4

Great Lakes Regional Transportation Deficiencies and Problems

The discussion groups were asked to respond to the following statement and question during the second session:

> *The Great Lakes Region generates and is the destination for a substantial amount of passenger and freight traffic. Much traffic passes through the Region, and shipments are transferred from one mode of transportation to another mode. Transportation in the Region is also subject to internal and external constraints (capacity, regulations, market demand).*
>
> *In light of these and other considerations, what are the deficiencies that exist and the problems that confront the Great Lakes Regional transportation system?*

The workshop vice-chairman asked that each group compile a list of the transportation problems and deficiencies which were mentioned in their discussions. The lists of the individual groups (prepared by the discussion group recorders while listening to and participating in their respective groups' discussions) were submitted to the workshop secretary for compilation into a master list for use during the third and fourth sessions of the workshop. The list presented below is the compilation of problems from the master list and additional problems mentioned in the reports of the discussion group leaders to the entire workshop, which are included to provide a more complete summary of the workshop proceedings.

The problems were categorized after the third session by the workshop chairman for reference purposes. This categorization is used below and through the remainder of this report to provide a more readable summary.

The five categories are: (1) Institutional Arrangements and Regulation; (2) Policy and Finance; (3) Data and Research; (4) Environment and Energy; and (5) System Condition, Capacity, and Operation. For a more readable summary, the workshop secretary also classified the problems into subcategories within each major category. The numbering of the problems does not reflect any priority, but only references a problem that was recognized by the participants at the workshop. The transportation problems from the master list are in regular type. *The additional problems reported by the discussion group leaders are in italics.*

INSTITUTIONAL ARRANGEMENTS AND REGULATION

Institutional Arrangements

(1) There is a lack of comprehensive multimodal planning at the State level. Necessarily, more communication should occur between those involved in planning for the various modes of transportation.

(2) There is lack of a credible regional transportation organization to foster cooperative transportation planning and implementation.

(3) Government institutions and regulations have not kept pace with technologial innovations.

(a) Transportation decisions are made in a fragmented manner.

(b) The planning and regulatory sectors of transportation have been traditionally separated and should be combined.

(4) The role of the public in transportation policy formulation is ill-defined.

(5) *Coordination should occur between the States to encourage greater efficiency and the maintenance, sustenance, and completion of the secondary highways on which the Region must depend. The limited characteristics of the highways must be recognized.*

(6) Ports should become more State-oriented.

(7) *While maintaining harbors and channels for water transportation is a Federal responsibility, the local governments must assume the responsibility for disposing of polluted dredged material. The fact that spoil disposal*

must be undertaken on public property presents constraints on the disposal of this material.

(8) Diversity in reciprocity agreements exists internationally, as well as between States.

(9) The Canadian National Railroad is subsidized, presenting international competition to U.S. transportation, particularly rail and water, in the movement of commodities to and from the interior of the continent.

(10) Labor rules tend to inhibit intermodal and efficient use of transportation facilities. In particular, containerization is hindered by labor problems.

Regulation

(11) *The effects of regulation on transportation system capacity have not been carefully assessed.*

(12) Regulations interfere with free market operation of the transportation system. Regulations that have developed for the benefit and safety of users have created significant barriers to the effective utilization of individual modes and intermodal movements.

(a) *The overall rate structure for the transportation industry has not kept pace with the economic changes that have occurred in the recent past and that will continue to occur. The rates between two locations often do not reflect the cost or distance of traveling between those two locations. This situation affects the modal split of freight and passenger transportation.*

(b) Regulation has discouraged competition and led to transportation service deterioration. The government should be working to increase the productivity of the existing facilities as opposed to maintaining existing regulations.

(i) *Railroad rates are set to meet competition and the cost of these rates are passed on to the consumer.*

(ii) Railroads are constrained by the Interstate Commerce Commission from direct operation of other modes of transportation that could provide new levels of efficiency.

(iii) Water transportation has a competitive disadvantage with regard to rate structure in relation to other modes of transportation.

(iv) Air route structure is limited to the growth of local carriers.

(13) Regulatory reform should take other forms in addition to deregulation and should encourage intermodal activities where these activities are most effective and efficient.

(14) Regulations should not be imposed where they do not now exist.

(15) Individual State regulations should be coordinated.

(16) *Tariff bureaus' operations should be examined to determine whether they are practicing price fixing and, if they are, a determination should be made as to whether or not this is an appropriate practice for them.*

(17) *The magnitude and degree of social, economic, and environmental impact, including the impact on energy consumption, of regulatory constraints must be determined and considered in decisions involving future deregulation and institution of further regulations.*

One discussion group leader commented:

> *The greatest problem seems to be the institutional framework in which we are trying to coordinate among the various modes of transportation and to work out the regulatory controls that encourage the interfacing of the systems. We need to know how to develop the most precise regional transportation plans. We also need to be more practical about the mid-range level of planning that can produce decisions, all of which may lead toward a better sense of priority in the allocation of public and private resources to maintain certain parts of the systems, build new pieces of the systems, and to eliminate other pieces of the system. This must be done in concert with the environmental and social values that concern us all. Accomplishing this on the level of cost-effectiveness that we all preach about adds to the complexity of the whole problem.*

POLICY AND FINANCE

Policy

(18) There must be a better definition of the objectives of transportation.

(19) At this time, there is no regional policy to transmit to the national level.

Charles A. Job, Great Lakes Basin Commission, Workshop Secretary.

(20) *Investments available from the private sector may not be sufficient to permit continuance of the policy of attempting to meet transportation needs after they surface.*

(21) *There may be too much competition among the communities and ports of the Great Lakes. This competition leads to lower levels of facility quality and lower levels of revenue production, and it impedes the flow of goods. Greater efficiency must be gained at the various ports.*

(22) *Policy must be developed to address the problem of under-utilization of all the various modes of transportation.*

(23) The extent to which waterways in the region should be improved and/or enlarged to benefit from the efficiencies or economies of larger vessels is not well-defined.

(24) There is a lack of timely resolution of the extension of the Great Lakes-St. Lawrence Seaway winter navigation season.

(25) The impact on railroads of extending the winter navigation season on the Great Lakes should be considered.

(26) Extensive rail line abandonment may place considerable burden on, and result in great demands for maintenance on, highways with limited capacity.

(27) Local communities are greatly impacted by rail line abandonment in the Region.

(28) The problem of subsidization or closure of the Ann Arbor Railroad Cross-Lake Car Ferry must be resolved.

(29) Innovative transportation technology is difficult to apply. Once an application is developed, it is difficult then to determine the level of funding and regulation of the systems to which the technology is applied to match the degree of innovation the technology offers.

Mrs. Terry Barnes, League of Women Voters.

(30) *A major problem exists in addressing a public, often uninformed on complex transportation problems, who ultimately influence and dictate the kind of public transportation policy this country has.*

(31) *The transportation system appears to discriminate against people with impaired mobility, such as people who do not have access to automobiles, people living in outstate rural communities, and handicapped people who require transportation to and from jobs.*

(32) A reduction in highway speed limits seriously affects trucking and bus line productivity.

Finance

(33) Balanced capital and subsidy policies do not exist.

(a) *It is difficult to justify the nation subsidizing two or three competing modes of transportation in the same corridor.*

(b) It is also difficult to justify differential subsidies across modes within the same corridor.

(c) High energy-consumptive modes of transportation (particularly air and highway) have received heavy support from all levels of government.

(d) *The Great Lakes Region pays out more in taxes than it receives in tax benefits.*

(e) Public transit should become less capital intensive.

(f) Local carriers have difficulty competing with chartered and Federally-supported carriers.

(g) *After 30 years of being less than minimally maintained, a tremendous infusion of capital is required to place the rail system back in proper operation.*

(h) No incentives exist to increase the productivity of the water transport system without capital investment.

(34) *If subsidies are to continue, a better definition of their roles in transportation should be developed.*

(a) *A problem in definition exists in considering whether subsidies should be used as a developmental tool to introduce service to an area as opposed to subsidies to continue service to areas that are no longer profitable.*

(b) *There should be a resolution of the policy and practice of subsidization versus user charges to pay for transportation systems.*

(c) *User charges affect transportation movement of most modes of transportation.*

(d) *If the Great Lakes-St. Lawrence Seaway winter navigation season extension is proven to be viable, there needs to be a resolution of the problem of payment for this season extension (i.e., whether*

user charges will be used or whether a subsidy program will be involved.).

(35) The States should examine their roles and policies for capital funding and subsidies for all modes of transportation.

(36) *The present transportation policies do not provide the airlines sufficient revenue to provide service to more remote areas.*

(37) Financial problems have exacerbated operational and processing problems at terminals.

(38) Capital investment in one mode of transportation makes that mode economically preferable and encourages continued investment in that mode, without adequate regard for efficiency and energy consumption.

(39) Rail line abandonment presents problems of future ownership and maintenance of the right-of-way.

(40) Railroads should be permitted to become more competitive.

During the group reports, one discussion group leader remarked:

> *Investments available from the private sector may not be sufficient to allow us to continue our policy of attempting to meet transportation needs after they surface—after they exist. That is, instead of having the transportation investments follow the demand, shouldn't we look at the possibility of having transportation investments lead demand—that is predict what the demand will be? This leads to the question of how much of that can you do before you are in fact practicing national growth policy formulation. Is this a legitimate role for transportation analysts and planners and other people involved in transportation? There is feeling among some planners that we should not be engaged in growth planning. If we aren't going to practice national growth planning, how far are we going to go in anticipating transportation demands, knowing full well that if you anticipate them and invest your transportation funds that the growth will occur and the prophecy will be fulfilled?*

DATA AND RESEARCH

(41) A lack of basic localized commodity traffic flow data exists. A census of transportation should provide origin and destination by mode and by facilities of each mode.

(42) Analysis of transportation problems with available techniques is not possible. For example, there is an inability to adequately analyze portions of the larger transportation system that are or have presented problems for the system, such as that of the Ann Arbor Railroad Cross-Lake Car Ferry.

(43) There is a lack of regional information on energy consumption related to alternative transportation policies, technologies, and design.

James W. Diffenderfer, Penn Central Railroad.

(44) There is a lack of information on environmental and social impacts of proposed shifts in transportation modes and policies.

(45) There is a lack of comparable information on land and monetary resource allocations to transportation modes.

(46) It is difficult to measure existing system capacity in ways which would allow comparison and analysis of economic benefits and rate structure for the various transportation modes.

(47) *There is a lack of comparable data on market demand by mode and cost of service by mode.*

(48) There is a lack of standards by which to measure costs and benefits of alternative outcomes of the transportation system.

(49) *Considerable research should be conducted prior to any deregulation of transportation due to the impacts of deregulation on transportation users, carriers, and communities.*

(50) *Careful research should be undertaken before any subsidy approach is implemented, due to the possible creation of side effects which may be worse than the original problem.*

(51) *Future research in transportation might be devoted to the use of dirigibles as an alternative transportation mode, including the air space, land area, energy consumption and other resource requirements of dirigibles.*

ENVIRONMENT AND ENERGY

Environment

(52) There is a lack of explicit consideration of environmental and energy factors in investment decisions

Dean William J. Johnson, University of Michigan.

and policies (capital investments, subsidies, rate structures, etc.) among the different modes of transportation. The lack of explicit recognition of these factors will present problems in establishing future investment policies.

(53) Environmental restraints will increase transportation construction, operation, and maintenance costs.

(54) Expansion of the bulk cargo market, particularly for petroleum in the Great Lakes, will be met with considerable opposition from environmental groups.

(55) *There is extreme difficulty in transferring hazardous materials from one transportation mode to another.*

(56) Heavy waterway traffic of hazardous materials presents pollution danger.

(57) Environmental degradation will continue with increased land-based operations related to water transport.

(58) Dredge spoil disposal presents problems of water quality and constraints on water transport capacity. Furthermore, low lake levels exacerbate the problem of dredging.

(59) The noise and land use problems around airports must receive greater attention.

Energy

(60) Fuel availability will be a continuing problem in transportation. The availability of fuel will have an impact on the future choice of modes to be used.

(61) Emphasis should be placed on energy conservation in transportation.

(62) *A major problem is whether the rail system will survive long enough in the face of all the other public policies concerning transportation without a tremendous infusion of public funds until fuel shortages dictate its use.*

(63) *With shifts in population to the Midwest, the Great Lakes Region finds itself short of energy and metals and must depend more heavily upon the transportation system to supply it with these materials.*

(64) *Life-cycle analysis of fixed facilities effects on energy and natural resources should be conducted.*

SYSTEM CONDITION, CAPACITY, AND OPERATION

System Condition

(65) Efficient regional transportation "hubs" do not exist for passenger and freight movements.

(66) Access to airports is inadequate for both passengers and freight.

(67) Feeder systems to major airports are insufficient.

(68) Great Lakes ports are not sufficiently attractive to U.S. flag carriers.

(69) *The shortness of the winter navigation season on the Great Lakes is a constraint in the regional transportation system with special focus on the water mode.*

(70) The railroad beds in the region are in generally poor condition.

(71) The condition of rural feeder highways and, specifically, bridges on these highways is inadequate for current traffic and will present greater problems with rail line abandonments.

(72) *There are no trans-Lake Michigan trucking facilities (i.e., a truck cannot physically be moved across Lake Michigan).*

System Capacity

(73) *The handling of both people and commodities by various modes of transportation (e.g., bus, air) presents problems with regards to system capacity and terminal development.*

(74) Certain portions of the transportation system in the Region are unable to handle peak loads of passengers and freight.

(75) The rail system in the Great Lakes Region is overbuilt.

(76) *A capacity limitation exists on the Region's railroads due to the problem of lack of maintenance for the roadbeds. As a result, sufficiently high speeds cannot be maintained to obtain the rail capacity needed for the economic health of the system.*

(77) The present rail system is inadequate to move grain to ports.

(78) Limited storage capacity for grain impedes grain movement by rail and water.

(79) *The entire Great Lakes-St. Lawrence Seaway System is approaching capacity.*

(a) The Seaway System dimensions restrict vessel size.

(b) The Welland Canal constrains the capacity of the Great Lakes-St. Lawrence Seaway System.

(c) There is resistance from environmental groups and the Canadian government to lock expansion.

(d) *Future low lake levels will constrain water transportation on the Great Lakes-St. Lawrence Seaway System.*

(e) Heavy waterway traffic density, particularly in harbors and approaches to channels and locks, presents maneuvering difficulties.

(f) *Traffic separation control is difficult in congested waterways such as the Detroit River.*

(80) *A potential capacity limitation exists in the channel between Lake St. Clair and the St. Clair River where half the channel is blocked.*

(81) *More emphasis should be placed on general cargo moving into and out of the Great Lakes.*

(82) The oil-deficient Midwest must be served by new pipelines in the future.

(83) *There is a demand for additional highway capacity in suburban areas of the Region.*

System Operation

(84) There is an inability to move small packages at low cost.

(85) Maximum use is not being made of the existing system.

(86) The present transportation system discriminates against people with imparied mobility.

(87) Modal interchange does not exist to the degree necessary to facilitate goods movement.

(a) *Problems in rail yards should be examined on a yard by yard basis for management and system deficiencies.*

(b) The location of truck terminals on urban fringes presents intermodal transfer problems when rail yards and terminals are still located in or near the central business districts of cities.

(c) *Leased specialized equipment impedes commodity movement and contributes to congestion at terminals.*

(88) *Redundant transportation routes which serve areas from which industry has moved should be carefully examined for elimination or maintenance.*

(89) Amtrak's emphasis should be on roadbed maintenance and control.

(90) Insufficient air service exists from major airports to smaller airports.

(91) Pipelines will face major supply problems in the future.

(92) Distribution problems with oil in the Region will exist if Canadian sources are eliminated.

(93) *Bus lines have had to absorb significant penalties as the result of their vehicles' inability to have a larger range of travel within a given period of time. As a result of reduced speed limits, this situation has ramifications for rate-making and for facility locations and for modal split of passenger traffic.*

In one group report, a discussion group leader noted:

In terms of underutilization we may have reached the end of our ability to increase the utilization of the various modes with ease. We are now facing extremely complex problems of justification and explanation in just advancing the use of the present system without even thinking about new systems or changes in them. The problem of coordination is upon us as a result and we can't do much more without new ways of talking among various systems of transportation and at looking at the impacts they make on the quality of life.

Representatives of various transportation modes had a chance to exchange viewpoints informally at the workshop.

CHAPTER 5

Issues Evolving from Great Lakes Transportation Deficiencies and Problems

The discussion groups were asked to develop lists of issues in responding to the following statement and question:

> *As deficiencies in the regional transportation system are identified, and as particular problems arise, alternative viewpoints as to the appropriate response to these deficiencies and problems develop. As the alternative viewpoints are more strongly expressed, issues evolve from the problems.*
>
> *Considering the deficiencies and problems of Great Lakes regional transportation, what are the issues that might evolve if the deficiencies and problems in regional transportation were addressed?*

The issues were categorized into five categories which overlapped to greater or lesser extents depending on the issues raised: (1) Institutional Arrangements and Regulation; (2) Policy and Finance; (3) Data and Research, (4) Environment and Energy; and (5) System Condition, Capacity, and Operation. The numbering of the issues does not reflect any priority, but only references the issues that were raised at the workshop. The list of issues which follows is not intended to be a definitive list of issues, but represents the issues raised at the workshop and therefore reflects the concerns of the participants. Again, the categories to which the issues have been assigned are not absolute. Many of the issues could be placed under two or more categories, but were placed under a single category to avoid duplication.

INSTITUTIONAL ARRANGEMENTS AND REGULATION

Institutional Arrangements

(1) How should regional transportation needs be articulated to Congress?

(2) What kind of institutional framework should be set up to plan and coordinate multimodal transportation systems on a regional basis in the Great Lakes?

(3) Should the regulation of transportation be placed into State departments of transportation in Great Lakes States, to permit the solution of problems created by regulation and the implementation of programs which address these problems?

(4) At what level(s) of government should intermodal planning be conducted?

(5) How can the fragmentation of transportation responsibilities at all levels of government be reduced?

(6) What groups should transportation planners listen to—government (which levels), industry, or the public?

(7) How can the problems of tariff and regulation reciprocity between states and nation be resolved?

(8) Should regional ports be designated on the Great Lakes, thereby eliminating small ports?

(9) Should regional air cargo ports be established in the Great Lakes Region?

(10) How can the problem of deposition of dredged material be resolved, since communities do not have a mechanism to provide economically for deposition areas and Federal policy presently precludes use of private property?

Regulation

(11) What is the impact of regulation on future economic growth?

(12) What is the impact of changes in regulation on labor and employment in the Great Lakes Region?

(13) What is the impact of regulation on investment?

(14) How will modal relationships be affected by changes in regulatory and subsidy policies?

(15) Are the environmental quality impacts of changes in regulations considered? Do regulatory changes inhibit or foster shifts from less environmentally ac-

ceptable modes to more environmentally acceptable modes?

(16) How are user costs affected by changes in regulation?

(17) To what extent do rate structure differentials discriminate against Great Lakes-St. Lawrence Seaway ports in favor of ocean ports with regard to grain movement?

(18) Should railroad companies be permitted to have multimodal capabilities? If so, to what extent?

(19) Should railroad companies be permitted to innovate in services, routes, and rates?

(20) Should truck weight and length limits be standardized? If so, how? How will they be enforced?

(21) How do changes in regulation affect energy consumption?

(22) Should common carrier routing requirements be restructured to eliminate empty back hauls, in interest of conserving energy and transportation costs?

POLICY AND FINANCE

Policy

(23) What transportation problems should be addressed at the multistate or regional level?

(24) What is the relation of intermodal programs to national goals?

(25) Do we need a unified regional intermodal program? If so what are the elements? What are the roles of the private and public sectors in establishing a unified regional intermodal program?

(26) What will be the degree of commitment of the Region to intermodal program development?

(27) Is intermodal cooperation and coordination necessary to achieve optimal use of the Region's existing transportation facilities? If so, can the optimal use of these facilities be attained?

(28) Can consistent Canadian and U.S. transportation policies for the corridor between the Great Lakes and the East Coast be developed? Furthermore, can consistent policies for intermodal programs in Canada and the U.S. be developed?

(29) Will there be national support of a regional policy for intermodal programs?

(30) What is the role of reciprocity between the States, and between the United States and Canada, in the development of an intermodal program?

(31) What will be the degree of commitment of the local, State, and Federal governmental units within the region to a Great Lakes regional transportation policy?

(32) Should national support be obtained for a regional policy which would be a component of the national policy or should the region set the standards around which the national policy is built?

John L. Craig, U.S. Department of Transportation.

(33) How are multistate and substate regional transportation plans to be developed without a national growth policy?

(34) Who should be the ultimate decision-maker in land use planning related to transportation?

(35) To what extent should the public be involved in planning transportation systems and facilities?

(36) Should overseas service expansion be promoted among shippers in the Great Lakes Region?

(37) Who will own the pathways ("roadbeds") of the various transportation modes?

(38) In view of limited dollars available for transportation facilities, what role should each mode play in handling of freight and passengers?

(a) Should the rail system be rebuilt to haul freight and passengers or should it be abandoned in favor of expenditures for other systems?

(b) Should modal facilities be expanded to gain modal economic advantage?

(39) Does the nation want to retain privately owned transportation systems and the entire common carrier concept?

(40) How will small air, highway, water, and rail carriers be accommodated in a national transportation plan and policy?

(41) Although the States in the Great Lakes Region are engaging in rail planning, are the State rail plans being integrated with transportation planning for the other modes?

Vernon Palmer, U.S. Maritime Administration.

Finance

(42) To what extent should the various modes of transportation be subsidized? How does subsidization affect the private sector?

(43) Should the private sector operate all transportation modes or should subsidization be continued and even expanded?

(44) Should there be dedicated transportation funds or should a general transportation fund exist for all modes? Should funds raised by one transport mode in such forms as taxes and user charges go to fund a competing mode?

(45) Should the interregional apportionment of funds from the U.S. Department of Transportation be reexamined?

(46) How should the capitalization and operating costs of the various transportation modes be divided between the private and public sectors?

(47) How does subsidization (or changes in subsidization) affect labor and employment?

(48) How does subsidization (or changes in subsidization) affect future economic growth?

(49) How does subsidization (or changes in subsidization) affect energy consumption?

(50) How are user costs affected by changes in subsidization?

(51) Should the question of user charges be addressed on the basis of socioeconomic needs of the region and equity between the modes of transportation?

(52) Does comprehensive transportation planning occur which insures that by providing subsidies to one mode a situation is not created in which another mode must be subsidized as a side effect?

(53) Should all transportation rights-of-way be free of property taxes, or should railroads and some airports continue to be taxed?

(54) Should facilities be expanded to gain modal economic advantage (for example, larger locks in the Great Lakes and St. Lawrence Seaway, airport expansion such as new runways, construction of new terminals for interfacing modes in urban areas)?

(55) Should Wisconsin and Michigan subsidize the Ann Arbor Railroad Cross-Lake Car Ferry?

(56) Should the cost of extending the Great Lakes winter navigation season be paid through user charge or subsidization?

ENVIRONMENT AND ENERGY

Environment

(57) How should the environmental, economic, and social objectives and impacts be balanced in a regional transportation policy and framework plan?

(58) How should resource utilization for transportation be considered? How will the use of resources for transportation affect their availability for other uses and demands? How will subsidies to transportation affect resource availability?

(59) What would the impact of intermodal programs be on environmental quality and economic growth within the Region?

(60) How do differing environmental requirements among the States affect the development of transportation in the Region?

(61) How can the environmental assessment process be made more efficient and effective in transportation planning?

Energy

(62) How will the problem of fuel availability be resolved for the total transportation system versus other demands?

(63) How will fuel be allocated to different transportation modes?

(64) Should expenditures and policies be directed to encourage choice of transportation mode in the interest of fuel conservation and other national interests?

(65) What are the implications of modal split on energy use and conservation?

(66) What are the effects of allocating different energy forms to different transportation modes?

(67) How should fuel costs be integrated with modal pricing structures?

DATA AND RESEARCH

(68) How can planners develop surrogates for data necessary for evaluation of markets, for modal split analysis, and for identification of required subsidies?

(69) Should research and development of multibarge towing capabilities on the Great Lakes be encouraged?

SYSTEM CONDITION, CAPACITY, AND OPERATION

System Condition and Capacity

(70) Are highways to be used predominantly for moving freight, for moving passengers, or for some reasonable and acceptable mix of both?

(a) Should the highway system be rebuilt to handle truck loads of 80,000 pounds or more?

(71) Should the size of locks and depth of channels on the Great Lakes-St. Lawrence Seaway System be increased?

(72) Should the New York State Barge Canal be developed for use as an expanded Great Lakes-Atlantic Ocean connecting waterway?

(73) Should the navigation season on the Great Lakes be extended annually during the winter on a continuing basis?

(74) How do modal capacity limitations and underutilization of transportation facilities in the Region affect economic growth?

(75) To what extent has the present capacity of the Great Lakes-St. Lawrence Seaway system inhibited the potential growth of grain movement through the Great Lakes?

System Operation

(76) To what extent can the maximum use of existing underutilized transportation facilities be achieved?

(77) Should uniform operation and equipment standards be established to promote safety in highway trucking operation, as they have been established for the water, air, and rail modes?

Workshop vice chairman Robert Adams (center), Michigan Department of State Highways and Transportation, talks with other participants.

CHAPTER 6

Priorities for Addressing the Problems

During the fourth session, the discussion groups were asked to respond to the folowing statement:

> *All levels of government and industry are experiencing fiscal "belt-tightening" and are competing for increasingly scarce and expensive resources, such as construction materials and labor. These circumstances necessitate careful evaluation of actions and alternatives. Priorities for responding to the circumstances must be set.*
>
> *Given the list of problems developed during the second session of the workshop, rank all of the problems within each category, considering both the importance of the problems and the necessity of attention which the problems demand.*

Due to time limitations, the groups were asked to rank only the first five problems in each category.

The assignment of the problems to categories was done by the workshop chairman and vice-chairman prior to this session. As indicated previously, the categories are broad and many of the problems could fit under several categories. The category assignments were made to provide a more manageable framework within which to consider the long list of problems.

Table 1 presents the ranking of only the problems *from the master list* within each category by each discussion group. The additional transportation problems mentioned by the discussion group leaders during their group reports were not considered for ranking by the groups. The numbers in Table 1 correspond to the numbers of the problems from the workshop master list of problems listed in Chapter 4 of this report.

In order to make the ranking of the problems more comprehensible, the workshop secretary assigned a weight to the ranked problems after the workshop was over. If a problem was ranked first, it received five units weight; a second-ranked problem received a weight of four; and so on, with problems receiving a weight of one unit each time they were ranked fifth. When a group did not rank a problem, or ranked it lower than fifth, that problem received no weight. The weights were then added to obtain a composite weighted score for each problem. Finally, the problems were ordered within each of the five categories in order of their composite weighted scores.

Table 2 below presents (a) the problems from the master list along with their numbers, (b) the relative ordering of the problems within each category, (c) their weighted scores, and (d) the number of times they were listed first. It should be noted that:

(1) Many of the problems could be placed in several categories. However, this was not done at the workshop to save time and avoid confusion, thus using the participants' time as effectively as possible. (One hour was provided for the participants to rank the master list of 78 problems and come to a consensus on the ranking within their respective groups.)

(2) The problems cannot be ranked across categories by the method used at the workshop.

(3) If any group gave the same rank to two problems, both problems received the same weight; e.g., if problems 1 and 17 were both ranked first by Group II, then they both received a weight of 5 units.

The five highest-weighted problems from each category are listed below in order of their weighted scores. The cutoff point for this highlight summary was set at five because most categories in Table 2 show a reasonably defined difference between the weighted scores of the first five problems and those of the other problems. There were problems among the five highest-weighted in each category which were not ranked first by any discussion group, but which received high weighted scores because many groups felt them to be of more importance relative to the other problems in a category.

INSTITUTIONAL ARRANGEMENTS AND REGULATION

(1) There is a lack of a credible regional transpor-

tation organization to foster cooperative transportation planning and implementation.

(2) Regulatory reform should take other forms in addition to deregulation and should encourage intermodal activities where these activities are most effective and efficient.

(3) Transportation decisions are made in a fragmented manner.

(4) The planning and regulatory sectors of transportation have been traditionally separated and should be combined.

(5) There is a lack of comprehensive multimodal planning at the State level. Necessarily, more communication should occur between those involved in planning for the various modes of transportation.

POLICY AND FINANCE

(1) There must be a better definition of the objective of transportation.

(2) Balanced capital and subsidy policies do not exist.

(3) At this time, there is no regional policy to transmit to the national level.

(4) There is a lack of timely resolution of the extension of the Great Lakes-St. Lawrence Seaway winter navigation season.

(5) The States should examine their roles and policies for capital funding and subsidies for all modes of transportation.

DATA AND RESEARCH

(1) It is difficult to measure existing system capacity in ways which would allow comparison and analysis of economic benefit and rate structure for the various transportation modes.

(2) There is a lack of regional information on energy consumption related to alternative transportation policies, technologies, and design.

(3) There is a lack of comparable information on land and monetary resource allocations to transportation modes.

(4) There is a lack of standards by which to measure costs and benefits of alternative outcomes of the transportation system.

(5) There is a lack of information on environmental and social impacts of proposed shifts in transportation modes and policies.

ENVIRONMENT AND ENERGY

(1) Environmental restraints will increase transportation construction, operation, and maintenance costs.

(2) Emphasis should be placed on energy conservation in transportation.

(3) There is a lack of explicit consideration of environmental and energy factors in investment decisions and policies (capital investments, subsidies, rate structures, etc.) among the different modes of transportation. The lack of explicit recognition of these factors will present problems in establishing future investment policies.

(4) Dredge spoil disposal presents problems of water quality and constraints on water transport capacity. Furthermore, low lake levels exacerbate the problem of dredging.

(5) Fuel availability will be a continuing problem in transportation. The availability of fuel will have an impact on future choice of modes to be used.

SYSTEM CONDITION, CAPACITY, AND OPERATION

(1) Modal interchange does not exist to the degree necessary to facilitate goods movement.

(2) The condition of rural feeder highways, and specifically bridges on these highways, is inadequate for current traffic and will present greater problems with rail line abandonments.

(3) Maximum use is not being made of the existing system.

(4) The railroad beds in the region are in generally poor condition.

(5) Efficient regional transportation "hubs" do not exist for passenger and freight movements.

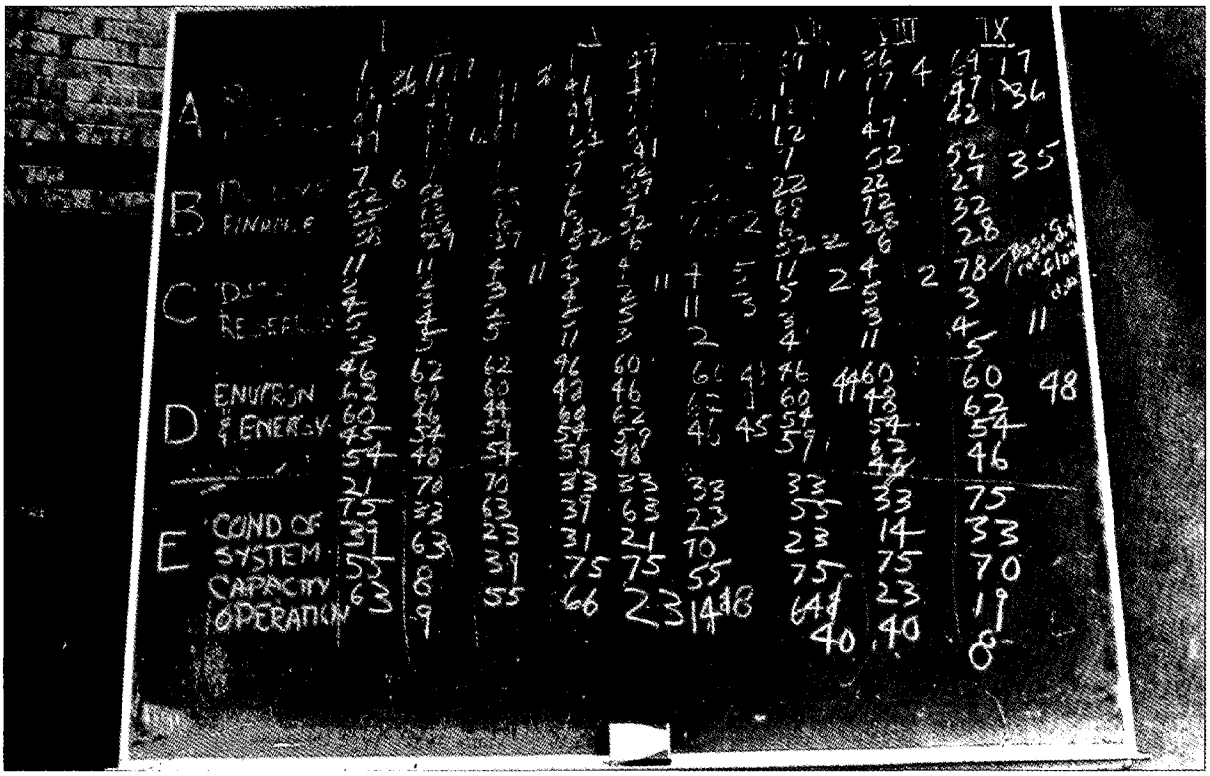


TABLE 1 Ranking of Problems Within Categories by Discussion Groups

		Discussion Groups								
	Categories	I	II	III	IV	V	VI	VII	VIII	IX
A	Institutional	2	2 &3(a)	12	2	13	13	3(b)	3	3(b)
	Arrangements	4	1	13	15	1	3(a)	2	3(a)	13
	and	13	3(b)	2	1	3(b)	2	4	2	12(b)(iii)
	Regulation	1	4	8	3(a)	6	3(b)	10	13	3(a)
		3		3	12(b)	15	15 & 3	12	1	3
B	Policy	18	18	18	18	35	18 & 33	18	33	33
	and	33	33	33	24	33(c)	19	19	19	37
	Finance	23	38	19	38	18	24 & 35	33(h)	34(c)	26
		29	19	27	33	33		24	27	27
		24	37	24	32	24		35	24	23
C	Data	48	48	46	43	46	46	48	46	41
	and	43	43	45	45	43	48	44	44	45
	Research	46	45	43	46	44	43	45	45	46
		44	46	44	44	45	44	46	48	44
		45	44	48	48	48	45	43	43	48
D	Environment	61	52	52	61	53	53	61	53	53
	and	52	53	53	60	61	52	53	60	52
	Energy	53	61	56	53	52	61	58	58	58
		57	58	59	58	59	60 & 57	59	52	61
		58	60	58	59	60		56	61	60
E	System	66	85	85	87	87	87	87	87	71
	Condition,	71	87	65	82	65	70	79(b)	79(a)	87
	Capacity	82	65	70	92	66	85	70	71	85
	and	79(b)	74	82	71	71	79(b)	71	70	77
	Operation	65	86	79(b)	89	70	79(a) & 74	67	68	74

Numbers refer to problem numbers in Chapter 4.

TABLE 2 Relative Rank of Problems by Category from Master List in Chapter 4

Chapter 4 Reference Number	Problem	Weighted Score	Times Ranked First
Category A: Institutional Arrangements and Regulation			
2	There is a lack of a credible regional transportation organization to foster cooperative transportation planning and implementation.	28	3
13	Regulatory reform should take other forms in addition to deregulation and should encourage intermodal activities where these activities are most effective and efficient.	23	2
3(a)	Transportation decisions are made in a fragmented manner.	17	1
3(b)	The planning and regulatory sectors of transportation have been traditionally separated and should be combined.	17	2
1	There is a lack of comprehensive multimodal planning at the State level. Necessarily, more communication should occur between those involved in planning for the various modes of transportation.	13	–
3	Government institutions and regulations have not kept pace with technological innovations.	9	1
4	The role of the public in transportation policy formulation is ill-defined.	8	–
12	Regulations interfere with free market operation of the transportation system. Regulations that have developed for the benefit and safety of users have created significant barriers to the effective utilization of individual modes and intermodal movements.	6	1
15	Individual State regulations should be coordinated.	6	–
12(b)(ii)	Railroads are constrained by the Interstate Commerce Commission from direct operation of other modes of transportation that could provide new levels of efficiency.	3	–
6	Ports should become more State-oriented.	2	–
8	Diversity in reciprocity agreements exists internationally, as well as between States.	2	–
10	Labor rules tend to inhibit intermodal and efficient use of transportation facilities. In particular, containerization is hindered by labor problems.	2	–
12(b)	Regulation has discouraged competition and led to transportation service deterioration. The government should be working to increase the productivity of the existing facilities as opposed to maintaining existing regulations.	1	–
9	The Canadian National Railroad is subsidized, presenting international competition to U.S. railroads for the transportation of commodities to and from the interior of the continent.	Unranked*	
12(b)(iii)	Water transportation has a competitive disadvantage with regard to rate structure in relation to other modes of transportation.	Unranked*	
12(b)(iv)	Air route structure is limited to the growth of local carriers.	Unranked*	
14	Regulations should not be imposed where they do not now exist.	Unranked*	

*Not ranked among first five problems by any group.

TABLE 2 Relative Rank of Problems by Category from Master List in Chapter 4 (continued)

Chapter 4 Reference Number	Problem	Weighted Score	Times Ranked First
Category B: Policy and Finance			
18	There must be a better definition of the objectives of transportation.	33	6
33	Balanced capital and subsidy policies do not exist.	31	3
19	At this time, there is no regional policy to transmit to the national level.	16	–
24	There is a lack of timely resolution of the extension of the Great Lakes-St. Lawrence Seaway winter navigation season.	12	–
35	The States should examine their roles and policies for capital funding and subsidies for all modes of transportation.	8	1
27	Local communities are greatly impacted by rail line abandonment in the Region.	6	–
38	Capital investment in one mode of transportation makes that mode economically preferable and encourages continued investment in that mode, without adequate regard for efficiency and energy consumption.	6	–
37	Financial problems have exacerbated operational and processing problems at terminals.	5	–
23	The extent to which waterways in the Region should be improved and/or enlarged to benefit from the efficiencies or economies of larger vessels is not well-defined.	4	–
33(c)	High energy-consumptive modes of transportation (particularly air and highway) have received heavy support from all levels of government.	4	–
26	Extensive rail line abandonment may place considerable burden on, and result in great demands for maintenance on, highways with limited capacity.	3	–
33(h)	No incentives exist to increase the productivity of the water transport system without capital investment.	3	–
34(c)	User charges affect transportation movement of most modes of transportation.	3	–
29	Innovative transportation technology is difficult to apply. Once an application is developed, it is difficult then to determine the level of funding and regulation of the systems to which the technology is applied to match the degree of innovation the technology offers.	2	–
32	A reduction in highway speed limits seriously affects trucking and bus line productivity.	1	–
25	The impact on railroads of extending the winter navigation season on the Great Lakes should be considered.	Unranked*	
28	The problem of subsidization or closure of the Ann Arbor Railroad Cross-Lake Car Ferry must be resolved.	Unranked*	
33(e)	Public transit should become less capital intensive.	Unranked*	
33(f)	Local carriers have difficulty competing with chartered and Federally-supported carriers.	Unranked*	
39	Rail line abandonment presents problems of future ownership and maintenance of the right-of-way.	Unranked*	
40	Railroads should be permitted to become more competitive.	Unranked*	

Not ranked among first five problems by any group.

TABLE 2 Relative Rank of Problems by Category from Master List in Chapter 4 (continued)

Chapter 4 Reference Number	Problem	Weighted Score	Times Ranked First
Category C: Data and Research			
46	It is difficult to measure existing system capacity in ways which would allow comparison and analysis of economic benefit and rate structure for the various transportation modes.	33	4
43	There is a lack of regional information on energy consumption related to alternative transportation policies, technologies, and design.	25	1
45	There is a lack of comparable information on land and monetary resource allocations to transportation modes.	25	–
48	There is a lack of standards by which to measure costs and benefits of alternative outcomes of the transportation system.	25	3
44	There is a lack of information on environmental and social impacts of proposed shifts in transportation modes and policies.	22	–
41	A lack of basic localized commodity traffic flow data exists. A census of transportation should provide origin and destination by mode and by facilities of each mode.	5	1
42	Analysis of transportation problems with available techniques is not possible. For example, there is an inability to adequately analyze portions of the larger transportation system that are or have presented problems for the system, such as that of the Ann Arbor-Railroad Cross-Lake Car Ferry.	Unranked*	
Category D: Environment and Energy			
53	Environmental restraints will increase transportation construction, operation, and maintenance costs.	38	4
61	Emphasis should be placed on energy conservation in transportation.	28	3
52	There is a lack of explicit consideration of environmental and energy factors in investment decisions and policies (capital investments, subsidies, rate structures, etc.) among the different modes of transportation. The lack of explicit recognition of these factors will present problems in establishing future investment policies.	27	2
58	Dredge spoil disposal presents problems of water quality and constraints on water transport capacity. Furthermore, low lake levels exacerbate the problem of dredging.	15	–
60	Fuel availability will be a continuing problem in transportation. The availability of fuel will have an impact on future choice of modes to be used.	13	–
59	The noise and land use problems around airports must receive greater attention.	7	–
56	Heavy waterway traffic of hazardous materials presents pollution danger.	4	–
57	Environmental degradation will continue with increased land-based operations related to water transport.	4	–

Not ranked among first five problems by any group.

TABLE 2 Relative Rank of Problems by Category from Master List in Chapter 4 (continued)

Chapter 4 Reference Number	Problem	Weighted Score	Times Ranked First
Category E: System Condition, Capacity, and Operation			
87	Modal interchange does not exist to the degree necessary to facilitate goods movement.	33	5
71	The condition of rural feeder highways and specifically bridges on these highways is inadequate for current traffic and will present greater problems with rail line abandonments.	18	1
85	Maximum use is not being made of the existing system.	16	2
70	The railroad beds in the region are in generally poor condition.	13	–
65	Efficient regional transportation "hubs" do not exist for passenger and freight movements.	12	–
79(b)	The Welland Canal constrains the capacity of the Great Lakes-St. Lawrence Seaway System.	9	–
82	The oil-deficient Midwest must be served by new pipelines in the future.	9	–
66	Access to airports in inadequate for both passengers and freight.	8	1
79(a)	The Seaway System dimensions restrict vessel size.	5	–
74	Certain portions of the transportation system in the Region are unable to handle peak loads of passengers and freight.	4	–
92	Distribution problems with oil in the Region will exist if Canadian sources are eliminated.	3	–
77	The present rail system is inadequate to move grain to ports.	2	–
67	Feeder systems to major airports are insufficient.	1	–
68	Great Lakes ports are not sufficiently attractive to U.S. flag carriers.	1	–
86	The present transportation system discriminates against people with impaired mobility.	1	–
89	Amtrak's emphasis should be on roadbed maintenance and control.	1	–
75	The rail system in the Great Lakes Region is overbuilt.	Unranked*	
78	Limited storage capacity for grain impedes grain movement by rail and water.	Unranked*	
79(c)	There is resistance from environmental groups and the Canadian government to lock expansion.	Unranked*	
79(e)	Heavy waterway traffic density, particularly in harbors and approaches to channels and locks, presents maneuvering difficulties.	Unranked*	
84	There is an inability to move small packages at low cost.	Unranked*	
87	Modal interchange does not exist to the degree necessary to facilitate goods movement.	Unranked*	
90	Insufficient air service exists from major airports to smaller airports.	Unranked*	
91	Pipelines will face major supply problems in the future.	Unranked*	

Not ranked among first five problems by any group.

CHAPTER 7

Remarks of Norman A. Erbe

The full prepared text of the presentation of former Iowa Governor Norman A. Erbe, Regional Representative of the U.S. Secretary of Transportation to the workshop dinner on the evening of November 19, 1975, is given below.

"It is a real pleasure for me to have the opportunity to visit with you this evening about my job—transportation in the Great Lakes States.

"As a matter of fact I don't quite know where to start. For instance, shall I discuss the Federal Regional Council and the ten Federal agencies' regional directors who work together on a regular basis to provide coordinated delivery of Federal programs as well as a more responsive Federal government in this Great Lakes area?

"Or should I devote some time to the work of the Upper Great Lakes Regional Commission and its impact on the economic health of the area, in addition to the emerging transportation interest of the Great Lakes Basin Commission as well as its efforts to coordinate the planning processes in an eight-State region so that we may have orderly and planned growth and development.

"Another alternative might be an in-depth discussion of the impact and role of the Department of Transportation—its relationship to the State Departments of Transportation and policies vis-a-vis transportation in this area.

"We might visit about the individual Administrations within the Department, such as the St. Lawrence Seaway Development Corporation and their concerns about the decline of use of the fourth seacoast, the Great Lakes, by the shipping industry—or the U.S. Coast Guard and their interests in port and waterway development, Great Lakes pilotage, and their many traditional missions involved with protecting life, property and marine environment—or the Federal Highway Administration and their problems in meeting the needs of the cities and states while at the same time complying with the environmental requirements—or the Urban Mass

Former Iowa Governor Norman A. Erbe, Regional Representative of the U. S. Secretary of Transportation.

Transportation Administration and the pressures they perceive for instant subways and rapid transit with constantly escalating costs and long lead time—or the Federal Railroad Administration with its increased involvement in Railroad Safety and planning in the several States—or the Federal Aviation Administration and its responsibility for improved regional airport planning, the possibility of regional cargo airports, and the airport role for general aviation facilities which carry 40 percent of the total passengers aloft in this country in 164,000 planes as compared with the 2,500 air carrier aircraft—or the National Highway Traffic Safety Administration, which is involved with safety standards on your auto, your motorcycle and your bicycle as well as alcohol counter-measures and roadway safety.

"Should we discuss my role as a Secretarial Representative in pulling together all of the modal administrations of the Department of Transportation at the regional level in what we call the DOT Field Coordination Group, or should we visit about the DOT Intermodal Planning Group—a consortium of Federal planners led by DOT who coordinate the planning process at the field level so that confusion and chaos in the comprehensive planning process is reduced if not eliminated.

"Or perhaps we should devote some time to those two new strange quasi-governmental bodies—Amtrak, which is striving mightily to provide intercity passenger service to the impatient railroad buff who expects new passenger cars and better service yesterday—and ConRail, which will succeed the United States Railway Association and is in the thicket of public and congressional hearings regarding the abandonment and consolidation of freight lines in the northeastern quadrant of the U.S.

"Another option might be to discuss the concerns of non-Federal agencies and their relationship to the Feds. The City of Detroit and its economic difficulties—Wayne County and its appropriate partnership role with Detroit in achieving constructive change—the Southeast Michigan Council of Governments and its umbrella planning responsibility for the Detroit metropolitan area—and the State of Michigan with its agencies and commissions and their role in putting it all together statewide. And with that overview of the interrelationship of transportation in the Great Lakes States I must tell you that the menu is not adequate for our purpose today, since I would like to share with you some conclusions reached by Secretary Coleman in the recently announced National Transportation Policy which has recently been transmitted to Congress.

"The policy itself is a 53-page document which discusses in some detail the various modes, where we are, and where we want to be in the future. The goals in the conclusion provide a flavor of the entire report and I would like to share them with you today:

. . . We would see a more safe, efficient, accessible, diverse, competitive transportaion system, mainly in the private sector, which would enhance the Nation's environment, economy, and quality of life, by providing:

—Privately owned, financially healthy and competitive, high-performance national networks of marine, rail, truck, bus, pipeline, and air freight and passenger service;

—A system of feeder lines and links that provide access to the nationwide interstate systems and effectively meet the transportation needs of urban, suburban, and rural areas, privately maintained where possible, and supported, on a fiscally responsible basis, primarily by States and local governments with Federal financial participation where necessary;

—A safer, more energy-efficient, environmentally sound automobile that will be utilized more intelligently and with greater social responsibility but which will continue to be the most pervasive form of transportation, essential to our life style and economic activity;

—A modern highway system which serves the needs of the future, consistent with our environmental and new energy concerns;

—Progress each year in safety performance, environmental protection, energy conservation, and transportation crime prevention;

—Comprehensive urban transportation systems, involving efficient mass transit and a mix of modes that are consistent with broader metropolitan goals;

—Safe and modern rural transportation facilities, providing access to the Interstate network and creating an infrastructure that enhances rural living and development;

—A strong international transportation system with the participation of privately owned, financially healthy, unsubsidized U.S. flag carriers;

—More equal competition between firms and among modes, freed from the encumbrance of outmoded regulatory restraints;

—New, more cost-effective, energy-efficient, and intermodal technology;

—Accessible transportation for the poor, the minorities, the handicapped and the elderly;

—Opportunities for employment and advancement for all citizens, particularly women, minorities, and the disadvantaged;

—An economy conducive to adequate capital formation, enabling private firms to earn a reasonable return on investment and keep facilities and equipment modern, safe, and environmentally sound.

A more perfect transportation system will evolve primarily through the efforts of an innovative, competitive, and forward looking private sector. The Federal Government must support this evolution, reinforcing the strengths of our system and shoring up its weakness . . .

"With these overall goals of transportation policy, Secretary Coleman could well sit back and say, 'We have formulated a policy, we have delivered that policy to the Congress, and now we can get on with the everyday

work load of running the Department.' That is not enough. Secretary Coleman has announced two additional steps with which we are vitally concerned.

"The first of these is an internal self-analysis and investigation and monitoring function which addresses those of us within the Department to a number of questions of continuing interest:

(1) Is the public getting lower-cost, safe, and efficient service?

(2) Are services accessible to those who need them?

(3) Is the private transportation sector operating in a competitive manner?

(4) Is the transportation sector, including the manufacture of equipment, growing in productivity, developing new technology, and improving safety and performance?

(5) Is the transportation system sufficiently flexible and adaptable to serve properly changing national priorities and lifestyles and new economic and community needs?

(6) Is the transportation sector attracting the capital it needs to modernize, provide employement, and render the desired service?

(7) Is the U.S. international transportation sector able to compete fairly and effectively with foreign carriers?

"The second step is no less important to the refinement of our short and long term goals in transportation—and that is input from non-Federal sources into basic questions relating to funding and program commitment by the non-Federal public and private sector.

"The questions posed to you for your consideration, discussion, conclusions, and most importantly forwarding to Secretary Coleman are five in number.

(1) What additional program transfers or intermodal flexibility would improve State and local authority and capability to respond comprehensively to transportation needs (e.g., transfer or funding flexibility among highways, mass transit, rail branchline assistance, air and water, unified trust fund, special revenue sharing, etc.)?

(2) Should the States assume greater responsibility for waterway improvement and operations?

(3) How may Federal requirements and processes be further simplified or eliminated?

(4) Should the States be authorized to undertake additional user financing?

(5) What should be the nature of Federal support for highways after the national Interstate System is completed?

"Your unique role reflecting, as you do, the Federal, State, local, and private concerns is significant in developing and refining national transportation policy especially with respect to the commitment of resources of our country to the transportation of our people and our goods.

"Secretary Coleman is genuinely interested in your conclusions on these basic questions. We solicit the results of your dialogue, discussion and debate."

Workshop participants talk over coffee during a break between sessions.

CHAPTER 8

Concluding Remarks By Rear Admiral J. S. Gracey

Rear Admiral J. S. Gracey, U.S. Coast Guard, U. S. Department of Transportation, workshop chairman, closed the workshop with the following remarks:

"At this workshop, it was the intent of the Great Lakes Basin Commission Standing Committee on Transportation to obtain a perspective on the problems and issues of transportation from the standpoint of the Great Lakes Region. As participants in this workshop, you have given us tremendous support in that respect. We were not seeking answers to the problems at this time. There just wasn't time to settle on answers at this meeting.

"The Great Lakes Basin Commission Standing Committee on Transportation is proposing a series of workshops oriented toward specific problems and issues of transportation in the Great Lakes Region. The guidance at this first workshop will provide the foundation for the development of the future workshops. During those workshops, we will seek answers and we will want to solicit the input of you and your colleagues.

"Now we hope that you will return to your respective areas in the Great Lakes Region and spread the word that we as a group of concerned government, private, and university transportation planners and officials, accomplished a great deal at this workshop, that this was a productive session, that considerable information was generated, and that views were exchanged.

"Let it be clearly understood, though, that we are not proposing studies. As I said earlier, this Committee is not a lobbying group. We have no power to propose or promote answers. Our function is to do just what we have done: to serve as a catalyst to relevant discussions of transportation problems in order to facilitate transportation planning in the Great Lakes Region, and to provide a forum to you and others to say what you think concerning transportation. In this way, your concerns and insights—and in future workshops, the concerns and insights of others—will be transmitted to those persons who are in a position to respond and take action. Those of you who attended this workshop and are in a position to do something with its results—whether you are in an industrial or user representative, a local or state representative, or a federal agency representative—go back to your agencies and organizations and do something with them.

Rear Admiral J. S. Gracey, Ninth Coast Guard District, addressing the workshop.

"I sincerely want to thank you all, on behalf of the Great Lakes Basin Commission and the Standing Committee on Transportation, for your two days of hard work and excellent participation."

APPENDIX A

Workshop Program

FIRST DAY, WEDNESDAY, NOVEMBER 19

Registration	9:00 a.m.
Welcome – Rear Admiral Gracey/Robert Adams	10:00 a.m.
Introductory Remarks – Rear Admiral Gracey	
Instructions to Participants – Rear Admiral Gracey	
First Session – discussion groups	10:15 a.m.
Topic: Great Lakes Regional Tranportation Systems: What the Region Has and What the Region Needs	
Group Reports and Questions	11:30 a.m.
Lunch (on your own)	12:30 p.m.
Second Session – discussion groups	1:30 p.m.
Topic: Great Lakes Regional Transportation Deficiencies and Problems	
Group Reports and Questions	4:00 p.m.
End of Second Session	5:30 p.m.
Cash Bar	6:00 p.m.
Dinner	7:00 p.m.
Guest Speaker: Governor Norman Erbe, Region V Representative of the Secretary of Tranportation	

SECOND DAY, THURSDAY, NOVEMBER 20

Reconvene – Rear Admiral Gracey/Robert Adams	8:00 a.m.
Instructions to Participants – Rear Admiral Gracey	
Third Session – discussion groups	8:15 a.m.
Topic: Issues Evolving from Great Lakes Regional Transportation Problems and Deficiencies	
Group Reports and Questions	9:45 a.m.
Fourth Session – discussion groups	10:45 a.m.
Topic: Priorities for Addressing the Transportation Problems	
Group Reports and Questions	11:45 a.m.
Summation – Rear Admiral Gracey	12:45 p.m.
End of Workshop	1:00 p.m.

APPENDIX B

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