

**Fall 2000** 

### CONTENTS

Railroad Industry	2
Query Central	2
Intermodal Sites	3
Long-Term Rail Service	4
Mountain-Plains Consortium	5
TEL8	6
ATAC	7
Student Profiles	8
Student Spotlight	9
Student Scholarships	10
John M. Agrev Award	11

Upper Great Plains Transportation Institute North Dakota State University 430 IACC Building, PO Box 5074 Fargo, North Dakota 58105 701.231.7767 • www.ugpti.org

### Upper Great Plains Transportation Institute studies strategic freight transportation analysis

The Upper Great Plains
Transportation Institute at North
Dakota State University, Fargo, is
developing a strategic freight
transportation analysis for the state's
agricultural commodities and
agricultural processed products. The
goal is to develop more efficient and
effective transportation and
logistical systems for marketing the
bounty of North Dakota
agriculture. This will allow North
Dakota producers and processors to
become more competitive.

The biennial study, currently underway, concentrates on grain and oilseeds. Among the issues being addressed are:

- 1. The efficiency and impact of 110-car shuttle trains
- 2. The impact of heavier rail cars
- Changing intermodal trends in marketing commodities and products
- 4. The impact of these changes on the ability to add value to the agricultural economy through processing of commodities

The analysis will add value for North Dakotans by allowing private and public decision makers to have better information regarding transportation investments and operations. It will provide producers with more insight in decisions on what to grow. It will provide the country elevator industry with information regarding expansion and consolidation and it will allow processors to more confidently develop new products and expand existing product lines. All of this will allow the state to be better able to develop and to maintain the transportation infrastructure.

Among those organizations supporting the project are the North Dakota Grain Dealers, North Dakota Mill and Elevator, North Dakota Barley Council, Spring Wheat Bakers, Agricultural Products Utilization Commission, North Dakota Farmers Union, North Dakota Wheat Commission, General Mills, Red River Valley and Western Railroad, Northern Plains Railroad, North Dakota Department of Transportation, Mountain-Plains Consortium and the United States Department of Agriculture.

# UGPTI leads effort to document short line and regional railroad industry contributions

The short line and regional railroad industry makes a significant contribution toward the preservation of rail service and the movement of essential freight traffic in the United States. The Upper Great Plains Transportation Institute (UGPTI) leads an effort to document and report this contribution through the development and establishment of a Regional and Short Line Railroad Information and Analysis System.

Initiated in 1993, this project incorporated a partnership with the American Short Line Railroad Association, the Mountain-Plains Consortium (MPC), the Federal Railroad Administration (FRA) and the Institute. The United States Department of Agriculture replaced the MPC in 1998 and

is the lead agency sponsoring the project.

The information system database was created through an extensive survey of the short line industry. Each year, short line survey data is analyzed and reported in an Annual Data Profile of the short line industry. The database, located at UGPTI, has information from 1993-1996 and 1998-1999.

The annual data profile reports statistics by railroad type and region, and uses railroad definitions that conform to those of the Surface Transportation Board and the Association of American Railroads. The Annual Data Profile may include:

- Estimated industry totals
- Current industry profiles
- Customer profiles

- Traffic profiles
- Physical profiles
- Equipment
- Finances
- Operating Statistics
- Employee benefits
- Computer systems

The database is also utilized for specialized data analyses for industry participants, industry-related entities and short line industry researchers. The specialized data analyses are approved by the ASLRRA and developed at UGPTI.

All database information is strictly confidential and remains under the ownership of the reporting railroad. The ASLRRA or FRA does not have access to individual railroad data.

# Query Central to create motor carrier border defense

Borders of the United States are under heavy use daily by international and United States motor carriers. The front-line operators at those sites need to know critical safety information on each vehicle as it enters the country. Enter Query Central – a system being developed to consolidate border inspection queries on drivers, vehicles and carriers into an "intelligent" request.

Brenda Lantz with the Upper Great Plains Transportation Institute at North Dakota State University recently received a contract from the Federal Motor Carrier Safety Administration and North Dakota Highway Patrol. Lantz will work with the FMCSA Field Systems Group on the design of Query Centeral.

Processing of the request will internally obtain data from several sources, and analyze and build a prioritized report to identify any past safety or operational problems. The query response will reduce confusion and expedite decisions to deny entry or to initiate safety inspections.

Ultimately, Query Central will interface with information systems operated by United States Customs, Departments of Agriculture, various states, and Mexico and Canada to provide all information available on a local situation.

(Query Central continued on Page 4)

# Intermodal sites on short line railroads could quickstep rural marketing

As Class I railroads pull away from less-than-trainload freight, short line railroads with adaptability to intermodal facilities may present a solution to the dilemma faced by farmers, rural manufacturers, other shippers, and product specialty operators. Mark Berwick, North Dakota State University and Upper Great Plains Transportation Institute researcher, outlines the potential for intermodal facilities in a new study.

Berwick created an economic engineering model to estimate start-up and operating costs of an intermodal facility located on a short line railroad. His model has several useful features. Costs can be estimated for different equipment configurations and sizes of facilities. In using sensitivity analysis, Berwick provides insight into investment decisions. The Berwick model provides information for shippers, short line railroads, economic developers and Class I railroads.

North Dakotans are already well-versed in the importance of short line railroads as an alternative for continuing rail service on lines deemed unprofitable by Class I railroads. Short line operators may also enhance their traffic base and customer service by adding an intermodal option.

The relative importance of a single value-added venture is much greater for a short line carrier than for a large Class I railroad, his research shows.

Partnering rural communities, producers, producer-initiated value-added processors, rural manufacturers, and a local short line carrier in the start-up and operation of a rural intermodal loading facility presents opportunity for economic expansion of the rural community and surrounding area.

People in the agriculture community are pursuing value-added ventures and exploring the value of identity-preserved products. To be able to have the option of shipping less-than-trainload quantities with reasonable transportation rates, Berwick points out, is increasingly critical.

Intermodal is used in domestic and international shipments. While the domestic movement is usually truck-rail, internationally it can be a truck-rail-ocean combo or any viable mix. The popularity of containers has increased in international trade. Containers would ensure North Dakota producers that their organically grown wheat or soybeans for export would arrive intact, preserving the quality of these identity-preserved commodities.

In analyzing intermodal traffic originating in North Dakota through the Public Use Waybill, volume decreased from 1995 to 1997. This decreasing volume reveals North Dakota shippers do not have the opportunity to participate in the intermodal growth enjoyed by

most of the United States. Application of information from Berwick's research could invite investment in intermodal prospects.

An intermodal loading facility would be needed. Berwick's base case scenario used an 80-acre facility with 5,000 feet of track, two powered switches and two internal switches. To fence the perimeter on three sides required 3,960 feet of fence. Forty acres would be paved with six work lights and six reefer hookups. A 1,500 square foot building would be built for office and storage space. With a manager and four yard employees, the facility would need one lifter, one hustler, two chassis and no forklifts.

His analysis shows the relationship between equipment investment and total annual costs, and track investment and total annual cost is that as investment increases in these items, total annual costs increase at a relatively smaller rate.

Actual demand for intermodal service is difficult to quantify. Trade-offs exist using rail versus truck including shipping time, door-to-door delivery, and control of the container or trailer and the contents. Shippers also assess costs of shipping a distance to an intermodal facility, performance of the facility and the railroad serving the customer.

(Intermodal Sites continued on Page 11)

### Long-term rail service availability key agricultural market ingredient

The success of United States production agriculture is closely tied to a healthy and competitive rail system. It's important to understand recent changes in the railroad industry and in the services they offer agricultural shippers. Changes in both industries influence logistical choices and the distribution of risk, reward and cost along marketing channels.

Upper Great Plains Transportation Institute associate research fellows Kimberly Vachal and Dr. John Bitzan studied the long-term availability of railroad services for U.S. agriculture. Through review of existing data and a Delphi survey, they describe trends in rail service and their potential impacts on agricultural shippers, projecting through 2010.

Vachal and Bitzan contend understanding these emerging trends is critical to making discerning resource allocation and policy decisions that affect the future of the rail grain industry. Further, they note, rail service is a key component in the long-run competitiveness of the U.S. grain and oilseed industry in delivering products to domestic and international markets.

Rail service encompasses a broad scope of issues that surround price, efficiency and reliability. Rail rates and freight programs have evolved substantially these last 20 years as railroads have been given freedom to use differential pricing, service and rate structures to grow their businesses, and encourage shipper

investment aimed at increasing efficiency for shipping via rail.

Vachal and Bitzan reviewed earlier research and conducted a Delphi survey to develop a consensus of industry experts regarding their expectations for the rail grain industry. A series of three questionnaires led to several future expectations:

- Further consolidation of the rail and elevator industries
- Increasing prominence of the HAL (286,000 pound) cars in grain service
- An increase in rail rates from 1 to 4 percent annually during the next decade
- Expanded use of shuttle/efficiency rail programs for major grains
- An increased use of market-based car ordering systems
- Growth of the short line rail network
- Small market-scale, but large volume, increases in the share of grain marketed via container

These expert opinions will be considered in future research and discussions regarding longerterm implications of government policy and market investment decisions in the rail grain sector.

To obtain the full report "The Long-Term Availability of Railroad Services for U.S. Agriculture," DP-136, contact the Upper Great Plains Transportation Institute at North Dakota State University, Fargo.

Query Central (cont. from page 2)

Query Central will use the latest web-based technologies. It will be developed through North Dakota State University with the expected basic phase one system operational by September 2001. The research is supported by an initial \$500,000 grant.

Early deplyment will be on the southern border states but Query Central will eventually see widespread use across the United States.

This system will enhance the work done in the last decade on motor carrier safety by the law enforcement community. Query Central will use the latest web technology and be optimized for wireless operation. It will also be able to deliver information to a variety of devices. Operating through browser-based secure, virtual private networks on the Internet, users need make a single, simple query. The system itself will make secondary internal queries to assemble the requested information.

For more information contact Brenda Lantz at (303) 969-5140 or brenda lantz@ndsu.nodak.edu.

### 5

# Mountain Plains Consortium creates multi-level opportunities

The math is simple. Take four universities dedicated to creating better transportation through combining expertise from multiple programs, add the numerous modes of transportation that serve the Mountain Plains Consortium geography and cap it with cooperation from Canada and Mexico and you multiply opportunity.

Members of the Mountain Plains Consortium – North Dakota State University, Colorado State University, the University of Utah and the University of Wyoming – bring various campus disciplines together to serve student educational needs and offer transportation research and learning opportunities.

The MPC is one of 10 competitively selected university transportation centers in 10 federal regions in the United States. MPC represents Region 8, which includes North Dakota, South Dakota, Montana, Wyoming, Colorado and Utah. The program is funded on a 50-50 matching basis by the U.S. Department of Transportation. The grant has been awarded each year since 1988.

With a theme highlighting rural and Intermodal transportation, the MPC looks at the spatial and economic character of the region and at the critical issues common in Region 8 and the broader geographic region. Seven focus areas define and guide the research selection process:

- Rural transportation safety
- Rural transit
- Low volume roads and bridges
- Intermodal freight transportation and logistics
- Environmental impacts
- Tourism and recreational travel
- International cross-border traffic

The five-year strategic plan the MPC developed was approved in September 1999. That plan will support the seven focus areas. The plan also opens itself to innovation and ideas as research continues, invaluable in a program with such energy and synergy.

Collectively the MPC universities coordinate and integrate concepts from many disciplines including engineering, planning, economics, business, geography, computer science and operations research. Resident and non-resident courses in both classroom and distance-learning programs support education and research. The research focus areas encompass the surface modes of highway, transit and railroad, as well as Intermodal freight movements.

Another dimension addresses multi-national transportation including educational and technology transfer activities. A major strategy is to engage universities in Canada, Mexico and the U.S. in broader partnerships.

MPC is a constantly growing program, accomplishing much along the way. In the last year alone, nine MPC project reports and a FRA (Federal Railroad Administration) report on railroad mergers were completed.

Through 1999, MPC produced a library of 114 research reports and 37 student theses or dissertations, all while attracting new faculty to the field of transportation. MPC, since 1988, funded 55 different principal investigators and developed or adapted 18 transportation graduate courses for delivery over the TEL8 distance learning network.

TEL8 is a particularly exciting regional telecommunications network. The system carries a two-way interactive audio and video signal to conferences and classrooms at respective sites. TEL8 greatly enhances and improves the cost-effectiveness of the MPC. The TEL8 network includes state transportation departments in North Dakota, South Dakota, Montana, Wyoming and Utah.

MPC universities continued to teach most of their pre-existing transportation courses and exceeded the funding levels specified by the U.S. Department of Transportation. This helped leverage further funding from agencies such as

(MPC continued on Page 11)

### TEL8 continues to expand offerings

TEL8, the Federal Highway Administration's telecommunications system dedicated to transportation in Region VIII, plans additional programming. The already successful program offers transportation-related programming and training to its six-state, nine-site videoconference network.

Now offered are the popular InfoX and TranxX Department of Transportation (DOT) sponsored series, FranklinCovey courses, professional management and training classes, technology transfer seminars and teleconferencing among the network's DOT's and Mountain-Plains Consortium (MPC) universities.

This year's plans from TEL8 will include graduate level courses in transportation, an MPC research report seminar series, MPC short courses and several professional management training seminars.

The programming effort is led by Julie Rodriguez, TEL8 program director and UGPTI transportation economist. Rodriguez initiates and coordinates TEL8 program development and chairs the TEL8 programming committee. The programming committee includes members from all nine TEL8 sites and is responsible for assessing and evaluating TEL8 programming.

The past year two TEL8 DOT sites, Utah and Wyoming, expanded their in-state network to incorporate district-level videoconference systems. A total of eight district-level DOT sites participated in TEL8 events during 1999-2000. Additionally, a third TEL8 DOT site, South Dakota, initiated an expansion to three of their districts with plans to activate these sites during 2000.



North Dakota DOT employees in Bismarck, ND, take part in a graduate education course via TEL8 from North Dakota State University in Fargo.

6

# ATAC studies ITS for small to medium size cities

The Advanced Traffic Analysis Center (ATAC) is a technology support center for small to medium size urban areas in their efforts to improve traffic operations. ATAC assists through powerful analysis tools and advanced technologies. They currently have several studies underway to assist their home metropolitan area, Fargo and West Fargo, N.D., and neighboring Moorhead, Minn.

ATAC has partnerships with North Dakota State University departments of computer science and civil engineering. With them, ATAC is conducting research on applications of artificial intelligence for traffic signal control and on effective traffic management in construction zones. Two graduate students and three undergraduate students work with the program.

Among studies, which include both professional and student staff in research, are:

• North Dakota's Intelligent Transportation System Plan examines the unique characteristics of the transportation system, users and agencies in North Dakota to outline potential areas for intelligent transportation system (ITS) deployment. The plan aims to develop a framework for guiding ITS projects in the state to be consistent with national ITS architecture and standards, and that would allow seamless operation of various systems in state and out-of-state.

- Analysis of Construction and Maintenance Zones Traffic Management studies work zone traffic management practices in both rural and urban work zones.
- Evaluating Transit Signal Priority. Using real-time tracking of buses and priority treatment at traffic signals, this project examines the potential of implementing transit signal priority in a medium-size urban area. The study examines different trade-offs of expediting bus operations through signalized intersections and the associated increase in delays to automobiles.
- Corridor Signal Timing and Coordination partners ATAC with local and state transportation officials to improve traffic operations on key corridors. Initial work was in Fargo-Moorhead but work is underway to identify other corridors in other metropolitan areas in the region. these analyses involve extensive data collection and applying analysis software to improve traffic flow and reduce delay to motorists.

The ATAC traffic laboratory is equipped with powerful computers and state-of-the-art software. The traffic laboratory also serves as the ATAC training facility and provides hands-on opportunities for exploring various traffic control strategies using traffic signal controllers and traffic simulation.

## **Student Profiles**

#### **Dennis Jacobson**

A pioneer of sorts, Dennis Jacobson joined the first class of the Mountain-Plains Consortium TEL8 Network, studying from his home in Bismarck, N.D. TEL8 is a distance learning and communications system



that maximizes technology. He completed all his course work through TEL8 and is nearing completion of his master's degree program in civil engineering.

With the North Dakota Department of Transportation for almost three decades, Jacobson is excited about the positive link between the UGPTI and the NDDOT. The NDDOT is a heavy user of the staff and assets at North Dakota State University, he says, noting the cost effectiveness of the partnership. Jacobson encourages efficient use of technical work forces and increased productivity.

He recently completed an assignment with the NDDOT as east region engineer. He was responsible for overall management of 300-plus employees, and construction and maintenance operations for the eastern half of North Dakota. He is now director of Quality Assurance. One of his dreams would be to establish a student design center at NDSU to work with transportation engineers. This applied research would benefit many entities. Something of a transportation evangelist, Jacobson wants to recruit more people to projects that benefit people through transportation.

A goal he developed through his experience is to find a way to obtain uniform performance for roadways. "Putting what we want where we want it, not wasting paving products and establishing roadways that work effectively, are essentials," Jacobson says. He adds that while engineers design by the inch and pave by the ton, everyone supports effective management of the entire process. This can happen with statistical process analysis such as he advocates.

Combining his TEL8 courses and his experience, Jacobson is interested in highway performance

measurement and monitoring. His current project is calibrating a pavement performance model using actual investment and condition data as collected by the department's paving management system. Completion of the study, he notes, will enable the NDDOT to better allocate fiscal resources and measure the impact of different pavement design, and management practices and procedures.

Jacobson, a colonel in the Army National Guard, is also completing a master's degree from the National Defense University in strategic studies. His next educational goal is a doctorate in some area of transportation engineering.

#### Kiel Ova

Through his graduate work at North Dakota State University at the UGPTI, Kiel Ova became even more convinced of the importance of transportation on the economy and society as a whole. "Working on



these projects has given me fire, motivation. It's something I enjoy doing," the master's degree candidate says.

His first project was with Jill Hough, an associate research fellow and transportation economist at NDSU, looking at the consolidation of township roads. Then he moved to the ATAC (Advanced Traffic Analysis Center) with Ayman Smadi, ATAC program director. Both fed his interest in geographical information systems and intelligent transportation systems.

His thesis case study uses the cities of Fargo, N.D., and Moorhead, Minn. Using a transit signal propriety model, they look at ways to provide preferential treatment to buses at traffic signals. This modification is much like, although having less priority as, the emergency vehicle signal interruption process at intersection signals. A priority for favoring buses could have many positive effects for public transportation. This project looks at the effects of non-priority street

(Student Profiles continued on page 9)

delay, bus travel time, and persondelay at intersections.

Ova appreciates the opportunities he's had with UGPTI and ATAC. He earned his bachelor of science degree in civil engineering in 1998 and wanted to do more. At the institute, he's had the opportunity to work with state-of-the-art traffic simulation models and software. "This is a great set up for my future," he says.

Transportation systems – with an emphasis on traffic engineering – are what Ova wants to do. He likes the idea of wrestling with urban corridors and signal systems, looking at cost and time benefits, efficiency and especially, safety. "Safety is the overlying objective in design," Ova has learned.

"The institute provides tools to develop as a young professional. They've given me lots of opportunities early on as a student. Being a co-author as an undergraduate is a plus," Ova says. He won two awards for papers from national transportation organizations.

He also founded the NDSU Institute of Transportation Engineers student chapter. UGPTI helped the group get going and continues to support the chapter today. Now with 30 members, they've taken field trips, attended conferences, and plan to expand to include more disciplines at NDSU. The organization's goal: "We want to get more people interested in transportation."

# Student Spotlight

She wanted to work on something to which she could make an emotional attachment. Researching transportation issues for disabled people in rural North Dakota has given **Jennifer Bjorge** the opportunity. The study she is doing with Jill Hough, an associate research fellow and transportation

economist at UGPTI, should help shape thinking about how best to deliver daily services to people with disabilities.

Their research hopes to determine what the transportation needs of the disabled are and if those needs are being

met. Mobility is essential and rural citizens must have viable transportation. If the research shows that needs are not being met, they will have accomplished one important task – diagnosing the problems helps find solutions.

Bjorge lauds the "people first" approach encouraged by professionals in the field of working with the disabled. Her work is for those people directly affected by transportation challenges, transit providers and the government. Growing up in rural North Dakota, she knows the miles it takes to purchase groceries, go to work, find recreational opportunities.

This project has also given her a different perspective on many things she has taken for granted in her own life of hiking, biking and walking. "For this issue I try to put myself in someone else's place," she says.

Awarded the Paul E.R. Abrahamson Scholarship, Bjorge is an agricultural economics student with a concentration in communications and public relations.

Her work experience at the UGPTI includes compiling and distributing surveys nationwide,

> analyzing results, doing reports and recommending changes where needed. She attended the International Transportation Institute conference and a conference to learn about the transportation

disadvantaged. She has also been a sales intern with Dow Agrosciences and a chemical sales intern with Appleton Farm Chemicals.

One of her pleasures has been her work at the institute. "I always feel like I learn something when I talk to these people. They're unique and fun and upbeat," Bjorge notes about her colleagues at UGPTI.

While a student, Bjorge has been active and on the deans' list. Her activities in agriculture, Alpha Gamma Delta, Bison Ambassadors, Blue Key National Honor Fraternity and Panhellenic Council contribute to her varied interests. She was the 1999 homecoming queen, too.

Her goal of helping people is well on its way through this evaluation of transportation needs and services for the disadvantaged.



### 10

# Student Scholarship Winners

The Paul E. R. Abrahamson scholarship awards for 2000 were presented to Jennifer Bjorge, Eric Berge, and Brock Lautenschlager. The scholarship is granted to undergraduate students pursuing a degree in agricultural economics with an interest in transportation.

The 2000 Transportation Engineering Scholarships were awarded to Jason Link and Derek Kost. The scholarship is granted to undergraduate students pursuing a degree at North Dakota State University in Civil Engineering with an interest in transportation.

Funding for the scholarships is provided by the Mountain-Plains Consortium through a grant from the United States Department of Transportation University Transportation Centers Program. The scholarships were presented to the winners at the UGPTI Annual Awards Banquet October 5, 2000.

#### Eric Berge

Interested in minimizing transportation costs through efficiency. Eric Berge hopes to work in grain merchandising. Commodity marketing is an interest enhanced by courses in agricultural economics.

Berge plans to graduate from North Dakota State University with a bachelor of science in agricultural economics.

He developed a financial plan for Roundup Ready sugarbeets through NAMA (National Agri-Marketing Association), is a member of the Agri-Business Club, and Saddle and Sirloin Club.

#### **Brock Lautenschlager**

Brock Lautenschlager created a custom option of study to concentrate in accounting in agricultural economics. He plans a career in the management and marketing industry in the grain merchandising industry following his 2001 graduation from North Dakota State University.

Lautenschlager is an Agri-Business Club and Golden Key National Honor Society member. He also organized intramural sports.

#### Derek Kost

As a youngster, Derek Kost traveled in California and wondered how people could find their way on the intricate highway systems in the larger cities. He noted freeways entangle with so many other raods, exits and entrances. When he came to North Dakota State University, he realized transportation was about more than moving people.

He viewed a government natural gas pipeline being run into Canada during his summer job. He noted the precision needed in the practical application of engineering.

A civil engineeing major, he will graduate in the spring of 2001.

#### Jason Link

Trains have been a fascination for North Dakota State University senior Jason Link since he was a boy. His civil engineering and transportation interest was mapped for him by his wondering about the many decisions needed to sustain and operate a railroad.

Link has worked for Ulteig Engineers Inc., Bismarck, N.D., for four summers. His experience allowed him to work with the sub-base and base foundation for an airport runway and the asphalt paving for the runway; street improvements that included storm and sanitary sewers, water mains and services; a pipeline route; a sludge pond for a coal-fired, electrical generating plant and aeration system for a sewer treatment pond.

He is vice president of Tau Beta Pi Engineering Honor Society and a member of both the Institute of Transportation Engineers and American Society of Civil Engineers at NDSU. He serves on the NDSU civil engineering student advisory committee.

### John M. Agrey Award

The 2000 John M. Agrey Awards were presented at the UGPTI Annual Banquet October 5, 2000. The recipients were Marshall Moore and John Finsness. The award recognizes individuals for their contribution in promoting transportation in North Dakota.

#### MARSHALL W. MOORE

For more than seven years, Marshall W. Moore served as director of the North Dakota Department of Transportation. His position was a capstone for years of service serving North Dakota and the region.

Moore distinguished himself as an engineer, legislator, fighter pilot and entrepreneur, earning the respect of lawmakers from North Dakota to Washington, DC. He has been one of few DOT directors who was also an engineer.

At NDDOT he addressed transportation needs throughout the state and furthered the growth of information technology. His comprehensive business plan reflected his 30 years in the private sector where he co-founded Moore Engineering, Midwest Technical Laboratory, and the architectural and engineering planning firm of Halvorson, Moore, Strague and Moore.

While his government service included four terms in the North Dakota legislature from 1981 to 1987, he also directed the North Dakota Farmers Home Administration from 1989 to 1992.

From 1994 through 1996 Marshall was active in the Western Association of State Highway and Transportation Officials, serving as president in 1996. He currently serves on the American Association of State Highway and Transportation Officials board.

In 1996, Marshall was chosen Man of the Year for Region I of the American Society of Highway Engineers.

#### JOHN I. FINSNESS

John Finsness served North Dakota transportation through his expertise in common carrier freight rates and rail transportation issues, skills honed from his earliest days working at the Minneapolis and St. Louis Railroad while studying law. A native of St. Paul, Minn., he graduated from the William Mitchell School of Law after military service.

In his near four decade career, Mr. Finsness was counsel for the transportation division of the Fargo Chamber of Commerce, railroad rate counsel for the North Dakota Wheat Commission, researcher with the Upper Great Plains Transportation Institute on long-range transportation issues and with the North Dakota Public Service Commission as an expert on freight rates.

He also served as a special assistant attorney general for North Dakota in rate litigation before the Interstate Commerce Commission, the federal district courts and several federal circuit courts of appeals.

Mr. Finsness retired in 1983, enjoying Florida winters and other travel with his wife, Evelyn.

Intermodal Sites (cont. from Page 3)

North Dakota has the Class I Burlington Northern Santa Fe, and the regional short line railroad Red River Valley and Western, and two local short lines, Missouri Valley and Western, and Northern Plains.

The development for intermodal facilities in North Dakota awaits application of Berwick's research. A positive environment exists to move North Dakota products to local, regional, national and world markets.

To obtain the full report "Potential for Locating Intermodal Facilities on Short Line Railroads" MPC Report No. 00-111 contact the Mountain-Plains Consortium at North Dakota State University, Fargo.

MPC (cont. from Page 5)

state and local transportation departments, U.S. Department of Agricultural, Federal Transit Administration, Federal Railroad Administration and the American Association of Railroads.

Each segment connects to the whole, ensuring the MPC vision to be a regional and national leader in rural and intermodal transportation and a North American center for cooperative education and information exchange.