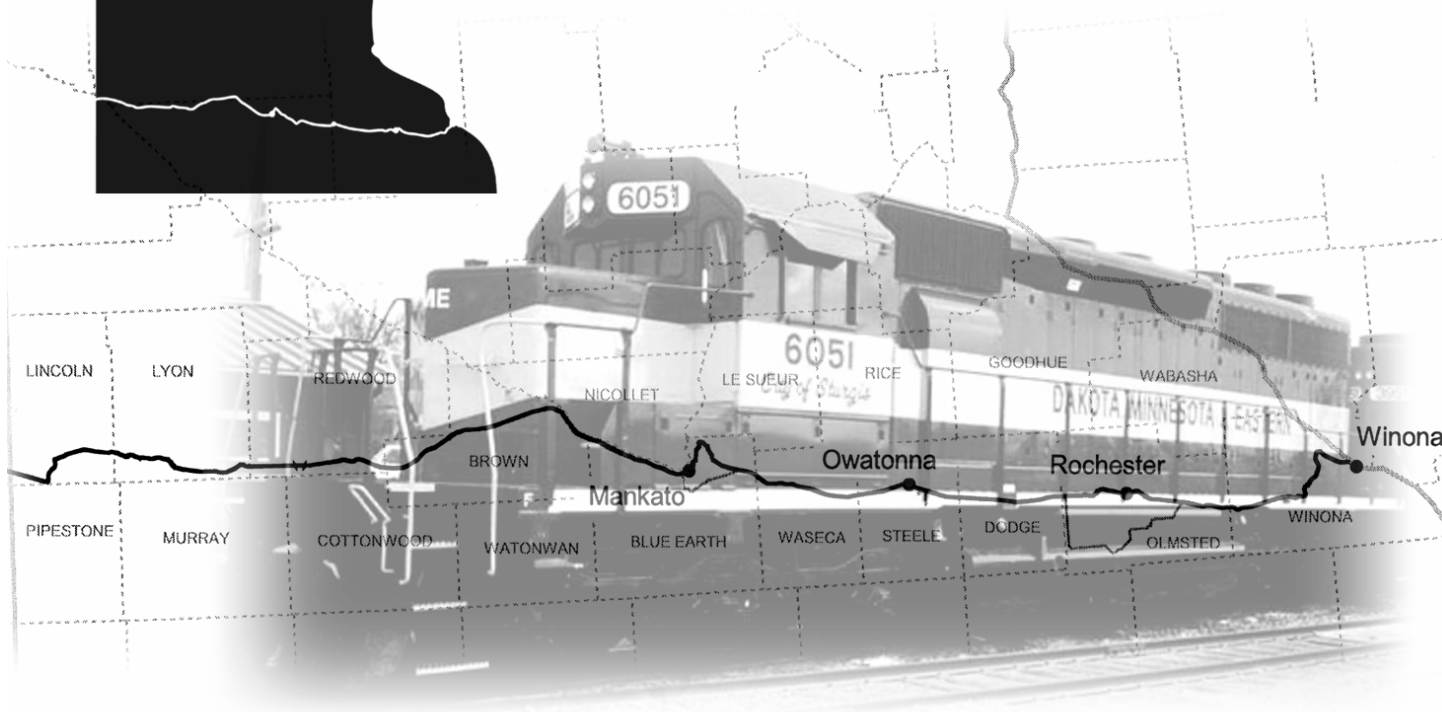




**DM&E**

# **Expansion in Minnesota**



**Dakota, Minnesota and Eastern Railroad Working Group**

**Final Report to the Legislature**

*April 2001*

Minnesota Planning develops long-range plans for the state, stimulates public participation in Minnesota's future and coordinates activities among state agencies, the Minnesota Legislature and other units of governments.

*DM&E Expansion in Minnesota* was prepared by the Department of Transportation and Minnesota Planning in fulfillment of Minnesota Laws of 2000, Chapter 479, Art. 1, Sect. 2, Sub. 9, with input and guidance from the Dakota, Minnesota and Eastern Working Group. The working group was chaired by Minnesota Planning and included representatives from the departments of Transportation, Trade and Economic Development, Public Safety, Natural Resources, Health and Agriculture and the Pollution Control Agency. The Working Group held monthly meetings and developed a Web site to keep people informed of the project and the group's activities.

The cost of preparing and printing this report was about \$100,000, not counting assistance provided by the working group.

Upon request, this document will be made available in an alternate format, such as Braille.



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# **DM&E Expansion in Minnesota**

## **Dakota, Minnesota and Eastern Railroad Working Group**

### **Final Report to the Legislature**

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## Summary

The Dakota, Minnesota and Eastern Railroad is one of the largest regional rail carriers in the United States and one of Minnesota's major grain carrying railroads. In 1997 the DM&E announced plans to expand, rehabilitate and increase the capacity of its 1,100-mile rail system. The U. S. Department of Transportation's Surface Transportation Board is currently reviewing the \$1.5 billion proposal for environmental impacts. If the project proceeds, train volumes on the line through southern Minnesota could increase from three trains to 37 trains per day.

The Minnesota Legislature created the DM&E working group to evaluate the federal draft environmental impact statement, summarize its findings and present recommendations to the Legislature on maximizing product movement and minimizing environmental, social and other public costs. *DM&E Expansion in Minnesota* presents the results of the working group's efforts.

The DM&E proposes to construct 280 miles of new rail track, mostly in Wyoming and western South Dakota, and rehabilitate 600 miles of existing rail line. All 220 miles of the DM&E's track in Minnesota would be reconstructed. New main line connections in Mankato and Owatonna and three new rail yards also will be built. In addition, an alternative to bypass the existing DM&E rail line through Rochester was developed.

The STB's draft EIS addresses project impacts in Minnesota, including land use, water resources, air quality, noise and vibrations, biological resources and safety. It describes areas of new construction and typical rehabilitation of existing tracks. The working group evaluated the draft EIS to develop an overall picture of the possible impacts on Minnesota and identify shortcomings in the STB's analysis. Agencies also submitted detailed comments to the STB.

The working group identified two key methods to minimize environmental impacts: conditions imposed by the STB in its approval of the project and federal and state permits. Agencies suggested specific conditions to the STB and are working with federal agencies to incorporate mitigation into permits. The DM&E has been cooperative in addressing Minnesota's environmental protection requirements.

Community partnership agreements were found by the working group to be the best method for involving local governments in siting issues and right of way acquisition. The STB encourages negotiation of mutually acceptable agreements between railroads and affected communities. DM&E has executed agreements with 27 of the 30 Minnesota cities through which the railroad passes.

The safety improvements contained in the agreements, however, do not always meet Mn/DOT's safety guidelines. The community agreements must, at a minimum, meet Mn/DOT guidelines. The agreements suggest that the DM&E will increase the level of warning devices as train levels increase.

Most Minnesota shippers believe the project will lead to reduced transportation costs and expanded markets for their products. However, studies of the project's economic impacts have yielded varying results. Studies typically reflect the geographic scale, whether national, regional or local, of concern to the parties conducting them. While the economic benefits of the project as a whole might be positive, the benefits to a particular community or individual might not.

Over the next several months the STB will evaluate the comments received on the draft EIS and prepare a final EIS. It will then issue its final decision on DM&E's application for authority to construct and operate the new rail line and associated facilities. If the project is approved, the DM&E can proceed with permitting and construction.

State agencies will continue to monitor the DM&E project and work with the railroad, federal agencies and local governments through permitting, construction and operations to ensure that the state's interests are served.

## DM&E Rail Proposed Expansion

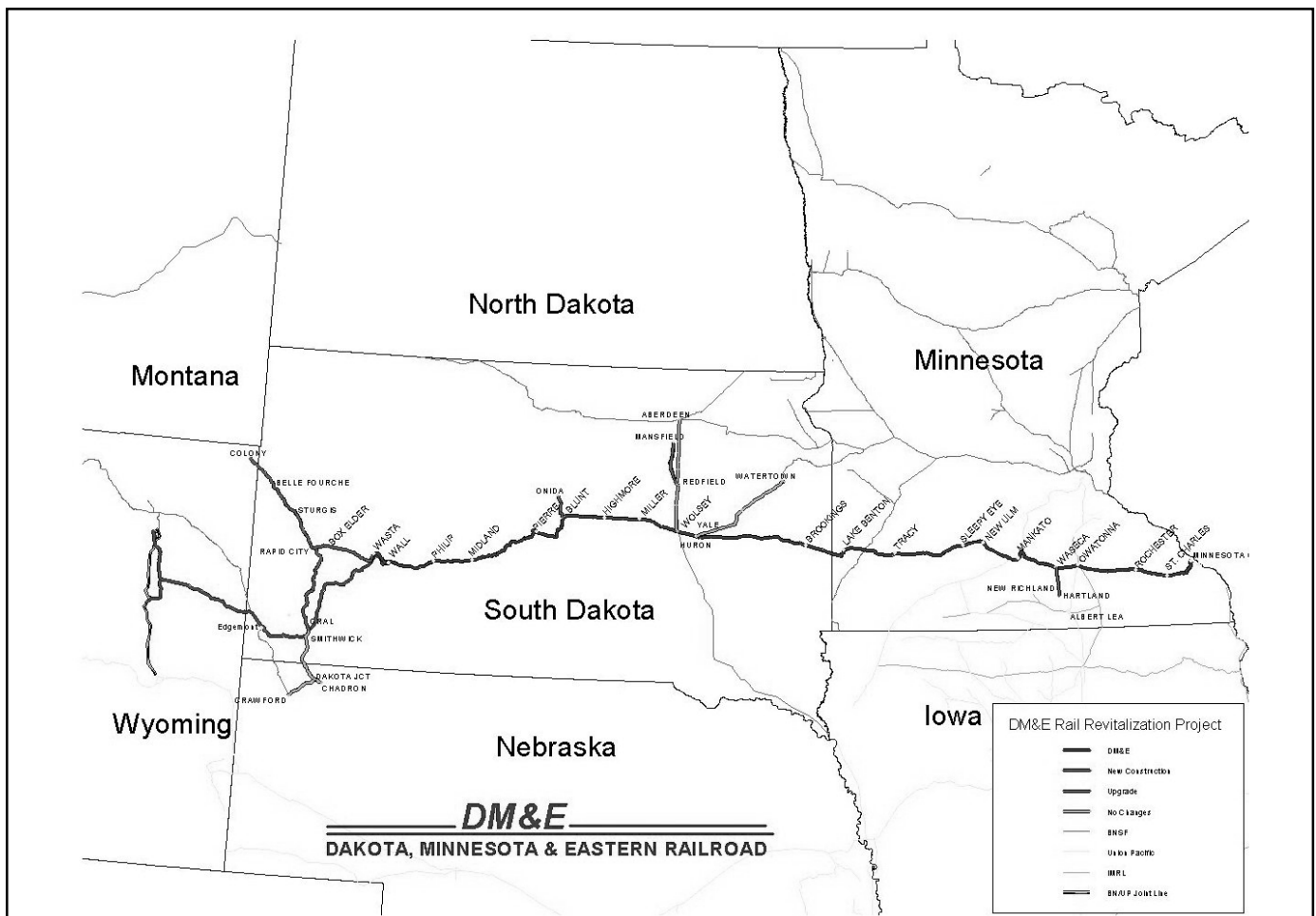
The Dakota, Minnesota and Eastern Railroad Corporation filed an application with the federal Surface Transportation Board in 1998 for authority to construct and operate new rail line and associated facilities in Wyoming, South Dakota and Minnesota, extending its existing operations into Wyoming's Powder River Basin coal mines. The STB determined that the proposed project satisfied the transportation aspects of federal law, but that environmental review under the National Environmental Policy Act had to be completed before the project could be finally approved.

In response, the 2000 Minnesota Legislature created the DM&E Working Group to document the effects of the proposed project on the state. The working group was charged with evaluating the federal draft environmental impact statement, summarizing its findings, and presenting recommendations to the Legislature on maximizing product movement and minimizing environmental, social and other public costs. It was to develop a final report of its findings six months after the STB issued the draft EIS on the project.

*DM&E Expansion in Minnesota* presents the results of the working group's efforts. It describes the project and its overall impacts on Minnesota, as well as the views of the working group member agencies on the adequacy of the draft EIS. It explores methods for minimizing environmental impacts and involving communities in siting and other issues. It addresses rail safety concerns, opportunities for moving Minnesota products on the DM&E and possible direct and indirect costs to the state. Finally, it outlines the next steps for the project and state.

### Railroad corridor dates from 1859

The Dakota Minnesota and Eastern Railroad Corporation began operations on September 5, 1986, on track acquired from the Chicago & Northwestern Transportation Company. Trains traveled the present DM&E corridor through Minnesota since 1859, about the same time as the formation of the city of Rochester and Minnesota statehood, and once included passenger trains. The corporation acquired lines from Rapid City, S.D., to Colony, Wyo., and Crawford, Neb., in 1996 from the Union Pacific Railroad, which purchased these segments of the C&NW in 1995.



Source: Powder River Basin Expansion Project Draft Environmental Impact Statement



The DM&E is a regional, or FRA class II, railroad and is one of the largest regional carriers in the United States. It serves one of the nation's most productive grain areas and is one of Minnesota's major grain carrying railroads, making it important to the state's economy.

The DM&E operates a 1,100 mile system, including 316 miles of track and trackage rights in Minnesota. The railroad's main line extends from Minnesota City, Minn., to Rapid City, S.D. At Rapid City, the DM&E splits northwest to Colony, Wyo., and south to Crawford, Neb. In 1997, the DM&E carried nearly 60,000 carloads systemwide, of which 50 percent consisted of grain and grain products. The railroad employed 350 people in 1997.

The DM&E serves 30 communities in southern Minnesota. Other railroads retained selected track ownership and control of isolated segments of mainline trackage through Mankato and from Minnesota City to Winona.

The DM&E connects with several rail lines in Minnesota: the Union Pacific Railroad at Mankato and Owatonna, the Canadian Pacific Railway at Winona and the I&M Rail Link at Owatonna and Hartland, Minn. The DM&E also connects with the Burlington Northern Santa Fe at several locations in South Dakota and Nebraska.

## The proposal

The DM&E proposal includes construction of 280 miles of new rail track, mostly in Wyoming and western South Dakota, and rehabilitation of 600 miles of existing rail line, for an estimated cost of \$1.5 billion. The proposed expansion has two purposes:

- Provide access for a third rail carrier to transport Wyoming's Powder River Basin coal eastward, promoting competitiveness and providing a low cost route to the Midwest and upper Midwest (The Union Pacific Railroad and the Burlington Northern Santa Fe Railroad currently serve the mines of the Powder River Basin.)

- Rehabilitate the line's existing trackage to address low speeds, inability to carry standard weight cars and safety problems associated with its existing rail line in Minnesota and South Dakota

Potential markets for coal traveling over the DM&E railroad include:

- Great Lakes utilities
- Rail-based utility plants in Wisconsin and Minnesota
- Chicago gateway access
- Mississippi River utilities

The DM&E estimates the proposed plan for expansion might increase the number of trains from the current three per day to 14 per day initially, and as many as 37 trains per day in 10 years.

At full implementation, the line could carry up to 34 coal trains (17 loaded coal hoppers and 17 empty cars returning to the mines) to supplement their current operation of three trains per day. A typical coal train consists of two locomotives and 120 coal cars, stretching as much as 8,000 feet in length and carrying approximately 15,000 tons of coal.

DM&E noted three areas of new construction in its application to the STB:

- More than 260 miles in South Dakota and Wyoming to reach the Powder River Basin
- 2.9 mile connection to the I&M Rail Link in Owatonna, Minn.
- 13.3 mile line to bypass the UP tracks in Mankato, Minn.

The preferred Powder River Basin extension is a new line of approximately 262 miles long diverging from the DM&E's main line at Wasta, S.D., running southwesterly along the Cheyenne River drainage basin, using a 13 mile segment of the DM&E's existing north-south line through Oral, S.D. After entering Wyoming on new alignment and trackage the line would terminate at 11 mine load-out sites in Converse and Campbell counties.

The rebuilding of its existing right of way from Wasta to Minnesota City will allow train speeds to increase to 49 mph and will provide heavier rail to accommodate heavier axle load unit coal trains. Several new yards and sidings are proposed along the mainline. Approximate locations of these supporting facilities are presented; however, the exact locations of these facilities are not yet known.

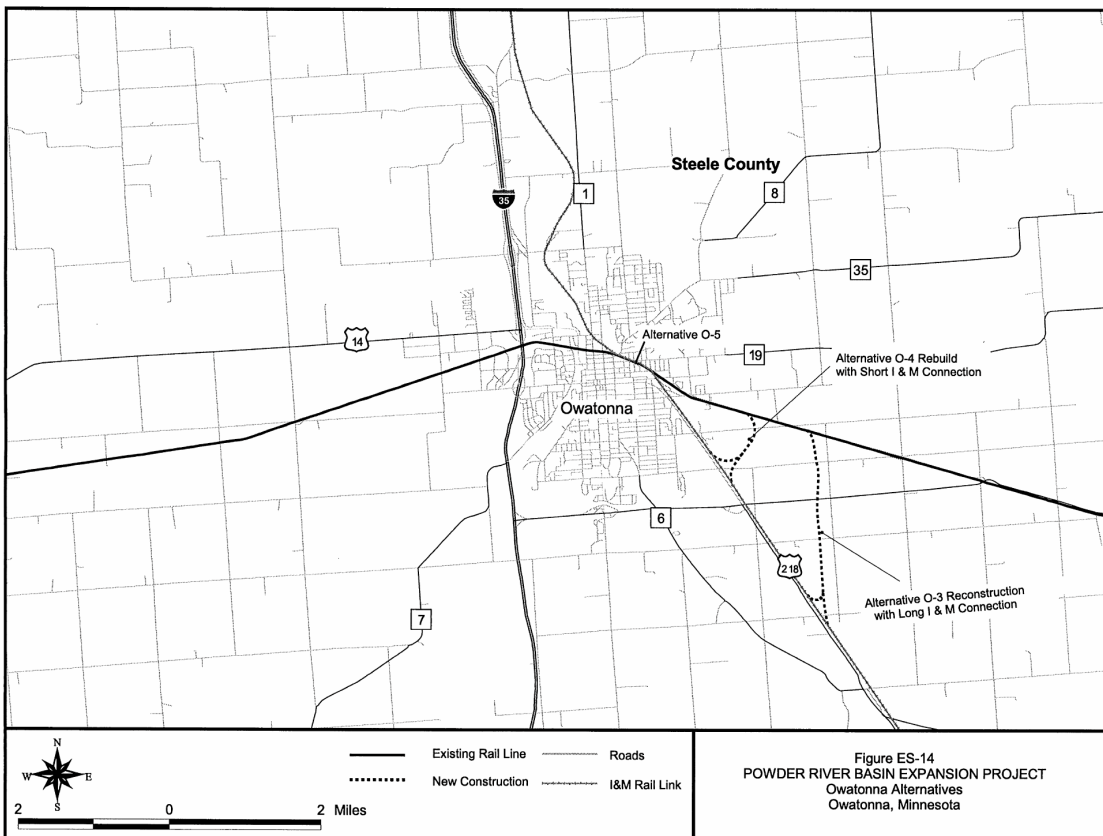
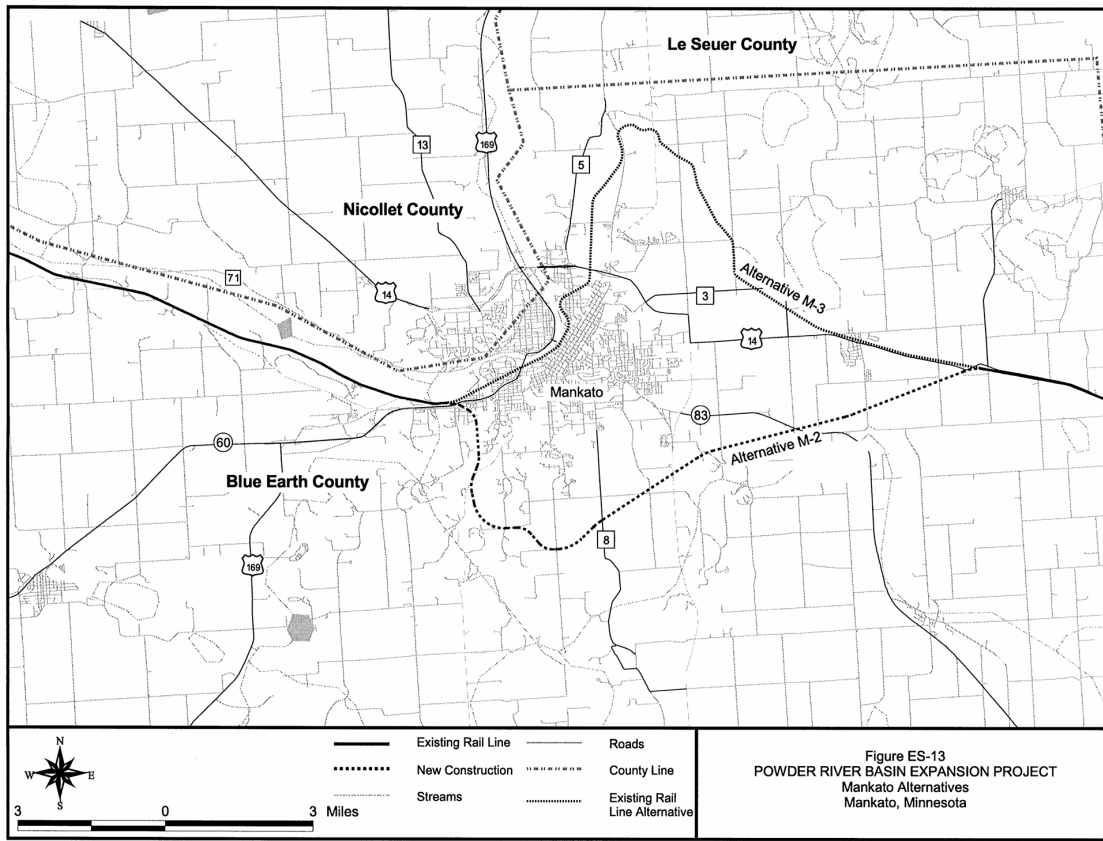
## The proposal for Minnesota

All 220 miles of the DM&E's existing track through Minnesota, currently in poor condition, would be reconstructed. Reconstruction is proposed to be restricted to its present right of way.

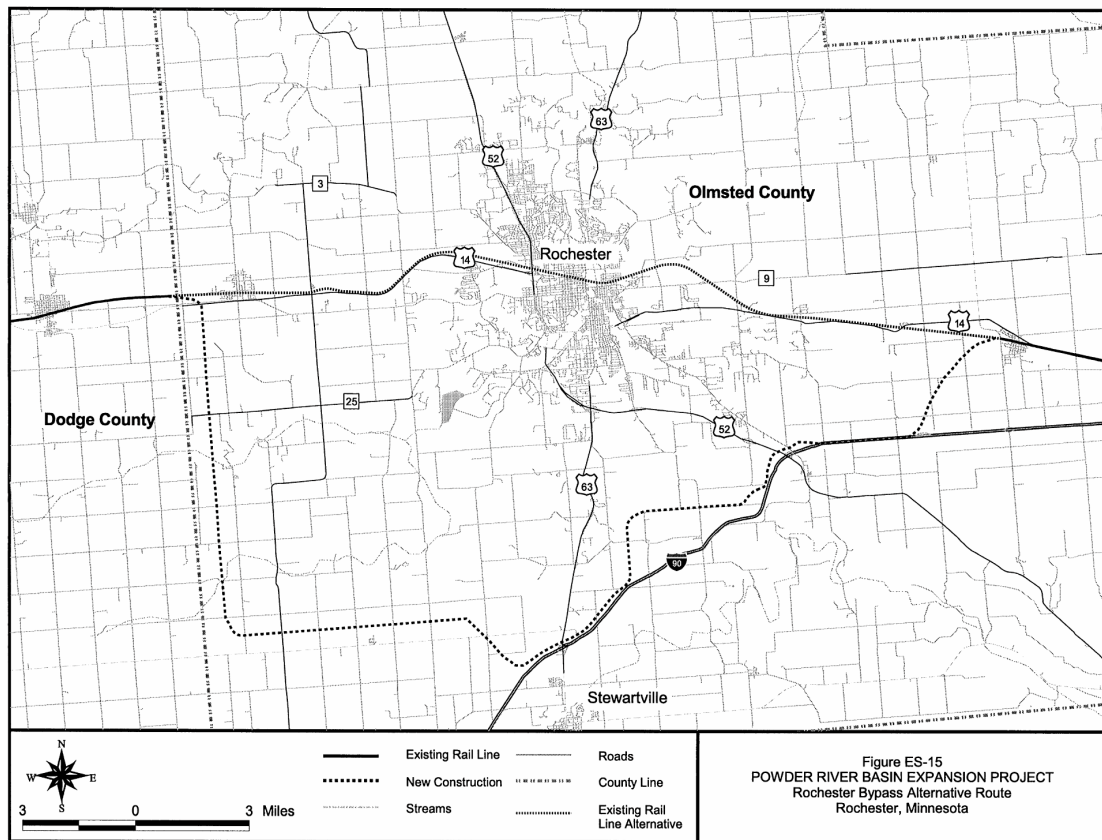
Marshalling yards, sidings and new trackage to connect portions of the DM&E line also are proposed. Minnesota portion includes:

- A new main line to connect two sections of DM&E's existing trackage in Mankato
- A new rail line connection between DM&E and I&M Rail Link at Owatonna
- Three new rail yards

In addition, an alternative to bypass the existing DM&E rail line through Rochester was developed as a result of the environmental review process and is addressed in the draft EIS.



Source: Powder River Basin Expansion Project Draft Environmental Impact Statement



Source: Powder River Basin Expansion Project Draft Environmental Impact Statement

**Mankato bypass.** DM&E has proposed a bypass at Mankato where it has trackage rights on UP owned tracks through the city. Owning the track, the UP controls the scheduling of traffic and use. The DM&E proposes two bypass alternatives:

- Rebuilding within the existing corridor through the city which will require UP permission and could potentially impact the city's flood protections
- A 13.3 mile bypass south of Mankato. This alternative would convert approximately 196 acres of agricultural land, none identified as prime, and 68 acres of woodland to right of way.

**Owatonna connection.** DM&E proposes an improved connection with the I&M Rail Link at Owatonna. Two connection alternatives would require addition trackage and right of way. The DM&E objective is to retain and improve its I&M Rail Link connection to give it northward and southward rail market access. The bypass would convert a maximum of slightly more than 70 acres of agricultural land to right of way. The alternatives are:

- Reconstruction of approximately 9.5 miles of existing trackage through Owatonna plus 2.9 miles of new line southeast of the city.

- Reconstruction of approximately 9.5 miles of existing trackage through Owatonna plus 1.7 miles of new line east of the city.

**Marshalling yards.** DM&E proposes three new staging and marshalling yards in Minnesota, where trains are assembled and disassembled and held for dispatch to their next destination:

- East Staging and Marshalling Yard – located between Lewiston and Utica by the railroad's eastern terminus, this 600 foot wide by 2 mile long yard would convert nearly 153 acres of agricultural land, 94 acres being prime, to right of way.
- Waseca Marshalling Yard – located just west of Waseca, this 300 foot wide by 2.2 to 2.6 mile long yard would convert approximately 80 acres of agricultural land, 74 acres being prime, to right of way.
- Middle East Staging and Marshalling Yard – DM&E proposed two alternative locations for this 400 foot wide by 2.3 to 2.4 mile long yard. One is immediately east of New Ulm; the other is 4 miles west of Mankato and is within the new statutory boundaries of Minneopa State Park. The New Ulm site would convert 86 acres of pasture, 16.8 acres of woodland and 12.6 acres of cropland, none prime, to right of way.



**Rochester bypass.** The city of Rochester has proposed a major bypass around the city. As proposed, it would add 34.1 miles of trackage through agricultural land and convert 727.3 acres of agricultural land, 606 acres being identified as prime, to right of way. Rochester proposed this bypass to eliminate what it believed would be detrimental impacts to its community.

### **Expansion proposal triggers environmental review**

After reviewing the DM&E's application for new rail construction, the STB issued a decision on December 10, 1998, finding that the proposed project satisfied the transportation aspects of federal law, but that environmental review under the National Environmental Policy Act must be completed before the project could be finally approved. The EIS is intended to inform federal, state and local agencies, communities and the general public about the potential environmental effects of the proposed project.

The STB developed a draft scope of work for the EIS in June 1998, and a final scope in March 1999, after holding public meetings and taking comments and suggestions. On October 6, 2000, the STB published the draft EIS for the project. The comment period on the 12 volumes and more than 5,000 pages of the draft EIS was originally set for 90 days. However, it was extended an additional 60 days to allow people adequate time for review. The comment period ended March 6, 2001.

As part of the environmental review process, the STB held public meetings throughout the project area, including two in Mankato and two in Rochester, to provide a forum for comment on the draft EIS. Hundreds of people representing communities, businesses, state agencies and other interests attended each of the four Minnesota meetings.

The STB draft EIS discusses several issues, alternatives and potential modifications to the DM&E proposal. It compares several alternative routes into the Wyoming coalfields. It examines four possible bypasses along the existing DM&E main line at the cities of Mankato and Rochester in Minnesota and Brookings and Pierre in South Dakota. The bypass alternatives for Rochester, Brookings and Pierre were developed as a result of the environmental review process; they were not part of the original DM&E application.

The STB took positions on three of the four bypass alternatives

- Rochester – no position on bypass
- Pierre – rejected bypass
- Brookings – looked favorably on north side bypass, assuming funding can be obtained
- Mankato – endorsed south side bypass, unless the DM&E agreement with UP to share its right of way can be reached

In addition, the STB favored building a new connecting track with the I&M Rail Link in Owatonna.

The STB will prepare a final EIS reflecting further analysis and the comments received on the draft. It will then issue its final decision on DM&E's application, determining whether to give final approval to the project, and if so, appropriate environmental mitigation to require and its potential costs.

### **Previous STB decisions provide insights**

The STB's final decision on the project will not be made until it has considered the comments and suggestions received on the draft EIS. However, a look at STB statements about the project and previous STB decisions can provide insights into the possible actions it might take.

#### **STB RECOGNIZES PROJECT NEED**

"The [STB], in its December 10, 1998 [construction application] decision, indicated the No-Action Alternative could result in the DM&E ceasing to be a viable railroad." The board also said, "Should this occur, it appears unlikely that another rail carrier would acquire the DM&E system given its deteriorated condition and limited revenue base. Therefore, rail service along the existing system could cease." (DEIS, pp 3.2-2)

### ***STB priorities favor interstate commerce***

STB's Web site suggests that its primary obligation as a federal regulator is to protect interstate commerce. The stated goal of the STB is to exercise regulatory oversight, only when necessary, to respond to the imperfections in the marketplace. Where regulatory oversight is necessary, the STB seeks to ensure such oversight is exercised efficiently and effectively, integrating market forces, where possible, into an overall regulatory model. In this regard the STB works to resolve matters brought before it fairly and expeditiously. Through use of its regulatory exemption authority, encouragement of private sector solutions to disputes, streamlining of its decision-making process, and consistent application of legal and equitable principals, the STB seeks to facilitate commerce by providing an effective forum for dispute resolution and the approval of appropriate business transactions.

### ***Specific decisions reflect compromise***

Some recent STB cases show interest in reaching compromises between interstate commerce and local interests.

- The STB encourages voluntary resolution of disputes between communities and the railroads rather than imposing pressure in the negotiations between contestants. If the dispute cannot be resolved locally on a voluntary basis, the STB reluctantly invokes its powers.



■ The “Consolidated Rail Corporation Breakup” and its anticipated effects in Cleveland, Ohio, is the most recent example of STB policy at work. In the Conrail proceedings, a number of concerns were raised with the STB regarding the rerouting of trains through urban and suburban areas of Cleveland. Most of these disputes were resolved voluntarily through agreements among the railroads, the communities and individual interests.

■ Another STB action involved the Union Pacific takeover of the Southern Pacific in Kansas where several municipalities faced a significant increase in the volume of rail traffic. In this case, the municipalities made reasonable appeals based on sound data. The STB granted relief by imposing conditions on the number of trains.

■ In the relocation of the former Nickel-Plate, now a Norfolk Southern Railroad line in Erie, Pa., the existing alignment runs in the center of a city street. The railroad proposed to relocate several miles of its track to the adjacent CSX main line right of way. A portion of the existing line will continue to serve as an industrial spur.

## Potential Impact on Minnesota

Depending on the alternatives selected, the more than 220 miles of track reconstruction and 16 to 50 miles of new track proposed for Minnesota have the potential to cause various impacts. The STB’s draft EIS addresses effects of these activities, plus effects from increased rail operations. It describes areas of new construction and details of typical rehabilitation efforts on existing tracks. Approximate locations of supporting facilities such as staging/marshalling yards and maintenance facilities are presented; however, the exact locations of these facilities is not yet known. The working group evaluated the draft EIS to develop an overall picture of the possible impacts on Minnesota and identify shortcomings in the STB’s analysis.

### Draft EIS outlines possible impacts on state

Volume II of the draft EIS covers impacts of the DM&E’s proposed project on Minnesota. The discussion includes land use, water resources, air quality, noise and vibrations, biological resources, safety and hazardous materials impacts resulting from new construction, reconstruction and operations.

**New construction** – The draft EIS outlines alternatives for Minnesota that call for construction of new trackage, as well as marshalling yards and other facilities. The extent of possible impacts depends on which alternatives are pursued. Major issues with the new construction portions of the project in Minnesota include:

- Damage to wetlands and streams
- Loss of agricultural land, including prime farmland

■ Impact on Minneopa State Park from the Middle East yard alternative

■ Karst/ground water issues with the East yard and Rochester bypass

**Reconstruction** – The draft EIS notes sensitive resources along the DM&E’s existing right of way that could be adversely affected during reconstruction, if proper procedures are not followed. These include:

■ 17 river crossings – rivers in the project area include the Mississippi, South Fork of the White Water, Zumbro, Straight, Blue Earth, Little Cottonwood, Cottonwood and Redwood

■ 115 intermittent stream crossings

■ More than 25 perennial stream crossings

■ 30 irrigation ditch crossings

■ More than 185 acres of wetlands

**Operations** – The draft EIS concerns in this area center around the effects that increased train traffic might have on Minnesota communities which include noise, vibrations and safety.

■ 1,000s of noise sensitive receptors including residences, churches, hospitals and schools could be impacted by levels or frequency of noise from trains

■ 100s of businesses and other restructures, some with sensitive equipment, could be impacted by increased vibrations

■ Crossing safety and delays – school buses, emergency vehicles and other traffic on roadways crossing the DM&E tracks will encounter more trains

The draft EIS also notes that the project brings safety improvements – to track and crossings – and that traffic levels could be significantly less than the maximum, thus reducing noise, vibrations and other affects related to increased train traffic.

### Agencies weigh in on draft EIS

In evaluating the draft EIS, each working group member agency focused on its areas of technical expertise and responsibilities. Most provided extensive comments to the STB, outlining concerns with the document and mitigative measures the STB should consider to address possible impacts to Minnesota. The following is a summary of some of the significant issues agencies identified.

#### Minnesota Department of Transportation

Mn/DOT believes the DM&E is a critical element of a balanced multi-modal transportation system in Minnesota. Competitive transportation options for shippers in Minnesota are critical and this railroad provides economic advantages to the agricultural

community in southern Minnesota. Furthermore, the continued operation of the DM&E is in the best interest of the state and the customers that use its system.

Conversely, the depth of analysis provided in the draft EIS does not allow Mn/DOT to make a statement in support of the Powder River Basin project (the level of analysis is not adequate). The following summarizes Mn/DOT's concerns:

**Grade crossing safety improvements.** Mn/DOT commissioned a study of Minnesota's southern rail corridor, *Southern Minnesota Rail Corridor Safety Plan*, completed in February 2000. Mn/DOT expected the safety recommendations identified in the study would be the basis for grade crossing safety improvements as part of this expansion project. The study recommendations, particularly the determination of appropriate warning devices at grade crossings, have not been included in the community agreements. Mn/DOT is especially concerned that:

- Use of existing vehicular traffic volumes, rather than projected volumes, is a major shortcoming in the draft EIS methodology.
- The STB apparently did not evaluate, nor consider, the need for grade separations – Mn/DOT's *Southern Minnesota Rail Corridor Safety Plan* identified 20 potential candidates for grade separations along the DM&E corridor.
- At-grade crossings of four-lane divided highways are unacceptable. Because safety is compromised, Mn/DOT will not accept at-grade crossings of a mainline railroad on any four-lane divided roadway at any location in Minnesota.

Mn/DOT specifically recommends that the STB:

- Require the DM&E to install gate arms at all locations with active warning devices.
- Require the DM&E to install stop signs at all unsignalized crossings.
- Order the DM&E to pay for all costs associated with grade crossing safety, including installation of signs, signals, crossing surfaces and construction of appropriate roadway approach work.

**Traffic delays.** The draft EIS analyzed traffic delays at all high vehicular volume grade crossings and determined that an additional 34 trains per day would not result in traffic delays in Minnesota. Mn/DOT takes strong exception to this conclusion. Mn/DOT strongly encourages the STB to revisit the results of its traffic delay analysis. The STB needs to identify mitigation measures, such as grade separations and emerging Intelligent Transportation Systems technology to address this serious problem.

**Community impacts.** The STB should acknowledge that some of the 37 trains used in the analysis will interchange at Mankato and at Owatonna, resulting in fewer trains traveling through

Rochester and Winona. Further, impacts to Rochester and Winona are not completely addressed.

- For the draft EIS to be silent on the impacts this project will have on the city of Winona is arguably a fatal flaw.
- With the additional train traffic in Winona and barge loading at the Port of Winona, it appears that new construction may be necessary. It is Mn/DOT's position that any new construction necessary at Winona should be subject to stringent review by the STB. The STB must address these concerns, identify necessary mitigation measures, and identify who will pay for the mitigation measures.
- The significant increase in train traffic the DM&E will generate within the city of Winona justifies the STB specifically ordering the DM&E to pay for all costs associated with construction of two grade separations within the city of Winona.
- Mn/DOT is extremely disappointed that after two and a half years of study, the STB could not identify a preferred alternative for the city of Rochester.
- The train traffic increases proposed by the DM&E will significantly exacerbate traffic and circulation issues in Rochester. Grade separations will help improve safety, while minimizing vehicle delay and emergency access issues.

**Mitigation.** The STB should specifically order that the cost of all mitigation is the sole responsibility of the DM&E Railroad, including all costs associated with grade-crossing safety improvements and necessary grade separations. In addition, it is imperative that the DM&E work with Mn/DOT and local governments to minimize the impact of the additional passing sidings and to determine which crossings should be closed.

### **Minnesota Pollution Control Agency**

**Eastern terminus.** The way coal will be transferred at the eastern terminus at or near Winona was not detailed in the draft EIS. Failing to address this aspect of the proposal is inconsistent with applicable provisions of the Council of Environmental Quality Regulations for implementing the National Environmental Policy Act. This is clearly an action related to the overall proposed project, yet the draft EIS is silent on the matter. The MPCA has several concerns related to the possible effects such a transfer could have upon the environment as detailed in the MPCA comment letter to the STB.

**Karst topography.** The draft EIS failed to demonstrate an adequate understanding of Minnesota's karst topography – an area located in the southeastern part of the state where, due to the unique terrain, the potential for geologic instability and ground water contamination is known to exist. Consequently, the environmental impacts the project would potentially have upon the karst terrain are also inadequately considered. For example, the draft EIS does not acknowledge that the proposed location of



the East Staging and Marshalling Yard is an area with extreme karst conditions, and it also fails to mention that most of the rail corridor east of Rochester is located in karst terrain. Similar inadequacies related to the karst topography are found elsewhere in the draft EIS, as noted in the MPCA comment letter.

**Air quality.** The draft EIS is lacking in its evaluation of air quality issues, which includes, but is not limited to, the following:

- It did not evaluate possible fugitive dust impacts associated with removing coal and other materials from trains at or near the eastern terminus.
- It did not mention the Minnesota Ambient Air Quality Standards.
- The document did not discuss Minnesota-specific potential health impacts from diesel exhaust emissions including fine particulate matter and air toxics.
- There are unanswered questions related to the methodology used in the draft EIS to determine air quality impacts.

**Water quality.** The draft EIS is lacking in its evaluation of water quality impacts and mitigative measures associated with each of the following:

- Impacted surface waters, including Garvin Brook, a high quality trout stream, and numerous wetlands
- The specific impact on surface and ground waters at or near each staging/marshaling yard (historically, marshaling yards have had problems related to soil contamination stemming from the handling of fuels, hazardous materials, hazardous waste and storm-water runoff)
- Ground water vulnerability throughout the project area
- Potential water quality impacts due to construction activity in or near existing contaminated sites, many of which are identified in existing public databases that were not accessed by those who prepared the draft EIS

### ***Minnesota Department of Agriculture***

In general, the MDA believes the draft EIS adequately addresses issues related to agriculture. It supports the expansion and reconstruction of the DM&E Railroad due to expected benefits to agricultural producers, shippers and other agriculture-related businesses. For that reason, it encourages the STB to proceed expeditiously to final EIS and approval.

**Eminent domain.** The draft EIS accurately describes provisions of the Minnesota Agricultural Land Preservation Program statute (Minnesota Stats Ch. 40A) as it pertains to eminent domain actions in Waseca and Winona Counties.

**Impacts to farmers and rural landowners.** The draft EIS does a good job of describing the nature of impacts to agricultural

operations, but not the scale or scope of impacts. Scale and scope of impacts to farmers and rural landowners become important when comparing alternatives for Mankato and Rochester in the draft EIS conclusions.

**Mitigation measures.** Mitigation measures for farmer/rural landowner impacts are described in general terms. However, without additional details, it is difficult to determine whether such measures would be adequate.

**Yard impacts.** The MDA has concerns that impacts to farming operations of the East Staging and Marshalling Yard are inadequately described, and that alternative locations and mitigation measures are lacking.

### ***Minnesota Department of Natural Resources***

**Shipment destinations.** The draft EIS does not adequately discuss the ultimate destination of the coal when it reaches the east end of the DM&E line at Winona; that is, the impacts of a barge transfer facility and increased barge traffic on the Mississippi River, and the effects of increased rail traffic on the connecting railroads and down line communities and resources. (The DM&E application to the STB identified the Mississippi River as one of their "target" or "core" markets.)

The DNR has proposed that the DM&E reconstruction project terminate at Owatonna since the draft EIS states that much of the coal will be transferred to other railroads there and at Mankato. This would avoid the problems associated with a possible barge transfer facility at Winona, the impacts of many additional trains through Rochester, the impacts of a Rochester bypass and the effects of additional rail traffic in and beyond Winona.

**Yards and sidings.** The DNR has concerns with staging and marshalling yards and sidings proposed in Minnesota.

■ The DNR has major concerns with the option which would locate a staging and marshalling yard in Minneopa State Park, as well as the construction of a siding along the line within the park. The yard would largely undermine the value of an area on the west end of the park comprising a recently approved legislative expansion, some of the land for which has already been acquired by the DNR.

■ The construction of between 16 and 23 new long sidings (3 to 7 miles each) will have significant impacts on natural resources, such as native prairie remnants and wetlands within or adjacent to the right of way. The selection of alternatives will affect the extent of these impacts.

■ The proposed East Staging and Marshalling Yard near Lewiston is located in an area of karst geology and is considered a high probable sinkhole zone. The area, therefore, has a high

potential for ground water contamination from operations of the yard, especially in the event of a spill of hazardous materials.

**Endangered, threatened and special concern species.**

The draft EIS does not discuss impacts to state-listed endangered, threatened and special concern species of plants and animals, of which there are many along the DM&E right of way.

**Bypasses.** Both the Mankato and Rochester bypasses, which establish new corridors, would have substantial impacts on natural and agricultural resources. These impacts are not well documented in the draft EIS.

**Surface waters.** The DNR is concerned with impacts to surface waters along the right of way, including wetlands, lakes and streams. In particular, three proposed channel changes in the Minnesota River (two of which are within Minneopa State Park) could have significant impacts to the river which are not addressed in the draft EIS. The DM&E Railroad line follows Garvin

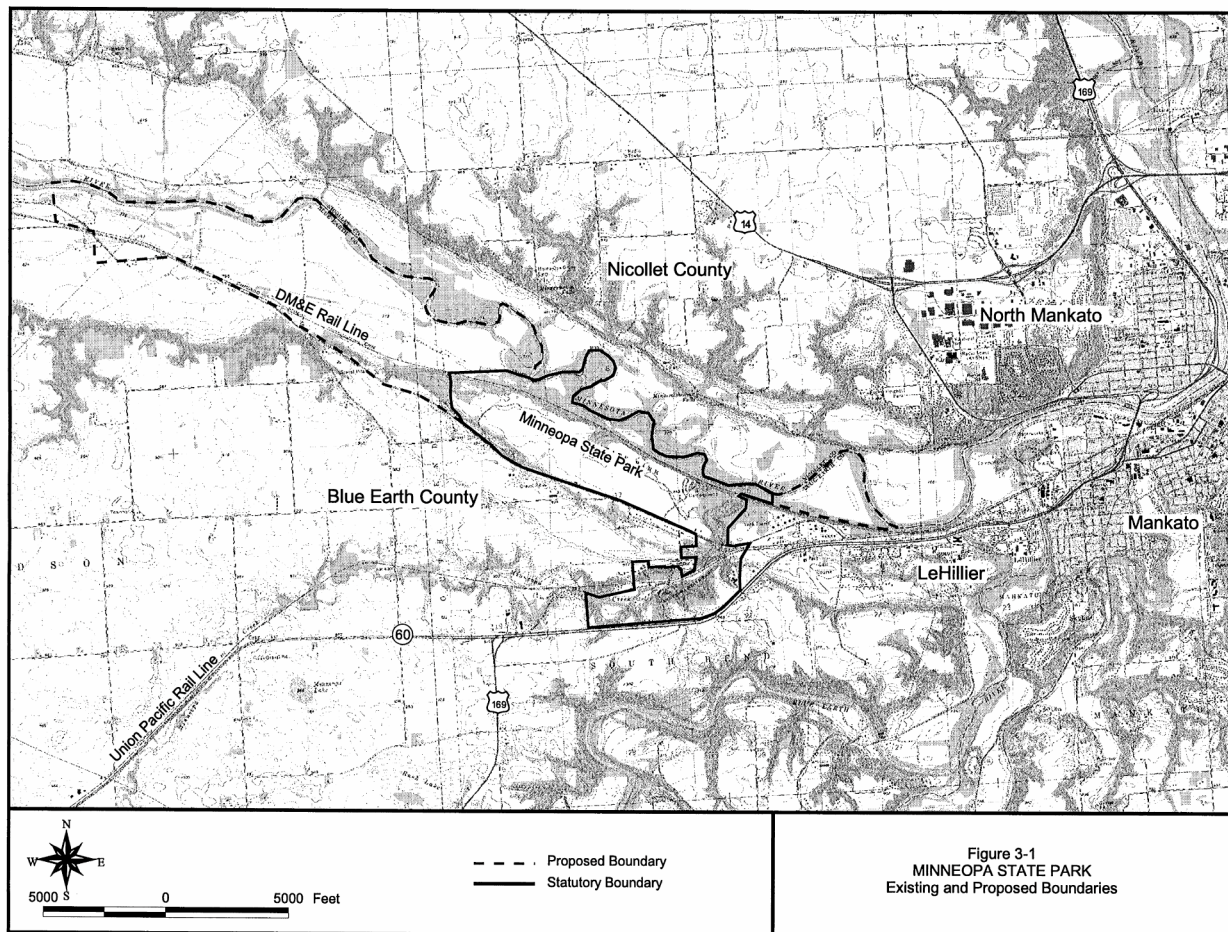
Brook, a high quality trout stream, for several miles and crosses the stream or its tributaries 15 times. Reconstruction of the track will have direct and indirect impacts on Garvin Brook and its watershed.

**Minnesota Department of Health**

The MDH concurs with many of the comments provided by the other agencies from the working group. However, the one issue that may not be adequately covered by any of the agencies' comments is vibration.

**Vibration.** How vibration could affect sensitive medical equipment in communities along the line is an important issue that must be addressed as part of this EIS process.

This issue has clearly been raised by Mayo Medical Center and Olmsted County. The MDH believes these comments should be sufficient to alert the STB and the Legislature of this issue.





## Minnesota Department of Public Safety

In reviewing the draft EIS, the DPS agrees that the DM&E complies with all federal and state laws and requirements as they pertain to safety and hazardous materials transportation.

**Emergency response.** The DPS is concerned that a train stopping anywhere in Rochester may compromise emergency response since the stoppage could cut the city in half, leaving residents on either side of the track vulnerable. The DPS also raises this same concern for similar locations along the line.

**Hazardous materials response.** The DPS recommends that the railroad enter into an agreement with each local unit of government to complete a hazardous material spill and response plan. Federal and state law require that the company complete this plan; however, it is of greater benefit if the plans are developed with the involvement of each community and exercised by all involved parties.

**Mitigation.** The DPS recommends that the communities affected by this project enter into an enforceable agreement to hold the DM&E and any successor accountable for the statements made in the draft EIS and any other statements or agreements that have been or will be made by the communities' representatives.

**Safety.** The result of increased rail traffic heightens the potential for additional traffic accidents involving trains at grade crossings. The DPS recommends that each community study the results of increased traffic, address the areas of concern and develop mitigation actions.

## Minnesota Planning

Minnesota Planning urges the STB to update and intensify its analysis of impacts on Minnesota's communities and businesses by using the most recently available data and more site specific information.

**Socioeconomic.** Use of county level data is too generic to assess impacts on Minnesota's communities and businesses. The final EIS should incorporate up-to-date and more site specific employment, income and other data.

**Environmental justice.** Significant shifts in Minnesota's population resulting from changing economics and increased presence of ethnic minority populations raise the possibility that the 1990 U.S. Census data used for this report are inadequate.

**Land use.** No attention is given to the impacts of DM&E operations on community function and connectedness or to the impact of the project on local community – city, township or county – current and future land use plans.

## Minimizing Environmental Impacts

Many individuals and agencies have expressed concern about the possible effects of the DM&E project on Minnesota's environment. The existing line and alternative sites for new facilities cross and border numerous streams and wetlands. Construction and reconstruction activities could directly and indirectly affect these resources, as well as area flora and fauna. The working group evaluated methods to assure that impacts to the environment are minimized. Two key methods are through conditions imposed by the STB in its approval of the project and through federal and state permits.

In comments on the draft EIS, working group member agencies suggested specific conditions that the STB should impose on the project to protect Minnesota's environment. State agencies also are working cooperatively with other federal agencies to evaluate potential impacts and incorporate mitigation into permits. Permitting mechanisms are available for use by the state of Minnesota to ensure that the DM&E complies with various environmental regulations. In addition, while the primary authority for approval and oversight of the project rests with the federal government, DM&E has to date cooperated with the state in addressing Minnesota's environmental protection requirements.

## Corps of Engineers permit addresses water quality

DM&E must obtain a permit from the U. S. Army Corps of Engineers under Section 404/10 of the federal Clean Water Act for discharge of dredge or fill material. The permit will address impacts of construction and reconstruction activities on streams, wetlands and other waters. Currently, as part of the Corps 404/10 permit process, applicants in Minnesota also must obtain a 401 Water Quality Certification from the Minnesota Pollution Control Agency, attesting that the proposal will comply with state water quality standards. DM&E submitted an application for both the Corps 404/10 permit and the MPCA 401 Water Quality Certification.

The MPCA and the Minnesota Department of Natural Resources submitted formal comments to the Corps during the 404/10 permit public notice period, which ended on March 6, 2001. Both comment letters identified that the application lacks certain information pertaining to the affected water bodies. The comments also discussed the mitigative measures that are necessary to receive the MPCA 401 Certification.

Included in the DNR's comment letter is a discussion of the DNR Protected (Public) Waters General Permitting Program requirements. As part of this program, the DNR has developed a set of best management practices that the Corps and the DM&E should implement as minimum level practices. Environmental inspectors will be essential to ensure that best management practices are implemented correctly.

## State protected waters permit requirements

Minnesota's protected (public) waters permitting requirements will be used to protect public interest regarding work in the beds of lakes, streams, wetlands and ground water and water appropriation activities. For example, detailed plans, and in certain cases hydraulic analyses, are required of the DM&E prior to permitting at various water crossing sites and in instances of stream channel encroachment. Particular emphasis will be given to the Garvin Brook Valley in Winona County and along the Minnesota River in Blue Earth County. In areas where specific DM&E routes have not yet been finalized, such as in the Mankato area, the permit would likely be held back until an alternative is selected.

## Storm water permit addresses construction and operation

Another compliance-related permitting mechanism applicable to this proposal is the federal Clean Water Act National Point Discharge Elimination System general storm water permit. The MPCA issues these permits for proposed construction activities that will disturb more than five acres. Applicable areas include the staging and marshaling yards and track improvement and siding areas that will disturb greater than five acres. This particular NPDES permit requires that both a temporary and permanent sediment and erosion control plan be completed prior to construction activity. These plans are then required during the construction activity so that storm water coming in contact with the disturbed areas will not cause detrimental effects on the receiving waters. The same NPDES permit also requires that wet-detention basins be installed for storm water treatment whenever a project replaces surface vegetation with one or more cumulative acres of impervious surface.

In addition to the NPDES general storm water permit for construction activity, the proposed staging and marshaling yards will be covered under the NPDES general storm water permit for industrial activity. This permit applies to the day-to-day operations of each staging and marshaling yard and requires that best management practices be employed so that the facility's operations do not result in detrimental effects to water quality.

## Other requirements come into play

A variety of other laws and rules should be applied to ensure DM&E environmental compliance. These include, but are not limited to, the Wetland Conservation Act, the Minnesota Endangered Species Act, mitigation of contaminated soils and solid waste disposal rules.

Noise associated with the DM&E Rail Line is governed by Federal Railroad Administration regulations 49 CFR Part 210, which establish decibel limits for train operations.

Local ordinances also have been pursued to control impacts. These include ordinances on horn blowing, queuing of trains for long periods of time on approaches to terminal areas, idling of locomotives and restricting the location of railroad facilities such as bulk and intermodal transfer facilities. However, many of these local ordinances do not withstand judicial review because they are regarded as suppressing interstate commerce.

## Involving Communities

In Minnesota, the DM&E passes through 30 cities and 10 counties, as well as eight unincorporated areas, as it crosses the state. The project could cause temporary inconveniences to a community or profound changes in its operations and growth patterns. The working group explored methods for involving local governments in siting issues and right of way acquisition. It found that partnership agreements – negotiated agreements between the local government and the railroad – offer the best approach. The STB encouraged the DM&E to negotiate mutually acceptable agreements with affected communities and other government entities to address potential impacts of the proposed project, including ways to share the costs of mitigation. Such agreements, however, only cover effects adjacent to the track and should be coupled with a review of local land use plans and revisions to those plans, as necessary.

## Community partnership agreements

As part of an effort to develop public support for the project, the DM&E negotiated community partnership agreements with 27 of the 30 cities across Minnesota on the DM&E right of way.

This negotiation process allowed all cities an opportunity to review plans for the railroad in their community and to have input into the agreement. The recitals of the agreement state the purpose of the agreement:

- Improve existing transportation and environmental conditions in the city to the maximum extent possible
- Minimize or mitigate any negative environmental and transportation impacts to the city as a result of the project
- Maximize the positive economic impacts to the city
- Provide more effective and efficient rail service throughout the DM&E service territory
- Foster the timely approval of the DM&E new construction and rebuild initiatives
- Foster a partnership approach to working through issues of mutual interest and concern on an ongoing basis

The agreements identify intent on behalf of the DM&E to mitigate or improve the impacts of the project, principally to address right of way, safety, traffic, noise, grade crossing safety, existing and



additional utility crossings, drainage deficiencies and other commitments. The agreements state the desire to foster continued economic development and ongoing dialogue between the railroad and the communities.

The agreements contain itemized listings of negotiated improvements to the railroad right of way and other non-right of way improvements. Existing utility crossings are contained in the agreements as are negotiated additional casing pipe locations funded by the DM&E. The agreements contain information provided by the communities about local business that could provide services to the railroad during construction and in the

### Minnesota Communities along the DM&E RR from East to West

#### City Populations based upon 1999 State Demographer's Estimates

County	City	1999 Population estimated	Entered into Agreement
Winona County	Minnesota City	253	Yes
	Stockton	597	Yes
	Lewiston	1492	Yes
	Utica	214	Yes
	St Charles	3104	Yes
Olmsted County	Dover	453	Yes
	Eyota	1621	Yes
	Rochester	82019	No
	Byron	3225	Yes
Dodge County	Kasson	4370	Yes
	Dodge Center	2150	Yes
	Claremont	529	Yes
Steele County	Owatonna	21599	Yes
Waseca County	Waseca	9427	Yes
	Janesville	2070	Yes
Blue Earth County	Eagle Lake	1828	No
	Mankato	32341	No
Brown County	New Ulm	14142	Yes
	Sleepy Eye	3720	Yes
	Cobden	58	Yes
	Springfield	2178	Yes
Redwood County	Sanborn	441	Yes
	Lamberton	958	Yes
	Revere	109	Yes
	Walnut Grove	621	Yes
Lyon County	Tracy	2017	Yes
	Garvin	123	Yes
	Balaton	649	Yes
Lincoln County	Tyler	1218	Yes
	Lake Benton	656	Yes

Source: Minnesota Planning and Mn/DOT

long term. The agreements also contain a number of unresolved community issues, which appear to be an action item list, to be addressed during and after construction.

The proactive work of the DM&E in soliciting feedback from the communities in the form of agreements is not common in the rail industry today. The DM&E spent considerable time approaching, educating and negotiating with the individual communities. The draft EIS does not address or consider the specifics of the community agreements entered into by the DM&E. The working group was concerned about the enforceability of the final agreements. However, the Minnesota Attorney General's office reviewed a typical community agreement at the request of the working group and indicated the agreement has standard arbitration language to resolve disputes.

### County agreements

DM&E's interest in establishing community partnership agreements relates to its efforts to build support for the Powder River Basin project. For this reason, the DM&E initially approached only cities, and not townships where the density of grade crossings is less. The DM&E subsequently approached each of the 10 counties located along its line in Minnesota to negotiate agreements on these township and county roadways. To date, there have been no partnership agreements entered into between the counties and the DM&E.

The DM&E has indicated a willingness to negotiate and enter into agreements with counties.

## Rail Crossing and Public Safety

Increased train traffic can lead to safety problems at grade crossings unless appropriate safety measures are taken. Public safety is a major responsibility of the state of Minnesota and an ongoing concern. The DM&E community partnership agreements contain negotiated improvements to vehicular roadway grade crossings. The working group reviewed the agreements to ensure they complied with Mn/DOT guidelines as presented in the *Southern Minnesota Rail Corridor Safety Plan*. The findings of this effort are included in this section.

### Rail corridor safety study assessed needs

In response to Minnesota Statutes 219.445, Mn/DOT developed the *Southern Minnesota Rail Corridor Safety Plan (Corridor Safety Plan)* in February 2000. As part of this safety plan, Mn/DOT conducted an assessment of the proposed grade crossing improvements developed by the DM&E as part of draft community partnership agreements. As a result, Mn/DOT outlined its position on grade crossing safety, and the appropriate warning devices for crossings throughout the DM&E corridor at various levels of train traffic.



As part of the *Corridor Safety Plan*, Mn/DOT reviewed 271 DM&E grade crossings and 49 grade crossings of other railroads to update Mn/DOT's crossing database, evaluate unique conditions at crossings and to provide information on roadway systems. Of the 271 DM&E grade crossings surveyed in Minnesota, 115 or 42 percent are included in the 27 community partnership agreements.

By year 2010, the DM&E could add up to 17 full and 17 empty coal trains to its current three train per day operation. A typical coal train can consist of two locomotives and 120 coal cars, stretching as much as 8,000 feet in length and carrying approximately 15,000 tons of coal.

As indicated in the *Corridor Safety Plan*, "The DM&E developed four threshold levels of coal train operations of current, 20, 50 and 100 net million tons per year (NMT/year). Railroads use the term million tons per year to describe train volumes, highway engineers prefer using the term trains per day as a measure of train volume."

As a result, the *Corridor Safety Plan* uses trains per day as its measurement tool.

NMT/YEAR	TRAINS/DAY
20	8
50	18
100	34

Source: Mn/DOT

### Mn/DOT guidelines for warning devices provide a baseline

Mn/DOT has published guidelines for warning devices at public railroad grade crossings. The choice of appropriate warning devices is determined by Mn/DOT and is based on several factors. Daily train counts, maximum train speed, number of tracks, sight distances, average daily traffic counts, width of roadway, crash history and community consistency are all factors in evaluating the appropriate warning device at a crossing. Exposure rate is the product of average daily traffic and number of trains per day. According to Mn/DOT guidelines, exposure rates greater than 5,000 should have active warning devices installed.

Furthermore, if a grade crossing meets guidelines for active warning devices and the maximum train speed is 40 mph or greater, the crossing must have safety gates. Gates must also be used if the roadway crosses more than one set of tracks.

Grade crossings that do not meet guidelines for active warning devices but have a maximum train speed of 40 mph or greater and low average daily traffic should have stop signs and crossbucks.

With the proposed DM&E operation, trains will operate in excess of 40 mph. All active warning devices must have gates, and public grade crossings without active warning devices must have stop signs and crossbucks. Mn/DOT will require DM&E to install gate arms at all locations with active warning devices.

The working group reviewed the 27 executed community agreements, covering 115 public grade crossings. It compared safety improvements identified in the community agreements with Mn/DOT safety guidelines as identified in the *Corridor Safety Plan*.

Each agreement was developed bilaterally between the communities and the railroads, with no involvement by Mn/DOT or other state agencies. Upon examining and evaluating these agreements, two matrices were developed to characterize grade crossing specific improvements, as well as additional improvements and benefits. It should be noted that while several negotiated items exist in the community agreements, the working group has not found evidence of any agreement with the many private crossings along the corridor.

Public grade crossing treatment levels identify the appropriate warning device at each crossing at various train levels.

TREATMENT LEVEL	TREATMENT DESCRIPTION
A	No warning devices
B	Crossbucks
C	Crossbucks and stop signs
D	Flashing light signals
E	Flashing light signals and gates
F	"Whistle free" (with 4 quadrant gates or center highway median barriers to prevent "drive arounds" by motorists)*

\* The FRA is currently reviewing the requirements for whistle-free crossing protection devices.

Source: Mn/DOT

### Community agreements offer measurement of compliance

When comparing grade crossing treatment level results found in the *Corridor Safety Plan* to the now finalized agreements, it becomes apparent that several modifications have been made. The language in the agreements indicates that the DM&E will increase the level of warning devices over time as train levels increase.

Beyond 50 net million tons, the majority of the crossings identified in the community partnership agreements are to be upgraded to Level F (whistle free) at varying levels. However, it is important to note that these Level F crossings are the result of several negotiated whistle bans within each of the partnered

## Percentage of crossings that exceed or are below Mn/DOT safety guidelines

	Exceed	Are below	Meet	Considered for closure
8 trains per day	13%	40%	37%	10%
18 trains per day	55%	25%	10%	10%
34 trains per day (Year 2010)	67%	17%	6%	10%

Source: Mn/DOT

### Proposed safety improvements Community plans vs. Mn/DOT guidelines

	Active (DEF)		Passive (ABC)	
	Mn/DOT	DM&E	Mn/DOT	DM&E
8 trains per day	87	70	11	12
18 trains per day	89	75	9	8
34 trains per day	93	80	7	3

Source: Mn/DOT

### Proposed safety improvements Community plans vs. Mn/DOT guidelines

	Flashers (D)		Gates (E & F)	
	Mn/DOT	DM&E	Mn/DOT	DM&E
8 trains per day	0	25	87	45
18 trains per day	0	14	89	61
34 trains per day	0	12	93	68

Source: Mn/DOT

communities. Of the 115 crossings included within the 27 partnership agreements, 60 percent are negotiated whistle bans.

The community partnership agreements include crossing closures. The language included as part of this discussion acknowledges the need to confer with state guidelines should a crossing closure be pursued, where necessary. Of the 115 crossings included within the 27 partnership agreements, 9 percent are under consideration for closure. There are also instances where new crossings and crossing consolidation are proposed.

## Moving Minnesota products

The DM&E is important to shippers across southern Minnesota. To address concerns that the line might not be viable without the proposed project or that coal could be shipped to the exclusion of other products, the working group explored effects on Minnesota shippers. This section includes findings of the working group's efforts to identify potential opportunities the DM&E upgrade provides for moving Minnesota products. The working group also studied the impacts of the DM&E upgrade on the ability to market and move Minnesota products.

Much of the large volume of testimony regarding impacts of the planned expansion and upgrade of the DM&E system assume an economically static situation. However, the market forces and the pricing structure of larger railroads can significantly influence the outcome of DM&E's business, leading to different results than

those presented in this report. The working group also advises that in the current environment of railroad mega-mergers, it is likely that if the DM&E proposal is approved and implemented, it would be a potential takeover target by the remaining Class I railroads of North America.

## National implications of the DM&E expansion

The DM&E's routes are 20 percent to 30 percent shorter than its competitors' routes to three major markets. Competition for capacity in the national freight system is caused by a number of factors. Shipments such as coal and intermodal container shipments put pressure on the national rail system's capacity for moving agricultural products. The increase in coal shipments is being driven by the demand for cleaner burning coal to meet the requirements of the federal Clean Air Act. The DM&E expansion could provide capacity to the national freight system for local grain and Wyoming coal movements. A DM&E with upgraded trackage and stable finances promotes choice on a national level. This would be important during a national crisis or serious weather-related problem, such as regional flooding, because of the shrinking number of larger railroads and potentially diminishing shipping options.

## DM&E traffic characteristics

Commodities moved on the DM&E are primarily grain, feed and other agricultural products. Other major shipments include kaolin clay materials, aggregates and forest products. Most products

move east to other rail carriers or are transloaded to the Mississippi River to be transported by barge at the Port of Winona (a relatively low-cost transportation alternative for nontime-sensitive shipments); however, some grain moves west on the DM&E and interchanges with the BNSF at Crawford, Neb.

The majority of shippers on the DM&E are considered “on line” or “captive” shippers, meaning that the only rail freight service available to them is the DM&E. Access from other railroads is not an option for their shipments. Discussions with shipper groups have indicated that the captive shipping scenario has not been a problem with their members largely due to the level of comfort that most shippers have with the DM&E. Shortline and regional railroads traditionally are dependent on locally derived business and are closer to their customers.

The DM&E handles 70 to 80 million bushels of Minnesota and South Dakota produced grain annually. For the entire railroad, grain, grain products and fertilizers comprise approximately 50 percent of annual carloadings. The DM&E car fleet is more than 3,700 cars, 1,700 of which are dedicated to grain service. The DM&E recently purchased cars with 5,161 cubic feet capacity and 286,000 pound gross weight standards.

Track conditions and grades from Rapid City, S.D., to Crawford, Neb., are such that trains need to be shortened. These operational limitations and travel times keep grain shipments from being competitive in the lucrative Pacific Northwest markets.

Fertilizers are trans-shipped from the Port of Winona at the east end of the rail line. Rail safety has been a limiting factor in why the fertilizer market has not grown. Anhydrous ammonia and other agricultural chemicals found in herbicide and pesticides pose a safety risk. The poor rail condition found on the DM&E track structure has been credited with being the limiting element in market expansion of these products to market proportions.

## Prospects for market expansions

The planned expansion and upgrade of the DM&E infrastructure is tied to market forces. The initial project is designed to provide the capacity to handle additional traffic levels as projected in the STB application. There is no guarantee that the traffic levels will be achieved. In addition, some coal traffic likely will leave the DM&E system through connecting rail lines before the shipments reach the cities of Rochester and Winona. Market forces will shape the DM&E traffic patterns. Coal could be diverted to other railroads such as the UP, I&M Rail Link, Illinois Central, the Canadian Pacific Railway, and the Iowa Interstate Railroad.

## Industry market observations

Xcel Energy is a combined gas and electric utility based in Minneapolis with a service territory in 12 states in the western and north central United States. Xcel's generating capacity

includes 16 coal-fired plants. These plants account for 56 percent of Xcel's generating capacity. Most of the coal for these plants originates in the Powder River Basin. Xcel plants have been modified to burn this fuel source. Some plants are served by B.N.S.F. and some are served by UP. There is no competitive service to any plant. Xcel claims this lack of competition costs Minnesota customers tens of millions of dollars in energy costs.

During 2000, Xcel expected to ship more than 12 million tons of coal to Minnesota generating plants, costing more than \$225 million. Approximately 60 percent of that cost is for transportation. In testimony to the STB, Xcel attributes congestion in the mines and on the rail networks and weather as contributing factors to delays in rail shipments. Xcel supports the planned expansion of the DM&E.

The U. S. Department of Agriculture has expressed strong support for the DM&E project in its comments to the STB. The USDA supports the expansion because it believes the project will increase railroad capacity, improve farm income, promote rural economic development and reduce the wear on local rural road networks.

The USDA identifies three potential markets for corn, wheat and soybeans shipped by the DM&E:

- The Pacific Northwest/Asian markets
- Iowa corn processors
- Coal transloading in Winona

Currently, most agricultural products move east to the Port of Winona where they are transloaded to barges. Weather can limit the port's ability for year-round shipments due to freezing on the Mississippi River. Little Minnesota grain moves west to the Pacific Northwest ports although the neighboring states of North Dakota and Nebraska move product in that direction. Long travel times are cited as restricting western movements. Lastly, the USDA suggests that an improved connection at Owatonna could increase the marketability to Iowa corn processors of corn shipped by DM&E.

## Shipper association survey and interviews

The working group identified several shipper groups and organizations representing various industries throughout the region serviced by the DM&E and whose members are either existing DM&E shippers or potential shippers. The associations contacted by survey were:

- Southern Grainbelt Shippers Association
- Minnesota Grain and Feed Association
- Winona Port Authority
- Minnesota Agrigrowth
- Minnesota Farm Bureau



- Minnesota River Valley Kaolin Clay Coalition
- Aggregate Ready Mix Association of Minnesota

Only three associations responded to the survey on their constituents' shipping patterns. A number of associations have drafted formal positions in favor of the DM&E expansion. Association representatives were interviewed to clarify their constituents' shipping patterns and positions on the DM&E expansion.

### **Southern Grainbelt Shippers Association**

The Southern Grainbelt Shippers Association was incorporated under the Minnesota nonprofit corporation act on May 22, 1987 to assist the DM&E in obtaining funds from the State's Rail Service Improvement Program to perform necessary rail line reconstruction. Following the success of the rail line rehabilitation project, the Southern Grainbelt Shippers Association and its 68 members continued efforts to be a voice for shippers along this rail line and an advocate in promoting business in the southern Minnesota corridor.

The SGSA reports that its constituents' shipping activities include:

- Corn, wheat and soybeans
- Kaolin clay
- Sand and aggregates
- Cement
- Other – including scrap metals, fertilizers, canned vegetables and printer paper

The SGSA reports that all its members make shipments by rail. Constituents that use a truck and rail mode mix for transportation move 50 percent to 100 percent of shipments by rail. The SGSA suggests the DM&E works well with their customers and rates the existing DM&E service as "good." Shipping decisions by rail or truck are largely dependent on service, car availability, timing and economics. Rate agreements between the DM&E and shippers are common. The SGSA believes a DM&E with access to new markets and improved rail line access to current markets through improved connections, improved capacity, quicker trip times and improved car utilization would make its members more competitive.

### **Minnesota Grain and Feed Association**

The Minnesota Grain and Feed Association is a voluntary nonprofit association composed of competing grain elevator firms and other agribusinesses involved in the grain, feed, fertilizer and farm supply business. The MGFA was established in 1907 to provide information, education and representation for the emerging country elevator industry, a function that still exists today. The MGFA has been on record with the STB in support of the DM&E expansion project since its application was filed in 1998.

Currently, there are 20 major grain elevators using the DM&E in Minnesota. The MGFA indicated other shippers are considering using the DM&E once the railroad's future is determined. The MGFA views the project as a necessary rehabilitation to insure the viability of future rail service to their constituents.

Counties immediately surrounding the DM&E right of way contain some of the finest agricultural lands in the nation and produced more than 200 million bushels of corn and 52 million bushels of soybeans in 1999. The MGFA sees a large potential for moving more grain on the DM&E.

The MGFA believes the proposed improvements on the DM&E will result in an increase in capacity of the state's transportation system. Improved capacity on the DM&E, in the forms of new and better connections, car capacity and speed, will create demand for increased capacity at existing elevators. Improvements to the loading and unloading operations at the elevators will be needed to take advantage of the bigger transportation pipeline and increased elevator throughput. Value added services such as dryers and improved handling can then be contemplated at the existing elevators. An improved transportation network for farmer's products could lure existing farmers to expand into specialty commodities such as #2 yellow corn and identity brand grains used in applications such as pharmaceuticals.

### **Port Authority of Winona**

The city of Winona, Minn., is located on the Mississippi River and is served by the CP Railroad (formerly the Soo Line), the UP (formerly the Chicago & Northwestern Railroad) and the DM&E. Additionally, Amtrak serves the city with daily service between Minneapolis/St. Paul and Chicago. The city has a commercial dock, which allows barge transloading.

The Port of Winona is located on a sand bar on the river and is surrounded by development including the river levee system. The port is constrained due to its proximity to the downtown area. Several factors limit the port's ability to expand beyond its current capacity:

- Space and geographical location
- Safety issues related to waterborne commercial traffic and recreational boating
- Level of service by the railroads to the port
- A lock and dam system that is aging and under capacity, preventing long cost-effective barge tows north of St. Louis
- Competitive access by rail to the port
- Mississippi River freezing

The UP and CP Rail service most shippers in Winona; the DM&E accesses the port via trackage rights. A sample of active shippers located in Winona and their shipments include:

- Winona River and Rail – (fertilizers from the DM&E)
- Modern Transport – grain, fertilizers and salt (DM&E to barge and truck)
- Cenex – corn and soybeans (rail to barge)
- ADM – corn and soybeans (rail to barge)
- Bay State – flour (rail to truck)

While the DM&E does not own any trackage in the city of Winona, it does have operating rights on the CP Rail and UP systems to access the port of Winona. The DM&E trackage ends in Minnesota City. The draft EIS does not detail any infrastructure changes for the city of Winona, nor does it address any impacts on the community due to the traffic increases.

Winona is conducting a land use and transportation investment study. The goals are: 1) to develop a multi-modal planning process that analyzes the efficiency of rail activity into the port and through the city; 2) to identify and prioritize the improvements needed to address transportation deficiencies; and, 3) to plan for future increases and modal shifts of freight transportation. The study will focus on improvements to facilitate freight movement and port development.

The city is very concerned about the impacts of the DM&E expansion on the local rail traffic through town and on the opportunities to the port. Its investment study will attempt to identify and set in motion mitigation measures to address these negative impacts.

## Direct and indirect economic impacts

The DM&E plans consider three components of construction: new construction, rebuild and upgrade. The “new construction” is predominately the 260 plus miles of new track alignment to be added to the DM&E system into Wyoming. The “rebuild” is the complete reconstruction of the mainline from Wasta, S.D., to Winona, Minn. The “upgrade” is to make significant improvements to the rest of the 239 miles of the lines that make up the DM&E system.

Type of construction	State of Minnesota	Total project
New track construction	16.25 miles	278.38 miles
Track rehabilitation	248.10 miles	597.80 miles
Track upgrade	12.70 miles	238.50 miles
Total miles	277.05 miles	1,114.68 miles

Source: Mn/DOT

According to the DM&E, each component of the project will be constructed in three phases.

Phase I – \$1.2 billion for new construction and rebuild components of the DM&E project sufficient to provide capacity to handle 50 million tons of new traffic annually.

Phase II – \$65 million for upgrading the other DM&E lines over a 10-year period.

Phase III – \$200 million for expanding capacity on the new construction and rebuild components to handle an additional 50 million tons annually, which would take place if and when the traffic levels necessitate the expenditure.

Exact planned expenditures by state were not available. Other details, such as the locating of various facilities required to support the expanded operation, are yet to be finalized. Though the DM&E continues to develop the engineering aspects of the project, the expenditures are based on data prepared in 1998 for application to the STB. Further refinement of engineering plans for the work likely has been made since the STB application was filed.

## Economic analysis

A number of studies have been performed specifically regarding the economic impacts of the DM&E expansion. There also have been a number of studies at the national level regarding the impacts of such a planned investment, as well as the no-action alternative possibly leading to a rail line abandonment. They range from systemwide analysis to localized studies of impacts.

The working group has determined that the studies and analysis reviewed related to the DM&E expansion have presented far reaching impacts which can be both positive and negative for Minnesota. The approach to the work and the results and conclusions of the various studies typically reflect the geographic scale, whether national, regional or local, of concern to the parties conducting the study. While the economic benefits of the project as a whole might be positive, the benefits to a particular community, company or individual along the line might or might not. For example, someone whose house is along the line might not benefit, but someone whose grain elevator is along the line might.

The working group sees the disparity in the previous analyses as best addressed by an independent evaluation of the impacts caused by the short-term (construction) and long-term (operational) implications of the project. Such an analysis could address the DM&E systemwide impacts and more localized impacts to major community centers in Minnesota.



## Independent input from Midwest economists

The working group contacted several specialists in the area of economics. The economists provided feedback to the methodologies and findings of the analysis. They found the methodology used by the DM&E for economic analysis was acceptable. They also indicated that there is potential for further analysis, if necessary.

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## Potential for study of the economic impacts to the region

The working group has researched several firms specializing in the analysis of freight transportation logistics modeling and analysis. Methods to determine and measure the impacts to the state from an investment such as the DM&E expansion were reviewed. Further study can provide a better understanding of the short- and long-term impacts of the DM&E project in Minnesota. Currently data on traffic levels and patterns varies in quantity and quality.

Mn/DOT is working in the interest of businesses to identify potential improvements to the statewide transportation system. Mn/DOT has completed a statewide multi-modal freight flow study. The study is part of an effort to actively engage the state business community in planning and programming activities that lead to transportation investments.

## Direct and indirect costs

The community partnership agreements specified the nature and costs of improvements the DM&E would provide to enhance its rail service, reduce community impacts, and provide additional safety at roadway grade crossings. The working group reviewed the agreements for other direct or indirect economic impacts beyond crossing improvements. Many of these improvements are

standard components of each agreement. They include the following commitments on the part of the DM&E.

- Removal and maintenance of debris within the DM&E right of way
- Development of an Emergency Response Program in coordination with the city
- Maintain and protect utility crossings that exist at the time of construction

In addition to these improvements, several agreements cover amenities along the DM&E right of way such as:

- Realignment of a private road to eliminate a private crossing
- Coordination of median and paving at crossings
- Providing new crossings
- Frontage road upgrades
- Construction of grade separations
- Assistance with adjusting roadway profiles
- DM&E funding of a gravel road
- DM&E funding of alley construction
- Assistance with potential bike trail easements
- DM&E funding of bike path at a bridge or walking trail
- Relocation of sidings
- Donation of right of way easements
- Assistance with drainage improvements
- Installation of utility sleeves under track
- Bridge inspections
- DM&E funding of a rail bridge
- Reconstruction of elevator track
- Installation of fencing
- Installation of tree barriers and other landscaping
- DM&E funding of sidewalks along right of way
- Install of pedestrian crossing panels and gates

## Indirect costs also affect industries, state agencies

Should the DM&E project move forward, industries served by the DM&E likely will find that capacity restrictions will move from the DM&E track and connections to their own facilities. Consequently, the number of applications for Minnesota Rail Improvement funds also should be expected to increase.

Local coordination of roadway improvement projects will increase during the construction of the rail line. Grade crossing improvements and crossing closings will require increased coordination between Mn/DOT's regional offices and the Office of Freight, Rail and Waterways. There is an opportunity for coordination of crossing improvements with the *State Highway Transportation Improvement Plan*. Grade separations and additional roadway lane construction could be coordinated with an opportunity for cost sharing with the DM&E.

Working group members identified various mitigative measures required for this project to proceed. The increase in activity associated with coordination and permitting activities over the multiyear construction phase of this project can be expected to affect the ability for each office and regional district to properly address needs. The impacts of the project should be considered in determining a department's ability to respond.

## What happens next

Over the next several months the STB will continue processing and evaluating the thousands of comments it received on the DM&E draft EIS. These include comments from local and state governments, citizens and interests along the proposed route, as well as federal agencies and national organizations, representing highly divergent points of view.

The STB will prepare a final EIS reflecting the further analysis and revisions it deems necessary to address the concerns raised with the draft. It will then issue its final decision on DM&E's application for authority to construct and operate the new rail line and associated facilities in Wyoming, South Dakota and Minnesota. This will include whether to give final approval to the project, and, if so, appropriate environmental mitigation to require as part of that approval and its potential costs.

If the STB decision is positive, the DM&E can proceed with permitting and construction. State agencies will continue to monitor the DM&E project and work with the railroad, federal agencies and local governments through permitting, construction and operations to insure that the state's interests are served. This will include:

- Cooperating with the U.S. Army Corps of Engineers to include necessary mitigation in the federal Clean Water Act 404/10 permit
- Continuing to work with the DM&E to ensure that state standards and permitting requirements are met
- Ensuring that state rail crossing safety guidelines are followed
- Assisting interested local governments with land use and zoning issues associated with the project
- Working with the city of Winona and shippers to identify priority transportation investments and potential improvements to facilitate freight movement