

Dakota Corporation; Southern Grain *
 Belt Shippers Association; Harvest *
 Land Cooperative; Farmers *
 Co-operative of Hanska; South *
 Dakota Farm Bureau Federation; *
 South Dakota Farmers Union; *
 South Dakota Grain and Feed *
 Association; South Dakota Soybean *
 Association; South Dakota *
 Wheat, Inc.; South Dakota Corn *
 Growers Association; South Dakota *
 Association of Cooperatives; *
 Minnesota Farm Bureau Federation; *
 Minnesota Soybean Growers *
 Association; City of Huron, a Political *
 Subdivision of the State of *
 South Dakota; Citizens Against *
 Rochester's Bypass; Newcastle, *
 Wyoming; Upton, Wyoming; Wall, *
 South Dakota; Phillip, South Dakota; *
 Midland, South Dakota; Fort Pierre, *
 South Dakota; Pierre, South Dakota; *
 Miller, South Dakota; Wolsey, *
 South Dakota; Iroquois, South Dakota; *
 De Smet, South Dakota; Volga, *
 South Dakota; Beadle County, *
 South Dakota; Tracy, Minnesota; *
 Waseca, Minnesota; Lake Benton, *
 Minnesota; Walnut Grove, Minnesota; *
 Sanborn, Minnesota; Springfield, *
 Minnesota; Greater Huron *
 Development Corporation; Huron *
 Chamber & Visitors Bureau; *
 Rapid City Economic Development *
 Partnership; Wall Chamber of *
 Commerce; Midland 2nd Century *
 Development Corporation; Pierre *

Chamber of Commerce; Pierre *
Economic Development Corporation; *
Miller Civic & Commerce; On Hand *
Development Corporation; *
South Dakota Chamber of *
Commerce & Industry; Tracy (MN) *
Chamber of Commerce; Tracy (MN) *
Economic Development Authority, *
*
Intervenors on Appeal. *

No. 02-1481

City of Rochester, *
*
Petitioner, *
*
Rochester Area Chamber of *
Commerce; City of Skyline, *
Minnesota; Brian Brademeyer, *
*
Intervenors on Appeal, *
*
v. *
*
Surface Transportation Board; *
United States of America, *
*
Respondents, *
*
South Dakota Wheat Growers *
Association; North Central Farmers *
Elevator; Dakota Ag Coop; *
Farmers Union Cooperative Elevator; *

Harrold Grain Company, LLC; *

Lake Preston Cooperative Association; *

Arlington Farmers Elevator Company; *

Ag First Farmers Cooperative; *

South Dakota Farm Bureau *

Federation; South Dakota Farmers *

Union; South Dakota Grain and Feed *

Association; South Dakota Soybean *

Association; South Dakota *

Wheat, Inc.; South Dakota Corn *

Growers Association; South Dakota *

Association of Cooperatives; *

Minnesota Farm Bureau Federation; *

Minnesota Soybean Growers *

Association; Newcastle, Wyoming; *

Upton, Wyoming; Wall, South Dakota; *

Phillip, South Dakota; Midland, *

South Dakota; Fort Pierre, *

South Dakota; Pierre, South Dakota; *

Miller, South Dakota; Wolsey, *

South Dakota; Iroquois, South Dakota; *

De Smet, South Dakota; Volga, *

South Dakota; Beadle County, *

South Dakota; Tracy, Minnesota; *

Waseca, Minnesota; Lake Benton, *

Minnesota; Walnut Grove, Minnesota; *

Sanborn, Minnesota; Springfield, *

Minnesota; Greater Huron *

Development Corporation; Huron *

Chamber & Visitors Bureau; *

Rapid City Economic Development *

Partnership; Wall Chamber of *

Commerce; Midland 2nd Century *

Development Corporation; Pierre *

Chamber of Commerce; Pierre *

Economic Development Corporation; *

Miller Civic & Commerce; On Hand *

Development Corporation; *
South Dakota Chamber of *
Commerce & Industry; Tracy (MN) *
Chamber of Commerce; Tracy (MN) *
Economic Development Authority; *
South Dakota Soybean Processors; *
Dakota, Minnesota & Eastern *
Railroad Corporation; Black Hills *
Regional Rail Shippers Association; *
Western Coal Traffic League; *
Oahe Grain Corporation, a South *
Dakota Corporation; Southern Grain *
Belt Shippers Association; Harvest *
Land Cooperative; Farmers *
Co-operative of Hanska; City of *
Huron, a Political Subdivision of *
the State of South Dakota; Citizens *
Against Rochester's Bypass, *

Intervenors on Appeal. *

No. 02-1482

Mayo Foundation, *

Petitioner, *

Rochester Area Chamber of *
Commerce; City of Skyline, *
Minnesota; Brian Brademeyer, *

Intervenors on Appeal, *

v.	*
	*
Surface Transportation Board;	*
United States of America,	*
	*
Respondents,	*
	*
South Dakota Wheat Growers	*
Association; North Central Farmers	*
Elevator; Dakota Ag Coop;	*
Farmers Union Cooperative Elevator;	*
Harrold Grain Company, LLC;	*
Lake Preston Cooperative Association;	*
Arlington Farmers Elevator Company;	*
Ag First Farmers Cooperative;	*
Dakota, Minnesota & Eastern	*
Railroad Corporation; South Dakota	*
Farm Bureau Federation; South Dakota	*
Farmers Union; South Dakota Grain	*
and Feed Association; South Dakota	*
Soybean Association; South Dakota	*
Wheat, Inc.; South Dakota Corn	*
Growers Association; South Dakota	*
Association of Cooperatives;	*
Minnesota Farm Bureau Federation;	*
Minnesota Soybean Growers	*
Association; Newcastle, Wyoming;	*
Upton, Wyoming; Wall, South Dakota;	*
Phillip, South Dakota; Midland,	*
South Dakota; Fort Pierre,	*
South Dakota; Pierre, South Dakota;	*
Miller, South Dakota; Wolsey,	*
South Dakota; Iroquois, South Dakota;	*
De Smet, South Dakota; Volga,	*
South Dakota; Beadle County,	*
South Dakota; Tracy, Minnesota;	*
Waseca, Minnesota; Lake Benton,	*

Minnesota; Walnut Grove, Minnesota;	*
Sanborn, Minnesota; Springfield,	*
Minnesota; Greater Huron	*
Development Corporation; Huron	*
Chamber & Visitors Bureau;	*
Rapid City Economic Development	*
Partnership; Wall Chamber of	*
Commerce; Midland 2nd Century	*
Development Corporation; Pierre	*
Chamber of Commerce; Pierre	*
Economic Development Corporation;	*
Miller Civic & Commerce; On Hand	*
Development Corporation;	*
South Dakota Chamber of	*
Commerce & Industry; Tracy (MN)	*
Chamber of Commerce; Tracy (MN)	*
Economic Development Authority;	*
South Dakota Soybean Processors;	*
Black Hills Regional Rail Shippers	*
Association; Western Coal Traffic	*
League; Oahe Grain Corporation,	*
a South Dakota Corporation;	*
Southern Grain Belt Shippers	*
Association; Harvest Land Cooperative;	*
Farmers Co-operative of Hanska;	*
City of Huron, a Political Subdivision	*
of the State of South Dakota;	*
Citizens Against Rochester's Bypass,	*
	*
Intervenors on Appeal.	*

No. 02-1767

Minnesotans for an Energy-Efficient *
Economy, *

Petitioner, *

Rochester Area Chamber of *
Commerce; City of Skyline, *
Minnesota; Brian Brademeyer, *

Intervenors on Appeal, *

v. *

Surface Transportation Board; *
United States of America, *

Respondents, *

South Dakota Wheat Growers *
Association; North Central Farmers *
Elevator; Dakota Ag Coop; *
Farmers Union Cooperative Elevator; *
Harrold Grain Company, LLC; *
Lake Preston Cooperative Association; *
Arlington Farmers Elevator Company; *
Dakota, Minnesota & Eastern *
Railroad Corporation; South Dakota *
Farm Bureau Federation; South Dakota *
Farmers Union; South Dakota *
Grain and Feed Association; *
South Dakota Soybean Association; *
South Dakota Wheat, Inc.;

South Dakota Corn Growers *
 Association; South Dakota *
 Association of Cooperatives; *
 Minnesota Farm Bureau Federation; *
 Minnesota Soybean Growers *
 Association; Newcastle, Wyoming; *
 Upton, Wyoming; Wall, South Dakota; *
 Phillip, South Dakota; Midland, *
 South Dakota; Fort Pierre, *
 South Dakota; Pierre, South Dakota; *
 Miller, South Dakota; Wolsey, *
 South Dakota; Iroquois, South Dakota; *
 De Smet, South Dakota; Volga, *
 South Dakota; Beadle County, *
 South Dakota; Tracy, Minnesota; *
 Waseca, Minnesota; Lake Benton, *
 Minnesota; Walnut Grove, Minnesota; *
 Sanborn, Minnesota; Springfield, *
 Minnesota; Greater Huron *
 Development Corporation; Huron *
 Chamber & Visitors Bureau; *
 Rapid City Economic Development *
 Partnership; Wall Chamber of *
 Commerce; Midland 2nd Century *
 Development Corporation; Pierre *
 Chamber of Commerce; Pierre *
 Economic Development Corporation; *
 Miller Civic & Commerce; On Hand *
 Development Corporation; *
 South Dakota Chamber of *
 Commerce & Industry; Tracy (MN) *
 Chamber of Commerce; Tracy (MN) *
 Economic Development Authority; *
 South Dakota Soybean Processors; *
 Black Hills Regional Rail Shippers *
 Association; Western Coal Traffic *
 League; Oahe Grain Corporation, *

a South Dakota Corporation; *
Southern Grain Belt Shippers *
Association; Harvest Land Cooperative; *
Farmers Co-operative of Hanska; *
City of Huron, a Political Subdivision *
of the State of South Dakota; Citizens *
Against Rochester's Bypass, *

Intervenors on Appeal. *

No. 02-1785

Oglala Sioux Tribe; Donley Darnell; *
Nancy Darnell; Tom Wright; *
Kay Wright; Rick Wehri; Ann Wehri; *
Mike Harris; Alice Harris; *
Jerry Dilts; Barbara Dilts; Luann *
Borgialli; Dennis Borgialli; Russ *
Christensen; Ruth Christensen; *
Clara Wilson; Fred Wilson; *
Mick Simons; Dianne Simons; Joe *
Simmons; Michele Simmons; *
Carolyn Johnson; Vern Johnson; *
Glen Hansen; Phyllis Hansen; *
Robert Harshbarger; Jean Harshbarger; *
DeWayne McGee; Ruth McGee; *
Raymond Dennis; Maxine Ripley; *
Dale Molitor; Chris Molitor; Bev *
Varelman; Jim Varelman; Rob *
Wordeman; Jenny Wordeman; Mike *
Wordeman; Linda Wordeman; *
Scott Edoff; Veronica Edoff; Marvin *
Kammerer; Paulene Staben; John *
Staben; Jack Cameron; Gay Cameron; *

Ruth Kerns; Marvin Kerns; Ray
Hillenbrand; Margaret Hillenbrand;
Duane J. Lammers; Triple Seven
Ranch; Lea Stodart; Craig Stodart;
Keith Andersen; Marie Andersen;
Carolyn Schnose; Verne Schnose,

Petitioners,

Rochester Area Chamber of
Commerce; City of Skyline,
Minnesota; Brian Brademeyer,

Intervenors on Appeal,

v.

Surface Transportation Board;
United States of America,

Respondents,

South Dakota Wheat Growers
Association; North Central Farmers
Elevator; Dakota Ag Coop;
Farmers Union Cooperative Elevator;
Harrold Grain Company, LLC;
Lake Preston Cooperative Association;
Arlington Farmers Elevator Company;
Ag First Farmers Cooperative;
South Dakota Farm Bureau Federation;
South Dakota Farmers Union;
South Dakota Grain and Feed
Association; South Dakota Soybean
Association; South Dakota
Wheat, Inc.; South Dakota Corn
Growers Association; South Dakota

Association of Cooperatives; *
 Minnesota Farm Bureau Federation; *
 Minnesota Soybean Growers *
 Association; Newcastle, Wyoming; *
 Upton, Wyoming; Wall, South Dakota; *
 Phillip, South Dakota; Midland, *
 South Dakota; Fort Pierre, *
 South Dakota; Pierre, South Dakota; *
 Miller, South Dakota; Wolsey, *
 South Dakota; Iroquois, South Dakota; *
 De Smet, South Dakota; Volga, *
 South Dakota; Beadle County, *
 South Dakota; Tracy, Minnesota; *
 Waseca, Minnesota; Lake Benton, *
 Minnesota; Walnut Grove, Minnesota; *
 Sanborn, Minnesota; Springfield, *
 Minnesota; Greater Huron *
 Development Corporation; Huron *
 Chamber & Visitors Bureau; *
 Rapid City Economic Development *
 Partnership; Wall Chamber of *
 Commerce; Midland 2nd Century *
 Development Corporation; Pierre *
 Chamber of Commerce; Pierre *
 Economic Development Corporation; *
 Miller Civic & Commerce; On Hand *
 Development Corporation; *
 South Dakota Chamber of *
 Commerce & Industry; Tracy (MN) *
 Chamber of Commerce; Tracy (MN) *
 Economic Development Authority; *
 South Dakota Soybean Processors; *
 Dakota, Minnesota & Eastern *
 Railroad Corporation; Black Hills *
 Regional Rail Shippers Association; *
 Western Coal Traffic League; *
 Oahe Grain Corporation, a South *

Dakota Corporation; Southern Grain *
Belt Shippers Association; Harvest *
Land Cooperative; Farmers *
Co-operative of Hanska; City of Huron, *
a Political Subdivision of the State of *
South Dakota; Citizens Against *
Rochester's Bypass, *
*
Intervenors on Appeal. *

No. 02-1792

Sierra Club; Sam N. Clauson, *
*
Petitioners, *
*
Rochester Area Chamber of *
Commerce; City of Skyline, *
Minnesota; Brian Brademeyer, *
*
Intervenors on Appeal, *
*

v. *

Surface Transportation Board; *
United States of America, *
*
Respondents, *
*
South Dakota Wheat Growers *
Association; North Central Farmers *
Elevator; Dakota Ag Coop; *
Farmers Union Cooperative Elevator; *
Harrold Grain Company, LLC; *

Lake Preston Cooperative Association; *

Arlington Farmers Elevator Company; *

Ag First Farmers Cooperative; *

South Dakota Farm Bureau Federation; *

South Dakota Farmers Union; *

South Dakota Grain and Feed *

Association; South Dakota Soybean *

Association; South Dakota *

Wheat, Inc.; South Dakota Corn *

Growers Association; South Dakota *

Association of Cooperatives; *

Minnesota Farm Bureau Federation; *

Minnesota Soybean Growers *

Association; Newcastle, Wyoming; *

Upton, Wyoming; Wall, South Dakota; *

Phillip, South Dakota; Midland, *

South Dakota; Fort Pierre, *

South Dakota; Pierre, South Dakota; *

Miller, South Dakota; Wolsey, *

South Dakota; Iroquois, South Dakota; *

De Smet, South Dakota; Volga, *

South Dakota; Beadle County, *

South Dakota; Tracy, Minnesota; *

Waseca, Minnesota; Lake Benton, *

Minnesota; Walnut Grove, Minnesota; *

Sanborn, Minnesota; Springfield, *

Minnesota; Greater Huron *

Development Corporation; Huron *

Chamber & Visitors Bureau; *

Rapid City Economic Development *

Partnership; Wall Chamber of *

Commerce; Midland 2nd Century *

Development Corporation; Pierre *

Chamber of Commerce; Pierre *

Economic Development Corporation; *

Miller Civic & Commerce; On Hand *

Development Corporation; *

South Dakota Chamber of *
Commerce & Industry; Tracy (MN) *
Chamber of Commerce; Tracy (MN) *
Economic Development Authority; *
South Dakota Soybean Processors; *
Dakota, Minnesota & Eastern *
Railroad Corporation; Black Hills *
Regional Rail Shippers Association; *
Western Coal Traffic League; *
Oahe Grain Corporation, a South *
Dakota Corporation; Southern Grain *
Belt Shippers Association; Harvest *
Land Cooperative; Farmers *
Co-operative of Hanska; City of Huron, *
a Political Subdivision of the State of *
South Dakota; Citizens Against *
Rochester's Bypass, *

Intervenors on Appeal. *

No. 02-1794

Olmsted County, *

Petitioner, *

Rochester Area Chamber of *
Commerce; City of Skyline, *
Minnesota; Brian Brademeyer, *

Intervenors on Appeal, *

v. *

Surface Transportation Board;	*
United States of America,	*
	*
Respondents,	*
	*
South Dakota Wheat Growers	*
Association; North Central Farmers	*
Elevator; Dakota Ag Coop;	*
Farmers Union Cooperative Elevator;	*
Harrold Grain Company, LLC;	*
Lake Preston Cooperative Association;	*
Arlington Farmers Elevator Company;	*
Ag First Farmers Cooperative;	*
South Dakota Farm Bureau Federation;	*
South Dakota Farmers Union;	*
South Dakota Grain and Feed	*
Association; South Dakota Soybean	*
Association; South Dakota	*
Wheat, Inc.; South Dakota Corn	*
Growers Association; South Dakota	*
Association of Cooperatives;	*
Minnesota Farm Bureau Federation;	*
Minnesota Soybean Growers	*
Association; Newcastle, Wyoming;	*
Upton, Wyoming; Wall, South Dakota;	*
Phillip, South Dakota; Midland,	*
South Dakota; Fort Pierre,	*
South Dakota; Pierre, South Dakota;	*
Miller, South Dakota; Wolsey,	*
South Dakota; Iroquois, South Dakota;	*
De Smet, South Dakota; Volga,	*
South Dakota; Beadle County,	*
South Dakota; Tracy, Minnesota;	*
Waseca, Minnesota; Lake Benton,	*
Minnesota; Walnut Grove, Minnesota;	*
Sanborn, Minnesota; Springfield,	*
Minnesota; Greater Huron	*

Development Corporation; Huron *
 Chamber & Visitors Bureau; *
 Rapid City Economic Development *
 Partnership; Wall Chamber of *
 Commerce; Midland 2nd Century *
 Development Corporation; Pierre *
 Chamber of Commerce; Pierre *
 Economic Development Corporation; *
 Miller Civic & Commerce; On Hand *
 Development Corporation; *
 South Dakota Chamber of *
 Commerce & Industry; Tracy (MN) *
 Chamber of Commerce; Tracy (MN) *
 Economic Development Authority; *
 South Dakota Soybean Processors; *
 Dakota, Minnesota & Eastern *
 Railroad Corporation; Black Hills *
 Regional Rail Shippers Association; *
 Western Coal Traffic League; *
 Oahe Grain Corporation, a South *
 Dakota Corporation; Southern Grain *
 Belt Shippers Association; Harvest *
 Land Cooperative; Farmers *
 Co-operative of Hanska; City of Huron, *
 a Political Subdivision of the State of *
 South Dakota; Citizens Against *
 Rochester's Bypass, *

Intervenors on Appeal. *

No. 02-1804

Michael J. Laplante, President of the *

Eastside Pioneers Neighborhood	*
Association,	*
	*
Petitioner,	*
	*
Rochester Area Chamber of	*
Commerce; City of Skyline,	*
Minnesota; Brian Brademeyer,	*
	*
Intervenors on Appeal,	*
	*
v.	*
	*
Surface Transportation Board;	*
United States of America,	*
	*
Respondents,	*
	*
South Dakota Wheat Growers	*
Association; North Central Farmers	*
Elevator; Dakota Ag Coop;	*
Farmers Union Cooperative Elevator;	*
Harrold Grain Company, LLC;	*
Lake Preston Cooperative Association;	*
Arlington Farmers Elevator Company;	*
Ag First Farmers Cooperative;	*
South Dakota Farm Bureau Federation;	*
South Dakota Farmers Union;	*
South Dakota Grain and Feed	*
Association; South Dakota Soybean	*
Association; South Dakota	*
Wheat, Inc.; South Dakota Corn	*
Growers Association; South Dakota	*
Association of Cooperatives;	*
Minnesota Farm Bureau Federation;	*
Minnesota Soybean Growers	*
Association; Newcastle, Wyoming;	*

Upton, Wyoming; Wall, South Dakota; *
 Phillip, South Dakota; Midland, *
 South Dakota; Fort Pierre, *
 South Dakota; Pierre, South Dakota; *
 Miller, South Dakota; Wolsey, *
 South Dakota; Iroquois, South Dakota; *
 De Smet, South Dakota; Volga, *
 South Dakota; Beadle County, *
 South Dakota; Tracy, Minnesota; *
 Waseca, Minnesota; Lake Benton, *
 Minnesota; Walnut Grove, Minnesota; *
 Sanborn, Minnesota; Springfield, *
 Minnesota; Greater Huron *
 Development Corporation; Huron *
 Chamber & Visitors Bureau; *
 Rapid City Economic Development *
 Partnership; Wall Chamber of *
 Commerce; Midland 2nd Century *
 Development Corporation; Pierre *
 Chamber of Commerce; Pierre *
 Economic Development Corporation; *
 Miller Civic & Commerce; On Hand *
 Development Corporation; *
 South Dakota Chamber of *
 Commerce & Industry; Tracy (MN) *
 Chamber of Commerce; Tracy (MN) *
 Economic Development Authority; *
 South Dakota Soybean Processors; *
 Dakota, Minnesota & Eastern *
 Railroad Corporation; Black Hills *
 Regional Rail Shippers Association; *
 Western Coal Traffic League; *
 Oahe Grain Corporation, a South *
 Dakota Corporation; Southern Grain *
 Belt Shippers Association; Harvest *
 Land Cooperative; Farmers *
 Co-operative of Hanska; City of Huron, *

a Political Subdivision of the State of *
South Dakota; Citizens Against *
Rochester's Bypass, *
*
Intervenors on Appeal. *

No. 02-1863

City of Winona, Minnesota, *
*
Petitioner, *
*
Rochester Area Chamber of *
Commerce; City of Skyline, *
Minnesota; Brian Brademeyer, *
*
Intervenors on Appeal, *

v. *

Surface Transportation Board; *
United States of America, *
*
Respondents, *

South Dakota Wheat Growers *
Association; North Central Farmers *
Elevator; Dakota Ag Coop; *
Farmers Union Cooperative Elevator; *
Harrold Grain Company, LLC; *
Lake Preston Cooperative Association; *
Arlington Farmers Elevator Company; *
South Dakota Farm Bureau Federation; *
South Dakota Farmers Union; *

South Dakota Grain and Feed *
 Association; South Dakota Soybean *
 Association; South Dakota *
 Wheat, Inc.; South Dakota Corn *
 Growers Association; South Dakota *
 Association of Cooperatives; *
 Minnesota Farm Bureau Federation; *
 Minnesota Soybean Growers *
 Association; Newcastle, Wyoming; *
 Upton, Wyoming; Wall, South Dakota; *
 Phillip, South Dakota; Midland, *
 South Dakota; Fort Pierre, *
 South Dakota; Pierre, South Dakota; *
 Miller, South Dakota; Wolsey, *
 South Dakota; Iroquois, South Dakota; *
 De Smet, South Dakota; Volga, *
 South Dakota; Beadle County, *
 South Dakota; Tracy, Minnesota; *
 Waseca, Minnesota; Lake Benton, *
 Minnesota; Walnut Grove, Minnesota; *
 Sanborn, Minnesota; Springfield, *
 Minnesota; Greater Huron *
 Development Corporation; Huron *
 Chamber & Visitors Bureau; *
 Rapid City Economic Development *
 Partnership; Wall Chamber of *
 Commerce; Midland 2nd Century *
 Development Corporation; Pierre *
 Chamber of Commerce; Pierre *
 Economic Development Corporation; *
 Miller Civic & Commerce; On Hand *
 Development Corporation; *
 South Dakota Chamber of *
 Commerce & Industry; Tracy (MN) *
 Chamber of Commerce; Tracy (MN) *
 Economic Development Authority; *
 South Dakota Soybean Processors; *

Dakota, Minnesota & Eastern	*
Railroad Corporation; Black Hills	*
Regional Rail Shippers Association;	*
Western Coal Traffic League;	*
Oahe Grain Corporation, a South	*
Dakota Corporation; Southern Grain	*
Belt Shippers Association; Harvest	*
Land Cooperative; Farmers	*
Co-operative of Hanska; City of Huron,	*
a Political Subdivision of the State of	*
South Dakota; Citizens Against	*
Rochester's Bypass,	*
	*
Intervenors on Appeal.	*

Submitted: June 11, 2003

Filed: October 2, 2003

Before MORRIS SHEPPARD ARNOLD, HEANEY, and RILEY, Circuit Judges.

MORRIS SHEPPARD ARNOLD, Circuit Judge.

Petitioners challenge the decision of the Surface Transportation Board issued January 30, 2002, giving final approval to the Dakota, Minnesota & Eastern Railroad Corporation's (DM&E) proposal to construct approximately 280 miles of new rail line to reach the coal mines of Wyoming's Powder River Basin (PRB) and to upgrade nearly 600 miles of existing rail line in Minnesota and South Dakota. They maintain that in giving its approval the Board violated 49 U.S.C. § 10901, the National Environmental Policy Act (NEPA) (42 U.S.C. §§ 4321-4370f), the National Historic Preservation Act (16 U.S.C. §§ 470 to 470w-6), and the Fort Laramie Treaty of 1868. Although we conclude that the Board should prevail on almost all of the issues raised

by the petitioners, our rulings on a few issues require us to vacate the Board's decision and to remand for further proceedings not inconsistent with this opinion.

I.

Under 49 U.S.C. § 10901, the Board has exclusive licensing authority for the construction and operation of rail lines. This statute provides that the Board shall authorize the construction and operation of a proposed new line "unless the Board finds that such activities are inconsistent with the public convenience and necessity." Although the Board's authorizing statute does not define the term "public convenience and necessity," in reaching its decisions the Board has historically asked whether there is a public demand or need for the proposed service, whether the applicant is financially able to undertake the construction and provide service, and whether the proposal is in the public interest and would not unduly harm existing services. If the Board is satisfied that the proposed project is not inconsistent with the public convenience and necessity, it proceeds to conduct an environmental review as required by NEPA. Once the environmental review is completed, the Board determines whether its original conclusion is still warranted after taking into account the potential environmental effects of the project and the cost of any necessary environmental mitigation.

In this case, the Board made an initial determination that DM&E's proposal was merited under § 10901. The Board found that there was public demand for the line because it would offer a shorter and less expensive method by which to transport coal from the PRB mines to power plants. It also concluded that the proposed project would benefit existing shippers and that DM&E had demonstrated its financial fitness to carry the project through to completion. Having preliminarily found that the project would not be inconsistent with the public convenience and necessity, the Board instructed its Section of Environmental Analysis (SEA) to examine the potential environmental effects resulting from the construction and continuing operation of the proposed project.

SEA, in coordination with five cooperating federal agencies, then produced a nearly 5,000-page draft environmental impact statement (DEIS) examining the effects both of constructing the rail line extension to the PRB mines and rehabilitating DM&E's existing lines in Minnesota and South Dakota to accommodate the coal traffic anticipated as a result of the project. SEA initially allowed 90 days for public review of and comment on the DEIS, but later extended this period by 60 days to ensure that the large number of persons and entities who wished to comment had ample opportunity to do so. The environmental review culminated with the issuance of a final environmental impact statement (FEIS), which contained further analysis in response to the comments received on the DEIS. The FEIS also made recommendations to the Board regarding environmentally preferable routing alternatives and mitigation measures. In all, the environmental review process took nearly four years and generated roughly 8,600 public comments.

II.

The NEPA mandates that a federal agency "take a 'hard look' at the environmental consequences" of a major federal action before taking that action. *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983) (quoted case omitted). To comport with this standard, an agency must prepare a "detailed statement" (generally, an EIS), 42 U.S.C. § 4332(2)(C), "from which a court can determine whether the agency has made a good faith effort to consider the values NEPA seeks to protect." *Minnesota Pub. Interest Research Group v. Butz*, 541 F.2d 1292, 1299 (8th Cir. 1976), *cert. denied*, 430 U.S. 922 (1977).

In reviewing the agency's decision, we are not free to substitute our judgment for that of the agency. *Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 555 (1978); *Friends of the Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1128 (8th Cir. 1999). Our role in the NEPA process "is simply to ensure that the agency has adequately considered and disclosed the

environmental impact of its actions and that its decision is not arbitrary or capricious." *Baltimore Gas*, 462 U.S. at 97-98; *see* 5 U.S.C. 706.

A.

We begin our review of the agency's actions under NEPA by addressing the objections raised by the city of Rochester, the Mayo Foundation, and Olmstead County, since their objections are to a large degree overlapping. DM&E's existing line, carrying an average of three trains per day, runs through Rochester and Olmstead County. In the FEIS, SEA recommended reconstruction of the existing line as the environmentally preferable alternative for the Rochester area, and the Board in its final decision accepted this recommendation. SEA rejected the proposed construction of a bypass around Rochester and a no-action alternative. Because Rochester is the largest community located on DM&E's projected route and Mayo is one of the most sophisticated medical centers in the nation, they could be expected to be particularly alert to any environmental degradation that might arise from the project that the Board approved. We therefore address their claims with some degree of specificity.

1. Reconstruction of the rail line through Rochester would result in increased rail traffic through the city. Whereas at the present time approximately three trains pass through the city daily, SEA estimated that upon completion of the project rail traffic could increase to as many as 37 trains per day. This increase in traffic would, among other things, increase noise in the city to what SEA calls "adverse" levels. (SEA considers average noise levels above 65 decibels to be adverse and noise levels above 70 decibels to be significantly adverse.) SEA calculated that the average wayside (engine and wheel) noise level produced from 37 trains per day would be at least 65 decibels at distances within 420 feet of the line and would be at least 70 decibels at distances within 210 feet of the line. With noise produced from the trains' horns included, SEA calculated that the average noise level would be at least 65 decibels at distances within 2220 feet of the line and would be at least 70 decibels at distances within 1110 feet of the line. Finally, SEA determined, using aerial photographs, the

number of noise-sensitive "receptors" (e.g., homes, schools, hospitals, churches) that would fall within the distances described above.

Based upon SEA's recommendation, the Board's final decision required DM&E to mitigate noise for those noise-sensitive receptors that would experience an average noise level of 70 decibels from wayside noise. Specifically, the mitigation required a minimum average noise reduction of 5 decibels to the affected receptors and stated a design goal of achieving an average noise reduction of 10 decibels. The Board did not require mitigation for average wayside noise levels below 70 decibels or for noise caused by train horns.

In its comments on the DEIS, Rochester produced data that purportedly showed that 88 residences would experience average wayside noise levels between 75 and 80 decibels and that 8 residences would experience average wayside noise levels above 80 decibels. (Noise levels double every 10 decibels; 80 decibels, therefore, is twice as loud as 70 decibels.) It asserts that SEA misled the Board (in violation of NEPA's requirement of full disclosure) by aggregating all of these residences into a group described as having an average noise level of *at least* 70 decibels. If SEA had advised the Board that some residences could experience average noise levels greatly exceeding 70 decibels, Rochester argues, the Board might have determined that additional mitigation was necessary.

There is no meaningful dispute that SEA accurately identified the distances at which receptors would experience an average noise level of *at least* 70 decibels. The question, rather, is whether SEA was derelict in failing to calculate the extent to which the average noise levels would exceed 70 decibels. Rochester maintains that the Board's own regulation, which instructs the agency to "quantify the noise increase" for receptors which will experience an average noise threshold of 65 decibels, 49 C.F.R. § 1105.7(e)(6)(ii), requires an affirmative answer to this question. Although Rochester's argument that SEA has not quantified the noise

increase is facially attractive, we think it ultimately unavailing. For one thing, Rochester's own proposal (that SEA determine the number of receptors affected at the 75 and 80 decibel levels) would not actually "quantify" the noise increase associated with the project; it would still yield only an aggregation, albeit at a higher level, of the noise increase in Rochester. One could, of course, understand the instruction to "quantify the noise increase" to require a measurement of the actual noise level experienced by every receptor that would meet the threshold noise level. But we do not think that the Board's regulations, or NEPA, require that level of precision. Indeed, we doubt that such a determination would be feasible given that this project involves some 880 miles of railroad line.

Having concluded that SEA is not required to measure actual noise levels for potentially affected noise receptors, we consider whether it nonetheless violated NEPA to aggregate all average noise levels above 70 decibels into one category that SEA described as significantly adverse. In considering whether the EIS "adequately sets forth sufficient information to allow the decision-maker to ... make a reasoned decision," we are guided by the "rule of reason." *See Boundary Waters*, 164 F.3d at 1128 (internal quotations omitted). Despite Rochester's assertions, it does not appear to us that SEA hid the facts from the Board. The DEIS fully disclosed the number of noise receptors that would suffer significantly adverse effects from both wayside and horn noise. It may be true, as Rochester contends, that even after mitigation there will still be residences that are subject to significantly adverse noise levels (indeed, the Board does not claim otherwise). But NEPA does not require that an agency eliminate all adverse affects that might result from a project.

Rochester draws attention to the fact that the Federal Aviation Administration (FAA) gathers data for average noise levels above 65 decibels, 70 decibels, and 75 decibels, and argues that SEA's analysis is therefore deficient. While it is true that the FAA includes a level of analysis that SEA does not, we do not think that this is dispositive. It would be wrong to conclude that one agency's selection of a particular

methodology necessarily makes another agency's chosen, but different, methodology insufficient under NEPA. On the whole, we find that SEA's choice of analysis, which was consistent with its past practice and similar in nature to the noise analyses performed by other federal agencies, was not arbitrary or capricious.

2. Rochester submits that the Board violated NEPA by failing to consider and mitigate horn noise. As described previously, SEA calculated the number of noise receptors that would experience average noise levels from train horns of at least 65 decibels and 70 decibels. But unlike the treatment given to wayside noise, SEA's discussion of the effects and mitigation possibilities for horn noise was relatively perfunctory. The only mention of mitigating horn noise in the FEIS occurred in a footnote explaining that "SEA is not recommending mitigation for horn noise because of potential safety concerns in the absence of Federal Railroad Administration [FRA] standards addressing this issue." In its argument to this court, the Board further explained that the FRA has recently proposed standards for establishing quiet zones (areas where horns do not have to be sounded), and that absent FRA approval it would be inappropriate for the Board to impose its own limitations on horn soundings. Given the important role that train horns play in reducing traffic accidents, we cannot second-guess the decision of SEA in refusing to limit the use of train horns. We do not believe, however, that this relieves SEA of the obligation to consider mitigation not involving limitations on the use of horns.

SEA required mitigation for receptors subjected to an average noise level of 70 decibels from wayside noise. Rochester maintains that SEA should have considered similar mitigation measures for receptors subjected to comparable levels of horn noise. Such measures might include sound-insulating treatments for buildings within high noise areas. By SEA's own calculations, horn noise will increase the distance at which buildings may be subjected to average noise levels of 70 decibels from 210 feet (the distance due to wayside noise alone) to 1110 feet. Although it is hard to imagine how insulating affected buildings might pose a safety

threat (horns are sounded primarily for traffic safety), it is just conceivable that safety reasons do exist. But without a reasoned discussion of its rationale, we cannot say that SEA has taken a "hard look" at this substantial issue.¹ This is not to say that the Board must ultimately mitigate for horn noise, but it must at least explain why mitigation is unwarranted. Even though NEPA's requirements are predominantly procedural, they do require that SEA "explain fully its course of inquiry, analysis and reasoning." *Minn. Pub. Interest*, 541 F.3d at 1299. We conclude that it did not do so here.

3. Rochester's next objection is to the method used by SEA in calculating ambient (background) noise for use in its noise analysis. SEA used noise levels in rural South Dakota as its baseline for ambient noise. Rochester argues that since the ambient noise levels in an urban area are higher, it was arbitrary for SEA to use the lower rural levels. We disagree. SEA adequately supported its analysis by explaining that noise is not additive; when two sounds are of different levels, the higher level predominates and the lower level adds little to the overall noise level. This conclusion is supported by the EPA, which has stated that "adding a 60 decibel sound to a 70 decibel sound only increases the total sound pressure level less than one-half decibel." *See Protective Noise Levels, Condensed Version of EPA Levels Document 3 (1979)*, at <http://www.nonoise.org/library/levels/levels.htm>. Even if we credit Rochester's estimate that its own ambient noise level is 59 decibels, that would add less than one-half a decibel to those receptors that SEA has determined will experience average train noise of 70 decibels. SEA's decision to forego a separate ambient noise

¹The Board argues that the two bypasses required in the mitigation order (discussed below) will reduce horn noise, thereby fulfilling its duty under NEPA to consider this issue. Although, after a full explanation and analysis, the construction of bypasses may prove to be the optimal method of handling horn noise, we do not believe that this proposed alternative relieves SEA of the duty to examine other potentially viable alternatives, such as insulating treatments.

measurement for every community located along the DM&E project was clearly within its permissible discretion.

4. Likewise, we find that SEA did not act arbitrarily in responding to concerns about nighttime noise. Because nighttime noise can lead to sleep disturbance, its effect on the human environment is greater than a similar level of daytime noise. To account for this, SEA employed the accepted practice of counting each nighttime train as ten trains (adding an approximately 10 decibel penalty to each train). For the purpose of its analysis it also assumed that train traffic would be spaced evenly throughout the day, an assumption that Rochester contends was a clear error in judgment. As the basis for this contention, Rochester presented in its comments a statistical model that purportedly shows that more trains will run at night than SEA's model predicts. Rochester's model is based upon DM&E's plan to schedule a block of up to six hours for maintenance (a period where no trains will run) each day. In response to this comment, SEA stated that maintenance was impossible to predict and would vary considerably depending on what particular coal contracts that DM&E obtained. SEA therefore chose not to alter its methodology. Rochester's model may indeed be a better predictor of night traffic if DM&E actually uses a full six hours per day for maintenance and if DM&E is equally likely to schedule maintenance during the daytime as it is to schedule it at night, but these assumptions are just as speculative as SEA's assumption that train traffic would be spaced evenly throughout the day. Due to the highly uncertain nature of rail traffic patterns, we cannot say that it was a clear error of judgment for SEA to prefer one set of assumptions over another in conducting its analysis.

5. Rochester argues that SEA failed to make any response to evidence presented in Rochester's comments that households experiencing both noise and vibration perceive the effect of the noise to be approximately twice the measured value of the noise. Although SEA included analysis for noise and vibration effects separately, we can find no evidence that it considered the synergies between the two in its response

to comments or in the environmental impact statements. "Although the agency is not required to include in its final analysis every factor raised by ... a comment" and may respond, for example, by explaining why the comment does not warrant [further] agency response, *see Oregon Natural Res. Council v. Marsh*, 52 F.3d 1485, 1490 (9th Cir. 1995), the Council on Environmental Quality (CEQ) regulations impose upon a[n] agency preparing an FEIS the duty to assess, consider, and respond to all comments, *see* 40 C.F.R. 1503.4(a). In this instance, SEA has not met this minimum requirement. On remand, SEA is instructed to fulfill its duty under the applicable NEPA regulations.

6. We now consider whether SEA's use of aerial photographs to identify noise-sensitive receptors led it to undercount the number of receptors eligible for noise mitigation. According to Rochester's comments, the method employed was flawed because any single building identified by photograph might contain multiple residences (the Board's regulations designate each "residence" as a separate noise-sensitive receptor). Rochester suggested that a more accurate count could be obtained by using the tax records to determine the number of affected residences. SEA responded to this comment by stating its belief that the number of potentially affected noise receptors was likely overestimated because there were no adjustments for ambient noise or for shielding (by an object between a noise source and a noise receptor) and because aerial photographs do not differentiate between eligible noise receptors (such as homes) and ineligible structures (such as businesses and garages). SEA also explained that any discrepancy between its calculations and the actual number of affected receptors can be corrected by the Board during its oversight period. We cannot say, as Rochester argues, that SEA's choice of methodology amounted to a clear error in judgment. In a project of this size, the agency is not required to maximize precision at all costs. We view SEA's decision to use aerial photographs as a sensible way reasonably to approximate the number of affected receptors along the entirety of the proposed project.

7. Rochester submits that SEA improperly failed to consider the environmental impact on the city of passing sidings (locations where westbound trains move onto alternate track so that eastbound trains can pass). Although there are no present plans to build a passing siding in Rochester, the city asserts that since the FEIS acknowledges that "siding locations have not been finalized" SEA should have assessed the environmental impact that would result from locating a siding in Rochester. We believe that Rochester has misconstrued SEA's statement. DM&E has proposed 45 locations for possible sidings, but it anticipates needing only 35-40 total sidings for efficient rail operation; thus there are several proposed locations that ultimately will not be used. It is not inconsistent for SEA to acknowledge that the locations have not been finalized while at the same time denying that a siding will be built in Rochester (because none has been proposed there). We note, moreover, that SEA's analysis with respect to the proposed sidings was more than adequate.

8. Rochester maintains that SEA committed two errors in its assessment of the traffic effects that will result from reconstruction of the existing line through Rochester. First, Rochester argues that SEA should have used more current data when determining average daily traffic (ADT) volumes for those streets where train crossings exist. According to Rochester, SEA used data from 1994 when data from 1998 was available.

Our comparison of the data from those years reveals that there has been little change in traffic volumes. In fact, the aggregate volume of traffic on the twelve streets where train crossings exist has actually declined (albeit only slightly) based on data from the Minnesota Department of Transportation. Even if we assume that SEA "erred" in using the older data, we need not remand unless "there is a significant chance that but for the errors the agency might have reached a different result." *Boundary Waters*, 164 F.3d at 1129. Given the inconsequential difference in the data, we find remand unnecessary on this issue.

Rochester also asserts that SEA used a nonsensical formula in calculating the average delay to vehicles that would result from increased rail traffic. According to Rochester, any formula designed to compute the average traffic delay to all vehicles must include as one of its variables ADT volumes. In lieu of using ADT volumes, however, SEA's formula calculates average traffic delays for all vehicles as a proportion of the delay for vehicles actually stopped. SEA explains that this method "results in a conservative estimate of vehicle delay." Indeed, our careful inspection of both the SEA methodology and that proposed by Rochester suggests that SEA's calculations likely overstate the average traffic delays. We are convinced, in any case, that SEA's chosen methodology did not undermine the purposes of NEPA.

9. Contrary to Rochester's assertions, we believe that SEA's analysis of ground vibration was adequate in all respects. In discussing the effects of vibration generally, SEA's analysis determined that there was little risk of damage to structures located 50 feet or more from the tracks and also that there was little risk of disturbance to structures located 100 feet or more from the tracks. SEA also noted that residences within 100 feet (SEA counted 14 such structures) might experience increased disturbances as rail traffic increased. In addition to its general analysis, SEA consulted with the manufacturer of a security fence at a nearby prison to verify its own conclusion that increased rail traffic would not be incompatible with operation of the security fence; the manufacturer assured SEA that if properly maintained and operated, the fence would not be affected by increased rail traffic. Lastly, SEA discussed the possibility that PEMSTAR, a local company that uses vibration-sensitive equipment, might not be able to continue operations at its current facility were traffic levels to increase. SEA noted that if PEMSTAR left Rochester altogether (a proposition that SEA considered unlikely since PEMSTAR has other facilities in Rochester that are located farther from the tracks), it would result in a loss of about 600 jobs. Given Rochester's size and the fact that some jobs would be created by DM&E's expanded operation, SEA concluded that the loss of 600 jobs would not have significant economic effects on the city.

Having thoroughly reviewed SEA's analysis of vibration, we cannot agree with Rochester's contention that SEA "buried" the facts. It seems to us that Rochester's real grievance is that SEA did not adopt Rochester's proposed mitigation condition that would have prohibited any increase in vibration. This proposal, it seems to us, would have essentially sounded a death knell to any plans to reconstruct the existing Rochester line. This result would have no doubt been met with Rochester's approval, but it was not compelled by the substantial body of evidence that SEA amassed on this issue.

10. Mayo asserts that SEA failed adequately to address the possibility of groundwater contamination. SEA acknowledged that both the existing route and the proposed bypass cross areas that are susceptible to groundwater contamination in the event of a rail line accident. After detailing these risks, SEA noted that because rehabilitation of the existing line would improve track that is currently in poor condition, the risks of groundwater contamination would actually decrease. Mayo's counter-argument is based entirely upon a verified statement of one of its experts that was presented to SEA after SEA had prepared and released the FEIS. SEA does not have an obligation to respond to arguments that were not presented to the agency during the appropriate time period, especially when, as here, there is no indication that the information presented was previously unavailable. But even if it were appropriate to consider Mayo's evidence, we would be unable to say that SEA has failed to take a "hard look" at the possibility of groundwater contamination.

11. Mayo also maintains that SEA did not take a "hard look" at the risk that the project would cause delays to emergency vehicles. Although Mayo acknowledges that SEA analyzed independently the effects of the reconstruction alternative and the bypass alternative on emergency vehicles, it argues that SEA arbitrarily avoided a direct comparison of the alternatives. Essentially, Mayo faults SEA for failing to say explicitly that the existing route would cause more delays to emergency vehicles than the bypass. We think, however, that SEA made this point abundantly clear when it

recommended that the Board, if it chose to utilize the existing route, should "require construction of two additional grade separated crossings in Rochester to prevent potential reductions in the quality of emergency response." FEIS 9-65. In contrast, SEA found that mitigation related to emergency vehicles would be unnecessary for the bypass. The only logical inference that can be drawn from this is that SEA anticipated that reconstruction of the existing route would pose more risk of disruption to emergency vehicles than would the construction of the bypass. For the purpose of complying with NEPA, it was not incumbent upon SEA to state this conclusion in a single explicit sentence.

12. Mayo contends that SEA failed properly to examine the relationship between increased levels of train vibration and the formation of sinkholes. Despite the high level of concern it expresses now, however, Mayo did not raise this issue in its comments on the DEIS. (Mayo did comment on its concerns about the effect of vibration on its facilities, and SEA responded to this comment by undertaking a more extensive vibration analysis.) Mayo seeks to excuse its failure to raise this issue earlier by stating that the issue was obvious (although apparently not obvious enough for Mayo to have raised it before). But even if it is true that increased vibration will hasten the formation of sinkholes, we fail to see how this advances Mayo's interests. SEA recommended the existing route because it was less susceptible to sinkholes than the bypass alternative. This relative advantage of the existing route would seemingly be magnified if SEA were to find that vibration accelerated sinkhole formation in susceptible areas. In any event, we do not believe that SEA's failure to respond to a concern that was never raised tainted its analysis.

13. Olmstead County raises alleged deficiencies with respect to SEA's air quality analysis. First, it asserts that SEA should have used Minnesota's thresholds for determining whether sulfur dioxide levels were significant instead of the less stringent EPA thresholds. The decision to apply these lesser standards, Olmstead County argues, led SEA erroneously to conclude that it did not have to undertake

more precise modeling to determine the exact scope of the effect of the proposed line on air quality. The County also faults SEA for failing to take background levels of hazardous air pollutants into account when it determined that hazardous air pollutant concentrations caused by train locomotives would be insignificant.

After reviewing the record, we conclude that SEA's decision to use the EPA's thresholds was not arbitrary. SEA has an interest in using a standardized measurement to compare and contrast the relative air quality effects across a variety of regions. The EPA thresholds provide a reasonable standard by which to accomplish this. SEA's decision to forego the testing necessary to determine the background levels of hazardous air pollutants in Olmstead County was similarly reasonable. Its measurements of hazardous air pollutant concentrations from locomotive exhaust showed that increased rail traffic would result in only a minuscule increase in overall concentration levels. NEPA regulations require agencies to expend the bulk of their efforts on the most pressing environmental issues. In this instance, SEA had evidence that showed that the increase in the concentrations of hazardous air pollutants would be *de minimis* in comparison to the background levels, whatever they might actually be. Further expenditure of agency resources was therefore not required.

14. Olmstead County maintains that SEA's environmental justice analysis was inadequate. The purpose of an environmental justice analysis is to determine whether a project will have a disproportionately adverse effect on minority and low income populations. To accomplish this, an agency must compare the demographics of an affected population with demographics of a more general character (for instance, those of an entire state). On the EPA's recommendation, SEA used 1990 census data (2000 census data were not yet available) to compare data at the census block group level (the smallest geographic unit for which data on both race and income are obtained) to data at the state level.

Olmstead County raises two objections to this approach. First, it argues that SEA should have used projected 2000 census data, which were available for some, but not all, communities. Second, it argues that for some areas, data were available at a level finer than that of census block group (for example, discrete neighborhoods, subdivisions, etc.). In Olmstead County's opinion, these "corrections" would allow SEA to identify more affected groups. In response to these comments, SEA explained that an environmental justice analysis must use consistent data sets in order for the comparison to be meaningful. SEA, after close consultation with the EPA, used the most current and consistent data that were available to it. It seems to us that it is Olmstead County's suggested approach (using a medley of assorted data), and not SEA's, that could more fairly be characterized as arbitrary.

15. We consider next whether the Board's decision-making process was flawed by the unlawful consideration of *ex parte* communications from DM&E. The record demonstrates that DM&E officials submitted a letter to SEA after the FEIS was issued (but before the Board's final decision). In this letter, the DM&E expressed its views on mitigation proposals in the FEIS that called for three grade-separated crossings. Mayo argues that this contact violated the Administrative Procedure Act, *see* 5 U.S.C. § 557(d)(1)(A), and the Board's own code of ethics, *see* 49 C.F.R. § 1103.14.

We are not sure that these prohibitions apply to communications, such as DM&E's letter, that are submitted to the authority in charge of an environmental review and that express comments about that review. We note, moreover, that three United States Senators wrote letters to the Board on behalf of Mayo during the same time period that the alleged improper communications of DM&E occurred, communications to which Mayo does not object. In any event, as we indicate below, the Board did not adopt the view expressed in the letter that Rochester should be required to pay for the proposed grade-separated crossings, so we discern no remediable harm here.

Mayo also objects to a discussion between DM&E's president and the Board's chairman regarding the jurisdiction of the Board to impose bypass alternatives. As this discussion concerned matters of jurisdiction, neither of the cited authorities would seemingly apply. But, again, the communication was of little consequence since the Board expressly rejected DM&E's understanding of its jurisdictional authority.

16. We turn our attention to the Board's rejection of a proposed bypass around Rochester, a decision that Rochester argues vigorously is arbitrary and capricious. According to SEA, the fundamental flaw in the proposed bypass was that it would require the construction of new track through karst areas that are topographically susceptible to sinkhole collapse. Construction in high sinkhole areas requires expensive mitigation to reduce the risk that heavy construction equipment will cause the collapse of underground caverns. Even with expensive mitigation and monitoring, there is the potential that sinkholes could develop at some point in the future, resulting in the derailment of trains, which could, in turn, lead to groundwater contamination. In addition, the necessary mitigation, which could require construction of a cement dam wall underneath the rail line, might itself result in potentially significant alterations in groundwater flow, thereby affecting the region's ecology and accelerating the formation of other sinkholes.

Rochester does not dispute the fact that construction over karst terrain presents increased risks and costs. Its argument, instead, is that SEA's treatment of the Rochester bypass was inconsistent with its treatment of other areas where sinkholes were a potential difficulty, primarily the proposed East Staging and Marshalling Yard in Lewiston, Minnesota (Lewiston Yard). SEA chose to approve the construction of Lewiston Yard despite the fact that it was located in an area having the potential for a high concentration of sinkholes. In its analysis, however, SEA points out significant differences between the situations presented by Lewiston Yard and the proposed bypass of Rochester. Lewiston Yard requires only 2.1 miles of

construction, and although the site initially proposed was in an area having the highest probability for sinkholes, there was some evidence that shifting the site slightly to the west would avoid the most troublesome topographical features. In contrast, the proposed Rochester bypass, which is 34.1 miles long, would involve 1.4 miles of construction through an area having the highest probability of sinkholes, 6.3 miles of construction through an area having a moderate to high probability of sinkholes, and 19.4 miles of construction through an area having a low to moderate probability of sinkholes. And unlike Lewiston Yard, there is no indication that these areas could be avoided (Rochester did not make such a case to SEA during the comment period).

The Lewiston Yard and Rochester bypass proposals are dissimilar in another important, and we think conclusive, respect. SEA concluded that there was an environmentally and fiscally preferable alternative to the Rochester bypass, namely, the reconstruction of the existing route, and that there was no such alternative in the case of Lewiston Yard. Rochester's arguments are misplaced in that they focus on demonstrating that the bypass could be built in spite of the existing terrain. But SEA does not contend in its analysis that the bypass could not in fact be built, only that it would entail considerable cost and significant environmental risk to do so. While Rochester may prefer those displaced environmental consequences associated with the bypass to the ones associated with reconstruction of the existing line, it is not our place to reallocate those burdens. When the "resolution of [the] dispute involves primarily issues of fact" and "analysis of the relevant documents 'requires a high level of technical expertise,' we must defer to 'the informed discretion of the responsible federal agencies.'" *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 377 (1989) (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 412 (1976)).

Mayo argues that SEA had an obligation under NEPA to analyze the feasibility of other bypass alternatives to or variations on the rejected bypass alternative. But we note that Rochester had considered five alternatives to DM&E's proposed

reconstruction through the city, and it determined that the 34.1 mile bypass that it submitted was the environmentally preferred alternative. Guided by the "rule of reason" approach, *Boundary Waters*, 164 F.3d at 1128, we do not think that SEA was under an obligation to examine alternatives that Rochester itself considered environmentally inferior to the alternative ultimately rejected. Nor do we think that SEA has an obligation thoroughly to study new alternatives that were proposed only after it became apparent that Rochester's preferred bypass alternative would be rejected. "Common sense ... teaches us that the 'detailed statement of alternatives' " required by 42 U.S.C. § 4332(c)(iii) "cannot be found wanting simply because the agency failed to include every alternative device and thought conceivable by the mind of man." *Vermont Yankee*, 435 U.S. at 551.

Mayo and Olmstead County argue that SEA's rejection of the bypass because of the difficulties with karst topography is arbitrary in light of the fact that the current rail line runs through similar topographical areas. SEA explained, however, that the risk of encountering sinkholes along the existing route was unlikely since surveys had identified only four sinkholes near or within DM&E's right of way and since the existing route had been in operation for over a century without incident. We think that this provides a reasoned basis upon which to conclude that the existing route presented fewer topographical challenges and risks than the proposed bypass.

Finally, Mayo maintains that SEA's conclusion that the bypass would be significantly more expensive to construct and operate when compared with reconstruction of the existing route is unsupported by the evidence. This contention is undermined by the fact that Rochester (Mayo's partner in interest) calculated that the bypass would cost approximately \$37 million more than reconstruction of the existing route. DM&E and SEA, for their part, estimated that the difference in cost could be as much as \$90 million. There was thus more than ample evidence to support SEA's conclusion that construction of a bypass would be considerably more expensive than reconstruction of the existing route.

17. After the period designated for comments on the DEIS had passed, Mayo petitioned the Board to reopen the record to consider concerns caused by a train derailment involving the release of toxic materials in Maryland and the terrorist attacks that took place on September 11, 2001. Mayo asserted that if similar incidents occurred in Rochester, it would be difficult to evacuate its medical facilities immediately. In denying Mayo's request to reopen the record, the Board explained that the proposed project would actually increase safety because it entailed system-wide improvements to existing track. The Board also noted that it was unlikely that DM&E would be involved in the increased shipment of hazardous materials. Finally, the Board did not view the two incidents as posing a threat specific to Mayo.

An agency is required to prepare supplements to an FEIS if "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c). This provision, however, has limits, for "an agency need not supplement an EIS every time new information comes to light after the EIS is finalized." *Marsh*, 490 U.S. at 373. "To require otherwise would render agency decisionmaking intractable, always awaiting updated information only to find the new information outdated by the time a decision is made." *Id.* We therefore review denials of such requests applying the "rule of reason," *id.* at 374, giving deference to the responsible agency so long as its decision is not arbitrary or capricious, *id.* at 377. In light of the safety analysis already performed by SEA, we do not think that it was arbitrary or capricious for the Board to conclude that further proceedings in light of the Maryland train derailment were not warranted. And while the events of September 11, 2001, have certainly raised awareness of the potential threats to our nation's transportation systems, the Board exercised its permissible discretion when it determined that any increased threat was general in nature and did not bear specifically on Mayo, Rochester, or the proposed DM&E project.

18. Rochester maintains next that the Board's final decision was unlawful insofar as it imposed, as part of its mitigation plan, conditions requiring consultation between DM&E and certain affected entities. According to Rochester, *Idaho by and through Idaho Public Utilities Commission v. Interstate Commerce Commission*, 35 F.3d 585 (D.C. Cir. 1994), supports its argument that the Board's consultation requirements are an unlawful delegation of NEPA responsibilities. *Idaho Public* is, however, readily distinguishable. In that case, the Interstate Commerce Commission (the predecessor of the Board) declined to prepare an EIS for a project proposal, opting instead to require the regulated party to consult with other federal and state agencies. *Id.* at 595. The D.C. Circuit determined that this was a violation of NEPA. *Id.* at 596. While we fully agree that an agency may not require consultation in lieu of taking its own "hard look" at the environmental impact of a project, we do not believe that NEPA is violated when an agency, after preparing an otherwise valid EIS, imposes consultation requirements in conjunction with other mitigating conditions. Whether consultation produces any "affirmative benefit" or not, *see Norfolk Southern Corp. – Control – Norfolk & Western Ry. Co.*, 366 I.C.C. 173, 234-35 (1982), is, of course, a matter properly left to agency discretion.

19. Finally, we examine Rochester's claim that the Board unlawfully imposed the cost of grade-separated crossings on entities other than DM&E. The Board's final decision adopts nearly verbatim the recommendation of SEA and states that DM&E "shall install two grade separated crossings in Rochester, Minnesota." 2002 Decision at 69. The decision requires DM&E to "complete installation of one grade separated crossing prior to transporting more than 20 million tons of coal annually through Rochester for more than one year," and to "complete installation of a second grade separated crossing prior to transporting more than 50 million tons of coal annually through Rochester for more than one year." *Id.* at 69-70. In furtherance of this objective, the Board's decision directs that DM&E "shall consult with FRA, Federal Highway Administration (FHWA), appropriate State and local transportation authorities, and the City of Rochester on the design (for example, whether the road

would go over or under the rail line), location, and funding of these grade separations," *id.* at 69, and "apprise [sic] SEA of the progress being made toward implementation of this condition in the quarterly reports required by [another condition]," *id.* at 70.

We offer two observations on this aspect of the Board's decision. First, although SEA expects the interested parties and various state agencies to work together to resolve the issue of funding, it did not order any particular entity to pay for the crossings. Second, because DM&E is required to construct the separated crossings *before* it can transport the specified amount of coal for more than one year, it will suffer significant economic repercussions if for some reason the crossings are not completed in a timely manner. Since DM&E bears the burden of nonperformance, it has the incentive either to secure funding for the crossings (presumably from a government source) or fund the crossings itself. Rochester is, of course, free to contribute to the crossings, but we do not think it (or anybody else) is required to do so under the Board's decision.

In another section of its decision, the Board addresses DM&E's concern "that the grade-crossing separation conditions could be read to require DM&E to bear 100% of the costs associated with designing and constructing these grade separations," *id.* at 28-29, by replying that:

This is not the case. Although our conditions do not specify how the grade-separations costs should be borne, it is not our intention to place an unreasonable burden on DM&E. The grade separations in Pierre and Rochester will benefit those communities. Therefore, it is reasonable to expect entities other than DM&E to bear a substantial share of the costs. The communities, DM&E and other interested parties can, of course, seek assistance under the Federal Aid Highway Program or pursue other funding opportunities ... However, if DM&E and the communities cannot arrange for adequate funding and/or reasonable cost sharing within a reasonable time, either DM&E or the communities could bring

the matter to our attention during the environmental oversight period and we will take appropriate action.

Id. at 29.

While it is conceivable that the above passage could be read as imposing a duty on Rochester to help with funding, we think that it merely makes it clear that DM&E need not necessarily fund the separated crossings by itself. This is consistent with the Board's instruction that DM&E consult appropriate state and federal authorities on matters of funding, an instruction that impliedly encourages DM&E to solicit funds. We think that it would be especially wrong to interpret the Board's response to DM&E's concerns as *requiring* Rochester to pay for the grade separation when doing so would raise serious questions about the Board's authority to impose requirements on non-applicants, an authority that SEA has said does not exist, *see* FEIS, vol. III, at 12-8.

B.

The Mid States Coalition for Progress represents the interests of approximately 150 landowners in South Dakota and Wyoming who are opposed to DM&E's proposed expansion. It raises several objections to SEA's analysis regarding alternatives for the proposed rail line extension into South Dakota and Wyoming.

1. In the preliminary stages of preparing its application, the DM&E examined three possible alignments (called northern, middle, and southern) for extending its system into the PRB. After it had held public meetings, visited the relevant areas, and conducted field investigations to reveal the engineering and environmental issues associated with each potential alignment, the DM&E determined that a southern alignment was the only one that would meet the purpose and needs of the project. According to the DM&E, the topography along the southern alignment allowed for gentle grades and shorter routes than the other two alignments, both of which were essential to DM&E's goal of constructing an efficient, direct, and competitive line to the PRB coal mines. In addition, a southern alignment appeared to provide the

greatest flexibility for constructing new track to avoid environmentally sensitive resources. Based on these findings, DM&E's application to the Board focused exclusively on routing alternatives along a southern alignment.

The Mid States Coalition criticizes SEA for failing to include and analyze routes in the northern alignment as project alternatives. It asserts that the general goals of the project could be fulfilled if DM&E were to use a northern alignment and that such an alignment might be environmentally preferable to the southern alignment alternatives that were considered. While these broadly worded assertions may or may not be true, it was within SEA's permissible discretion to focus its resources on the southern alignment alternatives only. Under NEPA, an agency "is required to consider only reasonable, feasible alternatives." *Missouri Mining, Inc. v. ICC*, 33 F.3d 980, 984 (8th Cir. 1994).

In this case, DM&E applied for a license to construct and operate a route to the PRB mines along the southern alignment, after concluding that the northern and middle alignments would not accomplish its business objective. While SEA had the obligation to explore alternative routes, which it did, we do not think that it was required to explore alternatives that, if adopted, would not have fulfilled the project goals as defined by the DM&E. This does not mean that SEA was obligated to recommend DM&E's preferred route (it did not), and if SEA had found that there were no alternatives that met DM&E's stated business objectives, it could simply have adopted the "no action" recommendation. But we do not think that SEA had a duty to analyze alternatives that were not germane to the proposed project itself.

2. Early in the formal scoping process of the project, SEA identified two alternatives for public and agency comment. One of these, "Alternative A," was a decision not to build at all, and "Alternative B," was basically the DM&E's preferred alternative as presented in its project application. As a result of comments received during the scoping process, SEA identified eight other alternatives for potential

inclusion in the DEIS. One was "Alternative C," the route recommended by SEA and adopted by the Board. The remaining seven alternatives were similar in that they all involved the use of existing rail line and transportation corridors. After reviewing these seven alternatives, SEA determined that only one remotely met both the environmental and operational constraints necessary to warrant detailed analysis in the DEIS. This alternative was examined in detail in the DEIS as "Alternative D."

During its comprehensive analysis in the DEIS, SEA concluded that Alternatives B and C were environmentally preferable to Alternative D, and it therefore eliminated Alternative D from further consideration. In comments on the DEIS, the EPA suggested that Alternative D might be modified to reduce its potential adverse environmental effects. In response, SEA, working closely with the EPA, requested that DM&E submit a "Modified D" alignment that would comply with the EPA's design criteria. Once SEA and the EPA approved DM&E's design, SEA requested more detailed engineering data from DM&E in order to determine the feasibility of the alignment, which data DM&E provided. After verifying DM&E's submissions to ensure that they "represented a reasonable and credible effort to develop a heavy-haul rail line using the existing rail line alignment," SEA determined that the Modified D alignment offered no significant advantages over Alternatives B or C, such as reduced distance, fewer environmental impacts, lower cost, or less complicated engineering. Of particular significance was the SEA's finding that the Modified D alignment would require eight to ten times the required earthwork of either Alternatives B or C, making the alignment both prohibitively expensive and environmentally precarious. On the basis of these findings, SEA concluded, and the EPA agreed, that the Modified D alignment was not a reasonable alternative for the project.

The Mid States Coalition contends that SEA erred in determining that the Modified D alignment was not a reasonable and feasible alternative. Specifically, it asserts that SEA violated NEPA by involving DM&E in providing information on the

feasibility of the alignment, that SEA's analysis was incorrect and misleading, and that a supplemental DEIS allowing for public review and comment on that alternative was required prior to issuance of the FEIS.

Since the Modified D alignment was suggested to SEA during the comment period on the DEIS, federal regulations require that the agency respond to the proposal in the FEIS. 40 C.F.R. § 1503.4. But the agency may respond in a variety of ways: It may, for instance, "[m]odify alternatives including the proposed action, ... [d]evelop and evaluate alternatives not previously given serious consideration by the agency, ... [s]upplement, improve, or modify its analyses, ... [m]ake factual corrections, [or] [e]xplain why the comments do not warrant further agency response." *Id.* In this instance, SEA did not choose the path of least resistance; instead, it chose to develop and evaluate the Modified D alignment to determine whether it was a reasonable and feasible alternative.

The Mid States Coalition argues that SEA's seemingly satisfactory response was actually inadequate because it relied, in large part, on information that DM&E submitted. The CEQ regulations, however, contemplate a role for applicants in providing information necessary to complete an environmental review, so "that acceptable work not be redone." 40 C.F.R. § 1506.5(a). Nor does it appear that the information was uncritically accepted, as the Mid States Coalition maintains. The engineering firm hired by SEA reported that "[t]he earthwork quantities developed ... [by DM&E] appear to represent a credible estimate of the cut and fill that would be associated with the proposed Modified D alignment," and that the Modified D alignment "is probably technically feasible but not reasonable or practical." FEIS, Appendix M, at M-127, M-128. The EPA, moreover, was also convinced, after reviewing SEA's analysis, that the Modified D alignment was not a reasonable alternative for the project. And while the Mid States Coalition vigorously disputes the accuracy of some of SEA's evidentiary findings, we need not "fly speck" an EIS for inconsequential or technical mistakes, *see Boundary Waters*, 164 F.3d at 1128

(internal quotations omitted). We are convinced that SEA made a good faith effort to explore the suggestions made by a commenting party and reasonably concluded that the Modified D alignment was not a preferred alternative.

Nor do we accept the Mid States Coalition's argument that SEA was in any event required to issue a supplemental DEIS allowing for public review and comment. Supplemental statements are required only when an agency "makes substantial changes in the proposed action that are relevant to environmental concerns," or when "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c). Neither of these conditions exists in this instance. Once SEA properly responded to comments suggesting Modified D as an alternative and determined that it was not a reasonable or feasible alternative, it was justified in refusing the Mid States Coalition's request to issue a supplemental DEIS allowing for public review and comment.

3. From the comments that it received on the DEIS, SEA concluded that its DEIS analysis did not completely reflect the potentially adverse environmental effects for one of the construction alternatives considered for the City of Mankato. In the FEIS, therefore, the agency supplemented its evaluation of the alternative and recommended appropriate mitigation strategies. The Mid States Coalition maintains that SEA should have prepared a supplemental DEIS so that the public could comment on the information that was first presented in the FEIS.

We think that this argument is misplaced. As we have already said, NEPA does not require an additional round of public comments every time an agency revises, supplements, or improves its analysis in response to the public comments on a DEIS. Incremental changes are expected and in fact encouraged: A supplemental DEIS is required only when changes are substantial, and even then, only if the substantial change is relevant to environmental concerns. If agencies were required

to issue a supplemental statement with every project adjustment, it would discourage them from making corrections and improvements in response to public comments. While SEA has modified its analysis with respect to this Mankato alternative, we think it was well within SEA's discretion to determine that the change was not substantial enough to require a supplemental DEIS.

C.

The Sierra Club argues that SEA wholly failed to consider the effects on air quality that an increase in the supply of low-sulfur coal to power plants would produce. Comments submitted to SEA explain that the projected availability of 100 million tons of low-sulfur coal per year at reduced rates will increase the consumption of low-sulfur coal vis-à-vis other fuels (for instance, natural gas). While it is unlikely that this increase in coal consumption would affect total emissions of sulfur dioxide (which are capped nationally at maximum levels by the Clean Air Act Amendments of 1990), the Sierra Club argues that it would significantly increase the emissions of other noxious air pollutants such as nitrous oxide, carbon dioxide, particulates, and mercury, none of which is currently capped as sulfur dioxide is.

Before this court, the Board admits that because of the need to comply with the restrictions in the Clean Air Act Amendments on sulfur dioxide emissions, many utilities will likely shift to the low-sulfur variety of coal that the proposed project would make available. It argues, however, that this shift will occur regardless of whether DM&E's new line is constructed, since the proposed project will simply provide a shorter and straighter route for low-sulfur coal to be transported to plants already served by other railroad carriers. But the proposition that the demand for coal will be unaffected by an increase in availability and a decrease in price, which is the stated goal of the project, is illogical at best. The increased availability of inexpensive coal will at the very least make coal a more attractive option to future entrants into the utilities market when compared with other potential fuel sources, such as nuclear power, solar power, or natural gas. Even if this project will not affect

the short-term demand for coal, which is possible since most existing utilities are single-source dependent, it will most assuredly affect the nation's long-term demand for coal as the comments to the DEIS explained. Tellingly, DM&E does not adopt the Board's argument that the proposed project will leave demand for coal unaffected: Instead, it adopts the more plausible position that SEA was not required to address the effects of increased coal generation because these effects are too speculative.

NEPA requires that federal agencies consider "any adverse environmental effects" of their "major ... actions," 42 U.S.C. § 4332(C), and the CEQ regulations, which are binding on the agencies, explain that "effects" include both "direct effects" and "indirect effects," 40 C.F.R. § 1508.8. Indirect effects are defined as those that "are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." *Id.* "Indirect effects may include ... effects on air and water and other natural systems, including ecosystems." *Id.* The above language leaves little doubt that the type of effect at issue here, degradation in air quality, is indeed something that must be addressed in an EIS if it is "reasonably foreseeable," *see id.* As in other legal contexts, an environmental effect is "reasonably foreseeable" if it is "sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision." *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992).

DM&E argues in its brief that "if the increased availability of coal will 'drive' the construction of additional power plants . . . the [Board] would need to know where those plants will be built, and how much coal these new unnamed power plants would use. Because DM&E has yet to finalize coal-hauling contracts with any utilities, the answers to these questions are pure speculation – hardly the reasonably foreseeable significant impacts that must be analyzed under NEPA." Even if this statement is accurate (the Sierra Club has asserted that it is not), it shows only that the *extent* of the effect is speculative. The *nature* of the effect, however, is far from speculative. As discussed above, it is reasonably foreseeable – indeed, it is almost

certainly true – that the proposed project will increase the long-term demand for coal and any adverse effects that result from burning coal.

Contrary to DM&E's assertion, when the *nature* of the effect is reasonably foreseeable but its *extent* is not, we think that the agency may not simply ignore the effect. The CEQ has devised a specific procedure for "evaluating reasonably foreseeable significant adverse effects on the human environment" when "there is incomplete or unavailable information." 40 C.F.R. § 1502.22. First, "the agency shall always make clear that such information is lacking." *Id.* Then, "[i]f the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known," the agency must include in the environmental impact statement:

- (1) A statement that such information is incomplete or unavailable;
- (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;
- (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and
- (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.

Id. at § 1502.22(b).

We find it significant that when the Board was defining the contours of the EIS, it stated that SEA would "[e]valuate the potential air quality impacts associated with the increased availability and utilization of Powder River Basin Coal." DEIS Appendix C at C-73. Yet, the DEIS failed to deliver on this promise. Interested parties then submitted comments on the DEIS explaining, for the reasons that we have summarized, why this issue should be addressed in the FEIS. These parties even identified computer models that are widely used in the electric power industry to

simulate the dispatch of generating resources to meet customer loads over a particular study period. According to the commenting parties, these programs could be used to forecast the effects of this project on the consumption of coal. These efforts did not convince SEA, which asserted that "[b]ecause the 1990 Clean Air Act Amendments mandate reductions in pollutant emissions ... an assumption of SEA's analysis was that emissions will definitely fall to the mandated level, producing whatever effect the emissions will have on global warming." FEIS at 10-2. SEA's "assumption" may be true for those pollutants that the amendments have capped (including, as we have said, sulfur dioxide) but it tells the decision-maker nothing about how this project will affect pollutants not subject to the statutory cap. For the most part, SEA has completely ignored the effects of increased coal consumption, and it has made no attempt to fulfill the requirements laid out in the CEQ regulations.

The Board has stated that this project "is the largest and most challenging rail construction proposal ever to come before [us]," and that the total cost of the project is estimated to be \$1.4 billion, not counting the cost of environmental mitigation. Final Decision at 4. We believe that it would be irresponsible for the Board to approve a project of this scope without first examining the effects that may occur as a result of the reasonably foreseeable increase in coal consumption.

III.

The Mid States Coalition argues that the financial fitness analysis in the Board's final decision underestimated construction costs for the new line and overestimated DM&E's future revenues. Upon review, we must uphold an agency's licensing decision unless that decision was arbitrary, capricious, an abuse of discretion, not supported by substantial evidence, or not in accordance with the law. 5 U.S.C. § 706(2); *see Boundary Waters*, 164 F.3d at 1121.

As we have previously said, the Board made a preliminary finding that the proposed project was not inconsistent with the public convenience and necessity as

required by § 10901. After the environmental review process was completed some three years later, the Board revisited its preliminary findings and determined that the environmental effects that could not be fully mitigated were not so great as to outweigh the public benefits of the new line. The Board then considered whether the costs of complying with the imposed mitigation conditions would threaten DM&E's financial fitness. In a previous decision, the Board explained that "[t]he purpose of the financial fitness test is not to protect the carrier or those who elect to invest in the proposed project, but, rather, to protect existing shippers from carrier financial decisions that could jeopardize a carrier's ability to carry out its common carrier obligation to serve the public." *Tongue River R.R. – Rail Construction & Operation – Ashland to Decker, Montana*, STB Finance Docket No. 30186 (Sub-No. 2) (STB service date Nov. 8, 1996). In this case, the Board determined that even with the projected additional mitigation costs DM&E would garner significant net income from its proposed PRB service, and that this additional income would actually inure to the benefit of DM&E's existing shippers because it would enable DM&E to rehabilitate deteriorating portions of track in the areas that it currently serves. In fact, the Board found that without the infusion of capital that this project would bring, DM&E might be unable to continue its operation in the long term, a result that would obviously be detrimental to DM&E's existing customers. On the basis of these findings, the Board determined that the public convenience and necessity test had been met.

In its original financial analysis, the Board used the construction cost estimates from DM&E's application, which were based upon DM&E's preferred 262-mile route. The Mid States Coalition argues that the Board erred in its final decision by not taking into consideration the additional cost of constructing the route that the Board ultimately approved, which was nearly 20 miles longer than DM&E's preferred route. The Mid States Coalition also argues that the Board's final decision should have reflected changed market conditions that, according to the Coalition, have rendered the Board's original revenue projections for DM&E obsolete. The Board does not

deny that the financial-fitness analysis in its final decision relied almost exclusively on data collected for the original financial-fitness analysis conducted in 1998. This was, in fact, by design: The Board's standard practice is to complete its financial analysis, subject only to any costs that might be incurred as a result of the Board's imposition of environmental mitigation; this allows the Board to approve or reject a project quickly once the environmental process has run its course.

It is probable, as the Mid States Coalition suggests, that the data that the Board relied upon in its original financial-fitness analysis was somewhat dated by the time a final decision is issued, especially where, as here, there is a protracted environmental analysis. But we do not believe that this invalidates the Board's chosen process. "Administrative consideration of evidence ... always creates a gap between the time the record is closed and the time the administrative decision is promulgated." *ICC v. Jersey City*, 322 U.S. 503, 514 (1944). "This is especially true if the issues are difficult, the evidence intricate, and the consideration of the case deliberate and careful." *Id.* If we were to require the Board to take the time to conduct its financial analysis anew, we suspect that adverse parties would then contend that the environmental analysis was stale.

We doubt, moreover, that under the existing statutory scheme the Board's decision would be different if it had access to the most current information. As first enacted, § 10901 directed the ICC (the Board's predecessor) to approve a project only if public convenience and necessity "require or will be enhanced by" the construction. *See* 49 U.S.C. § 10901(a) (1976 ed; Supp. II (1979)). Congress subsequently relaxed this restrictive policy by providing that the ICC need only find that public convenience and necessity "permit" the proposed construction. *See* 49 U.S.C. § 10901(a) (1982). Congress's latest iteration of the statute relaxes the standard even further, directing that the Board "shall issue" construction licenses, "unless the Board finds that such activities are *inconsistent* with the public convenience and necessity." 49 U.S.C. § 10901(c) (emphasis added). When read in conjunction with Congress's

broad policy directives to promote "effective competition among rail carriers" and to "reduce regulatory barriers to entry into ... the industry," 49 U.S.C. § 10101, we believe that the Board correctly maintains that there is a statutory presumption that rail construction is to be approved.

The record demonstrates that the Board had sufficient evidence before it to conclude that DM&E could complete this project. First, the Board's own analysis indicated that the venture would be profitable, even after the cost of environmental mitigation had been allowed for. Although much of the data used in the analysis was not current, there is still probative value in the Board's conclusion. Of particular significance was the Board's finding that this project would allow DM&E to continue as a financially viable operation and to update its deteriorating track, thereby ensuring future service for those whom the financial fitness requirement was meant to protect, DM&E's existing shippers. Even though a large portion of the Board's analysis on this matter was conducted in 1998, the fact that a number of DM&E's existing customers have intervened in this case on DM&E's behalf leads us to believe that the Board's finding is not suspect. Finally, we agree with the Board that the ultimate test of financial fitness will come when the railroad seeks financing. Without impugning the accuracy of the financial analyses presented by the various parties in this case, we believe that the nation's financial institutions possess the expertise and insight necessary to determine the financial viability of this project. Given the liberal nature of the licensing statute and the Board's analysis thus far, they should have that opportunity.

We do not mean to suggest, of course, that the Board can disregard additional costs, if any, that may arise from the environmental analyses that it will conduct on remand. We expect that the Board will incorporate its new findings appropriately into the body of evidence that it has already amassed before making a final determination on this matter.

IV.

We next consider whether the Board has complied with § 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470f, which provides that a federal agency shall "take into account" the effect of its licensing decisions on properties "included in or eligible for inclusion in, the National Register [of Historic Places]." In order to carry out this broadly stated purpose, the Advisory Council on Historic Preservation (ACHP) has issued regulations implementing the NHPA, *see* 36 C.F.R. Part 800, which are binding on agencies. These regulations require that the relevant agency consult with a number of specified parties to identify historic properties, assess the adverse effects that the proposed project would have on those properties, and "seek ways to avoid, minimize or mitigate any adverse effects." 36 C.F.R. § 800.1(a). This process may be conducted separately, or, as in this case, in conjunction with an environmental review under NEPA. *See* 36 C.F.R. § 800.2(d)(3).

The Mid States Coalition first maintains that the Board failed to include all necessary parties in its consultation process. Under the regulations, an agency has a general duty to "provide the public with information about an undertaking and its effects on historic properties and [to] seek public comment and input." 36 C.F.R. § 800.2(d)(2). The regulations, however, specify that certain individuals and organizations, known as "consulting parties," are to be more formally involved in the agency's NHPA review. The agency must invite all relevant state historic preservation officers, tribal historic preservation officers, local government representatives, and the project applicant to participate in the NHPA process as consulting parties. 36 C.F.R. § 800.2(c). In addition to those who are consulting parties as a matter of right, other interested individuals or organizations "*may participate* as consulting parties due to the nature of their legal or economic relation to the undertaking ... or their concern with the undertaking's effects on historic properties," 36 C.F.R. § 800.2(c)(5) (emphasis added), if they request participation in writing and the agency determines that they should be granted consulting party status, 36 C.F.R. § 800.3(f)(3).

The Mid States Coalition contends that the NHPA was violated because the Board failed to invite ranchers and farmers whose lands may contain historic properties to participate as consulting parties. The ACHP regulations make it apparent, however, that affected ranchers and farmers are not automatically entitled to be consulting parties. Because they have an economic interest in the proceeding, they may be added as consulting parties, but they must first make a request, in writing, to the Board. In this case, the Board has granted consulting party status to all individuals and organizations who made such a request. We believe, moreover, that the agency complied with its general duty to notify and allow comment from the public on matters of historic preservation during the environmental review process. *See* 36 C.F.R. §§ 800.3(e), 800.8(c)(1)(iv). The DEIS and the FEIS describe those sites along the proposed route that SEA initially identified as eligible for inclusion in the National Register of Historic Places. And since the public was encouraged to comment on all aspects of the DEIS, we cannot say that there was an insufficient opportunity for public comment under the NHPA.

The Mid States Coalition also asserts that the Board erred by issuing DM&E a license before it completed the NHPA process. The Board maintains that the NHPA's seemingly unambiguous directive to take effects into account "prior to the issuance of any license," 16 U.S.C. § 470f, is relaxed by the ACHP's implementing regulations.

As noted above, an NHPA analysis involves a three-step process of identification, assessment, and mitigation. The general expectation is that an agency will complete one step before moving on to the next, but the regulations permit an agency to use a "phased process" of identifying and evaluating properties where "alternatives under consideration consist of corridors or large land areas," 36 C.F.R. § 800.4(b)(2). The agency's phased process "should establish the likely presence of historic properties within the area of potential effects for each alternative ... through background research, consultation and an appropriate level of field investigation,

taking into account the number of alternatives under consideration, the magnitude of the undertaking and its likely effects, and the views of the [historic preservation officers] and any other consulting parties." *Id.*

We believe that SEA's analysis in the early stages adheres to this approach. During the period when there were still numerous alternatives under consideration, it was permissible for SEA to delay assessing the adverse effects of the project on specific sites. But as "specific aspects or locations of an alternative are refined," the regulation provides that the agency "shall proceed with the identification and evaluation of historic properties." *Id.* By requiring that agencies identify and assess individual properties as project alternatives become more concrete, the regulations assure that the agency will be in a position to proceed to the mitigation step.

Although the Board (through SEA) identified some potentially affected sites in the DEIS and FEIS, it has not made a final evaluation or adopted specific measures to avoid or mitigate any adverse effects, *see* 36 C.F.R. § 800.2(d)(3). It argues, however, that the ACHP's regulations permit it to defer these actions until after the license has been approved. We disagree. It is true that the regulations permit an agency to "defer final identification and evaluation of historic properties if it is specifically provided for in ... the documents used by an agency official to comply with [NEPA] pursuant to [36 C.F.R.] § 800.8." 36 C.F.R. § 800.4(b)(2). But § 800.8, in turn, requires that an agency develop measures to "avoid, minimize, or mitigate" adverse effects and then bind itself to these measures in a record of decision. 36 C.F.R. § 800.8(c)(4). The ACHP's regulations, when read in their entirety, thus permit an agency to defer completion of the NHPA process until after the NEPA process has run its course (and the environmentally preferred alternatives chosen), but require that NHPA issues be resolved by the time that the license is issued. In this case, the Board's final decision contains a condition requiring DM&E to comply with whatever future mitigation requirements the Board finally arrives at. We do not think

that this is the type of measure contemplated by the ACHP when it directed agencies to develop measures to "avoid, minimize, or mitigate" adverse effects.

We note that the ACHP's regulations offer agencies an alternative to the process described above. An agency may negotiate with consulting parties to develop "a programmatic agreement to govern the implementation of a particular program or the resolution of adverse effects from certain complex project situations." 36 C.F.R. § 800.14(b). While the programmatic agreement itself must be in place before the issuance of a license, it gives an agency flexibility when "effects on historic properties cannot be fully determined prior to approval of an undertaking," *id.* Indeed, the Board recognized this advantage, as evidenced by its continuing effort to negotiate an acceptable programmatic agreement before it issued its final decision.

We believe that the Board should have also recognized that it could not proceed without one. One month before the Board issued its final decision, the ACHP wrote a letter to the Board stating:

As we understand it, [the Board] plans to make a decision on whether to approve or deny the proposed project at the end of the month. Given this short time frame and the critical need to coordinate the completion of Section 106 with any decision reached under [NEPA], we recommend you set up a conference call among the consulting parties in order to develop timely revisions to this [programmatic agreement], and that you circulate a revised final [programmatic agreement] as quickly as possible. Until these important issues are resolved, the Council will not be able to execute a [programmatic agreement] with [the Board] for this undertaking.

If the programmatic agreement had been executed, the Board could have finalized the NHPA details at a future date according to the terms of the agreement, just as it

wished. Not willing to delay publication of its decision until after a consensus could be reached on the terms of the programmatic agreement, the Board instead issued the license having neither secured a programmatic agreement nor completed the alternate NHPA process. On remand, it must do one or the other.

V.

The Sioux maintain that the Board violated the terms of the Fort Laramie Treaty of April 29, 1868, 15 Stat. 635, and breached the government's fiduciary duty to the Sioux Indians, when the Board licensed the construction of DM&E's new extension without first obtaining the Sioux's consent. Article 12 of that treaty provides that any cession of reservation land must be approved by at least three-fourths of the adult male Sioux population. *Id.*, 15 Stat. at 639; *United States v. Sioux Nation of Indians*, 448 U.S. 371, 381-82 (1980). DM&E's proposed line, however, does not cross the boundaries of any present-day reservation: It is located either on land that was restored to the public domain by the Act of March 2, 1889, ch. 405, 25 Stat. 888, or on land in the Black Hills region, which was taken from the Sioux by the Act of February 28, 1877, ch. 72, 19 Stat. 254, and for which the Sioux have recovered damages, *see Sioux Nation*, 448 U.S. at 381-82, 423-24. Because DM&E's proposed line does not pass through any present-day reservation, no cession of reservation land is required before the proposed line can be built, and the Fort Laramie Treaty does not apply.

The Sioux's argument that the 1889 Act is itself invalid also fails. The Sioux contend that although that act was approved by three-fourths of the adult male Sioux population as a whole, *see Rosebud Sioux Tribe v. Kneip*, 430 U.S. 584, 589 n.5 (1977), it is invalid because it was not consented to by three-fourths of the Sioux males from each band, as, the Sioux contend, the Act requires as a condition to its effectiveness. Section 28 of the 1889 Act states that the Act will take effect only if it is consented to "by the different bands of the Sioux Nation of Indians, in manner and form prescribed by the twelfth article of the [Fort Laramie Treaty of 1868]

between the United States and said Sioux Indians." 25 Stat. at 899. Article 12 of that treaty, in turn, explains that "at least three-fourths of all the adult male Indians" living on the Great Sioux Reservation must agree to any cession of reservation land. 15 Stat. at 639. The Sioux argue that the phrase "by the different bands" in Section 28 means that the Act can take effect only if it is agreed to by at least three-quarters of the adult males from each Sioux band.

We disagree. We believe that Congress viewed the Fort Laramie Treaty as having been entered into between the United States and the different bands of the Sioux, *see* Ft. Laramie Treaty of 1868, 15 Stat. 635, and that the phrase "by the different bands" in Section 28 of the 1889 Act meant the Sioux population as a whole. This view is supported by Section 16 of the 1889 Act, which refers to "the acceptance of this act by the Indians in manner and form as required by the ... treaty concluded between the different bands of the Sioux Nation of Indians and the United States, April [29, 1868]." *See* 25 Stat. at 893. The history of the Act also supports this interpretation. According to an 1884 report of the Senate Select Committee to Examine the Condition of the Sioux and Crow Indians, Congress authorized the Secretary of the Interior to negotiate with the Sioux for a possible cession of reservation land as early as 1882. *See* S. Rep. 48-283, at 2 (1884). The report further indicates, however, that Congress repeatedly refused to ratify any agreement that resulted from these negotiations until commissioners appointed by the Secretary of the Interior were able to "procure the assent of the Sioux Indians as provided in article twelve of the treaty of 1868." *Id.* at 3-4. For these reasons, we believe that Congress intended Section 28 of the 1889 Act to require precisely what was required by the Fort Laramie Treaty: the assent of three-fourths of the adult male Sioux population as a whole, rather than three-quarters of the Sioux from each individual band. We therefore reject the Sioux's challenge to the validity of the 1889 Act.

VI.

In both size and scope, this project is undoubtedly one of the largest ever to have come before the Board. Although we find it necessary to vacate the Board's final decision so that it may correct certain deficiencies, we think that on the whole the Board did a highly commendable and professional job in evaluating an enormously complex proposal. We are confident that on remand the Board will quickly address those few matters that we have identified as requiring a second look, and will come to a well informed and reasonable conclusion.

HEANEY, Circuit Judge, concurring.

I concur in the majority's opinion. I write separately to highlight the significant adverse consequences that the Rochester community will experience due to the increased train traffic running through downtown Rochester, and to point out an additional component of the Final Environmental Impact Statement (FEIS) that the Section of Environmental Analysis (SEA) failed to fully explore.

The record makes clear that the Rochester community will be adversely affected as a result of the Surface Transportation Board's (STB) decision to approve the Dakota, Minnesota & Eastern Railroad Corporation's (DM&E) proposal to transport coal from Wyoming to the Mississippi River. This decision will bring up to 37 trains a day, some with more than 100 cars, at speeds up to 40 miles an hour, through the heart of the city of Rochester. These adverse consequences would have been best mitigated by bypassing the city. The STB, however, after carefully considering and analyzing the proposed bypass, properly rejected this alternative due to the additional costs imposed by the length of the bypass, the terrain, and the possibility of sinkholes along the route. Rejection of this alternative, however, does not relieve DM&E of its responsibility to mitigate, to the fullest extent practicable, the adverse consequences the Rochester community will experience due to the rehabilitation of the current rail line.

The majority has carefully set forth the adverse consequences that the Rochester community, including the Mayo clinic, will incur as a result of the decision to rehabilitate the existing railway. These include: increased wayside noise; increased vibration in homes and businesses near the tracks; increased risk of groundwater contamination in the event of a rail line accident; and increased risk of delay to emergency vehicles. The majority found that these adverse consequences were fully considered in the FEIS. The majority also found, however, that other adverse consequences to the Rochester community were not fully explored and therefore required further study and exposition by the STB. These adverse consequences are increased noise from train horns and the cumulative effect suffered by households experiencing both noise and vibration.²

In my view, there is an additional area in which the FEIS is insufficient. The SEA recommended the construction of two separated grade crossings in Rochester; the first is scheduled to be installed prior to DM&E transporting 20 million tons of coal annually, and the second is scheduled to be installed prior to DM&E transporting 50 million tons of coal annually through the city. Although these crossings will provide some mitigation of the impact of the increased train traffic in Rochester, the FEIS fails to adequately consider the consequences of deferring the construction of these crossings. The rehabilitation of the rail line and the construction of the separated grade crossings will, in and of themselves, adversely affect the city of Rochester through increased noise, vibration, air pollution, and disrupted traffic flow. Therefore, the Rochester community will suffer not only from an increase in train traffic, but also from the three construction projects; first when the track is

² I agree with the majority's holding that the reasonably foreseeable effects of increased coal consumption in Midwestern and Eastern states also must be thoroughly considered. Even though there is no evidence in the record that the Rochester community will be adversely affected by any significant increase in coal consumption, the environmental consequences of such an increase to other geographic areas should be considered by the STB.

rehabilitated, second when the first crossing is constructed, and, again, a third time when the second crossing is installed.

I agree that under the National Environmental Policy Act (NEPA) it is the responsibility of the permitting agency to determine what actions should be taken to mitigate the consequences of the adverse environmental impacts of a project, and that “[o]ur role in the NEPA process ‘is simply to ensure that the agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary or capricious.’” Ante at 27 (quoting Baltimore Gas & Elec. Co. v. Natural Res. Def. Council, Inc., 462 U.S. 87, 97-98 (1983)). In this instance, the SEA did neither with respect to the impact of deferring the construction of the separated grade crossings. The SEA is required to discuss the reasons why a certain mitigative step was chosen and the impact of that choice in enough detail to ensure that the environmental consequences are fairly evaluated. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 (1989) (stating that the “requirement that an EIS contain a detailed discussion of possible mitigation measures flows both from the language of [NEPA] and, more expressly, from CEQ’s implementing regulations” and that the “omission of a reasonably complete discussion of possible mitigation measures would undermine the ‘action-forcing’ function of NEPA.”). In this case, the SEA asserted that the construction of two separated grade crossings will mitigate the impact of the increased train traffic in Rochester, but failed to discuss how it decided on two rail crossings, or to consider the impact of deferring the construction. It is not enough to put forth installing such crossings as appropriate mitigation without revealing the reasoning behind such a finding, or detailing the impact the proposed mitigation will have on the community. Instead, the SEA is required to “explain fully its course of inquiry, analysis and reasoning.” Ante at 31 (quoting Minn. Pub. Interest Research Group v. Butz, 541 F.2d 1292, 1299 (8th Cir. 1976)).

I cannot say, based on the FEIS developed by the SEA, that it took the requisite “hard look” at the environmental impact of rehabilitating the current railway on the

Rochester community. Fully analyzing alternatives is the “heart of the environmental impact statement,” 40 C.F.R. § 1502.14, and the agency is required to “[r]igorously explore and objectively evaluate all reasonable alternatives,” 40 C.F.R. § 1502.14(a). Although I agree with the majority that the STB adequately considered and properly rejected the proposed bypass of the city of Rochester, the STB failed to sufficiently detail the mitigation measures that should be taken. This omission undermines the action-forcing function of NEPA.

The adverse consequences that the Rochester community will suffer due to this project are severe. The STB, therefore, should be required to consider the adverse consequences outlined in the FEIS and discussed by this court, both individually and collectively, in order to fully analyze all possible steps that can be taken to mitigate their impact on the Rochester community.
