



Minnesota Department of Transportation

Transportation Building

1000 Ireland Boulevard  
Minneapolis, Minnesota 55415-1899

03 - 0428

October 15, 2003

The Honorable Dean Johnson, Chair  
Senate Transportation Policy and Budget Division  
121 Capitol  
St. Paul, Minnesota 55155

The Honorable Ron Erhardt, Chair  
House Transportation Policy Committee  
591 State Office Building  
St. Paul, Minnesota 55155

Re: Transmittal of the Biennial Expenditure Report

Dear Senator Johnson and Representative Erhardt:

In compliance with Minnesota Statutes 161.08, subdivision 2, as added by the 2003 legislature, we are submitting a report of expenditures from the trunk highway fund during the 2002-2003 biennium. The source of this data is the Minnesota Accounting and Procurement System (MAPS), the state's official accounting system. Except for the amount shown for debt service and the report on the environmental costs of two representative projects, all data shown are actual expenditures and encumbrances as of the closing of fiscal year 2003 on September 5, 2003. Debt service is shown as a transfer to the debt service fund rather than as an expenditure. Cost accounting and other data were used to collect the environmental costs of the representative projects required in the report.

At this time, we are unable to provide separate expenditure amounts for maintenance and road operations; both are included in the amount shown for "State Road Operations." When the next phase of our Activity Base Budgeting (ABB) reporting system is completed in the next few months, we expect to be able to provide this breakdown. We are also unable to provide an amount for actual expenditures for planning, but have provided an estimate based on FY 2002 data from the ABB system. We expect to be able to provide complete data in the next biennium for these activities as well, when the next phase of the ABB system is completed.

Please contact me or Bonnie Kollmann (651-297-7514), Mn/DOT Financial Operations Director, if there are questions on this report.

Sincerely,

A handwritten signature in cursive script that reads "Carol L. Molnau".

Carol L. Molnau  
Lieutenant Governor and Commissioner

Attachment

cc: Patrick Flahaven, Secretary of the Senate  
Ed Burdick, Chief Clerk of the House  
Legislative Reference Library (6 copies)

**Minnesota Department of Transportation**  
**FISCAL YEAR 2002-2003 BIENNIAL REPORT**

Listed below are expenditures for the FY 2002-2003 biennium for each of the categories listed.

Section 1 of the report contains information on all of the costs except the environmental mitigation costs. Environmental mitigation costs for Metro and Greater Minnesota projects are described in Section 2.

- Table 1 lists the expenditures for the categories as specifically requested in legislation.
- Table 2 shows all of the expenditures for Mn/DOT from the Trunk Highway Fund during that period with notations identifying the source of the information listed in Table 1.

The amounts include expenditures that were originally funded by general funds appropriated to the department in 2000, but were converted to trunk highway bond funds as a result of action by the Legislature during the 2003 session.

Below Table 2 are brief explanations of what is included in each of the amounts in Table 1. Because expenditures for the FY 2002-2003 biennium were recorded in the previous program-based budget categories, some of the expenditures included may not match precisely with the information requested. Future reports will be based on expenditures recorded in our current Activity Based Budget format. This will provide greater ability to tailor information to match information requests.

Section 2 contains the information for environmental mitigation costs. It differs from the rest of the information because it is not a department total for the biennium. As requested in the legislation, it reports the costs of mitigation for projects in the Metro area and Greater Minnesota. The projects were chosen to represent the types and magnitude of costs typical for construction projects of similar magnitude.

**Section 1**

**MINNESOTA DEPARTMENT OF TRANSPORTATION**  
**FISCAL YEAR 2002-2003 BIENNIAL REPORT**  
**AS OF SEPTEMBER 5, 2003**  
(Dollars in Millions)

**Table 1**

Road Construction	\$1,454.5	[1]
Professional Technical Contracts	\$102.5	[2]
Design and Engineering	\$366.3	[3]
Labor	\$619.9	[4]
Acquisition of Right of Way	\$214.2	[5]
Litigation	\$4.0	[6]
Maintenance and Road Operations	\$449.4	[7]
Planning (Estimated)	\$42.1	
Environmental Mitigation	See Section 2	

**Table 2**

BUDGET ACTIVITY	LABOR	PROFESSIONAL/ TECHNICAL SVS.	RIGHT OF WAY ACQUISITION	ATTORNEY GENERAL COSTS	ALL OTHER COSTS	TOTAL
Transit Administration	\$1.0	\$0.1			\$0.1	\$1.2
Railroad & Waterways Admin.	2.5	0.3			0.1	2.9
Motor Carrier Administration	6.1				1.9	8.0
State Road Construction	4.2	67.4 [3]	213.8		1,454.5[1]	1,739.9
Highway Debt Service					18.5	18.5
Research & Investment Management	12.5	4.4			4.1	21.0
Central Engineering Services	90.1	19.2			14.4	123.7 [3]
Design & Construction Engineering	164.4	0.7			10.1	175.2 [3]
State Road Operations	272.6	2.8			174.0	449.4 [7]
Electronic Communications	8.8		0.2		6.4	15.4
General Management	54.8	4.4	0.2		20.3	79.7
General Services	2.9	0.9		4.0	31.3	39.1
Buildings		2.3			5.4	7.7
<b>Total</b>	<b>\$619.9</b>	<b>\$102.5</b>	<b>\$214.2</b>	<b>\$4.0</b>	<b>\$1,741.1</b>	<b>\$2,681.7</b>
	[4]	[2]	[5]	[6]		

1. Road construction costs include all actual encumbrances for road and bridge construction contracts. It includes both the design and engineering, and construction cost portions of design/build contracts.
2. Professional technical contract costs include all amounts encumbered for services such as road and bridge design, software development, construction engineering, and organizational development.
3. Design and engineering costs include all amounts encumbered for design, pre-design, construction, and other engineering activities performed internally by Mn/DOT employees and by consultants.
4. Labor costs include all expenditures for labor by Mn/DOT employees including overtime and benefits for full-time, part-time, and unclassified employees.
5. Right-of-way acquisition costs include all costs to acquire land for trunk highway system improvements including appraisers, court fees, and land purchases.
6. Litigation costs include all payments to the State Attorney General's Office for legal services. Payments for tort claims and other legal settlements are not uniquely identified in the MAPS system; as a result, we were not able to include those amounts in this report.

7. Operations and maintenance costs include all costs to maintain and operate the trunk highway system and Mn/DOT buildings. Since budgets for the just completed biennium did not differentiate between operations and maintenance activities, we were not able to report separate information for maintenance and operations. However, expenditures for FY 2002, converted to the activity-based accounting system, amounted to \$67.99 million for maintenance, and \$130.9 million for state road operations. Future reports will provide this level of detail for actual biennial expenditures.
8. Planning costs are an estimate for the biennium based on costs for FY 2002 converted to the Activity Based Budget format. Those costs were doubled to provide an estimate of total costs for the biennium. This method was used because costs for planning activities were not directly accounted for during the just completed biennium. However, future reports will provide actual costs for planning.

## **Section 2**

Mn/DOT does not track environmental mitigation costs independently of other project development and construction costs. As a result, mitigation costs for three Metro District construction projects and two Greater Minnesota projects were developed by examining the project documentation for each project. Costs for environmental mitigation were isolated, where possible, and estimated when necessary.

Since the Metro District is large and diverse, three representative projects were selected to more thoroughly demonstrate the impact of environmental mitigation on project costs. Much of this same information was previously submitted to the Legislature in a report on May 5, 2003.

District 2 (headquartered in Bemidji) provided the information for the Greater Minnesota environmental costs. The information presented is for two construction projects. These projects were initially one project and together were an improvement to one contiguous stretch of trunk highway.

### **Metro District Road Project Descriptions**

Mn/DOT examined the environmental mitigation costs of the following three Metro District highway projects:

- Trunk Highway 7 (SP 1004-24 and 1004-26) located in Hennepin and Carver counties from Shorewood to St. Bonifacius. The purpose of the project was to construct new ten-foot-wide shoulders, turn lanes, retaining walls, water main extension, new signals, replace an existing bridge and provide a bituminous overlay. The project was let in March 2002 and construction started on May 2002.
- Trunk Highway 610 (SP 2771-11 and SP 2771-12) located in Hennepin County between the Mississippi River and Regent Avenue in Brooklyn Park. The project included the construction of a park-and-ride lot, noise walls, signal installation, bridges, interchanges and a new four-lane roadway on new alignment over 2.7 miles in Brooklyn Park. The projects were let in May 1997 (SP 2771-12) and April 1998 (SP 2771-11).

- Trunk Highway 12 (SP 2713-75), also known as the Long Lake By-Pass, is located in Long Lake and Orono in Hennepin County. The purpose of the proposed project is to construct approximately 4 miles of new two-lane limited-access highway on new alignment around the City of Long Lake from Hennepin County Road 6 in Orono to Wayzata Boulevard. The project includes the relocation of an existing railroad line onto new alignment as well as a major relocation of Long Lake's city utilities. It is anticipated that the project will be let in July of 2003.

### **Mitigation Costs Reported**

Table 3 provides the costs Mn/DOT was able to quantify or estimate costs for

- Historical/Cultural Resource Investigations;
- Contamination Investigations;
- Noise Wall Engineering, Design, Right of Way, Construction, and Maintenance;
- Erosion Control Engineering, Design, Right of Way, Construction and Maintenance;
- Wetland Mitigation Engineering, Design, Right of Way, Construction and Maintenance;
- and
- Stormwater Pond Engineering Design, Right of Way, Construction and Maintenance.

### **Mitigation Costs Not Reported**

These mitigation costs do not reflect all actual mitigation costs of the planning, scoping, designing, building and maintaining of environmental mitigation measures for the Metro projects. These costs can include, for example, special studies and investigations (e.g., wetland delineation, mussel surveys, etc.), project alternatives analysis, or other compliance costs such as Environmental Impact Statements (EIS), or other project documentation. These additional mitigation costs, which can be substantial, were not readily available, and, therefore, were not accounted for as part of this report for the Metro District projects.

### **Total Project Costs For Design, Right Of Way and Construction**

Table 4 provides total project design, right of way, and construction costs for each of the three projects.

### **Estimated Yearly Mitigation Maintenance Costs**

Table 5 lists cost estimates to monitor, inspect and maintain the project mitigation features. These tasks are needed to fulfill regulatory requirements and include items such as inspecting and cleaning out stormwater ponds, and inspecting and verifying that wetland replacement has been successful. Occasionally, remedial action is needed in order to achieve the wetland characteristics originally proposed.

Table 3

Description	SP 1004-24 (T.H.7)	SP 2771-11 (T.H. 610)	SP 2713-75 (T.H. 12)
	SP 1004-26 (T.H.7)	SP 2771-12 (T.H. 610)	
<b>Environmental Related Pre-Letting Costs</b>			
<b>Environmental Investigations</b>			
Historical/Cultural Resources	\$1,000.00	0.00	\$21,800.00
Contamination Investigation	\$0.00	\$41,449.68	\$159,842.26
<b>TOTAL</b>	<b>\$1,000.00</b>	<b>\$41,449.68</b>	<b>\$181,642.26</b>
<b>Plan Design Costs</b>			
Noise Walls	\$0.00	\$83,300.00	\$150,000.00
Erosion Control	\$8,861.00	\$18,800.00	\$40,000.00
Ponds	\$8,000.00	\$50,000.00	\$125,000.00
Wetland Mitigation	\$0.00	\$125,000.00	\$195,000.00
<b>TOTAL</b>	<b>\$16,861.00</b>	<b>\$277,100.00</b>	<b>\$510,000.00</b>
<b>Water Resource/Drainage Design Engineering Costs</b>			
Erosion Control	\$3,386.00	\$0.00	\$5,127.00
Ponds	\$22,187.00	\$90,048.00	\$46,145.00
Wetland Mitigation	\$3,386.00	\$135,072.00	\$6,820.00
<b>TOTAL</b>	<b>\$28,959.00</b>	<b>\$225,120.00</b>	<b>\$58,092.00</b>
<b>TOTAL PRE-LETTING COSTS</b>	<b>\$45,820.00</b>	<b>\$502,220.00</b>	<b>\$568,092.00</b>
<b>Right of Way Costs (Land Only)</b>			
Ponds	\$0.00	\$1,300,000.00	\$3,500,000.00
Wetland Mitigation	\$0.00	\$0.00	\$1,400,000.00
<b>TOTAL</b>	<b>\$0.00</b>	<b>\$1,300,000.00</b>	<b>\$4,900,000.00</b>
<b>Specific Environmental Mitigation Construction Costs</b>			
Noise Walls	\$0.00	\$3,146,029.00	\$4,250,000.00
Erosion Control	\$97,000.00	\$124,321.00	\$310,000.00
Ponds	\$75,000.00	\$75,800.00	\$1,000,000.00
Wetland Mitigation	\$0.00	\$150,000.00	\$345,000.00
<b>TOTAL</b>	<b>\$172,000.00</b>	<b>\$3,496,150.00</b>	<b>(Estimate) \$5,905,000.00</b>
<b>Total Environmental Mitigation Costs</b>			
<b>TOTAL</b>	<b>\$217,820.00</b>	<b>\$5,298,370.00</b>	<b>(Estimate) \$11,373,092.00</b>

**Table 4**

	SP 1004-24 (T.H.7)	SP 2771-11 (T.H. 610)	
	SP 1004-26 (T.H.7)	SP 2771-12 (T.H. 610)	SP 2713-75 (T.H. 12)
<b>Total Plan Design Costs (including WRE costs)</b>			
TOTAL	\$735,227.00	\$1,463,742.00	\$1,607,023.00
			(includes \$1,500,000 Consultant Cost)
<b>Total Project Right of Way Costs (Land Only)</b>			
TOTAL	\$1,463,057.45	\$4,039,702.62	(Estimate) \$45,000,000.00
<b>Total Project Construction Costs</b>			
TOTAL	\$6,029,939.00	\$27,422,825.00	\$41,000,000.00

**Table 5**

<b>Estimated Yearly Project Mitigation Maintenance Costs</b>					
	SP 1004-24 (1) (TH 7)	SP 1004-26 (TH 7)	SP 2771-11 (TH 610)	SP 2771-12 (TH 610)	SP 2713-75 (TH 12)
Noise Walls	0	0	\$3,740	\$1,620	\$6,800
Erosion Control	\$436	\$354	\$133	\$129	\$390
Ponds	0	\$487	\$2,573	\$4,172	\$7,510 (1)
Wetland Mitigation	0	0	0	0	0
Total	\$436	\$841	\$6,446	\$5,921	\$14,700

**District 2 Road Project Description**

The projects selected for this report were on TH 200 (SP 1505-19 and 1505-20). These projects were originally planned as one project; however, during the scoping phase of the project, it was determined that it would take two construction seasons to complete the project. Mn/DOT then made the decision to divide the project into two projects.

The projects are located on TH 200 in Clearwater County from Zerkel to just east of the junction with CSAH-2 at Lake Itasca, a total of 10 miles. The purpose of the projects was to provide surfacing, profile grade corrections, shoulder widening, turn lanes, bridge modifications, replacement of centerline culverts, and intersection realignment. The first project, SP 1505-19 (from Zerkel to east of the Long Lake Park and Campground entrance), was constructed during the summer of 2001. The second project, SP 1505-20 (east of the Long Lake Park and Campground entrance to east of CSAH-2), was constructed in the summer of 2002.

## **Mitigation Costs Reported**

Total Environmental Mitigation costs are reflected in Table 6. Mn/DOT was able to quantify and/or estimate the pre-letting direct costs for

- Historical and Cultural Resource reviews/investigations,
- Project Memorandum,
- Wetlands delineation and negotiation,
- Permits, and
- Engineering Design of mitigation features.

Mn/DOT was able to quantify the indirect costs for

- Wetland Mitigation (Louisville-Parnell Wetland Bank).

Mn/DOT was able to quantify the construction costs for

- Silt traps,
- Ditch blocks, and
- Silt blocks.

Also included were the total construction costs for the contract, pre-letting and post-letting project delivery costs to provide perspective. All work was done within the existing right-of-way except for the intersection realignment; therefore, no right-of-way costs were reported.

## **Environmental Related Pre-Letting Costs**

The costs for historical reviews, project memorandum, and wetlands were the full costs taken from cost accounting for these two projects. The design of mitigation features was estimated by prorating the pre-letting costs of the specific features of the contract, i.e., silt traps, ditch blocks, and silt blocks. That is prorating the costs of the features in the contract to the total pre-letting costs.

## **Indirect Environmental Costs of the Contract**

Mn/DOT chose to mitigate its wetland impact off site. Its wetland impact acreage were 5.20 acres on SP 1505-19 and 6.64 acres on SP 1505-20. Several years ago, Mn/DOT invested in properties in the Red River Valley for the purposes of a wetland bank from which future wetland impacts could be mitigated. One of these sites was the Louisville-Parnell site. The dollar value of Mn/DOT's previous investment in that property is \$3,260 per acre.

## **Specific Environmental Mitigation Costs of the Contract**

These numbers are the costs to construct these particular features. These will require maintenance at some time in the future. There were 28 silt traps built on these two projects. It is estimated to cost approximately \$250 per silt trap to re-excavate, reshape, and re-seed these traps. The frequency of that need is unknown. Frequent, high volume rain events could cause annual maintenance, i.e. cleaning, at least once per year at approximately \$7,000 per year. As the vegetation becomes more permanent, it is likely the frequency would diminish to cleaning every five years or more.

## Permits

The following permits were required:

- NPDES permit from the MPCA for erosion control,
- Corps of Engineers permit for wetland impacts,
- DNR permit for protected waters, and
- WCA approval as outlined in Chapter 8420 (revised 2000).

The most critical environmental concern by the permitting agencies surrounded a trout stream, Sucker Creek, in an area where ground water purity was a key concern.

**Table 6**

Description	SP 1505-19	SP 1505-20	Total
<b>Environmental Related Pre-Letting Costs</b>			
Historical & cultural reviews	\$90	\$341	\$431
Project Memorandum	\$13,636	\$11,683	\$25,319
Wetlands delineation & negotiation	\$3,636	\$5,122	\$8,758
Obtaining road project permits	\$1,615	\$8,807	\$10,422
Design of mitigation features	\$22,505	\$9,095	\$31,600
<b>Total Environmental Related Pre-Letting Costs</b>	<b>\$41,482</b>	<b>\$35,048</b>	<b>\$76,530</b>
<b>Indirect Environmental Mitigation Costs of the Contract</b>			
Wetland Mitigation (Louisville-Parnell)	\$16,952	\$21,680	\$38,632
<b>Specific Environmental Mitigation Construction Costs of the Contract</b>			
Silt traps	\$4,000	\$3,300	\$7,300
Ditch blocks	\$1,600	\$2,400	\$4,000
Silt blocks	\$13,300	\$7,000	\$20,300
<b>Total Specific Environmental Mitigation Costs of the Contract</b>	<b>\$18,900</b>	<b>\$12,700</b>	<b>\$31,600</b>
<b>Total Environmental Mitigation Costs</b>	<b>\$77,334</b>	<b>\$69,428</b>	<b>\$146,762</b>
Costs to Construct (Contract only)	\$3,077,022	\$2,792,228	\$5,869,250
Pre-Letting costs (Project delivery)	\$356,363	\$144,014	\$500,377
Post-Letting costs (Project delivery)	\$147,627	\$148,895	\$296,522
<b>Total Project Cost</b>	<b>\$3,581,013</b>	<b>\$3,085,137</b>	<b>\$6,666,149</b>