

MINNESOTA DEPARTMENT OF TRANSPORTATION

FISCAL YEAR 2004-2005 BIENNIAL REPORT

06 - 0207

Listed below are expenditures for the FY 2004-2005 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 the Metro District and Greater Minnesota projects are described in Section 2.

- Table 1 lists the expenditures for the categories as specifically requested in legislation.

Below Table 1 are brief explanations of what is included in each of the amounts.

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 2004-2005 BIENNIAL REPORT
AS OF NOVEMBER, 2005
(\$ in millions)

Table 1

Road Construction	\$979.1
Professional Technical Contracts	\$125.4
Design and Engineering	\$285.6
Labor	\$591.4
Acquisition of Right of Way	\$206.6
Litigation	\$4.1
Maintenance	\$130.3
Road Operations	\$284.0
Planning	\$26.2
Environmental Documentation	\$32.3

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. Maintenance costs include all costs to maintain the trunk highway system and Mn/DOT buildings.
8. Operations costs include all costs to operate the trunk highway system and Mn/DOT buildings.

9. Planning costs are all costs for planning related to construction and maintenance of the Trunk Highway System, whether paid to Mn/DOT employees or consultants.
10. Environmental documentation costs are the costs derived from the completion of environmental review processes and the documentation of the results of those processes, such as Environmental Assessment Worksheets and Environmental Impact Statements. Both internal employee and consultant costs are included.

SECTION 2

Report on Environmental Mitigation Costs Associated with Two Mn/DOT Projects

Two recent projects were selected for study regarding environmental mitigation costs associated with each project, and to determine what proportion to overall project cost is attributable to environmental mitigation. One project is from the Metropolitan District and one is from District 3, representative of a rural project.

Environmental mitigation costs for these projects include the costs for engineering, right of way and construction of erosion control, ponds, noise walls and visual barriers, wetland mitigation, and the investigation of contaminated sites and cultural resources. The costs attributable to environmental documentation and alternative development are not considered as an environmental "mitigation" cost. These are an "environmental" cost and are noted in the tables, but are not included in the costs attributed to environmental mitigation. These costs are a component of total project cost.

Findings are presented below.

Project Description

Mn/DOT Project Number (Trunk Highway 169): 2776-02, 27294, 27295

This project adds an interchange at TH 169 and Pioneer Trail, an interchange at Anderson Lakes Parkway and Bloomington Ferry Road, and improvements at the interchange of TH 169 and I-494. The project involved impacts to the Hyland-Bush-Anderson Lakes Park Reserve in Bloomington and Eden Prairie. The project was processed with an Environmental Assessment. A Negative Declaration/FONSI was issued in November 2003.

The construction cost of the project was \$19.7 million, the right of way costs were \$4 million and project engineering costs were \$3.5 million. The total project cost for these two interchanges were \$27.2 million. Environmental mitigation costs of \$5 million are detailed in Table 1 and account for 18.6% of total project costs. It should be noted that the land for ponds and replacement land for the parkland impacts drive both the total dollars for right of way and the costs attributable to environmental mitigation to a high level.

Table 1: Environmental Mitigation Costs TH 169 S.P. 2776-02, 27294, 27295

Environmental Documents (costs not included in mitigation costs)

Environmental Assessment and 30% Plans: \$1,032,825

Environmental Investigation Costs

Historical/Cultural Resources: \$ 17,000

Contamination Investigation: \$ 26,000

Total: \$ 43,000

Preconstruction Engineering Costs

Noise Walls: \$ 28,876

Visual Barriers: \$ 21,245

Trails: \$ 2,696

Ponds: \$ 24,889

Erosion Control: \$ 19,855

Retaining Wall: \$ 32,466

Total: \$ 130,027

Construction Engineering/Administration Costs

Noise Walls: \$ 20,477

Visual Barriers: \$ 15,065

Trails: \$ 1,911

Ponds: \$ 17,649

Erosion Control: \$ 14,079

Retaining Wall: \$ 23,022

Total: \$ 92,203

Right of Way Costs (Land Only)

Ponds: \$1,800,000

4(f), 6(f): \$ 810,000

Total: \$2,610,000

Construction Costs

Noise Walls: \$ 482,068

Visual Barriers: \$ 354,662

Trails: \$ 45,000

Ponds: \$ 415,499

Erosion Control: \$ 331,467

Retaining Wall: \$ 542,000

Total: \$2,170,696

Total Mitigation Costs

Total: \$5,045,926

Total Mitigation Cost/Total Project Cost 5,046,000/27, 200,000 x 100 = **18.6%**

State Project 4912-48: Trunk Highway 371 in District 3; from 1500 ft north of TH 10 to 3000 north of CSAH 48

Project Description

This project is a four lane highway on new alignment east of the older alignment of TH 371. The project includes four travel lanes and two interchanges, one at CSAH 46 and another at CSAH 47. Bridges were constructed over Fletcher creek, and frontage road was also constructed west of the new highway. Some at grade crossings were provided as well. The project is approximately eight miles in length. This project was processed with an Environmental Impact Statement. The Record of Decision/Adequacy Determination was issued in January, 2004.

The construction cost for the project was \$17.1 million. The right of way costs were \$4.1 million and project engineering costs were \$3.1 million. The total cost of the project was \$24.3 million.

Although the project is considerably longer than the TH 169 project above, the environmental mitigations costs are substantially lower, not only as total costs, but also expressed as a percent of the project costs (i.e., less than four percent).

Table 2: Environmental Mitigation Costs TH 169 S.P. 4912-48

Environmental Documents (costs not included in mitigation costs)

EIS preparation – Consultant	\$ 277,000
EIS preparation – Mn/DOT Staff	\$ 171,000
Total:	\$ 448,000

Environmental Investigation Costs

Historical/Cultural Resources:	\$ 56,100
Contamination Investigation:	\$ 4,400
Total:	\$ 60,500

Preconstruction Engineering Costs

Ponds:	\$ 4,500
Erosion Control:	\$ 11,900
Wetland Mitigation	\$ 9,300
Total:	\$ 25,700

Construction Engineering/Administration Costs

Ponds:	\$ 4,500
Erosion Control:	\$ 12,000
Wetland Mitigation:	\$ 9,500
Total:	\$ 26,000

Right of Way Costs (Land Only)

Ponds:	\$ N/A
Wetland Mitigation	\$ 28,600
Total:	\$ 28,600

Construction Costs

Ponds:	\$ 55,300
Erosion Control:	\$ 148,900
Wetland Mitigation:	\$ 115,400
Total:	\$ 319,600

Total Mitigation Costs

Total:	\$ 460,400
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Total Mitigation Cost/Total Project Cost $460,400/24,300,000 \times 100 = 1.9\%$

Notes:

- The environmental investigations were completed for the entire TH371 corridor from Little Falls to the south end of the Brainerd Bypass. The costs shown are based on the percentage of the corridor included within the limits of this project.
- No additional r/w was purchased solely for the construction of the ponds.