MINNESOTA OFFICE OF THE LEGISLATIVE AUDITOR

Highway Spending

SUMMARY

By some accounts, highway infrastructure in Minnesota is in tough shape. Transportation spending has been the slowest growing category of state and local government spending over the last 20 or so years. Since 1972, transportation spending in Minnesota has shrunk from 13 to 8 percent of state and local government spending. Meanwhile, traffic on Minnesota's roads has increased about 80 percent. Some concerned groups also point to national data showing Minnesota's trunk highways to be in much worse condition than the national average. However, data also indicate that state and local governments in Minnesota generally spend about 40 to 60 percent more per capita on highways than the national average.

In this report, we attempt to resolve some of these apparently conflicting facts. We focus primarily on the State Trunk Highway (STH) system in Minnesota. While trunk highways account for only 9 percent of the miles of roads in Minnesota, they are the ''backbone'' of the state's road system and carry nearly 60 percent of the state's traffic. The Minnesota Department of Transportation (Mn/DOT) is responsible for the construction, repair, and maintenance of trunk highways and, over the last 10 years, has spent an average of about $775 million annually (in 1996 dollars) on the trunk highway system. In particular, we address the following issues:

- **How does Minnesota's road system and level of road spending compare with those in other states, and how does our trunk highway system compare with other state-administered systems?**

- **How have trunk highway revenues and expenditures changed over time?**

- **In what condition are state trunk highway pavements and bridges?**

- **How has the condition of trunk highway pavements and bridges changed since the mid-1980s?**

- **Given funding projections, how well will Mn/DOT be able to respond in the future to pavement and bridge deterioration, growing traffic, and other needs?**

- **To what extent does Mn/DOT perform adequate preventive maintenance on trunk highway pavements and bridges?**

- **Is Mn/DOT appropriately reassessing its lane and shoulder width standards for low volume rural trunk highways and state-aid roads?**

In carrying out this study, we interviewed Mn/DOT employees, as well as transportation planning officials at the Metropolitan Council. In addition to numerous contacts with staff in Mn/DOT's central office, we visited with employees at each Mn/DOT district office and the Metropolitan Division. We analyzed a variety of data from Mn/DOT data systems, particularly the pavement and bridge management systems and, in evaluating preventive maintenance practices, collected data from each district through several questionnaires and follow-up interviews. Our research also included a review of relevant literature on a variety of transportation topics.

TRUNK HIGHWAY SYSTEM

Minnesota has a large system of local roads but an average sized system of state roads.

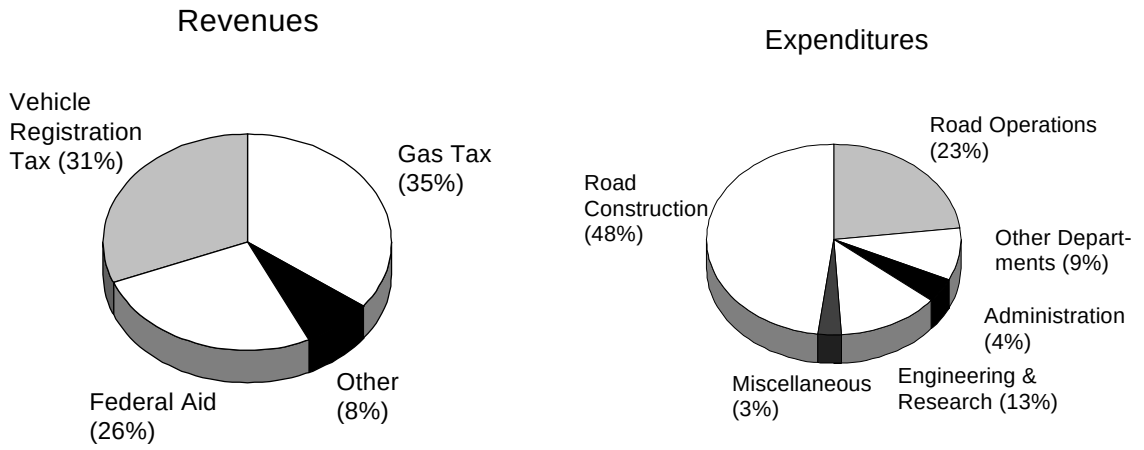
Minnesota has about 130,000 miles of roads--the fifth largest system in the nation--and in 1993 spent 52 percent more per capita on roads than the national average. Two factors contribute to Minnesota's higher than average spending. First, the state has a large rural road system due to its low population density and large number of smaller than average sized farms. Second, Minnesota has generally spent more per mile of road than the national averages for roads under the jurisdiction of state and municipal governments.

Minnesota's trunk highway system consists of about 12,000 miles of highways. Unlike Minnesota's overall road network, the trunk highway system is not large by national standards. While Minnesota's spending per mile for state-administered roads has generally been above the national average, it appears to be lower than spending per mile for a comparison group of midwestern states. The national average for state-level spending per mile may be biased downward because several eastern states have unusually large state systems including many low-cost local roads.

TRUNK HIGHWAY REVENUES

The Trunk Highway Fund is the principal source of support for the trunk highway system. There are three major sources of revenues for the fund: the state gasoline tax, motor vehicle registration taxes, and federal aid. Figure 1 shows the share of fund revenues from each of these sources in 1996. The Trunk Highway Fund receives about 60 percent of the proceeds of these two state-imposed taxes, while counties, cities, and townships receive the rest by virtue of the state constitution and other laws.

Figure 1: State Trunk Highway Revenues and Expenditures, 1996



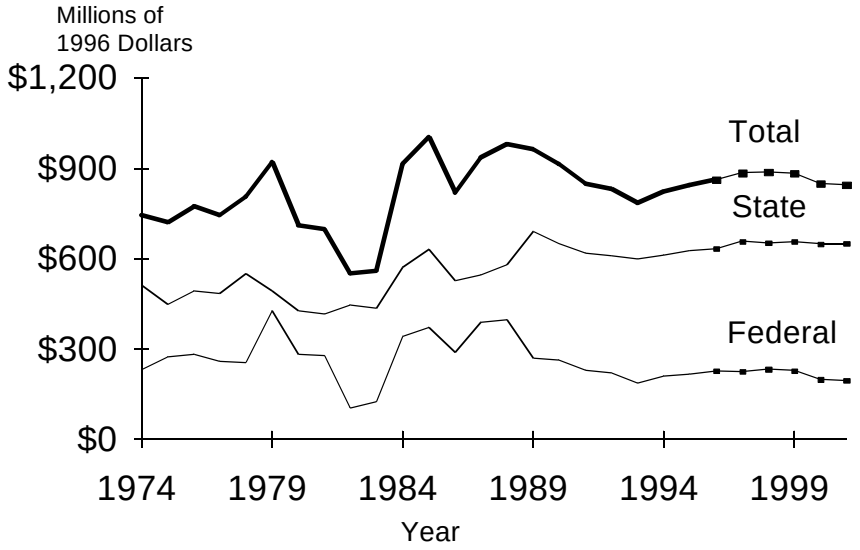
Source: Minnesota Department of Transportation.

Inflation-adjusted revenues for the Trunk Highway Fund increased 16 percent between 1974 and 1996. However, as Figure 2 shows, revenues have varied significantly in the past largely due to fluctuations in the amount of federal aid received. Revenues in 1996 were about 14 percent lower than the peak reached in 1985.

In the 1990s, overall revenues have been relatively stable even though the gasoline tax was last increased in 1988. Growth in gasoline consumption has prevented gas tax revenues from losing significant ground due to inflation as occurred during the 1980s. Over the next 5 years (1997-2001), we estimate

Revenues over the next 5 years are expected to be close to the average for the last 10 years.

Figure 2: Trunk Highway Fund Revenues, Actual and Projected, 1974-2001



Source: Program Evaluation Division analysis of Mn/DOT data.

average annual revenues (in 1996 dollars) to be within 1 percent of the annual average for the last 10 years.

TRUNK HIGHWAY EXPENDITURES

In 1996, expenditures from the Trunk Highway Fund totaled $808 million. About 91 percent of the spending was done by Mn/DOT, while other agencies--primarily the Department of Public Safety--made about 9 percent of the expenditures. As Figure 1 shows, nearly half of the spending out of the Trunk Highway Fund in 1996 was for Mn/DOT's road construction projects. Close to one-fourth was for Mn/DOT's road operations, including snow and ice control and routine maintenance.

The Trunk Highway Fund has benefited from relatively stable construction prices during the 1980s and 1990s.

Although Trunk Highway Fund revenues have only increased 16 percent since 1974, Mn/DOT's road construction budget has benefited tremendously from relatively stable highway construction prices during the 1980s and 1990s. Since 1974, the average annual inflation rate for highway construction in Minnesota has been almost 2 percentage points less than the rate experienced by state and local governments. As a result, we estimate that:

- **Inflation-adjusted spending on highway and bridge construction increased 52 percent from 1974 to 1996.**

Other trunk highway spending increased 11 percent. Much of the growth in other spending was due to spending on Mn/DOT's road operations, which increased 24 percent. Spending by Mn/DOT on general support and administration more than doubled but accounts for less than 4 percent of total spending. Mn/DOT's engineering and research spending declined 6 percent.

As Figure 3 indicates, trunk highway expenditures have fluctuated from year to year. Construction spending, which is more dependent on federal aid, has varied the most. In 1996, construction spending was about 20 percent below the peak reached in 1988. Total spending in 1996 was about 12 percent below its 1988 peak.

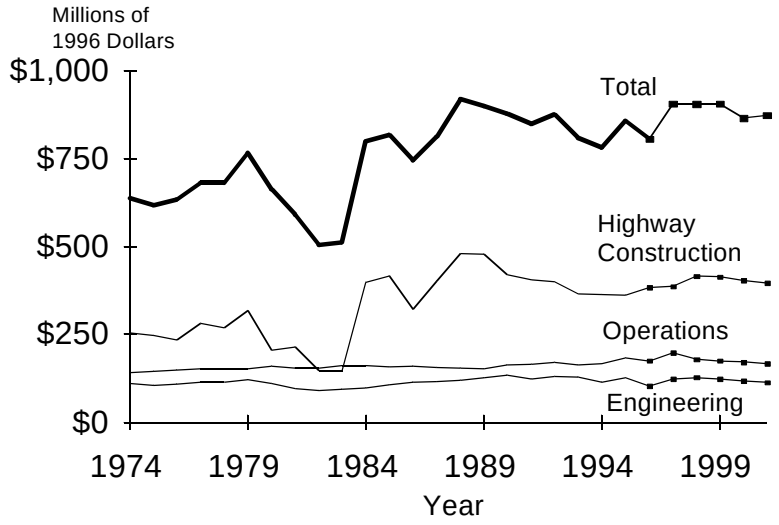
Based on the Governor's 1998-99 budget proposal and Mn/DOT's projections for the 2000-01 biennium:

- **Average annual trunk highway construction spending (in 1996 dollars) over the next 5 years is expected to be about 1 percent less than the annual average over the last 10 years.**

Other categories of Trunk Highway Fund expenditures would increase more relative to the 10-year average (1987-96). Other Mn/DOT spending is expected to be about 6 percent higher than the historical average. Spending by other departments is estimated to be about 10 percent higher under the Governor's proposal, which includes funding to hire more state patrol officers.

Construction spending over the next 5 years is expected to be comparable to historical averages.

Figure 3: Trunk Highway Fund Expenditures, Actual and Projected, 1974-2001



Source: Program Evaluation Division analysis of Mn/DOT data.

Beyond 2001, spending might not compare so favorably with historical averages. Under the Governor's proposal, the amount of spending for construction and other purposes is expected to receive a boost during the 1997-99 period by the use of the available fund balance, which totaled $147 million at the end of 1996. However, by the end of 1999, the fund balance is estimated to be only $3 million. As a result, the Trunk Highway Fund may not be able to sustain the spending levels anticipated during the 1997-99 period.

PAVEMENTS

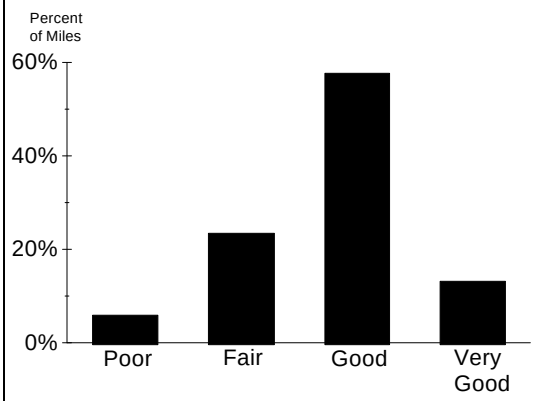
Most trunk highway pavements are in good condition.

Based on our analysis of Mn/DOT's pavement quality data, we think that:

- **The typical trunk highway was in good condition in 1996, and only a small percentage of pavements were in poor or very poor condition.**

We estimate that about 70 percent of trunk highway miles were in good to very good condition as measured by Mn/DOT's pavement quality index (Figure 4). About 24

Figure 4: Pavement Quality for State Trunk Highways, 1996



Source: Program Evaluation Division analysis of Mn/DOT data.

percent were in fair condition in 1996, while only about 6 percent were in poor or very poor condition. These measurements came prior to the winter of 1996-97 which may have taken an unusually harsh toll on Minnesota's roads, including its trunk highways.

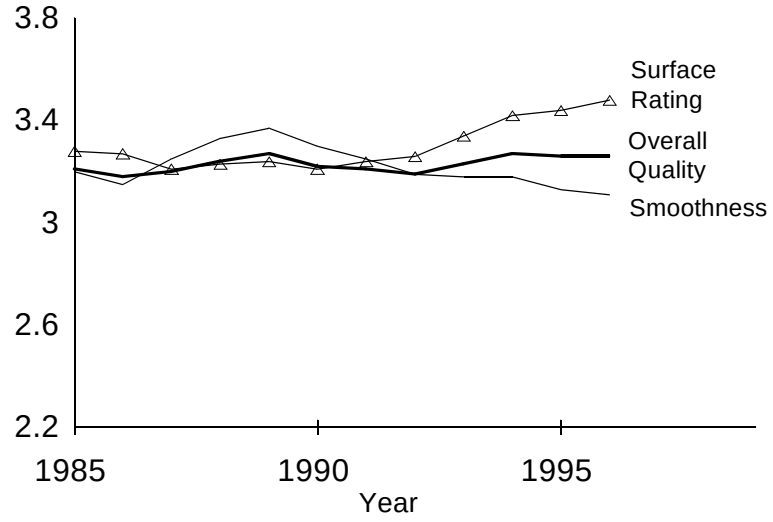
Our conclusions conflict with characterizations of Minnesota highway conditions made by Mn/DOT and the Federal Highway Administration. As Mn/DOT agrees, the federal data are invalid for comparison purposes across states because the data do not take into account the differences in equipment used to measure pavement smoothness. But, we also disagree with the labels Mn/DOT has used to characterize pavement quality index numbers. The labels (such as ''poor'' or ''good'') Mn/DOT has attached to various numbers are inconsistent with how Mn/DOT's Pavement Management Unit has calibrated the smoothness component of the index. It is possible for a pavement to have a ''fair'' rating on smoothness and the best possible rating on surface defects and yet be labeled as being in ''poor'' condition by Mn/DOT.

Mn/DOT has been able to maintain relatively constant pavement quality on the trunk highway system since at least the mid-1980s (Figure 5). Between 1985 and 1996, the pavement quality index has increased about 2 percent. The average is toward the lower end of what we consider the ''good'' range for pavement quality. The pavement quality index consists of both a smoothness rating and a rating for surface defects. Since 1985, the surface rating improved by about 6 percent, while the smoothness rating declined by about 3 percent.

Pavement quality has increased slightly since 1985.

Based on our assessment of the data on pavement quality, we do not think Mn/DOT has a backlog of pavements in poor condition. However, a backlog would develop if Mn/DOT reduced the average amount of resurfacing work it does annually. In fact, we think that:

Figure 5: Pavement Quality Ratings for State Trunk Highways, 1985-96



Source: Minnesota Department of Transportation.

- **Mn/DOT may have to increase the rate at which it resurfaces highways.**

We used Mn/DOT's Pavement Management System (PMS) to estimate the number of miles of resurfacing (including concrete pavement repair) necessary over the 10-year period from 1996 through 2005 to maintain a constant systemwide average pavement quality. The PMS predicts that between 13 and 28 percent more miles of resurfacing activity annually will be necessary than were actually done from 1986 to 1995.

The aging of the trunk highway system may require Mn/DOT to resurface highways more frequently in the future.

This increased need may be the result of the aging of Minnesota's trunk highways. The average pavement age on trunk highways increased from 32 to 40 years from 1985 to 1995. Mn/DOT has been able to maintain its highways in relatively good condition by resurfacing them. In fact, the average age of trunk highway surfaces declined from 11.5 years in 1985 to 10.9 years in 1995. However, the composition of trunk highway pavements and surfaces has changed, and some engineers think that each successive resurfacing may not last as long as the previous surface or the original surface. From 1985 to 1995, the percentage of trunk highway miles with their original surfaces declined from 38 percent to 27 percent.

It is also possible that the PMS is overstating the rate at which surface quality is deteriorating. Mn/DOT needs to examine the PMS to see if it is accurately predicting the deterioration rate. In addition, Mn/DOT needs to consider whether greater use of preventive maintenance might affect the need for resurfacing in the future and might reduce the estimated future costs of maintaining a constant pavement quality index.

BRIDGES

Trends show very slight changes in the condition of trunk highway bridges since the mid-1980s. The systemwide average bridge sufficiency rating improved less than 1 percent between 1986 and 1995. A sufficiency rating is an all-purpose indicator that measures structural adequacy, functional obsolescence, and essentiality for public use. Bridge condition ratings, which focus on structural condition, have declined slightly. The average systemwide condition ratings for bridge decks, superstructures, and substructures all decreased between 1 and 3 percent. The percentage of bridges which are deficient by federal standards for either structural or functional reasons has declined from 12.8 percent in 1990 to 11.7 percent in 1995. The estimated costs of improving deficient bridges also declined between 1990 and 1995. Longer trends are difficult to interpret because the federal criteria for identifying deficient bridges were changed several times in the late 1980s.

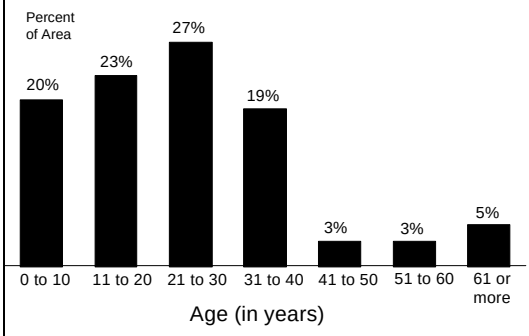
Overall, we found that:

- **The typical trunk highway bridge is in good to fair condition, but there is a backlog of bridges that are classified as having structural deficiencies.**

Most trunk highway bridges are in good condition, but there is a backlog of bridges with structural deficiencies.

Mn/DOT data indicate that 240 of the 4,614 trunk highway bridges had structural deficiencies which would cost an estimated $100 million to correct. This figure is more than twice the average annual amount Mn/DOT spent on bridge replacement, preservation, and safety improvements between 1991 and 1995. Mn/DOT also estimates that there are an additional 116 bridges for which both condition and functional problems exist. The functional problems include inadequate width or clearance, as well as load restrictions. It would cost an estimated $95 million to correct deficiencies on these bridges, but Mn/DOT does not itemize the costs of correcting condition problems from width or other functional deficiencies. Finally, another 185 bridges have functional deficiencies which would cost $127 million to correct. Clearly, there is a significant cost to repairing the trunk highway bridges identified as being structurally deficient. We are less convinced of the need to improve or replace bridges simply because of functional deficiencies. Such a project, generally designed to reduce accidents or congestion, should only be undertaken if the benefits to highway users exceed the costs of the project.

Figure 6: Age of Bridges and Culverts, 1995



Source: Minnesota Department of Transportation.

If additional funding were available, it might be a good time to address the backlog of bridges needing repair or replacement due to deficient structural conditions. In at least 15 to 20 years, Mn/DOT will be facing even more significant bridge replacement needs, since a significant percentage of trunk highway bridges will begin to meet or exceed their expected life of 60 years. As Figure 6 shows, only 11 percent of the total bridge deck area was on bridges which were 41 years old or more in 1995. However, that percentage is expected to grow significantly in the future.

CONGESTION

While trunk highway spending has been able to outpace inflation and even population growth since 1974, spending has not been able to keep pace with the significant growth in traffic on Minnesota's highways. Between 1974 and 1996, the amount of traffic on all of Minnesota's roads increased an estimated 80 percent, and traffic probably increased even more on the trunk highway system. This increase in traffic was well in excess of the 52 percent increase in the trunk

highway construction budget and the 11 percent increase in other spending out of the Trunk Highway Fund.

Highway spending does not necessarily need to grow as fast as the growth in traffic, particularly when there is excess capacity in the highway system. However, at some point, the capacity is exceeded on some highways and the amount of resources needed to manage or reduce congestion needs to be increased. Also, as traffic has grown, so have the loads borne by trunk highways largely from truck traffic. This increase in pavement stress may cause problems for some highways not built to handle the loads they now carry.

The increase in travel has caused a significant increase in congestion on some interstate highways, other freeways, and some principal arterials. The worst congestion is in the 7-county Twin Cities metropolitan area, but there are trunk highways in other parts of the state that are also congested. There is congestion at times on some interstate highways outside the Twin Cities area, as well as other trunk highways such as those in major tourism centers. The Metropolitan Council is projecting that the number of congested miles on major highways in the metropolitan area will more than double between 1995 and 2020, even though the Council's long-range plan for the area includes a number of important highway capacity improvements.

PREVENTIVE MAINTENANCE

Many studies have found preventive maintenance to be effective in extending pavement life or improving pavement quality over what it would have been in the absence of preventive maintenance. Preventive maintenance is generally done on pavements to keep moisture out of the pavement subbase or to maintain the ability of the pavement to move due to temperature changes. Some of the benefits of preventive maintenance on pavements include less cracking and fewer potholes and pavement blowups. Bridge preventive maintenance can reduce the exposure of bridge components to corrosive de-icing chemicals and maintain the ability of bridge components to expand and contract in response to temperature changes.

Mn/DOT probably should be doing more preventive maintenance.

We asked key Mn/DOT managers around the state whether they felt that their district or maintenance area was doing the right amount of certain types of preventive maintenance. We also examined records indicating the amount of preventive maintenance which has been done in the past and used the recently revised Pavement Management System to estimate how much of the trunk highway system might benefit from preventive maintenance. In general, we found that:

- **Mn/DOT is probably not doing enough preventive maintenance.**

The vast majority of Mn/DOT managers generally felt that the preventive maintenance activities we asked about are cost-effective or would be if they were used. For some activities, particularly newer technologies, a majority was not

sure. Roughly half of the Mn/DOT managers felt that their district or maintenance area did not do enough of the preventive maintenance activities we identified, although the answers varied depending on activity.

For bituminous pavements, managers were more concerned about the amount of crack filling, thin asphalt overlays, crack sealing, slurry sealing, and micro-surfacing and somewhat less concerned about the amount of chip sealing that is currently done. For concrete pavements, managers were more concerned about joint sealing and repair and less concerned about retrofit load transfer which is a new technique in the experimental phase. Some managers were particularly concerned that Mn/DOT does not address concrete joint problems in a timely way and, as a result, more costly repairs are ultimately necessary.

For bridges, most Mn/DOT managers said not enough of the following types of preventive maintenance were being done: spot painting, cleaning and resealing of deck joints, lubrication of expansion bearings, and correction of approach panel settlement. Sealing of cracks in concrete decks and reinstallation of strip neoprene glands in expansion joints were also a concern of some managers. Most managers were satisfied with the amount of bridge flushing their districts or maintenance areas performed. However, using the Bridge Management System, we found that bridge flushing is inadequate in several areas of state. While bridge experts recommend an annual bridge flushing to prevent concrete from cracking and scaling and steel components from corroding, the 1994-95 statewide average was about once every 3 years. The frequency was once every 6 years in the Twin Cities metropolitan area and once every 10 years in District 1 (Duluth).

Based on responses from managers as well as our own assessment of Mn/DOT's finances, we think that:

- **The principal reason Mn/DOT does not do more preventive maintenance is that it has more pressing needs.**

Preventive maintenance is important in controlling long-run costs but is hard to fund given more pressing problems.

Mn/DOT managers find it hard to justify allocating more money to preventive maintenance when they have other significant needs such as roads in bad shape, deficient bridges, and safety and congestion concerns. For example, a number of Mn/DOT managers told us that they find it difficult to justify doing preventive maintenance on highways in fairly good condition when other highways are in worse condition. Even in those instances when Mn/DOT managers said they thought their district was doing enough of a certain preventive maintenance activity, half of them said they would spend more on the activity if additional funds were available. They felt they were doing the best they could given funding constraints.

Unfortunately, however, the effect of these funding constraints may be to increase the long-run costs of maintaining the trunk highway system in good condition. If Mn/DOT were able to fund more preventive maintenance, it would likely incur some additional initial costs but would hopefully be able to reduce the number of highway miles and bridges needing more significant work in the long run and may

be able to reduce the amount of necessary maintenance work such as pothole patching.

We think that:

- **Mn/DOT is moving in the right direction but needs to take a more strategic approach to preventive maintenance on the state's trunk highways.**

In recent years, Mn/DOT has shown more interest in preventive maintenance. A department team wrote a report on the advantages of preventive maintenance for pavements. The team recognized the possibility of using the Pavement Management System to suggest and evaluate preventive maintenance activities. Prior to that time the system had been only used to suggest more costly rehabilitation options for pavements in relatively poor condition. Mn/DOT has now developed decision criteria which will help districts select preventive maintenance activities for pavements in better condition. Also, the department, in cooperation with local governments, is conducting research on preventive maintenance for pavements. We are concerned that current practices will not change, however, unless Mn/DOT establishes a separate category of preventive maintenance funding which cannot be used for other activities.

ADEQUACY OF FUNDING

In recent years, policy makers have been deadlocked over the issue of providing additional revenues for highways in Minnesota. Funding for transit has also been a key issue. Our study was limited to an examination of the trunk highway system and did not include an assessment of highway funding adequacy for counties and cities, which would also benefit from an increase in highway user taxes. In addition, we were not able to study Minnesota's transit needs.

Mn/DOT needs to develop better estimates of its pavement and bridge preservation and replacement needs.

In general, we found that:

- **Mn/DOT does not have adequate estimates of the funding needed to maintain current pavement quality and bridge condition ratings on the trunk highway system.**

Mn/DOT has not developed an estimate of the funding needed for highway preservation and replacement in order to maintain a constant systemwide average pavement quality. In addition, the estimate developed by Mn/DOT for bridge preservation and replacement needs should be revised because it overstates bridge replacement needs in some respects but also does not fully account for the emerging problems Mn/DOT is likely to face with steel fatigue on some bridges. The revised estimate should also be linked to a performance target such as a constant systemwide average for bridge condition ratings. Furthermore:

- **Because the use of benefit-cost analysis in Mn/DOT is still in a developmental stage, there is little systematic information on whether expansion and improvement projects planned for future years are worthwhile from a benefit-cost standpoint.**

The adequacy of funding should not be measured by simply comparing available funds to a list of potential projects. Such comparisons invariably have shown that infrastructure needs exceed available funding. Expansion or improvement projects that cost more than their estimated benefits, such as those measured by reduced highway user costs or the value of reduced accidents, should not be considered a system need.

Mn/DOT should better define its funding needs and periodically report on them.

We recommend that:

- **Mn/DOT should periodically prepare a report on the funding needs of the trunk highway system. Needs should be defined in terms of what funding is necessary to achieve specific performance targets and should incorporate benefit-cost criteria where appropriate and feasible.**

Despite the difficulties we had in arriving at any precise estimate of trunk highway funding needs, we think that:

- **Projected funding is probably not adequate to address all of Minnesota's trunk highway needs.**

Projected funding is probably insufficient to meet trunk highway needs.

Mn/DOT's funding has not been sufficient for it to fully fund mega-projects on Twin Cities area freeways. These projects have had to be delayed. Parts of the projects are scheduled to be implemented in piecemeal fashion over a period of many years. In addition, funding is not sufficient to fully address the backlog of structurally deficient bridges, perform adequate preventive maintenance on trunk highways and bridges, and reconstruct those heavily used highways which may be more cost-effective to reconstruct than to overlay frequently.

We think the executive and legislative branches need to cooperate to ensure that Minnesota is not ''penny wise and pound foolish.'' It may take an increase in taxes in order for Mn/DOT to implement practices and projects which more than pay for themselves by generating benefits in excess of their costs. In order for that cooperation to occur, Mn/DOT needs to thoroughly assess its trunk highway needs. Needs should be linked to performance targets and tied to benefit-cost analysis as much as possible so that the assessment of needs is not simply the compilation of a ''wish list.''

LANE AND SHOULDER WIDTH STANDARDS

Mn/DOT's Task Force has made useful recommendations for resurfacing projects.

In its 1995 report entitled *Within Our Means: Tough Choices for Government Spending*, Minnesota Planning recommended a variety of ways in which state and local governments could make more effective use of their resources. One recommendation was to reduce right-of-way, lane width, and other standards for highways, particularly low volume rural roads. In response, Mn/DOT established a Geometric Design Standards Task Force to review lane and shoulder width standards for rural trunk highways and state-aid highways which serve fewer than 2,000 vehicles per day. In December 1996, the Task Force finalized its recommendations and passed them on to the Commissioner of Mn/DOT and the County Highway Engineers Association. As part of our study, we examined the work of the Task Force. We found that:

- **While the Task Force has made a number of useful recommendations, particularly new lane and shoulder width standards for reconditioning (or resurfacing) projects, the Task Force's recommended construction or reconstruction standards are inconsistent with Mn/DOT's own benefit-cost analysis and reputable national studies.**

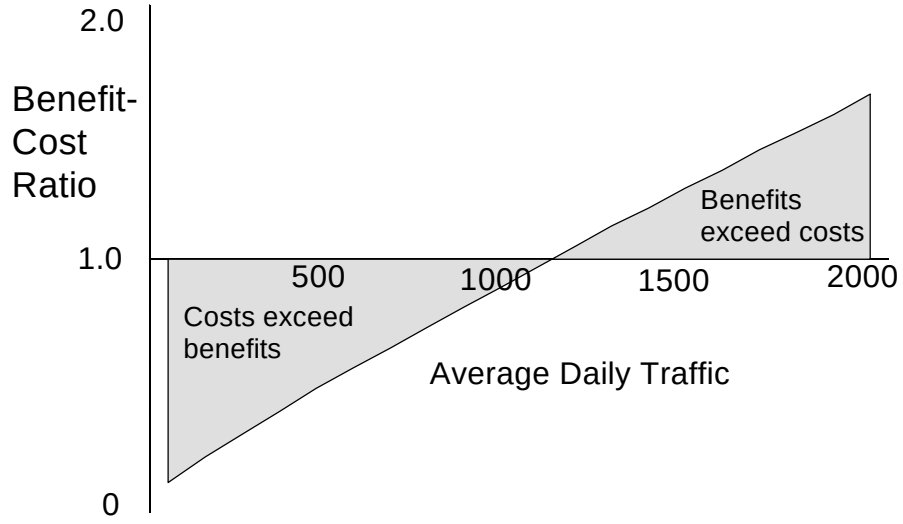
The Task Force's recommended reconditioning standards seem practical and may help to reduce the number of highways which are required to be reconstructed because of their current lane or shoulder width. For many low volume rural highways, it makes more sense to permit Mn/DOT districts and counties to preserve their existing roads with a less costly resurfacing project than to require total reconstruction.

However, the Task Force's recommended construction and reconstruction standards are relatively unchanged from existing standards for both trunk highways and county state-aid highways. In particular, the Task Force retained the requirement that all paved roads have at least 12-foot lanes and 4-foot shoulders regardless of traffic volumes. Like reputable national studies, Mn/DOT's own benefit-cost analysis shows that the costs of constructing 12-foot lanes outweigh the potential accident reduction benefits for lesser-traveled rural highways. For example, using Mn/DOT's data and assumptions, Figure 7 shows that the costs of constructing a highway with 12-foot lanes and 4-foot shoulders (rather than 11-foot lanes and 4-foot shoulders) exceed the benefits for highways with traffic volumes below about 1,100 to 1,200 vehicles per day. Judging from better cost data on county state-aid highways, we think that 11-foot lanes might be cost-effective at traffic volumes up to 1,500 or possibly 2,000 vehicles per day.

The Task Force cited a number of reasons for recommending standards not supported by Mn/DOT's benefit-cost analysis. However, we do not think that the Task Force thoroughly evaluated these additional factors. For example, the Task Force report cited some shoulder maintenance concerns for highways with 11-foot lanes but did not mention the additional pavement maintenance and rehabilitation costs which would be incurred with 12-foot lanes.

The recommended construction and reconstruction standards for lane width are not supported by national studies or Mn/DOT's own benefit-cost analysis.

Figure 7: Benefit-Cost Ratio for Constructing 12-Foot Lanes Instead of 11-Foot Lanes by Average Daily Traffic



Source: Minnesota Department of Transportation.

Minnesota already has more rural roads with 12-foot lanes than the national average. In addition, the Task Force's recommendation maintains a lane width standard in excess of nationally recommended standards such as those recommended in a 1994 report prepared for the National Highway Cooperative Research Program (NCHRP) by the Transportation Research Board and National Research Council. The adoption of the NCHRP recommendations instead of the Task Force's recommendation could potentially affect about 600 miles of trunk highways and more than 8,500 miles of county state-aid highways, which would no longer be considered substandard. It would also mean that more of the state aid for county state-aid highways could be directed toward preservation of existing highways or other important needs.

We urge Mn/DOT and the Task Force to reconsider the recommendation for construction and reconstruction projects. Given the fiscal realities facing state and local governments in Minnesota, it is important that every reasonable effort be made to maximize the cost-effectiveness of government spending. Mn/DOT and local governments need to focus on preserving existing infrastructure and should improve or expand infrastructure only when it makes sense from a benefit-cost standpoint. Governments cannot afford to focus on building the best possible transportation system.