



Legislative Fiscal Bureau

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Joint Committee on Finance

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State Highway Maintenance and Traffic Operations Funding (DOT -- State Highway Program)

Bill Agency

[LFB 2007-09 Budget Summary: Page 543, #3]

CURRENT LAW

The state highway maintenance and traffic operations program is responsible for a variety of activities related to the upkeep of state highways and highway rights-of-way, including the minor repair of pavements and bridges, snow plowing and ice removal, mowing and other vegetation management, and the maintenance of highway rest areas and waysides. Most of this work is performed by counties under contract with the state. In addition, the program is responsible for the installation, repair, and maintenance of signs, highway lighting, pavement marking, traffic signals, and intelligent transportation systems (ITS), unless the installation or replacement of these items is incidental to a larger highway improvement project, in which case they may be funded from the state highway improvement programs (state highway rehabilitation, southeast Wisconsin freeway rehabilitation, or major highway development programs). Base funding for the maintenance and traffic operations program is \$178,588,100 SEG and \$1,102,900 FED. The federal funds are used for the Milwaukee freeway traffic operations center. The program also has a separate appropriation for the cost of state-owned lift bridges, with base funding of \$2,232,400 SEG.

GOVERNOR

Provide \$28,964,000 SEG in 2007-08 and \$37,330,300 SEG in 2008-09 for the state highway maintenance and traffic operations program.

DISCUSSION POINTS

1. According to the Department of Administration, the funding increases in the bill are composed of the following: (a) \$21,510,000 annually to cover the costs of contracting for county services and other routine maintenance activities; (b) \$3,960,400 in 2007-08 and \$8,019,800 in 2008-09 for 2.5% annual inflationary increases, calculated on a base that excludes state-funded salary and fringe benefit costs; and (c) \$3,493,600 in 2007-08 and \$7,800,500 in 2008-09 to reflect projected growth in traffic and the number of lane miles on the state highway system.

2. The funding increases provided in the bill are the same amounts the Department of Transportation (DOT) had included in its agency budget request. The increases for inflation and system growth are adjustments that are intended to maintain the same level of maintenance services as in the base year, while the annual increase of \$21,510,000 is intended to increase the level of maintenance services to more closely match the level of service needed, as determined by DOT, to properly maintain the highway system. Each component of these adjustments is discussed separately below.

3. Between 50% and 60% of the total funding for the maintenance and traffic operations program is used for routine work done by county work crews. [The remainder of the funding is for program responsibilities not performed by the counties, such as the installation of traffic signals, pavement markings, and highway lighting, the purchase of salt for use by the counties for winter maintenance, rest area maintenance, and program salaries and fringe benefits.] By statute, the Department must reimburse counties for the actual costs of the work, but the amount of work that each county does is limited through the use of what the Department calls the "level of service" budget. That is, county administrators are generally given flexibility about what work is accomplished on the state highway system, as long as the cost of the work stays within the county's level of service budget.

4. In determining the amount of each county's level of service budget, the Department uses a model that identifies all of the maintenance activities that counties need to perform to maintain the highway system. For the purposes of the model, the highway system is divided into several classes, depending upon such factors as the type of surface (concrete or asphalt), the number of lanes, and the traffic level. For each highway class, the model specifies the maintenance activities that must be performed and the expected frequency of those activities. For instance, for each class of highway, the model makes assumptions on the number of potholes per mile that will require repairs each year, as well as the amount of time, number of workers, and equipment cost for this operation. Similar assumptions are made for other activities related to pavements and shoulders, bridges, roadside maintenance (mowing, trash pick up, and brush cutting), drainage maintenance, and others. For each county, the level of service budget is calculated using the number of lane miles and bridges in each highway class in that county and the estimated cost for each of the specified maintenance activities.

5. In every year since the Department's level of service model was established in 1992, the amount budgeted for making allocations to each county has been less than the amount that the

model estimates is needed to perform all of the specified maintenance activities. This has not necessarily been a problem, since the model is used primarily as a tool for making proportionate allocations of the available funding to each county, rather than as a list of all the activities that each county must do. In recent years, however, this gap has grown larger, even though the Department readjusted the level of service model to reduce overall costs in order to more closely match the amount of funding available for distribution to counties. Many counties have maintained that the gap between the amount of funding specified under the level of service model and the amount of funding actually provided represents, at a minimum, the funding shortfall for the portion of the program related to services provided by counties.

6. In calendar year 2007, the SEG funds available for distribution to the counties will fall short of the total level of estimated costs identified under the level of service model by \$24.4 million. A higher-than-expected level of federal highway aid in federal fiscal year 2007 allowed the Department to allocate \$16.0 million in FED funds to maintenance projects, thereby reducing this gap to \$8.4 million. But since this allocation was made on a one-time basis, the "base" gap between available funding and the level of service model remains \$24.4 million. In submitting its budget request, the Department indicated that \$20,000,000 of the annual requested funding (and of the amount provided in the bill) would be intended to partially close this gap. This level of funding would provide about 97% of the amount identified by the Department's model in 2007. The actual percentage of the model that could be funded in 2008 and 2009 with this increase would depend upon the extent to which any inflationary and system growth increases provided for the program can keep pace with adjustments to the model in those years. Model adjustments are based on changes in the actual costs of machinery, materials, and labor used by the counties for maintenance services, amounts that are calculated for each calendar year during the preceding fall.

7. Although the \$20,000,000 increase is intended to increase the real level of maintenance services provided by the counties, the Department argues that this increase is really intended to restore a level of services that used to be provided in past years. In the 2001-03 budget, the program was made responsible for functions that used to be the responsibility of the state highway rehabilitation program, which has forced reductions in the funding of those functions and the funding available for routine maintenance done by counties. Specifically, 2001 Act 16 mandated that the installation of highway signs, lighting, pavement marking, traffic signals, and intelligent transportation systems must be done from the highway maintenance program unless such installation is incidental to a larger highway improvement project. Since that time, the Department indicates that various maintenance services have been affected, including: (a) crack sealing of asphalt pavement and repair of concrete distresses; (b) inspection and maintenance of culverts, ditches, under drains, inlets, and other drainage structures; (c) mowing and noxious weed control; (d) repair of erosion problems; and (e) removal of trees and brush in the highway clear zones.

8. Each year the Department completes an evaluation of the condition of the state highway system, with a particular focus on problems that are the responsibility of the highway maintenance program. The measures are reported in terms of the percentages of particular problems that are untreated or inadequate at the end of the maintenance season. For instance, the backlog in longitudinal cracks in asphalt pavement is the percentage of all asphalt pavements in the highway

system that have unsealed cracks. The overall percentages are estimated by evaluating a random sample of highway segments in each county. In 2005, the latest year for which complete information is available, the Department's evaluation found that backlogs exceeded 25% of the highway system miles in several areas, such as asphalt pavement cracks, concrete pavement cracks, joint distress, and transverse faulting, highway signs older than their recommended life span, shoulder cracks and substandard dropoffs, and roadside litter and uncontrolled noxious weeds. Compared to the prior year, features that showed a statistically significant deterioration were the condition of signs, cracks and potholes on shoulders, and the condition of culverts.

9. In addition to the \$20,000,000 annual increase for the program, the bill would provide an additional increase of \$1,510,000 annually to address maintenance needs on new highway features or provide new maintenance services. The Department identifies three such new items. First, in high-traffic areas, county crews are beginning to do more work at night in order to minimize traffic disruptions. The costs of night work are typically higher due to the need for lighting equipment and for wage premiums. Second, the Department has increased the installation of median barriers along divided highways in the state, which require additional maintenance. Finally, the reconstruction of the Marquette Interchange has resulted in new, wider shoulders, additional, longer ramps, new lighting, and decorative features, all of which increase maintenance costs.

10. In 2006, the Joint Committee on Transportation Needs and Financing, commonly known as the "Road to the Future Committee," made funding recommendations for several transportation programs. For the highway maintenance program, the Committee recommended an annual increase (not including adjustments for inflation) of \$44.3 million. This amount includes: (a) \$20.8 million to close the gap between the funding needs identified in the level of service model and the amount available for routine maintenance, as discussed above; (b) \$21.5 million to restore prior levels of funding for the traffic operations items (such as traffic signals and pavement marking), which became the responsibility of the maintenance program under the 2001-03 budget; and (c) \$2.0 million to restore funding that has been eliminated or reduced for noxious weed control and roadside facility maintenance (such as rest areas). As noted above, the bill would provide \$20.0 million to nearly eliminate the level of service gap, but would not provide funding for the other parts of the "Road to the Future Committee's" recommendations. A decision to provide additional increases to meet that Committee's recommendations may require funding reductions for other transportation programs, including the highway improvement programs, or enacting additional transportation tax and fee increases.

11. In addition to the annual increases of \$21,510,000 for the program, the bill would provide 2.5% annual inflationary increases of \$3,960,400 in 2007-08 and \$8,019,800 in 2008-09. Global Insight, Inc., projects increases in the consumer price index of 1.8% for calendar year 2007, 2.1% for 2008, and 1.9% for 2009. Consequently, the bill's inflationary adjustments for the program are somewhat higher than the projected general rates of inflation over the 2007-09 biennium. Providing a 2.0% annual increase for the program would more closely approximate the projected level of general inflation and would result in reductions, relative to the bill, of \$792,100 in 2007-08 and \$1,619,800 in 2008-09.

12. Although the inflationary adjustments in the bill exceed the projected rates of general inflation, the Department notes that many program costs have recently increased at a rate that exceeds general inflation. For instance, the cost of fuel has increased by an average of 28% annually over the past three years, while the cost of machinery increased by just under 6% annually over that same period. Given these increases in costs, an inflationary adjustment that exceeds the general rate of inflation may be justified.

13. The bill would also provide funding to reflect projected increases in the number of lane-miles and traffic on the state highway system (\$3,493,600 in 2007-08 and \$7,800,500 in 2008-09). As noted above, the formula used to allocate funds to each county is based on the number and type of state highway lane-miles within the county. Since the amounts budgeted for each lane-mile depend, among other things, upon the traffic volume on the highway, an increase in traffic on a particular highway segment may have the effect of moving that segment into a higher reimbursement class, which, in turn, increases the amount that would be allocated to the county where the segment is located. Likewise, the construction of new highways or the addition of lanes to existing highways also have the effect of increasing the amounts budgeted for the counties in which such increases occur. The funding increases for lane-mile and traffic growth are intended to allow the Department to provide increases to counties that experience this growth.

14. If the total amount of funding for county maintenance contracts does not increase to compensate for lane-mile and traffic increases, then the counties that have such growth will not necessarily receive a funding adjustment specifically for this purpose. Instead, the Department's level of service model would have the effect of reallocating funds from counties where such growth was less than average to counties where the growth was greater than average, meaning that the amounts that are allocated per lane-mile for each class of highway would decline.

15. The basic principle behind the adjustment for growth in lane miles and traffic is that such growth increases the cost of highway maintenance. However, while the Department's formula for calculating the compensating funding increases assumes that the costs associated with each added lane-mile are equal to the average cost for lane-miles in that class, the actual, marginal costs of additional lane-miles could be lower. To illustrate this point with an example, a maintenance crew doing pothole repair uses certain equipment and materials. While the amount of material and the hours of labor needed for the work will increase as the number of lane-miles that must be repaired increases, the crew would not need additional equipment as long as the increase remains within a certain range. A case could be made, therefore, that the lane-mile and traffic growth adjustments, because they are based on average lane-mile costs rather than marginal costs, overstate the total growth in costs. Depending upon the other decisions regarding maintenance program funding and the availability of funding, the Committee may decide to eliminate or reduce the adjustment for projected lane-mile and traffic growth. For instance, providing an adjustment equal to 50% of the average cost for this growth would result in reductions, relative to the bill, of \$1,746,800 in 2007-08 and 3,900,300 in 2008-09.

16. Decisions about the overall level of funding provided for the state highway maintenance program will need to be made in the context of a consideration of the revenues

available for transportation and demands for funding in other programs. For instance, if the Committee decides to reduce increases to transportation fund taxes and fees in the Governor's bill, it may be necessary to reduce funding for the maintenance program. As noted in the points above, the Governor's bill includes funding for three purposes: increases to adjust for inflation, increases to compensate for growth in the number of lane miles and higher traffic volume, and increases to the real level of maintenance service provided to help address maintenance backlogs. If a decision is made to reduce this funding, one or more of these increases could be scaled back or eliminated. For instance, instead of providing \$21,510,000 annually to increase the real level of maintenance services on the highway system, the Committee could provide \$10,000,000 annually or some other amount. This would require the Department to prioritize the program improvements based on a consideration of the more critical problem areas.

ALTERNATIVES TO BILL

1. Approve the Governor's recommendation to provide funding increases for the state highway maintenance and traffic operations program of \$28,964,000 SEG in 2007-08 and \$37,330,300 SEG in 2008-09.

ALT 1	Change to Bill Funding	Change to Base Funding
SEG	\$0	\$66,294,300

2. Approve one or more of the following funding adjustments for the state highway maintenance and traffic operations program:

Real, Above-Base Increase for Maintenance Services

a. Approve the Governor's recommendation to provide \$21,510,000 SEG annually, which would almost eliminate the gap between the level of service model budget for county service and the base level of funding for county services, plus provide an additional amount for three new maintenance services identified by the Department.

ALT 2a	Change to Bill Funding	Change to Base Funding
SEG	\$0	\$43,020,000

b. Reduce funding for a real, above-base increase in maintenance services (independent of inflationary and system growth adjustments) by \$11,510,000 SEG annually, to provide a net increase of \$10,000,000 SEG annually for this purpose.

ALT 2b	Change to Bill Funding	Change to Base Funding
SEG	- \$23,020,000	\$20,000,000

c. Increase funding for a real, above-base increase in maintenance services (independent of inflationary and system growth adjustments) by \$22,790,000 SEG annually to provide the level of funding recommended by the "Road to the Future Committee."

ALT 2c	Change to Bill Funding	Change to Base Funding
SEG	\$45,580,000	\$45,580,000

d. Delete \$21,510,000 SEG annually to eliminate the real, above-base increase for maintenance services.

ALT 2d	Change to Bill Funding	Change to Base Funding
SEG	- \$43,020,000	\$0

Inflationary Adjustments

e. Approve the Governor's recommendation to provide \$3,960,400 SEG in 2007-08 and \$8,019,800 SEG in 2008-09 for 2.5% annual inflationary increases.

ALT 2e	Change to Bill Funding	Change to Base Funding
SEG	\$0	\$11,980,200

f. Reduce funding by \$792,100 SEG in 2007-08 and \$1,619,800 SEG in 2008-09 to provide 2.0% annual inflationary increases.

ALT 2f	Change to Bill Funding	Change to Base Funding
SEG	- \$2,411,900	\$9,568,300

g. Reduce funding by \$3,960,400 SEG in 2007-08 and \$8,019,800 SEG in 2008-09 to eliminate the inflationary increases in the bill.

ALT 2g	Change to Bill Funding	Change to Base Funding
SEG	- \$11,980,200	\$0

Lane-Mile and Traffic Growth Adjustment

h. Approve the Governor's recommendation to provide \$3,493,600 SEG in 2007-08 and \$7,800,500 SEG in 2008-09 to provide an adjustment for lane-mile and traffic growth, using 100% of the average costs.

ALT 2h	Change to Bill Funding	Change to Base Funding
SEG	\$0	\$11,294,100

i. Reduce funding by \$1,746,800 SEG in 2007-08 and \$3,900,300 SEG in 2008-09 to provide an adjustment for lane-mile and traffic growth, using 50% of the average costs.

ALT 2i	Change to Bill Funding	Change to Base Funding
SEG	- \$5,647,100	\$5,647,000

j. Reduce funding by \$3,493,600 SEG in 2007-08 and \$7,800,500 SEG in 2008-09 to eliminate the lane-mile and traffic growth adjustment.

ALT 2j	Change to Bill Funding	Change to Base Funding
SEG	- \$11,294,100	\$0

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