

COMMITTEE ON LEGISLATIVE RESEARCH  
OVERSIGHT DIVISION

**FISCAL NOTE**

L.R. No.: 4845-01  
Bill No.: SB 1208  
Subject: Roads and Highways; St. Louis; Transportation Dept.  
Type: Original  
Date: March 18, 2002

**FISCAL SUMMARY**

<b>ESTIMATED NET EFFECT ON STATE FUNDS</b>			
FUND AFFECTED	FY 2003	FY 2004	FY 2005
HIGHWAY FUND	(\$344,406)	(\$423,619)	(\$434,209)
ROAD FUND	(\$17,798,640)	(\$16,039,598)	(\$16,517,187)
<b>Total Estimated Net Effect on <u>All</u> State Funds</b>	<b>(\$18,143,046)</b>	<b>(\$16,463,217)</b>	<b>(\$16,951,396)</b>

<b>ESTIMATED NET EFFECT ON FEDERAL FUNDS</b>			
FUND AFFECTED	FY 2003	FY 2004	FY 2005
<b>Total Estimated Net Effect on <u>All</u> Federal Funds</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

<b>ESTIMATED NET EFFECT ON LOCAL FUNDS</b>			
FUND AFFECTED	FY 2003	FY 2004	FY 2005
<b>City of St. Louis</b>	<b>\$1,155,000</b>	<b>\$1,155,000</b>	<b>\$1,155,000</b>

Numbers within parentheses: ( ) indicate costs or losses.  
This fiscal note contains 7 pages.

## FISCAL ANALYSIS

### ASSUMPTION

Officials of the **City of St. Louis** assume the following estimated yearly cost savings as a result of the proposal (The following costs are assuming the state provides the indicated services. To the extent that this is not the case, the savings would then be reduced by the costs of those services not provided.)

Striping:	\$73,000
Street Lighting:	\$315,000
Signs:	\$41,000
Signals:	\$388,000
Sweeping:	\$24,000
Snow Removal	\$166,000
Patching	\$148,000
Total	<u>\$1,155,000</u>

Officials with the **Department of Transportation (DHT)** assume the proposal will amend the state highway system as outlined in section 227.030, RSMo, by adding all streets within the City of St. Louis which are functionally classified as of January 1, 1999, as principal arterial highways (PA) by MoDOT, USDOT, and FHWA. MoDOT would become responsible for the design, construction and maintenance which would also include signals, lighting, culverts and bridges.

MoDOT assumes the proposal would add approximately 77 centerline miles to the state highway system. Many of these routes are five or six lanes wide within the central business district. MoDOT does not know the exact number of lane miles, but has conservatively assumed an average of 4.25 lanes in width for a total of 327 lane miles.

This legislation will also add the bridges and culverts located on the principal arterial highways within the city to the state highway system. There are currently 10 deficient bridges on these routes of which several are very large viaducts. These 10 deficient bridges amount to approximately 680,000 square feet of bridge deck.

MoDOT notes that they currently have a written agreement with the City of St. Louis for surface maintenance of approximately 42 centerline miles of city streets. The agreement with the city is for surfaces maintenance only and does not include any responsibilities for bridges, signals, signing, striping, lighting, or snow removal. Currently, MoDOT is expending an estimated

\$3,777,500 (\$3,330,000 plus \$447,500) annually for the surface maintenance. This represents 18 lane miles per year of mill/resurface work at a cost of \$185,000 per lane mile and 179 lane miles  
ASSUMPTION (continued)

of routine maintenance at a cost of \$2,500 per lane mile. St. Louis City does not reimburse MoDOT for these expenses. Therefore, the total cost of this legislation has been offset by the \$3,777,500 that is currently in MoDOT's budget. Although some of the costs incurred by the Road Fund may qualify as reimbursable federal funds, the reimbursement amount can not be determined at this time.

MoDOT has calculated the following fiscal impacts the proposal would require:

Activity	Units	Unit Cost	Cost Per Year
1) Mill/Resurface	32 lane miles	\$185,000 per lane mile	\$5,920,000
2) Routine Roadway Maint.	327 lane miles	\$5,000 per lane mile	\$1,635,000
3) Traffic Signal Maint.	311 signals	\$3,400 per signal	\$1,057,400
4) Traffic Signal Upgrade	16 signal/year	\$90,000 per signal	\$1,440,000
5) Cont. Lighting Maint.	5,350 luminaries	\$120 per luminary	\$642,000
6) Cont. Lighting Upgrade	270 luminaries/year	\$8,000 per luminary	\$2,160,000
7) Signing Maint.	2,000 signs/year	\$100 per sign	\$200,000
8) Lane Striping	77cl miles	\$660 per cl mile	\$50,820
9) Intersection Striping	311 intersections	\$1,200 per intersection	\$373,200
10) Bridge Replacement (plus 15% allowance for construction administration)	68,000 sq ft deck/yr	\$72 per sq ft	\$5,630,000
11) Bridge Maintenance	50 days/ year for 23 bridges	\$2,500 per day	\$125,000
<b>Total</b>			<b>\$19,233,420</b>

The assumptions used for these calculations are shown below:

1.) Mill/Resurfacing - \$185,000 per lane mile - contract cost to mill and resurface each of these routes once every ten years (32 lane miles per year). Each project will include the required pavement repair and an overlay with approximately 2" of Superpave. The cost per lane mile is based upon a recent project let by MoDOT D6 on Chippewa Avenue within the city. The project let for \$1,623,000 for a four lane section approximately 2.2 miles in length.

2.) Routine Roadway Maintenance - \$5000 per lane mile - cost of labor and material for MoDOT personnel to perform routine roadway maintenance of non-interstate routes. This

includes pot-hole patching, sweeping, mowing and snow removal. This cost is based upon D6 averages for similar routes and is the same unit cost used last year by the legislative oversight committee.

ASSUMPTION (continued)

3.) Traffic Signal Maintenance - \$3400 per signal - cost of labor and material for MoDOT personnel to perform the routine maintenance of traffic signals. This cost is based upon historical costs for D6 to maintain the approximately 800 signals on the current state highway system within the district.

4.) Traffic Signal Upgrade - \$90,000 per signal - contract cost to replace aging and failing signals assuming a 20 year life expectancy (16 signals per year). This cost is based upon historical costs for D6 to replace existing traffic signals on the state highway system within the district.

5.) Continuous Lighting Maintenance - \$120 per luminary - cost of labor and material for MoDOT personnel to perform the routine maintenance of continuous street lighting found on all city streets. This cost is based upon historical costs for D6 to maintain the approximately 9000 luminaries found on the current state highway system within the district.

6.) Continuous Lighting Upgrade - \$8,000 per luminary - contract cost to replace aging and failing luminaries assuming a 20 year life expectancy (270 luminaries per year). This cost is based upon historical costs for D6 to replace existing luminaries on the current state highway system within the district.

7.) Signing Maintenance - \$100 per sign - cost of labor and material for MoDOT personnel to replace faded or stolen signs assuming a 10 year life expectancy (2000 signs per year). This cost is based upon historical averages for D6 to replace signs similar to those found on these city streets.

8.) Lane Striping - \$660 cl mile - cost of labor and material for MoDOT personnel to re-stripe pavement assuming a 1 year life expectancy. This cost is based upon historical averages for D6.

9.) Intersection Striping - \$1,200 per intersection - cost of labor and material for MoDOT personnel to re-stripe intersections assuming a 1 year life expectancy. This cost is based upon historical averages for D6.

10.) Bridge Replacement - \$72 per square foot of deck - contract cost for total replacement of typical bridge found on routes. Cost assumes \$60 per square foot to replace with an expansion factor of 1.2 to account for additional square foot of deck that results when older, shorter, urban

bridges are replaced. There are ten deficient bridges on the PAs within the city and this assumes that we would replace one bridge a year for the first ten years.

The unit costs provided above include some overhead expenses that a project related. This includes expenses such as gasoline, specific tools, and safety equipment.

ASSUMPTION (continued)

In addition to the expense provided above, MoDOT's St. Louis District will require additional staff to fulfill the work requirements created in this legislation. Assuming this district's current averages, the routine roadway maintenance function related to the additional lane miles will require approximately 8 FTE (including 4 additional dump trucks); however, the salaries and vehicle expense are included in the unit average per lane mile. The district Traffic division will also require an additional 21 FTE with associated expense and equipment (including 16 specialty vehicles) for the additional continuous lighting and signals on these routes.

Maintenance Personnel

1 Maintenance Supervisor - to perform routine maintenance work on the additional lane miles created in this legislation. This FTE will also monitor the additional maintenance personnel hired due to this legislation.

1 Assistant Maintenance Supervisor - to perform routine maintenance work on the additional lane miles created in this legislation. This FTE will also assist in monitoring the additional maintenance personnel hired due to this legislation.

2 Senior Crew Workers - these FTE will perform routine maintenance work. They will also lead the Crew Workers.

2 Intermediate Crew Workers - these FTE will perform routine maintenance work.

2 Crew Workers - these FTE will perform routine maintenance work.

Traffic Personnel

21 Signal and Lighting Electricians - to perform routine work relating to the continuous lighting and signals needed for the new routes.

FISCAL IMPACT - State Government

FY 2003  
(10 Mo.)

FY 2004

FY 2005

**STATE ROAD FUND**

GVB:LR:OD (12/00)

Cost - MoDOT

Personal Service (29 FTE)	(\$812,661)	(\$999,573)	(\$1,024,562)
Expense and Equipment	<u>(\$16,985,979)</u>	<u>(\$15,040,025)</u>	<u>(\$15,492,625)</u>

**ESTIMATED NET EFFECT TO  
 STATE ROAD FUND  
 STATE HIGHWAY FUND**

	<u>(\$17,798,640)</u>	<u>(\$16,039,598)</u>	<u>(\$16,517,187)</u>
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Cost - MoDOT

Fringe Benefits	<u>(\$344,406)</u>	<u>(\$423,619)</u>	<u>(\$434,209)</u>
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**ESTIMATED NET EFFECT TO  
 STATE HIGHWAY FUND**

	<u>(\$344,406)</u>	<u>(\$423,619)</u>	<u>(\$434,209)</u>
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FISCAL IMPACT - Local Government

	FY 2003	FY 2004	FY 2005
	(10 Mo.)		

**CITY OF ST. LOUIS**

Savings – reduced costs for road  
 maintenance

	<u>\$1,155,000</u>	<u>\$1,155,000</u>	<u>\$1,155,000</u>
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FISCAL IMPACT - Small Business

No direct fiscal impact to small businesses would be expected as a result of this proposal.

DESCRIPTION

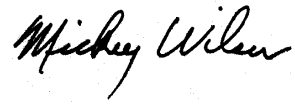
The proposal would include all principal arterial highways in the City of St. Louis in the state road system.

This legislation is not federally mandated and would not duplicate any other program. The proposal would require additional capital improvements.

SOURCES OF INFORMATION

Department of Transportation  
 City of St. Louis

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A handwritten signature in black ink that reads "Mickey Wilson". The signature is written in a cursive, flowing style.

Mickey Wilson, CPA

Acting Director  
March 18, 2002