

# **Senate Transportation and Housing Committee and Senate Budget and Fiscal Review Subcommittee No. 2**

## **Joint Informational Hearing**

### **Funding the Transportation Maintenance Backlog**

Tuesday, February 24, 2015  
1:30 p.m. – John L. Burton Hearing Room (4203)

#### **BACKGROUND PAPER**

##### **Hearing Introduction**

On February 24, the Senate Transportation and Housing Committee and the Senate Budget and Fiscal Review Subcommittee No. 2 will consider options to address the growing backlog of maintenance and rehabilitation projects on the state’s road and highway system.

In this hearing, the committee will first hear presentations identifying the need for maintenance and upgrades to both the state highway system and locally managed streets and roads. Next, Dr. Asha Weinstein Agrawal of the Mineta Transportation Institute will provide an overview of current transportation funding sources and the traditional challenges the state faces in increasing those resources, as well as the negative effects to our state and economy if we don’t act soon. Finally, a number of presenters will discuss various options the committee may wish to consider for addressing the growing backlog.

##### **Background**

###### **Overview of the Maintenance Problem**

The state has underfunded the maintenance and rehabilitation of its road system for decades. As a result, 68 percent of California’s roads are in “poor” or “mediocre” condition, putting California behind 43 other states in road condition, according to the American Society of

Civil Engineers. As demonstrated in Figure 1, 54 of California’s counties have an average pavement rating of “poor” or “at risk,” with much of this deterioration occurring over the past six

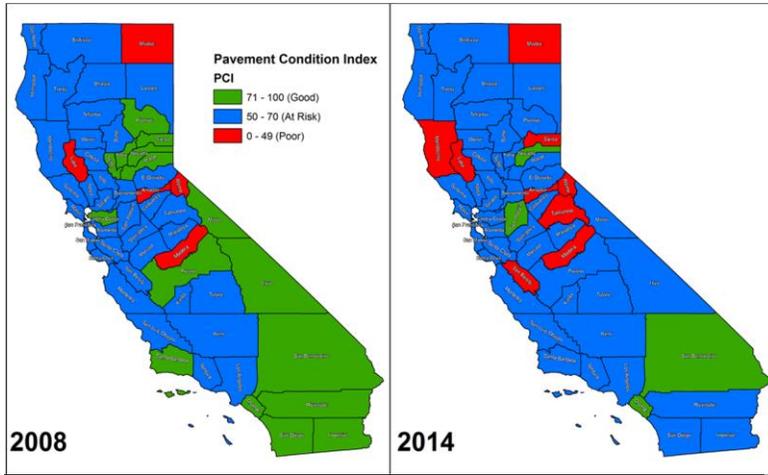


Figure 1. Condition of California’s local streets and roads. On a scale of zero (failed) to 100 (excellent), the statewide average Pavement Condition Index (PCI) has deteriorated to 66 (“at risk”) in 2014.

years. Not only roads are suffering: California has nearly 3,000 structurally deficient bridges.

The movement of people is only a part of the transportation puzzle. Also critical to California’s economic well-being is the movement of goods. The efficient movement of goods, both within the state and across state boundaries, increases the state’s

ability to generate jobs and remain competitive. The Office of Freight Management at the Federal Highway Administration estimates that the amount of freight moved on California highways will increase from 971 million tons in 2002 to 2,179 million tons in 2035, an increase of more than 100 percent. This increased movement of goods will create more truck traffic, and much of this increase will occur in and around urban areas and on the 50-year-old interstate highway system. Truck traffic exacts a greater toll on pavement and bridges than lighter weight vehicles, so increasing truck traffic will accelerate the deterioration of the transportation infrastructure.

In 2011, the California Transportation Commission compiled the Statewide Transportation System Needs Assessment. According to this assessment, over the next ten years the state’s total transportation system costs will be \$538.1 billion, while estimated revenues from all sources will only be \$242.4 billion, or roughly 45% of what is needed.

Overcoming transportation funding deficiencies becomes increasingly challenging, as the true cost of deferred maintenance is compounded over time. Roads that are not properly

maintained require more costly rehabilitation and reconstruction long before the projected end of

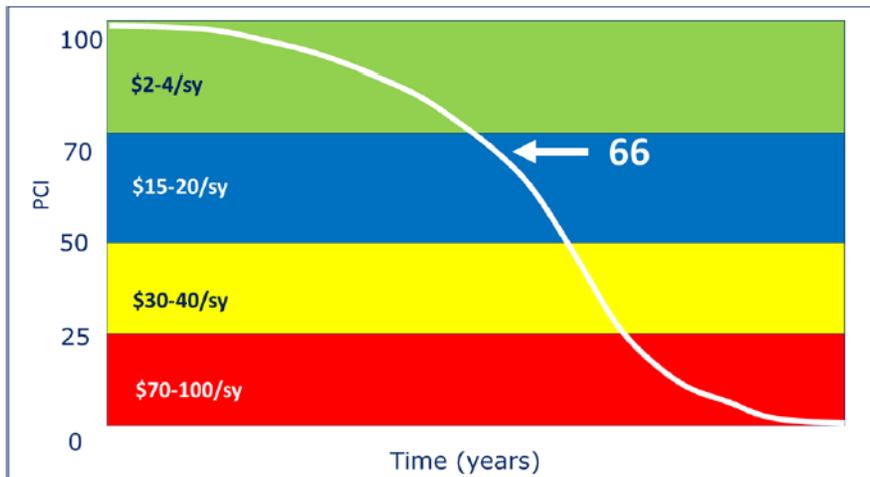


Figure 2. Generalized Pavement Life Cycle  
 PCI: Pavement Condition Index; sy: square yard

their useful lives. These pavement rehabilitation and reconstruction projects are by far the most expensive type of maintenance projects. For example, major pavement rehabilitation averages at least 10 to 12 times the cost of preventative maintenance, while minor pavement repairs average

four times the cost of preventative maintenance. For bridges, the cost of minor repairs can exceed maintenance costs by a factor of 12. With many of California’s roads already in the “at risk” category, Figure 2 shows that they are positioned at the precipice of a sharp decline in which maintenance costs increase dramatically over the life cycle of the pavement.

### Specific Needs

The following is a brief description of the identified needs related to the state highway system (SHS) as well as a discussion of identified needs on the local streets and roads systems.

**State Highway System** — According to the 2013 State Highway Operation and Protection Program (SHOPP), the total need for the rehabilitation and operation of the SHS for the next ten years is \$82 billion, or an average annual cost of \$8.2 billion. This cost estimate includes funding for project development, right-of-way acquisition, and capital construction.

Projected state funding available for the SHOPP is \$2 billion a year, which covers roughly 25 percent of the estimated need. Over 10 years this sums up to a \$59 billion shortfall in

revenues necessary for proper maintenance of the SHS, including more than \$31 billion in roadway preservation and \$12 billion in bridge preservation and maintenance.

**Local Streets and Roads** — California’s cities and counties own and maintain more than 143,000 centerline miles of local streets and roads. This road network incorporates 80 percent of the state’s total publicly maintained centerline miles, and is valued at over \$188 billion.

The table below shows the total funding shortfall for the local system of \$78.3 billion over the next 10 years. For comparison, the results from previous needs assessments are also included.

Transportation Asset	Needs (\$B)			2014		
	2008	2010	2012	Needs	Funding	Shortfall
Pavement	\$ 67.6	\$ 70.5	\$ 72.4	\$ 72.7	\$ 16.6	\$ (56.1)
Essential Components	\$ 32.1	\$ 29.0	\$ 30.5	\$ 31.0	\$ 10.1	\$ (20.9)
Bridges	-	\$ 3.3	\$ 4.3	\$ 4.3	\$ 3.0	\$ (1.3)
<b>Totals</b>	<b>\$ 99.7</b>	<b>\$102.8</b>	<b>\$ 107.2</b>	<b>\$ 108.0</b>	<b>\$ 29.7</b>	<b>\$ (78.3)</b>

While bringing the state’s local street and road systems to a cost-effective best management practice level will require more funding now, investing in local streets and roads sooner will reduce the need for more spending in the future. To reach that level — at which taxpayer money can be spent most cost-effectively — will require an additional \$56.1 billion for pavements alone, or \$78.3 billion total for a functioning transportation system, over the next decade. In other words, to bring the local system back into a cost-effective condition, local transportation agencies need \$7.8 billion annually in new funds.

## Sources of Funding for Transportation Projects

California’s state and local transportation systems rely on funding from local, state, and federal sources. Regional and local governments provide about half of the state’s transportation funding, and state and federal governments each provide about one quarter of the state’s total funding. Below we describe these three sources of funding in more detail.

**Local Funding** — Local sales tax measures and other funding sources such as local general funds, property taxes, and developer fees are the primary local sources of funding for road maintenance and expansion. Twenty counties (known as self-help counties) have approved ballot measures that increase the local sales tax for transportation programs. These measures are the largest source of revenue for transportation, requiring two-thirds local voter approval and generally lasting between 20 and 30 years.

**State Funding** — State funding for transportation comes primarily from revenues derived from taxes and fees. The three main state revenue sources are: (1) the state gasoline and diesel excise tax, (2) truck weight fees, and (3) the sales tax on diesel fuel. The base of these taxes has diminished over time as vehicles have become more fuel-efficient or use alternative energy sources not subject to state taxes. As a result, the traditional funding sources have not kept pace with the demands of a growing population and an aging transportation system.

In addition, the state funds transportation projects with general obligation (GO) bonds. The most recent transportation bond approved by the voters — the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 (Proposition 1B) — provided \$19.9 billion for a variety of transportation projects. However, most of this funding is already committed to ongoing projects and will be fully expended in the next few years as these projects are completed.

**Federal Funding** — The Highway Trust Fund, the source of most federal funding for the country's roads and transit infrastructure, has seen revenue fall short of expenditures for more than a decade. Drawing down trust fund balances and transferring money from the general fund have served as temporary fixes, but have not addressed the underlying issue of declining revenue from the federal fuel excise tax of 18.4 cents/gallon gasoline and 24.4 cents/gallon diesel fuel. The Congressional Budget Office projects that, absent reforms, trust fund shortfalls will grow to \$162 billion over the next 10 years.

Roughly 98 percent of federal funding for surface transportation flows to state and local governments, mostly in the form of reimbursements for expenses already incurred. Because projects require significant planning and construction time, it is important state and local governments have some certainty and consistency in funding. Historically, this has been the

reason federal funding was authorized for multiple years. However, the last full federal funding authorization (six years of funding) was passed nearly a decade ago, and state and local governments have been operating under short-term funding extensions since then. Funding uncertainty and declining revenues present challenges for planning and investment in transportation projects.

## Options for Addressing the Backlog

There are a number of options for providing additional state funding for transportation projects in California. The table below summarizes the pros and cons of some key options, and each is discussed in more depth following the table.

**Various Options for Increasing State Funding for Transportation Projects**

<b>Option</b>	<b>Pros</b>	<b>Cons</b>
<b>Increase fuel excise tax</b>	Targets larger and less fuel-efficient vehicles. Cannot be taken for general fund relief.	Regressive, and revenue source diminishes over time.
<b>Increase vehicle license fee (VLF)</b>	Can be implemented statewide. Low administrative costs. Is relatively progressive, and tax deductible.	Paid once annually, one-time sticker shock. Can be redirected for general fund relief.
<b>Increase vehicle registration fee (VRF)</b>	Can be implemented statewide. Low administrative costs. Cannot be taken for general fund relief.	Regressive, and is paid once annually.
<b>Increase vehicle weight fees</b>	Would better align costs that heavy trucks impose on roads with the amount paid.	Could have a somewhat negative economic impact. Can be redirected for general fund relief.
<b>Lower the local voter threshold</b>	Increases the likelihood of locals raising revenue to address their own needs.	Does not address the statewide needs. Amount of revenue generated uncertain.
<b>Increase number of tolls/road pricing</b>	Can help address congestion in urban areas, and ties revenue to use.	Regressive and cannot be implemented statewide. Amount of revenue generated uncertain.
<b>Sell transportation bonds</b>	Provides funding for transportation projects, though typically not for maintenance of existing roads.	Does not generate new revenue and commits future revenues. Governor is not supportive.
<b>Impose mileage-based charge</b>	Can be implemented statewide, addresses increasing fuel efficiency of vehicles, and ties revenue to use.	The state is not ready to implement, with technology, privacy, and administrative issues left to resolve.

**Fuel Excise Tax** — Some support increasing the state fuel excise tax to keep pace with inflation. The inflation-adjusted value of the base excise tax on gasoline, set at 18 cents in 1994, is only 10 cents today. Increasing and/or indexing the excise tax to inflation would help maintain the tax’s purchasing power. One benefit of this tax is that the larger and less fuel-efficient vehicles that cause a disproportionate amount of road damage pay more taxes. In addition, revenues from this tax are constitutionally protected for transportation purposes and therefore could not be redirected for other uses. However, this tax is regressive and increasing the tax is likely to be politically challenging. Also, this tax does not proportionally account for the wear and tear caused by vehicles using the state transportation system that do not rely, or rely less heavily, on gasoline.

**Vehicle License Fee** — The state imposes an annual vehicle license fee (VLF) based on the estimated depreciated cost of each vehicle in lieu of a property tax. Since the state already collects this fee, the administrative costs to increase the VLF are low and it can easily be implemented statewide. In addition, this fee is tax-deductible on both federal and state income tax returns, reducing the fee’s burden on vehicle owners who itemize deductions. An increase in the VLF could generate significant revenue — a one percent increase, to 1.65 percent of vehicle value, would generate roughly \$3 billion in new revenue annually. However, polling suggests that increasing the VLF, or “car tax,” would be met with significant public resistance; the annual one-time bill could also result in “sticker shock” for the public. This revenue stream is also not constitutionally protected for transportation uses, and could be redirected for other purposes.

**Vehicle Registration Fee** — In addition to the VLF, the state annually collects a vehicle registration fee (VRF), which is a flat fee everyone pays in order to register their vehicles in the state of California. Because it is not a tax in lieu of a property tax, revenues from the VRF are constitutionally protected for transportation purposes and therefore could not be redirected for other uses. A \$35 increase in the VRF generates roughly \$1 billion in additional revenue. The fact that the VRF is the same amount regardless of the value of the vehicle, however, makes this

a regressive tax. In addition, some argue that increasing this fee too much could create an economic barrier and discourage owners from registering their vehicles with the state.

***Vehicle Weight Fees*** — Trucks currently pay vehicle weight fees based on the estimated gross weight of the vehicle. Some argue that current weight fees are not proportionate to the costs that these heavy vehicles impose on the state's transportation system. An increase in the fees that trucks pay would likely receive opposition and potentially have a somewhat negative economic impact because it may increase the costs of goods and services. In addition, this revenue stream is not constitutionally protected for transportation uses, and could be redirected for other purposes.

***Local Revenue Options*** — Advocates generally discuss two options for raising additional transportation revenues at the local level. First, state law allows counties to impose a sales tax for local transportation purposes when approved by a supermajority, or two-thirds of those voting. Some suggest the two-thirds threshold could be lowered to a simple majority, making it easier for local governments to pass these taxes. While these taxes can create a significant amount of new revenue for local transportation projects, they do not encourage fuel efficiency, are regressive, and don't help to comprehensively address the state's transportation needs.

Another option often discussed, which the Governor included in his proposed budget this year, is expanding the opportunity for local transportation agencies to build toll lanes. Toll roads can help to address congestion, especially in urban areas, and can result in the more efficient use of scarce resources (uncongested lanes) during peak travel periods. However, this approach does not address issues of congestion throughout the state and would not generate enough revenue to maintain the state's existing transportation system.

***Transportation Bonds*** — The state can sell bonds to finance transportation projects. However, this approach does not generate new revenues, and recently the state has dedicated existing transportation revenues to bond debt service. This approach also has the downside of not charging taxpayers proportionate to their use, or cost imposed on the system. Finally, the

Governor has publicly discouraged the idea of increasing the state's debt burden for transportation purposes.

***Mileage-based Charge*** — A mileage-based user fee charges users of the system an amount that is proportionate to the amount they drive, generally based on vehicle miles traveled (VMT). Increasing revenues through this approach would address the declining use of fuel and the associated revenue decline. A VMT-based charge could be established to adjust for inflation so that the revenue generated maintains its purchasing power. An advantage of such a charge is that it can be implemented statewide. Before implementing a VMT-based charge, the state needs to do significant work to address privacy issues and obtain the public's support. A recent report by the University of Southern California, Sol Price School of Public Policy, estimated that a 2.1 cents per mile VMT fee would raise enough revenue to replace the current state excise tax on gasoline.

## **Conclusion**

Clearly there is a need, and the Legislature should further consider options, for increasing the amount of funding available for transportation projects. This legislative process should include efforts to educate, inform, and solicit input from stakeholders, including the public at-large and other impacted interest groups. The effort needs to provide information about the state's transportation funding shortfall, the inadequacy of existing funds to maintain the current system, and the estimated annual cost of various options.