

Executive Summary

Previous editions of this report cautioned that without an influx of new revenues, the local street and road system would continue to deteriorate and cost taxpayers nearly twice as much to repair this vital investment in the near future. In 2016, the combined funding shortfall for local streets and roads and the state highway system was \$130 billion.

After years of careful consideration and study, the Legislature passed and Governor Jerry Brown signed the Road Repair and Accountability Act (also known as SB1), which provides over \$5 billion annually for transportation. Of this, approximately \$1.5 billion is allocated to the local street and road system owned and maintained by 539 cities and counties. The passage of SB1 was a significant success for municipal governments statewide, and injected a long awaited substantial infusion of funding to maintain the local street and road system.



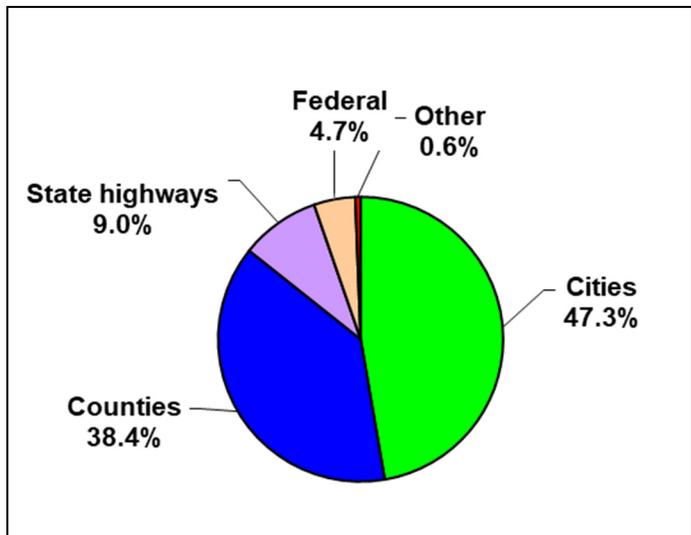
The importance of the local system cannot be over-emphasized. Nearly every trip begins on a city street or county road. Whether traveling by bicycle, bus, rail, truck or family automobile, Californians need a reliable and well-maintained local street and road system.

Every component of California's transportation system is critical to providing a seamless, interconnected system that supports the traveling public and economic vitality throughout the state. There is a significant focus on climate change and building sustainable communities, which cannot function without a well-maintained local street and road system.

Unfortunately, this continues to be a challenging time for California. SB1 may be repealed in November 2018, and if so, it would eliminate over \$5 billion annually in existing transportation funding and jeopardize over 6,500 road and bridge projects on the local street and road system alone.

The first comprehensive statewide study of California's local street and road system in 2008 provided critical analysis and information on the local transportation network's condition and funding needs. Each subsequent report has monitored the changes biennially.

This study sought answers to important questions: What are the current pavement conditions of local streets and roads? What will it cost to repair all streets and roads? What are the safety needs for a functioning system? What is the impact of SB1 and its repeal on the condition of local streets and roads, bridges, and essential components?



Road Centerline Miles by Agency

Responsible for over 85 percent of California’s roads, cities and counties find this study to be of critical importance for several reasons. The goal is to use the results to continue to educate policymakers at all levels of government and the public about the infrastructure investments needed to provide California with a seamless, multi-modal transportation system. The findings provide a credible and defensible analysis to support a dedicated, stable funding source such as SB1 for maintaining the local system. It also provides the rationale for the most effective and efficient investment of public funds, potentially saving taxpayers from paying

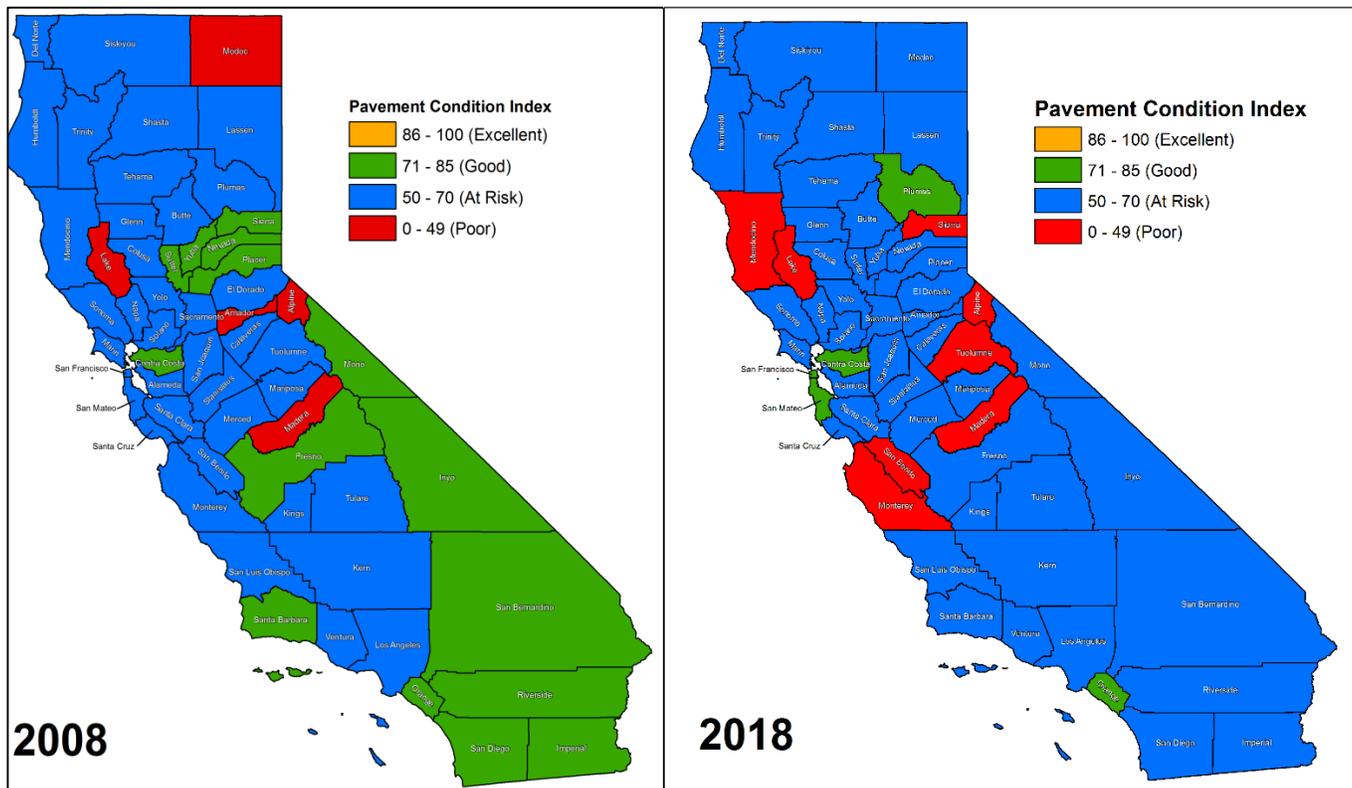
significantly more to fix local streets and roads into the future.

This update surveyed all of California’s 539 cities and counties. Over 90 percent of the agencies responded – a level of participation that makes clear the local interest in addressing the growing problems of crumbling streets and roads.

Pavements

The condition of California’s local streets and roads has continued to deteriorate significantly since the initial study. On a scale of zero (failed) to 100 (excellent), the statewide average Pavement Condition Index (PCI) is now 65 (“At Risk” category). Even more alarming, 53 of 58 counties are either at risk or have poor pavements (the maps on the next page illustrate the changes in condition since 2008).

In order to use taxpayer money wisely, it makes more sense to preserve and maintain roads in good condition than to wait and repair or replace them when they deteriorate or fail. The costs developed in this study are based on achieving a roadway pavement condition called Best Management Practices (BMP). At this condition level, preventive maintenance treatments (i.e., slurry seals, chip seals, thin overlays) are most cost-effective. In addition to costing less, preventive maintenance interferes less with commerce and the public’s mobility and is more environmentally friendly than rehabilitation or reconstruction.



The importance of this approach is significant. As roadway pavement conditions deteriorate, the cost to repair them increases exponentially. For example, it costs as much as 13 times more to reconstruct a pavement than to preserve it when it is in good condition. Even modest resurfacing is four times more expensive than maintaining pavement in the BMP condition. To put it another way, 13 miles of roadway can be maintained in a BMP condition for the same cost as reconstructing one mile of failed pavement. By bringing the local roadway system to BMP conditions, cities and counties will be able to maintain streets and roads at the most cost-effective level. This goal is not only optimal, it is necessary.

Technological Cost Savings

For the first time, this report also examines the impact of sustainable technologies (e.g., cold-in-place recycling) that result in significant cost savings. Since 2012, the number of agencies that employ some form of recycling has more than doubled. This trend is expected to continue, and the cost savings are therefore included in the funding scenarios. The savings range, on average, from 26 to 29 percent over conventional treatments and result in a reduction of the 10-year paving needs. This is one example of how cities and counties have stretched the proverbial dollar.

Funding Scenarios

Three funding scenarios were analyzed, including one to determine the impacts of SB1 (RMRA) over the next decade. Approximately \$1 billion is available for pavements, with the remainder for essential components. Note that these are in constant 2018 dollars.

- 1) **Existing funding levels (\$3.083 billion/year)** – this is the current funding level and includes SB1 funds together with cost savings from paving technologies. The results are positive; for the first time in 10 years, cities and counties are able to essentially maintain pavements at their current levels. In addition, the percentage of good pavements will increase to 66.2 percent (see table). (Note that of the \$1.5 billion available from SB1, approximately \$1 billion was allocated to paving; the remainder was allocated for other transportation components.)
- 2) **Existing funding without SB1 (\$2.090 billion/year)** – this is the funding level if SB1 were to be repealed. As expected, reduced funding would result in the PCI decreasing to 57 by 2028 and the percent of good pavements will decrease to less than half.
- 3) **Funding required to reach BMP (\$6.824 billion/year)** – the optimal scenario is to bring all pavements into a state of good repair so that best management practices can prevail. To reach BMP levels (PCI = 87), \$68.24 billion is needed over the next 10 years. *After that, it will only require \$2.5 billion a year to maintain the pavements at that level.*

The table below summarizes the results of each scenario.

Scenarios	Annual Budget (\$B)	PCI in 2028	Condition Category	% Pavements in Poor/Failed Condition	% Pavements in Good Condition
Current Condition (2018)	-	65	At Risk	24.9%	54.7%
1. Existing Funding with SB1	\$3.083	64	At Risk	21.0%	66.2%
2. Existing Funding without SB1	\$2.090	57	At Risk	28.4%	49.6%
3. Best Management Practices	\$6.824	87	Excellent	0.0%	100.0%

Essential Components

The transportation network also includes essential safety and traffic components such as curb ramps, sidewalks, storm drains, streetlights and signals. These components will require \$34.1 billion to maintain over the next 10 years, and there is an estimated funding shortfall of \$21.1 billion.

Bridges

Local bridges are also an integral part of the local street and road infrastructure. There are 12,105 local bridges (approximately 48 percent of the total number of bridges) in California. There is an estimated shortfall of \$2.6 billion to maintain the safety and integrity of the bridge infrastructure.

Total Funding Shortfall

The table below shows the total funding shortfall of \$54.6 billion (2018 dollars) over the next 10 years. For comparison, the needs from the previous updates are also included. Note that the pavement needs in 2018 are markedly reduced due to the use of sustainable technologies.

Transportation Asset	Needs (\$B)					2018 (\$B)		
	2008	2010	2012	2014	2016	Needs	Funding	Shortfall
Pavement	\$67.6	\$70.5	\$72.4	\$72.7	\$70.0	\$61.7	\$30.8	\$(30.9)
Essential Components	\$32.1	\$29.0	\$30.5	\$31.0	\$32.1	\$34.1	\$13.0	\$(21.1)
Bridges		\$3.3	\$4.3	\$4.3	\$4.6	\$5.5	\$2.9	\$(2.6)
Totals	\$99.7	\$102.8	\$107.2	\$108.0	\$106.7	\$101.3	\$46.7	\$(54.6)

Conclusions

The conclusions from this study are clear; SB1 is a critical funding source that will allow cities and counties to arrest the deterioration that has occurred to local transportation infrastructure during the past decade or more. Without this source of funding, California’s local street and road system—along with California’s entire interrelated transportation system—will be in crisis. The lack of transportation funding will not only hamper the ability of cities and counties to provide efficient local streets and roads, it will impact their ability to increase alternative modes, provide active bicycle and pedestrian options, meet transit needs, and comply with air quality, greenhouse gas reduction and other environmental policies.