

# **Executive Summary**

# California's local street and road system continues to be in crisis.

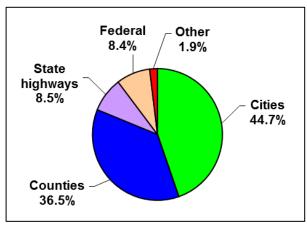
Nearly every trip begins on a city street or county road. Whether traveling by bicycle, bus, rail, truck or family automobile, Californians need a reliable and well-maintained local street and road system. Unfortunately, these continue to be challenging times due to increased demand and unreliable funding. There is a significant focus on climate change and building sustainable communities, yet sustainable



communities cannot function without a well-maintained local street and road system. The need for multi-modal opportunities on the local system has never been more essential. 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.

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. Conducted biennially, the needs assessment provides another look at this vital component of the state's transportation system and once again finds a significant funding shortfall.

The 2016 study sought answers to important questions: What are the current pavement conditions of



**Breakdown of Road Centerline Miles by Agency** 

local streets and roads? What will it cost to repair all streets and roads? What are the needs for the essential components to a functioning system? How large is the funding shortfall? What are the solutions?

Responsible for over 81 percent of California's roads, cities and counties find this study of critical importance for several reasons. While federal and state governments regularly assess their system needs, no such data existed for the local component of California's transportation network prior to 2008. Historically, statewide transportation funding



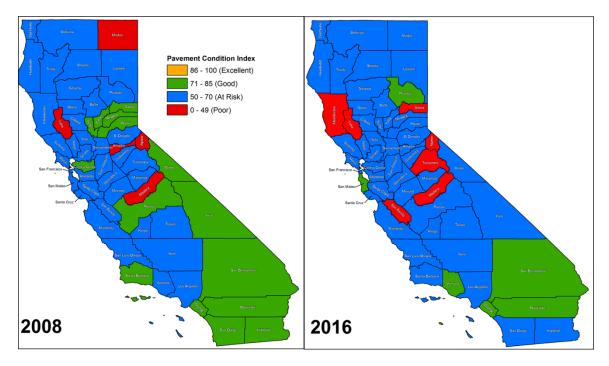
investment decisions have been made without local pavement condition data. This biennial assessment provides a critical piece in providing policy makers with a more complete picture of California's transportation system funding needs.

The goal is to use the results 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 for maintaining the local system at an optimum level. The study 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 58 counties and 482 cities in 2016. The information captured data from more than 99 percent of the state's local streets and roads – a level of participation that makes clear the local interest in addressing the growing problems of crumbling streets and roads.

#### **Pavements**

The conditions of California's local streets and roads are rolling off the edge of a cliff. On a scale of zero (failed) to 100 (excellent), the statewide average Pavement Condition Index (PCI) has deteriorated to 65 ("at risk" category) in 2016. Even more alarming, 52 of 58 counties are either at risk or have poor pavements (the maps illustrate the changes in condition since 2008). If the current funding remains the same, the unfunded backlog will swell from \$39 billion to \$59 billion by 2026.







In order to use taxpayer money wisely, it makes more sense to preserve and maintain our roads in good condition, than to let them crumble further and cost more to fix. 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. Preventive maintenance interferes less with commerce and the public's mobility and is more environmentally friendly than rehabilitation and 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 fourteen times more to reconstruct a pavement than to preserve it when it is in good condition. Even a modest resurfacing is four times more expensive than maintenance in the BMP condition. Or to put it another way, employing maintenance practices consistent with BMP results in treating as much as fourteen times more road area for the same cost.

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. It is a goal that is not only optimal, but also necessary. This study examines three funding scenarios in order to determine their impacts on the condition of the roads over the next decade. Note that these are in constant 2016 dollars.

- 1. **Existing funding levels of \$1.98 billion/year** this is the current funding level available to cities and counties from federal, state and local sources.
- 2. **Funding to maintain existing conditions (\$3.5 billion/year)** this is the funding level required to maintain the pavement conditions at its current PCI of 65.
- 3. Funding required to reach Best Management Practices (\$7.0 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, \$70 billion is needed over the next ten years. This is an estimated funding shortfall of \$50.2 billion. After that, it will only require \$2.5 billion a year to maintain the pavements at that level.

| Scenarios                 | Annual<br>Budget<br>(\$B) | PCI in<br>2026 | Condition<br>Category |
|---------------------------|---------------------------|----------------|-----------------------|
| Current Conditions (2016) | -                         | 65             | At Risk               |
| 1. Existing Funding       | \$ 1.98                   | 56             | At Risk               |
| 2. Maintain PCI = 65      | \$ 3.5                    | 65             | At Risk               |
| 3. Best Mgmt. Practices   | \$7.5                     | 87             | Excellent             |

| % Pavements in Failed Condition | % Pavements in Good Condition |
|---------------------------------|-------------------------------|
| 6.9%                            | 54.8%                         |
| 22.2%                           | 47%                           |
| 21.8%                           | 74%                           |
| 0.0%                            | 100%                          |





#### **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 \$32.1 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 streets and roads infrastructure. There are 12,501 local bridges (approximately 48 percent of the total) in California. There is an estimated shortfall of \$1.7 billion to maintain the safety and integrity of the bridge infrastructure.

## **Total Funding Shortfall**

The table below shows the total funding shortfall of \$73 billion (constant 2016 dollars) over the next 10 years. For comparison, the results from the previous updates are also included.

| Transportation Asset | <u>Needs (\$B)</u> |          |          |          |
|----------------------|--------------------|----------|----------|----------|
|                      | 2008               | 2010     | 2012     | 2014     |
| Pavement             | \$ 67.6            | \$ 70.5  | \$ 72.4  | \$ 72.7  |
| Essential Components | \$ 32.1            | \$ 29.0  | \$ 30.5  | \$ 31.0  |
| Bridges              | -                  | \$ 3.3   | \$ 4.3   | \$ 4.3   |
| Totals               | \$ 99.7            | \$ 102.8 | \$ 107.2 | \$ 108.0 |

| <u>2016</u> |         |           |  |  |
|-------------|---------|-----------|--|--|
| Needs       | Funding | Shortfall |  |  |
| \$ 70.0     | \$ 19.8 | \$ (50.2) |  |  |
| \$ 32.1     | \$ 11.0 | \$ (21.1) |  |  |
| \$ 4.6      | \$ 2.9  | \$ (1.7)  |  |  |
| \$ 106.7    | \$ 33.7 | \$ (73.0) |  |  |

#### What are the Solutions?

The conclusions from this study are inescapable. Given existing funding levels available to cities and counties, California's local streets and roads will continue to deteriorate over the next 10 years. It is alarming that local streets and roads have decayed to the point that funding will need to almost double just to maintain current conditions.

Investing in California's local streets and roads sooner will reduce the need for exponentially more spending in the future. To reach that level – at which taxpayer money can be spent most cost-effectively – will require an additional \$50.2 billion for pavements alone, or \$73 billion total for a functioning transportation system, over the next decade. *Only \$2.5 billion per year will be needed to maintain the pavements after they reach a level at which they can be maintained with best management practices.* 

To bring the local system back into a cost-effective condition, thereby preserving the public's \$168 billion pavement investment and stopping further costly deterioration, \$7.3 billion annually in new funds are needed – that's equivalent to a 49-cent-per-gallon gas tax increase.





Failure to invest would be disastrous – not only for local streets and roads but for California's entire interrelated transportation system. Failure to invest will impact our ability to increase alternative modes, active bicycle and pedestrian options, transit needs, meet air quality impacts, greenhouse gas reduction policies, and other environmental policies.

It is imperative that cities and counties receive a stable and dedicated revenue stream for cost-effective maintenance of the local system in order to reverse this crisis.

