California Statewide Local Streets & Roads Needs Assessment - 2020 Update

CSAC/Cal Cities Webinar
August 25, 2021
Project Sponsors

- California State Association of Counties
- League of California Cities
- County Engineers Association of California
- Regional Transportation Planning Agencies
- Rural Counties Task Force
- Caltrans Highway Bridge Program Advisory Committee
Has this project been successful?
SECTION 1.

The Legislature finds and declares all of the following:

(a) Over the next 10 years, the state faces a $59 billion shortfall to adequately maintain the existing state highway system in order to keep it in a basic state of good repair.

(b) Similarly, cities and counties face a $78 billion shortfall over the next decade to adequately maintain the existing network of local streets and roads.

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(1) The revenues estimated to be available for allocation under the act to local agencies are estimated over the next 10 years to be as follows:

(A) Fifteen billion dollars to local street and road maintenance.
Project Objectives

• What are pavement conditions statewide?
• How much will it cost to maintain local roads? Bridges? Essential components?
• What is the funding shortfall?
• What are impacts of different funding scenarios?
• Communicate results to elected officials, the public and the media!
Local Roads Are A Huge Part of California’s Network

More than 85% of California’s roads are owned by cities and counties. That’s more than 144,000 centerline miles.
Pavements
98% of total miles are included in a pavement management system.
Average Statewide PCI

- **2020**
  - Average PCI = 66
  - Cities = 68
  - Counties = 61
PCI of 66
Looks Like This
Average PCIs Don’t Tell the Whole Story

Average PCI = 65

Average PCI = 66
Compare 2008 with 2020

Average PCI = 68

Average PCI = 66

Pavement Condition Index
- 86 - 100 (Excellent)
- 71 - 85 (Good)
- 50 - 70 (At Risk)
- 0 - 49 (Poor)
Los Angeles Co. Avg PCI = 68

Sacramento Co. Avg PCI = 58
Complete Streets
Huge Range in Incremental Costs

Average $117/sy

City of Santa Ana
Population: 332,725
Street Network: 424 miles
Complete street elements:
  • Bike lanes
  • Landscaped buffer
  • Street lights
  • Sidewalk widening
Incremental Cost: $18/sy

City of Emeryville
Population: 12,104
Street Network: 20 miles
Complete street elements:
  • Street widening
  • Bike/bus movement innovation
  • In-lane transit island stop
Incremental Cost: $50/sy
Huge Range in Incremental Costs

Average $117/sy

City of San Clemente
Population: 64,857
Street Network: 134 miles
Complete street elements:
  • Street widening
  • Class II bicycle lanes
Incremental Cost: $135/sy

City of Mill Valley
Population: 14,295
Street Network: 60 miles
Complete street elements:
  • Median replacement
  • Bike lane
  • Sidewalk widening
  • Ramp
Incremental Cost: $726/sy
### Additional Regulatory Requirements

<table>
<thead>
<tr>
<th>Regulatory Requirements</th>
<th>Needs ($M)</th>
<th>Funding ($M)</th>
<th>Shortfall ($M)</th>
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<tr>
<td>ADA</td>
<td>$ 2,444</td>
<td>$ 1,120</td>
<td>$(1,324)</td>
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<td>NPDES</td>
<td>$ 6,340</td>
<td>$ 5,369</td>
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<tr>
<td>Traffic Signs</td>
<td>$ 286</td>
<td>$ 152</td>
<td>$(134)</td>
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<td>Complete Streets</td>
<td>$ 501</td>
<td>$ 16</td>
<td>$(485)</td>
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<td>Other</td>
<td>$ 87</td>
<td>$ 34</td>
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<td><strong>Total</strong></td>
<td><strong>$ 9,658</strong></td>
<td><strong>$ 6,691</strong></td>
<td><strong>$(2,967)</strong></td>
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</table>

Responses are guesstimates but needs are consistently about $9.6 billion.
Trends in Construction Costs
PCI = 75
Treatment – Surface Seal ($6.60/sy)
Seals Increased 19%
PCI = 54
Treatment – Overlay ($25/sy)
Overlays
Increased 15%

Unit Cost Comparison (Thin Overlay)
PCI = 5
Treatment – Reconstruction ($85/sy)
Reconstruction Increased 23%
There are 9,592 miles of unpaved roads that need $1.6 billion over 10 years
Total Pavement Needs = $76 billion
($61.7 billion in 2018)
Pavement Needs by County

See Final Report (Appendix C) for your County’s data

LA county needs $12 billion
Pavement Needs Met by County

See Final Report (Appendix C)

Percent of Pavement Needs Met (10-Years)
- Greater than 80%
- 60% - 80%
- 40% - 60%
- 20% - 40%
- Less than 20%

Less than 40% of needs are met with current funding
Essential Components
Essential Components Include:

They add up ... approximately 30% of total needs!
Essential Components Needs by County

$35.5 Billion

See final report (Appendix D) for your County’s data

LA county needs $6.4 billion
Local Bridges

From:

Quincy Engineering
Spy Pond Partners
Cities & Counties Own 12,339 Bridges
How Old Are Local Bridges?

Local Bridge Age Distribution

Almost 20% are more than 80 years old
Bridge Conditions (Local & State)

**LOCAL BRIDGES**
- **Good**: 47.9%
- **Fair**: 40.6%
- **Poor**: 11.5%

**STATE BRIDGES**
- **Good**: 74.9%
- **Fair**: 21.8%
- **Poor**: 3.3%
Bridges

Percent Poor by County

Over 4,800 bridges need repair or replacement
Local Bridge Needs

$7.2 billion
Funding of $800 m/year is needed to keep % poor the same.
How is SB 1 Helping?
SB1 is adding $533 m (22%)
SB1 slowed the decline (by about 4 points)
Higher paving costs = more funding needed
Higher paving costs = more funding needed

Scenario 3: Best Management Practices

2021 - 2030: $7.89 B/Year
2031 - 2040: $3.03 B/Year
## Statewide Needs Summary

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<tr>
<th>Transportation Asset</th>
<th>Needs ($B)</th>
<th>2020 ($B)</th>
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<tr>
<td></td>
<td>2018</td>
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<td>Pavement</td>
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<td>Essential Components</td>
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<td>Bridges</td>
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<td>Totals</td>
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Key Findings

- SB 1 arrested historical deterioration over last 2 years
  - Could be underestimated because PCI lags
  - 2018 was a conservative year due to repeal efforts
  - Not enough data to fully appreciate impacts of SB 1

- Local bridges are still aging
  - Over 4,800 bridges need repair or replacement
  - Dedicated funding has been flat for over 10 years

- Construction costs went up sharply
  - Unintended consequence of SB1?

- Funding shortfall of $64 billion
Questions?

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