

Infrastructure Investment and Jobs Act

Fix it First Team

Action Plan

DRAFT

April 2022

Poor Condition Infrastructure is Bad for California

It's bad for ...

the budget

the air quality

goods movement

all transportation modes



Acknowledgements

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Introduction

The transportation system in California connects people to opportunities and powers the economy of the State. The elaborate network of roads, bridges, drainage systems and traffic management systems (TMS) comprise the most heavily used transportation system in the nation. California is home to the two largest ports in the nation supplying goods to the entire Western United States. The transportation system provides access for residents to get to schools, jobs, shopping and health services. The transportation system also serves a large tourism industry that brings significant visitors and taxes into the State. Our transportation system also serves a critical role in providing emergency access during major disaster events such as wildfires and earthquakes. We need a system that is in good condition to withstand these events in order to serve this important emergency access and public evacuation functions. Collectively, the transportation system in California is serving significantly more vehicle miles of travel than any other State in the nation.

The heavy use of the transportation system and aging infrastructure creates significant demand for rehabilitation and replacement of existing assets. Funding provided by the 2017 gas tax increase has provided much needed revenue for “Fix it First” repairs of existing infrastructure. These funds have been put to good use repairing the transportation system up and down the state. Even with the increased gas tax; analysis of the backlog of deferred state and local infrastructure repairs needs indicates that available funding is only about half of what is needed. The Infrastructure Investment and Jobs Act (IIJA) provides an opportunity to improve the condition of roads, bridges and associated transportation assets and simultaneously improve climate resiliency and modal choice. The “Fix it First” investment strategy means investing in the infrastructure we already have before we consider expanding the system. The “Fix it First” Team is aware of the many competing priorities facing asset owners and believes that investing in improving the condition of the existing infrastructure is an important priority for IIJA funding.

Existing Asset Conditions

The condition of pavement, bridges culverts and TMS elements are well documented in the State Highway System Management Plan and Local Streets and Roads Needs Assessment. These documents report regularly on the size and condition of existing infrastructure assets in California.

- From 2018 to 2020 the condition of local pavement improved 1 point on a 0-100 scale with increased funding from SB1. Local pavement has been on a downward condition trajectory since 2008.
- Caltrans has directed much of the SB1 increases to pavement, bridges, culvert and TMS elements on the State Highway System. With this significant investment, conditions are improving but require sustained investment to keep condition gains achieved to date.
- California received more bridge funding than any other state in the nation due to the size of our bridge inventory and its condition relative to other states.

- Currently there are almost 1,500 bridge classified in Poor condition. These bridges represent almost 20 million square feet of bridge deck surface area.
- The condition of other transportation system assets such as drainage systems and traffic management systems are less susceptible to traffic impacts as compared to roads and bridges, but their age and deterioration require renewal in many cases. If not maintained, the failure of these assets can lead to safety concerns and operational impacts.
- The “Fix it First” strategy recognizes that timely maintenance and rehabilitation can reduce the long term costs of ownership of the transportation system. The life cycle cost benefits are well documented. Fixing our existing infrastructure condition before expanding the system will reduce long term costs.
- Inflation of material prices and labor costs are driving up the cost of transportation infrastructure projects. These cost increases threaten to reduce the buying power of available funding putting further pressure on our ability to improve asset conditions.

Identified Needs and Current Funding Shortfall

The State Highway System Management Plan and Local Streets and Roads Needs Assessment evaluates the existing transportation infrastructure in California and quantifies the needs as follows:

- The State Highway System requires approximately \$2 billion annually to maintain existing pavement condition.
- The Local Streets and Roads Needs Assessment identifies an additional \$1.41 billion needed to maintain local pavements at current levels and \$5.6 billion additional funds needed to reach optimal condition levels
- Caltrans is responsible for 77% of all bridge area in the State of California. These bridges are some of the most heavily used bridges in the nation and have an existing 10 year need of over \$7 billion. Additional needs for toll bridges and climate related vulnerabilities are above and beyond the cited \$7 billion need.
- The Local Streets and Roads Needs Assessment identifies an estimated shortfall of \$4.3 billion to maintain the safety and integrity of the local bridge infrastructure.
- Local Assistance has authorized funding for bridge projects as advanced construction and needs to reimburse cities and counties over \$600 million. After repayment new bridge projects can be funded.
- Bridge funding improves condition, reduces long term costs and ensures the safety of our bridges in California.

- Many Traffic Management Systems in California are very old and in need of replacement. As older systems are replaced, there is an opportunity to modernize the systems to be able to better support autonomous and connected vehicles, signal pre-emption, and transit signal priority.

Associated Benefits of “Fix it First” Projects

Projects that rehabilitate or replace transportation system components often have associated benefits. Common associated benefits include bicycle and pedestrian infrastructure being added or climate resiliency being incorporated within the project. The additional costs associated with these added benefits are often minimized by pairing the work with larger pavement and bridge rehabilitation projects. For example, adding sidewalks to a new bridge will be considerably less expensive than widening a bridge to add a sidewalk.

There is also a life cycle cost benefit of doing climate resiliency work or complete streets work. For example, if we need to raise an asset to get it out of the way of sea level rise, the opportune time to do the raising is at the end of the service life of the asset or treatment. Raising an asset that has remaining service life is like throwing away the remaining years of service.

“Fix it First” Team Recommendations

Funding Recommendations

The “Fix it First” funding needs referenced within this Action Plan exceeds the total expected value the State of California anticipates receiving through formula allocations associated with IJJA. The “Fix it First” Team recognizes the demand for system expansion and climate action funding, however the deferred needs of the existing infrastructure should be prioritized before expansion funding.

Pavement –

Bridges – The bridge formula funding is required to be spent on eligible bridges within California. The recommended distribution of the bridge formula funding between state and local owners is recommended to be XX% for state owned bridges and YY% for local bridges.

Drainage Systems

Traffic Management Systems (TMS)

Execution Recommendations

IJJA funding (with the exception of bridge formula funds) should be distributed to the State Highway Account for state owned assets and apportioned directly to agencies for local pavement, drainage and TMS projects using existing processes.

IIJA Bridge Improvement Plan formula funding should be distributed to the State Highway Account for State Highway Bridge funding and to Caltrans Local Assistance for prioritization and distribution to specific bridge projects.

If California is unable to obligate the bridge formula funds in a timely manner the state may lose the funding. To ensure that this does not happen in California, the Fix it First Team recommends that the funding distribution be reevaluated for Federal fiscal year 2023/24. The reevaluation should consider allocations and an evaluation of obligation plans.

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