



Although pavement, bridges and culverts are the most obvious parts of Caltrans' inventory of highway "assets," displays such as this electronic message board on Highway 80 in the Bay Area also are vital to the functioning of the state highway system. SB 1 requires Caltrans improve a set number.

TAMP Ramps Up Caltrans Expectations

Transportation Asset Management Plan Takes Inventory, Sets Performance Goals

What it will take to keep the world's sixth largest economy and more than 40 million residents moving on California's vast transportation system is at the heart of the draft [California Transportation Asset Management Plan \(TAMP\)](#).

The TAMP offers a present-day assessment of the system's many physical parts, but also sets ambitious performance goals as a new era in transportation beckons in California with passage of Road Repair and Accountability Act of 2017 (Senate Bill 1).

The asset management plan is required by state law and federal regulations. The product of internal and stakeholder input, the plan is Caltrans' most comprehensive effort to date to inventory California highway "assets" — the critical components that make up the state and federal transportation network. The plan assesses the condition of those resources, and projects the costs of protecting, managing and ultimately improving the state's pavement, bridges, drainages, and traffic management systems.

To reach "state of good repair" objectives over the next 10 years, the TAMP lays out a range of performance targets for California's highway infrastructure. The plan highlights stark differences in future highway conditions with and without SB 1 funding.

The improvement effort will require a massive financial commitment, the TAMP acknowledges, but it projects that SB 1 revenues will put California on track to meet those targets. Almost \$2.7 billion is expected to be raised yearly through 2027 for state transportation purposes.

The assets on two overlapping highway systems are examined: the State Highway System (SHS) and the National Highway System (NHS). The SHS is the highway system managed by Caltrans that includes all interstate and state highways. The NHS includes portions of the SHS, as well as roads and bridges managed by California cities' and counties' transportation agencies. Roads on the NHS are defined by the FHWA to be important to the nation's economy, defense and mobility.

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Caltrans' asset management approach attempts to strike a balance between reconstructing parts of the transportation system in poor condition, and preserving those in good condition to prevent costly deterioration. This strategy extends the useful lives of the state's transportation assets and is more cost-effective in the long run compared with replacement of badly damaged structures.

In addition, asset management strategy calls for highway infrastructure investments based on total life-cycle cost estimates, from design to upkeep. The plan also emphasizes Caltrans' "fix it first" philosophy, using preventive maintenance to improve or preserve the condition of existing assets, not expand highway capacity.



Caltrans photo by Steven Hellon

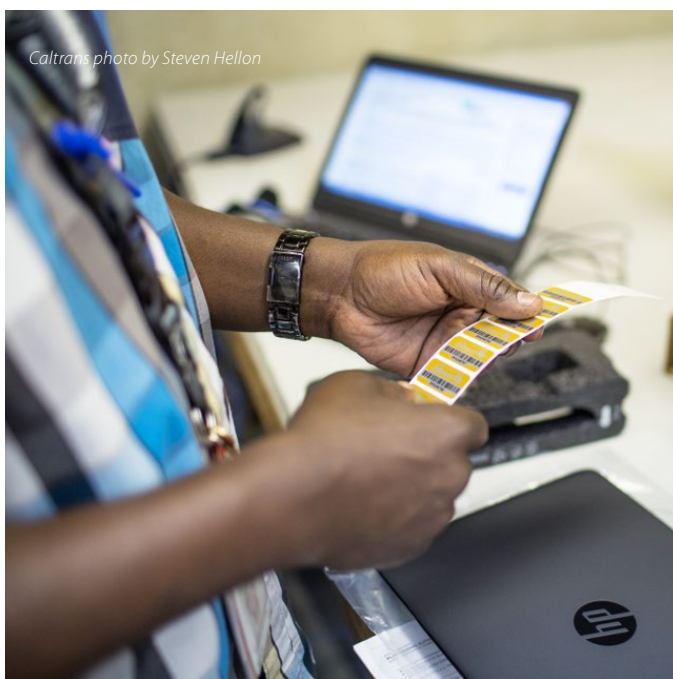
Sections of pipe that will become new culverts are lined up in a Caltrans yard. Drainage upgrades are high on the SB 1 fix-it list.

Much of the TAMP's conclusions are based on Caltrans' 2017 State Highway Management Plan, which redefined the way highway projects would be selected and funded. That plan adopted a good/fair/poor rating system for all highway assets that was used in the TAMP, and that classification standard will continue to measure progress toward SB 1 performance goals.

In addition to Caltrans' major asset classes — pavement, bridges, culverts and transportation management systems — the TAMP also evaluates nine other types of infrastructure, such as office buildings, roadside rest facilities and weigh stations.

Throughout the process of developing the California TAMP, workshops were held with stakeholders that are responsible for parts of the NHS. The TAMP process and the development of asset management performance targets on the SHS and local NHS systems to evaluate scenarios and financial investments was an opportunity to improve coordination across agencies to deliver a better transportation system and experience to Californians.

The final version of the TAMP will be submitted to the California Transportation Commission for approval, then undergoes FHWA review in April 2018 for compliance with federal requirements. **MM**



Caltrans photo by Steven Hellon

At a Caltrans warehouse, a worker readies ID labels that will be affixed to new traffic management system components on highways.

Source: Caltrans Office of Public Affairs