

**INITIAL STATEMENT OF REASONS
FOR PROPOSED CHANGES TO THE STATE'S AUTOMATED VEHICLE IDENTIFICATION
PROTOCOL FOR ELECTRONIC TOLL COLLECTION**

Authority/Background

Streets and Highways Code (SHC) section 27565 requires the California Department of Transportation (Caltrans), in cooperation with any agency that would operate a toll facility, to develop functional specifications and standards, i.e., a protocol for automated vehicle identification (AVI), which would be used for electronic toll collection (ETC). The protocol governs the features of transponders mounted in vehicles and overhead devices (readers) which detect the transponders.

SHC section 27565 requires any protocol selected to be an open standard, meaning that an agency that operates a toll facility must have the ability to select ETC equipment from different manufacturers and vendors.

The current protocols used for ETC in California are "Title 21" after the section of the California Code of Regulations where the specifications for the standard are listed and International Standards Organization (ISO) 18000-63 commonly referred to as "6C".

There are currently more than 870 lane mile of toll roads, high-occupancy/toll lanes, and bridges operating in California. All these facilities, except for one toll road in San Diego County, only collect tolls electronically. The electronic toll collection (ETC) systems used on these facilities are managed by six different local government entities, hereafter referred to as the "toll facility operators". (It should be noted that the ETC operations for the state-owned bridges in the San Francisco Bay Area are handled by one of these toll facility operators and not by Caltrans). There are currently approximately 12 million active transponders in use in California, split evenly between the Title 21 and 6C protocols.

The state's toll facility operators have requested that Caltrans modify the existing regulation to extend the date the Title 21 protocol can be used to December 31, 2026.

Summary of the Proposal

The proposed regulatory change will extend the date the Title 21 protocol can be used to December 31, 2026. After this date the Title 21 protocol will be discontinued.

Benefits

Caltrans has determined that this change could reduce toll agency expenditures by as much as \$5.8 million annually. The resultant savings could be used by the toll agencies to help pay down any indebtedness they may have incurred to develop their facilities. They could also be reinvested into desired or needed improvements on the facilities or in the transportation corridors where they are located, which would result in safer, more efficient travel for the public.

Purpose and Necessity

Toll operators have not issued as many transponders as anticipated in recent years due to COVID-19 travel restrictions and its impacts on travel patterns. Therefore, some toll operators took longer to issue their remaining Title 21 transponder inventory and some are still finishing issuing a limited number of these transponders. These recently issued Title 21 transponders have considerable useful life left.

Toll operators and customers will be able to realize the useful life of the existing 6 million transponders by taking advantage of the investment in the transponders currently being used and saving money by not needing to immediately purchase new replacement 6C transponders.

An extension of the legacy Title 21 sunset date to January 1, 2027 is expected to yield substantial benefits to both toll agencies and their customers. A three-year extension of the sunset date would result in an estimated \$5.8 million savings to the toll agencies each of those years. It would also result in added convenience for customers who will not have to swap out their Title 21 transponder for a new 6C version. This will result in reduced electronic waste and being good stewards of the environment.

In addition, there are no drawbacks to extending Title 21 end of life since toll operators are already equipped and configured to use both the Title 21 and 6C protocols.

Specific Discussion of the Proposed Regulations

The proposed regulatory change affect California Code of Regulations Title 21, Section 1700.3. The following provides a detailed discussion of the proposed changes.

Section 1700.3, Repeal

This section is changed to establish a new repeal date of January 1, 2027 for the articles that contain the functional specifications and standards for the Title 21 protocol.

The COVID-19 pandemic left some toll agencies with a high inventory of Title 21 transponders. This inventory took longer to deplete due to reduced travel. The time extension allows continued use of these recently issued transponders utilizing their full useful life and not disrupting customers.

Technical, Theoretical, and/or Empirical Study, Reports, or Documents Relied Upon

In preparing this regulatory change, Caltrans developed an economic analysis document entitled “Fiscal and Economic Analysis for Extending the Title 21 Protocol Sunset Date.” The document may be found at <https://dot.ca.gov/programs/traffic-operations/electronic-toll>.

Economic Impact Analysis

Refer to the “Fiscal and Economic Analysis for Extending the Title 21 Protocol Sunset Date” referenced above for the economic impact analysis.

Support for Determination of No Significant Adverse Economic Impact on Business

This regulation will not adversely affect California businesses, as this regulatory change is only a time extension on when Title 21 transponders can be used and it will not create an additional cost to businesses. The implementation of this regulation could lead to an increase of investment into the state’s transportation infrastructure; therefore, resulting in travel quality improvements on affected highways such as higher throughput, larger buyer-supplier market access, and lower transportation costs. Thus, an improvement in travel quality may be positive for business.

Conferring with Interested Persons

Pursuant to Government Code section 11346.45, Caltrans staff have provided information and solicited input regarding this proposed action with stakeholder groups, including the state’s toll facility operators and AVI equipment manufacturers. A pre-notice public discussion virtual workshop was held on February 28, 2023 using Microsoft Teams. A technical questionnaire on the proposed changes was distributed at those workshops to interested parties.

Responses were subsequently received from 11 organizations. Minutes from the workshop and the questionnaire responses may be found at <https://dot.ca.gov/programs/traffic-operations/electronic-toll>.