

# Chapter 18 Maintenance

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## EXHIBITS

Exhibits applicable to this chapter can be found at:

<http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapmforms.htm#goHere8>

Exhibit 18-A Maintenance Review Checklist

Exhibit 18-B Sample Resolution

Exhibit 18-C City-County Road System EDP Input Form HCC 342

Exhibit 18-D Mileage of Maintained Roads

## Chapter 18 **Maintenance**

### 18.1 GENERAL REQUIREMENTS

Section 116 of Title 23, United States Code (U.S.C.) states that the State Transportation Department (Caltrans) is responsible for maintaining or causing to be maintained, any project constructed with federal-aid funds and all bridges carrying federal-aid routes. Responsibility for maintaining local federal-aid projects is passed on to the local agency as stated in the “Local Agency-State Master Agreement” (see Chapter 4, *Agreements*, in this manual). The annexation, by a city, of territory in the county that contains all or a part of a federal-aid project transfers the maintenance responsibility of that project to that city. This responsibility is expected to be enforced during the service life of the project.

Section 116 of Title 23, United States Code (U.S.C.) also provides that if the federal authorities find that any completed project is not properly maintained such fact shall be called to the attention of Caltrans. If the project is under local agency jurisdiction and is not put in proper condition within 90-days after written notification by Caltrans, approval of further federal-aid projects for the agency will be withheld until the project is put back in proper condition.

Section 823.5 of the Streets and Highways Code (S&H Code) outlines Caltrans’ authority to perform the required maintenance should the agency having the responsibility fail to do so. In such case, Caltrans shall notify the State Controller of their maintenance expenditures on such street or highway. Then the State Controller shall deduct from future apportionments to such county or city, the amount certified by the Director of Caltrans from the Highway Users Tax Account in the Transportation Tax Fund and place such amount in the State Highway Account (SHA).

Local agency projects that are on the State Highway System (SHS) that will create a maintenance responsibility must be covered in a Caltrans maintenance agreement, or an amendment to an existing maintenance agreement. This policy is contained in the *Project Development Procedures Manual*, Chapter 2, *Roles and Responsibilities* at: [http://www.dot.ca.gov/hq/oppd/pdpm/chap\\_pdf/chapt02.pdf](http://www.dot.ca.gov/hq/oppd/pdpm/chap_pdf/chapt02.pdf).

These agreements are to be executed preferably during the project development process and no later than the start of construction.

Maintenance includes not only the preservation of the general physical features of the roadway, roadside, and surfacing, but also the preservation of all safety and regulatory features, devices and appurtenances built into the project. No safety features, devices and appurtenances paid for with federal funds shall be removed, eliminated, or decreased in effectiveness without the prior approval of the governing entity of the jurisdiction in which the project is located (see Section 11.4, *Design Exceptions*, of this manual).

## Acronyms

<b>AADT</b>	- Annual Average Daily Traffic
<b>AASHTO</b>	- American Association of State Highway and Transportation Officials
<b>Caltrans</b>	- California Department of Transportation
<b>CRS</b>	- California Road System
<b>CTC</b>	- California Transportation Commission
<b>DLAE</b>	- District Local Assistance Engineer
<b>FC</b>	- Functional Classification
<b>FHWA</b>	- Federal Highway Administration
<b>FIPS</b>	- Federal Information Processing Standards
<b>HCM</b>	- Highway Capacity Manual
<b>HOV</b>	- High-Occupancy Vehicle
<b>HPMS</b>	- Highway Performance Monitoring System
<b>HSE</b>	- Highway System Engineering
<b>IRI</b>	- International Roughness Index
<b>ISTEA</b>	- Intermodal Surface Transportation Efficiency Act
<b>LRS</b>	- Linear Reference System
<b>MPO</b>	- Metropolitan Planning Organization
<b>MTC</b>	- Metropolitan Transportation Commission
<b>NHS</b>	- National Highway System
<b>OC</b>	- Overcrossing
<b>PM</b>	- Post Mile
<b>SAFETEA-LU</b>	- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (replaced TEA 21)
<b>S&amp;H Code</b>	- Streets and Highways Code
<b>SHA</b>	- State Highway Account
<b>SHS</b>	- State Highway System
<b>STP</b>	- Surface Transportation Program
<b>STRAHNET</b>	- Strategic Highway Corridor Network
<b>TRB</b>	- Transportation Research Board
<b>TSI</b>	- Division of Transportation System Information (Caltrans)
<b>UC</b>	- Undercrossing
<b>VMT</b>	- Vehicles Miles Travelled

## 18.2 BRIDGE INSPECTION

Bridges located on public roads, under the jurisdiction of a local agency, whether or not they were constructed with federal funds are inspected by the state at approximately two-year intervals. The inspection is conducted in accordance with the *National Bridge Inspection*

*Standards and Caltrans Maintenance Manual.* A local agency may conduct their own inspection in accordance with the above standards, using their own forces or consultants.

During the initial investigation and report writing stage, bridges are analyzed to determine their load carrying capacity. If necessary, posting recommendations are made at that time. If subsequent investigations indicate that posting may be required or revised because of deterioration, neglect, or other causes, additional analyses are made. Additional studies and analyses may be made at any time by the state at the local agency's written request. The local agency will receive two copies of the written Bridge Report.

### 18.3 MAINTENANCE MONITORING

Caltrans is responsible for the administration of the local assistance program and shall review the condition of local federal-aid roads for general compliance with the provisions of this section. The primary concern of the maintenance review is whether or not federal-aid highway projects are maintained at an acceptable level of physical integrity and operation. Should an unsatisfactory condition be observed which threatens the integrity of the project that was constructed with federal funds, it should be brought to the attention of the appropriate local officials so that corrective measures may be taken in time to avoid an official action from the federal authorities.

Local agency compliance with maintenance requirements will be verified through program and process reviews. District Local Assistance Engineer (DLAE) should perform maintenance reviews if/ when requested, when deficiencies are identified, because of prior experience with an agency, or as part of program/process reviews. A *Maintenance Review Checklist* (Exhibit 18-A) is used for the maintenance review.

All deficiencies shall be discussed with the local agency and adequate time allotted to correct the condition. Major deficiencies left uncorrected should be discussed with HQ DLA to determine what further action should be taken. Comments and follow up actions should be included on the Maintenance Review Checklist where appropriate.

### 18.4 COUNTY ROAD SYSTEM

The S&H Code confers upon the Board of Supervisors of the various counties the authority, duties, and limitations that have to do with the establishment and maintenance of the county road system. The S&H Code also places certain duties upon Caltrans with respect to the county roads, requiring cooperation between the counties and Caltrans in some areas and allowing it, or making it optional in others. This cooperative effort and contact is carried on between the County Road Commissioners and the District Directors, acting through authorized assistants, all subject to administrative review and correlation of effort by the Transportation System Information (TSI).

#### **Certification of Maintained Mileage**

As required by the State Controller, one of the duties of Caltrans is to certify the maintained mileage of county roads in each county. The State Controller currently requires certification each month (see Section 2121 of the S&H Code). Collection of data for and implementation of

this duty, including the certification to the State Controller, has been delegated to Caltrans TSI. The main object of this activity is to supply the information necessary for distribution of Highway User's Tax Funds in accordance with Section 2104 of the S&H Code.

Procedures for accurately reporting and certifying the county road mileage figures have evolved and certain rules have been adopted. These steps involve the necessity for official action by counties and documentation thereof. Caltrans, in order to prepare the monthly certificate, is constantly engaged in the collection and tabulation of road information and in maintaining the records and maps necessary for this purpose and for other activities.

### **Mileage Eligible for Certification**

It is important that the maintenance status of county roads be determined under uniform rules, because the miles maintained is an important factor in apportioning Highway User's Tax monies. In approximately half of the smaller counties, each mile added to a county's road system increases its annual apportionment above that which it would otherwise receive. Each such increase decreases the amount available for apportionment to all counties on the basis of vehicular registration.

For the purpose of certification to the State Controller, it has been established that a maintained county road must meet all of the following criteria:

1. An existing road actually maintained by the county or its agent (planned, unbuilt roads are not considered eligible).
2. Traversable by ordinary automobile except for seasonal closure by snow, or occasional closure to accommodate repair or reconstruction (otherwise, non-traversable roads are not considered to be maintained).
3. Have become county roads through due legal processes (they cannot become county roads through mere public use or because of arbitrary opinion).
4. Open to the general public (roads from which the public is barred do not qualify).
5. Public alleys that function like public roads can qualify as public roads. These alleyways would never be classified functionally high enough to be eligible as a federal-aid highway.
6. Be located outside of incorporated cities. The Collier Burns Act, which originated the mileage certification requirement contained in Section II, the following:

*"... the Department of Public Works shall certify ... the total maintained mileage of County roads in unincorporated territory ..."*

The S&H Code has since provided two exceptions to criteria No. 5: (1) In any city that has not held an election of municipal officers in 10 years (Section 2004.5), and (2) In any county which has since January 1, 1961, adopted a county highway bond issue (Section 1732). The first exception applies only to Hornitos, Mariposa County; Markleeville, Alpine County; Meadowlake, Nevada County; and the second exception applies to Santa Clara County.

A road which is on a county line, or which crosses a county line, may be maintained by one of the counties and be eligible for inclusion in that county's maintained system, even though it may be in the other county; provided there is an agreement certified to by resolutions of the

Boards of Supervisors of both counties. Copies of these resolutions should be forwarded to TSI.

Boundary line road mileage may be divided among the agencies involved in any manner agreeable to the agencies, but the sum of the various lengths should equal the total length of the road. Dividing a roadway down the centerline is acceptable, but it is preferable to divide the road transversely in segments.

Each agency's tabulation will indicate the mileage claimed by the different agencies within the termini shown with an asterisk indicating as "non-add" the mileage not claimed by the reporting agency. The agency that does not claim the mileage should omit such roadway segment from the tabulations. Alternatively, if form HCC 342 (Exhibit 18-C, *City-County Road System EDP Input Form HCC 342*) is used, there should be an asterisk indicating as "non-add" the mileage not claimed by the reporting agency. The use of form HCC 342 is optional, and at the sole discretion of the reporting agency.

To ensure consistency among all the agencies, roads will be measured through intersections regardless of the overlapping of mileage thus caused. Roads terminating at an intersection with another road will be measured from the intersection of centerlines, except where roads terminate at a state freeway. In the latter case, the mileage will be to the end of county maintenance.

### **Certification Procedures**

Section 2121 of S&H Code reads as follows:

"(a) In May of each year, each county shall submit to the Department any additions or exclusions from its mileage of maintained county highways, specifying the termini and mileage of each route added or excluded from its county maintained roads. The Department shall either approve or disapprove each such inclusion or exclusion. A county may appeal any disapproval as provided in Section 74. The Department shall certify county mileage figures to the Controller, as required. No appeal shall affect any apportionment made by the Controller pending the determination of the appeal. If, on appeal, additional mileage is allowed the county, the Department shall immediately certify the corrected figure to the Controller, and the same shall be used for subsequent apportionments.

"(b) Upon relinquishing any state highway or portion thereof to a county, the Department shall immediately certify to the Controller the mileage so relinquished and the same shall immediately be added to the county's maintained mileage of county roads for purposes of subsequent apportionment."

### **Action Required of the Counties**

While the law permits the counties to propose their annual mileage revisions at any time during May, such action should be taken very early in the month to give Caltrans adequate time to complete an orderly and accurate June 30 certifications for the beginning of the new fiscal year.

The counties should alertly claim at the time of their May submittals all mileage properly claimable, because there is no provision in the law for adding maintained mileage during other months, except for state highway relinquishments. New frontage roads and others of a similar nature, which are accepted from the state for maintenance by the county under an agreement are not “relinquishments” and must await the following May before being added to the county’s certified mileage. The county should claim in May, any additions that would become effective on the following July 1 because of any provision of law, or by reason of agreement previously entered into.

**EXAMPLE**

**County A and County B have previously agreed through due process that a certain boundary road now maintained and claimed by County B shall, after the 30th of June is maintained by County A. County A should pick up this mileage on its May submittal. Thus County B must drop the above-mentioned boundary road when County A takes over. One exception to this rule is a county road to be taken for maintenance by Caltrans as a state highway effective July 1. Such roads are to be kept on a county’s list of maintained roads for gas purposes until the following June 30.**

Another deletion that should be shown on the May changes is the mileage that will be lost to cities, because of annexations during the period since last June 30. Section 34333 of the Government Code is worded in such a manner as to cause the counties to continue maintenance of roads in newly incorporated territory through June 30 following the incorporation. It will be expected that the counties will, in each May, delete all maintained mileage in areas incorporated since the previous June 30.

Each County Road Commissioner will present to the DLAE, corrected mileage figures for his/her county; the submittal is to be in the form of a resolution by the Board of Supervisors supported by corrected maps and tabulations. The resolution should be in the general form shown as Exhibit 18-B, *Sample Resolution* and should contain all the recitals indicated therein. The resolution shall be supported by the following document as attachment:

- **ATTACHMENT** – Consisting of one complete set of the previous years’ HPMS or EDP tabulation of Maintained County Roads with all changes marked in color. Any color contrasting sharply with the printing may be used except orange, which is reserved for any corrections found necessary by the district. The changes will be so noted. Examples of some changes are: extended roads, deleted roads or deleted portions of roads, and changed descriptions, names or numbers.

Counties desiring not to use Caltrans’ EDP tabulations may use their own, provided a complete list of the changes and a complete tabulation showing the revised system are submitted.

This attachment may be submitted electronically or in hard copy to the DLAE and the total mileage thereon must agree with the mileage certified on the Board of Supervisor’s resolution.

**Action Required of the District**

The DLAE should check the resolutions, maps and tabulations against each other and against the record of the month-to-month changes prior to submitting them to headquarters.

Necessary changes in the county's EDP tabulations should be corrected in orange to show the correct mileage following agreement upon any necessary changes. Some counties prefer, in lieu of furnishing the revised EDP list for EXHIBIT B, to furnish a separate list of additions and deletions of mileage. Such separate lists are acceptable, provided they contained all required descriptive data. In such cases, the county will furnish a complete updated copy of its tabulation.

After all resolutions, maps, and tabulations have been checked, each district will submit a mileage certification to TSI not later than June 15, but preferably earlier. This certification will list the correct total mileage of maintained county roads in each county in the district. It is not necessary that the tabulations be forwarded with the district's certification. They may be held pending completion of necessary changes.

The district's certification will be used as the basis of Caltrans' certification to the State Controller for his/her use in calculating the Section 2103 of S&H Code monthly apportionment to the counties from the Highway User's Tax Fund over the ensuing fiscal year. Since, in many counties, each mile of increase means more income, the need for accuracy is apparent, as well as the necessity for promptness of the submittal. Even though a county does not receive funds on a mileage basis, the prompt submittal of its maintained mileage changes is essential to maintain accurate mileage figures for other purposes.

### **Action Required of Headquarters**

The mileage reported annually by the districts, adjusted for known changes occurring during the period of their preparation, or for obvious errors and oversights, will be combined in Caltrans' July 1 certification to the State Controller.

As an illustration of the mileage tabulation for the certification to the State Controller, see Exhibit 18-D, *Mileage of Maintained Roads*. The tabulation includes the net changes from the previous month's mileage. In order that the districts and counties may maintain accurate records, a copy of the combined mileage certification is sent to each district.

### **Month-to-Month Mileage Changes**

On the first working day of each month, TSI compiles a new tabulation of mileage for each county as of the last working day of the preceding month. The new tabulation is transmitted to the State Controller with a certificate similar to the July 1st certification. This tabulation is similar to the June 30 tabulation, except that the plus and minus mileage figures are generally minor in nature, being limited as noted and discussed hereafter.

### **Errors in Previous Certifications**

To correct errors in previous certifications, the maintained mileage of any county may be changed in any monthly certification to the Controller. The county, district may initiate these changes, or by TSI at the time the error is discovered. Errors discovered by the county or the district should be mutually verified and agreed upon before being submitted to TSI for review and appropriate action.

### **Relinquished State Highways**

Mileage relinquished from the SHS by the California Transportation Commission (CTC) is added by TSI to the maintained mileage of the counties concerned. Upon receipt of assurance from headquarters the Right of Way Program, the relinquishments become effective. Addition of relinquished mileage is one possible source of error in mileage certification.

### **Mileage Involved in Undercrossing and Overcrossing of State Highways**

A complication in mileage sometimes occurs where county roads carry across state freeways via a separation structure. County roads carried across the freeways via separations, within the state's right of way, are not relinquished to local jurisdiction, yet they are included as a county responsibility in maintenance agreements and are eligible for inclusion in the county's maintained mileage. The relocation of a county road at its crossing of a freeway may result in either a decrease or an increase in the length of the county road. Such changes will not be made until May, following completion of the state highway construction project.

### **Functional Classification Updates**

Local agencies submit annually their Maintained Mileage Reports to Caltrans District Coordinators. The Maintained Mileage Report should accurately summarize in tabular format, the existing functional classification system of roadways. The District Coordinator reviews and forwards the information to the HPMS Branch at Caltrans Headquarters. If there are discrepancies between the Maintained Mileage Report and the CRS maps, the approved CRS maps take precedence.

Functional Classification Change Requests, which include CRS maps, are submitted separately from the tabular Maintained Mileage Reports. Local agencies may submit "Functional Classification Change Requests" to their DLAE year-round. Functional Classification Guidelines provide the procedure for submittal of appropriate documentation, which can be found at: [http://www.dot.ca.gov/hq/tsip/HSEB/functional\\_classification.html](http://www.dot.ca.gov/hq/tsip/HSEB/functional_classification.html).

The DLAE reviews and forwards the information to the Highway System Engineering (HSE) Branch at Caltrans Headquarters. The FHWA reviews and provides final approval for functional classification change requests by stamping and signing the CRS maps.

## **18.5 REFERENCES**

- Caltrans Maintenance Manual
- Manual on Traffic Control Devices 2003 (MUTCD) California Supplement
- Collier Burns Act
- National Bridge Inspection Standards
- Project Development Procedures Manual
- Section 34333 of the Government Code
- Sections 2104, 2121, 823.5 of the Streets and Highways Code (S&H Code)
- Section 116 of Title 23, United States Code (U.S.C.)