

CHAPTER 4

Equipment

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4.01 Introduction

4.01.01 Chapter Content and Resources

This chapter contains information relevant to the care, responsibility and use of the California Department of Transportation (Caltrans) mobile fleet equipment.

The Division of Maintenance (DOM), Office of Maintenance Safety, Equipment & Training (MSET) is responsible for monitoring District Maintenance compliance with all requirements in this chapter.

The Division of Equipment (DOE) is delegated the authority by the Department of General Services (DGS) to oversee all Mobile Fleet, component, and non-Mobile Fleet accessory purchases. Items affected are listed in the Division of Procurement and Contracts (DPAC) Acquisition Manual.

All mobile pieces of automotive, maintenance, and construction equipment are purchased and maintained by DOE and assigned to districts or the Headquarters Maintenance pool. This equipment is designated as Mobile Fleet equipment and normally is assigned a seven (7) digit identification (ID) number. Equipment types are identified by a five (5) digit Maintenance Class (MC). This five-digit number is used to identify the type and size of each piece of equipment in the fleet.

Caltrans Mobile Fleet is defined as devices owned by Caltrans by which any person or property may be propelled, moved, or towed on or off highway and that are used for employee transportation or material movement, or for construction or maintenance work relating to transportation, including, but not limited to, passenger vehicles, heavy duty trucks, boats, trailers, motorized construction equipment, and “slip in” accessories or attachments that are used by more than one functional unit.

For further clarification of approvals (internal and external) related to equipment purchases, see the Caltrans Acquisition Manual, which is available on the DPAC web site: [Division of Procurement and Contracts \(DPAC\) | Division of Procurement and Contracts \(ca.gov\)](#)

Rental rates are established and maintained by DOE and the Division of Accounting.

For resources referenced within this chapter, please see the following:

California Vehicle Code: [Codes: Codes Tree - Vehicle Code - VEH \(ca.gov\)](#)

Deputy Directives: [Deputy Directives | Administration \(ca.gov\)](#)

Division of Equipment: [Division of Equipment | Division of Equipment \(ca.gov\)](#)

Division of Equipment - Equipment Catalog: [Equipment Catalog | Division of Equipment](#)

Division of Equipment – Shop Operations Handbook: 3. Equipment: [Shop Operations Handbook: 3. Equipment | Division of Equipment \(ca.gov\)](#)

Memorandum DOM Assisting DOE with Equipment Work (November 27, 2012): [Equipment-Focus-Group-Issue-Memo-Maintenance-Assisting-Equipment.pdf \(ca.gov\)](#)

Safety Manual: [Employee Safety Manual Online | Health and Safety \(ca.gov\)](#)

State Administrative Manual: <https://www.dgs.ca.gov/Resources/SAM>

4.01.02 Definitions

BIT – Basic Inspection of Terminal
CCR – California Code of Regulations
DD – Deputy Directive
DGS – Department of General Services
DMV – Department of Motor Vehicles
DOE – Division of Equipment
DPAC – Division of Procurement and Contracts
E-FIS – Enterprise Resource Planning Financial Infrastructure
FAP - Fleet Acquisition Plan
FOM - Fleet Optimization Manager
FOUR - Fleet Optimization Utilization Report
GPS – Global Positioning System
ID - Identification
IMMS - Integrated Maintenance Management System
LR – Local Request
MC – Maintenance Class
META – Maintenance Equipment Training Academy
MSET – Office of Maintenance Safety, Equipment and Training
PEMR – Permanent Equipment Maintenance Record
SAM – State Administrative Manual

4.01.03 References and Hyperlinks

There are hyperlinked resource materials identified within this chapter. If any hyperlink is not accessible, please notify the appropriate personnel to inquire about that resource or reference.

4.01.04 Chapter Contact

This chapter of the Maintenance Manual is maintained by the Division of Maintenance, Maintenance Safety, Equipment & Training (MSET).

4.02 License Requirements

Supervisors shall ensure that each operator of equipment has a valid driver's license and any special endorsements required for the specific type of equipment operated. Each supervisor shall maintain a file for each employee that contains the training records (electronic storage of training records is acceptable), and a current Department of Motor Vehicles (DMV) pull notice as required by the Basic Inspection of Terminal (BIT) Program, and medical certification, as required. Each DMV pull notice requires the supervisor's signature and date received.

4.02.01 Defensive Driver Training

This is a mandated course for all employees who drive a State or personal vehicle on State business at least once every two (2) weeks. This course is required in accordance with the State Administrative Manual (SAM), Section 0751 and must be taken at least once every four (4) years. The Maintenance Field Defensive Driver Training meets the Department of General Services, Office of Risk and Insurance Management mandated requirement for new and current field Maintenance/Equipment employees. This four (4) hour course incorporates California driving laws and Caltrans collision statistics and data, with driver safety instruction and a refresher on defensive driving rules and techniques. This course is for Maintenance/Equipment field employees. Employees who need additional training will be enrolled in an individualized State Defensive Driver Training course (one on one).

4.03 **Assignment of Equipment**

The District Equipment Manager (DEM), along with the Fleet Optimization Manager (FOM), shall continually analyze use of equipment assigned to a Maintenance region or area. The DEM shall move equipment within the district to affect the best usage possible.

Districts should use the Fleet Optimization Utilization Report (FOUR), Global Positioning System (GPS) reports, as well as Integrated Maintenance Management System (IMMS) reports to aid in analysis of equipment use.

4.04 **Equipment Catalog**

DOE publishes a catalog of equipment available to the districts. This catalog was created to assist Caltrans in requesting the equipment best suited for the job. The catalog is available on the DOE Intranet web site and provided in Section [4.01.01](#) of this chapter. The catalog is updated as items are added or removed.

Most of the available units of equipment are included in the catalog. With rare exceptions, all requests shall be from the catalog.

4.05 **Care and Responsibility of Mobile Fleet**

Division of Equipment

As the owning agency, DOE is responsible for the purchase, maintenance, and repair of the Mobile Fleet. DOE also has the following responsibilities:

- Ensure that the equipment catalog provides Caltrans with typical equipment and associated options to maintain the State highway infrastructure safely and efficiently. The equipment provided shall be of a size and configuration necessary to accomplish its intended task as safely and efficiently as possible, recognizing that quick and efficient operations on the travel way reduces employee exposure and traffic delays.
- Care for, and proper use of, all mobile equipment from the time it is received until it is returned to DOE.

- Schedule lubrication, preventative maintenance, and accurately maintaining service records. DOE will notify equipment users of the next Preventative Maintenance due date. It is the responsibility of the user to notify DOE in advance of any service needs prior to any pre-programmed service dates, and mutually arrange access for service. There may be occasions when Maintenance personnel will assist in servicing a vehicle.
- Maintain the fleet as it was originally provided in as good an operational condition as possible.
- Provide Caltrans with a safe and functional equipment fleet that complies with all the requirements of the California Code of Regulations (CCR), California Vehicle Code, Cal-OSHA, and other regulatory agencies.
- Schedule all service and repair work to the Mobile Fleet as overall district priorities dictate. After performing repairs, the DOE representative shall inform the unit supervisor. The unit supervisor will normally arrange to have the unit picked up promptly and returned to service. The DOE representative shall provide the unit supervisor repair documentation on the signed Repair Request.
- Document all repairs and services in the Permanent Equipment Maintenance Record (PEMR) book unless the repairs are made by the operator.
- Provide Divisions with a monthly State equipment rental expenditure report. This report shall be itemized at the cost center level.
- Provide Mobile Fleet equipment meter readings upon request.

Chief, Division of Maintenance

The Chief, Division of Maintenance, has the overall responsibility for the DOM statewide. Their responsibilities include the following:

- Evaluate the future needs of the Maintenance Division and prepare Budget Change Proposals as necessary.
- Establish and maintain a management system that efficiently fully utilizes equipment and funding resources.
- Determine equipment resource allocations for the districts.

Chief, Office of Maintenance Safety, Equipment & Training (MSET)

The Office Chief of MSET reports to the Chief, Division of Maintenance and has the following responsibilities:

- Oversight of statewide safety training on equipment.
- Make recommendations regarding optimal allocation of equipment resources between

districts by communicating with Deputy District Directors, Maintenance, or their designee.

- Anticipate future equipment needs by communicating with Deputy District Directors, Maintenance, or their designees, and with other Division of Maintenance Office Chiefs.
- Evaluate existing policy and make recommendations for change when appropriate.
- Handle statewide fleet management and application of fleet standards.

Statewide Equipment Manager

The Statewide Equipment Manager reports to the Chief, Office of MSET, and has the following responsibilities:

- Prepare and submit the Equipment Order Summary (EOS) and Equipment Change Request (ECR) when needed.
- Provide information and consultation to the District Equipment Managers.
- Manage the statewide equipment pool.
- Review legislation that affects Maintenance Mobile Fleet and provide analysis.
- In conjunction with DOE, monitor Intergovernmental Service Agreements (Form STD. 13A) and invoices.
- Monitor equipment rental expenditures (Sub Object Code 007) statewide.
- Oversee statewide fleet to ascertain meeting of usage goals.
- Handle statewide fleet management and application of fleet standards.

Deputy District Director, Maintenance

The Deputy District Director, Maintenance has the following responsibilities:

- Responsible for the equipment resource management within the districts.
- Keep the Chief, DOM apprised of equipment resource utilization and, if necessary, make recommendations and research future equipment needs.
- Provide DOE resident mechanics with safe, compliant, and functional facilities for the work conducted.

Field Maintenance Region Managers

The Field Maintenance Region Managers have the following responsibilities:

- Evaluate equipment availability and its impact on regional work plans.
- Plan, schedule, and effectively utilize the equipment fleet under regional control.
- Enforce compliance with all policies related to fleet management.
- Work with DOE to set priorities for vehicle inspections and repairs for the Maintenance fleet.
- Review vehicle accident data pertinent to their regions and make recommendations or changes as needed.

District Equipment Managers

The District Equipment Managers have the following responsibilities:

- Prepare and submit the Districts' Equipment Order Summary (EOS) and Equipment Change Request (ECR) when needed.
- Make periodic field reviews observing the pre-operation inspections/post operation reports of equipment are completed by the crews, inspect for general condition, unauthorized modifications, and general cleanliness. A report of these reviews will be made to district Maintenance management and the local Shop Superintendent.
- Provide input to district and Headquarters management on equipment needs identified by field Maintenance forces.
- Manage the district Maintenance equipment pool.
- Review and monitor Equipment Monthly Usage Reports.
- Manage and move district equipment to meet usage goals.
- Coordinate with Headquarters Maintenance Equipment Office to reassign fleet units to meet fleet usage standards.
- Help prioritize repairs for the Maintenance fleet.

Fleet Optimization Managers

The FOMs have the following responsibilities:

- Ensure communication of policy to management and staff.

- Review and distribute monthly usage reports.
- Work with region(s) to meet fleet usage standards.
- Manage and move district equipment to meet usage goals.
- Coordinate with Headquarters Maintenance Equipment Office to reassign fleet units to meet fleet usage standards.

Maintenance Area Superintendents

Maintenance Area Superintendents have the following responsibilities:

- Ensure proper use and care of equipment assigned to their areas.
- Ensure equipment is meeting fleet usage standards and monitor that the usage is being accurately charged in IMMS.
- Identify and arrange equipment training for operators and supervisors.
- Support policies regarding operation, maintenance, and minor repair of equipment as taught to operators and supervisors at the Maintenance Equipment Training Academy (META).
- Enforce the use of form DME-0283, Pre-Operation Inspection/Post Operation Report (Pre-Op/Post Op) and Permanent Equipment Maintenance Record (PEMR) books.
- Provide DOE personnel with equipment and access to Maintenance stations, and maintain safe, compliant, and functional facilities for work performed.
- Make every effort to work with DOE and resident or Field Mechanics to set priorities for vehicle inspections and repair of the Maintenance fleet.

Maintenance Supervisors and Leadworkers

Maintenance Supervisors and Leadworkers have the following responsibilities:

- The Maintenance Supervisor, through the equipment operator, is responsible for shift inspection and minor preventive maintenance repairs.
 - Operators are responsible for detecting the first signs of faulty equipment. They shall use the Pre-Op/Post Op for reporting any signs of problems to their supervisors.
 - The supervisor is responsible for making repair arrangements.
 - The Pre-Op/Post Op books are available through Headquarters Warehouse and the electronic form DME_0283 can be found on the Caltrans

Electronic Forms System (CEFS).

- Pre-Op/Post Op checks shall be made and recorded on the Pre-Op/Post Op by each operator at the beginning and end of each shift.
 - This requirement applies to all equipment rated $\frac{3}{4}$ ton and larger.
 - Units rated smaller than $\frac{3}{4}$ ton shall have a pre- operational check once a week, unless there is an operator change.
- If repairs are requested, trouble symptoms shall be recorded on the Pre-Op/Post Op.
- If the repairs are minor and within the capability of the operator, the operator can make the repair with Supervisor approval, noting any repairs on the Pre-Op/Post Op, and in the PEMR book.
- If repairs are beyond the capability of the operator, the Pre-Op/Post Op will be submitted to the supervisor.
- The supervisor shall decide if the vehicle can be operated as is or should be parked and scheduled for repair.
 - Supervisors may only authorize the use of a vehicle with non-safety related defects until the date on the repair request portion. If there are safety-related defects, the supervisor will park the vehicle until repairs are completed.
- Operators shall follow the instructions on the Pre-Op/Post Op book cover. The Pre-Op/Post Op book shall be kept in or on the vehicle.
- To maintain the appearance and condition of equipment assigned to, or used by, their cost centers.
- Enforce the policies of equipment operations, minor adjustments, and repair as instructed by META.
- Ensure that personnel under their supervision follow prescribed Lube Chart or operator manual instructions regarding proper servicing of equipment when required.
- Provide adequate cabinet or space to store a supply of parts and accessories for use by equipment operators.
- Provide proper storage for lubricants with correct product number decals on containers and dust free storage for swing-spout oil dispensers.
- Identify and advise management of operator training needs.

- Perform a safety inspection of each unit in their cost center.
 - The safety inspection will be performed bi-annually, and the inspection date will be recorded in the PEMR book.
 - When using pool assigned equipment, the supervisor will ensure that the inspection is current, and will perform an inspection if one is due.
 - The PEMR book shall be kept with the vehicle.
- Provide DOE personnel with access to Maintenance stations and vehicles.
- Inform DEM of all equipment transfers and movement.

Operators

Operators (all employees who operate equipment) have the following responsibilities:

- Follow prescribed methods of equipment operation as instructed by META and their supervisors.
- Perform the required Pre-Op/Post Op checks.
- Follow appropriate Lube Chart instructions for shift, 40 hour, or minor and major service when required (or use manufacturer's operator's manual if no Lube Chart exists) and log eight (8) and 40-hour services where designated on pre-trip form.
 - Pre-Op/Post Op book covers provide specific record keeping instructions and shall be followed to ensure proper pre-trip and post-trip records are kept.
 - The signature of the person making the Pre-Op/Post Op checks is required in the space provided. The user shall also print their last name for identification purposes.
- Record major and minor vehicle service in the operator service section of the PEMR book, including the operator's initials in the space provided.
 - A PEMR book will be maintained for each piece of Mobile Fleet equipment and shall be kept in the equipment at all times.
 - Major and minor servicing, repairs, brake adjustments, and inspections on the vehicle will be recorded in the book.
 - DOE supplies the PEMR books.

Operators are also responsible for making the following minor repairs and adjustments:

- Change light bulbs, fuses, and lenses.

- Simple adjustment or replacement of fan belts.
- Replace battery, cables, and clean battery connections when trained to do so.
- Replace wiper blades.
- Perform scheduled services when instructed to as outlined in the PEMR and/or Lubrication Interval Standards, using the proper Lube Chart (or manufacturer's operator's manual if no Lube Chart exists) as a guide. Lube charts are available on the DOE web site.

The above in no way is meant to limit the operator to those repairs. As stated in the November 27, 2012, Memorandum "DOM Assisting DOE with Equipment Work," provided in Section [4.01.01](#) of this chapter, the operator may make other minor repairs, but not modifications, as needed at the discretion of their supervisor with the approval of a Field Mechanic, Shop Supervisor, or District Shop Superintendent.

Equipment which cannot be returned nightly to the Maintenance station must be parked in a safe place and be locked. Valuable parts are not to be left unprotected if easily removable from the equipment.

4.06 Transferring Equipment

To ensure that equipment is used to the maximum extent possible and to meet usage goals, districts shall move equipment within their own district (intra-district), between other districts (inter-district), and to other State agencies when needed in accordance with established procedures.

Utilizing the Motor Pool Module of Fleet Management dispatching between districts and other Divisions may be arranged by the districts. A Smartsheet request shall be completed for each permanent transfer. The DEMs of the districts involved may handle inter - district movement of equipment. The local Shop Superintendents must be told of permanent transfers of equipment so proper location code changes can be made.

The DOM Statewide Equipment Manager can assist on inter - and intra - district moves and may be involved in movement of equipment that involves DOM and other governmental agencies. Rental of equipment to or from other governmental agencies should be accomplished through use of an Intergovernmental Service Agreement (Form STD. 13A) and Invoice.

4.07 Amber Warning Lights

Warning lights shall be provided for Maintenance vehicles which are routinely operated on the traveled way at lower traffic speeds and are not equipped with arrow boards. (Reference: Caltrans Safety Manual and Volume 1, Chapter 8 of the Maintenance Manual). If rental vehicles are required to be used for Maintenance forces, all rental vehicles shall also be equipped with the proper warning lights.

Amber warning lights shall not be turned on when deadheading at prevailing speeds.

Units not regularly engaged in operations requiring amber warning lights may occasionally need portable amber warning lights not permanently mounted on the vehicle. These “plug-in” units will be supplied by the local Equipment Shop with a proper Local Request (LR). Amber warning lights of this type will be supplied at the expense of the operating unit and will become its property. The LR must include the charge district, unit, and E-FIS Project ID. All LRs for portable amber warning lights for Maintenance will be approved by the DEM. The local Equipment Shop will provide a dollar estimate for installation and associated costs, prior to approving the LR.

4.08 Red Warning Lights

Red warning lights are permitted only on an “authorized emergency vehicle” defined in Section 165 of the California Vehicle Code.

Caltrans’ vehicles classified as “emergency” are those complying with Section 165 of the California Vehicle Code.

4.09 Cost Responsibility - General

In general, DOE will furnish all typical motor vehicles and construction equipment. This equipment should be complete with accessories, devices, or services that are standard, ordinarily used, or legally required, and are provided as necessary in the operation of the unit. Available equipment units are in the Equipment Catalog, along with a list of optional equipment.

4.10 Local Request - Review

Districts shall comply, to the extent fiscally and operationally feasible, with the latest policies and procedures when unusual working conditions require special devices, accessories, or modification to units.

The requesting department shall provide appropriate charge codes to the Shop Superintendent for Local Request (LR) work.

When an item not listed in the catalog is requested, follow the approval process as outlined on Figure 4-1. All improvements or modifications become the property and repair responsibility of DOE, with the exception of items defined as “plug ins” as in Section 4.07.

Improvements or modifications are sometimes required due to changes in the industry, or to enable a Mobile Fleet unit or its components to perform the functions for which they were originally intended. Examples of such improvements include larger engines, improved suspension, and retarder retrofits. Improvements or modifications are subject to the approval process. There shall be no improvements or modifications made to Mobile Fleet equipment except by DOE employees or approved vendors, unless authorized by the Shop Superintendent or DOE, as appropriate.

All Requests for improvements or modifications to Mobile Fleet equipment from the operating Divisions must be supported by a properly justified and approved request with an appropriate E-FIS Project ID and E-FIS Reporting Code.

Any improvement or modification option requested for a Mobile Fleet unit that would require a Maintenance Class Number change shall be done with the concurrence of the Statewide Equipment Manager, DOE, Office of Shop Operations, Field Liaison, and Office of Fleet and Business Services prior to the work being accomplished.

Figure 4-1 is a matrix that illustrates the responsible parties and appropriate actions to be taken when requesting modification or improvement of Mobile Fleet equipment.

Figure 4-2 is the LR Process Flow Chart which can be found in the DOE Shop Operations Handbook: 3. Equipment, provided in Section [4.01.01](#) of this chapter.

Requests to Modify or Improve Mobile Fleet Equipment

ITEM/SITUATION	UNIT/ACTION
Requests to retrofit Mobile Fleet units. With options listed in Equipment Catalog	<ol style="list-style-type: none"> 1. DEM makes initial review and/or recommendation. 2. DEM discusses with Shop Superintendent. 3. Shop Superintendent provides estimates, recommendations and pursues needed approvals with DOE. 4. DOE determines the delegated authority of the Shop Superintendent.
Requests for non-catalog options, or improvements.	<ol style="list-style-type: none"> 1. DEM makes initial review and/or recommendation. 2. DEM discusses with Shop Superintendent; proper charge is determined. 3. Shop Superintendent provides recommendations, estimates, and pursues needed approvals with DOE. 4. DOE determines the delegated authority of the Shop Superintendent.

Figure 4-1: Requests to Modify or Improve Mobile Fleet Equipment

There shall be no modifications or improvements of Caltrans Mobile Fleet equipment that is nearly obsolete or nearing replacement unless legally required to keep the unit in operation.

Any repair work done on district owned non-Mobile Fleet or Maintenance equipment such as lawn mowers, small pumps, and chain saws is not the responsibility of DOE and shall be arranged by Maintenance through private vendors or other means.

There shall be no modifications or additions made to Caltrans Mobile Fleet by Caltrans Maintenance employees unless approved by DOE, or as delegated to the Shop Superintendent and DEM.

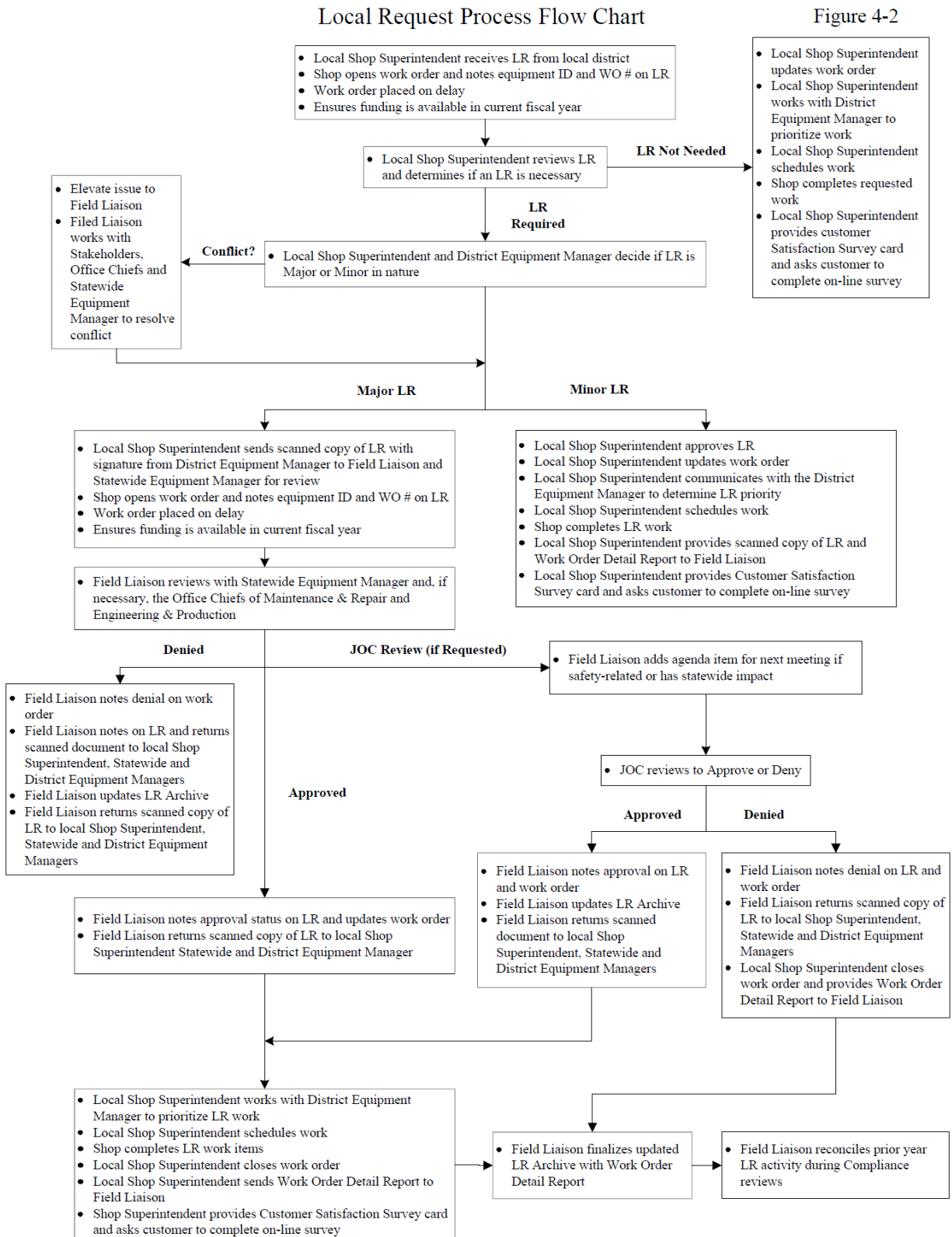


Figure 4-2

Figure 4-2: Local Request Process Flow Chart

4.11 Lost or Stolen Accessories

The cost or replacement of lost or stolen accessories or loss due to theft, vandalism, abuse, or neglect while such equipment is in the possession of a district shall be charged to the Division.

Disciplinary action may be taken when damage or loss is a result of operator's negligence or abuse.

4.12 Changes in Location of Accessories.

Accessories and equipment that are the property of DOE are not to be altered or moved from one vehicle to another without first complying with requirements of Section 4.10.

4.13 Repair

One of the main functions of DOE is to perform all necessary repairs to equipment. These repairs will be made promptly by one of the DOE shops, or the shop may give authorization to have the work accomplished in a suitably equipped commercial shop. For minor repairs, authorization may be given to Maintenance Division employees to perform the work.

A Shop Superintendent of Equipment has authority to request release of equipment for repairs when, in their opinion, the equipment should be removed from service to prevent progressive mechanical damage. During an emergency, an Equipment Shop Superintendent may permit continued use of equipment despite this damage if a district is unable to make satisfactory substitution.

4.14 Inspection of Steam Boilers and Unfired Pressure Vessels

Every steam boiler or unfired pressure vessel must be inspected at designated intervals if it is over six (6) inches in diameter, has a holding volume of more than one- and one-half cubic feet, or operates at more than 30 pounds pressure per square inch. The inspector must have a certificate of competency issued by the Department of Industrial Relations, Division of Industrial Safety.

Steam boiler and unfired pressure vessel inspections on Mobile Fleet are to be handled through DOE. Districts are responsible for all other steam boilers and unfired pressure vessels and shall ensure that these inspections are done.

Operators shall drain air tanks completely of accumulated moisture at least once during each shift of operation. Air brake reservoirs must be drained to remove moisture and contaminants, even when a tank is equipped with an air dryer.

To ensure the proper function of one-way check valves on dual brake system, tanks must be drained in the following order:

- 1) Supply (wet) reservoir
- 2) Front service reservoir
- 3) Rear service reservoir

Drain each completely before closing drain valve and proceeding to the next. If any reservoir is empty when a valve is first opened (with engine off and system charged), the brake system may be defective. Notify supervisor or Equipment Shop staff before further operation.

4.15 Overweight or Oversize Loads

State equipment carrying overweight or oversize loads must carry a transportation permit authorizing the movement. Annual permits for Maintenance and other Divisions can be obtained through the Office of Commercial Vehicle Operations and Permits.

4.16 Fire Extinguisher on Equipment

- Fuel trucks, paint strippers, and asphalt kettles shall be equipped with a 20: BC rated dry chemical or carbon dioxide fire extinguisher.
- Any truck or truck-tractor used to transport hazardous materials shall be equipped with a fire extinguisher having a rating of 10: BC or more.
- Any truck or tractor-trailer combination exceeding 40 feet in length will require a fire extinguisher having a rating of 5: BC or more.
- Any 3-axle truck will require a fire extinguisher having a rating of 5: BC or more.
- Any truck or bus used primarily for hauling seven (7) or more employees to and from the job site will require a fire extinguisher having a rating of 4: BC or more.
- All tow trucks will require a fire extinguisher having a rating of 4: BC or more.
- All certifiable mobile cranes shall have a fire extinguisher rating of 5: BC or more, readily accessible to the operator station.
- All personnel lifts shall be equipped with a fire extinguisher having a rating of 5: BC or more, located in the truck cab.
- Fire extinguishers are required to be visually inspected during pre-op inspection by the operator. They should be serviced and tested annually. Functional units are responsible for the service and testing costs.
- Alternate equivalent protection shall be provided when portable extinguishers are removed from service for maintenance and recharging.
- Where portable extinguishers have been provided for employee use in the workplace, an educational program shall be provided by the functional unit to familiarize employees with the general principles of fire extinguisher use, and firefighting hazards.

4.17 Use of State Vehicle

The State Administrative Manual, section 4109, requires that State employees who store State vehicles at or near their residences on a frequent basis (as defined by CCR, Title 2, Section 599.808(d)) must have a Home Storage Permit.

For additional information related to the use of State vehicles, refer to DD-111-R2: Use of State Vehicles, DD-28-R4: Vehicle Home Storage Permits and DOE Use of State Vehicle Guidelines provided on the DOE intranet page.

4.18 Rental of Non-State-owned Equipment

When equipment is not available from within Caltrans, the DEM is required to make the effort to obtain equipment from another governmental agency prior to renting from a non-governmental source.

Any rental equipment must meet the minimum safety requirements established by Cal/OSHA.

Authority to rent equipment is delegated to the districts in conformance with the following procedures:

- 1) Equipment is not within immediate area
If needed equipment is not available in the immediate area, notify the DEM, who will look for the units within the district.
- 2) Equipment is not within the district
If the equipment is not available in the district, the DEM shall look statewide for Caltrans equipment or for equipment from other governmental agencies. The DOM Statewide Equipment Manager will assist in this search.
- 3) Equipment not within Caltrans or other governmental agencies
If the equipment is not available within Caltrans or other governmental agencies using district procedures, an equipment rental contract may be prepared, or the DEM may use their Equipment Rental CAL-Card. Every effort should be made to obtain rented equipment un-operated. The contract should include a justification that indicates the efforts made to obtain equipment either through Caltrans or another government agency. The contract should also include an approval signature by the DEM.

DOE is not responsible for any repairs to rented equipment. Transporting and repairs of the equipment should be included in the contract and provided by the rental agency.

There are two basic principles involved in considering use of contract equipment:

- (1) Use Caltrans or other governmentally owned equipment whenever it is reasonably available for maintenance work.
- (2) Do not rent operated equipment to do work that is the normal function of Maintenance employees.

When looking for needed equipment, always work through your DEM, who will make the required contacts.

Equipment rental contracts should not be requested for the rental of haul trucks to haul materials such as asphalt concrete, cinders, sand, and aggregate. Such materials purchased from a vendor should be delivered by the vendor, or by State Forces utilizing State owned equipment. Vendor delivery is generally the preferred approach.

An emergency condition is defined as an unforeseen happening or situation requiring prompt action to protect the health, safety, and welfare of the maintenance employees and the public. Emergency work is defined as remedial measures required to; immediately avert, alleviate, repair, or restore damaged property having a public and State interest.

An emergency condition, however, does not relieve Caltrans of the requirement to look at its equipment as well as that of other governmental agencies prior to obtaining an outside rental.

A copy of all equipment rental contracts shall be forwarded to the DOM Statewide Equipment Manager.

Equipment rental should be minimized whenever possible through proper scheduling of work and sharing of equipment.

4.19 Towing Equipment

No equipment shall be towed on the traveled way at road speeds when the weight of the towed unit is more than the towing vehicle, unless the towed unit is equipped with brakes controlled by the towing vehicle. The drawbar or chain length shall not exceed 15 feet, and the vehicle cannot be towed with a chain beyond the nearest exit from a freeway. (California Vehicle Code. §§ 29004-29006.).

4.20 Maintenance Equipment Training Academy

The Maintenance Equipment Training Academy (META) is the Caltrans Equipment Operator training program located at McClellan Park in Northern California.

All Caltrans Maintenance personnel whose duties include operation of equipment, and their supervisors, are required to attend the training facility and learn the fundamentals for the proper inspection, preventive maintenance, service, and operation of Caltrans equipment. The training program includes a mix of classroom, laboratory, and “hands on” equipment operating time.

4.21 Equipment Budget

DOE Headquarters is responsible for the preparation and submission of the Fleet Acquisition Plan (FAP) and District Equipment Budget, including Maintenance.

During the creation of the FAP, each District shall complete a self-supporting justification for each addition, upgrade, or downgrade, change in mix, or replacement request. There may be special exemptions or justifications needed (e.g. Air/Water Quality Districts).

In addition, the following shall be accomplished before submitting a budget item:

- 1) Identify all units of equipment previously requested and approved that are in process or already purchased but have not yet been received in the district. Forward a copy of this list to the Headquarters DOM.
- 2) Fully describe the circumstances that have created the need for upgrade, change in mix, or additional equipment, including the estimated dollar and person year savings, and potential change in rental costs. Include a justification why the equipment meeting replacement criteria is necessary to complete duties.
- 3) The DEM should consult with the Maintenance Deputy District Director and Maintenance Region Managers regarding the equipment needs for Area Superintendents, based on the number and types of equipment required to effectively accomplish the total workload. This should take into consideration the Area Superintendent's present equipment inventory, equipment "in process" but not yet received, units predicted for disposal, and district and Headquarters pool units available on a loan basis. This process should separate true "needs" from "wants."
- 4) Permanent transfer of low usage units and increased sharing within the district shall be considered before a request for equipment is submitted.
- 5) Question each special attachment or feature to be provided with a requested unit. Anything added increases initial cost and may require a larger vehicle, thereby further increasing initial cost, operating cost, and fuel consumption. Offsetting benefits should be quantified whenever possible.
- 6) Consult with the District Shop Superintendent regarding how special features will affect the size and weight of requested units. Avoid requesting larger units not compatible with the existing fleet.
- 7) Requests for equipment which are found to be incomplete and/or lack justification will be disapproved in the FAP process
- 8) Comply with any other FAP instructions used by DOM and DOE.

All Mobile Equipment, except in very rare cases, shall be ordered from the Caltrans Equipment Catalog in accordance with DGS and Caltrans procurement procedures. See the Caltrans Acquisition Manual, available on the DPAC web site provided in Section [4.01.01](#) of this chapter, for details.

4.22 Parking

No vehicle shall be left by the driver without first engaging the transmission into the lowest gear, unless otherwise instructed in the operator's manual. In the case of some automatic transmission equipped vehicles, put vehicle into park, apply the parking brake, and shut off the engine. Dozer blades, log grapples, tongs, and buckets on front end loaders, elevating dump bodies, and other components capable of vertical movement by gravity shall be lowered to the ground, blocked, or set on a solid support when the machine is parked. Such components shall be mechanically locked or securely blocked to prevent movement before employees are permitted to perform any work on them.

The use of chock blocks with vehicles other than aerial lift units is an option of district management. Those districts that have an established chock block policy shall supply and use the standard chock blocks for their vehicles. All new vehicles coming into service will have chock block holders. These are to be installed by the Division of Equipment using the Local Request procedure as outlined in Section 4.10.

4.23 Operator Qualification

Operator qualification testing and training is administered by META. Qualification modules exist for most equipment in the Caltrans fleet.

Equipment for which modules exist can only be operated by qualified and properly licensed operators. Equipment for which modules do not exist can be operated if the operator is properly licensed, trained, and has the proper position classification.

The Qualification Program includes time for training to prepare for the required testing.

4.24 Abnormal Equipment Failure

Guidelines and reporting information procedures can be found on form DM-E 253 (Rev. 1/2003), Abnormal Equipment Failure Report. The identification of the failure can be made by Maintenance or DOE. However, the record of discovery on form DM-E 253 will be signed off by both the District Shop Superintendent and the DEM.

It is the responsibility of the DEM to consult with the functional unit manager to pursue the investigation and report findings.

The Deputy District Director, Maintenance has the responsibility to pursue the investigation and report the findings to the Chief, Division of Maintenance.

These guidelines supersede all previous directions and/or policy and procedures.