

**CALIFORNIA DEPARTMENT OF TRANSPORTATION
DUTY STATEMENT**

<u>CLASSIFICATION TITLE</u>	<u>DISTRICT/DIVISION/OFFICE</u>	
TRANSPORTATION ENGINEERING TECHNICIAN	02/MAINTENANCE & OPERATIONS TRAFFIC MANAGEMENT	
<u>WORKING TITLE</u>	<u>POSITION NUMBER</u>	<u>EFFECTIVE</u>
TRANSPORTATION ENGINEERING TECHNICIAN	902-367-3175	

As a valued member of the Caltrans team, you make it possible for the Department to improve the mobility across California by being innovative and flexible; working cooperatively with team members and others; and treating others fairly, honestly and with respect. Your efforts are important to each member of the team, as well as those served by Caltrans.

GENERAL STATEMENT:

Under the direction of the Sr. Transportation Engineer of Traffic Management, the lead Census Technician, and with functional direction from the Traffic Management Center (TMC) lead operator, this position performs a combination of duties primarily as a Census Technician for the District 2 Census Program as well as a night shift operator for the District 2 TMC during winter storms. Census duties include but are not limited to: meeting Caltrans and Federal traffic count requirements; providing accurate count data; processing, analyzing, and correcting collected count data; maintaining a high level of count station health; and providing special counts as needed. Traffic Management Center duties include but are not limited to: monitoring, evaluating and managing rural highway and freeway system operations; minimizing delay caused by non-recurrent congestion; and providing timely and accurate in-route traveler information. Possession of a valid Class C driver's license is required.

TYPICAL DUTIES:

- 50% (E) Works with lead Census Technician in producing, maintaining and future development of the District's Traffic Census Program. Completes traffic counter set-up and retrieval (which sometimes requires overnight travel). Uses various equipment including traffic van, generators, laptop computers, counters, count hoses, electrical testing devices, hand tools, etc. Analyzes and submits accurate count data through CT database to HQ on schedule. Conduct special traffic counts. Responds to requests for traffic data in a timely manner. Files and compiles traffic census data. Conduct and attend safety meetings and ensure compliance with departmental policies and procedures. These duties are typically split approximately ½ field and ½ office work.

- 30% (E) Works as an operator in the District 2 Traffic Management Center (TMC), primarily during winter storms on the night shift. Monitor and analyze real time traffic and highway data through the Districts CCTV's, RWIS's, CHP CAD, CHP Radio, Caltrans Dispatch and other inputs. Prepare and disseminate timely and accurate Traveler Information messages on various TMC devices such as changeable message signs and highway advisory radios. Coordinates with District Dispatch, CHP, and other Caltrans and State TMC's. Operates various equipment and software in the Transportation Management Center such as SOCCS, HAR software, District weather information system, CHP Computer Aided Dispatch (CAD) System, telephone, fax and 2-way radio system. Does simple engineering calculations to determine delay to traffic. Maintain written and electronic records of TMC activities and highway conditions; maintain log of messages sent and received; and provide reports on highway conditions to District Office personnel, Headquarters and the general public. Perform general clerical duties such as typing, distributing documents, answering telephones, taking messages, filing and processing reports.

Transmit and receive TMC activities and highway condition information to/from Headquarters, CHP Dispatch Centers, other DOT's and other Districts utilizing fax machines, e-mail and the CHP CAD (computer aided dispatch) regarding closures, one-way traffic controls and critical incidents. Activities could require after hour call outs.

15% (M) Uses engineering and computer-oriented processes to compile data for the design, construction, alteration, maintenance and operation of a wide variety of transportation engineering projects; analyzes engineering data; gathers traffic data; may assist in the preparation and review of special studies, designs, plans estimates, reports and specifications for all types of highway and bridge projects, especially in regards to traffic census installations and repairs. Review and inspect encroachment permit work pertaining to traffic monitoring facilities. Respond to public inquires related to traffic count data.

5% (M) Works as an operator in the District 2 Traffic Management Team (TMT). Operates and transports TMT equipment. Performs traffic operational activities including surveillance and incident response. Maintain written and electronic records of TMT activities. Transmit and receive TMT activities and highway condition information to/from Headquarters, CHP Dispatch Centers, other DOT's and other Districts utilizing fax machines, e-mail and the CHP CAD regarding closures, one-way traffic controls and critical incidents. Activities could require after hour call outs.

SUPERVISION EXCERCISED OVER OTHERS:

This position does not supervise other employees.

KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS:

- Knowledge of electrical and electronic theory as applied to the design and construction of highway and traffic monitoring systems and instrumentation for physical testing and research.
- Knowledge of modern traffic monitoring equipment and apparatus, including manual and traffic activated.
- Knowledge of effects of weather and time on electrical and electronic equipment and traffic monitoring systems.
- Knowledge of principals and practices of traffic engineering as they apply to traffic monitoring systems.
- Knowledge of computer aided drafting and design.
- Knowledge of engineering and highway design principles including interpretation of plans and specifications.
- Knowledge of computers and their use, including Microsoft Word, Access, Excel, and other Windows, DOS, and mainframe based programs.
- Knowledge of engineering mathematics.
- Knowledge of the Department's safety and health policies and procedures, including the California Code of Regulations, Title 8 Industrial Regulations, Safety Orders, Code of Safe Practices, and Safety Manual.

- Ability to read and write English at a post high school level. Must be able to articulate program policies and goals to management, staff, and the public. Could be required to advise management of program status, issues and needs. Must be able to communicate effectively and tactfully. Must possess sound techniques for handling sensitive issues.
- Class C driver's license required.
- Ability to follow directions and work independently. Correspond effectively, orally and in writing, with other Caltrans functional offices, local agency people, and general public. Inspect the construction and operation of highway facilities and recommend improvements. Read and understand difficult and complex highway plans, drawings, and field data. Analyze situations accurately and recommend an effective course of action. Establish and maintain cooperative relations with those contacted through daily work activities. Correlate plans, designs, drawings, and data with physical conditions. Inspect the installation and operation of highway loop detectors and recommend revision. Assists in preparing plans and making accurate engineering calculations.

CONSEQUENCE OF ERROR/RESPONSIBILITY FOR DECISIONS:

Errors in judgment, analysis, actions, conduct, directions and decisions could result in inefficient use of resources, employee injuries and death, injuries and death to members of the general public, loss of individual and departmental credibility, poor employee moral and affect the ability of Caltrans to deliver its work program on schedule.

PUBLIC AND INTERNAL CONTACTS:

Contact with the public will be minimal and primarily through telephone conversations and written contact. This position will require contact within the District and Region, including Permits Office, Project Development, Construction, Right of Way, Planning, Environmental Planning Office, and Maintenance. Some contact will be required with local government, City, County and private consultants concerning plan reviews, cooperative agreements on various projects. Contact with Headquarters Traffic Operations will be required on a regular basis.

PHYSICAL, MENTAL AND EMOTIONAL REQUIREMENTS:

Incumbent will be required to use personal computers in office and field settings for long periods of time. Physical activities will include extensive field work, repetitive lifting of up to 20 pounds, infrequent lifting of up to 80 pounds, walking on uneven ground, bending and stooping, light construction type activities (including digging) and frequent driving and sitting for long periods. Field duties occur during all times of the year, including below freezing winter in snow and above 100 degree summer periods.

Incumbent will be required to place traffic count hoses in live lanes of traffic and must be able to quickly and safely bend in the live lane to secure hoses while being aware of approaching traffic.

Incumbent will be required to sustain mental activity needed for report writing, problem solving, researching, analysis and reasoning, and participating in meetings.

Incumbent will be required to develop and maintain cooperative working relationships; respond appropriately to difficult situations; recognize emotionally charged issues or problems; and display empathy to others.

Employee must have the ability to refrain from insubordination, follow supervisor's instructions, "get along" with supervisors and co-workers, avoid violent behavior, understand and follow Caltrans policies, and avoid disruptive or harassing behavior.

WORK ENVIRONMENT:

At their base operation, incumbent will work in a climate-controlled office under artificial lighting. Incumbent will also be required to travel and work outdoors and will be exposed to dirt, chemicals, noise, highway and freeway traffic, uneven surfaces, extreme heat, extreme wet conditions and extreme cold. In these work environments the incumbent will be required to traverse office complexes, parking lots, equipment repair shops, highways, sidewalks, roadside cut and fill slopes, and drainage facilities.

SIGNATURES:

I certify that I can perform the duties listed above with/without reasonable accommodation.

EMPLOYEE

DATE

I have discussed with and provided a copy of this duty statement to the employee named above.

SUPERVISOR

DATE