

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Transportation Engineering Technician	OFFICE/BRANCH/SECTION Dist 1 - Traffic Operations	
WORKING TITLE	POSITION NUMBER 901-350-3175-	EFFECTIVE DATE May 2016

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

GENERAL STATEMENT:

Under the direction of a Senior Transportation Engineer, the Transportation Engineering Technician will provide support for and assist in performing difficult transportation engineering work including traffic investigations, traffic management plans, draft reports, conduct traffic counts, will install, remove, repair and maintain, adjust and calibrate various types of microprocessor based traffic data collection equipment; collect and evaluate traffic data; prepare written responses and reports transmitting traffic data.

TYPICAL DUTIES:

Percentage		Job Description
Essential (E)/Marginal (M) ¹		
35%	E	Collect traffic flow and accident data; analyze traffic flow and operation; assist in the preparation of traffic plans. Assist in Safety Investigations. Installs, upgrades, replaces, and removes various types of electronic signal equipment and traffic data collection and retrieves the appropriate data as necessary from them.
25%	E	Independently assesses field problems associated with the equipment and recommends solutions. Adjusts and calibrates various types of microprocessor based traffic data collection equipment in the office or field. Repairs and maintains various types of microprocessor based traffic data collection equipment in the office or field.
10%	E	Assists in performing or at times conducts field investigations, studies physical characteristics of intersection, channelization and other traffic movement areas and collects engineering data.
10%	E	Provides assistance, consultation and technical support to Construction, Maintenance, Permits, Traffic Safety, Legal, Project Development, Planning, and other Caltrans functional offices, local agencies and general public responding to complaints regarding traffic operations.
15%	E	Performs movement counts for signal warrant analysis, and left and right turn channelization analysis. Performs counts of bicycles and pedestrians on the State highway system. The data is then processed and provided to traffic or design engineers for analysis.
5%	M	Reviews proposed projects and field reports; analyzes traffic flow and accident data and determines when traffic signals, and other electrical systems are justified. Provides input for Project Study reports.

¹ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.

MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others.

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

None

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Basic knowledge of traffic engineering principles, mathematical formulas and calculations; use of various types of traffic data collection equipment; use of personal computers and their programs (i.e. Windows, spreadsheet, data base and data communications programs). Working knowledge of the California Vehicle Code, Manual on Uniform Traffic Control Devices, and the Standard Plans and Specifications. Knowledge of electronics as applied to Model 334 controller cabinets, various traffic data collection equipment and design of traffic monitoring stations; inductive loop detector theory and practice; use of piezo-electric axle sensors; use of various types of electronic test equipment; must communicate effectively, both verbally and in writing, and work successfully with others. Demonstrated capacity for assuming increasing responsibility. Must be able to regularly work adjacent to high-speed traffic for significant periods of time, work

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independently and function under the Traffic Operations Code of Safe Practices.

Must be able to support and assist in traffic investigations and provide data and technical input on the associated reports and recommendations.

Must be able to evaluate and ascertain validity of collected traffic volumes, speeds and classifications, and analyze problems associated with traffic data collection.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The consequences of gathering incorrect data could be the inaccurate calculation of the Annual Average Daily Traffic (AADT), accident rates, Traffic Indices (T.I.), Vehicle Miles of Travel (VMT) and freeway/highway design, erroneous conclusions in signal warrant analysis and channelization analysis. Uncorrected mechanical or electrical failures, or lack of working equipment could adversely affect programs schedules and create additional costs.

PUBLIC AND INTERNAL CONTACTS

Contact with other groups is required in this job. Contacts are with additional Caltrans functional units such as Legal, Construction, Maintenance and Operations as well as with other public agencies.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent will be required occasionally to repeatedly lift equipment up to fifty pounds. The incumbent will be required to sit for extended periods operating a personal computer and perform outdoor engineering fieldwork that may require walking on steep slopes. It is important that employee works with others in a cooperative manner. May be subject to and have the ability to handle irate public in a calm manner. Must deal with pressure; maintain focus and intensity yet remain optimistic and persistent, even under adversity. Act in a fair and ethical manner toward others and demonstrate a sense of responsibility and commitment to public service.

WORK ENVIRONMENT

The incumbent will work in a climate-controlled office under artificial lighting while at his/her base of operation. The incumbent will also be required to travel and work outdoors where exposure to traffic, noise, uneven terrain, precipitation and extremes of weather will occur. Work assignments will occasionally require overtime.

I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

EMPLOYEE (Print)

EMPLOYEE (Signature)

DATE

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

SUPERVISOR (Print)

SUPERVISOR (Signature)

DATE