

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Transportation Surveyor (Caltrans)	Design/Office of Surveys/Mapping Unit	
WORKING TITLE	POSITION NUMBER	EFFECTIVE DATE
Transportation Surveyor	907-302-3029-xxx	

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 supervision of a Senior Transportation Surveyor, incumbent will perform a wide variety of tasks related to land surveying within the Mapping Unit of the Office of Surveys in an office setting. The incumbent will be assigned complex survey activities and may function as a lead person over the activities of surveying staff and technical personnel in the office. Transportation Surveyor is assigned technical responsibility of land surveying in the office, which include activities such as Photogrammetry, Mapping, GIS and Right of Way Engineering

TYPICAL DUTIES:

Percentage		Job Description
Essential (E)/Marginal (M) ¹		
75%	E	Performs calculations, compile Record of Survey Maps, Alignment Maps, Topographic Map and Digital Terrain Model from field notes, record maps and Total Station electronic collected data. Merge and integrate Digital Terrain Model files generated by Photogrammetric and field methods. Analyze as-builts drawing, record maps, Coordinate Control Maps, Right of Way Maps, field notes and interpret legal descriptions. Reviews and check mapping products to ensure compliance with applicable Caltrans standards and specifications.
20%	E	Research is very important aspect of compiling a Record of Survey Map, Coordinate Control Map, and Alignment Map. The incumbent must be adept in performing research of available maps and records that pertains to the project. The incumbent will be responsible for researching Caltrans as-built drawings, Right of way Maps, Coordinate Control Maps, field notes, bench marks, Parcel Maps tract Maps, Record of Surveys, Title Report and other documents required to prepare various types of maps.
5%	E	Perform quality assurance and quality review of Survey Maps provided by the consultants to ensure compliance with applicable Caltrans standards and specifications.

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

May act independently or act as lead person over survey staff engaged in routine office assignments.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

A Transportation Surveyor must have a good working knowledge of the fundamentals of land surveying. This includes knowledge of mathematics and basic science as it applies to the land surveying profession. The following are knowledge, abilities, and analytical requirements necessary for this position:

- Understand the methods used in the practice of surveying as described in the Caltrans Surveys Manual.
- Knowledge of CADD programs such as Autocad(Civil 3D), Microstation, Caice, word processing and spreadsheet, Least Square Adjustment software and other CADD related software.
- Must possess basic principals and procedures as applied to fundamentals of land surveying.
- Assist with the research, verification and adjustment of survey data, and if directed, may include performing and interpreting survey calculations.
- Apply and utilize basic principles of trigonometry as used in state plane and geodetic surveying and within the California

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Coordinate System.

- Basic knowledge and understanding regarding boundary location and determination as it relates to the sectionalized U. S. Public Land System.
- Aware of the Department's responsibility to perpetuate monumentation and map existing facilities as defined in the Land Surveyors' Act and the Subdivision Map Act.
- Assist with the interpretation of preliminary design requests and construction plans.
- Posses a valid Land-Surveyor-in-Training or equivalent certificate accepted by the California State Board of Registration or graduation from a four-year curriculum in surveying, surveying engineering or surveying geometrics accredited by the Accreditation Board for Engineering Technology.
- Posses a valid California Drivers License.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

Responsible for assisting various functional units within the Office of Surveys in support of field survey staff conducting design data collection, construction staking, geodetic control, and photogrammetric control surveys. This work is required to support the Department's Capital Outlay Support (COS) program, which is responsible for the development and delivery of billions of dollars of transportation improvements. It is imperative that this work is accomplished accurately, timely, efficiently, and safely. The effects of poor decisions relating to any of these items could translate into project delays resulting in significant additional costs or claims against the State of California. Errors committed may result in redesign and costly change orders.

PUBLIC AND INTERNAL CONTACTS

External contacts may include those with other state agencies, local agencies, federal agencies, private surveyors and engineers, private citizens, consultants, and construction contractors. Internal contacts may be made throughout the Department at all levels and within all Divisions. These contacts may be verbal or written as needed to perform assignments.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

Physical

A Transportation Surveyor's normal assignments are within District 7, which includes Los Angeles and Ventura Counties. Since the Land Surveying department delivers many different work products, changes in work assignments are frequent and unpredictable. Since the physical environment is directly linked to work assignments, any or all of the following conditions may be met:

- Sitting for extended periods of time, and operate computers, plotters, scanners, and other typical office machines in a climate-controlled office setting with artificial lighting.
- Frequent, substantial or unexpected workload changes which can dictate rescheduling or reassigning of work as needed.
- Overtime may be required and vacations may be restricted as departmental workload dictates.

Mental

- Must have the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice.
- Must be able to maintain a sustained mental alertness and concentration for prolonged periods of time in the office setting.

Emotional

- Requires constant interaction with Department staff, management, and external contacts. It is important to work closely with others to develop and maintain cooperative, professional relationships.
- May be subject to interacting with emotionally upset individuals requiring the ability to handle situations such as irate public or staff in a calm and professional manor.
- Must deal effectively with pressure, maintain focus and intensity, yet remain optimistic and persistent, even while working under adverse conditions.
- Open to change; adapts behavior and work methods when presented with new ideas, changing conditions, or unexpected obstacles.
- Behaves in a fair and ethical manner toward others and demonstrates a sense of responsibility and commitment to public service, values cultural diversity and other individual differences in the workforce.

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WORK ENVIRONMENT

Primarily work in a standard cubicle workspace, in a climate-controlled office environment, in a conservative and professional work setting. Maintain a high level of professionalism, promote cooperation and unity, and show a genuine concern for work related issues and staff concerns. Should be sensitive, open, and responsive to personnel and act responsibly in their daily activities to maintain a safe and productive work environment.

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
