

M S P



MANAGERIAL SELECTION PROCESS

Caltrans strives to maintain a diverse workforce and be an equal opportunity employer to all regardless of political affiliation, race, religious creed, color, national origin, ancestry, disability, medical condition, marital status, sex, gender, gender identity, gender expression, age or sexual orientation. It is an objective of the State of California to achieve a drug-free state work place. Any applicant for State employment will be expected to behave in accordance with this objective because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and this special trust placed in public servants. TTY users can contact the California Relay Services line by dialing 711.

THIS IS A CALTRANS PROMOTIONAL EXAMINATION IN WHICH LATERAL CANDIDATES ARE ENCOURAGED TO APPLY.

EXAMINATION ANNOUNCEMENT

THIS EXAMINATION IS DESIGNATED FOR MANAGERIAL POSITIONS.

CLASSIFICATION: **SUPERVISING TRANSPORTATION ELECTRICAL ENGINEER**

POSITION TITLE: **CHIEF, OFFICE OF TECHNOLOGY**

SALARY: **\$9,866 - \$11,208**

LOCATION: **HEADQUARTERS – SACRAMENTO**

FINAL FILING DATE: **APRIL 2, 2015**

DUTIES/RESPONSIBILITIES

Under the general direction of the Assistant Division Chief of Traffic Operations, a Principal Transportation Engineer, the incumbent leads technological solutions development and standardization to implement the Division's business practices, enterprise systems, and Intelligent Transportation Systems (ITS). The incumbent leads delivery of portions of the Traffic Operations Business Plan, the Transportation Management System (TMS) Master Plan, and TMS Standardization Plan by establishing, supporting, and expanding a healthy TMS infrastructure integrated with the Department's Transportation Management Centers (TMCs) commensurate with operational needs and available resources. The incumbent provides leadership and guidance on ITS project activities ensuring deployment of a state-of-the-art, cost-effective and integrated TMS infrastructure for the operation of an integrated multi-modal transportation system for the State of California. **Responsibilities include, but not limited to:**

- Provides statewide policy, leadership and coordination to develop and maintain the Division's business, enterprise, and transportation management systems.
- Develops and implements statewide configuration management policies, plans, and priorities.

**Supervising Transportation Electrical Engineer
GK10-3156-15MSP10**

**Final File Date: 4/2/2015
Bulletin Release Date: 3/11/2015
Department of Transportation**

- Establishes, operates, and maintains configuration management software tools to manage statewide configuration during the requirements, development, deployment, operation, and maintenance lifecycle.
- Sponsors and provides leadership for statewide Transportation Management System (TMS) configuration management and steering committees.
- Provides technical review and oversight of selected major District TMS projects.
- Acts as Traffic Operations Technical Manager to Division of Information Technology (IT).
- Negotiates and manages IT related plans and project approvals.
- Participates as the Traffic Operations representative on Caltrans' IT Enterprise Standards Board (ESB).
- Sponsors, leads, and appoints membership to TMS Standards Technical Committees reporting to the ESB.
- Coordinates Traffic Operations/IT projects and activities statewide.
- Oversees staff providing technical expertise and support for evaluation, development, deployment, operation, and maintenance of statewide standard operational ITS hardware, software, firmware, systems and equipment. These systems include: traffic signals, arterial management systems, ramp meters, vehicle detection stations, changeable message signs, closed circuit television cameras, roadway weather information systems, truck weigh-in-motion systems and related field operational systems and components.
- Provides functional management of statewide TMS support activities.
- Manages traffic detection systems statewide, ensures adequate technical support is provided to the districts, monitors detection performance and health, promotes advanced detection technologies, prepares indicators and dashboards related to detection performance.
- Promotes system engineering processes in developing ITS projects and TMS support activities.
- Promotes Transportation System Management and Operations principles, processes and tools.
- Develops and maintains workload standards to support allocation and resource requirements. Recommends and monitors appropriated funds usage. Allocates personnel services dollars and contracting out resources to the districts to balance statewide requirements.
- Coordinates and prioritizes statewide contracting and procurement activities related to the maintenance and support of TMC and field operational systems.
- Develops and maintains Title 21 Specification and National Data Registry for statewide Electronic Toll Collection interoperability.
- Provides leadership and support for Traffic Operations Program management. Contributes to projects to improve business affectivity, financial stewardship, organizational effectiveness, and business priorities.
- Participates in executive leadership team to implement the Traffic Operations Strategic Plan, including efforts to increase performance-based management, partnerships, knowledge management, and the use of technology and innovation.
- Ensures staff provide for the qualification and procurement of ITS electrical and electronic equipment.
- Develops and maintains statewide standards, manuals, and operational guidelines for electrical and electronic systems including the following: Transportation Electrical Equipment Specifications, Caltrans TMS Standardization Plan, and Fiber Optic Design Guidelines; and publishes the annual TMS Inventory.
- Provides leadership, support, and training for Caltrans electrical engineers statewide. Contributes to resolution of issues affecting all Traffic Operations electrical engineering by initiating, coordinating, and supporting statewide teamwork to carry out the above responsibilities.
- Prepares correspondence, reports, and technical articles for publication and/or presentation.
- Prepares Budget Change Requests, Finance Letters, issue papers, briefs executive management, responds to Control Agency inquiries, and reviews legislative bills.

MINIMUM QUALIFICATIONS

Applicants must have a permanent civil service appointment with the Department of Transportation and meet the following qualifications by the final file date in order to participate in this examination.

Possession of a valid certificate of registration as an Electrical Engineer issued by the California Board of Registration for Professional Engineers. (Candidates who submit proof that they have applied for registration will be admitted to the examination, but must possess a valid certificate of registration before they may be appointed.) **and**

Either I

One year of experience in the California state service as a Senior Transportation Electrical Engineer (Supervisor), Senior Transportation Electrical Engineer (Specialist), or Senior Electrical or Electronic Engineer, Caltrans, performing highway electrical or electronic engineering work.

Or II

Experience: Five years of professional engineering experience, at least two years of which shall have been in supervising the planning, development, design, construction, maintenance, or operation of highway lighting, traffic control systems, and real time traffic management computer systems at a level comparable in responsibility to that of a Senior Transportation Electrical Engineer (Specialist) or Senior Transportation Electrical Engineer (Supervisor) in the California state service. **and**

Education: Equivalent to graduation from college accredited by the Accreditation board for Engineering and Technology with major work in electrical, electronic, or computer engineering or equivalent degree approved by the California Superintendent of Public Instruction under the provisions of California Education Code Section 94310. (Additional qualifying experience may be substituted for the required education on the basis of one year of experience equal to one year of education.)

KNOWLEDGE AND ABILITIES

Knowledge of: Design of highway lighting and electrical traffic control installation; electrical and electronic theory and field practice as applied to highway lighting and traffic control equipment; principles and practices of traffic engineering as they apply to highway lighting and traffic control systems; materials and construction costs and reviewing estimates for highway lighting and traffic control systems; basic occupational safety and health regulations contained in the Title 8 Industrial Relations, Electrical Safety Orders, safety and health policies and procedures as contained in the Department's Injury and Illness Prevention Program, and the supervisor's role in maintaining an effective injury and illness prevention program; principles and techniques of personnel management and supervision; the Department's affirmative action/equal opportunity and labor relations program objectives; a manager's role in safety, health, affirmative action/equal opportunity, and labor relations and the processes available to meet these program objectives.

Ability to: Coordinate statewide design of highway lighting and traffic control systems; effectively chair committee of electrical engineers organized to establish statewide electrical and electronic design standards and procurement specifications; plan and direct the work of others; establish and maintain cooperative relations with those contacted in the course of the work; analyze situations accurately and adopt an effective course of action; prepare correspondence and direct the preparation of comprehensive reports; communicate effectively; effectively contribute to the Department's affirmative action/equal opportunity and labor relations program objectives.

POSITION SPECIFIC QUALIFICATIONS/EVALUATION CRITERIA

In addition to the minimum qualifications listed above, the following position specific qualifications will be evaluated based on the candidate's demonstrated:

- Ability to build and strengthen coordination and negotiate with Caltrans' internal and external partners including other programs, districts, city, county and regional agency staff and officials, the Federal Highway Administration (FHA).
- Ability to support, promote, and ensure alignment with Caltrans' and Traffic Operations' mission, vision, goals, values, and financial constraints.

- Ability to work effectively with others as an interdisciplinary team to lead staff, inspire a shared vision and achieve successful outcomes through teamwork, professionalism, technical skill with organized work plans and effective risk management.
- Knowledge of all related national ITS standards activities such as ITS America, National Transportation Communications for ITS Protocol, and the ITS National Architecture.
- Knowledge of Caltrans transportation system management field systems and central systems.
- Knowledge of the systems engineering process and application to transportation management systems planning, design, implementation, maintenance and operations.
- Knowledge of Information Technology system development processes, policies and security requirements.
- Ability to analyze facts, data and situations, use a variety of problem-solving techniques, develop new and innovative ideas, recommend solutions for improvements, and adopt an effective course of action.

EXAMINATION INFORMATION

This examination process provides for position specific examining and selection of the most qualified managerial candidates. Job-selection criteria specific to each position and consistent with the knowledge, skills, and abilities of the classification will be applied. All candidates who meet the qualifications may compete for the vacant position. An evaluation of the Examination/Employment Application (STD. 678), Statement of Qualifications, and exam will be used to rate candidates. Only the most qualified applicants will be invited to participate in the examination. A pool of candidates will be created for the specific position identified on this bulletin. The exam will establish a list which will include the ranking of each candidate.

Candidates will be notified in writing of their examination results.

FILING INSTRUCTIONS

All interested applicants must submit:

- An original, signed State application (STD. 678), which includes civil service titles and dates of experience. The application should specify the **classification, position title, and the following MSP Number: 15MSP10**
- Faxed or emailed applications will not be accepted.
- A Statement of Qualifications is a discussion of the candidate's experience that would qualify him/her for this position. **The Statement should be no more than two pages in length and should address each of the Position Specific Qualifications listed on this examination announcement.**
- Resumes are optional and **do not** take the place of the Statement of Qualifications or completed State application (STD 678).
- "Effective January 1, 2009, Government Code Section 18991 was enacted which permits persons retired from the United States military, honorably discharged from active military duty with a service-connected disability, or honorably discharged from active duty, shall be eligible to apply for promotional civil service examinations, for which he/she meets the minimum qualifications as prescribed by the class specification. **Persons applying who qualify as a Veteran under Government Code Section 18991 must submit a copy of their DD214 with their Examination Application (STD. 678).**"

State application and Statement of Qualifications must be received or postmarked by the final file date of **April 2, 2015** Interagency mail received after this date will NOT be accepted.

The State application and Statement of Qualifications are to be submitted to:

Department of Transportation
ATTN: Barbara White 15MSP10
1727 30th Street, MS-90
Sacramento, CA 95816

APPLICANTS WHO FAIL TO SUBMIT A STATEMENT OF QUALIFICATIONS WILL BE ELIMINATED FROM THE EXAMINATION.

Questions regarding this examination process should be directed to Barbara White at (916) 227-7513.

ELIGIBILITY INFORMATION

This examination **will not** establish a civil service list; therefore, candidates **will not** have the ability to transfer their eligibility to other departments.

REASONABLE ACCOMMODATION

If you have a disability and wish to participate in one of our testing services, programs, or activities and require a specific accommodation, please mark the appropriate box for Question #2 on the Examination and/or Employment Application form. You will be contacted to make specific arrangements.

For individuals with disabilities, this document may be available upon request in alternate formats. To obtain an alternate format, please write to Caltrans, Office of Examinations and Special Programs, 1727 30th Street, MS-90, Sacramento, CA 95816 or contact us by phone at (916) 227-7858. TTY users contact the California Relay Service at 711.