

Summary of Duties : Performs professional engineering work in investigating and analyzing street traffic conditions to determine appropriate control measures; reviews street improvement plans to determine need for traffic control devices and prepares plans, specifications, and estimates for the installation of traffic signal systems and channelization; performs transportation planning studies to determine the impact of land use and transportation system changes; performs traffic research studies to evaluate existing and proposed traffic control measures and methodologies; and does related work.

Distinguishing Features : Transportation Engineering Assistant is the entry-level professional traffic engineering class. Although a Transportation Engineering Assistant works under close supervision, an employee of this class is given important assignments relative to the investigation of traffic conditions, the determination of need for traffic control devices, and the preparation of plans and specifications for the installation of traffic signal systems and channelization, the determination of street system impact of proposed land development and transportation projects, and the design and implementation of traffic research studies.

A Transportation Engineering Assistant's work differs from that of a Transportation Engineering Associate in that the latter has broader responsibility for planning and organizing the work of other traffic engineering employees and for making decisions and preparing recommendations as to methods of traffic control. An employee of this class may be assigned to design working plans, material lists, and specifications for traffic signal installations, or for striping channelization and other changes in the physical elements of streets and highways. An employee of this class may be assigned to projects involving the use of computer models in the simulation of traffic flow and long range forecasting of street traffic volumes. In carrying out these assignments, a Transportation Engineering Assistant may delegate detailed phases of the work to subprofessional transportation engineering employees.

Examples of Duties : Makes surveys and investigations of a large variety of complaints and requests received from the public, such as requests for traffic signals, stop signs, and other traffic control devices; directs Transportation Engineering Aides in gathering data to determine the need for loading zones, parking prohibitions, time limit parking, crosswalks, and other traffic control devices; contacts complainants, and inspects locations of problems to observe physical and traffic flow characteristics, and reviews traffic count and vehicle speed data; determines need for control and most appropriate control measures and devices; prepares formal reports outlining problems and including specific recommendations; prepares traffic signal timing charts for new and existing signal systems; assists in the implementation of traffic control plans for special events; schedules, coordinates and evaluates work performed by field

construction, maintenance, shop and laboratory personnel.

Reviews street improvement plans to ascertain need for traffic signals and warning, guide, and regulatory signs; recommends that investigations be made to obtain specific data regarding traffic conditions in areas concerned; prepares plans and specifications for the installation of traffic signal systems and other regulatory traffic devices; supervises preparation of design drawings of signal hardware, channelization striping, raised traffic islands, curb setbacks, and realignment of roadways; prepares material lists and cost estimates for major traffic signal installation projects.

Performs the more routine professional traffic engineering duties in evaluating statistical data obtained from parking and traffic surveys; assists in studies which are preparatory to recommending the acquisition, location, financing, operation, construction, and maintenance of off-street parking facilities; takes charge of, and is responsible for, specific portions of an assigned project; may contact local businesses and groups to obtain specific information; assists in the preparation of reports of activities; and may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications : A good knowledge of the principles and practices of transportation engineering, together with the ability to apply them to specific problems related to traffic congestion and safety; a working knowledge of the uses of various traffic control devices; a working knowledge of the State and City traffic laws and regulations pertaining to traffic control; a general knowledge of the principles of design of the physical facilities for controlling traffic movements; general knowledge of statistical procedures used in the compilation of graphic and tabular reports of traffic data; the ability to plan and lay out the work of a small group of subprofessional transportation engineering employees; the ability to make sound analysis of transportation problems on a basis of personal observations and facts presented by subordinates; the ability to prepare working plans and drawings for traffic signal installations and the construction of channelizing islands; the ability to write clear and concise reports of findings in traffic investigations and recommendations for control measures; and the ability to deal tactfully and effectively with the public, civic groups, representatives of business firms, and employees; the ability to verbally communicate clearly with fellow employees, agency representatives, and the public.

Graduation from a school of engineering in a recognized four-year college or university with a degree in engineering which includes at least 9 semester units or 12 quarter units of Transportation Engineering and/or Computer Science courses; or possession of an Engineer-in-Training Certificate issued by the California State Board of Registration for Professional Engineers is required for Transportation Engineering Assistant.

License : A valid California driver's license is required prior to appointment.

Physical Requirements : Strength to perform average lifting of least 15 pounds and occasionally over 25 pounds; good speaking and hearing ability; good eyesight, and the ability to perform moderate walking field assignments and extensive driving assignments.

Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positions in this class. Such determination must be made on an individual basis in light of the person's limitation, the requirements of the position, and the appointing authority's ability to effect reasonable accommodations to the person's limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what the duties and responsibilities of any position shall be.