Summary of Duties: Performs difficult and responsible professional transportation engineering work; serves as a division head; or directs the activities of a major bureau of the Department of Transportation; and does related work.

Distinguishing Features: A Senior Transportation Engineer has considerable responsibility for administration, as well as the solution of complex transportation engineering problems. An employee of this class has responsibility for the supervision of subordinate engineers, drafting technicians and engineering aides, and may be assigned to direct and coordinate the work of craft supervisors, journey-level workers, and helpers. Assignments are usually received in general terms, and the detail work involved is normally delegated to subordinate personnel. Solution of many problems requires coordination with other government agencies, City departments, and private concerns. An employee of this class reports directly to a Principal Transportation Engineer and receives supervision through conferences and review reports.

A Principal Transportation Engineer is distinguished from lower levels by greater responsibility for administration and solution of more complex transportation engineering problems. Assignments are in general terms. An employee of this class directs the activities of a major bureau and reports to and assists the Assistant General Manager in the development of departmental policies and procedures. Principal Transportation Engineers develop procedures and policies for the bureau under their supervision. The work of these employees is normally subject to executive review and evaluation.

Examples of Duties: A Senior Transportation Engineer plans, directs, and coordinates the activities of a division in the Department of Transportation; directs the work of subordinate engineers in preparing designs, specifications, cost estimates, and recommendations in connection with the installation of facilities to reduce traffic hazards and congestion and manage parking, including one-way streets, traffic signals, street and curb markings, regulatory warning and guide signs, safety lighting, channelization islands, and other traffic and parking control devices; directs the review of street and freeway system plans for potential traffic hazards or congestion areas, and reviews recommendations for their correction.

Coordinates the work of a district office; directs experimental work in the development, improvement and testing of materials and equipment; directs the requisition, storage and issuance of supplies and equipment; inspects a district office and yard and recommends improvements; confers with representatives of other governmental agencies, City Departments, civic organizations, private concerns and individual citizens concerning traffic problems.
Directs the establishment of records and filing systems; directs the preparation and maintenance of a variety of maps; directs the preparation of budget estimates; reviews a wide variety of reports; prepares complex, technical engineering reports; and represents the Department before the City Council Committees and in meetings with various agencies.

A Principal Transportation Engineer develops and administers policies, technical standards, and procedures for a major bureau in the Department of Transportation; prepares or directs the preparation of work programs, cost control procedures, and budget estimates; participates in the planning for development and expansion of major traffic engineering projects and makes recommendations as to technical and economic feasibility of alternate plans; confers with other bureau heads, City departments, consulting engineers, private citizens, civil organizations and other governmental agencies on planning, design, construction, and procedural traffic engineering problems; prepares technical recommendations and monitors contracts, agreements, ordinances and bills; appears in court and before legislative bodies as an expert witness; and represents the Department on policy matters before City Council and various committees and agencies.

Aids the Assistant General Manager in the development of standard operating policies and procedures; coordinates the work of several divisions within the Department of Transportation concerned with the installation, maintenance, and repair of traffic control devices; and administers experimental work programs for the development, improvement, and testing of materials and equipment; and monitors and reports progress of the Department in meeting goals to the General Manager, Mayor and City Council.

Employees of these classes may occasionally be assigned other duties for training purposes or to meet technological changes or emergencies.

**Qualifications:**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Senior Transportation Engineer</th>
<th>Principal Transportation Engineer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory, principles, and practices of transportation engineering and State and City laws and regulations on traffic control;</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Transportation problems encountered in a large City and the various devices used in traffic control and sources of transportation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Coordination, supervision, and planning problems encountered in large-scale transportation engineering work;

Transportation engineering as applied in administering and directing the preparation of designs, plans, specifications, estimates, studies, technical reports and recommendations for a wide variety of transportation engineering work;

Construction, inspection, general administration, and coordination as required in the conduct of extensive transportation engineering projects;

Laws and regulations related to equal employment opportunity and affirmative action;

Principles and practices of supervision;

Safety principles and practices;

Qualifications:

Knowledges:

Principles and practices of public administration, including budget preparation, personnel management, and cost control procedures as required to direct the activities of a division or bureau of the Department of Transportation;

Transportation engineering programs, policies,
standards, and organization;   Working          Good

City Personnel Rules,      General          Working
policies, and procedures;

Memoranda of Understanding as they apply to subordinate personnel.          General          General

<table>
<thead>
<tr>
<th>Abilities:</th>
<th>Senior Transportation Engineer</th>
<th>Principal Transportation Engineer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate alternative proposals as to soundness of traffic engineering features, economic feasibility and long-range planning aspects;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Direct work programs, develop design standards, organize procedures, and exercise administrative control over engineers and technicians;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Prepare technical and operating reports;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Deal tactfully and effectively with other supervisors, representatives of other City departments and other governmental agencies, employees, and the public.</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Two years of full-time paid professional experience as a Transportation Engineer or in a class at that level engaged in transportation or traffic engineering is required for Senior Transportation Engineer.

One year full-time paid professional supervisory transportation engineering or transportation planning experience in a class at the level of Senior Transportation Engineer is required for Principal Transportation Engineer.

Registration: Registration as a Professional Engineer with the California State Board of Registration for Professional Engineers is required prior to appointment for Senior Transportation Engineer. For all Principal Transportation Engineer positions, except the position
in charge of the Bureau of Transportation Planning, registration as a Professional Engineer with the California State Board of Registration for Professional Engineers in Traffic Engineering, Civil Engineering, or Electrical Engineering is required prior to appointment.

License: A valid California driver's license is required for both classes.

Physical Requirements: Both Classes: Strength to perform average lifting of less than five pounds and occasionally over fifteen pounds; frequent walking and standing; good eyesight; and good speaking and hearing ability.

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 limitations, 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 all of the duties and responsibilities of any position shall be.