



PRINCIPAL TRANSPORTATION ENGINEER

DEFINITION

Under minimal direction, prepares, manages, and conducts the most complex and professional transportation engineering work in the field and office; acts as the lead engineering staff responsible for project management and delivery; performs complex transportation engineering analyses, studies, and other related work as is required. The highest level in the Transportation Engineer series.

DISTINGUISHING CHARACTERISTICS

The Principal Transportation Engineer is assigned the most complex studies and projects. This advanced journey level/lead worker serves as subject matter specialist and resource for other professional staff in the Agency. This position performs the most difficult and complex engineering assignments under limited supervision. The Principal Transportation Engineer serves as a team leader who assists management in developing and mentoring more junior staff, as well as ensuring the quality and timeliness of the team's work product.

This position is distinguished from the next lower class of Senior Transportation Engineer in that it requires more independent performance of work duties, handles the most complex project management assignments, and assists in mentoring other staff. This position is distinguished from the next higher position of Deputy Executive Director in that the latter has full supervisory responsibility for the technical staff of the Transportation Agency for Monterey County (TAMC).

EXAMPLES OF DUTIES

- Serves as project manager for the most complex regional priority projects that the Agency is responsible for delivering under Measure X, State Transportation Improvement Program, and other funding sources, in coordination with partner agencies.
- Leads consultant selection and contract management efforts on assigned projects including: requests for proposals, advertisements for bids, instructions to bidders, detailed specifications or scopes of work, contract budgets, invoice review and task management;
- Mentors and provides technical engineering assistance to professional staff; serves in a supervisory role on an as-needed basis;
- Contributes policy recommendations relating to strategic agency priorities;
- Prepares or oversees consultant preparation of preliminary studies, reports, designs, calculations, cost estimates, maps, and plans;
- Performs professional transportation engineering work in the field and office on a variety of complex projects; may act as resident engineer on construction projects.
- Makes presentations before public, private or government decision-making bodies, providing technical information, data, and expert advice; and,
- Serves as committee staff or back up staff to a TAMC committee and mentor junior employees with committee activities; and,

- Prepare staff reports, memos, correspondence, consultant or contractor procurement documents, and other written materials.

QUALIFICATIONS

A combination of experience, education, and/or training which substantially demonstrate the following knowledge and skills:

Thorough knowledge of:

- Principles and practices of transportation engineering, project delivery and project management;
- Federal, state, and local laws, regulations, and policies relating to environmental review, design and construction standards, procurement and contract management;
- Current standards and policies for design of complete streets, roads and highways, bikeways, sidewalks and trails, and safe crossings;
- Trends and innovations in transportation engineering design, construction; materials, modeling and travel forecasting, traffic simulation tools, data collection and analysis;
- Interrelationships between federal, state, regional, and local agencies involved in or affected by transportation engineering projects and programs;
- Effective team leadership skills, and project development team and/or construction team management skills; and,
- Transportation funding sources and reporting requirements.

Working knowledge of:

- Basic supervisory and personnel management principles and practices; and,
- Structural engineering principles.

Ability to:

- Plan, fund and deliver complex transportation engineering projects on time, within budget and minimizing disruption to the traveling public.
- Review engineering plans and specifications prepared by private contractors and/or consultants.
- Perform complex transportation engineering analyses and studies, utilizing software applications for data analysis.
- Coordinate work of consultants, government agencies, utilities, project partners and Agency staff to assure timely, cost-effective project and program delivery.
- Oversee all phases of engineering work in progress, and enforce common safety practices and procedures in the field.
- Mentor, train, and provide input on performance appraisals of technical staff.
- Make presentations that convey complex engineering information and transportation data to a variety of audiences in a manner that is persuasive and easy to understand.

- Communicate clearly and effectively in writing, utilizing technical and statistical information.
- Develop effective working relationships with Agency Board members, member agencies, business and public groups, to successfully gain cooperation and consensus.

EXAMPLES OF EXPERIENCE AND TRAINING

The knowledge, skills, and abilities listed above may be acquired through various types of training, education, and experience. A typical way to acquire the required knowledge and skills would be:

Education: Registration as a Civil or Traffic Engineer and graduate degree in Transportation Engineering desired,

AND

Experience: Minimum of ten and one half years of experience at a level equivalent to Senior Transportation Engineer with TAMC;

Participation in a statewide or national engineering committee, task force or project is a plus.