SBCAG **FLSA: EXEMPT**

TRANSPORTATION ENGINEER I
TRANSPORTATION ENGINEER II
SENIOR TRANSPORTATION ENGINEER

SALARY RANGE
$38.988 - $60.664 Hourly
$6,757.96 - $10,515.06 Monthly
$81,095.55 - $126,180.69 Annually

DEFINITION

Under direct or general supervision, or general direction performs professional and technical duties for transportation engineering and planning programs; plans, analyzes, organizes, oversees and coordinates engineering work, including long- and short-term project planning, programming and compliance, design construction and related areas; coordinates assigned projects and activities with other SBCAG staff, member jurisdictions, regional transportation agencies, and/or state agencies; provides complex staff assistance to a Deputy Executive Director; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Transportation Engineer I and Transportation Engineer II receive direct or general supervision; Senior Transportation Engineer typically receives only general direction from the Director of Project Delivery and Construction.

Transportation Engineer II may be assigned as project lead, which involves providing direction and oversight to assigned team members and/or consultants.

Senior Transportation Engineers may be assigned to serve as lead or project manager, which involves exercising direct and general supervision over assigned team members and/or consultants.

CLASS CHARACTERISTICS

Transportation Engineer I – This is the first level class in the Transportation Engineer series. Initially, under direct supervision, incumbents in this class learn to provide professional transportation engineering support. As incumbents' breadth of knowledge and experience increases and their assigned responsibilities become more complex, the incumbents may be considered for movement to the higher class of Transportation Engineer II. Positions at this level usually perform most of the duties required of the positions at the Transportation Engineer II level but are not expected to function with the same amount of program or project knowledge or skill level as positions allocated to the "II" level and exercise less independent discretion and judgment in matters related to work procedures and methods. Assignments and objectives are set for the employee and established work methods are followed. Incumbents have some flexibility in the selection of steps and timing of work processes.

Transportation Engineer II – This is the fully competent, journey-level class in the Transportation Engineer series. Performs moderately difficult professional engineering work which may include

supervision of consultants. Incumbents perform the full spectrum of professional transportation engineering duties including providing technical and policy-related research and analysis on transportation engineering issues and managing engineering studies, projects, and programs, as well as overseeing member jurisdiction relationships. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of assigned projects, programs, and team(s). Assignments are given with general guidelines and incumbents are responsible for establishing objectives, timelines, and methods to deliver work products. Work is typically reviewed upon completion for soundness, appropriateness, and conformity to policy and requirements, and the methodology used in arriving at the end results is not reviewed in detail.

Senior Transportation Engineer – This is the senior level in the transportation engineer class series. Incumbents serve as a technical expert using initiative and resourcefulness in deviating from traditional methods or researching trends and patterns to develop new methods, criteria, or proposed new policies and procedures. Incumbents at this level require significant experience that enables them to represent SBCAG on a regular basis to the Board, other public agencies, private and community organizations, regulatory and governmental agencies, and the public. Incumbents in this class are typically assigned to lead projects, programs, studies, or initiatives that involve contact outside of the agency and the ability to manage multiple stakeholder interests, require a high level of expertise in support of management and/or Board priorities, strategic initiatives, and directives, and are of high visibility and sensitivity to SBCAG in areas of its core business initiatives. The work involves a high-level of problem-solving requiring analysis of unique issues or problems. Work assignments are typically given as broad, conceptual ideas and directives and incumbents are accountable for overall results and responsible for developing guidelines, action plans, and methods to produce deliverables on time and within budget.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Serves as the transportation programming engineer and administrator of locally funded programs and highway projects (sales tax revenues and vehicle registration fees), including pass-through programs; manages, coordinates, and facilitates the development and administration of funding distribution, programming policies and procedures, grants guidelines, evaluation criteria, selection, monitoring and control processes; provides complex professional assistance to executive team in areas of expertise.
- Develops and/or coordinates the development of grant applications, grant selection criteria, grant evaluations, and recommends grant awards; develops and reviews grant agreements and amendments; ensures grant recipients are in compliance with SBCAG policies, procedures, standards, requirements, and time and budget estimates; reviews and updates deliverables; analyzes and resolves problems that may arise.
- Administers project development contracts including approving contractor and consultant pay requests.
- Assists in the acquisition of land, easements, and rights of way.
- Recommends and assists management in the implementation of goals, objectives, policies and procedures.
- Coordinates and facilitates meetings with representatives of other agencies in order to discuss items of common interest, develops project study reports, and clarifies project specifications, financial details, and project schedules.
- Conducts a variety of transportation engineering studies.

- Researches, collects, records, analyzes, interprets, and summarizes statistical information; prepares spreadsheets and establishes and maintains a comprehensive database.
- Attends and participates on a variety of committees, professional groups, and task forces; stays abreast of new trends and innovations related to transportation engineering.
- Performs technical and policy related research on transportation engineering issues; researches, analyzes, and prepares planning-level reports that identify needs and addresses concerns raised by stakeholders.
- Authors technical reports including the preparation of conclusions, recommendations, and forecasts for management, the Board, and member jurisdictions.
- Coordinates assigned engineering projects, programs, and activities with other SBCAG projects, programs, and activities as well as with member jurisdictions, external organizations, and the general public.
- Ensures that consultants are adhering to budgets and schedules on projects.
- Monitors opportunities at the state and federal level for additional funding for engineering studies and prepares grant applications accordingly.
- Examines potential policy changes by researching and consulting with experts to determine potential implications of policy changes that may affect SBCAG and member agencies.
- Prepares short-term and long range transportation engineering plans and studies.
- Maintains awareness of federal, state, and local regulations; analyzes federal, state, and local legislative proposals for impact on assigned programs, projects, and studies.
- Performs other duties as assigned.

In addition to the above, the Transportation Engineer II:

- Tracks program expenditures, reviews invoices for accuracy and consistency with contractual obligations, and recommends appropriate dispersals of allocated funds.
- Reviews inventories of all capital projects, issues and action items that would require the advisory committee, subcommittee or board action; develops plan for recommendations and agendizing for the board; presents to SBCAG Executive Director and management group
- Coordinates the development and implementation of highway capital projects; coordinates with other SBCAG staff, consultants, and/or Caltrans representatives on projects; reports status of projects to Policy Board through updates to sub-regional committees and/or the full SBCAG Board.
- Meets and confers with contractors, engineers, developers, architects, a variety of outside agencies, and the general public in acquiring information and coordinating engineering matters; provides information regarding SBCAG engineering requirements, projects, and programs.
- Assists in developing policies and procedures such as guidelines, design standards, and standard plans and specifications while ensuring that construction, financial, regulatory, and legal requirements are met.
- Prepares staff reports, presentations, project information and status, and program financial information to various committees, community groups, and professional organizations about SBCAG's transportation engineering projects and programs.
- Individually or as a team lead, manages assigned studies, projects, programs, and initiatives; develops work plans consisting of mission, objectives, scope of work, budget, schedules, baseline requirements, and implementation strategies; identifies strategic, project management, and external issues, recommends solutions, and implements solutions to manage risks and issues.
- Develops consultant requests for proposals for professional services and administers the advertising and bid processes; evaluates proposals and recommends project award; negotiates contracts and agreements and administers same after award.

- Makes presentations to the public, community groups, various commissions and committees, and elected boards.
- Represents SBCAG on committees and task forces to develop, implement, and monitor programs and projects that impact SBCAG and its member jurisdictions.

In addition to the above, the Senior Transportation Engineer:

- Provides leadership and technical guidance in assigned area of responsibility using initiative and resourcefulness in analyzing unique issues or problems without precedent and/or structure; researches trends and patterns to develop new standards, models, methods, criteria, or proposed new policies and procedures related to transportation engineering; oversees quality assurance and quality control activities within area(s) of expertise.
- Manages relationships between member agencies and state and federal officials to effectively carry out the implementation and management of transportation engineering programs and projects.
- Investigates field problems affecting project design and construction.
- Performs funding/grant development and administration, including conducting grant research, writing proposals, and programming and administering awarded grant funds.
- Makes presentations to the Policy Board related to assigned projects, programs, and services.
- Manages relationships with member jurisdictions to effectively carry out the development and management of transportation engineering projects and initiatives; identifies engineering needs and interests.

QUALIFICATIONS

Knowledge of:

- Principles, practices, policies and procedures of transportation engineering of federal, state, regional, and locally generated transportation funds.
- Civil and transportation engineering principles, concepts, standards, and practices associated with SBCAG programs and projects.
- Principles and practices of environmental impact assessment and related regulatory processes.
- Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Recent and on-going developments, current literature, and sources of information related to the operations of the assigned functional area.
- Record keeping principles and procedures.
- Modern office practices, methods, and computer equipment and applications related to the work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for effectively representing SBCAG in contacts with governmental agencies, various business, professional, educational, and regulatory organizations, and with contractors and the public.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and SBCAG staff.

Ability to:

- Conduct civil and transportation engineering research projects, evaluate alternatives, make sound recommendations, and prepare effective technical reports.

- Analyze and interpret engineering plans and specifications in accordance with design requirements and applicable standards and regulations.
- Research, analyze, and evaluate new service delivery methods, procedures, and techniques.
- Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, and regulations.
- Research, analyze, interpret, summarize and present administrative and technical information and data in an effective manner.
- Prepare and present clear, concise, and logical written and oral reports, correspondence, policies, procedures, and other written materials.
- Make accurate arithmetic, financial, and statistical computations.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Operate modern office equipment including computer equipment and specialized software applications programs.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines in politically sensitive situations.
- Establish, maintain, and foster effective working relationships with those contacted in the course of work.

Transportation Engineer II, in addition to the above:

Knowledge of:

- Advanced principles, practices, and funding sources for transportation engineering studies and projects.
- Contract management practices in a public agency setting.
- Practices of researching engineering and design issues, evaluating alternatives, making sound recommendations, and preparing and presenting effective staff reports.
- Principles and practices of project and team management, including developing and implementing goals, objectives, scope of work, schedule, and budget and funding allocation.
- Techniques for effectively representing SBCAG in contacts with governmental agencies, community groups, various business, professional, educational, and regulatory organizations, and the public.

Ability to:

- Recommend, develop, and implement work plans and effectively manage engineering studies and projects.
- Lead assigned team including planning, organizing, directing, and coordinating the work of assigned team members.
- Manage and monitor large and complex projects on-time and within budget.
- Effectively represent the team and SBCAG in meetings with member jurisdictions, governmental agencies, community groups, and various businesses, professional, and regulatory organizations and in meetings with individuals.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner.

Senior Transportation Engineer, in addition to the above:

Knowledge of:

- Expert theories and concepts related to transportation engineering and engineering project implementation strategies.
- Contract administration, grants administration, and general principles of risk management related to the functions of the assigned engineering projects.
- Principles, practices, and techniques used in the conduct of effective transportation engineering programs, including project planning, funding and programming, environmental review, contract management, and delivery.

Ability to:

- Provide leadership and technical guidance as an agency-recognized subject matter expert and advisor in assigned area of responsibility.
- Prepare complex grant applications and contracts for assigned projects and programs.
- Effectively represent the team and SBCAG in meetings with the Policy Board.

Education and/or Experience:
Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to graduation from an accredited four-year college or university with major coursework in civil engineering, transportation engineering, or a closely related field.

Transportation Engineer I: From 0-3 years of experience in transportation-related engineering tasks.

Transportation Engineer II: At least three (3) years of increasingly responsible experience in transportation-related engineering tasks.

Senior Transportation Engineer: At least six (6) years of increasingly complex, transportation related engineering work with minimal supervision using a demonstrated degree of specialized knowledge and originality in thinking, which may include supervision of consultants or staff.

Licenses and Certifications:

- Possession of a valid Class “C” California Driver’s License.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. This is primarily a sedentary office classification although standing in and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 25 pounds.

ENVIRONMENTAL ELEMENTS

This is primarily a sedentary classification and the employee works in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. The employee interfaces with staff, management, member jurisdictions, government officials, business representatives, and/or the general public in explaining SBCAG policies and requesting and providing information.