



Transportation Engineer (Civil)

Exam Code: 0TR41

Department: Department of Transportation

Exam Type: Departmental, Open

Final Filing Date: Continuous

CLASSIFICATION DETAILS

Transportation Engineer (Civil) – \$5,849.00 - \$10,956.00 per month

View [the Transportation Engineer \(Civil\) classification specification](#)

APPLICATION INSTRUCTIONS

Final Filing Date: Continuous

Who Should Apply:

Applicants who meet the minimum qualifications as stated on this bulletin may apply for and take this examination.

Once you have taken this examination, you may not retake it for **six (6) months**.

How To Apply:

The link to connect to the Training and Experience Evaluation is located farther down on this bulletin in the “Taking the Exam” section.

Special Testing Arrangements:

If you require assistance or alternative testing arrangements due to a disability, please contact the testing department listed in the Contact section of this bulletin.

SPECIAL REQUIREMENTS

If you meet the Minimum Qualifications under [Pattern 2](#), a written examination covering basic engineering will be required to obtain qualification. To take the written examination you are required to submit the following documents to the address listed below:

1. [Standard State Application \(STD. 678\)](#).
2. A copy of your transcripts and

3. An evaluation of your transcripts from a member of the NACES (if applicable) to apply to take the written examination

MAILING ADDRESS:

Caltrans
Examination Services (MS 86)
P.O. Box 168036
Sacramento, CA 95816-8036

SUBMIT IN PERSON:

Caltrans
Examination Services (MS 86)
1727 30th Street, 1st Floor
Sacramento, CA 95816

Faxed or E-mailed applications will NOT be accepted. THE EXAMINATION TITLE MUST BE INDICATED ON THE APPLICATION.

Note: Testing locations may not be located in all areas. Candidates may be asked to travel to the nearest testing facility at their own expense.

MINIMUM QUALIFICATIONS

All applicants must meet the education and/or experience requirements as stated on this exam bulletin to be accepted into the examination. Part-time or full-time jobs, regardless of whether paid or volunteer positions, and inside or outside California state service will count toward experience.

Transportation Engineer (Civil)

EITHER 1

Graduation from a four-year curriculum in civil engineering accredited by the Accreditation Board for Engineering Technology. (Registration as a senior in such a curriculum will admit an applicant to the competition, but she/he must produce evidence of graduation before she/he will be considered eligible for appointment.) (Possession of a valid certificate as an Engineer-in- Training issued by the California State Board of Registration for Professional Engineers and Land Surveyors, or issued by another jurisdiction and accepted by the California Board in lieu of the first division of the examination as an engineer may be substituted for the required education.)

OR 2

Possession of equivalent qualifications may be demonstrated by graduation from an engineering curriculum which includes the basic engineering courses normally covered in a standard four-year engineering curriculum, and by qualifying in a written examination covering basic engineering. (Registration as a senior in such a curriculum will admit an applicant to the qualifying examination, but she/he must produce evidence of graduation before she/he will be considered eligible for appointment.)

OR 3

A master's or doctorate degree in a civil engineering curriculum from a college or university that has a baccalaureate degree program in a civil engineering curriculum which is accredited by the Accreditation Board of Engineering Technology (ABET). (Registration as a candidate in such a curriculum will admit an applicant to the

competition but she/he must produce evidence of graduation before she/he will be considered eligible for appointment.)

POSITION DESCRIPTION

Transportation Engineer (Civil)

A Transportation Engineer (Civil) performs engineering work involving plans, designs, details, and maintenance of transportation systems, in whole or in part, that may include land, rail, freeways, roads, airports, ramps, hydraulics, sanitary facilities, bridges, nonstandard major structures or transportation-related building and other structures; makes layouts, assembles specifications; reviews or assists in reviewing project proposals, plans and specifications prepared by others; acts as resident engineer on small to medium-sized construction projects; works up special provisions and contract estimates; keeps or assists in keeping the necessary records pertaining to construction progress, jobs expenditures, budget programs, and work order balances; confers with contractors regarding compliance with plans and quality of work and construction activity; selects and/or uses computer-based processes to compile engineering data, horizontal and vertical alignments and curve computations; develops or assists in the development or maintenance of transportation-related state-of-the-art computer programs and procedures; makes or revises maps, charts, and diagrams; uses project management systems to budget personnel and set milestones for transportation projects; makes field investigations of and for laboratory analysis of materials being used in construction transportation and public works research projects; makes controlled tests and checks performance of construction materials, soils, aggregates, cement, asphalt, concrete, and other materials incorporated in bridges, non-standard major structures, or transportation-related buildings; evaluates, or assists in evaluating, damage for all types of transportation facilities, including bridges and other nonstandard major structures; makes in-plant investigations and makes recommendations regarding materials, plant design and operations; may use underwater diving equipment to make underwater quality control and structure investigations; performs transportation operational, traffic operations, planning, or maintenance engineering tasks; prepares and presents information to the public about all types of transportation engineering matters; tests for and prepares environmental reports, assessment reports of transportation surveys, investigations and analysis statements, and air and water quality reports; assists a registered engineer in performing professional engineering work; may lead other engineering and technical personnel.

EXAMINATION SCOPE

This examination consists of the following components:

Training and Experience Evaluation – Weighted 100% of the final score.

The examination consists solely of a **Training and Experience Evaluation**. To obtain a position on the eligible list, a minimum score of 70% must be received. Applicants will receive their score upon completion of the Training and Experience Evaluation process.

All candidates will be required to complete a Training and Experience Evaluation. The Evaluation is designed to elicit specific information regarding each candidate's training and experience relevant to the Transportation Engineer (Civil) classification. The

information on the Training and Experience Evaluation will be competitively assessed based on pre-determined rating criteria.

The Training and Experience Evaluation measures the following areas determined to be important for success on the job: **Computer Skills, Interpersonal Skills, Visual/Technical Skills, Communications Skills and Project Leadership Skills.**

In addition, there are questions regarding work experience in jobs similar to Transportation Engineer (Civil), personal characteristics, and work performance. In addition to evaluating applicants' relative knowledge, skills, and ability, as demonstrated by quality and breadth of education and/or experience, emphasis in each exam component will be measuring competitively, relative job demands, each applicant's:

Knowledge of:

1. Basic principles of physics, chemistry, and mathematics as applied to civil engineering
2. Engineering surveying
3. Hydrology and hydraulics
4. Stress analysis
5. Mechanics
6. Strength of materials
7. Properties and uses of engineering construction materials
8. Methods and equipment of engineering construction
9. Engineering economics

Ability to:

1. Do simple mapping and drafting and make neat and accurate computations and engineering notes
2. Prepare reports
3. Establish and maintain friendly and cooperative relations with those contacted in the course of the work
4. Communicate effectively

ELIGIBLE LIST INFORMATION

A departmental, open eligible list for the **Transportation Engineer (Civil)** classification will be established for:

Department of Transportation

The names of **successful** competitors will be merged onto the eligible list in order of final score regardless of exam date. Eligibility expires **twelve (12) months** after it is established. Applicants must then retake the examination to reestablish eligibility.

Veterans' Preference will be granted for this examination. In accordance with Government Codes 18973.1 and 18973.5, whenever any veteran, or widow or widower of a veteran achieves a passing score on an open examination, he or she shall be ranked in the top rank of the resulting eligible list.

Veterans status is verified by the California Department of Human Resources (CalHR). Information on this program and the [Veterans' Preference Application](#) (Std. 1093) is available online. Additional information on veteran benefits is available at the Department of Veterans Affairs.

Career Credits **will not** be added to the final score of this examination, because it does not meet the requirements to qualify for Career Credits.

EXAMINATION INFORMATION

Caltrans is pleased to announce the posting of the **Transportation Engineer (Civil)** examination. Employment from this examination may be offered in all Districts and Sacramento County.

[Preview of the Transportation Engineer \(Civil\) Training and Experience Evaluation](#)

PREPARING FOR THE EXAMINATION

Here is a list of suggested resources to have available prior to taking the exam.

Employment History: Employment dates, job titles, organization names and addresses, names of supervisors or persons who can verify your job responsibilities, and phone numbers of persons listed above.

Education: School names and addresses, degrees earned, dates attended, courses taken (verifiable on a transcript), persons or office who can verify education, and phone numbers of persons or offices listed above.

Training: Class titles, certifications received, names of persons who can verify your training, and phone numbers of persons listed above.

TAKING THE EXAMINATION

Take [the Transportation Engineer \(Civil\) examination](#).

TESTING DEPARTMENTS

Department of Transportation

CONTACT INFORMATION

If you have any **technical** questions concerning this examination bulletin, please contact:

California Department of Human Resources
Attn: Examination Services
1515 S Street
Sacramento, CA 95811
Phone: 1-866-844-8671
California Relay Service: 1-800-735-2929 (TTY), 1-800-735-2922 (Voice)

If you have any **administrative** questions concerning this examination bulletin, please contact:

Department of Transportation
Office of Examinations and Recruitment Services

P.O. Box 168036, MS 86
Sacramento, CA 95816-8036
Phone: 916-227-7858

TTY is a Telecommunications Device for the Deaf, and is reachable only from phones equipped with a TTY Device.

EQUAL OPPORTUNITY EMPLOYER

The State of California is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right of family care and medical leave, gender, gender expression, gender identity, genetic information, marital status, medical condition, military or veteran status, national origin, political affiliation, race, religious creed, sex (includes pregnancy, childbirth, breastfeeding, and related medical conditions), and sexual orientation.

DRUG-FREE STATEMENT

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 the special trust placed in public servants.

GENERAL INFORMATION

Examination and/or Employment Application (STD 678) forms are available at the California Department of Human Resources, local offices of the Employment Development Department, and through your [CalCareer Account](#).

If you meet the requirements stated on this examination bulletin, you may take this examination, which is competitive. Possession of the entrance requirements does not assure a place on the eligible list. Your performance in the examination described in this bulletin will be rated against a predetermined job-related rating, and all applicants who pass will be ranked according to their score.

The California Department of Transportation reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all applicants will be notified.

General Qualifications: Applicants must possess essential personal qualifications including integrity, initiative, dependability, good judgement, the ability to work cooperatively with others, and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) servicewide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must

be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

High School Equivalence: Equivalence to completion of the 12th grade may be demonstrated in any one of the following ways: 1) passing the General Education Development (GED) Test; 2) completion of 12 semester units of college-level work; 3) certification from the State Department of Education, a local school board, or high school authorities that the competitor is considered to have education equivalent to graduation from high school; or 4) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.