



## Research Analyst 1 & 2 (Geographic Information Systems)

Research Analyst 1 (GIS) Class Code: 7416  
Research Analyst 2 (GIS) Class Code: 7417  
Series Exam Code: PB064

Department(s): Board of Equalization  
California Energy Commission  
California Public Utilities Commission  
Department of Conservation  
Department of Fish and Wildlife  
Department of Forestry and Fire Protection  
Department of Transportation  
Employment Development Department  
State Lands Commission

Opening Date: 09/19/14  
Final Filing Date: Continuous  
Type of Examination: Multi-Departmental Open  
Salary: Research Analyst 1 (GIS) - \$3,247.00 - \$5,029.00  
Research Analyst 2 (GIS) - \$4,829.00 - \$6,048.00

### EQUAL EMPLOYMENT OPPORTUNITY

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.

### WHO SHOULD APPLY?

Applicants who meet the Minimum Qualifications as stated on this bulletin may apply for and take this Training and Experience Evaluation at any time.

Once you have taken the Training and Experience Evaluation, you may not retake it for 12 months.

### **SPECIAL TESTING ARRANGEMENTS**

If you have a disability and/or need special testing arrangements you will be able to request a reasonable accommodation during the filing and self-scheduling process.

If you have questions, please contact:

California Department of Human Resources Selection Division  
1-866-844-8671

California Relay Service (7-1-1)

Telecommunications Device for the Deaf (TTY) (916) 654-6336

TTY is a telecommunications device that is reachable only from phones equipped with a TTY device.

### **ELIGIBLE LIST INFORMATION**

An open eligible list will be established by the California Department of Human Resources for use by the State departments listed above. The names of successful competitors will be merged onto the eligible list in order of final score regardless of test date. Eligibility expires 12 months after it is established. Competitors must then retake the Training and Experience Evaluation to reestablish eligibility.

### **REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION**

**NOTE:** All applicants must meet the education and/or experience requirements as stated on this examination bulletin as of the date the test is taken.

### **MINIMUM QUALIFICATIONS**

#### **Research Analyst 1**

#### **General**

#### **EITHER 1**

Education: [Equivalent to graduation from college](#) with any major, but with [extensive course work](#) in an area appropriate to the parenthetical specialty, such as economics, psychology, sociology, demography, geography, anthropology, statistics, or a [related research-oriented field](#). (See individual parentheticals.) This must include or be supplemented by at least one course in statistical methods.

(Registration as a senior in a recognized institution of higher education will admit applicants to the examination but they must produce evidence of graduation before they can be considered eligible for appointment.) [\(Work experience in the California state service performing technical research- related duties appropriate to the parenthetical specialty](#) may be substituted for the required education on a year-for-year basis.)

#### **OR 2**

Six months of experience performing research-related duties in the class of Management Services Technician, Range B, and twelve semester or eighteen quarter units of college courses in economics, psychology, sociology, demography, geography, or a subject closely related to the work. or

Twelve months of technical research-related duties in a class equivalent to that of [Crime Studies Technician 1](#).

### **Geographic Information Systems**

Demonstrated achievement as evidenced through experience or education which provides [ability to perform successfully \(under supervision\) evaluation and research of geographic data and spatial analysis](#); and all of the requirements specified in the Research Analyst I (General).

### **Research Analyst 2**

#### **General**

#### **EITHER 1**

Experience: At least one year of [pertinent research experience](#) appropriate to the parenthetical specialty performing the duties of a class with a level of responsibility equivalent to Research Analyst 1, Range C. (Applicants who have completed six months of service performing the duties as specified above will be admitted to the examination but they must satisfactorily complete one year of this experience before they can be eligible for appointment.)

#### **OR 2**

Experience: Three years of progressively responsible [technical experience in a research program](#) appropriate to the parenthetical specialty including two years above the [trainee level engaged in](#) the collection, compilation, analysis and interpretation of data. (Experience in the California state service applied toward this pattern must include at least one year of research experience appropriate to the parenthetical specialty performing the duties of a class with a level of responsibility equivalent to [Research Analyst 1, Range C](#).) (A Master's Degree in Economics, Psychology, Sociology, Demography, Geography, or a related research-oriented field may be substituted for one year of the required experience. A doctoral degree in the same areas may be substituted for two years of the required experience.) and

Education: Equivalent to graduation from college with any major but with extensive course work in an area appropriate to the parenthetical specialty, such as economics, psychology, sociology, demography, geography, anthropology, statistics, or a related research-oriented field.

This must include or be supplemented by at least one course in statistical methods.

### **Geographic Information Systems**

Demonstrated achievement as evidenced through experience and education which provides

ability to independently and successfully perform evaluation and research of geographic data and spatial analysis; and all of the requirements specified in the Research Analyst 2 (General).

The pertinent experience specified in the Research Analyst 2 (General) means one year of experience equivalent to Research Analyst 1 (GIS), Range C.

## **POSITION DESCRIPTION**

### **Geographic Information Systems**

Incumbents in this parenthetical are distinguished from other Research Analysts by being able to perform research and statistical studies involving various types of digital spatial data and the techniques and methodologies associated with geographic information systems. The studies, objectives and conclusions may be based on spatial analysis of: natural resource management, land use and transportation planning, emergency response planning and health assessments.

### **Research Analyst 1 (General)**

This is an entry, recruiting and developmental class for persons qualified to perform basic technical research and statistical work in one or more areas of a broad range of research fields as a background for advancement in State service. Employees are assigned duties and responsibilities commensurate with their background and training. Positions may be permanently assigned to this level, Research Analyst 1, when the major functions of the position do not include the more responsible, varied, independent and difficult assignments found in the full journey level of Research Analyst 2 (Various Classes). Work at this level is characterized by a reliance on proven techniques and methodologies and usually involves assignments in areas where a comparable body of knowledge and experimentation exists.

### **Research Analyst 2 (General)**

This is the full journey level class. Under general direction, employees at this level perform a variety of tasks including the more independent, responsible, varied and complex technical research and statistical work in a variety of fields; they may provide consultative advice to various governmental entities and agencies, and may act as a lead person. Work at this level is often characterized by independent development and employment of research methodology and techniques; and the designing and implementation of research projects. Usually involves investigation into areas where precedents are lacking or where only a sparse body of knowledge or experience in the area exist.

Incumbents often have lead responsibilities, work on multidisciplinary teams or have primary responsibility for a major project or activity.

## **EXAMINATION INFORMATION**

### **TRAINING AND EXPERIENCE EVALUATION – Weighted 100%**

The examination will consist solely of a Training and Experience Evaluation. To obtain a position on the eligible list, a minimum score of 70% must be received. An applicant will receive his/her score upon completion of the Training and Experience Evaluation process.

[Click here to preview the Training and Experience Evaluation.](#)

## **KNOWLEDGE AND ABILITIES**

## **Research Analyst 1 (Geographic Information Systems)**

### **A. Knowledge of:**

- Research methods and techniques including planning of studies and investigations, statistical procedures, general principles, concepts and terminology used in research.
- Principles and concepts of geography or cartography that relate to spatial analysis.

### **B. Ability to:**

- Gather, compile, analyze and interpret data.
- Prepare research and statistical reports.
- Analyze written and numerical data regarding general governmental problems.
- Speak and write effectively.
- Reason logically and creatively and use a variety of analytical techniques to resolve or provide information regarding complex governmental and managerial problems.
- Develop and evaluate alternatives.
- Consult with and advise administrators or other interested parties on a wide variety of subject-matter areas.
- Gain and maintain the confidence and cooperation of others.
- Conduct research and perform spatial analysis using mapped and tabular information (under supervision).

## **Research Analyst 2 (Geographic Information Systems)**

### **A. Knowledge of:**

- Research methods and techniques including planning of studies and investigations, statistical procedures, general principles, concepts and terminology used in research.
- Principles and concepts of geography or cartography, and computer mapping.
- Techniques of spatial analysis that involve map overlays and proximity analysis.
- Understanding and commitment to effectively carry out State and departmental equal opportunity and affirmative action policies.
- Designing and implementing research related projects.
- Departmental policies and procedures.
- Principles and concepts of geography, cartography, and computer mapping.
- Techniques of spatial analysis that involve map overlays and proximity analysis.
- Familiarity with various maps products provided by the U.S. Geological Survey, including digital formats.
- Familiarity with map projections and coordinate systems.

### **B. Ability to:**

- Gather, compile, analyze and interpret data.
- Prepare research and statistical reports.
- Analyze written and numerical data regarding general governmental problems.
- Speak and write effectively.
- Reason logically and creatively and use a variety of analytical techniques to resolve or provide information regarding complex governmental and managerial problems.
- Develop and evaluate alternatives.
- Consult with and advise administrators or other interested parties on a wide variety of subject-matter areas.
- Gain and maintain the confidence and cooperation of others.
- Conduct research and perform spatial analysis using mapped and tabular information (under supervision).
- Adapt and perform spatial analysis techniques and methods to complex problems involving mapped information.

## VETERANS' PREFERENCE

Veterans' Preference will be granted for this examination. Effective January 1, 2014, in accordance with Government Codes 18973.1 and 18973.5, whenever any veteran, widow or widower of a veteran, or spouse of a 100 percent-disabled veteran achieves a passing score on an open examination, he or she shall be ranked in the top rank of the resulting eligibility list. This section shall not apply to any veteran who has been dishonorably discharged or released.

## CAREER CREDITS

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

## CONTACT INFORMATION

If you have any questions concerning this announcement, please contact:

The California Department of Human Resources Selections Division  
1515 S Street, North Building, Suite 400  
Sacramento, CA 95811-7258  
1-866 844-8671

California Relay Service: (7-1-1)

Telecommunications Device for the Deaf (TTY) (916) 654-6336

TTY is a telecommunications device that is reachable only from phones equipped with a TTY device.

## GENERAL INFORMATION

**Applications are available** at [www.jobs.ca.gov](http://www.jobs.ca.gov) and local offices of the Employment Development Department.

**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 on this bulletin will be rated against a predetermined job-related rating, and all candidates who pass will be ranked according to their scores.

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

**Candidates needing special testing arrangements** due to a disability must mark the appropriate box on the application and contact the testing department.

**Hiring Interview Scope:** In a hiring interview, in addition to the scope described in this bulletin, the panel will consider education, experience, personal development, personal traits, and fitness. In appraising experience, more weight may be given to the breadth and recency of pertinent experience, and evidence of the candidate's ability to accept and fulfill increasing responsibilities than to the length of his/her experience. Evaluation of a candidate's personal development will include consideration of his/her recognition of his/her own training needs; his/her plans for self-development; and the progress he/she has made in his/her efforts toward self-development. For more information, you may refer to the classification specification <http://www.calhr.ca.gov/state-hr-professionals/pages/5729.aspx>.

**General Qualifications:** Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, 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) service-wide promotional, 5) departmental open, and 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.

**Veterans' Preference:** Effective January 1, 2014, in accordance with Government Codes 18973.1 and 18973.5, Veterans' Preference will be awarded as follows: 1) Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an entrance examination, shall be ranked in the top rank of the resulting eligibility list. Any veteran who has been dishonorably discharged or released is not eligible for Veterans' Preference. 2) An entrance examination is defined, under the law, as any open competitive examination. And 3) Veterans' Preference is not granted once a person achieves permanent civil service status.

Veteran status is verified by the California Department of Human Resources (CalHR). Directions to apply for Veterans' Preference are on the Veterans' Preference Application (Std. Form 1093), which is available at <https://jobs.ca.gov/Public/Jobs/Veterans.aspx> , and the Department of Veterans Affairs.

**Bulletin Revision Date: 11/4/16**

## **TAKING THE EXAM**

When you click the link below, you will be directed to the Training and Experience Evaluation. At the end of the Training and Experience Evaluation, it will be instantly scored.

**\*Please remember to print a copy of your exam results for your records. It may take up to 5 business days for eligibility records to appear in your CalCareer profile.**

**[Click Here to go to the Training and Experience Evaluation.](#)**