Research Analyst 1 and Research Analyst 2  
(Geographic Information Systems)  

Exam Code: PB064  
Department: State of California  
Exam Type: Servicewide, Open  
Final Filing Date: Continuous  

This exam will be discontinued effective  
August 11, 2018  

CLASSIFICATION DETAILS  
Research Analyst 1 (Geographic Information Systems) – $3,512.00 - $5,439.00 per month  
Research Analyst 2 (Geographic Information Systems) - $5,223.00 - $6,542.00 per month  
View the classification specification for the Research Analyst 1 and Research Analyst 2 (Geographic Information Systems) classification.  

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 12 months.  
How To Apply:  

Bulletin Date: 7/30/2018
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 special testing arrangements due to a verified disability or medical condition, please contact:

California Department of Human Resources  
CalCareer Service Center  
1810 16th Street  
Sacramento, CA 95814

Phone: (866) 844-8671  
Email: CalCareer@CalHR.CA.GOV

California Relay Service: 7-1-1 (TTY and voice)

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

**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.

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

**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.)

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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 (Geographic Information Systems)
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 journeyperson 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 SCOPE**

This examination consists of the following components:

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

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. Applicants will receive their score upon completion of the Training and Experience Evaluation process.

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:

**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)**

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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.

ELIGIBLE LIST INFORMATION

A servicewide, open eligible list for the Research Analyst 1 and Research Analyst 2 (Geographic Information System) classification will be established for:

State of California (all State of California departments, statewide)

The names of successful competitors will be merged onto the eligible list in order of final score regardless of exam date. Eligibility expires 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 for this exam, because it does not meet the requirements to qualify for Career Credits.

EXAMINATION INFORMATION

| Preview | 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

This exam will be discontinued effective August 11, 2018

Take the examination for the Research Analyst 1 and Research Analyst 2 (Geographic Information Systems) classification.

TESTING DEPARTMENTS

State of California (all State of California departments)

CONTACT INFORMATION

California Department of Human Resources
CalCareer Service Center
1810 16th Street
Sacramento, CA 95814
Phone: (866) 844-8671
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**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](https://www.calcareeraccount.com).

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 Human Resources (CalHR) 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 form 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.