CALHR
CALIFORNIA DEPARTMENT OF HUMAN RESOURCES

RESEARCH DATA MANAGER

Exam Code: 8PB45

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

CLASSIFICATION DETAILS

Research Data Manager – $8,173.00 - $9,280.00 per month.

View the **classification specification** for the Research Data Manager 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 **nine (9)** 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 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 Data Manager

Education

Incumbents must possess 12 semester or 18 quarter units course work in any combination of a data driven research-related field, such as economics, mathematics, psychology, sociology, demography, geography, anthropology, statistics, data science or a research-related field. This must include at least one course in statistical methods; and

Equivalent to graduation from an accredited college with a bachelor's degree. Work experience may be substituted on a year-for-year basis by applicants who have the required units mentioned above.

A Master's Degree in economics, mathematics, psychology, sociology, demography, geography, anthropology, statistics, data science or a related research-oriented field may be substituted for two years of the required experience. A doctoral degree in the same areas may be substituted for three years of the required experience.

Experience applicable to one of the following patterns may be combined on a proportional basis with experience applicable to the other pattern to meet the total experience requirements.

Experience

Either I

One year in the California state civil service performing data research-oriented duties in a class with a level of responsibility equivalent to that of Research Data Supervisor II, or the Research Data Specialist II; or

II

Six years of [professional data research-oriented experience which must have included responsibility for the determination of research data gathering and reporting design and methodology of a complete research project.](#) (Research experience applied toward this pattern must include at least one year of experience performing duties with a level of responsibility equivalent to Research Supervisor II, or the Research Data Specialist II.)

POSITION DESCRIPTION

Research Data Manager

Under administrative direction, this is the full managerial level responsible for a highly specialized or varied research data analytics function and may oversee multiple program areas. Incumbents supervise Supervisors I and II or Research Data Specialists.

EXAMINATION SCOPE

This examination consists of the following components:

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

The examination will 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.

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. Data analysis methods and techniques including gathering and collection of structured and unstructured data, as well as general principles, concepts and terminology used in research
2. Planning studies and investigations
3. Trend analysis procedures
4. Time management techniques to provide for efficient prioritization and completion of projects and assignments
5. Software to prepare spreadsheet summaries, reports, charts, and tables
6. Basic arithmetic and statistical techniques to analyze numerical data
7. Departmental policies and procedures

8. Design and implement research-related projects
9. Practices required to ensure and maintain data security, including securely transmitting confidential data
10. Experimental design procedures
11. Problem-solving techniques and processes to identify and resolve issues related to the completion of work assignments
12. Advanced mathematical techniques and descriptive statistical analysis techniques and methods
13. Principles and concepts applied in research and statistical settings
14. Principles and concepts appropriate to data and research techniques and methodologies
15. Operations research methods
16. Current data analytics processes, including the utilization of business intelligence software programs
17. Broad principles of algorithms, data structures, and data management
18. Application of computerized models to research data, statistical and other methods used in the analysis
19. Survey methods and analytical techniques
20. Organizational analysis including data presentation and interpretation
21. Principles and procedures of forecasting, and of research planning, design, methodology
22. Problem solving techniques and processes to facilitate the identification and resolution of issues related to the completion of work assignments
23. Supervisory principles, practices, and techniques to oversee the work activities of employees to ensure the unit operates
24. Departmental policies and regulations regarding confidentiality
25. applicable laws
26. Public administration, including management and supportive staff services such as budget, personnel, program planning and evaluation, program management, or related areas
27. Employee supervision, development, evaluation and training
28. Governmental functions and organization at the state and local level as they affect departmental research functions
29. Problem-solving techniques and processes to facilitate the identification and resolution of issues related to the completion of work assignments
30. Leadership principles and methods to motivate and maintain the productivity of work unit staff members in accomplishing program objectives
31. A supervisor's and manager's responsibility for promoting equal opportunity in hiring and employee development and promotion, and for maintaining a work environment which is free of discrimination and harassment
32. Of personnel management, supervision, and training
33. Advanced automated processes for capturing data and applying quality control procedures to design and implement complex research projects
34. Current leadership techniques and their application to ensure effective oversight of project team members

35. Project management principles to monitor project progress, and conduct final project evaluation
36. Function as lead for complex large scale research projects
37. The supervisory principles, practices, and techniques to oversee the work activities of employees to ensure the division/branch operates
38. Principles of workflow to plan a variety of programs, and project activities, timelines, and milestones effectively
39. Advanced automated processes for capturing data and applying quality control procedures to design and implement complex research projects
40. Current leadership techniques and their application to ensure effective oversight of project team members
41. Project management principles to monitor project progress, and conduct final project evaluation
42. Function as lead for complex large scale research projects
43. Strategic planning principles and concepts in order to lead or participate in unit/branch strategic planning sessions
44. State budgeting processes to meet mandatory and regulatory requirements

Ability To:

1. Research, gather, compile, and analyze structured and unstructured data
2. Conduct and interpret descriptive statistical analyses using appropriate software to test research hypotheses and to formulate conclusions and recommendations
3. Prepare research and statistical reports
4. Analyze written and numerical data regarding general governmental problems
5. Speak and write effectively
6. Develop and evaluate alternatives, recommendations, solutions, and conclusions or approaches to research problems
7. Manage a workload consisting of multiple projects and assignments
8. Complete work under critical timelines to meet project
9. Objectives and deadlines
10.Be objective and flexible to adapt to changes in priorities and work assignments
11.Gain and maintain the confidence and cooperation of others, collaborate, and work in multidisciplinary teams
12. Query, mine, analyze, and manipulate data
13. Communicate effectively both orally and in writing to individuals and groups related to the area of research
14. Present ideas and information effectively
15. Adapt and apply formal research methods and principles to research problems
16. Design and validate studies and analyze the accuracy of data collected
17. Analyze quantitative and qualitative data to reach sound conclusions and/or make recommendations
18. Identify improvements and originate and develop new solutions which depart from traditional and existing patterns
19. Identify required data, information, materials, and resources needed to complete/perform a project

20. Reason logically and creatively and use a variety of analytical techniques to resolve or provide information regarding complex research and data problems
21. Consult with and advise administrators or other interested parties on a wide variety of subject-matter areas
22. Recognize when issues, activities, and/or decisions need to be elevated to management, and communicate information effectively to others
plan and carry out large scale research and data projects
23. Prepare and present reports and data models
24. Adapt and apply complex research methods and principles to research problems of an applied practical nature
25. Identify required data, information, materials, and resources needed to complete/perform a project
26. Identify data needs of complex analyses and evaluate adequacy of existing data to meet these needs
27. Develop procedures for collection and integration of data sources
28. Design and test complex data base structures for storage and manipulation
29. Access and process data located on large databases, servers, mainframes and/or desktop computers
30.Design and conduct a complex research project and/or validating studies
31.Conduct program evaluation studies including the systematic analysis of program requirements, goals, and outcomes to ensure program effectiveness
32. Analyze and evaluate the impact of programs, procedures, business processes, and/or policies
33. Develop documents related to data processing and analysis procedures for research projects and assignments to be used as a future resource
34. Determine how a system or process works and how utilizing new inputs, operations, and environmental conditions would affect outcomes
35. Function as a technical lead for complex projects to ensure timely completion
36. Provide technical assistance to professional personnel
37. Establish and maintain cooperative relationships with others, and with stakeholders
38. Communicate with internal and external stakeholders with diplomacy and tact, especially concerning difficult and sensitive issues
39. Plan, organize and manage a research function
40. Review and edit written reports
41. Use interdisciplinary teams effectively in the conduct of studies
42. Manage workload and assignments of others in order to meet work unit and project objectives and deadlines
43. Objectively identify all facts and implications related to a situation before drawing conclusions and determining courses of action
44. Delegate work to staff to ensure work projects are completed on time and within budget
45. Review the work of subordinate staff and provide constructive feedback from the perspective of a supervisor
46. Effectively promote equal opportunity in employment and maintain a work
47. Environment that is free of discrimination and harassment

48. Translate legislatively mandated program evaluation requirements into methodically rigorous study designs
49. Translate departmental policy into action programs and/or test the impact of policy changes
50. Evaluate the adequacy and merit of proposed research and evaluation study designs and techniques
51. Provide expert consultation on the feasibility impact or potential of a variety of operations, projects or proposals to the department and to other organizations
52. Analyze and evaluate the impact of changes to existing programs, procedures, business processes, and/or policies;
53. Use creativity when independently designing research projects
54. Write clear and concise studies and reports
55. Design and develop research methodologies required to ensure the collection and analysis of appropriate, meaningful, and unbiased data
56. Conduct and interpret descriptive and/or inferential statistical analyses using appropriate software to test research hypotheses and to formulate conclusions and recommendations
57. Analyze situations accurately and take effective action at the appropriate time
58. Provide mentoring to staff
59. Manage a complex program
60. Establish and maintain project priorities
70. Develop and effectively use all available resources
71. Perform oversight on projects ensuring that end products or services are delivered on schedule, within the established budget, and in compliance with applicable laws
72. Utilize project management techniques to manage the progress of programs and project activities to ensure that project timelines and schedules are appropriately established, modified, and adhered to

ELIGIBLE LIST INFORMATION

A servicewide, open eligible list for the **Research Data Manager** 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 **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 applied to the final score of competitors who are successful in this examination.

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

Take the examination for the **Research Data Manager** classification.

TESTING DEPARTMENTS

State of California (all State of California departments)

CONTACT INFORMATION

California Department of Human Resources
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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.**

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.