RESEARCH ANALYSIS SPECIALIST

KIND OF WORK

Professional statistical and data analysis work.

NATURE AND PURPOSE

Under limited supervision/procedural control, conducts studies in a specialized field of research and forecasts trends by determining methodology, monitoring overall system and making final recommendations for major program studies which have direct statewide or departmentwide impact and for which little or no existing informational resources are available; provides technical advice and assistance to professional co-workers by directing a unit engaged in difficult statistical research; performs related work as required.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Determines research methodology to be used in assigned statewide/department-wide project or program area to gather, compile and analyze data and to produce reports for use by others either on a recurring or project basis by analyzing requests and defining needs; by developing objectives; by determining resources required and the most feasible and cost effective methods to gather data; and by developing work plans and assigning priorities and time limits.

Writes or coordinates the writing of reports so that program evaluation, forecasting and reporting requirements are met by initiating and coordinating the application of data analysis, reviewing for accuracy, precision and compliance; by serving as consultant for others who assist in the writing; and by making oral presentations to those who use the report.

Writes and executes computer programs to build statistical models used to forecast changes in existing programs by using packaged software, mathematical formulas and analytical procedures.

Plans, develops, and maintains data bases to facilitate quick retrieval and manipulation of data for research and program administration by determining data base requirements and working with programming and systems personnel; by providing advice and technical guidance to others in regard to feasible alternatives and systems; by formulating for review a program of data base development; and by designing and implementing systems and sub-systems and analyzing data bases for validity and reliability.

Directs the maintenance of on-going data bases so that program data is available to produce reports by evaluating and analyzing data; by evaluating program, policy and systems changes; and by developing and initiating plans for modification.
Evaluates and applies advanced quantitative and qualitative analytical tools to complete studies and projects by analyzing problems that involve probabilities and uncertainties and by designing and applying methods that improve decision making.

Schedules, distributes/balances and guides the work assignments of co-workers, in accordance with established workflow/assignment requirements to assist supervisory staff in the timely accomplishment of the assigned workload by directing work activities.

Monitors and reports on the work performance of co-workers to determine conformity to established timetable and quality standards and to document employee production levels and training needs by checking work products and comparing performance to established timetable and quality standards.

**KNOWLEDGE, SKILLS AND ABILITIES REQUIRED**

Knowledge of:

- The field in which research is conducted sufficient to analyze requests, define needs, develop objectives and determine the resources needed to produce reports.
- Statistical techniques sufficient to determine the research methodology to be used for major program studies.
- EDP principles sufficient to use packaged software to write and execute computer programs and to evaluate, analyze and modify data bases.

Ability to:

- Plan and outline procedures necessary in the compilation of data for major studies.
- Collect, analyze and interpret complex statistical data and present interpretations in clear, concise form.
- Write for and speak to the public and to interpret complex statistical data to lay persons.
- Direct work activities of co-workers and to monitor and report on work performance.

Est.: 09/68  
Rev.: 11/71, 07/73, 04/84  
Ckd.: 06/91  

T.C.: 07/81  
Former Title(s): Research Analyst 2