

ILLINOIS DEPARTMENT OF CENTRAL MANAGEMENT SERVICES  
CLASS SPECIFICATION

STATISTICAL RESEARCH SPECIALIST II

POSITION CODE: 42742  
Effective: 11-1-81

DISTINGUISHING FEATURES OF WORK:

Under general supervision at a journeyman professional level, applies research methods and techniques in the preparation of a research design, survey, analysis of findings and presentation of interpreted statistical data; compiles several sets of data from secondary sources developed for quite different purposes and prepares an integrated analysis; searches, collects, organizes, and analyzes data from a variety of subject matter sources which require adaptation and interpretation; initiates investigations of suspect data; provides methodological or subject matter interpretation and advice; prepares reports or report components for publication; maintains liaison with other government or private agencies; use of computer equipment and skills may be in evidence, but incidental to the purpose of the assignments, which require the application of professional statistical research design analysis, and interpretative skills.

ILLUSTRATIVE EXAMPLES OF WORK:

1. Investigates unclear or possibly faulty data based on observations in related areas and a knowledge of probable outcomes; assures that data treatments are performed within established program guidelines; recognizes the variations in statistical findings which demand prompt action in adjusting or altering established procedures.
2. Compiles, analyzes, interprets, and releases wage and salary information; conducts surveys to determine wage rates; answers inquiries regarding wage information; reviews labor market reports for conformity to agency procedures and accuracy of content; corrects significant errors; prepares memoranda evaluating local office reports.
3. Selects information of economic and labor market trends preparatory to use in summary published reports and speeches; reviews and edits tables and reports for publication; prepares statewide estimates of work force employment and unemployment; develops statistical procedures and sampling techniques for one time studies.
4. Conducts a complex research and statistics program for a local employment service office; gathers, analyzes and compiles labor market employment data; prepares narrative reports on employment conditions and trends in employment; conducts manpower surveys to determine characteristics of the unemployed; participates in or conducts field interviews with employers to obtain data; trains local office staff in techniques of gathering data for labor market surveys.
5. Analyzes relationships between social, economic, and demographic characteristics of the general population and those of the mentally ill or developmentally disabled or handicapped; summarizes patient movements, service delivery data; prepares summary drafts of research proposals, including design to be followed and techniques to be applied; instructs managers and others in interpreting statistical reports and findings; prepares narrative and graphic reports pertaining to statistical research studies.

## STATISTICAL RESEARCH SPECIALIST II (Continued)

6. Performs fiscally oriented and analytical studies applying computerized statistical research methods and presenting those studies in the form of written reports; develops sampling methodologies to be employed in Public Aid audit exceptions; employs data analysis techniques in identifying potential claimable areas; uses statistical report generating software and established data bases to create reports for special requests; writes simple programs to access and test needed data within the established computer system.
7. Performs the necessary analysis, program coding, testing, output design and program execution necessary to complete special requests; using computer tabulations and following established work practices, prepares statistical analysis of findings for state-aided and department personnel to assist them in the planning process and program evaluations; using statistical techniques, constructs graphs, charts and tables for management reports and statewide statistical publications.
8. Performs other duties as required or assigned which are reasonably within the scope of those enumerated above.

### DESIRABLE REQUIREMENTS:

#### Education and Experience

Requires knowledge, skill and mental development equivalent to four years of college with courses in statistics, computer science, mathematics, economics and related fields.

Requires one year of professional experience in the development and application of research designs and statistical methods and techniques, preferably in the job related subject matter area.

#### Knowledges, Skills and Abilities

Requires working knowledge of the development and application of research design techniques and their application to social and economic data.

Requires working knowledge of the interpretation of results of statistical applications.

Requires elementary knowledge of the uses and application of data processing equipment for statistical analysis and report generation.

Requires elementary knowledge of the computer formatting of statistical reports using statistical report generating software.

Requires elementary knowledge of reference library organization and maintenance.

Requires elementary knowledge of cataloging and cross referencing systems.

Requires ability to develop and apply research design techniques.

Requires ability to apply utilize complex statistical techniques in the analysis of social and economic data.

Requires ability to interpret the results of statistical analysis.

Requires ability to use data processing equipment for data analysis.

Requires ability to develop and maintain a simple cataloging and cross-referencing system.

Requires ability to develop and maintain effective working relationships and communication skills with agency personnel.