

**STATE OF WISCONSIN
CLASSIFICATION SPECIFICATION**

**RESEARCH ANALYST
CLASSIFICATION SERIES**

I. INTRODUCTION

A. Purpose of This Classification Specification

This classification specification is the basic authority under ER 2.04, Wis. Adm. Code, for making classification decisions relative to present and future professional positions that perform research, statistical analysis, and/or statistical information reporting duties. This classification specification will not specifically identify every eventuality or combination of duties and responsibilities of positions that currently exist, or those that result from changing program emphasis in the future; rather, it is designed to serve as a framework for classification decision making in this occupational area.

Classification decisions must be based on the “best fit” of the duties within the existing classification structure. The “best fit” is determined by the majority (i.e., more than 50%) of the work assigned to and performed by the position when compared to the class concepts and definition of this specification or through other methods of position analysis. Position analysis defines the nature and character of the work through the use of any or all of the following: definition statements; listing of areas of specialization; representative examples of work performed; allocation patterns of representative positions; statements of inclusion and exclusion; licensure or certification requirements; and other such information necessary to facilitate the assignment of positions to the appropriate classification.

B. Inclusions

This classification series encompasses positions that conduct research, perform statistical analysis, or develop and maintain statistical information reporting systems. Positions allocated to this classification provide information, interpretations, and analysis to program planners, evaluators, administrators, or the general public. Positions require professional knowledge of statistical or other quantitative research or analysis methods, or of the specific research methodology of a professional discipline such as history, demography, or psychology. Positions in this classification meet the definition of professional as defined in s. 111.81(11), Wis. Stats.

C. Exclusions

Excluded from this classification series are the following types of positions:

1. Positions which, for a majority of the time, perform duties which are more appropriately classified as Program and Planning Analyst.
2. Management, confidential, and supervisor positions, as defined in s. 111.81, Wis. Stats.
3. Positions which do not meet the definition of professional as defined in s. 111.81(11), Wis. Stats.

4. Positions in which research or analysis activities constitute less than 50% of the assigned duties and the positions spend the majority of their time in the provision of direct services to clients or patients, the administration of grant programs, or the administration of a program of direct or administrative services. “Administrative services” includes any combination of human resources, budget, payroll, purchasing, fiscal, and accounting programs.
5. Positions which, for the majority of the time, are responsible for examining programs or decisions for compliance of operations or conclusions with established laws, rules, regulations or standards.
6. Positions which spend the majority of the time performing specialized analytic functions such as budget and policy analysis, information systems programming and systems analysis, office systems analysis, or fiscal analysis, which are more appropriately classified in more specific classifications.
7. Positions which spend the majority of the time performing analytic functions which are more appropriately classified by other classifications due to highly-specialized training and experience requirements or the high degree of specialized knowledge of the program service provided or service provision techniques (e.g., of social services, education, unemployment compensation, compensation services, etc.).
8. Positions which spend the majority of the time performing applied or theoretical research in the natural or medial sciences, or which are identified in other classification series which are based on the specific discipline in which knowledge is required (e.g., economists, etc.).
9. All other positions that are more appropriately identified by other classification specifications.

D. Entrance Into and Progression Through This Classification Series

Employees enter this classification series by competitive examination. Progression to the Senior or advanced level will occur through competition except that reclassification will be permitted only when it can be demonstrated that the change in duties and responsibilities justifying the class change is a logical and gradual outgrowth of the position’s previous duties and responsibilities. Positions at the Senior or Advanced level with formal leadworker duties will be filled by competition

E. Definition of Terms Used in This Classification Specification

Complexity – The difficulty inherent in performing the work often measured by both the variety of worker activities (number and related or unrelated) and the type (simple, singular, recurring, predictable, non-controversial, etc. vs. intensive, multifaceted, sporadic, unpredictable, controversial, etc.). Complexity is frequently influenced by or interacts with scope.

Full performance level – The level of performance in a position at which the employee demonstrates the expected degree of skill or competence in the satisfactory completion of the duties and responsibilities expected to be assigned to the position. “Full performance level” is distinguished from the “objective level” or “advanced level” in that the former deals primarily with the expected level of performance while the latter two deal primarily with the duties and responsibilities of the position.

Impact of work – The extent of the effect of the properly performed work on other functions both internal and external to the work unit.

Leadworker – A position whose assigned duties include training, assisting, guiding, instructing, and assigning and reviewing the work of two or more employees in the work unit. Leadworkers do not have supervisory authority as defined under s. 111.81(19), Wis. Stats.

Objective Level – The classification level which any employee in any position allocated to that classification series can reasonably expect to achieve. That maximum class level is then determined to be the objective level for all positions with similar duties and responsibilities, in that series, within the employing unit. Objective level employees perform the full range of job duties assigned to that position type, under general supervision.

Package Programs – Also referred to as analytical programs, are computer programs developed (usually by someone other than the user) to carry out a specific type of mathematical or statistical analysis. These packages typically provide for different combinations or variations of analyses and a variety of display and data storage formats and methods, but do not have the flexibility of full programming languages.

Planning/Plan – The process of developing a specification for a future state and the processes or means necessary to achieve it. Planning involves choosing or prioritizing goals, identifying and developing alternative courses of action as means to achieve these goals, and selecting or recommending the optimum course based on systematic comparison of the efficiency or effectiveness of the alternatives. A plan is the formal specification of the future state and the means to achieve it for both internal and external issues.

Policy – A broad guideline or framework within which decisions are made regarding the distribution of program resources or benefits. Policy controls the nature of program outputs by defining what will be done, for whom it will be done, and the priorities to be applied to specific program objectives.

Procedure – The specific steps, rules, or methods followed in order to accomplish program objectives or implement policies.

Program – An ongoing set of coordinated activities carried out by a number of people, aimed at providing a specific service or benefit to a specific group, organization or group of organizations. A program typically has a unique set of policies, regulations, or procedures, a unique set of activities to be performed in providing the service or achieving the program's goals, and a unique set of persons specializing in carrying these out. A program involves a variety of specific projects or functions coordinated to achieve program objectives.

Programming Language – A system of codes and terms which computers are able to interpret as instructions for processing.

Project – A coordinated set of analytic activities aimed at reaching a conclusion, recommendation or decision on a specific question, problem, or issue. Projects do not continue indefinitely, but are expected to end in the foreseeable future when the conclusion, etc. is reached. A project differs from a program in that it has narrower scope, is situational in focus, and is temporary in duration.

Project Leader – A position that leads the work of other positions on a temporary ad hoc basis by assigning, coordinating and reviewing the work of two or more employees in the work unit. Project leaders differ from leadworkers in the temporary nature of the lead assignment.

Leadworkers are permanently assigned responsibility for leading the work of other positions and perform such duties on an ongoing basis.

Research – The process of defining a set of measurable variables, establishing their level, and specifying their interrelationships, for the purpose of understanding or explaining a particular phenomenon or predicting future states of affairs.

Research Hypothesis – A tentative theory or supposition provisionally adopted to account for certain facts and to guide in the investigation of others. The terms research hypothesis and scientific hypothesis may be used interchangeably.

Scope – A quantifiable job characteristic that ascribes value to a job. The range (number and variety) of job responsibilities. Scope is most often measured by depth and breadth. Scope is frequently influenced by or interacts with complexity.

Statistic – A measure computed from observations.

Statistics – The body of theory and methods used in the collection, classification, and evaluation of quantitative facts as a basis for inference. Basic to statistical theory are the theories of probability and sampling.

Statistical Information Reporting System – The set of processes and procedures necessary to collect, compile, report, and store quantitative data about a particular population on an ongoing basis. Typically these systems utilize electronic data processing methods and equipment to compile and store data, as well as depending on statistical concepts and methods to guide the collection and interpretation of data.

Statistical Significance Tests – Methods of evaluating the likelihood or probability that a particular statistical hypothesis is supported by the data from a sample of that population, or is contradicted by it. Typically such tests involve calculating the probability of the statistic calculated from the sample being the result of the choice of the particular sample.

Systems Analysis – The process of developing detailed system specifications for a computerized information collection, manipulation, storage, and reporting system. Such specifications specify the logic of the computer programs and the flow of data to and from the computer, and guide the acquisition/utilization of equipment and the coding of the program in the programming language. A full-scope systems analysis involves defining and evaluating user needs, identifying the operations needed, analyzing the elements or operations into programmable steps, developing an overall system design, projects costs and benefits from systematization, and presenting the overall design to users or management.

II. DEFINITIONS

RESEARCH ANALYST

This is either an entry or objective level for positions performing research, statistical analysis, and/or statistical information reporting (e.g., utilizing SAS or a similar statistical package). Positions are allocated to this level as either: (1) the entry level for positions that will eventually progress to the Research Analyst – Senior level and perform the work outlined at the Senior level, as well as progress from close to general supervision; or (2) the objective level for positions that spend a significant amount of time using survey and statistical procedures to collect and process data for routine, one time, or special projects. Positions at the objective level, further meet the following criteria:

The **scope** of work may be defined by a supervisor or other technical lead within the work unit; *work is commonly focused on a specific survey or set of data*. Data is easily gathered and a limited range of standard procedures or methods is applied to analyze the data. Findings and statistics are verified for validity/accuracy and shared within the agency; factual information may also be shared with specific stakeholders as requested (e.g., business sector representatives, media, industry meetings, etc.) via printed, electronic, or public presentations. Positions may be proficient in SAS or utilize existing or previously designed software reporting systems to extrapolate data.

The **impact** of positions at this level is often limited to a specific phase, major segment of a large project, or a complete project of a smaller scale where the data results are not open to interpretation or few variables exist. Work results support other staff responsible for the entire project/system; work does not heavily impact the allocation of funds or extend across a wide range of program areas. The consequence of error is limited to the immediate program area or project and errors can be more readily resolved.

The **complexity** of positions at this level involves analysis of problems or situations involving a variety of general or established standards, policies, or methodologies. Objectives are typically well-defined, recurring or predictable, and a comparison of facts with standards. Special or one-time projects may necessitate the use of more complex standard analytical approaches or techniques, but this is not a regular assignment or is performed under the direction of a more experienced analyst. Interactions are typically within the organization to plan and coordinate work efforts, provide technical assistance or interpretations, and to work towards a shared goal.

These positions may work under the leadership of a Senior or Advanced level Analyst.

Representative Positions:

Department of Agriculture, Trade and Consumer Protection – Wisconsin Agricultural Statistics Service: The position requirements include assisting in design of samples, collection of data, edit and analysis of data, determination of state and county level commodity estimates, publication of survey results, and evaluation of statistical information reporting systems. The person in this position must keep informed of changes in the agricultural industry through conversations with the industry, attending industry meetings, and reading of periodicals.

Department of Health Services, Division of Public Health: This position gathers data, processes information and maintains statistical information reporting systems for the Pregnancy Risk Assessment Monitoring Program System (PRAMS) to collect state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. This information will be used by researchers to investigate emerging issues in the field of maternal and child health; by state and local governments to plan and review programs and policies aimed at reducing health problems among mothers and babies; and by state agencies to identify other agencies that have important contributions to make in planning maternal and infant health programs and to develop partnerships with those agencies. This position provides consultation, technical assistance and interpretation of information, responses to surveys, and special projects and their direct application to agency operations.

RESEARCH ANALYST – SENIOR

Positions allocated to this objective level perform a variety of research, statistical analysis, and/or statistical information reporting; serve as an expert in SAS, including extracting and manipulating data sets. Work includes a combination of semi-routine or specialized assignments as well as work for larger projects, a specific program, or a significant segment of a program on a regular basis. Work is completed under general supervision. Positions at this level may work as leadworkers to other Research Analysts. Positions meet the factor definitions below:

The **scope** of work involves applying a wide range of research, statistical analysis, or data processing/systems analysis techniques, to complete major segments of large projects/programs where the analyst serves as a specialist for that program or a particular segment or phase of a program (e.g., the design of surveys and analysis of survey data, development of measures, etc.). Entire research projects may be assigned to positions where results depend on the analyst's development of new approaches or methods and the establishment of many of the criteria or presuppositions upon which project conclusions/recommendations depend. Positions may be assigned some outreach or educational tasks to share information with specific stakeholders (e.g., business sector representatives, media, industry meetings, etc.); positions will develop materials used in outreach activities.

Positions may develop and/or operate statistical information reporting systems; may write language that allows databases to interact or allows users to extract data via queries. Positions may also serve as a trainer and specialist in reporting systems or analyses to other unit staff or external parties who may utilize a specific program areas' systems/tools.

Impact – the work products or services involve a wide range of different programs or facilities, a specific program, or a significant segment of a program; controls the allocation of millions of dollars through the design of allocation formulas or providing the data necessary to administer such formulas; provides information essential to key business decisions of a large number of private firms or external entities. The information compiled may be requested or used by internal management staff in the planning, budgeting and evaluation of program areas. As a program area specialist, positions provide technical advice and consultation. Work product may affect the way others conduct studies or provide services; the consequence of error is increased and crosses program lines.

The **complexity** involves relating the assigned problem to broad factors such as theoretical, public, or policy issues; the information needs of multiple users; or the operation of a variety of other systems or programs as well as testing different technical approaches and assumptions to determine the most appropriate methodology. Positions often develop original data or adapt data developed for other purposes. Advanced techniques are used to address multi-variable problems. Activities include designing multi-user, multi-purpose statistical information reporting systems and/or directing multi-disciplinary research projects stemming from a large, specific, or significant segment of a program. Complicating factors may include conflicting/ambiguous objectives or specifications, the need to conceptualize and define previously undefined variables, use of not yet standardized techniques, conflicts between technical requirements, or other similar factors.

Positions may participate or provide input to a project or research that results in the development of new policies, models, or programs, but do not have responsibility for overall implementation or administration of these new items.

Interactions regularly include the general public, individuals or groups, and staff at lower levels of other organizations. Internal contacts include both staff within and outside of the work unit and may be outside of the chain of command. The role of parties involved in a project may be initially unclear or frequently maintain varying perspectives or approaches in supporting a common goal; occasional controversial projects may be assigned.

Representative Position

Department of Agriculture, Trade & Consumer Protection – Division of Agricultural Development (leadworker): This position is responsible for the creation of vital economic reports involving gathering, analyzing, interpreting and synthesizing market data regarding the state's livestock and grain industries. Information is gathered directly from various auction barns, on-farm sales, buyers, producers, processors, commodity groups, brokers and others connected to the industry. At times, these reports represent the

sole source of information for Wisconsin's multi-billion dollar agriculture industry. The information is also used by a wide range of interests outside of the industry, including federal and state governmental agencies, foreign governmental agencies, academia, analysts, and news media. The information is used to frame public policy and devise programs beneficial to the economy both for domestic and global interests. This position must be able to relate to and communicate with members of the industry, public officials, the media and the general public in providing and interpreting market information. This position is the lead worker for the state's Market News unit and is responsible for the unit operations in the Livestock and Grain Market News office.

RESEARCH ANALYST – ADVANCED

Positions allocated to this classification serve in an advanced, full performance capacity under general supervision. Positions at this level are considered to be the overall area expert or serve as the technical resource over a work unit of other Research Analysts. In addition to the research and analytical work described at the Senior level, positions must perform work in support of policy analysis, planning, or program evaluation. Positions at this level may work as leadworkers to other Research Analysts.

Positions responsible for statistical information reporting systems (or the analysis of IS systems) consider information needs analysis, development of detailed system specifications, design of system elements (e.g., files, edits, coding instructions), liaison with users or data sources, testing & debugging of changes, and interpretation of data reported.

An expert at this level provides high level consultation to management, serving as the key point of contact for managers as well as other internal/external stakeholders; serve as a decision-maker responsible for implementation of recommendations, policy, or related program changes.

Positions further meet the factors as described below:

The **scope** involves administering a research and statistical analysis program, involving the collection and analysis of a wide range of data, including extensive use of SAS, Access, Excel, and other statistical and database programs at the consummate expert level. Oversee or manage a significant program research area and/or statistical information reporting program; establish program objectives and standards, decide what studies should be conducted or reporting systems developed. Provide authoritative consultation to agency management on all matters relevant to the program function.

Positions perform independent research utilizing all elements of the process from design of the study, to data collection, analysis, and publication of findings. To execute research studies, positions must have extensive program knowledge of major programs.

Positions may also serve as a trainer and specialist in reporting systems or analyses to other unit staff or external parties who may utilize systems/tools from a specific program area. Positions may also oversee outreach activities being conducted by other unit staff.

Impact – the work products or services for which the position is responsible provide comprehensive information essential to the planning, budgeting, or evaluation of a number of major state government programs or a significant agency program with multiple, large user groups (e.g., large segment of the general public, etc.) and are the primary source of information for the public, the private sector and other levels of government on subjects such as: economic activity, health and vital statistics, transportation facilities and usage, state agricultural production, or other comparable areas. Work products or data provided to other levels of government is often used by additional user groups of the other government entity, so the impact is wide-reaching and errors difficult to resolve. Consequences of decisions are not always known.

The **complexity** of positions at this level involves deciding what needs to be done by addressing a variety of previously undefined issues, considering a wide range of facts and conditions external and internal to the organization (e.g., interest group sentiment, interagency relationships, budget constraints, top management's goals) and coordinating activities with a wide range of other programs to set policy for the program or develop policy recommendations. Problems may be defined only in terms of broad legislation or policy directions from top management, and involve multiple, often conflicting goals and priorities.

Positions will be assigned to oversee the administration of new policies, models, and/or programs within the organization. Positions will serve as a resource to management and policy makers, providing comment on program direction.

Interactions regularly include program managers in other agencies, representatives of interest groups or private organizations, officials of other levels of government, legislative leaders, or other similar representatives of outside organizations. Divergent goals or priorities often exist among the contacts or adversarial relationships are common or unpredictable.

Representative Positions:

Department of Children and Families: This position provides expert consultation and guidance for Wisconsin's network of low-income work programs to make them more effective and accessible for state residents. The position is responsible for identifying issues of concern for Office of Quality and Performance managers, developing a methodology for achieving consensus regarding priorities among these issues, posing research questions, identifying available data sources and new data to be generated, providing leadership to state and local-level participants in evaluations, compiling and analyzing data, and presenting findings to DWD management. The work involved a wide variety of TANF, WIA, Migrant and other work programs. The work products are used to understand the operations of the work programs; to evaluate current and proposed work program policies; to manage and measure the performance of both clients and local agencies; and to provide budget estimates. The research results, quantitative analyses and evaluation outcomes are the basis upon which federal, state and local government policy makers evaluate the effects of potential and actual program policy changes on the economic well-being of children and families.

Department of Health Services, Division of Public Health: This position manages and directs all aspects of the Wisconsin Behavioral Risk Factor Survey Program (BRFS), including liaison activities with the U.S. Centers for Disease Control and Prevention (CDC); applies thorough knowledge of population-based survey design and methodology to expand and elevate the Wisconsin BRFS Program's standing within the national BRFS system; monitors the work of the BRFS data collection contractor for adherence to CDC-mandated guidelines and standard professional survey research practice; develops new reports based on BRFS data and prepares operational budgets and grant proposals to other external agencies to secure funds for BRFS-related and other research activities; and provides expert consultation and guidance about data presentation and documentation, measurement, research methods, survey operational procedures and survey question design and sample weighting.

III. QUALIFICATIONS

The qualifications required for these positions will be determined at the time of recruitment. Such determinations will be made based on an analysis of the goals and worker activities performed, and by an identification of the education, training, work, or other life experience which would provide reasonable assurance that the knowledge and skills required upon appointment have been acquired.

IV. ADMINISTRATIVE INFORMATION

This classification series was created in December 1996 as a result of the Research and Planning Survey. The classification specification was modified effective May 18, 2003, and announced in Bulletin MRS-SC-159 as a result of the PERSA Class Collapsing Study.

This classification specification was revised as a result of class collapsing within the series in conjunction with the introduction of broad banding to the PERSA bargaining unit.

The classification series Research Analyst, Research Analyst 5-8 was abolished and the Research Analyst, Senior and Advanced classification series created effective November 8, 2009 and announced in Bulletin OSER-0252-CLR/SC as a result of the Personnel Management Survey of Economists and Research Analysts which facilitated PERSA class collapsing within the series in conjunction with the introduction of broad banding to the PERSA bargaining unit.

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