

**MICHIGAN CIVIL SERVICE COMMISSION
JOB SPECIFICATION**

STATISTICIAN

JOB DESCRIPTION

Employees in this job complete and oversee a variety of professional assignments involving the systematic collection, compilation, and interpretation of numerical data.

There are four classifications in this job.

Position Code Title – Statistician-E

Statistician 9

This is the entry level. As a trainee, the employee carries out a range of professional statistician assignments while learning the methods of the work.

Statistician 10

This is the intermediate level. The employee performs an expanding range of professional statistician assignments in a developing capacity.

Statistician 11

This is the experienced level. The employee performs a full range of professional statistician assignments in a full-functioning capacity. Considerable independent judgement is used to make decisions in carrying out assignments that have significant impact on services or programs. Guidelines may be available, but require adaptation or interpretation to determine appropriate courses of action.

Position Code Title – Statistician-A

Statistician 12

This is the advanced level. The employee may function as a lead worker or senior worker. At this level, employees are responsible for overseeing the work assignments of other professionals or have regular assignments which have been recognized by Civil Service as having significantly greater complexity than those assigned at the experienced level.

NOTE: Employees generally progress through this series to the experienced level based on satisfactory performance and possession of the required experience.

JOB DUTIES

NOTE: The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

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Conducts and designs studies requiring the collection, assembly and compilation of social, economic, scientific or engineering data.

Determines sampling methods to be used.

Studies methods of analyses for various surveys.

Applies standard statistical methods such as measures of dispersion, central tendency, reliability, index numbers, moving averages and correlations in determining significant factors present in such data.

Prepares charts, tables and graphs, checks computations and maintains records pertaining to the work.

Prepares analyses of statistical tables, charts and graphs.

Assists in developing equations for analyzing specific types of data.

Assists in the interpretation and evaluation of results of research projects.

Prepares articles and reports.

May report collected data to outside statistical reporting agencies that compile national data or make industry specific comparisons.

Assists in the training of less experienced Statisticians.

Maintains records and prepares reports and correspondence related to the work.

Performs related work as assigned.

Additional Job Duties

Statistician 12 (Lead Worker)

Oversees the work of professional staff by making and reviewing work assignments, establishing priorities, coordinating activities, and resolving related work problems.

Statistician 12 (Senior Worker)

Performs on a regular basis professional statistician assignments which are recognized by Civil Service as more complex than those assigned at the experienced level.

JOB QUALIFICATIONS

Knowledge, Skills, and Abilities

NOTE: Some knowledge in the area listed is required at the entry level, developing knowledge is required at the intermediate level, considerable knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

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Knowledge of the science of statistics, including statistical theory, techniques and methods encompassing such areas as sampling, ratios and proportions, measures of dispersion and central tendency, reliability, validity, correlations, time-series, trends, index numbers, forecasting, categorical data analysis and non-parametric methods.

Knowledge of the significance of various statistical measures.

Knowledge of computer based statistical applications.

Knowledge of statistical applications.

Knowledge of methods used in presenting statistical data.

Knowledge of statistical needs.

Ability to analyze and interpret statistical data.

Ability to test the validity and reliability of research and survey projects.

Ability to determine the adequacy of operational definitions and monitoring of data collection processes for observational studies.

Ability to test the appropriateness of assumptions using computer methods.

Ability to determine and respond to the needs of statistical data users.

Ability to present conclusions in written and graphic form.

Ability to assist in the training of less experienced statisticians.

Ability to maintain records, and prepare reports and correspondence related to the work.

Ability to communicate effectively with others.

Ability to maintain favorable public relations.

Additional Knowledge, Skills, and Abilities

Statistician 12 (Lead Worker)

Ability to organize and coordinate the work of others.

Ability to set priorities and assign work to other professionals.

Working Conditions

None.

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Physical Requirements

None.

Education

Possession of a bachelor's degree with at least 12 semester (18 term) credits in statistics.

Experience

Statistician 9

No specific type or amount is required.

Statistician 10

One year of professional experience in the systematic collection, compilation and interpretation of numerical data equivalent to a Statistician 9.

Statistician P11

Two years of professional experience, in the systematic collection, compilation and interpretation of numerical data equivalent to a Statistician, including one-year equivalent to a Statistician 10.

Statistician 12

Three years of professional experience in the systematic collection, compilation and interpretation of numerical data equivalent to a Statistician, including one year equivalent to a Statistician P11.

Special Requirements, Licenses, and Certifications

None.

NOTE: Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION

Job Code
STATISTCN

Job Code Description
Statistician

Position Title
Statistician-E
Statistician-A

<u>Position Code</u>	<u>Pay Schedule</u>
STATTCNE	H21-001
STATTCNA	H21-009