

**TOMPKINS COUNTY CIVIL SERVICE
EXAMINATION
Inclusion Through Diversity**

OPEN TO THE PUBLIC

Tompkins County Department of Human Resources Office
125 E. Court Street
Ithaca, NY 14850
(607) 274-5526

Tompkins County is an Equal Opportunity/Affirmative Action employer. Minorities and women are encouraged to apply

TITLE: Geographic Information System (GIS) Analyst

EXAM NO: 69566

SALARY: \$35.00 per hour

EXAM DATE: 03/06/21

ISSUE DATE: 03/27/20

THE FINAL DATE TO FILE APPLICATIONS: 04/11/20

DATE THAT THIS ANNOUNCEMENT SHOULD BE REMOVED FROM POSTING: 03/07/21

RESIDENCY WAIVED

THE USE OF A QUIET HAND HELD CALCULATOR WILL BE ALLOWED FOR THIS EXAMINATION.

Location of Position:

There is currently one vacancy in the title of Geographic Information System (GIS) Analyst located at the Town of Ithaca. The eligible list resulting from this open competitive examination may be used to fill any full-time, part-time, or temporary vacancies that may occur during the life of the eligible list.

MINIMUM QUALIFICATIONS:

- (a) Graduation from a regionally accredited or New York State registered college with a Bachelor's Degree in Geographic Information Systems, cartography, surveying, computer science, engineering or a related field **AND** one year of full-time paid (or the equivalent part-time) professional computer graphic design and web-based application development experience in a public or private planning, engineering, architectural, or similar technical agency using mapping software, computer aided design graphics (CAD) and/or database applications; **OR**
- (b) Graduation from a regionally accredited or New York State registered two year college with an Associate's Degree in Geographic Information Systems, cartography, surveying, computer science, engineering or a related field **AND** three years of full-time paid (or the equivalent part-time) professional computer graphic design and web-based application development experience in a public or private planning, engineering, architectural, or similar technical agency using mapping software, computer aided design graphics (CAD) and/or database applications; **OR**
- (c) Any combination of training and experience equal to or greater than that described in (a) and (b) above.

Tompkins County is Committed to Equity and Inclusion. We encourage those with similar values to apply.

SPECIAL REQUIREMENT:

Required to possess a valid New York State Driver's License to operate a motor vehicle or otherwise demonstrate the ability to meet the transportation needs of the job.

DISTINGUISHING FEATURES OF THE CLASS:

This position is responsible for the development, maintenance, implementation and analysis of geographic information systems (GIS) products and applications. The incumbent will assist the Director of Engineering with the management and development of specific departmental GIS or related projects. The position will coordinate with departmental staff, other departments, and outside agencies towards the acquisition of data, project design, and spatial data processing functions. Incumbent will be responsible for responding to public inquires and data requests. Responsibilities may include functioning on and leading teams of Department staff, Town staff and representatives from other agencies. Work is performed under the general supervision of the Director of Engineering, with considerable leeway for managing GIS projects for specific departments, planning work methods and procedures to achieve end goals. The position is also responsible for designing, building, implementing, and maintaining Web pages, sites and applications related to the GIS program and other departmental services. Although supervision of others is not a primary function of this position, the incumbent may be called upon to supervise work projects, work groups, and to provide technical supervision and training to staff. This position requires the ability to work with a high degree of autonomy making daily independent judgments in managing and coordinating major projects. The incumbent will perform all related duties as required.

TYPICAL WORK ACTIVITIES:

- Using geographic information system computer software, the incumbent will prepare a variety of analytical and mapping products related to various Town projects and services;
- Management, development, and implementation of online GIS workflows to integrate with third party enterprise wide business systems and improve the user experience of internal and public online GIS applications;
- Assists in the management and development of public safety outputs specifically online applications, map books, and emergency management applications before, during and after an active emergency as requested;
- Acquire or develop, update, and maintain electronic spatial databases, other GIS repository data, and related metadata;
- Prepare analysis of data and geographical maps in support of County/Town projects and programs;
- Apply scientific and statistical methods to obtain, analyze, classify and rectify data to develop and/or modify geo-spatial databases;
- Create a variety of electronic and hard copy map products;
- Performs translation and conversion of data between various data platforms and mapping projection systems;
- Data entry of geographic related material and other materials as required;
- Performs Quality Assurance/Quality Control procedures for data within the GIS program;
- Performs data analysis in support of professional staff activities;
- Responds to other Departments and public requests for digital data and hard copy and digital map products, and the production of custom maps and databases;
- Communicates with a variety of departments, outside organizations and the public to coordinate activities, exchange information, and resolve questions and/or concerns;
- Assists in the coordination of Town-wide GIS web-based mapping services and applications involving the participation of County, municipal and private agencies;
- Develop custom GIS applications for departmental staff, using various GIS programming tools, to automate common analytical mapping procedures;
- Communicate with GIS staff and senior personnel in other departments to coordinate activities, exchange information and resolve questions and/or concerns about GIS data;
- Promotes the use and understanding of GIS programs and related technology through public information and educational campaigns, including public presentations, demonstrations, the writing of articles, and interaction with the community;
- Provides technical GIS and Web content management training to staff within various departments;
- Develop and communicate Web site usage, policies and standards;
- Assists in defining Web site functionality and overall site structure and content management practices;
- Identify and recommend new Web features and applications in conjunction with business leaders, department managers and vendors;
- Assists the Director in the planning and management of Web development projects, including those hosted by vendors and the Town.
- May be required to do field work for collection data to related projects.

KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Thorough knowledge of mapping, database and related software necessary to perform and supervise tasks associated with the design, development and maintenance of the GIS program and Web sites and applications;
- Working knowledge of advanced GIS and cartographic concepts and database design concepts;
- Working knowledge of personal computer software and operating systems, including, graphical, database, and spreadsheet applications;
- Ability to establish and maintain high standards of accuracy and produce products with high professional standards;
- Ability to work courteously with the public and staff from other departments and outside organizations;
- Ability to prepare and present ideas clearly and concisely, both orally and in writing;
- Ability to understand and follow complex oral and written instructions;
- Ability to maintain effective working relationships;
- Resourcefulness, initiative, good judgment and tact are required;
- The employee's physical and mental condition shall be commensurate with the demands of the position, either with or without reasonable accommodations.

PHYSICAL, MENTAL, AND ENVIRONMENTAL DEMANDS:

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical

While performing the duties of this job, the employee is frequently required to sit, use hands to keyboard, manipulate controls, and reach with hands and arms. Computer operation requires a considerable level of precision, manual dexterity and operating knowledge/skill in order to be effective. The employee is required to see sufficiently to perform the essential duties. The employee must occasionally lift and/or move up to 10 pounds. Due to extensive computer usage eight hours per day, five days per week, the job requires an extreme level of visual effort. Vision abilities required by this job include extensive work with a video display screens, close vision and the ability to adjust focus close and mid-range.

Mental

Psychological demands are moderate for this position. Considerable interpersonal skills are necessary in order to create connections, obtain buy-in, cooperation with staff. Internal contacts will be with employees at all levels throughout the organization and will require professional collaboration on overlapping projects. External contacts are with professional associates, liaisons, community groups and involve the development of professional networks and the successful implementation of intermunicipal GIS projects.

Environmental

The work is performed almost exclusively in an office environment and the incumbent will have minimal exposure to any disagreeable environmental conditions. The employee often works alone or in proximity to one or more staff. As a result, the work involves only some minimal risk of injury or illness.

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Complete Scope of the examination and Expanded subtest descriptions:

1. Understanding and interpreting maps, aerial photography, survey data, and other source material used in map construction

These questions test for the ability to read, analyze, and perform computations based on cartographic drawings, site plans, survey notes, and mapping-related written presentations, and for knowledge of the terminology and principles involved in reading and working with aerial photographs, including scale conversion and focal point computations.

2. Collection, analysis, and presentation of data, including basic statistics

These questions test for knowledge of the proper procedures and methods used to gather, evaluate, organize, and present various types of technical data and information, and the fundamental concepts, terminology, and computations involved in statistical analysis for cartographic and land use planning studies.

3. Geographic Information Systems (GIS), including data conversion, plotting, database construction, interactive editing, and labeling

These questions test for knowledge of GIS design features, global positioning systems, and the concepts, terminology, and proper procedures to use when creating, producing, and revising various types of maps and site plans using GIS and computerized mapping software.

4. Principles of data bases for PC's

These questions test for a basic background in the design and use of data bases on microcomputers. They cover such topics as data base terminology and concepts, analyzing a data base project, planning the data base, organizing the data, designing data entry forms, accessing and manipulating the data, generating reports, and performing backups.

Test guide:

The New York State Department of Civil Service has not prepared a test guide for this examination. However, candidates may find information in the publication 'General Guide to Written Tests' helpful in preparing for this test. This publication is available on line at:<https://www.cs.ny.gov/testing/testguides.cfm>.

FURTHER INFORMATION AND INSTRUCTIONS

Falsification of any part of the "Application for Employment" will result in disqualification.

Accepted candidates will be notified when and where to appear for the examination. If you do not receive your notice to appear at least three days before the date of the written examination, call Tompkins County Department of Human Resources at 274-5526. If an application is disapproved, due notice will be sent. This department does not make formal acknowledgment of the receipt of an application or take responsibility for non-delivery or postal delay.

Applicants must answer every question on the application form and make sure that the application is complete in all respects. Incomplete applications will be disapproved.

ACTIVE MILITARY PERSONNEL, VETERANS OR DISABLED VETERANS desiring to claim additional credit will request the Veterans Credits application form, at any time between the date of application for examination(s) and the date of the establishment of the resulting eligible list. You must meet the requirements set by NYS for these credits and they may be used only once. **YOU MAY NOT CLAIM ADDITIONAL CREDITS AFTER THE ELIGIBLE LIST HAS BEEN ESTABLISHED. IT IS THE CANDIDATE'S RESPONSIBILITY TO REQUEST THE VETERANS CREDIT APPLICATION FORMS AND TO SUBMIT THESE FORMS AND ANY SUPPORTING PAPERWORK BEFORE THE ELIGIBLE LIST IS ESTABLISHED.**

Tompkins County's written examinations are prepared and rated by the New York State Department of Civil Service in accordance with Section 23-2 of Civil Service Law. The provisions of the New York State Civil Service Rules and Regulations, which deal with the rating and review of the examinations apply.

The duration of the eligible lists may be fixed for a minimum of one and a maximum of four years and may be extended beyond four years if there has been a restriction against the filling of vacancies in that title.

The candidates must complete a separate "Application for Employment" for each open-competitive and/or promotional examination that the candidate is eligible to take.

All experience required meeting the acceptable training and experience is full-time experience. (Part-time experience will be credited on a prorated basis).

Appointment from an eligible list must be made from the top three candidates willing to accept the appointment.

Tompkins County is an Equal Opportunity Employer. As part of its efforts to provide employment opportunities to the physically handicapped, Tompkins County Civil Service has adopted a rule permitting the employment of qualified physically handicapped persons without competitive examination (pursuant to Section 55 of Civil Service Law). If you meet the minimum qualifications for this position and wish to know more about this rule, please contact the Tompkins County Department of Human Resources Office.

Unless otherwise notified, candidates are permitted to use quiet, hand-held, and solar or battery powered calculators. Devices with Typewriter Keyboards, Spell Checkers, Personal Digital Assistants, Address Books, Language Translators, Dictionaries or any similar devices are prohibited. You may not bring books or other reference materials.

CROSS-FILING - APPLYING FOR CIVIL SERVICE EXAMINATIONS IN MULTIPLE JURISDICTIONS WHEN EXAMINATIONS ARE SCHEDULED ON THE SAME DATE: When applying for examinations across multiple jurisdictions - all of which are scheduled on the same day - you must submit a Tompkins County Cross-Filing Form. This form must be submitted no later than 4:30 PM on the final filing date of the examination. On this form, list each examination that you are taking and then tell us where you would like to sit. The purpose is to ensure that all of the test materials for the various examinations that you are taking will be available in one location. If you do not provide the cross-filing form to us by the final filing date, we cannot ensure that we can accommodate your desire to cross-file. If any of the examinations are State level examinations, you must sit at the State test center. You will still need to complete the Tompkins County cross-filing form. If sitting at the State site, the State will notify you of when and where to report for your examination(s) and you should bring all admittance letters to the State site. If you are not taking a State examination, bring all admittance letters to your chosen testing site. If you have any question please call Tompkins County Department of Human Resources Department (607) 274-5526. The Cross File form is located at <http://www.tompkins-co.org/personnel/CivilSrvForms/index.html>

FOR RELIGIOUS ACCOMMODATION AND HANDICAPPED PERSONS: If special arrangements for testing are required, please indicate this on your application.

ALL CANDIDATES FOR EMPLOYMENT FOR POSITIONS IN SCHOOL DISTRICTS AND BOCES GOVERNED BY TOMPKINS COUNTY CIVIL SERVICE MAY HAVE THE FOLLOWING SPECIAL REQUIREMENT. PER CHAPTER 180 OF THE LAWS OF 2000, AND BY REGULATIONS OF THE COMMISSIONER OF EDUCATION, TO BE EMPLOYED IN A POSITION DESIGNATED BY A SCHOOL DISTRICT OR BOCES AS INVOLVING DIRECT CONTACT WITH STUDENTS, A CLEARANCE FOR EMPLOYMENT FROM THE STATE EDUCATION DEPARTMENT IS REQUIRED.

In conformance with Section 85-a of the Civil Service Law, children of firefighters and police officers killed in the line of duties shall be entitled to receive an additional ten points in a competitive examination for original appointment in the same municipality in which his or her parent has served. If you are qualified to participate in this examination and are a child of firefighter or police officer killed in the line of duties in this municipality, please inform this office of this matter when you submit your application for examination. A candidate claiming such credit has a minimum of two months from the application deadline to provide the necessary documentation to verify additional credit eligibility. However, no credit may be added after the eligible list has been established.â

BACKGROUND INVESTIGATION: Applicants may be required to undergo a State and national criminal history background investigation, which will include a fingerprint check, to determine suitability for appointment. Failure to meet the standards for the background investigation may result in disqualification.

TOMPKINS COUNTY PERSONNEL DEPARTMENT, 125 EAST COURT STREET, ITHACA, NY 14850