TOMPKINS COUNTY CIVIL SERVICE
EXAMINATION
Inclusion Through Diversity

OPEN TO THE PUBLIC
Tomkins 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 Analyst

EXAM NO: 69541

SALARY: $25.94 per hour - 2020 Hire Rate

EXAM DATE: 05/16/20

ISSUE DATE: 03/27/20

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

DATE THAT THIS ANNOUNCEMENT SHOULD BE REMOVED FROM POSTING: 05/17/20

RESIDENCY: Candidates must have been legal residents of Tompkins County or one of the six adjoining counties (Cayuga, Chemung, Cortland, Schuyler, Seneca, Tioga) for at least one month immediately preceding the date of application and maintain residency. For Examinations: The eligible list resulting from the examination will be established in accordance with the final earned numerical ratings of passing candidates regardless of residence. A municipality or district may exercise its right under section 23-4-a. of Civil Service Law to request a certification of eligible candidates who have been residents of that municipality or district for at least one month prior to appointment. After the names of residents have been exhausted, Tompkins County must then certify the names of non-residents on the list.

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

LOCATION OF POSITIONS:

There is currently one vacancy in the title of Geographic Information System Analyst located in the Tompkins County Department of Assessment. The eligible list resulting from this open competitive examination may be used to fill any full-time, part-time, or temporary vacancy that may occur during the life of the eligible list.

MINIMUM QUALIFICATIONS:

(a) Graduation from a regionally accredited or New York State registered university with a Masters Degree in geography, cartography, planning, engineering or a GIS related field AND one year of full-time paid (or the equivalent part-time and/or volunteer) experience working in a public or private planning, engineering, architectural, or similar technical agency using GIS or CAD software, and database applications; OR

(b) Graduation from a regionally accredited or New York State registered college or university with a Bachelors Degree geography, cartography, planning, engineering or a GIS related field AND three years of full-time paid (or the equivalent part-time and/or volunteer) experience working in a public or private planning, engineering, architectural, or similar technical
agency using GIS or CAD software, and database applications; OR

(c) Graduation from a regionally accredited or New York State registered college or university with a Associates Degree in geography, cartography, planning, engineering or a GIS related field AND five years of full-time paid (or the equivalent part-time and/or volunteer) experience working in a public or private planning, engineering, architectural, or similar technical agency using GIS or CAD software, and database applications; OR

(d) Any combination of training and experience equal to or greater than that described in (a), (b) or (c) 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 requirements of the job.

**DISTINGUISHING FEATURES OF THE CLASS:**

This position exists in various County Departments and is responsible for the development, maintenance, implementation and analysis of geographic information systems (GIS) products and applications. The position will coordinate with departmental staff, other county departments, and outside agencies towards the acquisition of data, project design, and spatial data processing functions. Incumbent will be responsible for responding to public inquiries and data requests. Responsibilities include functioning on and leading teams of Department staff, County staff and representatives from other agencies. Work is performed under the general supervision of senior personnel, with considerable leeway for planning work methods and procedures to achieve end goals. 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 work as required.

**TYPICAL WORK ACTIVITIES:**

- Design and implement a variety of Geographic Information Systems (GIS) analytical and mapping projects;
- Acquire, update and maintain GIS electronic databases and maps;
- Prepare analysis of data and geographical maps in support of County 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;
- Respond to county departments and public requests for digital data, hard copy maps and the production of custom maps and databases;
- Perform Quality Assurance/Quality Control procedures for GIS data;
- Provide GIS technical support and training to departmental staff;
- Maintain a detailed inventory of paper and digital spatial data, including organizing computer directories and maintaining meta-data for each data set;
- 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.

**KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

- Thorough knowledge of advanced GIS and cartographic concepts and database design concepts;
- Thorough knowledge of personal computer software, including graphical and mapping software, word processing, database and spreadsheet applications;
- Ability to develop work plans for complex tasks;
- Ability to function on and lead internal teams and teams with staff from other departments, and representatives from outside agencies;
- Ability to communicate effectively both verbally and in writing with departments, local officials and the public;
- Ability to establish and maintain high standards of accuracy and produce products with high professional standards;
- 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.

Originally created 03/16/1993

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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.
BACKGROUND INVESTIGATION:

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.

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