**DEPARTMENT OF NATURAL RESOURCES**
**POSITION DESCRIPTION**

**Working Title**: GIS Support Analyst
**Classification**: Information Systems Data Services Professional
**Location:** State Natural Resources Building - Madison

**Purpose of the Position**:
The DNR IT GIS Support Analyst performs account administration, technical support, and enterprise data management using ESRI platform technologies for approximately 1,000 agency GIS users. This position will maintain enterprise GIS datasets used by DNR staff and provide first-level technical support for desktop and web-based GIS platforms used by staff across the department. This position will also manage user accounts, group configurations and sharing requests for ArcGIS Online, ArcGIS Hub and ArcGIS Portal, and fulfill ArcGIS Desktop license requests.

**Location, Geographic Scope and Travel Requirements:** This position works primarily in the State Natural Resources Building - Madison (GEF 2), but may occasionally travel for training, conferences, and project work.

**Scope of Authority:** This position works under close progressing to general supervision of the Geographic Information Systems (GIS) Section supervisor, DNR IT Executive Program. This position supports GIS account management, licensing, technical support, and enterprise data management for agency staff.

**Goals & Activities**:

**35% A: Account administration and desktop licensing support**
   A.1. Process ArcGIS Online, ArcGIS Hub and ArcGIS Portal named user account requests. Gather account usage requirements and provide advice about the appropriate account user role. Track user account information in a database. Perform user account quality control and produce associated reports for review and clean up. Maintain user account reference documentation.
   A.2. Track ArcGIS Online, ArcGIS Hub and ArcGIS Portal account usage, estimate account chargeback costs and produce chargeback reports. Communicate with staff about cost requirements and chargeback processes.
   A.3. Administer and configure group permissions in ArcGIS Online, ArcGIS Hub and ArcGIS Portal.
   A.4. Support ArcGIS Online and ArcGIS Hub public sharing requests. Follow publishing checklist steps and facilitate tasks performed by Division Web Coordinators and other DNR staff involved in the publishing process.
   A.5. Process ArcGIS Desktop licensing requests. Maintain user account information in a database. Perform quality control of user account information and produce summary reports.
   A.6. Assist with web mapping application deployments.

**30% B: Technical support for ArcGIS Desktop, ArcGIS Online and ArcGIS Portal.**
   B.1. Provide first-level consulting services and technical support to DNR staff about enterprise geospatial data sources, ArcGIS desktop, map service design and ArcGIS Online, ArcGIS Portal and ArcGIS Hub usage.
   B.2. Conduct basic troubleshooting to diagnose issues and determine the level of support needed. Resolve common problems such as permission settings and following established best practices.
   B.3. Identify the internal and external geospatial data needed to produce useful IT applications and analyses for stakeholders.

B.3. Identify, implement, and help communicate policies and procedures to enable user access to geospatial data and services.

B.4. Assist with the development of in-person and web-based training for ArcGIS desktop, ArcGIS Online, ArcGIS Portal and ArcGIS Hub.

**25% C:  Enterprise Data Management**

C.1. Acquire/develop, QA/QC, enhance, and maintain enterprise geospatial data for use across agency business areas.

C.2. Gather and document geospatial data requirements from internal and external stakeholders.

C.3. Extract, modify and reformat data using Microsoft Access, Excel, Python and SQL coding to prepare datasets for developing GIS data and performing analyses.

C.4. Provide guidance in the design, structuring, documenting and management of GIS data layers including enterprise geodatabase, file geodatabase and other formats.

C.5. Assist with managing and updating content in ArcGIS Online, ArcGIS Portal and Open Data Portal. Ensure metadata documentation is complete.  Support maintenance processes for updating data.

C.6. Create and verify data topologies for use within geospatial applications and systems.

C.7. Design, develop, test, deploy, and maintain ArcGIS for Server (AGS) enterprise base map and other web services using ArcGIS Desktop and AGS software and tools.

C.8. Create detailed documentation of GIS processes and metadata for future use and increased transparency of analytical methods used in decision making

**10% D:  Organizational Responsiveness**

D.1. Maintain knowledge of GIS technology and functional updates through self-study, computer based training and other educational resources.

D.2. Participate in job-related training and organizational meetings as assigned by supervisor.

D.3. Follow all general and position-related safety requirements.

D.4. Perform other position-related duties as assigned.

**Knowledge: Technical Competencies**

- Knowledge of Environmental Systems Research Institute (ESRI) ArcGIS Desktop software (ArcMap, ArcGIS Pro), including extensions and tools (e.g., Spatial Analyst, 3D Analyst, Model Builder), and ESRI ArcSDE Enterprise database structure and management.

- Knowledge of ArcGIS Online, ArcGIS Portal and ArcGIS Hub named user account types, development tools and administrative structure.

- Knowledge of fundamental methodologies to perform technical geospatial data collection, processing, coordinate conversion, QA/QC, distribution, management, etc.

- Knowledge of fundamental methodologies of mapping sciences and cartographic design.

- Proficiency with Microsoft office products including Access, Excel, Word, Skype, Power Point, and SharePoint.

- Knowledge of SQL and Python scripting languages.

- Analysis, evaluation and problem-solving skills.

- Skilled in clear and effective written and oral communication techniques necessary to explain technical information to a non-technical audience.

- Ability to follow standard operating procedures and pay attention to details.

- Organizational and time management skills. Ability to handle multiple priorities and coordinate many tasks at once.

**Physical Requirements and Environmental Factors:**
Physical requirements include talking in front of groups; sitting for long periods of time; and lifting and carrying 5 to 30 lbs. Environmental factors include working indoors in an office setting and independently traveling to offices around the state.

**Equipment Used:** Computers, tablets, smartphones, virtual meeting hardware, fax machine, copy machine, and telephone.

**Telework Evaluation:** Because this position must be available for regular in-office contacts and works closely with developers and business experts/managers, telework could be available only on an occasional basis.

## ADDENDUM

## Departmental Competencies

**Service Excellence for Customers & Partners:** Makes customer service a top priority and constantly seeks to improve customer service. Is responsive to changes in what customers want and need. Delivers on promises made to customers and follows up appropriately. The desired outcome for this competency is a strong connection to our customers.

**Effective and Fair Decision Making**: Able to analyze situations fully and accurately to reach productive decisions. Consults appropriate parties when necessary and identifies the key concerns and/or issues that need to be addressed in order to make the best decision possible, at the correct level of decision hierarchy. The desired outcomes for this competency include excellence and credibility in decision making.

**Effective Communication**: Able to express ideas in a clear, concise and effective manner, whether speaking or in writing. Uses correct grammar and sentence structure in communications. Is a good listener, even when differing viewpoints are being expressed. Openly shares information and keeps all relevant parties updated. The desired outcome for this competency is strategic unity built on trust.

**Interpersonal Relationships & Partnership Building**: Builds and maintains effective working relationships with others both internally and outside the organization; takes a positive and productive approach to resolving any conflicts which may arise. Exemplifies the commitment to the DNR's core value of respect; to work with people, to understand each other's views and to carry out the public will, maintain integrity, and treat everyone with fairness, compassion and dignity. The desired outcome of this competency is a shared mind set and pool of meaning.

**Demonstrates Leadership**: Fosters and encourages support from his/her team to accomplish objectives, follow procedures, and accepts suggestions; inspires confidence and respect; motivates people to achieve agency goals and objectives; promotes respect, honesty, integrity, and fairness to all. Enforces standards/rules fairly and consistently and leads with courage. The desired outcomes for this competency are accountability through ownership of the work, staff alignment with agency direction, and full engagement of all employees.

**Safety/Risk Management -** Demonstrated commitment to safety through incident/accident prevention and control of risks in the working environment.

**Additional Competencies Needed for this Position**

**Strategic Thinker / Systems Thinking**
• Anticipates future needs and identifies potential options and constraints; critically evaluates information to promote the most effective position.
• Thinks through the implications of decisions and actions on people, organizational components, partners and customers.

**Process Oriented**
• Increases overall learning and performances by designing, implementing, and/or connecting critical work processes.
• Takes steps to make sure that new ideas are integrated with established procedures and processes. Assures successful implementation by connecting processes and seeing that key staff are involved.

**Builds Teams and/or Is a Team Player**
• Builds constructive and effective relationships with colleagues at all levels.
• Advises and collaborates with others to develop a stronger team and enhance team spirit. Sees team as a vehicle to achieve agency goals.