

Job Title: Lead GIS Analyst Location: Service Center

**Department:** Data Strategy

Job Status: Full-Time

**Reports To:** GIS Supervisor **Job Grade:** T605

Pay Status: Exempt Date Created/Updated: 9/12/2025

#### **Position Summary**

The Lead GIS Analyst, is required to complete work orders, assist team with questions and troubleshooting technical issues, assists in troubleshooting GIS Datasets, reviewing and inputting designs from design technicians, completing special projects, writing python scripts to automate workflows, assists in training staff, develops mapping applications and solutions in portal and ArcGIS online, updates datasets with external data and assists with vendor calls to troubleshoot and resolve software issues. The Lead GIS Analyst is also familiar and proficient with both ArcGIS Pro and ArcMap. The Lead GIS Analyst is also responsible for assisting the GIS Supervisor with the Administration of the GIS Enterprise System serving as a backup for the Supervisor. The Lead GIS Analyst is expected to be a leader in the group, assisting in the mentoring, development and training of coworkers in GIS.

### **Essential Duties & Responsibilities**

- Proficient in Python scripting, ArcPy, Arcade, and ETL tools to automate geospatial workflows and system integrations.
- Experienced with process automation, continuously looking for and implementing process improvements
- Assists with the Administration of the ArcGIS Enterprise System at NBU
- Assists with creating and troubleshooting integrations for the GIS Enterprise System
- Assists with recommending, testing, and implementing GIS innovations for new solutions or software
- Assist with data conversion, design, development, and quality assurance for GIS software systems applications.
- Extracts data from GIS software and uses varying analysis methods to arrive at results, then recommends appropriate strategies in response to GIS analysis.
- Provides maps and data sets to clients to supplement analysis
- Develops, implements and manages GIS data and its organizational structure/database environment.
- Develops and implements methodologies for creation and use of spatial data, including digitizing, editing, coding, and annotating line, point and polygon data.
- Performs programming activities including design, development, testing, debugging, documentation, and modification of geospatial applications and python scripts
- May participate in projects working with special requests, special report preparations and GIS presentations.
- Maintains current knowledge of trends and developments in the geographic information systems field for application to responsibilities under charge.
- Interacts with local, state, federal, and private agencies that request GIS data through open records or PIA
- Professional skill in reading, understanding, and interpreting maps, survey field notes, and technical manuals.
- Professional skill in solving highly technical problems and offering a fact-based solution based on the data.
- Manages GIS integrations with OMS (Outage Management System), CIS (Customer Information System), SCADA, and Work/Asset Management Systems (Maximo, Cityworks, SAP).
- Designs and maintains automation and QA/QC tools to validate new asset data, ensure regulatory compliance, and improve data integrity.
- Develops, deploys, and manages web mapping applications, dashboards, and mobile data collection solutions (ArcGIS Enterprise/AGOL, Field Maps, Survey123).
- Mentors and trains staff on advanced GIS workflows, automation, and utility-specific data models.

#### GENERAL RESPONSIBILITIES

- Maintain regular attendance; leave schedule should be managed so as to not interfere with ability to accomplish tasks, including special projects and assignments with deadlines
- Adhere to NBU safety guidelines and practices at all times and in all situations
- Maintain a clean and safe work area, office, field site and vehicle as applicable
- Develop & maintain effective customer service skills for communications with co-workers, customers and the public in general
- Maintain strict confidentiality of business, employee and customer information in written and oral communications and safeguard sensitive documents
- Adhere to NBU policies and procedures
- Exemplifies NBU Core Values of Integrity, Stewardship, Team and Safety
- Participate in and support initiatives to reach annual NBU Performance Measures

#### Formal Education and Work Experience Requirements

Degree/Diploma Obtained: Bachelors

Other: Four years of experience as a GIS Analyst can be

Work Experience Time Frame: Three Years or

substituted for degree requirement. GIS certificate with an

More Field of Study: GIS/Geography

approved field of study is also acceptable.

#### **Certification and Licensures Requirements**

A valid Texas Driver's License is required to operate a company vehicle when necessary.

#### **Other Minimum Qualifications**

- 3 years working with ArcGIS either ArcMap or ArcGIS Pro
- 2 years experience working with ArcFM or Masters in GIS
- 2 years experience working with a work order management system
- 2 years experience working with Portal for ArcGIS
- Completed 3 Web Mapping Application Projects
- Written 3 python scripts for use in GIS Applications
- Familiarity with GIS Administration
- Demonstrate the core values as described in the job description

## **Knowledge of Computer Software**

|                  | No Knowledge | Beginner | Intermediate | Expert      |
|------------------|--------------|----------|--------------|-------------|
| Arc GIS          |              |          |              |             |
| AutoCAD          | $\boxtimes$  |          |              |             |
| Crystal Reports  |              |          |              |             |
| Microsoft Access |              |          |              | $\boxtimes$ |
| Microsoft Excel  |              |          |              |             |
| Microsoft Word   |              |          | $\boxtimes$  |             |

| Microsoft Publisher  |                      |                               | $\boxtimes$          |                    |  |  |  |
|--|----------------------|-------------------------------|----------------------|--------------------|--|--|--|
| Microsoft PowerPoint   |                      |                               | $\boxtimes$          |                    |  |  |  |
| Other Software Knowledge  • ESRI Suite of GIS software, Software         | Schneider Electric A | rcFM, Microsoft SC            | QL, CityWorks, Adobe | Acrobat PDF, GPS   |  |  |  |
| Experience with Machines, Too<br>GPS Equipment, Computer, Lar<br>Scanner |                      |                               |                      | nner, Large Format |  |  |  |
| Physical Demands   |                      |                               |                      |                    |  |  |  |
| Standing: Occasionally   |                      | ☐ Filing in                   | Lower Drawers        |                    |  |  |  |
| ⊠Making Presentations  |                      | _                             | ng Items from Lower  | r Shelves/Ground   |  |  |  |
| ⊠ Observing Work Sites   |                      |                               | 8                    |                    |  |  |  |
| ☐ Observing Work Duties  | Pushing/P            | Pushing/Pulling: Occasionally |                      |                    |  |  |  |
| ⊠ Communication with Co-Worl   | kers                 | ☐ File Dra                    | ☐ File Drawers       |                    |  |  |  |
|  | ⊠ Equipm             | ent                           |                      |                    |  |  |  |
| Fine Dexterity: Constantly   | ⊠ Table ar           | nd Chairs                     |                      |                    |  |  |  |
| ⊠ Computer Keyboard  | ☐ Hose               |                               |                      |                    |  |  |  |
| ☐ Telephone Keypad   |                      |                               |                      |                    |  |  |  |
| ☐ Calculator   |                      | <b>Climbing:</b>              | Occasionally         |                    |  |  |  |
| ☐ Calibrating Equipment  | Stairs               |                               |                      |                    |  |  |  |
| <b>G</b> 1 1   |                      | ☐ Ladder                      |                      |                    |  |  |  |
| Walking: Occasionally  |                      | ☐ Step Sto                    | ool                  |                    |  |  |  |
| ☑ To Other Departments/Office/   | ☐ Onto Eq            | ☐ Onto Equipment              |                      |                    |  |  |  |
|  |                      |                               | -                    |                    |  |  |  |
|  |                      | Vision: Co                    | nstantly             |                    |  |  |  |
| Carrying: Occasionally   |                      | □ Reading                     | 5                    |                    |  |  |  |
| ⊠ Supplies   | ⊠ Comput             | □ Computer Screen             |                      |                    |  |  |  |
| ⊠ Equipment  | □ Driving            | □ Driving                     |                      |                    |  |  |  |
| ⊠ Files  |                      | ⊠ Observi                     | ng Worksite          |                    |  |  |  |
| Sitting: Constantly  |                      | Foot Cont                     | rols: Occasionally   |                    |  |  |  |
| ⊠ Desk Work  | □ Driving            | ⊠ Driving                     |                      |                    |  |  |  |
| ⊠ Meetings   |                      | ☐ Operatin                    | ng Heavy Equipment   |                    |  |  |  |
| ⊠ Driving  |                      | ☐ Dictaph                     | ☐ Dictaphone         |                    |  |  |  |

**Balancing:** Never

□ On Equipment□ On Step Stool

**Bending:** Rarely

☐ Filing in Lower Drawers

 $\boxtimes$  Retrieving Items from Lower Shelves/Ground

 $\square$  On Ladder

**Reaching:** Rarely 

✓ For Supplies

**Handling:** Constantly

 $\boxtimes$  Paperwork

☐ Monies

**Kneeling:** Occasionally

| <ul><li>☐ Making Repairs</li><li>Crouching: Rarely</li><li>☒ Filing in Lower Drawers</li></ul> |  |  |                               | <ul><li>☑ Communication Via Telephone/Radio/To Co-Workers/Public</li><li>☑ Listening to Equipment</li></ul> |                       |      |                                   |                                      |  |
|--|--|--|-------------------------------|---|-----------------------|------|-----------------------------------|--------------------------------------|--|
| $\boxtimes$  | Retrieving Items from Lower  | <ul><li>Twisting: Occasionally</li><li>☑ From Computer to Telephone</li><li>☑ Getting Inside Vehicle</li></ul> |                               |   |                       |      |                                   |                                      |  |
|  | Under Equipment  |  |                               |   |                       |      |                                   |                                      |  |
|  | Inside Attics/Pipes/Ditches  |  |                               | <b>Talking:</b> Occasionally<br>⊠ Communication Via Telephone/Radio/To-Co-                                  |                       |      |                                   |                                      |  |
| H  | earing: Rarely   |  |                               | Workers/Pub   | lic                   |      |                                   |                                      |  |
| O  | ther: Click or tap here to enter   | r text.  |                               |   |                       |      |                                   |                                      |  |
| E  | nvironmental Factors   |  |                               |   |                       |      |                                   |                                      |  |
|  |  | Never  | Seasonally                    | Several Times<br>Per Year   | Several Ti<br>Per Mon |      | Several Time<br>Per Week          | es Daily                             |  |
|  | Extreme Temperature (Heat, cold, extreme temp. change)                     |  |                               |   |                       |      |                                   |                                      |  |
|  | Wetness and/or humidity (bodily discomfort from moisture)                  |  |                               |   |                       |      |                                   |                                      |  |
|  | Respiratory Hazards<br>(Fumes, gases,<br>chemicals, dust, and dirt)        |  |                               |   |                       |      |                                   |                                      |  |
|  | Noise and Vibration (sufficient to cause hearing loss)                     |  |                               |   |                       |      |                                   |                                      |  |
|  | Physical Hazards (High voltage, dangerous machinery, aggressive Customers) |  |                               |   |                       |      |                                   |                                      |  |
|  |  |  |                               |   |                       |      |                                   |                                      |  |
| H  | Health and Safety Conditions   |  |                               |   |                       |      |                                   |                                      |  |
|  |  | Never<br>(Never<br>Occurs)   | Rarely (Less that hour p week | an 1 (1/3 o<br>er of the  | r more time)          | (Fro | equently om 1/3 to 3 of the time) | Constantly (2/3 or more of the time) |  |
|  | Mechanical Hazards   | $\boxtimes$  |                               |   |                       |      |                                   |                                      |  |
|  | Chemical Hazards   | $\bowtie$  |                               |   |                       |      |                                   |                                      |  |

| Electrical Hazards  | $\boxtimes$ |  |  |  |  |  |  |
|---|-------------|--|--|--|--|--|--|
| Fire Hazards  | $\boxtimes$ |  |  |  |  |  |  |
| Explosives  | $\boxtimes$ |  |  |  |  |  |  |
| Communicable Diseases   | $\boxtimes$ |  |  |  |  |  |  |
| Physical Danger or Abuse  | $\boxtimes$ |  |  |  |  |  |  |
| Other: Click or tap here to enter   | r text.     |  |  |  |  |  |  |
|   |             |  |  |  |  |  |  |
| Primary Work Environment: Office Environment  |             |  |  |  |  |  |  |
| Other: Click or tap here to enter text.   |             |  |  |  |  |  |  |
| Overall Strength Demands  |             |  |  |  |  |  |  |
| ⊠ Sedentary - Exerting up to 10 pounds occasionally or negligible weight frequently, mostly sitting             □             □ |             |  |  |  |  |  |  |
| ☐ Light - Exerting up to 20 pounds occasionally, 10 pounds frequently, walking or standing often                                |             |  |  |  |  |  |  |
| □ Light - Exercing up to 20 pounds occasionally, to pounds frequently, walking of standing often                                |             |  |  |  |  |  |  |
| ☐ Medium - Exerting 20 - 50 pounds occasionally, 10 - 25 pounds frequently, or 10 pounds constantly                             |             |  |  |  |  |  |  |
| ☐ Heavy - Exerting 50 - 100 pounds occasionally, 25 - 50 pounds frequently, or 10 - 20 pounds constantly                        |             |  |  |  |  |  |  |
| ☐ Very Heavy - Exerting 50 pounds constantly  |             |  |  |  |  |  |  |
|   |             |  |  |  |  |  |  |

# **Non-Physical Demands**

|  | Never | Rarely      | Occasionally | Frequently | Constantly |
|--|-------|-------------|--------------|------------|------------|
| Time Pressure                                    |       |             |              |            |            |
| Emergency Situations                             |       | $\boxtimes$ |              |            |            |
| Frequent Change of Task                          |       |             |              |            |            |
| Irregular<br>Schedule/Overtime                   |       |             |              |            |            |
| Performing Multiple Tasks<br>Simultaneously      |       |             |              |            |            |
| Working Closely with<br>Others as Part of a Team |       |             |              |            |            |
| Tedious or Exacting Work                         |       |             |              |            |            |
| Noisy/Distracting<br>Environment                 |       |             |              |            |            |

**Other:** Click or tap here to enter text.

THIS JOB DESCRIPTION DOES NOT CONSTITUTE AN EMPLOYEE AGREEMENT BETWEEN NEW BRAUNFELS

UTILITIES (NBU) AND THE EMPLOYEE. Nothing is this position description restricts NBU's ability to assign, reassign or eliminate duties and responsibilities of this job at any time.

| ·         | <u>-</u> |              |              |
|-----------|----------|--------------|--------------|
| B DESCRIF | PTION.   |              |              |
| _         |          |              |              |
| _         |          |              |              |
| _         |          |              |              |
| 3         | DESCRIF  | DESCRIPTION. | DESCRIPTION. |