

**Opportunity Title:** Cartographic Fellow

**Opportunity Reference Code:** USDOT-2017-0005-ES

**Organization** U.S. Department of Transportation (DOT)

**Reference Code** USDOT-2017-0005-ES

**Application Deadline** 1/26/2018 12:00:00 PM Eastern Time Zone

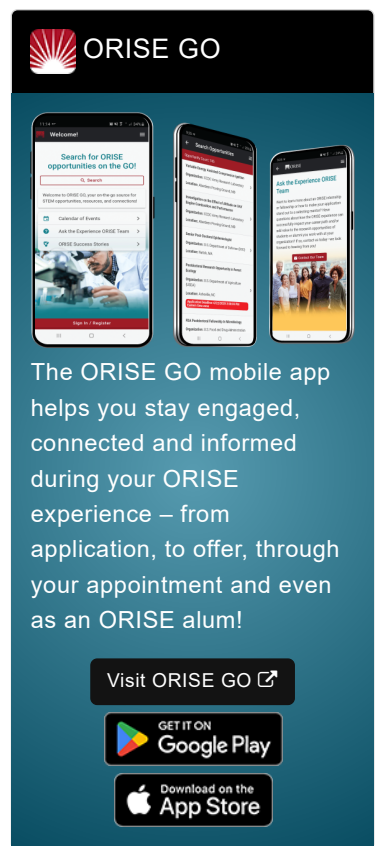
**Description** The future of geospatial transportation datasets holds great promise as well as new challenges. The democratization of data and omnipresence of technology in transportation has created the opportunity for vast new empirical data resources with profound impacts on data velocity, volume and bias. These changes push us, as cartographers, analysts and statisticians, to rethink our relationship with maps. You will explore opportunities to advance cartographic techniques that are appropriate for statistical analysis and creating new maps for BTS to use in analysis and publish to the world.

You will be designing and carrying out cartographic projects, operations, and studies. You will produce high quality maps, charts, and graphics for inclusion in BTS publications. You will consult with project planners to evaluate proposals for maps/charts or related products to determine cartographic requirements; and work with managers and other GIS professionals to identify and develop unique ways to depict transportation statistics on maps and charts.

You will have the opportunity to develop close working relationships with other DOT offices, and other Federal agencies that maintain geospatial data and analytical capabilities, which can aid in the understanding of the transportation industry. You will participate in inter-agency efforts relating to the development and improvements of geospatial data and analysis applications, and you will conduct research on existing and emerging technologies, processes and approaches that can be used to enhance the cartographic techniques for explaining transportation.

Finally you will have the chance to assist in development and updates to the National Transportation Atlas Database (NTAD), a set of nationwide geographic databases of transportation facilities, transportation networks, and associated infrastructure.

- Qualifications**
- Proficiency translating high level business requirements into detailed design specifications;
  - Experience presenting results in a clear, effective, and attractive manner to inform next steps;
  - Strong written and verbal communications skills;
  - A self-starter with the ability to perform work with limited supervision and changing outcome goals;
  - Knowledge of U.S. transportation systems;
  - Ability to work across various offices and work units to obtain information, collaborate on data-related projects, and validate findings and conclusions;
  - Ability to work with subject matter experts to identify and mitigate data limitations;
  - Comprehensive knowledge of cartographic theories, concepts, principles,



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practices and equipment, including those used in photogrammetry, remote sensing, photointerpretation, digital analysis or other techniques, sufficient to evaluate source material; research, analyze, select, and prepare cartographic materials.

- Thorough knowledge of and ability to read and interpret maps and charts of different scales and projections;
- Demonstrated ability to present and illustrate geographic information in written and graphic form;
- Knowledge of open and proprietary exchange formats used in GIS-specific applications, including: REST/JSON, GeoJSON, XML, geodatabases, Web Mapping Services (WMS), and Web Feature Services (WFS);
- Comprehensive experience with the ESRI/ArcGIS software suite, and the Adobe Design suite;

- Eligibility**

**Requirements**
- **Citizenship:** U.S. Citizen Only
  - **Degree:** Any degree .
  - **Discipline(s):**
    - **Communications and Graphics Design** ([6](#) 👁)
    - **Computer, Information, and Data Sciences** ([2](#) 👁)
    - **Earth and Geosciences** ([21](#) 👁)
    - **Engineering** ([27](#) 👁)
    - **Environmental and Marine Sciences** ([14](#) 👁)
    - **Life Health and Medical Sciences** ([10](#) 👁)
    - **Mathematics and Statistics** ([10](#) 👁)