SPOKANE REGIONAL TRANSPORTATION COUNCIL

DATA SCIENTIST

This position is Open until Filled. The first review of applications for the Data Scientist position will begin on February 21, 2017. The salary will be dependent on the qualifications and experience of the selected candidate. The annual salary range is $72,758 - $90,626.

Spokane Regional Transportation Council (SRTC) Overview
Spokane Regional Transportation Council (SRTC) is dedicated to tackling challenges that transcend municipal boundaries. SRTC is seeking a professional **Data Scientist** who enjoys challenges, has great communication and project management skills, and enjoys working in a fast paced team environment. This position will work under the general supervision of the Executive Director.

SRTC is the lead agency for transportation planning for the area covered by Spokane County, Washington. SRTC is a Metropolitan Planning Organization (MPO) and per Washington State law, a Regional Transportation Planning Organization (RTPO). SRTC offers a variety of services including but not limited to developing the region's long range transportation plan, conducting multi-modal transportation studies, census information analysis, air quality conformity and analysis, travel demand modeling, performance based planning prioritization processes, and distributing state and federal funds to local transportation projects and programs.

SRTC is a place where you can put your innovative thinking and analytical skills into high gear and work alongside other highly intelligent and motivated people. It's a place where you can apply your skills to challenging, interesting, and meaningful projects.

Spokane and surrounding areas offer something for everyone; from nearby lakes in every direction to skiing, camping, shopping and sporting events to fine restaurants, wineries and world class colleges and universities. The area offers affordable housing with equally affordable entertainment.

Opportunity
This Data Scientist position is ideal for an experienced transportation modeler with current technical knowledge of modeling methods, software development and maintenance, who also wants to explore creative ways to analyze and communicate information. SRTC produces a regional growth forecast, an essential tool used by local governments in transportation and other long-range planning. The position conducts the ongoing collection and analysis of employment, population, and land use data, providing critical information for investment decisions.

For this position, we are searching for a candidate with an aptitude for analytical thinking and statistical analysis experience; someone who is organized, flexible, and can be relied upon to meet deadlines while working on multiple projects. Excellent communication skills, the ability to work collaboratively, and the use of sound judgment including attention to detail and logical reasoning abilities are important.

In this role, you will be responsible for developing and managing regional growth forecasting models with large data sets from various sources. The Data Scientist will provide complex analytical support and serve as a point of contact for internal and external requests for data. Quality control to ensure the accuracy and integrity of data, and providing innovative solutions to improve forecasting efforts is an integral part of this job. This position also will develop, maintain, and improve SRTC's transportation modeling tools including interface with "big data" such as Streetlight.

Job Responsibilities

- Provide transportation modeling and analysis required for long-range regional plans, transit system implementation and analysis, corridor studies, air quality conformity analysis, and major highway and transit investment studies

- Develop and maintain standard and custom software applications to support travel forecast modeling; develop new software and scripts, and create new architectures as modeling needs evolve

- Perform validation and calibration of travel demand models using third party data sources such as INRIX, Airsage, ATRI and Streetlight

- Analyze and assess travel demand model results and prepare tables/graphics/plots of results for presentations and reports

- Ensure transportation modeling tools and analytical capabilities are credible and effective for policy analysis; participate in quality assurance and quality control processes; participate in processes to improve model transparency

- Develop and implement scripting for traffic software packages to enhance input, output and support results

- Collect, analyze and organize data sets for performance management, traffic, household survey and census

- Develop traffic networks and perform planning analysis multi-modal networks using transportation planning/engineering software (one or more of the following travel forecasting software including TransCAD, CUBE/Voyager, EMME/2, and VISUM)

- Participate in the development of Request for Proposals (RFP's) and Request for Qualifications (RFQs), evaluate competitive project proposals and make recommendations for consultant selection; coordinate with project consultants and ensure projects are completed on schedule, within the prescribed budget, and with a high-level of effectiveness

- Coordinate and collaborate on inter-departmental and inter-agency project teams assembled for transportation modeling, analyses, performance outcomes and planning; foster collaborative working relationships with state and local jurisdictions and the various transit and transportation agencies

- Prepare and present written, oral, and visual reports to policy and stakeholder committees, member agencies, community groups, private organizations, and members of the public; explain and interpret complex transportation modeling projects and activities

Position Requirements

- Bachelor's degree in Engineering, Planning, Mathematics, Statistics, or related field

- 4+ years of relevant professional experience

- Significant experience and thorough knowledge of the principles and practices of transportation, traffic, and travel demand and/or land use modeling and economic forecasting; knowledge of long-range transportation planning issues at a regional level is desirable

- Demonstrated experience developing transportation modeling applications using computer programming languages such as Java, Python, R, and SQL; experience developing and maintaining custom software applications to support modeling functions

- Experience with data acquisition, compilation, and quality assurance/quality control methods; experience collecting and processing data from local, state, and federal agencies and validating third party data; experience with statistical analysis software and knowledge of statistical analysis methodologies

- Experience with relational database management such as SQL Server, including developing and querying data warehouses and business intelligence packages; experience updating and maintaining project databases, files, and records and documenting data

- Experience using GIS software to design transportation-related databases and mapping applications; experience with ESRI software is preferable

- Successful project management/project coordination experience, including participating in the development of RFPs, scopes of work, budgets, and schedules, consultant selection, and contract management

- Ability to communicate highly technical information effectively, both orally and in writing; ability to prepare and deliver public presentations and recommendations regarding various program elements to upper management, Boards, community groups, and other audiences

- Demonstrated ability to establish and maintain effective working relationships with federal transportation agencies, other government officials, and community groups; ability to gain cooperation and consensus through discussion and persuasion

- Effective time management and organizational skills and the ability to prioritize multiple tasks in a fast-paced environment; ability to exercise good judgment and work independently

- Strong computer skills and proficiency with the Windows operating system and Microsoft Office applications especially Word and Excel; and presentation software

Salary and Benefits

SRTC rewards the efforts of its employees with a comprehensive compensation package. Competitive salaries are supplemented with a flexible offering of health, financial security, and time-off benefits to meet the work and life needs of employees and their families. The salary of the Data Scientist will be dependent on the qualifications and experience of the selected candidate. The annual salary range is $72,758 - $90,626.

Our benefits include traditional health, dental, and vision insurance as well as employee assistance, wellness, and work/life balance programs. Retirement and financial security benefits are provided through participation in the Washington Public Employment Retirement System (PERS). SRTC supports the need to rest and rejuvenate, employees are provided with a bank of paid time off in addition to paid holidays.

How to Apply

We encourage all interested candidates to apply for this position by submitting a resume, cover letter, and answers to the supplemental questions (see below) Work samples may be submitted in addition to the application materials.

Completed applications and related materials can be submitted via email to sminshall@srtc.org or by mailing the materials to 421 W. Riverside Avenue, Suite 500 Spokane WA 99201.

Additional Application Requirement

To help us further evaluate the skills and experience of individuals interested in this position, applicants are asked to prepare a cover letter and respond to the Supplemental Questions below. The information can be up to 350 words per question and should be submitted with the Employment Application. This is considered a required component of the application; applications received without a response will be removed from selection process.

==*Supplemental Questions*==

1. Describe a project you were involved in that required the use of various sources of data. Explain the goal of the project, the types of data used, your role in the project, and the QA/QC process for data and results.

2. Describe a modeling, forecasting, or statistical analysis you were involved in that required custom programming and scripting. Explain your role in the project.

3. Describe your experience with managing consultants and working with project teams. What lessons have you learned from your experience? Describe best practices in each.

Candidate Selection and Notification

The Executive Director will begin reviewing and evaluating applications within a few days of the first review date. The best qualified candidates will be invited to continue in the selection process. All candidates will receive written notification as to the final outcome of their application.

In compliance with the Americans with Disabilities Act (ADA), SRTC will accommodate persons who require assistance in order to apply for a position at SRTC. Applicants requiring an accommodation due to a disability during any stage of the recruitment and selection process, including requesting this document and related application materials in an alternative format, should make their needs known by contacting Greg Griffin at (509) 343-6370 or at ggriffin@srtc.org.

In compliance with the Immigration Reform and Control Act of 1986, applicants hired by SRTC must show acceptable proof of identity and evidence of authorization to work in the United States.

SRTC is an Equal Opportunity Employer.