

JOB DESCRIPTION

JOB TITLE:	TRANSPORTATION PLANNING TECHNICIAN
DEPARTMENT:	SAINT CLOUD AREA PLANNING ORGANIZATION
SUPERVISOR:	EXECUTIVE DIRECTOR
FLSA STATUS:	EXEMPT
SALARY RANGE:	\$48,100 TO \$68,692
PREPARED:	SEPTEMBER 21, 2021

SUMMARY

The Saint Cloud Area Planning Organization (APO) is seeking the ideal entry-level or mid-level candidate to supplement its existing transportation planning staff. While this person may be involved in activities in any or all of the APO's areas of responsibility, their primary focus areas will be:

1. **TRANSPORTATION SYSTEM PERFORMANCE DATA COLLECTION, MONITORING & ANALYSIS** – They will be the staff member with primary responsibility for the collecting and maintaining accurate data reflecting the conditions and operations of the regional transportation networks, such as Average Annual Daily Traffic (AADT) Counts, Travel Time Reliability estimates, crash data, pavement quality reports, bridge condition reports, etc. The Planning Technician will produce an annual report to accurately document and report the current conditions and operations of the transportation networks in the APO's planning area. (See <https://stcloudapo.org/wp-content/uploads/2021/06/2019-TPMR.pdf> for an example.) They will also provide similar data and/or analysis in support of other plans such as corridor studies, the Metropolitan Transportation Plan, and the regional Active Transportation Plan. The staff member will also be responsible for developing and making recommendations on regional performance measures that reveal important characteristics of transportation and accurately analyzing data in order to produce reasonable annual performance targets for the region.
2. **REGIONAL TRAVEL DEMAND MODEL MAINTENANCE, OPERATION AND ANALYSIS** – They will be the staff member with primary responsibility for maintaining the APO's regional travel demand model (which operates in CUBE). To the extent possible, the staff member will be asked to operate the model by running specific scenarios in support of larger planning efforts. If the chosen candidate has little or no experience running a CUBE-based travel demand model, they will be expected to seek out and participate in training and professional development opportunities to build their modeling skills. The staff member will also be responsible for analyzing model output to ensure it is reasonable and to uncover errors in model inputs or model operations. Again, the extent to which the staff member will be expected to do this analysis will be a function of their skill level and experience with travel demand models.
3. **MAINTAINING GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASES AND FILES & CREATING REGIONAL MAPS** – They will be the staff member with primary responsibility for maintaining the APO's GIS layers and updating those layers as new information/data becomes available. The staff member will also be the APO's

primary “map maker” using GIS, although some individual team members may have sufficient skills to produce their own maps on occasion. Still, the Planning Technician will be the APO’s chief GIS specialist, providing expertise to other team members.

ESSENTIAL DUTIES AND RESPONSIBILITIES

In addition to those responsibilities listed above, other essential duties and responsibilities will include, but are not necessarily limited to, the following. Other duties may be assigned.

1. The Planning Technician will be the primary staff member responsible for researching and seeking out transportation performance, condition, and demographic data relevant to the APO planning area, collecting that data from the originating agency, ensuring it is accurate, and maintaining the APO’s master database of regional transportation data.
2. When a data source is not available, the Planning Technician may need to conduct first-hand collection of the data. For example, the APO has an active transportation data collection program in which the Planning Technician deploys a bicycle-pedestrian counter on shared-use paths throughout the urban area. On occasion, one of the APO’s member jurisdictions requests a traffic count at a specific location on their roadway network. The Planning Technician is the staff member that will deploy the traffic counter, ensure it is working properly, review the data collected to ensure it appears to be accurate, and provide the data to the requesting jurisdiction.
3. The Planning Technician will make occasional presentations to the Technical Advisory Committee and Policy Board. The ability to analyze complex data and turn it into information (i.e., “tell the story” that is revealed by the data) that is accessible and meaningful to a broad audience is important.
4. The Planning Technician will mathematically/statistically analyze data such as finding means, medians, averages, statistical distributions, correlations, scatter plots, trend lines, probabilities, and (through GIS) geographic distributions. Moreover, the Planning Technician will be expected to compare and recognize relationships between multiple datasets and provide clarity as to the nature of the relationship. For example, if AADT and population are both increasing, is AADT increasing at the same rate as the population, or is it increasing at a slower or faster rate than population? Another example: If the number of vehicles entering a specific intersection has been increasing over time, and the number of total crashes at the same intersection has been decreasing over the same time period, but the total number of traffic fatalities has actually been increasing, what are some possible explanations for the increase in fatalities? Which datasets could be examined to support or refute a hypothesis and how should the dataset be analyzed?
5. The APO maintains a license for Streetlight Data (<https://www.streetlightdata.com/>) which provides a rich data source for trip origins and destinations, average speeds, route choices, and other data that is valuable for understanding transportation demand. The Planning Technician is the staff member with primary responsibility for accessing and utilizing Streetlight Data to help “tell the story” of transportation in the APO’s planning area.

MINIMUM QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations will be made to enable individuals with disabilities to perform the essential functions.

EDUCATION AND EXPERIENCE

Bachelor's degree or equivalent from an accredited college or university in mathematics, statistics, computer science or programming, or a related field.

- Experience handling and maintaining large datasets.
- Knowledge of and experience in data analysis.
- Strong attention to detail
- Ability to prepare clear and definitive reports and to effectively present such reports orally to various groups.
- Skill in research and analysis using state-of-the-art computer programs necessary for data analysis, GIS, travel demand modeling, and/or other transportation planning activities.
- Ability to establish and maintain effective working relationships with supervisors, other staff, staff of local jurisdictions, staff of state and federal agencies, and the general public.
- Must be capable of functioning with limited supervision and making independent decisions based on a sound understanding of the goals and principles of the APO.

LANGUAGE SKILLS

Must be able to read, write, hear, and speak English sufficiently to understand and carry out oral and written instruction; to understand various State and Federal regulations related to transportation planning; to communicate effectively orally and in writing; to prepare written documents and reports required for local, State-Aid and Federal-Aid projects.

Must have the ability to understand and carry out complex oral and written instructions.

Ability to read, analyze, and interpret common scientific and technical journals, financial reports, and legal documents. Ability to respond to common inquiries or complaints from APO member agencies, citizens, regulatory agencies, or members of the business community. Ability to write reports and documents that conform to prescribed style and format. Ability to effectively present information to public groups, the APO Board, and advisory committees.

MATHEMATICAL SKILLS

Ability to calculate figures and amounts such as means, medians, percentages, proportions, correlations, and trends in data over time. Ability to apply concepts of algebra, statistics, and geometry to transportation planning.

REASONING SKILLS

Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables. Must possess sound problem-solving skills. Must be capable of reasonable judgment and possess sound reasoning skills due to the independent nature of a considerable amount of work involved.

COMPUTER SKILLS

To perform this job successfully, an individual should have knowledge of internet browsers; Microsoft Excel; Microsoft Word, Microsoft Outlook, and Microsoft PowerPoint. Must have the ability to learn proper techniques and use of office equipment. The ability to learn proper techniques to use CUBE, ArcGIS (including ArcGIS Online), and Streelight Data.

CERTIFICATES, LICENSES, AND REGISTRATIONS

Current driver's license required.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job the employee is frequently required to sit for prolonged periods of time. The employee is regularly required to talk or hear. Must have a range of hearing, with or without correction, to be able to hear and respond to telephone communications. The employee is occasionally required to stand; walk; use hands to finger, handle, or feel; reach with hands and arms and stoop or kneel. Hand-eye coordination is required to operate office equipment and computer software. The employee must occasionally lift and/or move up to 35 pounds. The employee must have sufficient strength, mobility and agility to perform field survey work including: use of hands to handle equipment and ability to traverse areas of uneven or excavated ground and steep embankments, working outside in adverse weather conditions such as cold or hot weather and rain or snow. Specific vision abilities required by this job include close vision and ability to adjust focus. Must have vision, with or without correction that will afford the ability to adjust focus in order to operate computer software.

IDEAL QUALIFICATIONS

The starting pay for this position is dependent upon the chosen candidate's accumulated skills, knowledge, and experience. What follows is a summary of the additional skills knowledge, and experience of an ideal candidate for this position (over and above the Minimum Qualifications shown above).

EDUCATION AND EXPERIENCE

Master's degree or equivalent from an accredited college or university in mathematics, statistics, computer science or programming, or a related field.

- Three or more years of experience in statistical or mathematical analysis of large datasets.
- Three or more years of experience using CUBE, ArcGIS and/or ArcGIS Online, and/or Streetlight Data.
- Two or more years of experience making public presentations of data analysis and receiving and responding to audience feedback.
- Experience creating original infographics based on data.

LANGUAGE SKILLS

Fluency in Spanish or Somali.

Very strong writing skills in English are especially valuable.

MATHEMATICAL SKILLS

Significant knowledge of or experience with statistics and/or mathematics, especially as they pertain to analyzing large data sets and/or public survey data.

COMPUTER SKILLS

Experience using Geographic Information Systems (GIS), especially ArcGIS and/or ArcGIS Online, including simple coding; experience using and maintaining Eco-Visio counting equipment; experience with CUBE-based travel demand models.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential duties and responsibilities of this job. Reasonable accommodations will be made to enable individuals with disabilities to perform the essential functions.

Most of the work is performed in a clean, professional office setting. The noise level in the office work environment is usually quiet. Candidates should be comfortable performing much of the work alone in their office, working on their computer. Staff is encouraged to make their offices a comfortable for themselves as possible without making permanent changes to the walls, carpet, and other permanent fixtures.

Attending meetings of two to 20 people is regularly required. Meetings are normally held in conference rooms or large meeting rooms. Occasionally they may be held in more informal settings such as restaurants, diners, or coffee shops. Meetings can become noisy. Meetings of more than 20 people are infrequent but do happen.

Fieldwork is performed with exposure to weather conditions, dust, dirt, loud noise, traffic, exhaust fumes, and moving equipment. Some fieldwork may require walking in or across busy roadways.

THE REGION

The Saint Cloud metropolitan area is a growing region of about 137,000 residents, located about an hour north-west of Minneapolis on the banks of the Mississippi River. Ideally located, the region is affordable, but still offers something for everyone. Central Minnesota is famous for its year-round outdoor activities – hunting, fishing, bird-watching, and snowmobiling among many, many others. But the thriving arts, entertainment, and professional sports teams of the Twin Cities metro area are still within easy reach.

The region prides itself on being family-friendly, boasting good schools, lots of parks, and miles and miles of shared-use paths for walking or biking. And, of course, the entire state is famous for its quality of life and friendly people.

The region is also home to a number of institutions of higher-education, including Saint Cloud State University, Saint Cloud Technical and Community College, the College of Saint Benedict, and Saint John's University.

THE APO

The APO is a free-standing, independent metropolitan planning organization created by a joint-powers agreement. The agency has five full-time professional planning staff positions and one part-time administrative support position. The agency's annual operating budget is generally between \$800,000 and \$1,000,000 per year.

The APO Policy Board is comprised of officials from five cities, three counties, one township, and the urban transit provider. In addition, APO staff support a Technical Advisory Committee and an Active Transportation Advisory Committee. Staff is also active in other relevant organizations such as the regional Toward Zero Deaths committee, Access to Food, and the Area Transportation Partnership for MnDOT District 3.

SALARY AND BENEFITS

Salary will be negotiated and is dependent upon qualifications and experience. The salary range for this position is \$48,100 to \$68,692. Additional benefits include 12 paid holidays per year, paid vacation, paid sick leave (accrued at 8 hours per month), health insurance (provided free of charge to the staff member), health savings account with employer matching, \$50,000 life insurance policy, dental insurance, short- and long-term disability insurance, a deferred compensation plan, and participation in the Minnesota Public Employee Retirement Association.

In addition, APO staff members have significant flexibility to set their regular work schedule, including working from home when it is possible to do so.

TO APPLY

The Saint Cloud APO will be accepting resumes and cover letters from interested individuals until the position is filled. Interested persons are encouraged to tailor their submissions to the job requirements and qualifications shown above.

Resumes and Cover Letters should be mailed to:

Brian Gibson
Saint Cloud Area Planning Organization
1040 County Road 4
St. Cloud, MN 56303

Or they may be submitted by email to:

Gibson@stcloudapo.org

All resumes will be evaluated and prioritized and highly-qualified candidates will be contacted to schedule an interview. In-person interviews are preferred, but may be done by electronic means (e.g., Zoom, Teams, telephone, etc.) if the candidate cannot attend the interview in person.

This hiring process will remain active until the position is filled.