

Title	Traffic Engineering Senior Specialist
Vacancy Number	MoPW/SRTAP/PSC/1400-68
Ministry	Ministry of Public Works
Organization	Program for Service life enhancement and construction cost reduction of roads (PSC)
Project	Sustainable Reform & Technical Assistance Project
Duty Station	Kabul
Duration	1 year (with the possibility of extension)
No of Jobs	1
Nationality	Afghan
Sex	Male/Female
Salary Range	NTA Salary Scale (Grade B3 – B5)
Announcing Date	22 May 2021
Closing Date	03 June 2021
Job Type	Engineering
Shift	Full Time (chances of homebased or part time contract is also available, based on negotiation)
Job Status	Sourcing
Experience	Specific 2 years, General 8 years

Background:

The Ministry of Public Works (MoPW) is responsible for the planning, design, procurement, implementation, monitoring, and maintenance of the various transportation infrastructure projects such as roads, bridges, and its relevant drainage and retaining/protection structures in the government of the Islamic Republic of Afghanistan.

On a mission to reduce project costs and extend the service life of road infrastructures in Afghanistan, the MoPW aims to embark on a project to *develop a set of new criteria for the design of roads and highway infrastructures* in compliance with national and international standards, country's climatic and environmental conditions, economic situation, safety requirements, and the available construction technology. The adoption of newly developed design criteria will enhance safety, mobility, and sustainability when designing.

For the effective accomplishment of this purpose, the ministry intends to establish a team of well-versed and highly experienced professionals that will work together to revise the available *Interim Road and Highway Standard* and substituting it with the newly developed design criteria for roadways and highway infrastructures with sufficient quality to be adopted by the MoPW and other relevant highway agencies and contractors functioning in Afghanistan. The developed design criteria will encompass the essential design criteria, including but not necessarily limited to road functional/administrative

classification system, sets of design references, guidelines for traffic characteristics, sight distance, horizontal/vertical alignment, cross-sectional elements, rest/parking facilities, ramps, drainage facilities, and structures, retaining structures, intersection types, pavement types, pavement markings, traffic signs, and road furniture, etc.

Scope of Work/Job Summary:

The MoPW is actively seeking an engineering professional with a proven background in traffic engineering, and functions as a member of the team for developing the Design Criteria. The incumbent will work under the direct supervision, guidance, and direction of the International SME and leadership of the Team Leader/ Project Manager. The position should utilize their qualifications and experience in Traffic Design and Management to work as a member of expert engineers in developing a comprehensive and well-compiled set of design criteria for road projects in Afghanistan that is aligned with both the country's needs and the regional/international standards. The ideal candidate must perform an advanced level of traffic engineering studies and should demonstrate high-level skills in signal system designing, monitoring, and control, traffic modeling, data collection, design of complex ramps, interchanges and intersections, illumination, and also ensure the standards for safe and efficient traffic operations are incorporated in the newly developed design criteria and thereby ensure effective highway operations and improved safety.

The potential candidate will remain active through all project phases and should work in close coordination with the senior management in the MoPW. He/ She must directly report to the Team Leader/ Project Manager of the team.

Duties & Responsibilities:

The selected Traffic Engineering Senior Specialist will focus on the development of Design Criteria whose duties and responsibilities will include but not be limited to:

- Provide technical assistance in all relevant areas of traffic engineering, including planning, design, management, operation, and monitoring when compiling the design criteria;
- Demonstrate a comprehensive knowledge of the country's road network and routes, capacity, volume, and other traffic conditions;
- Conduct advanced level of traffic engineering studies and revise traffic-related existing standards, regional special provisions, and standard plans;
- Conduct site surveys, field investigations, and feasibility studies for data collection and criteria development, if deemed necessary;
- Perform needs assessments and discover problems in current practices through field studies and regular meetings with provincial engineers and stakeholders;
- Evaluate the history of traffic accident cases and make proper recommendations to avoid accidents;
- Gather and interpret data and present reports to the design criteria team on traffic issues such as speeding, volume, circulation patterns, roadway capacity, accidents, parking requirements, and projected traffic lanes needed;
- Develop and incorporate traffic safety and operations policies and procedures in the design criteria;
- Evaluate and compare the proposed procedures to be incorporated in the design criteria for traffic management and operations;
- Ensure the inclusion of all phases of traffic engineering within the newly developed design criteria; i.e., from concept through construction;
- Ensure the adherence of new design criteria with internationally recognized design standards and with the consideration of local conditions and regional/international standards;
- Ensure the criteria is equipped with the safety standards and guidelines for placing road furniture, traffic signage, signals, markings, etc.;
- Provide necessary technical expertise to the team relating to traffic engineering for both urban and rural roadway projects;
- Plan and coordinate the activities for the development of design criteria to ensure compliance to

procedures and regulations as required by the MoPW;

- Develop specific design criteria/procedures for establishing traffic design parameters for highway projects;
- Assist the team in disseminating and publishing the finalized design criteria draft;
- Successfully interface with experts from a range of other disciplines (civil, design, surveying, planning, geotechnical, etc.) to compile a comprehensive set of design criteria;
- Develop solutions to a wide range of difficult technical issues concerning traffic engineering and propose effective approaches and solutions;
- Complete all work in conformance with the MoPW policies, guidelines, and core values;
- Develop and maintain effective working relationships with seniors and the design criteria team and provide the necessary advice and support to the team;
- Assist the Project Manager in reviewing/preparing the progress reports (weekly, monthly, quarterly);
- Convene and attend technical meetings with stakeholders and team members on regular basis;
- Assist the team in drafting the criteria and oversee the writing quality;
- Ensure that the language used in draft design criteria is clear, simple, and focused; and
- Perform other tasks related to developing design criteria required/assigned by the senior management.

Skills & Competencies:

- Demonstrate in-depth knowledge of current design practices in the areas of illumination design, traffic signal design, other traffic control devices, interchange/intersection modeling, simulation, etc.;
- Must be familiar with regional best practices in the field of traffic engineering;
- Able to prepare/ analyze traffic studies, traffic models, geometric plans, traffic signal plans, and road construction plans and specifications;
- Able to draft and develop specifications/ guidelines and write clear, concise, and accurate technical/ non-technical reports;
- Acquaintance with regional and international traffic standards and knowledge of relevant AASHTO and Indian Road Congress / MoRTH guidelines;
- Conversant with a traffic simulation software, CIVIL3D, AutoCAD, and MS Office;
- Knowledge of Rapid Bus Transport (RBT) and Intelligent Transportation System (ITS) is desirable;
- Highly motivated and enthusiastic team player with a strong desire to succeed;
- Able to manage conflicting priorities; and
- Demonstrate leadership in handling and working with multidisciplinary teams.

Job Requirements:

- A bachelor's degree holder in Civil engineering or a master's in Transportation Engineering (preferred) with specialization in traffic management, design, and optimization of pedestrian and traffic safety;
- Knowledge of traffic simulation software and/or Transport Demand Modelling (Transport-related software i.e., VISSIM, VISUM, Cube) would be a plus;
- Have at least 8 years of experience focused on highway capacity, facilities design, traffic operations, systems analysis, network modeling, travel behavior, demand forecasting, and planning for safe and effective traffic flow, ESAL analysis, etc.;
- Having 2 years of experience in preparing technical documents and developing standard manuals is highly preferable;
- be fully familiar with the currently practiced traffic standards and proposed criteria for roadways in Afghanistan and have the knowledge of methodology concerning design criteria development;
- Must have completed several high-profile transportation projects in well-renowned organizations;
- Must demonstrate robust technical writing and English communication skills;
- Proven organizational and problem-solving skills;

- Able to travel to the remote area all over Afghanistan, collect required data and work as part of a team;
- Perform any other job-related duties and tasks as assigned by senior management.

Required Documents:

- CV with a cover letter for the relevant position;
- Copy of verified Degree by the Ministry of Higher Education;
- Copy of verified Afghan ID Card (Tazkera) or Passport;
- Copy of verified last Posting Contract; and
- Copy of other relevant documents that support the application.

Submission Guideline:

Interested candidates are requested to forward their applications, detailed CV and other required documents to jobs.mopw@yahoo.com indicate the vacancy number (**MoPW/SRTAP/PSC/1400-68**) and the post title (**Traffic Engineering Senior Specialist**) in the subject line when applying by email to the Human Resource Unit – Sustainable Reform and Technical Assistance Project of Ministry of Public Works (MoPW) at Kabul, Afghanistan.

Address: SRTAP Office, Railway Building, Kabul-Jalalabad Rd., opposite KMTC, MoPW, Kabul, Afghanistan.

Note: Only short-listed candidates will be contacted.