Title Traffic Engineering Specialist

Vacancy Number MoPW/SRTAP/RAMS/1400-05

Ministry Ministry of Public Works

Organization Road Asset Management Unit

Project Sustainable Reform & Technical Assistance Project

Duty Station Afghanistan (Various Provinces)

Duration 1 Year (with possibility of extension)

No of Jobs 7

Nationality Afghan

Sex Male/Female

Salary Range According to NTA Salary Scale (Grade-C)

Announcing Date 04/April/2021

Closing Date 18/April/2021

Job Type Engineering

Shift Full Time

Job Status Sourcing

Experience Specific 2 year, General 4 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.

The Road Asset Management System (RAMS) is a planning tool that MoPW intends to use it to deliver a sustainable road management system. MoPW is in the process of building up on the previous progress made in establishing RAMS to produce annual maintenance plans and priorities the project. The ministry is recruiting data collectors to carry out pavement and roadway structures' inventory and condition surveys of the Strategic Road Network (SRN) and of rural roads throughout Afghanistan. The paved road share of SRN is around 7,000 km of various types of pavements including asphalt, concrete, and DBST. Roadway structures includes Bridges, Culverts, Tunnels, Avalanche Galleries, Causeways and Retaining Walls. MoPW will provide necessary training for the pavement inventory and condition surveyors on various types of inspections, data collection, use of inspection equipment, form filling, condition rating using severity and extent of various elements. The trainees will be able to identify defects and specify element's condition index and provide detailed description accompanied with photographs and sketches as needed.

#### Scope of Work/Job Summary:

The Traffic Engineering Specialist will carry out all the required traffic data for determination of average daily traffic (ADT), annual average daily traffic (AADT), peak hours traffic, traffic growth rate, running speed, gross vehicles weight, axle loads, etc. required for the planning of road network, carriageway width analysis, upgradation of roadways (from two lanes to four and six lanes), prioritization of roads for maintenance works based on the traffic volume or intensity, pavement structure design, roadway classification based on the traffic volume, budgeting, timeline, etc.

#### **Duties & Responsibilities:**

- Preparing traffic counting plan and managing of timeline;
- Liaise with MoPW central office and local authorities and get approval prior to the traffic counting and data collection;
- Managing traffic counters in the team and guiding them to follow the work plan and timeline;
- Preparing traffic survey templates and analysis spreadsheets;
- Calculation of ADT. AADT and Peak hours traffic volumes:
- Determination of traffic intensities along the rural roads and their current densities;
- Calculation of traffic capacity for current highways and preparation of its upgradation based on the relevant analysis, assessments and field requirements;
- Calculation of traffic growth rate and comparing it with the GDP growth and proposing final growth rate for the design of pavement structures and roads geometry;
- Classification of highways based on the volume of equivalent single axle loads (ESAL) such as heavy, medium and light duty traffic;
- Assisting pavement designers in calculation of equivalent single axle loads (ESAL) for the design of pavement structures;
- Analysis of passenger car equivalent or passenger car unit for vehicles operating in Afghanistan;
- Conducting tire pressure survey and required analysis for vehicles operating in Afghanistan;
- Carry out routine and periodic traffic counts and survey;
- Filling survey forms utilizing survey equipment, take pictures/videos recordings, and write survey station brief information;
- Conducting Quality Assurance (QA) from the traffic counting stations and teams;
- Give required instructions to the traffic counters for the selection of traffic counting stations, team management, and counting procedures;
- Keep soft and hard data of traffic counts such as counting forms, sketches, drawings, calculations, reports, photos, etc.
- Fill out risk matrix spreadsheets before undertaking trips;
- Coordinate with RAMS core team, the Traffic Engineering Senior Specialist, Pavement Condition Officer, and GIS specialist to update the central database in an accurate and reliable manner;
- Carry out supervision and provide guidance to the vehicles counting contractor (if hired) to improve their performance and quality of the works;
- Participate in missions related to the project review and evaluation;
- Participate in the preparation and implementation of seminars and training courses;
- Any other task assigned by the Traffic Engineering Senior Specialist, and other relevant head/supervisor.

# **Skills & Competencies:**

- Familiar with the traffic survey, traffic counts, required data collection and their analysis;
- Experience with ADT, AADT, peak hour traffic, design hour traffic, ESAL analysis, Passenger car equivalent, Passenger car unit, traffic density analysis, traffic flow, etc.;
- Ability to overcome challenges and work in difficult work environments/conditions (especially in

the field);

- Be able and willing to travel to all provinces and remote location in Afghanistan, including volatile and insecure areas;
- High degree of personal initiative and willingness to accept responsibility for poor data collection;
- Knowledge of traffic engineering, and conducting relevant surveys and analysis;
- Use of Excel, Word, Power Point, AutoCAD and any other software uses for traffic engineering.

#### **Job Requirements:**

- Min of bachelor degree in civil engineering, transportation engineering, traffic engineering and or any other similar discipline;
- Having of personal computer installed with MS Word, Excel, Power Point and AutoCAD software:
- Having min of 4-year work experience in road survey, design, maintenance and construction (general experience) and min of 2-year work experience of traffic survey, analysis, and management (specific experience);
- Knowledge of standard practices of traffic engineering;
- Basic experience working with traffic survey equipment as necessary;
- Required verbal and written communication skills in English;
- Proven organizational and problem-solving skills;
- Able to travel to the remote area in all over the Afghanistan, collect required data and work as part of a team;
- Physical fitness and able to travel and complete inspection procedure;
- Perform any other survey related duties and tasks as assigned by the head/supervisor.

#### **Required Documents:**

- CV with an application form for the relevant position;
- Copy of verified Degree by the Ministry of Higher Education;
- Copy of verified Afghan ID Card (Tazkera) or Passport copy;
- Copy of verified last Posting Contract;
- Copy of other documents seems to be necessary.

#### **Submission Guideline:**

Interested candidates are requested to forward their applications, detailed CV and other required documents to <a href="mailto:vacancies.mopw@gmail.com">vacancies.mopw@gmail.com</a> indicate the vacancy number (MoPW/SRTAP/RAMS/1400-05) and the post title (Traffic Engineering 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.

### Office Address:

SRTAP Office, Railway Building, Kabul Jalalabad Road, in front of KMTC, MoPW, Kabul, Afghanistan.

Only short-listed candidates will be notified for written exam and interview.