



**URBAN POLICY & PLANNING UNIT  
PLANNING & DEVELOPMENT DEPARTMENT  
GOVERNMENT OF KHYBER PAKHTUNKHWA**

**Draft ToRs**

**Traffic/Transportation Plan for Kohat and Mardan**

**Introduction:**

The urban population of Khyber Pakhtunkhwa is increasing at a very fast pace due to many push and pull factors. The Afghan influx in KP, the law and order situation pushing people out from FATA and Malakand coupled with natural calamities like floods and earthquakes are responsible for migration of rural population to the urban centres of the province. The pull of safety and security, education and health facilities, better business and employment opportunities, all have their attraction, bringing more people to the cities and increasing the urban population.

Increase in urban population requires that the systems are strengthened and urban growth is planned properly. However, in KP the cities are witnessing unregulated and unplanned growth, with no master plan to guide the growth and channel the resources to lead to enhanced economic growth and urban management. All of this is leading towards collapse of services and formation of slums.

Urban centers in Khyber Pakhtunkhwa are increasingly suffering from overcrowding, traffic congestion, and air pollution. Insufficient investment and weak management of key infrastructure have resulted in poor coverage and low service quality.

Transport sector is one of the most important sectors in urban management. Connectivity is the key for spurring development and growth. However, the transportation sector has traditionally be ignored and beset with many problems. Systems are not keeping pace with the demand. The public transport system is in private hands, with substandard services, dehumanizing veneer and lack safety, not at all sufficient to the needs and requirements. The road networks are unplanned and built in a reactive mode, with some inputs provided only when the issue assumes serious proportion and is already out of hand.

The scale and complexity of urban problems are increasing everywhere. All cities must develop Plans to enable a sustainable future in the rapidly changing urban environment. And these plans must be reviewed and updated at a regular interval, to ensure a better economic, social and environmental future. Cities indeed are important engines of economic growth and provide significant economies of scale in the provision of jobs,

housing and services. The Urban Policy Unit initiated the formulation of Transport Master Plan and Traffic Management for Kohat and Mardan.

As USAID is providing financial assistance to various projects of UPU and being as a partner in development, UPU decided to finance the development of Transport Master Plan Traffic Management for Mardan and Kohat through USAID funding (re-appropriation of PIL4). The Transportation MasterPlan/ Traffic Management will address traffic management issues in the target cities and will be an integral part of the Cities Strategic Development Plan.

### **Mardan City:**

The City of Mardan located at a distance of 50 KM in the east of the provincial capital is the second largest city of the province with an estimated population of 600,000. The only planned settlement in Mardan City is Sheikh Maltoon town, where the development is regularized and building activities are taking place under the Mardan Development Authority (MDA). All other areas of the city are growing haphazardly without proper guidelines and building regulations. Traffic congestion in the city is high with residential & population density. Internal streets in the city centre like UCs Begot Ganj, Hoti and Par Hoti etc are too narrow with no vehicular accessibility.

### **Kohat City:**

Kohat is a district of the Khyber Pakhtunkhwa. The Indus Highway passes through the district connecting Kohat to Peshawar in the north and Bannu, Dera Ismail Khan, Dera Ghazi Khan and many other big cities of Pakistan in the south. The National Highway N-80 runs from Islamabad (federal capital) to Kohat.

The city's rapidly growing population coupled with increasing vehicular ownership has resulted in an insatiable travel demand. Development of transport infrastructure has not kept pace with this increase and has caused transport related problems like traffic congestion and poor environment.

In the absence of an extensive railway service or another alternate transportation option in cities of Mardan and Kohat roads and highways are heavily used for passenger and freight traffic. To mitigate the resultant deterioration of road and Public Transport Infrastructure, the existing road network needs to be improved with special emphasis on Public Transport Infrastructure extension, up-gradation and maintenance.

The Government of Khyber Pakhtunkhwa (KP) is aware of the social, environmental and economic costs of growing car use in urban areas. To deal with all these issues, UPU has decided to formulate a comprehensive Transport Master Plan and Traffic Management Plan Mardan, and Kohat cities of KP in collaboration with USAID. The purpose of Transportation Master Plan (TMP) is to analyse in detail the complex and multimodal transportation system of these urban areas and propose a sustainable plan that must cater the transportation needs of these cities for the next 20 years.

## **Objectives:**

The Traffic/Transportation Management Plan (TMP) will outline the transport needs of Kohat, and Mardan and will devise short, medium and long-term solutions. This plan will set out a long-term strategy to guide the planning, development, renewal and maintenance of a multimodal transportation system in a manner that is consistent with projected needs, and aligned with the city's growth and the overall vision for a sustainable development of Mardan and Kohat.

Conduct macro analysis of the traffic problems of these cities and identify reasons that cause traffic congestions at city various major inlets, junctions and nodes and at any other locations necessary to address traffic problems.

- Evaluate the existing traffic handling arrangements being practiced in the city and propose various options, modifications, infrastructure requirement which may provide short-term solutions, leading towards smooth traffic flow in the city.
- Develop transport plans for these cities that may ultimately address the underlying traffic problems; and suggest prioritized projects. These plans shall provide direction to the KP Government for adopting systematic approach in the implementation of transport infrastructure, to develop an adequate, modern and innovative transportation system that accommodates and provides for the current and future needs and the demands of these cities.

## **Scope of Work:**

The Traffic Surveys will be conducted in particular context of the city and will focus only on the roads that actually connect the city, intersection and midblock in the city, and affect the city performance and productivity.

This study will take in mind all the associated factors, which actually contribute towards traffic problems or affect the smooth flow of traffic in any way. This may encompass various technical and social factors, urban trends, prevailing traffic management techniques, available infrastructure arrangements and other sundry factors.

The consultant will conducting traffic survey and analyzing the data and submitting a report along with a Transport Plan on the findings.

## **Presentations:**

Professional presentations would be required from the top three (3) qualified/responsive Consultants. This presentation will be part of the process of technical evaluation.

## **Tasks/Activities to be performed by the Consultant:**

1. Kick Off Meeting; within 7 days of the award of the contract, the Consultant will have a kick off meeting with UPU to discuss the following points.
  - Review of the concept and requirements of the survey
  - Review of the key issues and findings
  - Review of the approach and Reporting channel of the Consultant
  - Review of the team organization and detailed functions of the team members; if any specific issues requiring immediate attention
2. Divide the cities district roads network areas into zones, determine and establish the boundaries for each zone for surveys to be conducted to the satisfaction and approval of UPU.
3. Identify various locations, nodes/ junctions and mid-blocks where traffic backlogs are very frequent throughout the day to the satisfaction and approval of UPU.
4. Illustrate aims, objectives and methodology of the various types of these standard surveys and explain the desired outcome to be achieved.
5. The Consultants are required to study existing traffic and transportation system of the cities. Various transportation surveys are to be carried out to explore the constraints and opportunities and come up with suitable solutions for traffic and transportation within the city. The surveys shall include the following but not limited to:
  - Development of a detail roads and parking inventory
  - Origin, Destination and Cordon Survey
  - Traffic counts at various roads and junctions to determine roads and junction capacities.
  - Public Transport User Interview Survey
  - Household Interview Survey (HIS)
  - Traffic Signage Survey (also signage relevant to public transport)
  - Parking Survey as parking lots identifications/developments is an important component of this study
  - Mobility survey and to identify synergy between land-use and transport etc
  - Traffic flow volume, trend, axle weight-age etc (data from weighing stations and established traffic count permanent stations-or any other means including survey on the main arteries and by-pass roads).

6. Based on the outcomes of the surveys, assess the approaches/techniques employed by the traffic and transport authorities and identify major weakness and constraints in the current traffic management and operation system that is being followed by the traffic and transport authorities.
7. Recommend improvements required to make the current traffic management and operation systems efficient and safe, and brought in line with international practices.
8. Analyze the existing traffic control measures and devices, geographic modifications and maintenance practices that have been adopted in the city and critically evaluate their advantages and effectiveness and conversely the flaws, and hence evaluate and prioritize the potential improvement projects and strategies that can solve the issues.
9. Identify the encroachments that affect the operational performances of the roads network (including junctions) and cause safety risk to road users.
10. Develop and suggest various options of traffic management and control that can be applied in the given situation, to get rid of the prevailing traffic problems in the city. The options suggested should be accompanied and substantiated through technical and cost analysis of the given options with most preferred options clearly brought out.
11. Prepare and make a presentation on the results and conclusion/ recommendations at the completion of the studies.
12. Development of Transport Plans: Develop short term- plans, Mid-term and long-term programs for each city, identifying specific capital projects and operational strategies, with timelines and priorities that can solve the traffic problems and improve the life of its citizens.

**Defined Deliverables / Reporting Requirements for Each City:**

Sr. No.	Title of Deliverable	Schedule for Submission
1	<p><b><u>Inception Report:</u></b></p> <p>Inception Report should include key issues and findings of the consultant, the final approach and methodology to be used for the study, timetable of activities / milestones going forward, team organization and functions of the team members of the consultant. The report shall also contain zoning of the whole city area for traffic studies as elaborated in TORs</p>	<p>Within maximum of Two weeks of signing the contract.</p>
2	<p><b><u>Traffic Data:</u></b></p> <p>Data collected of all traffic surveys as per ToR in each zone shall be submitted in tabulated form to the satisfaction and acceptance of the UPU.</p>	<p>Within maximum of 14 weeks of Approval of Inception Report.</p>
3	<p><b><u>Draft Report:</u></b></p> <p>A Comprehensive draft report along with transport plans based on the findings of the surveys conducted, containing the data and outcomes and recommendations to the satisfaction of the UPU</p>	<p>Within maximum of 16weeks after submission and acceptance of the traffic data</p>
4	<p><b><u>Stakeholder Consultative workshop:</u></b></p> <p>Draft report along with Transport Plans shall be shared with all the stakeholders to validate the data findings and recommendations of the Report.</p>	<p>Within maximum of 4 weeks after submission of the draft report</p>
5	<p><b><u>Final Report:</u></b></p> <p>A very comprehensive final report along with Transport Plans incorporating inputs of the stakeholders on all works to be carried out shall be submitted to UPU for approval</p> <p>The report shall give a focus on the significant features of existing and projected travel demand in quantitative as well as qualitative terms and shall present a comparison of the existing supply situation with the same highlighting the gap between demand and supply.</p>	<p>Within 12 weeks</p>

**Notes:**

- All the deliverables shall be evaluated and approved by the Technical Evaluation Committee, comprised of experts nominated, in accordance with the scope of TORs.
- Any delay on the part of client shall be excluded from the given time line of the assignment.
- Keeping in view, having a transparency and verity in reports for each city and avoiding duplication, consultancy for each city will be awarded to different consultant firm that means that only one city would be awarded to each consultant.
- The deliverable which involve survey data shall be submitted in both original form and scan copies, as it property of UPU.
- The consultant should provide twenty numbers of copies of the final report.

<b>Position</b>	<b>Qualification</b>	<b>Min Experience</b>
<b>Team Leader: Transportation or Highway Engineer</b>	MSc	10 years
<b>Urban Planner</b>	MSc	5 years
<b>Transport Planner</b>	MSc	5 years
<b>Transport/Traffic Engineer</b>	MSc	5 years
<b>Transport Modeler</b>	MSc	5 years
<b>Surveyor</b>	Relevant Experience and Qualification	2 years