

**GOVERNMENT OF GUJARAT  
ROADS & BUILDINGS DEPARTMENT [R&BD]**

**TECHNICAL ASSISTANCE  
FOR ROAD SAFETY MANAGEMENT AND CAPACITY  
STRENGTHENING UNDER GSHP-II**

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**TERMS OF REFERENCE**

**1. Background**

The World Bank (WB) assisted Second Gujarat State Highway Project (GSHP-II) has been taken up by Roads and Building Department (R&BD) of the Government of Gujarat (GoG). This project includes a Highway Improvement Component, a Sector Policy and Institutional Development Component and a Road Safety Component.

In 2012, the WB conducted a Road Safety Management Capacity Review (RSMCR) for Gujarat to identify key requirements to establish a robust road safety management system and the contours of corridor demonstration projects, within the operational framework of the GSHP-II- Road Safety component. This was aimed at bringing Gujarat's challenging road safety outcomes under control. Based on the RSMCR<sup>1</sup>, it was decided to include the following under the road safety component of GSHP-II:

- A fully resourced Project Steering Committee (PSC) to lead and manage Road Safety component of the project;
- Interventions to be developed and implemented across the agencies/ sectors in targeted high-risk, high-volume demonstration corridor(s)
- Policy reviews of agreed road safety priorities, such as driver standards, heavy commercial vehicle safety, safe infrastructure design, deterrent policing and penalty frameworks, road crash data system improvement and vehicle safety.
- Conduct of a formal review of existing institutional arrangements and recommendation of preferred options for a State Lead Agency role
- Review of a road safety policy and action plan by the GoG by project completion

Accordingly, the GoG has formed a PSC, chaired by the Chief Secretary of the GoG and comprising the Secretary, Roads and Buildings Department, the Commissioner of Transport and the Additional Chief Secretaries of Home, Urban Development and Housing, Principal Secretaries Education and Health Departments<sup>2</sup> as members. The PSC will lead and oversee high level monitoring of the road safety component, and will progressively assume a lead agency role for setting up appropriate mechanisms for the purposes of delivering the project. It will facilitate interagency coordination and provide high level guidance as and when required during the project. The PSC may meet at least half yearly or whenever required.

A Working Group (WG) of Officers was also formed from the same Departments whose members represent the PSC<sup>3</sup>. Its critical project role is to meet regularly to provide the hub and support for the design, delivery, coordination and monitoring of the road safety component, as

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<sup>1</sup> See Annexure 1 for an Extract

<sup>2</sup> See Annexure 2

<sup>3</sup> See Annexure 3

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it relates to their specific Department. It will meet quarterly or more frequently as required, and report to the PSC.

The R&BD will also make available a road safety cell which will play the secretariat support and coordination role. This cell will support related procurement aspects through the PIU and will provide day-to-day implementation and monitoring support for the project components together with the Consultant, to the WG and its member Departments. The WG member departments will be responsible for adopting appropriate designs/ details for their safe corridor interventions and for implementation and monitoring.

In 2016, the GoG formulated a State Road Safety Policy<sup>4</sup> (See Annexure 4), with a goal of a 50% reduction in fatalities and crashes by 2020 through an improved institutional framework (a designated lead agency and state road safety fund) safer infrastructure (zero black spot policy, better safety standards and designs to incorporate needs of all vulnerable road users), traffic calming measures to reduce speed and regular road safety audits<sup>5</sup>), safer vehicles (statutory periodic inspections including through more automation to ensure road-worthiness and quality of emissions), safer drivers (better license testing and training), better enforcement (through tools and resources), improved emergency care to crash victims (immediate compensation to victims<sup>6</sup>, provision of cranes, ambulances etc for faster rescue, adequately equipped hospitals along NHs and SHs) and research (crash investigation and dissemination) and analytics (establishment of a road safety information database to fit the requirements of all stakeholder departments, improved crash data collection, analysis, investigation and reporting).

Accordingly in February 2018, the GOG has enacted the Gujarat Road Safety Authority Act, 2018 (See Annexure 5), to establish an independent Road Safety Authority (GRSA) to act as the lead agency for road safety in the state, with a Chief Road Safety Commissioner as its Chief Executive Officer. It would work as a Secretariat for the State Road Safety Council (SRSC), arrange Council meetings, and monitor implementation of the SRSC decisions by respective state departments, and the directions of the Supreme Court Appointed Committee on Road Safety, and furnish related compliance reports. It would inter alia, notify annual targets for reduction of crashes and fatalities and formulate action plans to achieve these targets; collect crash data on a regular basis and analyze the data to identify crash prone areas and road stretches and categories of road user victims; direct the GoG departments, State, District and City Road Safety Councils on road safety issues; prescribe and enforce road safety standards and procedures; administer the Road Safety Fund to facilitate implementation of road safety and trauma care programs, sanction expenditure for road safety projects, purchase, installation of related equipment and devices and conduct of related research; provide and arrange for training programs, conferences, workshops etc. for road safety capacity augmentation; collaborate and coordinate with other agencies, NGOs and institutions with the same road safety aims; monitor implementation of road safety laws (helmet, seat-belt etc.).

These consulting services are now needed to provide technical assistance to the R&BD to: (1) enable it to lead and coordinate implementation of multi-sector interventions by relevant agencies in the selected demonstration corridor(s) through the WG and PSC process; (2) develop skills and knowledge and capacity about interventions within the R&BD Cell, WG members and some member departments; (3) assist the GoG (through the WG and PSC) and

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<sup>4</sup> GO issued on March 8, 2016

<sup>5</sup> Every roadworks project that costs more than INR 10 crore to undergo a mandatory road safety audit

<sup>6</sup> Through a GO issued in April 2016, the government has announced provision of an immediate compensation of INR 50,000 to crash victims to defray their medical costs.

liaise with the GRSA (as needed) in determining/establishing a sustainable combination of institutional arrangements, functions, staffing and other resources, to tackle the state's future road safety challenges and responsibilities effectively, in a comprehensive, multi-sectorial and strategic manner and (4) assist the PSC, WG and the GRSA to carry out initial State wide reviews of agreed road safety priority issues.

## 2. Broad Objectives

The broad objectives of the required technical assistance services are as follows:

- Successfully plan and implement the safe corridor demonstration projects under GSHP-II and support the R&BD, Home and Transport Departments as needed, to implement road safety interventions including social awareness campaigns;
- As a vital element of the demonstration corridor projects, support the R&BD, Home and Transport Departments departments in development of their road safety management capacity, and the R&BD Cell in particular to deliver the Secretariat role for the Departments, WG and the PSC, and the WG and R&BD Cell to effectively plan and oversee delivery of the safe demonstration corridor projects;
- Reviews of driver experience requirements before undergoing license testing, heavy commercial vehicle driver licensing and heavy vehicle driver training and road crash data system improvement;
- Provide support for the GRSA in the administrative arrangements for its own meetings and in its convening of meetings of the SRSC;
- Based on the experience of the corridor demonstration project(s) and the State's own ongoing initiatives, support the GRSA in its development of a medium to long term action plan for improving statewide road safety outcomes.

## 3. Scope of Services

The Consultant is expected to guide and support various concerned authorities to perform the following tasks and deliver outputs which are best suited to deliver outcomes for improved road safety management in the state.

### 3.1. **Task 1: Review and recommend improvements to current practices/procedures**

The consultant will accomplish the following tasks:

#### A) **Transport Department**

##### 3.1.1. Review licensing processes

- International good practice benchmarking of pre-license test experience for LMVs, and heavy vehicle driver licensing including heavy vehicle driver training;
- Recommend short-term and long-term improvements to: (i) the current and planned practices for pre-license test experience for LMV drivers; and (ii) licensing arrangements for heavy vehicle driver licensing including heavy vehicle driver training;
- Provide potential options including likely costs of implementation, potential timing and road safety benefits of these measures.

##### 3.1.2. Recommend awareness/publicity campaigns

- Review current road information/publicity materials (including TEAM van project) developed for increasing community road safety awareness and compliance with traffic rules
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## **B) Home Department**

Under the SCDP in GSHP-II, the Consultant shall identify measures to strengthen police enforcement capacity and develop further the police crash investigation capacity in the limited geographic area of the demonstration project. Specifically, the Consultant shall accomplish the following tasks:

### 3.1.3. Review of police enforcement to understand current levels and procedures and practices of enforcement for general deterrence of unsafe road user behaviors

- Assess road user compliance with road traffic laws as currently enforced and deterred by legislative and regulatory arrangements, penalty levels and enforcement spread, intensity and intelligence basis;
- Recommend required levels of enforcement (person hours and equipment operating hours) to enhance enforcement of existing road transport rules and regulations for safe road user behavior to address shortcomings and change road user behavior;
- Identify on-the-job support needs for the implementation of improvement to periodic enforcement programs (to complement training under Task 3).

### 3.1.4. Consider measures to enable Police to more efficiently enforce the traffic laws

- Recommend improvements to the efficiency of police enforcement programs based on the evaluation findings in high-risk corridors and areas.
- Explore adjusted delegated authority measures for Police to support more widespread issuing of infringements and Police sanctions, such as streamlined suspension of licenses and streamlined removal of unfit vehicles on the highway reducing reliance on mandatory court referral.

### 3.1.5. Assessment of current road crash data practices and procedures

- Evaluate current procedures and systems for reporting, recording and analyzing road crash data and the extent to which current system capability meets agency requirements for analysis and understanding of road crash problems.
- Identify necessary modifications to current and planned procedures and systems for reporting, recording and analyzing road crashes to improve data system application.

### 3.1.6. Present options to develop a Road Safety Information Database

- Examine other available systems which are operating in India and may be under preparation nationally and the extent to which they meet agencies' requirements (for practicality of data collection by police and for the required level of analysis and understanding of road crash problems by other agencies)
  - The Gujarat Police has developed e-GujCop, a state of the art computerized system, which has a number of utility modules that could supplement and complement multi sectoral Road Safety intent. In addition, the Police are developing a mobile application for improved recording, mapping, analysis and reporting of crash data. The Consultant should interact with concerned stakeholders on assessing whether and how best these systems could be harnessed in establishing the Road Safety Information Database (as referred to in the State's Road Safety Policy).
  - In consultation with the PSC/WG, compare the options for (i) modification of the current system (including e-GujCop) and (ii) replacement with (procurement of) some operational systems in other Indian States.
  - Evaluate and recommend measures required to be taken for each option and the estimated costs and project duration to implement these systems in Gujarat.
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### C) Support to WG

3.1.7. Assist the WG to discuss and redefine (if needed) their roles and responsibilities for their management overview and delivery responsibilities for the road safety component of the Project as well as the operation of the demonstration project(s). This will also include identifying suitable opportunities for inter-agency coordination and recommendations for twinning with other agencies nationally and internationally to share experience and enhance knowledge about road safety management (to complement Task 3D).

3.1.8. *Workshop for Stakeholder Departments*

As part of Task 1, the Consultant shall conduct a workshop involving officers of all the stakeholder departments including the WG members for addressing the respective assessments and recommendations suggested therein.

### 3.2. Task 2: Support for Safe Corridor Demonstration Project

GSHP-II project had envisaged about thirty kilometers length of selected road corridors to be covered under SCDP. Of the selected road corridors, civil works are now ongoing on the Bharuch-Dehgam (11 km) corridor wherein some ITS interventions are also planned. Another corridor that was earlier identified for the SCDP has been substituted with a corridor close to the Capital of Gujarat for higher visibility and demonstration effect, namely, the Gandhinagar-Indira Bridge (G-I) Corridor of 11 km length (from Ch-0 to Indira Bridge). For this corridor, design and civil works would be done by R&BD with construction to commence in first quarter of 2019. The scope of this assignment covers advisory assistance in operationalizing and M&E activity for both Bharuch-Dehgam and the G-I corridors.

#### A) Planning Support

The Consultant will provide support to the Home and Transport Departments for formulation of detailed plans of proposed deliverable interventions, their associated estimated costs for implementation and operation, and for monitoring and evaluation of these plans in the demonstration projects. As R&BD will have carried out this task for the safer infrastructure component substantially by the time of this consultancy, a high level review of their infrastructure plans and advice on relevant speed limits is likely to be all that is required. For Transport and Home Departments, consultancy services provided would likely involve implementing a combination of enforcement and publicity campaigns.

Several of the multi-sectoral interventions to be designed for the targeted demonstration corridors are specified below:

3.2.1. *Safer Infrastructure and recommended speed limits*

Of the two corridors, detailed designs have already been made for Bharuch-Dehgam by the PMC and designs for the G-I corridor are underway through PMC as well. As such, this TA Consultant would conduct a high-level review of safe system infrastructure elements proposed for the G-I Bridge Corridor, alongside PIU/PMC and establish consensus through Working Group and the World Bank, following due process of the R&BD. Further, the Consultant shall undertake the following:

3.2.1.1. *Monitoring and Evaluation Plan:* Assist the WG in developing detailed monitoring & evaluation plans/procedures to assess safety performance in the demonstration corridors taking into consideration each Department's plan. Performance measures should take the form of final outcomes, intermediate outcomes and outputs (See Annexure 6). The M&E plan shall be so designed and delivered with appropriate frequency to enable the GRSA to develop and

apply more effective engineering, general deterrence-based enforcement with publicity campaigns for improved compliance with vehicle and road user standards and rules, to the entire statewide road network progressively.

- 3.2.1.2. The Consultant will also recommend safe system compliant speed limits for the treated sections, in consultation with local authorities.

3.2.2. Safer Users through enforcement, education and awareness

- 3.2.2.1. Prepare detailed action plans (including required training, equipment procurement and implementation resourcing, deployment, project supervision and Police to WG reporting requirements) for Police Department to support enhanced traffic enforcement in the demonstration corridor(s) before Police commence the SCDP activity; these plans will include:
- speed management action plan (with a special focus on pedestrian safety) through appropriate devices (interceptor vehicles, radar, speed cameras, point to point cameras, etc.)
  - seat belt and helmet compliance action plan
  - heavy vehicle safety regulations enforcement action plan (especially for checking lighting, overloading, driver fatigue, speeding)
  - crash site clearance plan through appropriate equipment (cranes and any specialized equipment such as “jaws of life” hydraulic tools)
- 3.2.2.2. Based on the above set of interventions, review potential benefits of a specially trained and equipped state highway patrol dedicated to vehicular speed enforcement and recommend a future approach.
- 3.2.2.3. Conduct an analysis of equipment needs and formulate specification and costing of additional equipment required to support enforcement programs.
- 3.2.2.4. Prepare a detailed action plan for Transport Department (including required training, equipment procurement and implementation resourcing - deployment, project supervision and Transport to WG reporting requirements) for heavy vehicle (truck and bus) safety regulation enforcement (especially lighting, overloading, speeding, fatigue and driver license status).
- 3.2.2.5. Formulate and deliver social campaigns/plans, to improve road and traffic safety awareness and compliance with safety standards in the demonstration corridors and areas; provide content advice and execute recommended campaign and information delivery methods:
- These campaigns should ideally supplement the TEAM van project and target all relevant parties and use all appropriate media (local television, theatres/multiplex screens, radio, newspapers, billboards, posters and social media), taking into account local literacy levels and language needs. Opportunities will also be explored to use local cultural events and outlets, road safety weeks to disseminate key messages and funding will be made available to support related community development initiatives.
  - Consultant should inform all the stakeholder departments upon start of any social awareness campaigns.
  - Consultant will earmark fixed amount of INR 50 Lacs in their financial proposals under provisional sum head only towards social awareness Campaigns during the contract period. Such sum shall be spent appropriately for various campaigns only after discussion, consultation and approval of R&BD - GoG. After implementation of such approved campaigns, the appropriate sum shall be reimbursed to the Consultant.
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- 3.2.2.6. Consultant shall also explore possibilities to collaborate with local industry for sponsoring some of the safety related social/awareness campaign activities.

## **B) Operational Support**

### 3.2.3. Final review of, and advice about SCDP Operationalization:

- Final review of detailed action plans for safer users (Home Department and Transport Department) and assessment of any high-level infrastructure safety issues for advice to R&BD;
- Final training in enforcement activity and equipment use for Police and Transport officers;
- Preparation and distribution of public road safety campaign materials, road user information materials through various delivery options and appropriate timing of activities;
- Support review by WG and PSC of funding availability and priorities for funding of respective detailed action plans
- Carry out a comprehensive, agreed upon M&E of SCDP corridors (including before-after surveys of outcomes) and report to the WG.

### 3.2.4. Support progressive implementation of all safer infrastructure, safer user interventions in the demo corridor(s).

## **3.3. Task 3 - Road Safety Capacity Building for Stakeholder Departments**

### 3.3.1. Training Needs Analysis

Identify priority training needs for Home, Transport Departments and the officers in the existing road safety cells of stakeholder departments on safe system principles and thinking, understanding of crash risks for state wide application and basic road safety management, interventions and results to support detailed crash analysis and design of interventions in the demonstration corridors and areas.

### 3.3.2. Training programs

#### **A) To R&BD**

To achieve a satisfactory level of safe system awareness and to develop the ability to apply various tools to infrastructure design, a satisfactory level of training and knowledge transfer across the R&BD will be required over a number of years. Training will be necessary for the Road Safety Cell, to be followed by its extension to staff in R&BD engineering staff across Districts. At present under GSHP-II, some road safety training is being imparted to the Engineers of R&BD; also a Train-The-Trainers program is getting implemented. The TA Consultant shall have to review such training material, its content and shall identify and recommend the missing aspects to impart complete road safety training including Safe Systems Approach, Crash Risk Assessment and ITS.

Accordingly TA Consultant shall identify the comprehensive long term training needs and prepare training plan for R&BD. This training shall cover the “road safety aspect” as a whole after due consideration of already imparted training through GSHP-II including more in-depth aspects of ITS and Road Safety, Safe Systems Approach and Crash Risk Assessment. Such training recommendations need to be arrived at in close consultation with R&BD.

**B) To Home Department**

Capacity Building and Training in the areas of traffic management, field operations (in the use of various tools and equipment) and enforcement.

- Identify training needs for a basic training program to upgrade the traffic safety knowledge and skills of road policing staff.
- Identify and recommend the advanced courses available on general deterrence theory and practice, and related operational strategies and tactics, for senior police.

Develop knowledge and expertise within Police through best practice crash investigation techniques on serious crashes on demonstration corridors to enable them to progressively carry out such crash investigations for serious crashes on the state wide road network and report on these to Police command and to the other road safety authorities.

- Skilled core group of officers able to conduct crash investigations as per good international practices
- Identify suitable training to conduct investigations, including advanced systems/equipment for crash investigations and to prepare report for the relevant authorities

**C) To Home, R&B and Transport Department and GRSA**

- Identify and recommend suitable advanced courses available on road safety management and operational measures for senior officers.
- Facilitate preparing the necessary proposals, and make all the expenditure toward travel, logistics and program costs for about 8-10 GoG officers to attend such courses (these will be reimbursed at cost by the client and are not to be made part of the financial proposal).

**D) To WG**

Work with the WG to provide high level training and knowledge transfer to this group on safe system and road safety management (decision making, support and liaison needs). Training programs shall be put together to be delivered in Gujarat in the following areas:

- Improved awareness and understanding of safe system approach
- Capacity to analyze major crash risks on the system using safe system approaches
- Capacity to introduce safe system approach into project discussions at concept stage
- Capacity to develop infrastructure solutions based on safe system approach

**3.4. Task 4: Strategic support for state-wide Road Safety Management**

Based on Tasks 1 to 3 above, the Consultant is expected to conduct a review of road safety management arrangements in Gujarat for the medium to longer term, with the support of the relevant authorities.

The Consultant will review to strengthen existing operational arrangements regarding road safety (GRSA/SRSC/DRSC) and recommend necessary improvements. Draft MVA Road Amendments Bill is under consideration by the Government of India. In case it is approved during the course of this assignment, the Consultant is expected to thoroughly study the same and recommend appropriate responses for Gujarat.

Specifically, the Consultant is expected to provide suggestions/advice to GRSA to perform the following tasks and deliver outputs which are best suited to deliver improved road safety management in the state.

3.4.1. Review Lead Agency resourcing support

- Identify and recommend necessary resourcing for the lead agency to carry out its role;
- Identify options for securing sustainable funding for the proposed Road Safety Fund (including through injury insurance contributions and cess on new vehicle registration).

3.4.2. Identify and recommend road safety capacity development, research and partnership needs

- Review road safety research needs and discuss with GRSA on how these could be progressed.
- Determine resource requirements and likely curriculum for setting up a Traffic Training Cell in the Gujarat Police Academy

**3.5. Task 5 - Review road safety policy and develop a time-bound action plan for adoption**

The Consultant is expected to guide and support GRSA to review the GoG road safety policy (as needed) and develop a medium to long term road safety action plan for adoption by GOG.

3.5.1. Conduct and facilitate a Chintan Baithak (Brainstorming Workshop) for all stakeholders to:

- Discuss and agree with GRSA upon institutional, lead agency coordination, financing, results monitoring and evaluation arrangements for road safety management
- Agree with GRSA on strategic action plan for the state in the medium to long term
- Agree with GRSA on strategic funding programme in the medium to long term that incorporates sustainability of institutional and financing arrangements to encourage good practice road safety activity and improve safety value for money.

3.5.2. Support continued negotiations/presentations to finalize action plan

- Work in an iterative manner with all departments and other stakeholders to finalize agreed action plan content, responsibilities and timing after stakeholder workshop.

**4. Reporting requirements**

The Consultant is expected to carry out the assignment tasks as stipulated in the ToR, in very close co-ordination with, and under the guidance of, the WG and PIU. The consultant will report to WG and PIU as well as executive level of stakeholder departments, and all progress reports and other stipulated deliverables of this assignment will be placed for their review and subsequent approval. In addition, the consultant will also apprise the PSC on progress of this assignment at PSC meetings. The consultant will also make presentations to the PIU, PSC, other stakeholder departments and the World Bank (WB), as needed/upon client request. The PMC consultant will coordinate and facilitate all the presentations, meetings and deliberations as per directives of PIU. Presence of at least 3-4 relevant key professionals of consultant along with Team Leader is a must during review meetings and presentations. During the course of the assignment, Consultant shall also assist in reporting to the Supreme Court Appointed Committee on Road Safety as and when required.

## 5. Required Deliverables/Outputs

The consultant shall at least complete outputs and deliverables as and when shown in the following table:

Table of Required Deliverables & Outputs					
Sr. No.	Required Deliverable & /or Output	Due Timing (from mobilization)	No. of hard copies	No. of soft copies (CD/ DVD)	Contract Payment %*
1	Inception Report (IR), inclusive of all tasks with detailed work program	End of month 2	10	7	6
2	Quarterly Progress Reports	7 <sup>th</sup> day after end of each quarter	10	7	-
3	Report on consultation with concerned departmental stakeholders for all 5 Tasks along with review report (Tasks 1A, 1B)	End of month 3	10	7	5
4	Overview and delivery responsibilities of PSC and WG for the road safety component of GSHPII and for operation of SCDP (Task 1C)	End of month 4	10	7	5
5	Conduct First Stakeholder Workshop, associated presentations and report	End of month 5	10	7	5
6	Report on Safer Infrastructure and M&E plan for the SCDP (Task 3.2.1. under Task 2A)	End of month 6	10	7	5
7	Report on Safer Users plan for the SCDP (Task 3.2.2 under Task 2A)	End of month 7	10	7	5
8	Report on Training Needs Analysis (Task 3.3.1)	End of month 9	10	7	5
9	Review Report on SCDP implementation plans (Task 3.2.3 under Task 2B)	End of month 10	10	7	5
10	Mid-Term Progress Report on implementation of the SCDP (Task 3.2.4 under Task 2B)	End of month 14	10	7	6
11	Detailed Report on Road Safety Capacity Building status of all stake holders after training (Task 3.3.2)	End of month 16	10	7	6
12	Report on road safety management arrangements (Task 4)	End of month 18	10	7	6
13	Final evaluation Report of the impact of multi-sector interventions implemented in SCDP	End of month 21	10	7	8
14	Report on medium to long term road safety action plan including conducting of workshop-2 with its deliberations report (Task 5)	End of month 22	10	7	8
15	Draft Final Report (DFR) on all tasks	End of month 23	10	7	10
16	Final Report (following GoG response to DFR)	End of month 24	10	7	15

**Note:** \* - 50% of payment shall be made on scheduled deliverable submission and the remaining 50% on acceptance of the deliverable or within 60 days, whichever is earlier. However, Consultant must submit revised deliverable even if comments are received after 60 days. Presentation should be made on each deliverable by concerned key professional for consideration and acceptance of the same.

## 6. Client's Review of Outputs & Deliverables

The consultants' services contract will be managed through the PIU. The consultants' main outputs and deliverables will initially be vetted by Working Group Members. The R&BD will place all such output and deliverables before Working Group to have their comments/suggestions, if any, within fifteen days from date of submission. The WG members in turn supposed to submit their comments/suggestions, if any, within thirty days from the date of placement. R&BD will provide feedback on main as well as all other outputs and advice acceptance of the Consultant's outputs and/or reports.

## 7. Location, Duration and Mobilization of the Services

- 7.1 The services shall be delivered mainly in Gandhinagar, Gujarat. However, there will also be significant involvement of some of the Consultant's team on various occasions in non-metropolitan field activities, particularly in connection with the implementation of the Safe Corridor Demonstration Project (SCDP). This will be determined progressively in consultation between the R & BD, Concerned Stake holders and the Consultant's team.
- 7.2 The duration of the services will be **twenty four (24) months** from the time of the contract signature.
- 7.3 The GOG is presently planning for such mobilization to take place by November 2018. At the outset of mobilization and during their period of the services, the Consultant is expected to field all the key professionals along with Team Leader. Interested consultants shall take this into account in proposing the phasing of their nominated "key personnel".

## 8 Facilitation of the Services by the Client

- 8.1 The Client will provide/facilitate the following:
  - Available related reports and background documentation.
    - The RSMCR is available on [www.gshp2.gov.in](http://www.gshp2.gov.in) website.
    - Gujarat's Road Safety Policy Document can be accessed at - [http://rtogujarat.gov.in/documents/notifications/Draft\\_State\\_Road\\_Safety\\_policy.pdf](http://rtogujarat.gov.in/documents/notifications/Draft_State_Road_Safety_policy.pdf)
    - Gujarat Road Safety Authority Gazette notification can be accessed at - <http://rtogujarat.gov.in/documents/notifications/GRSG.pdf>
  - Assistance in establishing essential contacts in concerned GoG areas, including at district/ local government levels and in gaining the cooperation of other GoG departments and agencies, as required for this assignment.
- 8.2 The Home Department, Transport Department and R & BD shall provide counterpart personnel as and when required to work with the consultant aimed at technology transfer.

## 9 Accommodation & Operational Support Resources

The consultant shall be required to ensure the necessary operating resources and supplies (etc) for their team's requirements during the performance of the services. Interested consultants who are preparing a proposal for these services are therefore advised to make appropriate funding allocations in the financial part of their proposals for 'office facilities / resources / supplies/ consumables' costs and for possible accommodation, logistic rental costs.

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## **10 Key Personnel and Expertise Requirements**

- 10.1 The services shall be provided by the selected firm of consultants (hereafter termed simply “the Consultant”) via a team of suitably qualified professional and technical personnel (hereafter referred as the “key personnel”), to be headed by a Road Safety Engineering and Management Specialist (Team Leader) having relevant qualifications and extensive experience in supporting road safety initiatives in low and middle income countries.
  - 10.2 It is expected that the Consultant would establish a strong team of national and specialists capable of supporting the Government to significantly improve its capability to improve road safety results in the State, and that the Team Leader will draw regularly upon the expertise of specialists in managing and delivering the project tasks.
  - 10.3 The available time of both the Team Leader and the other team members “on the ground” shall be carefully phased to match the work program which will be designed around the client’s views of priorities, absorptive capacity and any Government factors on sequencing of targets and activities. The progressive demands arising through the preparation and implementation of the project shall also be an important influence on phasing of these services.
  - 10.4 It is that adequate person months of professional/technical/support staff inputs shall be provided by the personnel to be mobilized by the selected Consultant, which shall be phased in accordance with a Work Program finalized with the Client during the Inception stage of these services. However, the Key Personnel inputs should be available during assignment period and should be supported by adequate technical support staff person months. Consultants shall have their own estimate commensurate with key staff deployment and overall responsive work and deliverable plan.
  - 10.5 Adequate support staff shall also be provided by the Consultant to facilitate the operations of the nominated team during the services, but these support staff will not be taken into account in the client’s evaluation of the staffing element of consultants’ proposals.
  - 10.6 The Consultant shall name the individuals to participate in specific roles within the Project Team and provide full curricula vitae and any other information considered relevant by the Consultant. The Consultant is expected to post two persons in R&BD (Highway Engineer, M&E Specialist), three people in Transport Department (Transport Operations Specialist, Transport Legislation, Statutes & Regulations Specialist and Communications/Publicity Specialist) and one person in Home Department (Police Enforcement Specialist). The Consultant shall name the Team Leader, and the team members and any short-term specialists, and provide an assurance that all members of the proposed team will be made available as specified in the proposal, if the Consultant is selected. The Consultant is expected to make full use, where possible, of appropriately qualified local staff. The Consultant is also expected to work closely with, transfer knowledge to, and build the capacity of local institutions and staff.
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**10.7 Professional qualifications, skills and experience required**

<i>Sr. No.</i>	<i>Position</i>	<i>Minimum qualifications</i>	<i>Specific Required Expertise</i>
1	Road Safety Engineering and Management specialist cum Team Leader	<p>Graduation in Civil/ Mechanical/ Automobile Engineering with Post graduate qualification in Mechanical/Transportation/ Highway Engineering. Specialist high-level qualifications relevant to Road Safety management and coordination functions is preferable.</p> <p>Minimum overall professional experience: 20 years</p> <p>Team Leader should be on payroll of the bidder for not less than 1 year.</p>	<p>The specialist should have minimum 15 years of experience in Road Safety domain including at least two years of international exposure in Road Safety. He/she should have experience of at least 1 similar projects and should have sound in-depth knowledge of South Asian or similar international best practices in road safety strategies and action management, particularly in the engineering, regulatory, enforcement, monitoring &amp; evaluation, planning and advocacy aspects; extensive national and international experience in road safety action planning, design and management, and in facilitation of related training, capacity-building and institutional initiatives is a must; high-level skills in strategic and technical advising, and in coordinating complex multi-agency action in a public sector environment.</p>
2	Transport Operation Specialist	<p>Post graduate qualifications in any stream from recognized university in addition qualification and thorough knowledge in IT/Computer Software is a must. Registered Member of SIAM is preferable.</p> <p>Minimum overall professional experience: 15 years</p>	<p>A specialist with about 10 years' experience with driver licensing policy development and motor vehicle driver training, testing and licensing in Indian jurisdiction. A thorough knowledge of international best practice and associated research evidence for driver licensing system initiatives is essential. Previous experience in the provision of advisory services to a national or state driver licensing policy agency in a developing or transitional country is desirable. He should have at least 3 years' experience with the management of modern registry systems for drivers and vehicles and related business procedures and technology. Extensive experience working at a senior management level in a national or state registry is essential.</p>
3	Transport Legislation, Statutes & Regulations Specialist	<p>Graduate qualifications in Law, preferably with post-graduate specializations in Administrative Law and/or Legislative Drafting (or equivalent)</p> <p>Minimum overall professional experience: 15 years</p>	<p>Specialist should have at least 5 years extensive professional experience in advising on, reviewing and /or facilitating amendment of transport and traffic safety specific legislation within India and 2 years' experience globally is desirable. Familiarity with statutes, regulations and/or rules in the legal framework of Indian Public Sector and Transport related aspects is highly desirable. Experience in legal drafting in relation to preparation of new bills, regulations, legislative amendments, statutory notices and/or orders.</p>

<i>Sr. No.</i>	<i>Position</i>	<i>Minimum qualifications</i>	<i>Specific Required Expertise</i>
4	Police Enforcement Specialist	<p>Post Graduate qualification in any discipline, preferable to have specialized qualification/credentials related to job title</p> <p>Minimum overall professional experience: 15 years</p>	<p>A specialist with at least 7 years' experience in traffic enforcement leadership, coordination, policy advice and policing experience, including the line-management of traffic enforcement staff in Indian traffic Police Agency operating a successful general deterrence model. A demonstrated ability to communicate road safety enforcement principles and tactics to a broad audience is essential. Previous experience in a law enforcement training facility is desirable. He should have at least 5 years' experience in the design, implementation and evaluation of police officer and recruit training and development programs; at least 2 years' experience in the specification, sourcing, evaluation and procurement of road safety equipment and tools in Indian Police agency operating a successful general deterrence model. A demonstrated understanding of modern operational safety enforcement practices is essential.</p>
5	Monitoring & Evaluation (M&E) Specialist	<p>Graduate qualifications in Management/Engineering/Economics and/or Business Management, with additional specialist qualifications relevant to Performance Monitoring and Evaluation programs (Relevant post-graduate qualifications are also desirable).</p> <p>Minimum overall professional experience: 12 years</p>	<p>Should have at least 5 years extensive experience in project / program management systems and applications specific to Road Safety assessment programs; minimum 2 years of technical experience, preferably in a developed country, with systems and processes dedicated to project-based progress / performance / results monitoring and outputs / outcomes evaluation. Proven expertise in the development of process frameworks and specifications for IT-supported Monitoring and Evaluation (M&amp;E) functions and resources for technical and operational environments, interfaced with other MIS and decision-support systems and having multi-level reporting capability. Completion of at least one comparable assignment in Asia is essential.</p>
6	Highway Engineer	<p>Graduate qualification in Civil Engineering with Post Graduate qualification Civil/Highway/Traffic and Transportation is mandatory</p> <p>Minimum overall professional experience: 12 years</p>	<p>Minimum 12 years of professional experience in road sector is required. He should have 10 years' experience either as site project manager or in design of highway projects. He should have extensive experience in highway designs having flexible and/or rigid pavements of at least 5 highway projects and fully familiar with international 'best practices'. Should have completed at least two major highway assignments with road safety intervention in similar capacity in developing country.</p>

<b><i>Sr. No.</i></b>	<b><i>Position</i></b>	<b><i>Minimum qualifications</i></b>	<b><i>Specific Required Expertise</i></b>
7	Communications/ Publicity Specialist	Graduate qualifications in Communications, social marketing, Public Relations and/or Information Management. Relevant experience in road safety Advocacy is preferable.  Minimum overall professional experience: 15 years	Should have at least 5 years extensive experience in developing and executing proactive strategies and plans in community information and communication programs for public health/road safety campaigns in India. At least 5 years' experience in designing and facilitating consultation and communication initiatives aimed at civil society stakeholders and/or at raising awareness in target community groups. Completion of at least one comparable assignment in India is essential.

Note: Consultant to note that maximum age limit is 65 years on Bid due date for all the key position/personnel mentioned above

## Annexure 1: Extract from RSMCR on Project Management Functions

<b>PROJECT STEERING COMMITTEE AND WORKING GROUP MEMBERS</b>	<b>SUGGESTED PROJECT MANAGEMENT FUNCTIONS FOR PROJECT COMPONENTS 1-4</b>
Chair of Project Steering Committee – Chief Secretary	
Project lead agency support Roads and Buildings Department	<ul style="list-style-type: none"> <li>- Chair of Project Working Group</li> <li>- Support role for:               <ul style="list-style-type: none"> <li>- Project leadership</li> <li>- Project coordination</li> <li>- Project funding</li> <li>- Project legislation</li> <li>- Project promotion</li> <li>- Project monitoring and evaluation</li> <li>- Project knowledge transfer, research</li> </ul> </li> <li>- Highway safety management</li> <li>- Highway safety standards and guidelines</li> <li>- Highway safety audit</li> <li>- Highway safety assessment</li> </ul>
Department of Transport	<ul style="list-style-type: none"> <li>- Road safety legislation</li> <li>- Road safety enforcement</li> <li>- Road safety reporting</li> <li>- Driver licensing and penalty points</li> <li>- Vehicle registration and inspection</li> <li>- Heavy vehicle overloading</li> <li>- Carriage of hazardous goods</li> <li>- Vehicle safety policy</li> <li>- Professional driver training</li> <li>- Road safety information</li> </ul>
Home Department	<ul style="list-style-type: none"> <li>- Crash reporting and data systems</li> <li>- Road safety legislation</li> <li>- Road safety enforcement</li> <li>- Road safety reporting</li> </ul>
Health Department	<ul style="list-style-type: none"> <li>- Emergency response and treatment</li> <li>- Injury control and prevention programs</li> <li>- Road fatality and injury data surveillance</li> <li>- Road safety promotion campaigns</li> </ul>
Education Department	<ul style="list-style-type: none"> <li>- School road safety education</li> <li>- School bus safety</li> <li>- Safe school management systems</li> <li>- Road safety promotion campaigns</li> </ul>
Urban Development	<ul style="list-style-type: none"> <li>- Land use/transportation planning</li> <li>- Public transport</li> <li>- Urban road design standards</li> </ul>

## Annexure 2: GOG Memo on Constitution of Project Steering Committee

WBP / 10 / 2012 / 4 / C

Government of Gujarat,  
Roads and Building Department  
Sachivalaya, Gandhinagar  
Date: 28-04-2012

### Office Memorandum

The Government of Gujarat, Roads and Building Dept., has proposed a Second Gujarat State Highway Project (GSHP - II) for development of existing state roads across the state with the loan assistance of the World Bank. Road safety is being given higher focus in this. To integrate appropriate road safety component in the project, the World Bank has carried out road safety management capacity of GOG. World Bank has now come out with the final report with the recommendation of formation of Project Steering Committee (PSC). The road safety project involves multi sectoral inputs to demonstrate consolidated and result focused interventions, it is propose to implement multi sectoral interventions through demonstration corridor.

In view of the above, the state government has constituted the following Project Steering Committee (PSC).

1.	Chief Secretary	Chairmen
2.	Additional Chief Secretary, Home Dept., Sachivalaya, Gandhinagar or a senior representative.	Member
3.	Additional Chief Secretary, Urban Development and Urban Housing Dept., Sachivalaya, Gandhinagar or a senior representative.	Member
4.	Principal Secretary and Commissioner (Health) Health Dept., Sachivalaya, Gandhinagar or a senior representative.	Member
5.	Principal Secretary, Education Dept., Sachivalaya, Gandhinagar or a senior representative.	Member
6.	Commissioner of Transport, Gujarat State, Gandhinagar or a senior representative.	Member
7.	Principal Secretary, Roads and Building Dept., Sachivalaya, Gandhinagar	Member Secretary

### **Annexure 3: GOG Memo on Constitution of Working Group**

Government of Gujarat,  
Roads and Building Department  
WBP/10/2012/5/C  
Sachivalaya, Gandhinagar  
Date:- 06-05-2012

#### **Office Memorandum**

The Government of Gujarat, Roads and Building Dept, has proposed a Second Gujarat State Highway Project (GSHP-II) for development of existing state roads across the state with the loan assistance of the World Bank. Road safety is being given higher focus in this. To integrate appropriate road safety component in the project, the World Bank has carried out road safety management capacity review (RSMCR) of GoG. World Bank has now come out with the final report on RSMCR with the recommendation of formation of Project Steering Committee (PSC) and Working Group (WG) for project to demonstrate consolidated and result focused interventions, it is proposed to implement multi sectoral interventions through demonstrations corridor.

In view of the above Working Group (WG) is constituted as following

Working Group

1.	Chief Engineer (World Bank), R&B Department Sachivalaya, Gandhinagar	Chairman
2.	Dy. Inspector General of Police (Law & Order) Sachivalaya, Gandhinagar or a senior representative	Member
3.	Additional Secretary Urban Development & Urban Housing Department Sachivalaya, Gandhinagar or a senior representative	Member
4.	Additional Director (Medical Services), Health Department, Sachivalaya, Gandhinagar or a senior representative	Member
5.	Director (Primary Education), Education Department, Sachivalaya, Gandhinagar or a senior representative	Member
6.	Director (Transport), Dr. Jivraj Mehta Bhavan, Gandhinagar or a senior representative	Member
7.	Officer on Special Duty (Special Projects), R&B Department, Sachivalaya, Gandhinagar	Member Secretary



R. K. Chauhan  
Officer on Special Duty (S.P.)  
R&B Department,  
Gandhinagar

## **Annexure 4 – Road Safety Policy**

Gujarat's Road Safety Policy Document can be accessed through following URL-  
**[http://rtogujarat.gov.in/documents/notifications/Draft\\_State\\_Road\\_Safety\\_policy.pdf](http://rtogujarat.gov.in/documents/notifications/Draft_State_Road_Safety_policy.pdf)**

## **Annexure 5 – GRSA Notification**

Gujarat Road Safety Authority Gazette notification can be accessed through following URL-  
**<http://rtogujarat.gov.in/documents/notifications/GRSG.pdf>**

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## **Annexure 6: Outputs, intermediate outcomes and final outcomes**

Best practice road safety management incorporates a results framework with three distinct components – final safety outcomes (the results being sought), intermediate safety outcomes (the intermediate results to assess progress), and institutional outputs (the deliverables implemented to affect the intermediate results).

### **a) Final Safety Outcomes**

Final safety outcomes are the highest level results being sought, and comprise three main areas:

- Reduced fatalities
- Reduced serious injuries
- Reduced social cost of road trauma.

Ideally the data can be analyzed in the following manner:

- Social cost and injury data should be disaggregated by location, gender, age, user type, crash type, and road type
- Final safety outcomes should be supported by critical exposure information – population, network length, kilometres travelled, and registered vehicles
- International comparison of road safety performance is typically assessed by the number of fatalities per 100,000 people.

### **b) Intermediate Safety Outcomes**

Intermediate safety outcomes are important to assess improvement in key indicators and typically require scientifically conducted observational surveys. Typical outcomes are listed.

### **c) Institutional Outputs**

Road safety is produced, and so a credible results management framework includes operational data that allows agencies to identify where specific effort is needed to address specific safety issues.

These output indicators should logically connect with agreed intermediate safety outcome indicators – that is, increased quantity and quality of outputs will impact positively on the intermediate outcomes.

#### **Intermediate Safety Outcomes**

- Improved safety star rating of infrastructure (iRAP)
- Improved skid resistance on roads
- Lower average traffic speed (rural & urban)
- Lower average age of vehicle fleet
- Higher vehicle compliance with testing standards
- Improved safety star rating of vehicles
- Community attitudes to road safety
- Emergency medical services response times
- Improved motor vehicle driver/rider behaviors
  - less drivers exceeding the legal speed limit
  - less drivers exceeding the legal drink driving limit
  - more riders wearing helmets
  - less drivers using mobile phones
  - more use of seatbelts.

**Institutional Outputs**

- Kilometres of footpath and number of pedestrian crossing points constructed
  - Number of intersections and other road sites (including blackspots) treated for safety improvements
  - Number of driver licences issued/renewed, and number of licence sanctions applied to restrict the legal opportunity for offenders to drive
  - Number of vehicles inspected, and number of vehicle sanctions applied to remove unsafe vehicles from the road network
  - Number of commercial operator licences issued/renewed, number of operator sanctions applied to restrict the legal opportunity for offenders to offer services
  - Number of emergency medical services responses to road crashes
  - Number of breath alcohol tests administered, and legal actions taken
  - Number of speeding tickets issued or other legal actions taken
  - Number of legal actions taken regarding use of mobile phones
  - Number of legal actions taken regarding helmet wearing
  - Number of legal actions taken regarding unrestrained motor vehicle occupants.
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