

**Terms of Reference**  
**TECHNICAL ASSISTANCE**  
**FOR**  
**ROAD SAFETY - POLICY, INSTITUTIONAL REVIEWS AND ROAD SAFETY**  
**MANAGEMENT CAPACITY STRENGTHENING UNDER GSHP-II**

**JUNE 2015**  
**R&B DEPARTMENT**  
**GOVERNMENT OF GUJARAT**

## 1 PROJECT 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 Road Safety component.

The WB conducted a Road Safety Management Capacity Review (RSMCR) in order to identify what would be required to establish a robust road safety management system, within the operational framework of the GSHP-II Road Safety component. This was aimed at bringing Gujarat's challenging road safety outcomes under control.

Accordingly, it was decided to include following in the project;

- A fully resourced Project Steering Committee (PSC) to lead and manage Safety component of the project;
- Interventions across the agencies/ sectors in targeted high-risk, high-volume demonstration corridor(s)
- Conduct of a formal review of existing institutional arrangements and recommendation of preferred options for a State Lead Agency role
- Policy reviews of agreed road safety priorities, e.g. amongst topics of driver standards, heavy commercial vehicle safety, safe infrastructure design, deterrent policing and penalty frameworks and vehicle safety.

The overall aim of the services is therefore to enable the R & BD to implement a sustainable combination of institutional arrangements, functions, staffing and other resources - to engage the state's road safety challenges and responsibilities effectively, in a comprehensive, multi-sectorial and strategic manner.

The GoG has formed a Project Steering Committee (PSC), chaired by the Chief Secretary of the GoG. Other members of the Project Steering Committee are 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. A Working Group (WG) of Officers was also formed from the Departments whose members represent the PSC.

Office memorandum of PSC and Working Group are Annexed as Annexure 1 and 2.

The assignment implementation monitoring responsibility will be centered on PIU. The Project Steering Committee 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 guidance as and when required during the project. The Project Steering Committee will meet half yearly or more frequently whenever required. The R&B Department will play the coordination role of the Project Steering Committee and will make available a resourced road safety cell to carry out the secretariat role of the Project Steering Committee and the coordination role for the project.

Already in place state level Working Group (WG) is to spearhead regular interaction, facilitation and managing this TA fully. WG will meet quarterly or more frequently as required, and report to the Project Steering Committee. The role of the WG is to provide the hub and support for the design, delivery, coordination and monitoring of the road safety component.

PIU will support the related procurement aspects and will provide day-to-day implementation and monitoring support for the component along with WG. For the safe corridor demonstration sub-component, PIU and the field divisions of the stakeholder departments, supported by PMC consultant, will have the primary role for procurement and implementation. The Working Group will be responsible for getting appropriate design and take care of monitoring of this sub-component. For the sub-components related to: (a) Road Safety Policy formulation and (b) integration of safety attributes in the asset management system of GRMS, the PSC/Working group and the PIU, respectively, would hold the primary responsibility and will be assisted by TA consultant. The working group with the help of PIU will also oversee the road safety training and capacity building.

This TA consultant will report to WG and PIU. It is expected that assignment flows as stipulated in the ToR and in very close co-ordination and guidance of PWG and PIU. Progress reporting and stipulated deliverables will always be placed in perusal of WG and PIU consistently all through this TA assignment. In addition TA consultant will also apprise the PSC on progress and on important deliverables of this assignment whenever PSC meets. It is to state expressly that the WG and PIU will review and approve the reports. Whenever necessary the TA consultant will also make presentations to the PSC, other stakeholder departments and the World Bank (WB). The PMC consultant will coordinate and facilitate all the presentations, meetings and deliberations as per directives of PIU.

### **Broad Objectives and Scope of Services**

The broad objectives of the required technical assistance services department specific (Transport, Home, R&BD, Education, Health etc.) and overall are as follows. Respective scope as detailed in this sub-section shall form basis towards delivery of TA services:

#### *Transport Department:*

- Review driver preparation for licensing, including training and gaining experience, license testing and licensing practices.
- Recommend and scope measures to upgrade driver training, testing and licensing practices, which would be consistent with a longer term progression to a graduated licensing system.
- Recommend measures (and where necessary scope proposals) to improve the administrative efficiency of license testing, license issuance, license renewals and data analysis from the licensing data base.

*Home Department:*

- Develop a strategy to achieve deterrence of unlawful and unsafe behaviors on the Gujarat road network through enforcement systems and practices and evaluate operation
- Provide advice and recommendations on enforcement technology application and implementation and associated back office requirements necessary to support the implementation
- Identify needs and provide training and development in key enforcement matters (e.g., passengers sitting on top of vehicles, overloading, speeding, drink driving, helmet and seatbelt wearing, running unfit/un-roadworthy vehicle) especially in higher speed environments – for operational police staff and in the police training college,
- Provide guidance and implementation as input to enforcement associated publicity campaigns – in association with Transport and on ground delivery of such campaigns, demonstrating the same comprehensively to be carried forward.
- Review and agree streamlined delegation of authority to line police for the issuing of notices for rule violations
- Provide training in crash investigations/ reconstruction, for a selected group of officers

*R & B Department:*

To provide training to officers of R & B Department in:

- Road Safety Audit
- Black Spot Identification/ Treatment
- Safe System application
- Traffic engineering infrastructure
- Work site safety
- Network crash risk assessment and potential treatments (RAP assessment and treatment options) plus review of guidelines, policies and processes to be applied by R and B (based on latest standards and policies of Indian Road Congress) in order to mainstream road safety into the organisation's activities and deliverables.

*Education Department:*

To provide support to the Education department in:

- Road Safety education preparedness for schools
- Awareness and Campaigns

*Health Department:*

To provide support to the Education department in:

- Health preparedness for post-crash care
- Awareness and Campaigns
- Post-crash safety

To move ahead, consultant shall assist client/concern stake holders for following.

1. Assist the Project Steering Committee/Working Group to decide on the State Policies affecting road safety to be reviewed under GSHP-II based on the relative importance, impact potential, current status and GoG ownership / support.
2. Assist in reviewing and making/finalizing recommendation for improvement to the identified Policies
3. Assist the Project Steering Committee/Working Group for a formal review of existing Institutional arrangements affecting Road Safety and in finalizing the recommendation for preferred option(s) for a State Lead Agency role and structure and financing mechanism for road safety in Gujarat.
4. Assist the Project Steering Committee/Working Group for a review of options and adoption of an improved road crash data system for Gujarat.
5. To support all concern stake holders for elements of demonstration program.
6. Not only design of various campaigns but TA consultant has to lead in imparting its training and convincing delivery on ground. Also demonstrating and training of monitoring and evaluation of SCDP as per TA proposed M&E Plan. Both these points are vital for the project. The TA consultant will deliver and demonstrate the Campaigns and M&E of SCDP to concern departments so convincingly to enable them to carry forward beyond tenure of this assignment on their own.

## **Task – 1: POLICY AREAS FOR REVIEW**

### **1.1. Future Licensing Policy Review: For Graduated Licensing, Driver Training/ Experience Gaining and License Testing (Key Agency – Transport Department)**

#### **Task Objectives**

- Registration/ certification of approved driving test examiners and driver training centers in Gujarat
- Improving the quality of driver preparation for licensing and levels of safety of novice drivers and riders
- Potential graduated licensing introduction for novice drivers and riders
- Driver registry organization - good international practice to support current modernization activity and give effect to processes adopted from the above policy review and to improve overall operations

#### **Task Scope**

*(a) Review and recommend improvements to current driver training and driver experience gathering, license testing and licensing practices.*

- International good practice benchmarking of current driver training and experience gathering, testing and licensing practices.
- Recommended short-term and long-term improvements to the current and planned practices for driver training, testing and licensing, and an action plan for improvement program.
- Provide scoping of a driver training, testing and licensing improvement program.

*(b) Identification of a desired longer term graduated licensing system for new learners and licensed drivers in Gujarat.*

- Detail potential options for introduction – in stages – of a graduated licensing system for Gujarat in the longer term, specifying likely costs of implementation, potential timing and road safety benefits.

*(c) Scope a good practice driver training; license testing and licensing program and guidelines.*

- Network-wide driver training, testing and licensing program, including cost estimates and implementation schedule.
- Guidelines detailing requirements for improved driver training, testing and licensing practices which are consistent with moving progressively to a longer term graduated licensing system for Gujarat.

### **1.2 The Review of General Deterrence Police Enforcement (Targeting Unsafe Behaviors) and Penalty Frameworks (Deterrent Policing and the Penalty System)**

#### **Task Objectives**

- The State of Gujarat is conducting a road safety demonstration project in GSHP-II which

will include measures to strengthen police enforcement capacity and develop further the police crash investigation capacity in the limited geographic area of the demonstration project.

- Major amendments are expected at National level through Draft Road Transport and Safety Bill 2014; it is likely that Central Government may get the nod for the same from the parliament soon. Although the Consultant is expected to thoroughly review the same and adopt, devise appropriate compatible model for Gujarat. In case it is approved in due course of the assignment flexibility shall be such that appropriate provisioning of the same is possible without affecting the progress of the assignment. This particular task and Institutional Arrangement to be proposed through Task 2 shall be in line with national development and such progress shall be happening in closest consultation with the PIU and WG all through.

## **Task Scope**

*(a) Support the preparation of annual police enforcement programs to achieve the general deterrence of unsafe behaviors in high-risk corridors and areas.*

- Identification of unsafe road user behaviors in high-risk corridors and areas.
- Operational strategies, practices, tactics and related guidelines to address unsafe behaviors in high-risk corridors and areas.
- Review potential benefits of a designated highway patrol dedicated to higher speed roads law enforcement and recommend a future approach
- Annual programs of (monthly) scheduled enforcement operations targeting unsafe behaviors in high-risk corridors and areas.
- Analysis of equipment needs and specification and costing of additional equipment required to support annual enforcement programs.
- Draft bidding documents for the procurement of additional equipment and back office support requirements.
- Review resourcing and recommend required levels of enforcement (person hours and equipment operating hours) to achieve widespread compliance with road laws
- Identify on-the-jobs support needs for the implementation of annual enforcement programs.

*(b) Train police staff at all levels in the implementation of annual enforcement programs in the high-risk corridors and areas.*

- Preparation and delivery of a basic training program to upgrade the traffic safety knowledge and skills of all road policing staff.
- Preparation and delivery of advanced training course on general deterrence theory and practice, and related operational strategies and tactics, for senior police.
- Preparation and delivery of management training on the supervision of program implementation by operational supervisory staff.
- Adopted delegations of authority to support more streamlined and widespread enforcement.

(c) *Evaluate the efficiency and effectiveness of police enforcement programs in the high-risk corridors and areas.*

- Design and conduct of evaluations of police enforcement programs in high-risk corridors and areas
- Recommended improvements to police enforcement programs based on the evaluation findings in high-risk corridors and areas.
- Evaluation of effectiveness of adjusted delegated authority measures for police to support widespread issuing of infringements

(d) *To provide guidance as input to enforcement-associated publicity campaigns – in association with Transport and deliver, demonstrate on ground such campaigns with training*

- Guidelines for publicity campaigns as they relate to Police enforcement and execute such campaigns in project benefit holistically.

(e) *Provide training in crash investigations/ reconstruction, for selected group of officers*

- Skilled core of officers able to conduct good international practice crash investigations
- Adequate equipment and training to conduct investigations and report to the Courts and (on technical issues only) to the road safety partnership

### **1.3 Road Safety Engineering and training in Safe Infrastructure Knowledge and Awareness**

#### **Task Objectives**

- In order 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 & B Department will be required over a number of years.

#### **Task Scope**

(a) *Road safety audit training*

- Understanding of the road safety audit process
- Knowledge of the four stages of audit for new projects
- Ability to conduct road safety audit at the four stages
- Ability to conduct road safety inspections on the existing network
- Identification of a road safety auditor accreditation process to be pursued for Gujarat engineering practitioners

(b) *Black spot identification, analysis and identification of treatment options*

- Analysing crash data to identify blackspots
- Developing treatment options
- Identifying cost effective treatments



(c) *Safe System application*

- Improved awareness and understanding of safe system thinking
- R and B Cell and project planning engineers to have capacity to analyse the major crash risks on the system using safe system approaches
- Senior engineering management to have capacity to introduce safe system thinking into project discussions at concept stage
- Project Design engineers to have capacity to develop infrastructure solutions based on safe system thinking

(d) *Traffic engineering infrastructure*

- Design engineers to have an understanding of the principles involved in reducing serious crash risk outcomes through use of simple traffic engineering infrastructure measures
- Design engineers and senior engineering management to have capacity to develop cost effective traffic management infrastructure solutions to reduce fatal and serious injury crash risk.

(e) *Work site safety*

- Development of understanding for works planning and supervisory engineers of need for planning and delivery of management of traffic through work zones
- works planning and supervisory engineers to require solutions from contractors for safe traffic management through worksites and have the capacity to adjust proposals received to ensure safe operation and to supervise the application of the agreed measures

(f) *Network crash risk assessment and potential treatments (RAP assessment and treatment options)*

- Project planning and senior design engineers to have capacity to commission iRAP surveys and interpret results re crash risk identify cost effective infrastructure solutions to reduce fatal and serious injury crash risk measures.

(g) *Training* in road safety will be necessary for the Road Safety Cell, to be followed by its extension to staff in R & B Engineering staff in across Districts.

## **Task – 2: THE REVIEW OF EXISTING INSTITUTIONAL ARRANGEMENTS**

### ***ARRANGEMENTS FOR MANAGING ONGOING ROAD SAFETY ACTIVITY IN GUJARAT (BEYOND THE DEMONSTRATION PROJECT)***

It is intended that this activity will review existing institutional arrangements affecting road safety and develop preferred options for a State Lead Agency role and structure for road safety in Gujarat and for a financing mechanism for road safety in Gujarat

#### **Task Objectives**

The objectives are to:

- Review existing institutional arrangements for the management of road safety in Gujarat
- Identify preferred options for a State Agency to carry out the lead Agency Role  
Identify necessary resourcing for the lead agency and the other key agencies and reach agreement with the Project Steering Committee about resourcing to enable road safety management in Gujarat to be effective
- Identify and reach agreement on the decision making arrangements between agencies and the consultative and advisory arrangements with other stakeholders to support road safety in Gujarat
- Identify capacity development (including training) needs in road safety management for the road safety positions to be established in the lead agency and other agencies and for the senior officers in these Agencies
- Identify options for (further) development of a Gujarat university based road safety research centre, including potential collaboration with another centre such as IIT or other centers of road safety research excellence
- Identify options for increased interaction with NHAI and other States to improve road safety management capacities and road safety outcomes
- Develop recommendations for a financing mechanism for road safety in Gujarat and achieve an agreed outcome with the Project Steering Committee

#### **Task Scopes**

*(a) Review existing institutional arrangements for the management of road safety in Gujarat.*

- Summarise the detailed roles of each of the agencies from the RSMCR and the RSMCR findings
- Review the operational effectiveness of the Project Steering Committee and Project Working Group arrangements in overseeing the demonstration project and (potentially) some commissioned policy reviews.

*(b) Identify preferred options for a State Agency to carry out the lead Agency Role*

- Specify the preferred option(s) for the lead agency role

- Identify necessary resourcing for the agency to carry out that role and obtain the agreement of the Project Steering Committee to resourcing needs.
  - Identify necessary resourcing for other agencies to carry out their roles in support of effective road safety management across the agencies in order to achieve desired road safety outcomes
- (c) *Achieve agreement on the decision making arrangements between agencies and the consultative and advisory arrangements with other stakeholders which are to be established*
- Agreed decision making arrangements (structures and processes) between agencies
  - Agreed consultative and advisory arrangements with other stakeholders to support road safety in Gujarat
  - A document summarising these arrangements to be signed by all Project Steering Committee members
- (d) *Agreed road safety capacity development, research development and national partnership needs identified*
- Road safety management training and development needs for the road safety positions to be established in the lead agency and other agencies and for the senior officers in these Agencies to be specified and agreed
  - Proposals for (further) development of a Gujarat university based road safety research centre, including potential collaboration with another centre such as IIT, or other centers of road safety research excellence, to be specified and agreed
  - Options for increased interaction with NHAI and other States to improve road safety management capacities and road safety outcomes to be identified and agreed
- (e) *Develop recommendations for a financing mechanism for road safety in Gujarat*
- Options for securing agreed long term funding for road safety in Gujarat identified and agreed by agencies/ Project Steering Committee.

### **Task - 3: THE REVIEW OF OPTIONS AND SUGGESTION OF AN IMPROVED ROAD CRASH DATA SYSTEM FOR GUJARAT**

#### **Task Objectives**

The objectives are to:

- Support the evaluation of the current road crash data system for comprehensiveness and suitability for analysis of road crash problems.
- Consider options to improve (or replace) the current system and in consultation with the Working Group, identify the preferred options for upgrading of the State road crash and data analysis system.
- Scope any required procurement and technical assistance, including training of police and R&BD in data capture and training of users in diagnostic techniques and system applications.
- Extending inputs for other system integration with Home Department

#### **Task Scope**

*(a) Support the evaluation of the current Gujarat road crash data system/ practices for comprehensiveness and suitability for analysis of road crash problems*

- Evaluation of 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.
- Identify preliminary costings for the necessary potential modifications option, including hardware and software modification requirements and user documentation and training needs

*(b) Consider options to replace/ modify the current system*

- 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)
- Evaluate measures required to be taken for each option and the estimated costs and project duration to implement these systems in Gujarat

*(c) In consultation with the Project Steering Committee/Working Group, compare the options for (i) modification of the current system and (ii) replacement with (procurement of) an existing system operating in another Indian State*

*(d) Home Department, Gujarat Police has developed e-GujCop State-of-the Art computerized system through specialized developers. It is having number of utility modules which very well supplement and compliment multi sectoral Road Safety intent. As per as Accident*

Crash Database system and e-GujCop standing is concerned, the TA Consultant has to interact with concerned stakeholders for how best this system is helping in establishing crash database from Road Safety point of view. Specifically the integration interface and necessary input data fields need to be proposed by TA consultant. The same has to be implementable after finalizing in consultation with the concerned Stakeholders and the World Bank. Besides this possible view points on further utility and maximizing benefits with minimum effect/impact on e-GujCop with respect to this task is expected.

Provide a report to, and work with, the WG to agree the preferred solution



## **Task-4: THE DEMONSTRATION PROJECTS POTENTIAL SUPPORT**

### **Task - 4.1 PREPARATION OF GUJARAT SAFER CORRIDOR DEMONSTRATION PROGRAM UNDER GSHP-II**

#### **A. PROJECT BACKGROUND AND OBJECTIVES**

The Road Safety Management Capacity Review (RSMCR) was carried out by the World Bank experts in October 2011. Key findings of the review and recommendations for the road safety project component were shared with different Stake holders.

The GoG formed a Project Steering Committee which held its first meeting on July 2, 2012. The Project Steering Committee consists of Additional Chief Secretary, Secretary of the R & B, Transport, Home and Education Departments and is chaired by The Chief Secretary of GoG. A working Group was also formed whose members represent the Project Steering Committee Departments.

Now collectively the intent is being carried forward on road safety component.

#### **B. SCOPE OF WORK**

1. Assist each Department represented on the Working Group to identify a plan of interventions for the Safe Corridor Demonstration Program. The application of this support is to include the following key activity areas:
  - Social Campaigns design, delivery and training,
  - Police enforcement preparedness,
  - Transport Officer enforcement preparedness
  - Education preparedness for schools,
  - Health preparedness for post-crash care in corridor
  
2. The work will also include drafting the TOR for any necessary further T/A for Stage 2 - detailed preparation of the interventions (within some 5 months of this initial T/A) – especially for:
  - Police enforcement training and equipment procurement;
  - Transport Officer training and equipment procurement;
  - Training of Police in crash investigation activity;
  - Training of Police and R and B Department staff in the new road safety cell-established in each Department and the officers in the existing Transport road safety cell;
  - Advice to the Department of Education about: curriculum materials for road safety education of school children; briefing of teachers; briefing of school communities and reaching agreement in the WG and with Education department for measures to be applied to achieve the safer movement of children to/ from (and in the vicinity of) schools
  - Public campaigns planning, content advice and delivery; review of road user

information materials to be developed by Transport; Agreed campaign and information delivery methods and Training

- Preparation of further TOR's for T/A during the Stage 2 advice activity - for the proposed Stage 3 activity, the final review of - and advice about - the demonstration project implementation within a further 6 or so months.

Note: The subsequent Stage 3 activity is likely to require advice and support for the following:

- Final training in enforcement activity and equipment use for Police and Transport officers;
  - Further training in police crash investigation activity
  - Preparation and implementation of public road safety campaign materials, through various delivery options and appropriate timing of activities;
  - Preparation of road user information materials and its distribution
  - Preparation and supply of relevant materials for school communities after reviewing Education Department's road safety actions.
3. Assist the Working Group in developing detailed implementation, procurement and monitoring & evaluation plans for the Safe Corridor Demonstration Program taking into consideration each Department's plan. Actual M&E of SCDP has to be carried out by TA consultant with due training and demonstration. This task has to be dealt so diligently that PWG/PIU carries this forward continuously.
4. Assist the Project Steering Committee and the Working Group to develop a brief TOR for their over viewing and delivery of Stages 1, 2 and 3 of the Project as well as the operation of the demonstration project. This will also include identifying suitable opportunities for inter-agency coordination and for twinning with other agencies nationally and internationally to share experience and enhance knowledge about road safety management.

The consultant should work with all Departments represented in the Working Group and report back to the Project Steering Committee.

*Consultant is required to meet and discuss various concerned authorities to perform his duties and deliver outputs which are best suited for the Road Safety Management in the state.*

#### **Task - 4.2 Multi-sectoral interventions in demonstration corridor(s)**

Several options for the multi-sectoral interventions in targeted demonstration corridors are specified. Depending on the sections(s) selected there may be trade-offs between engineering the safety of the corridor or implementing combined enforcement or publicity or a implementing a combination or both. The totals for enforcement and engineering are thus tentative and will depend on the final project design.

#### **❖ SPECIFIC OUTPUTS EXPECTED FROM CONSULTANT**



A Safe Corridor Demonstration Program document containing the following:

- Detailed multi-departments interventions implementation Plan
- Procurement Plan
- Monitoring & Evaluation Plan and delivery with training
- Design, delivery and training of all campaigns on ground with concern stakeholder departments

#### ❖ Traffic safety enforcement

Enhanced traffic enforcement campaigns are to be designed and implemented in the demonstration corridor(s) to develop more effective general deterrence-based measures to achieve improved compliance with vehicle and road user standards and rules. Measures will include:

- speed management (with a special focus on pedestrian safety) through appropriate devices (such as radar, speed cameras, point to point cameras, etc.)
- alcohol testing
- occupant restraints
- motorcycle helmets
- Seat Belts usage
- heavy vehicle safety regulations (especially lighting, overloading, driver fatigue, speeding)

This may present an opportunity for piloting of a specially trained and equipped State Highway Patrol.

#### ❖ Social marketing campaigns

Social marketing campaigns to improve traffic safety awareness and compliance with safety standards and rules will be designed and implemented to support the enhanced traffic enforcement in the demonstration corridors and areas. These campaigns will target all relevant parties and use all appropriate media, taking into account local literacy levels and language needs. Media will include local television, radio, newspapers, billboards and posters. Opportunities will also be found to use local cultural events and outlets to disseminate key messages and funding will be made available to support related community development initiatives.

#### ❖ Post-crash safety

It is proposed that enhanced post-crash safety services be designed and implemented in the demonstration corridors and areas to improve the survivability of road crash victims and their longer- term recovery prospects. These services are to include:

- first responder training programs for those aside from local health workers most likely to attend crash scenes (e.g. taxi drivers, local business people and traffic police),
- emergency response systems
- the establishment of trauma registries

- computerized road traffic injury monitoring systems in health facilities
- ❖ Monitoring and evaluation

Systematic monitoring and evaluation procedures will need to be designed and developed to assess safety performance in the demonstration corridor(s) in consultation with Working Group. Performance measures should take the form of final outcomes, intermediate outcomes and outputs. M&E plan, delivery and training shall be accomplished in such a way WG/PIU carries forward the set M&E regime for SCDP.



### Professional qualification, 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	Graduation in Civil/Mechanical/Automobile Engineering with Post graduate qualification in Mechanical/Transportation/Highway Engineering. Plus, specialist high-level qualifications relevant to Road Safety management and coordination functions	<p>The specialist should have minimum 15 years of experience in Road Safety domain including International exposure in Road Safety domain of at least 2 years. He/she should have experience of at least 2 similar projects and should have sound in-depth knowledge of National / International findings and directions in road safety strategies and action management, particularly in the engineering, regulatory, enforcement, monitoring &amp; evaluation, planning, education, communication and advocacy aspects.</p> <p>Minimum 10 years of extensive national and minimum 2 years of international experience in road safety action planning, design and management, and in facilitation of related training, capacity-building and institutional initiatives. High-level skills in strategic and technical advising, and in coordinating complex multi-agency action in a public sector environment.</p>
2	Driver Licensing Policy, Driver Testing and Registry Management Specialist	Graduate qualifications in Mechanical Engineering with thorough knowledge of IT/Computer Software, plus other specialist high-level qualifications relevant to driver testing and licensing policy. Registered Member of SIAM is preferable. (Relevant post-graduate qualifications if any are also desirable). Post-Graduation in relevant to the position is Preferable	A specialist with about 10 years' experience with driver licensing policy development and motor vehicle driver training, testing and licensing in a national 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 5 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.
3	Enforcement, Enforcement Training and Operations Management Specialist	Post Graduate/ Graduate qualification in any discipline, preferable to have specialized qualification/credentials related to job title	<p>A specialist with about at least 7 years' experience in traffic enforcement leadership, coordination, policy advice and policing experience, including the line-management of traffic enforcement staff in a national or state 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.</p> <p>He should have at least 5 years' experience in the specification, sourcing, evaluation and procurement of road safety equipment and tools in a national or state Police agency operating a successful general deterrence model. Previous experience in law enforcement training is desirable. A demonstrated understanding of modern operational safety enforcement practices is essential.</p> <p>Operational experience in a national or state police training college is essential.</p>

4	Safe system and Safety Analysis Specialist	Graduate qualifications in Civil/Mechanical/Automobile Engineering with thorough knowledge of Computer Software plus other specialist high-level qualifications relevant to Road Safety (Relevant post-graduate qualifications are desirable).	A recognized specialist with about 10 years' experience conducting scientific analyses of road environment, vehicle and human factors contributing to road crashes and injuries. Hands-on experience of quantitative evaluations of safety interventions and outcomes is essential. Experience of road safety analysis in developing and transitional countries is desirable. He should also have 7 years' experience in the design, implementation and evaluation of infrastructure safety programs with operating road authorities and in safe system training of authority staff. He should have also experience of about 5 years in the review of road crash injury incurred from road crashes in the detailed and analysis of injury incurred by road users in road crashes.
5	Legislation, Statutes & Regulations (India) Specialist	Graduate qualifications in Law, preferably with post-graduate specializations in Administrative Law and/or Legislative Drafting (or equivalent)	He should have at least 10 years extensive professional experience in advising on, reviewing and /or facilitating amendment of transport and traffic safety specific legislation at National level and at least 2 years' experience globally. 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.
6	Public Information & Communication Specialist (India)	Graduate qualifications in Communications, social marketing, Public Relations and/or Information Management with relevant experience in road safety Advocacy	He should have at least 10 years extensive experience in developing and executing pro-active 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. Sound knowledge of current "public disclosure" and/or "right to information" provisions, and experience in integrating these in wider specific-purpose information and advocacy strategies. Completion of at least one comparable assignment in India is essential.
7	Monitoring & Evaluation (M&E) Specialist	Graduate qualifications in Management/Engineering/Economics and/or Business, with additional specialist qualifications relevant to Performance Monitoring and Evaluation programs (Relevant post-graduate qualifications are also desirable).	He should have at least 10 years extensive experience in project / program management systems and applications specific to Road Safety assessment programs. Minimum 5 years extensive 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&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 two comparable assignments in Asia is essential.

Details of the expected minimum number of key personnel in the Consultant's team and their respective likely man month inputs are provided hereunder. It is estimated that overall key personnel Man Month as Forty (40).

<b>Sr. No.</b>	<b>Key Personnel</b>	<b>Estimated Man Months (Key Personnel)</b>	<b>Minimum Years Overall Professional Experience</b>	<b>Estimated Man Months (Support Staff)</b>
1	Road Safety Engineering and Management specialist cum Team Leader	17	20	20
2	Driver Licensing Policy, Driver Testing and Registry Management Specialist	4	15	8
3	Enforcement, Enforcement Training and Operations Management Specialist	4	12	8
4	Safe system and Safety Analysis Specialist	3	12	6
5	Legislation, Statutes & Regulations (India) Specialist	4	15	4
6	Public Information & Communication Specialist (India)	4	15	6
7	Monitoring & Evaluation (M&E) Specialist	4	15	4
	<b>Total</b>	<b>40</b>		<b>56</b>

Indicative Technical support staff person months are 56, though Consultants shall have their own estimate in commensuration with key staff deployment and overall responsive work and deliverable plan. Also adequate administrative support staff shall be provided by the Consultant.



## Client's Review of Outputs & Deliverables

The consultants' main outputs and deliverables will initially be vetted by Review Committee comprising Working Group Member/Project Steering Committee. The R&BD (usually via the identified Review Committee, in the first instance) shall be responsible for reviewing, providing feedback on and /or advising acceptance of the Consultant's outputs and/or reports. This shall be done by the R&BD within not more than two (2) weeks of the date of submission to the Client.

## Required Deliverables and Outputs

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

Sr. No.	Table of Required Deliverables & Outputs				Contract Payment % upon acceptance of Submitted Deliverables
	Required Deliverable & /or Output	Due Timing (from mobilization)	No. of Hard copies	No. of soft copies (CD/ DVD)	
1	Inception Report (IR), inclusive of each task and Review of Functions and Capacity Building Needs of Lead Agency, Working Group Members, Road Safety Cell	End of month 2	10	7	5
2	Monthly Progress Reports	7 <sup>th</sup> day of each month	10	7	-
3	Workshops Facilitation & Associated Presentations / Papers (three (3) workshops)	Timings to be fixed	As required	7	5
4	Report on Consultation with concern Stake holders of Task 1, 2, 3 and 4.2	End of month 4	10	7	6
5	Report on findings of Task 1, 2 3 and 4.1 including Review of Legislation, Statutes, Regulations & Powers Relating to Road Safety Management in Gujarat	End of month 6	10	7	6
6	Report on Monitoring & Evaluation Framework the Safe Corridor Demonstration Program (Task 4.2)	End of month 6	10	7	6
7	Report inclusive of recommendations with cost estimation for all Task inclusive of Training Need Assessment (TNA)	End of month 9	10	7	6
8	Interim Progress Report on Implementation and Evaluation and Monitoring of Safe Demonstration Corridor Program (SCDP)	End of month 10	10	7	8
9	Mid-Term Progress Report on implementation arrangements for the SCDP	End of month 12	10	7	8
10	Draft for New/Amendment for Legislation, Statutes, Regulations & Powers Relating to Road Safety Management in Gujarat required if any	End of month 14	10	7	8

Sr. No.	Table of Required Deliverables & Outputs				Contract Payment % upon acceptance of Submitted Deliverables
	Required Deliverable & /or Output	Due Timing (from mobilization)	No. of Hard copies	No. of soft copies (CD/DVD)	
11	Interim Progress Report on implementation of multi-sectoral intervention under SCDP and its outcome including detailed Review of Road Safety Capacity Building status of all stake holders after training	End of month 18	10	7	8
12	Draft Final Report (DFR) on all tasks	End of month 20	10	7	14
13	Final Report (following GoG and WB response to DFR)	End of month 24	10	7	20

### Location, Duration and Mobilization of the Services

The duration of the services will be twenty four (24) months from the time of the Consultant's mobilization. The GOG is presently planning for such mobilization to take place by July 2015. 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 Program (SCDP). This will be determined progressively in consultation between the R & BD, Concerned Stake holders and the Consultant's team.

At the outset of mobilization and during their Man Month Input period of the services, the Consultant is expected to field at least the Road Safety Engineering and Management specialist cum Team Leader, Driver Licensing Policy, Driver Testing and Registry Management Specialist, Enforcement, Enforcement Training and Operations Management Specialist, Safe system and Safety Analysis Specialist, Legislation, Statutes & Regulations (India) Specialist, Public Information & Communication Specialist (India), Monitoring & Evaluation (M&E) Specialist. Interested consultants shall take this into account in proposing the phasing of their nominated "key personnel".

### Facilitation of the Services by the Client

Client facilitation:

- Provision to the consultant of available related reports and background documentation.
- Assistance to the consultant in establishing essential contacts in concerned GoG areas

and in gaining the cooperation of other GoG departments and agencies, as required for this assignment.

- The World Bank's Safety experts report can be seen on [www.gshp2.gov.in](http://www.gshp2.gov.in) website.

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. During the course of the assignment consultant team leader shall be reporting to both, the Road Safety Working Group as well as the executive level of concerned stake holders consultant shall also reporting to SC as and when necessarily required. Urban Development and Housing, Education and Health Departments shall share their experiences and provide need based inputs as and when required by the consultant.

### **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.

**Annexure : EXTRACT FROM RSMCR REPORT:**

***PROJECT MANAGEMENT FUNCTIONS***

<b>PROJECT STEERING COMMITTEE AND WORKING GROUP</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-1

Government of Gujarat, Roads  
and Building Department WBP /  
10 / 2012 / 4 / C 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

The terms and reference of the committee is annexed as Annexure 1.

-Sd-

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

Annexure – 2

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