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# ANNUAL REPORT 2023



Global Road Safety Facility

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## ABBREVIATIONS AND ACRONYMS

**ANSV** Agencia Nacional de Seguridad Vial/National Road Safety Agency (Colombia)

**ASE** Automated Speed Enforcement

**AVIS** Assessment of Vehicle Inspection Systems

**BRT** Bus Rapid Transit

**CITA** International Motor Vehicle Inspection Committee

**EMS** Emergency Medical Service

**FAQ** Frequently Asked Question

**FY** Fiscal Year

**GBD** Global Burden of Disease

**GDP** Gross Domestic Product

**GHA** Ghana Highway Authority

**GHE** Global Health Estimates

**GRSF** Global Road Safety Facility

**GSRRS** Global Status Report on Road Safety

**IDA** International Development Association

**iRAP** International Road Assessment Programme

**IRF** International Road Federation

**LMICs** Low- and Middle-Income Countries

**MDB** Multilateral Development Bank

**MPA** Multiphase Programmatic Approach

**NGO** Non-governmental organization

**PIU** Project Implementing Unit

**RSA** Road Safety Audit

**RSSAT** Road Safety Screening and Appraisal Tool

**SDGs** Sustainable Development Goals (UN)

**TanRAP** Tanzanian Road Assessment Programme

**UN** United Nations

**WHO** World Health Organization

**WRI** World Resources Institute



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# FOREWORD

We are pleased to submit the GRSF Annual Report for fiscal year 2023 (FY23). During this year, GRSF continued to play a key role in improving road safety in low- and middle-income countries via three main activities: a) providing technical assistance, capacity development, and policy advice to governments; b) producing research on road safety topics; and c) catalyzing and informing road safety investments financed by the World Bank.

With \$2.85 million of new grants approved this year, GRSF’s active portfolio reached \$12.6 million, spanning 61 activities covering 36 countries and several regional and global initiatives. During FY23, GRSF funded the assessment of over 16,400 km of roads, launched ten publications, and trained over 2,000 professionals in a wide range of road safety topics such as infrastructure safety, speed management and the development of road crash data systems.

Road safety remains a global crisis. Road traffic crashes account for 97 percent of all transport-related fatalities and are the leading cause of death for young people aged 5-29. As vehicle ownership increases rapidly across low- and middle-income countries, already-high fatality rates could escalate further in a business-as-usual scenario. Despite significant progress in recent years, much more investment is needed if we are to achieve the United Nations Sustainable Development Goal (3.6) of halving road crash fatalities and serious injuries by 2030.

The primary objective of GRSF moving forward is to catalyze World Bank and other Multilateral Development Banks road safety financing in low- and middle-income countries. GRSF will continue to play a central role coordinating efforts among Multilateral Development Banks to harmonize their road safety financing. GRSF helped ensure that 14 percent of the road and urban transport financing committed by the World Bank in FY23 was dedicated to road safety initiatives—a similar ratio to FY22. GRSF’s goal is to maintain this road safety financing ratio above 10 percent.

In FY24, GRSF will transition into an Umbrella Multidonor Trust Fund and will launch a new business plan for the period FY24-27. As we embark on this exciting transition to “GRSF 2.0”, we would like to gratefully acknowledge the support of GRSF’s past and present donors, as well as our global, regional, and country partners who have worked with us to help achieve our shared vision of safer roads and streets for all.

We look forward to deepening our work with all our GRSF partners as we strive to support low- and middle-income countries to achieve their 2030 targets.

Sincerely,



**Kelly Larson**  
GRSF Board Chair  
Bloomberg Philanthropies



**Said Dahdah**  
Head of GRSF and Global Lead for Road Safety  
The World Bank

# FY23 IMPACT AT A GLANCE





## IMPACT BY THE NUMBERS



Since its establishment in 2006 and up to June 30, 2023, GRSF has received total contributions of \$80.3 million. This includes \$4.9 million received in fiscal year 2023 (FY23), which covers the period from July 1, 2022 to June 30, 2023.

GRSF approved \$2.85 million in new grants in FY23, bringing the active portfolio to \$12.6 million. In FY23, GRSF's active portfolio spanned 61 activities and covered 36 countries and several regional and global initiatives.

In FY23, \$2.28 billion in World Bank transport projects financing was informed by GRSF's work, including \$323 million in financing dedicated specifically to road safety investments. Among other achievements in FY23, GRSF funded the assessment of over 16,400 km of roads, shared knowledge with over 2,000 professionals, and published 9 papers and reports.

### FY23 ACHIEVEMENTS BY THE NUMBERS

**\$2.28B**

AMOUNT OF WORLD BANK TRANSPORT INVESTMENTS APPROVED IN FY23 AND INFORMED BY GRSF



**\$12.6M**

ACTIVE PORTFOLIO AS OF END JUNE 2023



**61**

TOTAL ACTIVITIES

**17** AT GLOBAL LEVEL

**4** AT REGIONAL LEVEL

**40** AT COUNTRY LEVEL

**\$323M**

AMOUNT OF WORLD BANK DEDICATED ROAD SAFETY FINANCING APPROVED IN FY23  
(14% of road sector financing)



**\$2.85M**

NEW GRANTS APPROVED IN FY23



**16,414 KM**

OF ROADS ASSESSED FOR SAFETY



**669**

PROFESSIONALS TRAINED



KNOWLEDGE SHARED WITH

**1,335**

PROFESSIONALS



**10**

PAPERS AND REPORTS PUBLISHED



**139,491**

VISITS TO THE GRSF WEBSITE



## WHERE FY22 IMPACT TOOK PLACE



In FY23, GRSF approved funding for new activities in 18 countries, bringing the number of countries with active GRSF grants to 36.

### Countries with active GRSF grants in FY23

#### **EAST ASIA & PACIFIC**

Cambodia  
Fiji  
Lao PDR  
Mongolia  
Nepal  
Papua New Guinea  
Philippines  
Viet Nam\*

#### **EUROPE & CENTRAL ASIA**

Armenia  
Azerbaijan  
Tajikistan  
Ukraine

#### **LATIN AMERICA & CARIBBEAN**

Argentina  
Brazil\*  
Colombia  
Ecuador\*  
Mexico  
Peru\*

#### **MIDDLE EAST & NORTH AFRICA**

Jordan\*  
West Bank And Gaza\*

#### **SOUTH ASIA**

Bangladesh\*  
India\*

#### **SUB-SAHARAN AFRICA**

Cameroon\*  
Chad\*  
Ethiopia\*  
Ghana  
Kenya\*  
Malawi\*  
Mozambique\*  
Niger\*  
Nigeria  
Rwanda  
Senegal\*  
Tanzania\*  
Uganda\*  
Zambia\*

\* Countries where new grants were approved in FY23



# FY23 HIGHLIGHTS





## HIGHLIGHTS OVERVIEW

GRSF focused on the below five thematic areas in FY23.

The highlights of each theme are presented in the following sections.



### 1. ROAD SAFETY MANAGEMENT AND DATA

Supporting road safety management systems through institutional strengthening, policy reform and better data collection and analysis.



### 2. SAFER ROADS

Promoting safer road infrastructure through road safety audits, network assessments, safety inspections, crash-data analysis, and international good practices in road design.



### 3. SAFER SPEEDS

Promoting good practices in speed management and safe road use through disseminating knowledge and expertise and supporting infrastructure-related interventions.



### 4. SAFER VEHICLES

Promoting improved vehicle safety standards, certification processes, and inspection systems for safer and cleaner vehicles.



### 5. HEALTH IMPACT AND RESPONSE

Promoting good practices and results-focused investments in post-crash response and rehabilitation services.

# 1. ROAD SAFETY MANAGEMENT AND DATA

## STRENGTHENING ROAD SAFETY MANAGEMENT IN JORDAN

GRSF supported the World Bank's Middle East and North Africa transport unit in providing advisory and analytical services to the Government of Jordan regarding the sustainable development of the transport sector. In FY23, GRSF provided advice on strengthening road safety management in Jordan and provided inputs into a road safety investment program and related national strategic priorities.

In FY23, GRSF conducted a comprehensive review of Jordan's road safety management processes. The review focused on Jordan's Road Safety Strategic Plan (2019-2023) and the multiple agencies and stakeholders responsible for its delivery. Specifically, the review assessed a) Jordan's efforts to improve its road safety performance, b) the quality of road safety interventions being delivered to achieve this, c) the effectiveness of its road safety management

processes, and d) the lead agency's contribution to road safety management.

GRSF prepared a detailed report on the review findings, which generated ongoing deliberations and catalyzed the preparation of a second report setting out a recommended investment program and related management strengthening initiatives.

The findings of the two reports have been impactful. Recommendations concerning amendments to the Traffic Law of 2008 and related guidance on the functions, structure, and procedural arrangements of the proposed Higher Council for Traffic Safety (a road safety lead agency) have been instrumental in shaping ongoing action by the Government of Jordan. GRSF and the World Bank will continue to support Jordan's road safety management efforts going forward.





## IMPROVING ROAD CRASH DATA MANAGEMENT

In many countries, insufficient or poor-quality data about road crashes can impair evidence-based road safety policymaking. Further, many countries are often unaware of data gaps in their systems, preventing them from understanding the full extent of their road safety problems. It is therefore crucial that countries invest in improving their road safety data collection methods and systems.

In FY23, GRSF worked with a variety of countries to improve their road crash data systems.

### Malawi

There are several initiatives in Malawi collecting road crash data from different entities (e.g., district hospitals, the police, and the Directorate of Road Traffic and Safety Services) for different uses and purposes.

Building on these initiatives, GRSF supported the country's ambition to develop a high-quality integrated road safety data system to allow for easier analysis, interpretation, and decision-making related to road safety. If proven successful, the integrated system could be expanded to police stations and hospitals across the country for real-time data updates.

This work directly informed the road safety activities of an \$80 million investment project in Malawi—the Southern Africa Trade and Transport Facilitation (Phase 2) Project—and will inform possible future transport investments in the country.

A two-day workshop was conducted in June 2023 to disseminate the findings, during which the road safety data stakeholders in attendance agreed with the proposed governance plan to improve the collection, analysis and application of road safety data going forward. As a follow-up action, the Principal Secretary of the Ministry of Transport agreed to make the necessary legal amendments to set up the new database based on GRSF findings and recommendations.

NIGHT DUTY REPORT		09/04/23	
40 M		Board	Restoration
54 M	Kalumbash	Steglar	in calced
24 M	Chinsapa	Head	lyny
A M	? Ohts — External Chinsapa	? Ohts	External
5 F	Nkhosho	Retrol	Board obstruction
24 M	Chankhwa Dowa	Pressure	sines spych
23 F	Area 24/11	STI	
2 F	Area 25	Assault	Skull x-ray
26 M	Brada	STI	Kray
31 F	Mauna	Hemia	
17 M	Area 23	Cuts	on the road
20 M	Area 25	Head	lyny
28 M	Area 49	Head	lyny
23 M	Chikuse	crash	ref pat
22 M	Area 26/11	Open	STI

Basic information is recorded, but the gap between what data is required and what is collected and recorded is very large.

The best operations reduce the opportunity for error by minimizing the time between collecting and inputting data.

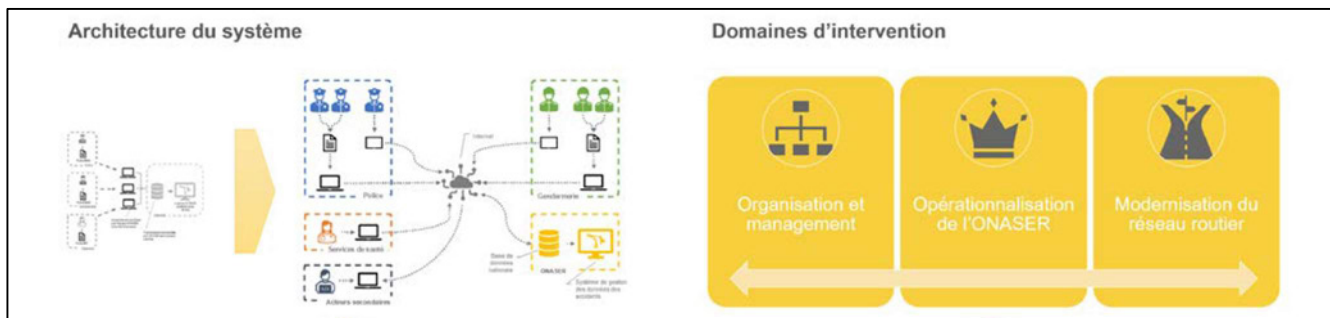
Images from the Malawi road safety data review



## **Chad**

In Chad, GRSF funded a road safety data review, complemented by capacity building workshops. The aim of the work was to strengthen the capacity of Chad's road safety lead agency to implement the National Road Safety Strategy, particularly in relation to road safety data collection, analysis, and

management. A series of recommendations and a roadmap were developed and discussed with government counterparts, and it is expected that this work will support the country in enhancing its overall road safety data management processes.



*Slides from capacity building workshops in Chad*



*Capacity building workshops in Chad*

## **Mongolia, Nepal, and Tajikistan**

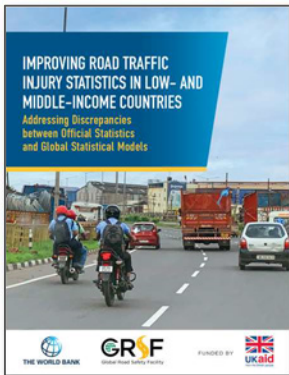
GRSF supported the Asian Development Bank to improve the accuracy and reporting rates of road crash fatalities and serious injuries in Mongolia, Nepal, and Tajikistan. Specifically, the project reviewed current practices and assessed barriers to correctly identifying a) accurate fatality and serious injury numbers, b) contributing factors to crashes, c) high crash locations, and d) victim demographics.

Throughout March 2023, two-day workshops on crash data collection and analysis were conducted for researchers, data managers, and government officials in Ulaanbaatar, Mongolia (80 participants);

Dushanbe, Tajikistan (31 participants); and Kathmandu, Nepal (30 participants). In addition, recommendations for strengthening crash data management were provided in each country, and opportunities for further road safety capacity building were discussed with officials.

A standout finding from the project was the observation that even where countries have good crash data collection, there can be an absence of quality crash data analysis since this activity rarely receives dedicated resourcing.

## ANALYZING ROAD TRAFFIC INJURY STATISTICS IN LMICs



Road safety is a global health and economic issue that disproportionately affects low- and middle-income countries (LMICs). Precise data is crucial for understanding the full scope of the problem and developing effective interventions, but LMICs struggle to collect comprehensive data due to limited resources, underdeveloped health systems, and inconsistent data collection processes.

To overcome reporting gaps, three major global statistical models are utilized: The Institute for Health Metrics and Evaluation Global Burden of Disease (GBD) study, the World Health Organization (WHO) Global Status Reports on Road Safety (GSRRS), and WHO Global Health Estimates (GHE). However, discrepancies exist among these models, and between them and official country statistics; the global models often estimate significantly higher road traffic fatalities and injuries than official LMIC statistics.

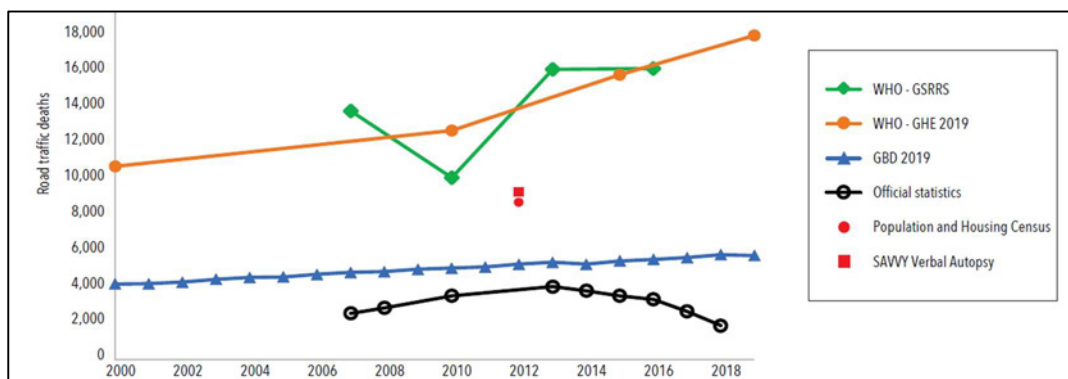
A GRSF study identified the reasons behind these statistical discrepancies and outlined strategies to strengthen modeling efforts. This involved qualitative research, a systematic review of national data availability, and four case studies in Brazil, Cambodia, Ethiopia, and Tanzania.

Key findings included:

- National decision-makers typically recognize the issue of underreporting but tend to dismiss higher estimates by global statistical models.
- Most countries use WHO GSRRS estimates.
- National health surveys and censuses in LMICs often contain relevant information, and minor modifications to these surveys can greatly improve their usage for road safety measurements.
- Incorporating national health survey data into global statistical models can help resolve discrepancies and increase confidence in estimates.

Recommendations included:

- Integrating epidemiological data sources into global statistical models (GBD, GHE, GSRRS) to reduce discrepancies and increase confidence in their estimates.
- Including relevant questions in future national data collections and censuses to facilitate epidemiological measurements of road traffic injuries.
- Encouraging local involvement in data production for better estimates.
- Enhancing coordination between the Institute for Health Metrics and Evaluation and the WHO to improve estimates and reduce inconsistencies.



*Discrepancies in estimates of road traffic deaths and official statistics in Tanzania*

## 2. SAFER ROADS

### IMPROVING SAFE SCHOOL JOURNEYS IN TANZANIA

In many parts of Tanzania, the journey to and from school can be harrowing. Many students must cross high-speed roads to get to and from school or deal with other hazards such as inadequate sidewalks and even river crossings that can become impassable after heavy rains.

In a bid to improve road safety for the nation's one million secondary school students, the Government of Tanzania—through the ongoing Secondary Education Quality Improvement Project—initiated a Safe Passage to School program as part of the broader Safe Schools Package.

The program aims to reduce risks associated with school journeys through a) school community awareness raising on the risks students encounter on their school journeys; b) mapping of student routes to and from school; c) identification of specific risks associated with those routes; and d) development of school plans for safe passage.

In this context, GRSF funded a study managed by the World Bank Education team in Tanzania to analyze the problem in detail. Kisima Secondary School in the Mkuranga district was used as a case study. The study, which utilized Mapillary—Meta's street-level imagery platform—assessed infrastructure, transport, design, and gender components of students' journeys. It found that around half of students felt unsafe on the roads they use to go to school.

The study also found that:

- Most children walk the entire distance to and from school, with an average journey length of slightly over one hour.
- Students reported that the roads near the school did not have adequate speed control, and an independent speed assessment found the average speed of “boda-bodas” (minibuses) to be around 60 kph, well above the desired speed in a school area.
- Poor and sometimes impassable road conditions often prevents students from attending school during the rainy season.
- Dedicated pedestrian infrastructure was non-existent, with children often having to compete with motorized traffic for available space.
- Risks associated with school journeys differed for girls and boys.

Next steps include studies of two additional schools to assess the specific challenges faced by children in urban areas; the development of an analysis and planning guidance tool to help school communities use the information; and the sharing of preliminary findings from the pilot with the national coordination team for the Safe Schools Program.

A key takeaway from the study was the need to increase coordination between the education and transport sectors to enhance education access. These studies could offer a blueprint for improving students' school journeys in Tanzania and beyond.



*Some of the challenging journeys faced by school students in Tanzania.*



## CONDUCTING ROAD SAFETY INSPECTIONS AND IMPROVING ROAD WORK SITES IN VIET NAM

In recent years, GRSF has provided ongoing technical assistance to a [World Bank-financed project](#) in Viet Nam designed to improve the connectivity, safety, and climate resilience of National Highway 19 (NH19), a major thoroughfare in the country. Prior to FY23, GRSF supported the planning phase of the project through a comprehensive road safety inspection of the existing road; guidance on dedicated motorcycle lanes, as well as on speed management strategies; and capacity-building workshops for local teams and contractors on road safety engineering and the safe system approach.

Many of the planned upgrades and improvements to the highway are now under construction. In FY23, GRSF continued supporting the project by providing technical assistance for the implementation phase, particularly related to road works safety.

A comprehensive assessment of the current safety state of road work zones along the route was completed, and a framework and action plan for the improvement of road work sites safety was provided. Based on the assessment and framework, the Project Management Unit and contractors implementing the upgrades to NH19

have begun to improve their safety practices while monitoring incidents.

In addition, a hands-on training on safe work zones was delivered in December 2022 with the objective of improving safety at construction sites on NH19, while also improving the technical capacity of local staff to successfully manage road safety processes during their contract.

Lastly, an action plan and framework (to define minimal standards) were prepared to address road safety management during the upgrade of NH19. The action plan and framework are intended to also contribute to the improvement of road works safety in the long term in Viet Nam.

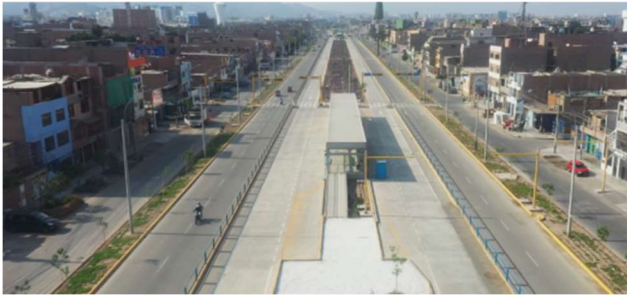
Looking ahead, the safety work done for the NH19 project is anticipated to inform two upcoming World Bank-financed projects in Viet Nam: the Mekong Resilient Regional Connectivity Project in the Mekong Delta—which involves rehabilitating, upgrading, and widening three national highways—and the Viet Nam Regional Resilient Transport Corridors Project in North and Central Regions of the country.



*Viet Nam's NH19*



## IMPROVING SAFETY STANDARDS ON LIMA'S BUS RAPID TRANSIT SYSTEM



The Metropolitan Lima Bus Rapid Transit (BRT) Project consists of 10.2 km of BRT infrastructure and is expected to dramatically reduce commute times in the congestion-plagued capital. Yet the project faces ongoing road safety challenges, including operational stability and traffic signal issues.

To reduce the risk of crashes, the project implementing unit (PIU) developed a road safety action plan. GRSF supported the plan's

development by providing technical assistance to the PIU in undertaking a post-construction road safety audit (RSA).

Recommendations of the RSA included:

- Design improvements for safer bus access.
- More crosswalks in key user-demanded areas identified in the corridor.
- Improved safety conditions at intersections.
- Better design for universal passenger access to stations and buses.
- Improved road safety conditions at stations.
- Alternative location and design of traffic signals, vertical and horizontal signage.
- Improved lighting in specific sections.

Discussions are ongoing between the PIU, the contractor, and World Bank staff on how to adopt the RSA recommendations to improve road safety conditions within the corridor.

## ADVISING ON SAFER ROADS IN GHANA



GRSF has been engaged with the Government of Ghana in recent years to build capacity and improve road safety outcomes. Building on this foundation, in FY23 GRSF delivered an assessment of approximately 750 km of roads in Ghana for the Ghana Highway Authority (GHA) and the Department of Feeder Roads, which included the inspection of road safety conditions around 50 school zones along main traffic corridors.

The safer infrastructure recommendations—which included interventions to protect vulnerable road

users, manage speeds, and boost school zone safety—will be implemented under the World Bank-financed [Transport Sector Improvement Project](#), informing \$187 million worth of investments. GRSF also provided detailed recommendations for the GHA Road Safety Audit Manual, which will be used by road safety auditors in Ghana.

The results of the assessment were discussed at meetings with key government stakeholders including the National Road Safety Authority and the Driver and Vehicle Licensing Authority. During the visit, GRSF followed up on the implementation of assessment recommendations and explored further collaboration opportunities with the agencies.

As part of the engagement with GHA, more than 150 professionals participated in several road safety training and knowledge-sharing events, including a two-day intensive workshop in Accra.

## PILOTING THE “TEN STEP” SAFER ROADS PLAN IN TANZANIA



In FY23, GRSF co-funded the Ten Step Plan project in Tanzania to improve the standard of road safety engineering in the country. The project was the first application of the [Ten Step Plan for Safer Road Infrastructure](#) guidelines—a set of 10 recommended steps to improve the safety of road infrastructure at the national level.

The project had several positive outcomes. A total of 569 individuals from a wide range of organizations—including almost 100 women—participated in training and capacity building activities. As an indication of the high level of engagement, Tanzania significantly improved its global ranking in iRAP certifications, moving from 38<sup>th</sup> in 2020 to 7<sup>th</sup> in 2022 for the number of people certified in iRAP software, and now ranks second in the number of iRAP-certified road safety auditors. The project also resulted in the accreditation of an additional 28 IRF-certified road safety auditors.

Working groups provided forums for coordination and opportunities for participants to work alongside international partners and put newly gained knowledge into practice. Working group outcomes and recommendations included the development and launch of TanRAP (Tanzanian Road Assessment Programme), the preparation of the [National Road Infrastructure Safety Strategy](#), a review of the [Road Geometric Design Manual \(RGDM\)](#), a [National Training and Accreditation Scheme](#), and the completion of previously planned

road safety-related upgrades of the Tanzania National Roads Agency’s road asset data collection system, which is used to perform around 11,000 km of road safety surveys every year.

In addition, safety improvements to road designs identified by participants during workshops and through economic analysis for road sections would result in most of these roads achieving a “three-star or better” safety rating for all road users. Implementation of these improved designs could prevent an estimated 15,233 deaths and serious injuries over 20 years, representing a 65 percent reduction over the original designs.

The Ten Step Plan project considered several active and recently completed transport development corridor projects financed by the World Bank, African Development Bank, European Union, and the Government of Tanzania. These projects, which have total costs exceeding \$1.3 billion, will benefit greatly from the inputs provided by Ten Steps Grant.

Overall, the Ten Step Plan pilot in Tanzania contributed to improving road safety in the country by helping to build capacity, develop new resources, and make recommendations for long-term improvements. Lessons learned from the project will prove valuable when implementing the Ten Step Plan for Safer Road Infrastructure in other countries in the future.





## CONDUCTING SAFETY ASSESSMENTS IN GUINEA-BISSAU

The Bissau-Ziguinchor road is a trans-continental trade corridor that connects Guinea-Bissau to external markets and is a key link in the broader Dakar (Senegal) to Lagos (Nigeria) Trans-African Highway 7 that runs through twelve West African nations. Despite its strategic importance, the existing road is in poor condition, with a large portion running through swamps and rice fields.

There are plans to rehabilitate this stretch of road to meet African standards for major trade corridors based on a feasibility study undertaken along the project route. The section under consideration is approximately 113 km long, from Safim (8 km north of Bissau) to Mpack at the Senegalese border.

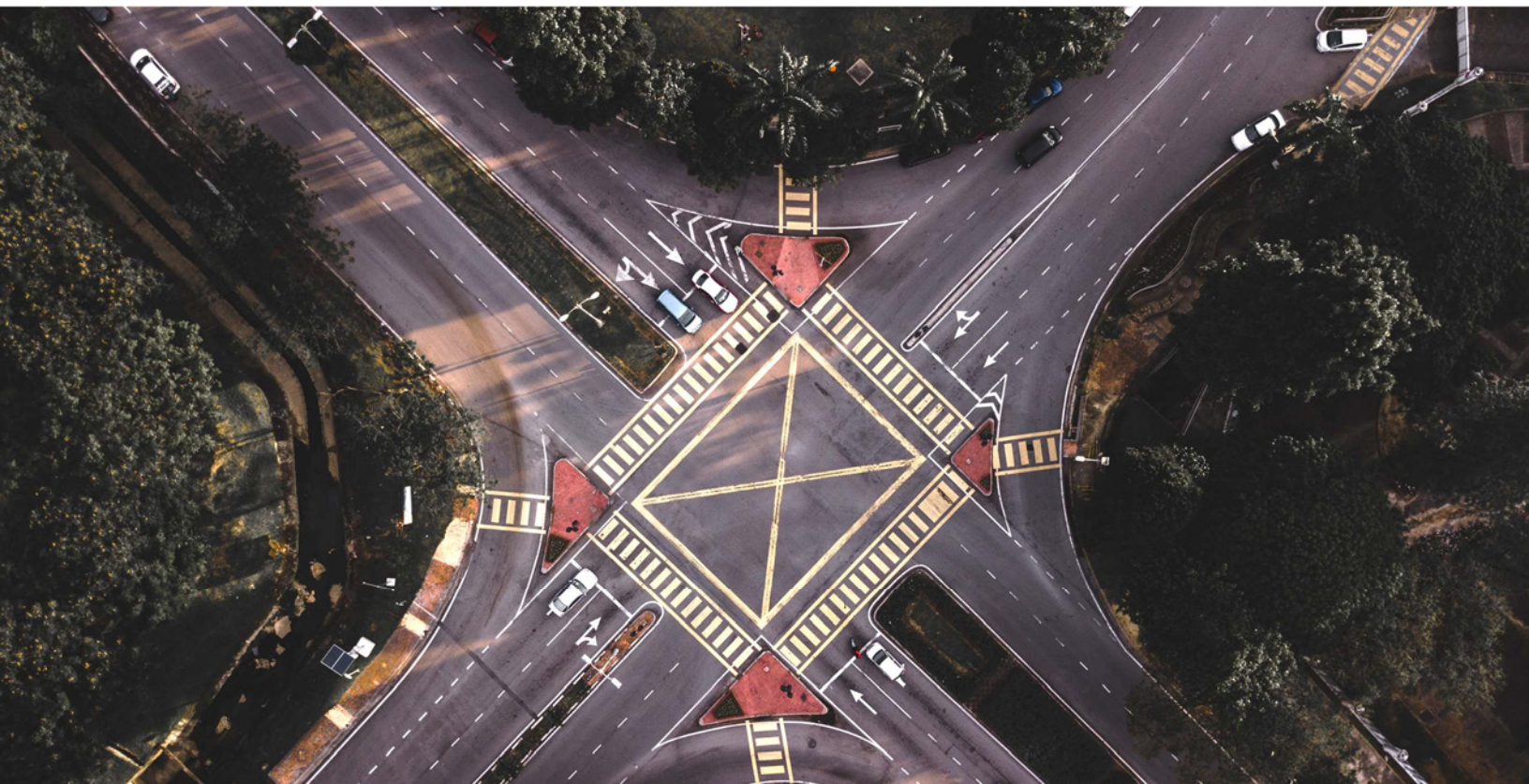
A key aim of the “[Enhancing Connectivity in Northern Guinea-Bissau Project](#)”, co-financed by the World Bank and the European Investment Bank, is to achieve a “three-star or better” iRAP safety rating for all road users.

Given the complex safety dimensions of the project, GRSF funded and led an iRAP assessment of the



baseline condition of the road to capture high-risk locations and evaluated the road safety impacts of the proposals in the feasibility study.

In addition, scenarios for different speed limits were provided to inform the project team of the increased safety risks stemming from higher speeds, and the need to invest in speed management. The design improvements resulting from the assessment will help the project achieve a “three-star or better” safety rating for all road users.



### 3. SAFER SPEEDS

#### DISSEMINATING KNOWLEDGE THROUGH THE SPEED MANAGEMENT HUB

Research has shown that speed is the top contributing factor to the severity of road crashes, putting it at the heart of the road safety crisis. Simply put, lower speeds directly correlate with fewer road crash fatalities and injuries.

Lowering speeds also has other societal benefits, such as reducing vehicle emissions, lowering local air and noise pollution, and encouraging the uptake of active modes of mobility such as walking and cycling—which in turn can improve health outcomes.

Given the importance of speed to road safety, GRSF has been a global leader in promoting speed management by providing guidance, technical assistance, and conducting original research. This information has been disseminated through the [Speed Management Hub](#) on the GRSF website, which was developed and launched in FY21 and now houses a comprehensive set of evidence-based documents on effective speed management.

In addition to hosting resources and guidebooks to help practitioners tackle speed management challenges, the Speed Management Hub includes answers to frequently asked questions (FAQs) related to speed management.

In FY23, GRSF added 34 new speed management FAQs to the database, bringing the total number available on the website up to 127. Additional FAQs will be published throughout FY24.

GRSF produced two new animations in the “Speeding Hurts Us All” explainer video series—one on speed management myths, and the other on traffic calming measures.

The combination of regularly updated resources, a growing number of FAQs, and comprehensive explainer videos makes the speed management hub a true one-stop shop for the global speed management community.



Two new animated “explainer” videos were added to the Speed Management Hub in FY23



## BUILDING MOMENTUM FOR SPEED MANAGEMENT IN COLOMBIA



Colombia is in the midst of a speed management transformation. In FY22, GRSF and the World Resources Institute (WRI) worked with Colombia's National Road Safety Agency (ANSV) to support the development of a national speed management plan. The plan aims to reduce speed-related fatal crashes, which currently account for 40 percent of all road traffic fatalities in Colombia.

In FY23, GRSF continued its engagement with ANSV on speed management. In November 2022, GRSF participated in a series of road safety events and workshops in Bogota as part of the country's national road safety stakeholder meeting. ANSV hosted a speed management workshop, where attendees presented and discussed Colombia's new speed management strategy and methodology for setting speed limits. GRSF peer-reviewed both the program and the methodology and provided feedback to ANSV during program development.

At the workshop, GRSF presented speed management best practices to a combined audience of over 100 attendees (in-person and online). The workshop formed part of the preliminary activities by ANSV in its rollout of the speed management program and methodology to Colombian provinces and municipalities.

## EVALUATING SPEED INTERVENTIONS IN RURAL BANGLADESH

Speed is a major risk factor influencing the likelihood and severity of crashes and is a major cause of pedestrian fatalities on rural roads in Bangladesh. There is a wide range of infrastructure-based interventions that can lower vehicle speeds, yet their effectiveness and applicability in local contexts may vary, and global guidance on rural road safety may not always be appropriate given variability in road classifications, road uses, and functional types. Some engineering measures have been adopted to reduce fatal crashes in Bangladesh's rural areas, but their effectiveness has not yet been evaluated.

In this context, GRSF funded research to determine the most effective speed management interventions on rural roads in Bangladesh. To achieve the research objective, the study was divided into three parts: 1) a speed study to measure the effectiveness of speed management infrastructure; 2) a conflict study to analyze safety implications;



and 3) a survey and observational study to understand the community's views.

Speed bumps were found to be the most effective physical intervention to reduce conflict probability and speed. The observations from the speed study and the conflict study were found to be aligned with the perceptions of the road users.

The outputs of this research will contribute to the global knowledge base on rural speed management in low- and middle-income countries, as limited research has been conducted in this area.

## PROMOTING SPEED MANAGEMENT IN LAO PDR

With an expanding road network and rapid rise in vehicle ownership, road safety has become a major issue in Lao PDR. Road crashes are the leading cause of death among children and young people in the country, and the greatest cause of disability across all age groups. The impact on the national economy is estimated at five percent of gross domestic product (GDP), a heavy burden for a country striving to alleviate poverty and provide basic services for its population.

Following a GRSF grant in FY21 that supported a road safety capacity gap assessment, GRSF continued its support to Lao PDR in FY22 and FY23 by funding work on speed management. The work conducted under this grant included the following components:

- An evaluation of the relationship between speed and road trauma in the Lao PDR.
- Developing guidance for planners and policymakers on setting appropriate and safe speed limits.
- Installing the country's first raised pedestrian crossing to demonstrate speed control infrastructure.
- A social media campaign to raise public awareness on speed and road trauma.

The road safety dialogue that accompanied these GRSF grants contributed to the December 2022 approval of a National Road Safety Strategy in Lao PDR. With this plan in place, Lao PDR is now better positioned to mobilize development assistance.









## ASSESSING RISK ON A REHABILITATED ROAD IN UTTAR PRADESH, INDIA

When new roads are built or existing roads are upgraded, many drivers will be tempted to drive at higher speeds due to the smoother road surface. For this reason, crash risks can increase if road safety considerations aren't implemented into the new road design.

In May 2023, GRSF funded a site survey and a radar-based speed data collection exercise on road SH-42 in Uttar Pradesh, India, to assess if high speed was the major risk factor for an increase in road fatalities on the newly rehabilitated road. An observational assessment was also undertaken to determine current road use and safety provisions. Five sites along the SH-42 corridor were selected, each at a location that had experienced elevated levels of crashes.

High speeds, especially for passenger vehicles, were recorded at the high crash risk locations. In some cases, the speed limit was found to be set too high for the prevailing conditions. There was also a lack of traffic calming measures when the highway passed through built-up areas such as villages.

Several recommendations were made highlighting the need to improve facilities for pedestrians, introduce speed management measures, and invest in greater enforcement. A detailed report providing specific recommendations for safety improvements along this corridor is currently being considered by relevant government counterparts.

Eastbound (looking to high speed approach)	Eastbound (high speed approach)
	
Westbound (looking towards village)	Westbound (looking towards village)
	

*Photos from the site survey taken in Gursarai, Uttar Pradesh*



## ANALYZING THE EFFECTIVENESS OF AUTOMATED SPEED ENFORCEMENT IN RWANDA

Automated speed enforcement (ASE) is a critical tool to reduce speed-related crashes, injuries, and deaths on the roads. Rwanda recently became the first low-income country in Africa to implement a comprehensive national ASE system, comprised of up to 500 speed cameras.

To build on Rwanda's pioneering efforts with ASE, GRSF partnered with Healthy People Rwanda and the Traffic Injury Research Foundation on a study to generate and share lessons learned from Rwanda's experience, which could in turn facilitate the implementation of ASE systems in other countries.

A mix of study approaches was used, including stakeholder interviews, focus group discussions, experiments to measure the impact of ASE on speeding outcomes, and a survey on the public perception of ASE and road safety in Rwanda. GRSF funded the study and provided technical guidance to the study team.

The study revealed a significant decrease in mean speeds for all vehicles and each vehicle type at locations where visible cameras were present compared with locations with hidden cameras, indicating that ASE may be positively affecting driver behavior and leading to decreased speeds. Mean vehicle speeds, even at hidden camera sites, were more than 10 percent lower than the speed limit of 60 km/h.

The national survey indicated that most road users agree that speed cameras and the delivery of citations are fair, which confirmed the importance of ASE as a tool for improving public safety. A journal article with the full results will be published in FY24.

Other study findings included:

- Co-production and collaboration with in-country partners is essential.
- High-quality data systems need to be developed, maintained, and used for rigorous research.
- Research should be conducted more frequently to determine the most effective implementation strategies and road user perceptions.
- Data on baseline speeds, traffic, and road safety indicators is necessary to understand the impact of ASE.
- Road users should be included and given adequate information about ASE implementation.
- ASE should not be seen as a “silver bullet” to solving all road safety issues.



*A visible (left) and hidden (right) speed camera used in the study.*

## STUDYING ENABLERS AND EFFECTIVENESS OF 30 KM/H ZONES IN AFRICA

According to the 2023 Global Status Report on Road Safety (WHO), Africa as a region has the world's highest road crash fatality rate (19 per 100,000 population). Speed management is a proven technique to reduce road fatalities, particularly for vulnerable road users. Unprotected road users such as pedestrians, cyclists and motorcyclists can typically survive impact speeds of around 30 km/h, but at speeds above this limit, the chance of survival decreases dramatically. For this reason, there is sufficient evidence that 30 km/h speed limits are effective at reducing fatalities and the severity of injuries arising from road crashes.

GRSF funded a mixed-methods study of three African countries—Cameroon, Kenya, and Rwanda—to catalog the existence of 30 km/h zones and examine possible enablers of such zones to inform advocacy and policy change in support of 30 km/h speed limits in Africa.

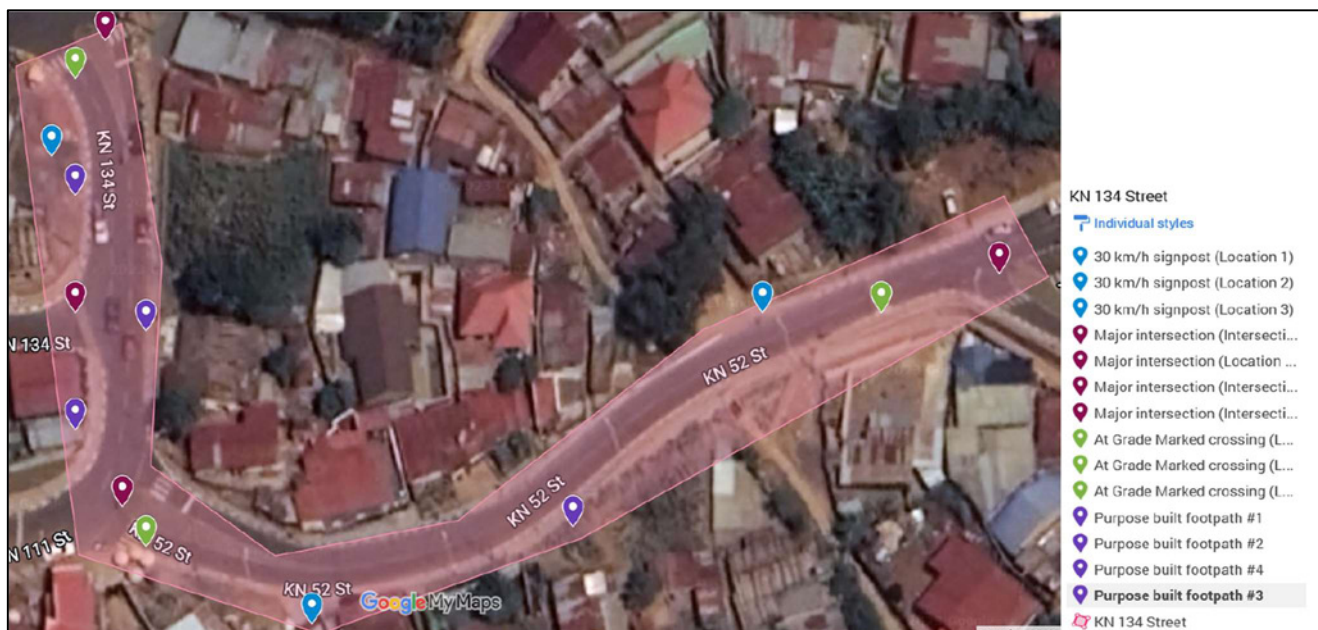
Local NGOs in each of the study cities worked with the Global Alliance of NGOs for Road Safety to identify nine study sites (three per city) and collect quantitative and qualitative data. The Milken

Institute School of Public Health at George Washington University led the data analysis.

Key findings of this project include:

- The implementation of 30 km/h speed limits lacked clear decision-making processes, timelines, and policies, highlighting a need for more transparency to legitimize and improve these sites.
- While decision-makers had mixed attitudes towards 30 km/h zones, community members strongly supported them, advocating for additional safety measures and public involvement in decision-making.
- The study sites showed a significant need for better protective infrastructure for pedestrians, cyclists, and motorcyclists.
- A lack of specific speed and crash data at these sites hindered the ability to evaluate their effectiveness.

The study concluded with recommendations for governments and NGOs to formalize and expand 30 km/h zones and highlighted the need for future research in this area.



*A 30 km/h zone study site in Kigali, Rwanda*

## 4. SAFER VEHICLES

### IMPROVING VEHICLE SAFETY THROUGH BETTER INSPECTION SYSTEMS



High vehicle safety standards directly correlate to fewer crashes and less severe crash outcomes, ultimately reducing road crash-related fatalities and injuries. For this reason, vehicle safety standards are a critical component of road safety. An Assessment of Vehicle Inspection Systems, or an AVIS, is a systematic evaluation process designed to examine the effectiveness and efficiency of vehicle inspection programs within a country. AVISEs look at the entire lifecycle of vehicle inspection, from the regulatory framework and enforcement to technical capabilities and coverage of inspection facilities.

In FY23, GRSF conducted an AVIS in four countries—Armenia, Bangladesh, Philippines, and Mozambique—with support from the International Motor Vehicle Inspection Committee (CITA). These AVISEs built upon previous AVISEs conducted in Togo and Cameroon and are part of a broader strategy to integrate motorization management into global targets for safer and more sustainable mobility. Additionally, there are ongoing assessments in Burkina Faso, Niger, and Senegal funded by the World Bank budget or financed by the World Bank’s transport projects in those countries.

Recommendations from AVISEs have contributed to expanding investment and knowledge opportunities for World Bank client countries. For Bangladesh and Senegal, AVIS recommendations contributed directly to investment projects. In Bangladesh, AVIS outcomes are supporting vehicle safety activities under the World Bank-financed

[Bangladesh Road Safety Project](#). Activities include (i) the integration of existing vehicle registration information systems; (ii) reviews of current driver licensing, vehicle registration, and inspection regimes; and (iii) the development of standard design and specification guidelines for the setup of new vehicle inspection centers.

In Senegal, AVIS outcomes contributed to [additional financing of a transport project](#), with the following activities included under the “safer vehicles” sub-component of the loan: (i) technical assistance for the development of a national strategy for the deployment of vehicle inspection in Senegal; (ii) technical assistance for the procurement of a vehicle inspection center; and (iii) procurement of mobile vehicle inspection stations.

In Ecuador, the completed AVIS led to technical discussions with officials of Quito Municipality’s transport agency as it seeks private sector engagement to operate vehicle inspections in Quito.

Apart from informing World Bank investments, information gleaned from AVISEs has also contributed to the World Bank’s flagship [report](#) on motorization management, upon which the World Bank is engaging client countries and other partners to improve vehicle safety.

In addition, the completed AVISEs have sparked knowledge transfer among task team leaders in the World Bank’s Transport Global Practice, particularly as they bring together two core priorities: road safety and transport decarbonization. AVIS findings have also led GRSF to draft a Guide for Conducting Assessments of Vehicle Inspection Systems, which will support governments in diagnosing the performance of vehicle inspection systems in their countries. The methodology presented in the Guide will show how effective vehicle inspection systems contribute to managing the quantity, quality, and condition of a country’s vehicle stock.



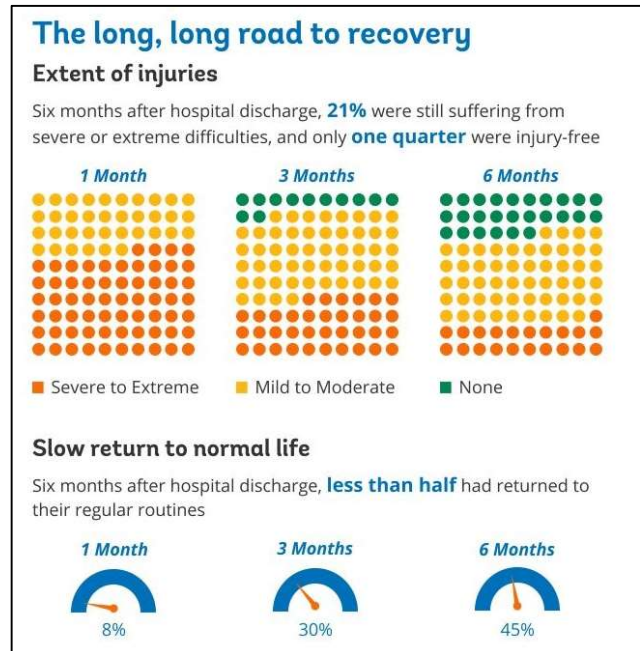
## 5. HEALTH IMPACT AND RESPONSE

### UNCOVERING THE DISABILITY BURDEN OF ROAD CRASHES

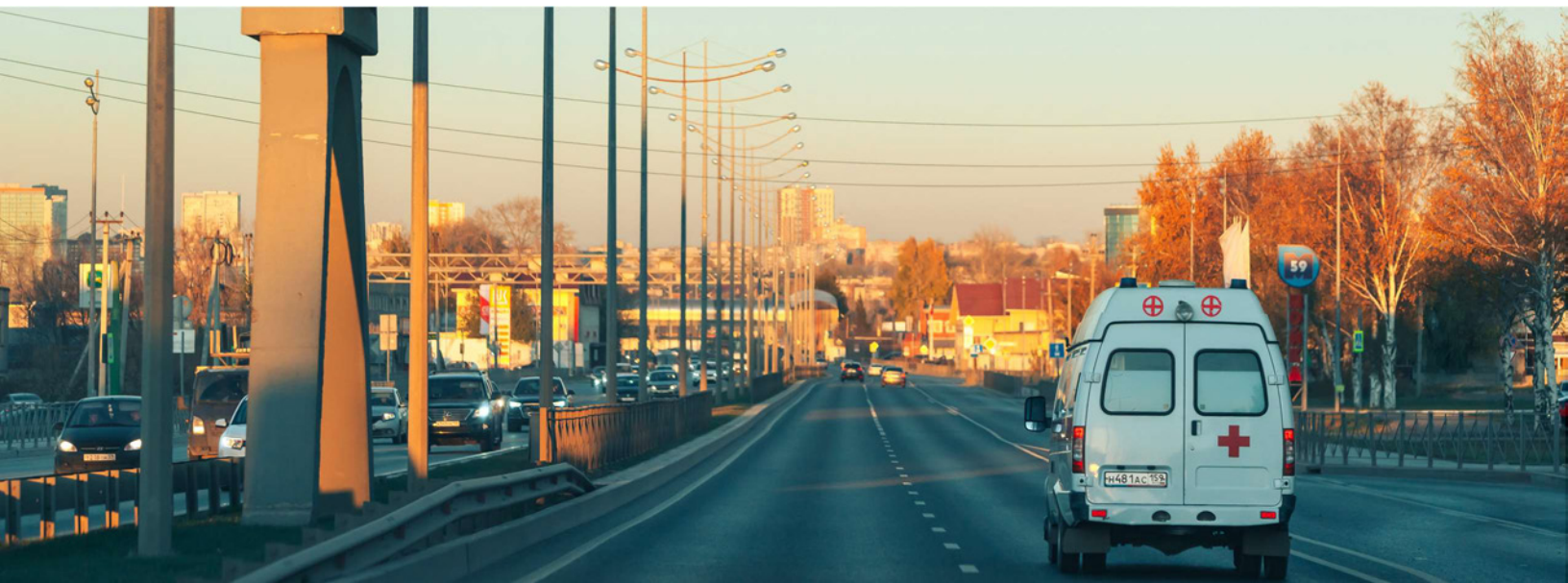
Road crashes claim over a million lives each year and rank as the twelfth leading cause of death globally, causing huge burdens for households, economies, health systems, and transport networks. However, beneath the sobering fatality statistics lies a largely unexplored landscape: the staggering toll of disabilities induced by road crashes.

Until now, the focus of road safety research and policy discourse has predominantly revolved around fatalities, which has limited our understanding of traffic-related injuries and disability burdens at the individual, community, and national levels.

To address this critical knowledge gap, GRSF conducted a study involving over 2,300 patients hospitalized for road crash injuries in six countries—Bangladesh, Cambodia, Ethiopia, Malawi, Ukraine, and Zambia—to provide valuable insights into the prevalence, causes, and long-term impacts of crash-related disabilities. By broadening the discussion beyond fatalities to the often-overlooked issue of disability, the report provides a more holistic perspective on road safety impact, which can inform more effective road safety policies.



The resulting report is a call to action for comprehensive and context-specific interventions that encompass both the transport and health sectors. Effective measures may include implementing safety regulations, enhancing emergency services, strengthening rehabilitative care, and expanding social safety nets to ease the financial burden on crash survivors. A report launch event and social media campaign is being planned for FY24.



## ASSESSING EMERGENCY MEDICAL SERVICES IN AFRICA



Around half of the road traffic mortality cases in low- and middle-income countries take place post-crash. The quality and the response time of emergency medical services (EMS) are crucial factors in determining a patient's ultimate outcome. In particular, the time between a road crash and the provision of first professional emergency care is crucial in reducing the fatality rates from road trauma.

In FY23, GRSF funded assessments of the state of emergency medical services (EMS) for the provision of post-crash care in Mozambique, Nigeria, Senegal, and Uganda. The assessments evaluated the effectiveness of these systems and identify areas for improvement.

A qualitative survey instrument developed as part of an earlier regional evaluation—*The State of Emergency Medical Services in Sub-Saharan Africa*—was used to frame the respective assessments. The assessments found that countries must make a continuous and coordinated effort on the fundamentals for effectively delivering urgent medical care that is operationally and financially sustainable.

A summary of key findings and recommendations is below:

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### Governance and Standards:

- All four countries need stronger legal and regulatory frameworks for EMS.
- Specific legislation is needed in Mozambique for pre-hospital and in-hospital emergency services.
- Nigeria lacks national standards for communication, technology, and asset management.
- Senegal needs to reinforce the 1515 emergency call center and establish dedicated funding mechanisms.
- Uganda requires an EMS Act to codify the availability of the 912-emergency call center.

### Financing Arrangements:

- Sustainable financing mechanisms for EMS are crucial in all four countries.
- Mozambique needs policy reforms to ensure effective fiscal governance for EMS.
- Nigeria can leverage existing health insurance schemes and consider adjusting telecommunication taxes.
- Senegal needs to explore additional funding sources beyond donor support and public expenditure.
- Uganda can incorporate emergency care into ongoing results-based financing mechanisms and revitalize the dialogue on a National Health Insurance Scheme.



### Skills and Human Resources:

- All four countries need to develop or strengthen their EMS training programs.
- Mozambique needs national requirements for first aid training certification processes.
- Nigeria needs a standardized curriculum for Emergency Medicine, as well as national guidelines for EMS training.
- Senegal needs a specialized school for paramedics and official recognition for the role of Medical Regulation Assistants.
- Uganda requires a standardized curriculum for Emergency Medicine and a comprehensive needs assessment of the EMS workforce.

### Communication and Information Management Systems:

- All four countries need to improve their communication infrastructure and data management systems.
- Mozambique needs to operationalize its Integrated Center for Guidance and Coordination of Medical Emergencies.
- Nigeria needs a National Integrated Emergency Management Solution and national standards for communication and technology.
- Senegal needs to streamline multiple short codes into a single public service access point and improve communication systems between call centers and hospitals.
- Uganda needs to mandate the operation of the 912 short code and should install vehicle location devices in all ambulances.

### Common Challenges and Opportunities:

- Geospatial analyses are needed in all four countries to determine resource requirements and proximity for timely EMS response.
- Increased public awareness about emergency short codes is crucial.
- A Good Samaritan Law can expand the pool of first responders trained in basic life support skills.
- Overall, these assessments highlight the need for significant investment and improvements in EMS systems across all four countries. By addressing the common challenges and exploring the identified opportunities, these countries can improve post-crash care and ultimately save lives.





## IMPROVING TRAUMA CARE IN BANGLADESH



According to the World Health Organization (2023), 19 people per 100,000 are killed each year in Bangladesh due to road crashes—one of the highest road safety fatality rates in the world. In addition to these fatalities, a much larger number of people are left severely injured and often with a permanent disability. Road crashes have become the ninth leading cause of inpatient hospital admissions. This concerning trend underscores the urgent need to revamp and fortify trauma care infrastructure to better support patients suffering from serious road crash injuries.

Trauma registries and trauma systems improvement programs are important tools for the rigorous and continuous improvement of the provision of care. Between 2021 and 2022, with support from GRSF and in partnership with the Bangladesh Ministry of Health and Family Welfare, Bangladesh embarked on a groundbreaking study to determine the feasibility of establishing trauma registries and trauma systems improvement programs.

The study spanned four high road crash fatality districts—Cumilla, Tangail, Bogra, and Jhenaidah—and found that:

- The implementation of trauma registries was feasible and would gather crucial data for patient management.
- Trauma registry implementation was easier in facilities with dedicated casualty departments, such as medical college hospitals.
- Trauma registries and trauma systems improvement programs improved trauma care by identifying and addressing gaps on a case-by-case basis, utilizing local resources.
- Health facilities will need to build up the capacity of healthcare providers working in emergency rooms to manage acute trauma cases.

The study clearly demonstrates the transformative potential of trauma registries and trauma system improvement programs. Based on the study findings, the World Bank-financed [Bangladesh Road Safety Project](#) will scale up these interventions in medical college hospitals in 25 high-fatality districts. By harnessing the power of data and tailoring interventions to the unique needs of each facility, Bangladesh is positioned to make [significant advances](#) in trauma care, ultimately safeguarding the lives and well-being of its citizens.

# CAPACITY BUILDING



Road safety investments are most effective when there is sufficient in-country road safety management capacity that can deliver road safety results. However, road safety management capacity in LMICs is often weak. It is critical that countries strengthen capacity as a precursor for durable road safety progress. For this reason, one of GRSF's core priorities is to build capacity in LMICs so they can harness and adapt global road safety knowledge to their local contexts.

Some highlights of GRSF's capacity building work in FY23 is below:

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## TRAINING ROAD SAFETY PROFESSIONALS IN AMMAN, JORDAN



GRSF and the World Bank's Middle East and North Africa transport team partnered to deliver a four-day Road Infrastructure Safety Management training program in Amman, Jordan, in August 2023. Participants were introduced to the essential tools and knowledge required to effectively manage road safety in Jordan.

The program attracted 70 professionals from a range of government agencies including the Ministry of Public Works and Housing, Ministry of Transport, Greater Amman Municipality, Ministry of Local Administration, and the Land Transport Regulatory Authority. About two thirds of the attendees were women, highlighting a growing trend of gender diversity in the traditionally male-dominated field. This training signified a substantial leap forward in strengthening road safety practices in Jordan.

Participants immersed themselves in hands-on problem-solving challenges in areas such as road

safety management, road safety inspections and audits, and speed management. The program also involved field visits to the Amman BRT corridor and the Desert Road, offering a firsthand look at real-world road safety challenges and the application of safety measures in diverse settings.

Jordan has taken significant strides in its journey towards safer roads in recent years. In a noteworthy development, an amendment to the Traffic Law was recently passed and enforced, which includes increased fines for running red lights and using mobile phones while driving.

Collaborative efforts between the World Bank, GRSF, and Jordan's transport-related institutions and professionals have set Jordan on a promising trajectory towards safer roads. The training program and the recent amendments to the Traffic Law demonstrate a robust commitment to improving road safety in the country.





## FACILITATING EXPERIENCE-SHARING ON MODERNIZING CRASH DATABASES



Around 80 percent of road crash deaths are missing from official statistics in low-income countries, which limits the ability to monitor road safety trends, provide effective road safety governance, and advocate for improvements.

While many jurisdictions have adopted or developed proprietary systems for recording crash data, they are often developed in isolation and often owned and/or maintained by traffic police. This means that analytical usage is often limited to law enforcement, without suitably addressing road

safety risk and management issues as would be expected of a robust crash database system.

A GRSF webinar in February 2023 showcased country experiences in modernizing crash database systems from the Philippines, Georgia, India, and Colombia. It also highlighted the inter-governmental effort required to develop such systems and ensure effective utilization by all stakeholders.

In addition to modernizing crash database systems, there must be parallel efforts to: a) improve capacity and training for reliable data collection, b) ensure adequate resources, especially in rural areas, and c) foster an inter-governmental commitment to share information with, and analyze data from, the aggregated crash database system.

Though there are many challenges in upgrading national crash database systems, some low- and middle-income countries have shown promising results.

## SIERRA LEONE ROAD SAFETY WORKSHOP

In partnership with the Sierra Leone Road Safety Authority, the World Bank and GRSF conducted a two-day workshop in Freetown, Sierra Leone, in April 2023.

The objectives of the workshop were to share good road safety practices and knowledge, raise awareness on mentality shifts required to address road safety, and highlight evidence-based interventions.

Participants came from a variety of institutions and sectors, including a variety of government agencies, transport owners' associations, civil society organizations, and the media.

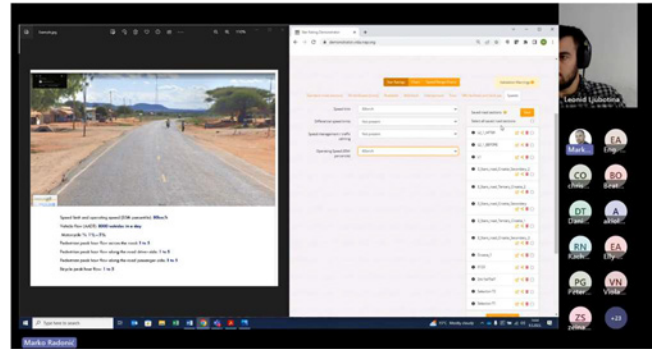


Presentations included an overview of the safe systems approach, speed management, the collection and analysis of road safety data, safety at road works, and strategies to protect vulnerable road users.

## SHARING KNOWLEDGE ON ROAD INFRASTRUCTURE SAFETY IN KENYA

GRSF delivered a three-day virtual training in Kenya in May 2023, focused on road infrastructure safety. The purpose of the learning event was to develop and enhance in-country capacity for undertaking safety road infrastructure assessments, and to facilitate the transfer of knowledge from international experts to local stakeholders based on the ongoing road Star Rating assessments in Kenya and other African countries.

The workshop brought together a diverse group of 45 participants from nine organizations, including Kenya National Highways Authority, National



Transport and Safety Authority, State Department for Transportation, Kenya Urban Roads Authority and Kenya Rural Roads Authority.

## BUILDING SPEED MANAGEMENT CAPACITY IN DHAKA, BANGLADESH



In May 2023, GRSF led a technical visit to Bangladesh and delivered a three-day speed management training. The training was designed to provide practical and technical guidance on speed management, including hands-on advice for safety improvements in different road environments based on the latest best practices.

The first half day of the course was attended by forty senior policymakers as well as technical staff from the Police, Bangladesh Road Transport Authority, Roads and Highways Department, and Local Government Engineering Department.

The remaining two and a half days were targeted to technical staff, where 28 participants learned about the importance of speed management and key interventions that can be applied to address speeding. This included site visits and practical risk assessment activities, speed limit setting, and measures required to support these speeds.

The exercise has led to the development of an action plan and next steps, which will be taken forward as part of future World Bank activities in Bangladesh.



# CATALYZING ROAD SAFETY FINANCE





*GRSF plays a pivotal role in catalyzing World Bank-financed road safety investments. GRSF grants and GRSF team members contribute to the preparation and implementation of World Bank projects by providing technical assistance, training, and expert advice to World Bank regional teams and policymakers in client countries.*

*In FY23, GRSF achieved and contributed to significant results:*

### **INFORMING WORLD BANK TRANSPORT PROJECTS**

**\$2.28 billion of newly approved World Bank-financed investment projects in the Transport Global Practice—spanning 13 projects and 11 countries—were informed by GRSF with respect to road safety.**

In the preparation stage these projects used the Road Safety Screening and Appraisal Tool (RSSAT), a tool developed by GRSF to meet the World Bank Transport Global Practice’s requirement that all investments with a road component a) include road safety within the economic analysis of the project, and b) achieve a reduction in road traffic fatalities.

In FY23, RSSAT was used by World Bank project teams to assess road works to be financed along 74 road sections, equivalent to 2,960 km. The expected reduction in fatalities along these road sections varied from 2 to 75 percent, which should yield an economic benefit of over \$813 million over 20 years.

### **CATALYZING WORLD BANK ROAD SAFETY INVESTMENTS**

**\$323 million in World Bank financing of road safety investments was approved.** This represents 14 percent of all road and urban transport financing approved by the World Bank in FY23.

### **BUILDING EXPERTISE AMONG WORLD BANK STAFF**

**The second GRSF Road Safety Academy for World Bank staff was delivered in April 2023.** The academy provided participants with knowledge and skills to improve road safety outcomes in World Bank operations and boosted their understanding of road safety development impacts and opportunities in low- and middle-income countries.

Thirty-five participants from 15 countries attended the three-day virtual training, representing diverse fields including transport, health, environment, impact evaluation, climate change, and knowledge management. GRSF plans to repeat the course every year to meet increasing demand from World Bank staff for guidance and knowledge on how to improve road safety outcomes in World Bank-financed projects.

## CREATING SAFER ROADS FOR ECONOMIC INTEGRATION IN MOZAMBIQUE



### Context:

Mozambique suffers 20 road traffic deaths per 100,000 people per year, which is one of the worst road safety records in Africa and the world. In absolute terms, it is estimated that around 6,500 people die on Mozambique's roads each year. The government of Mozambique has recognized the dire need to improve road safety in the country—alongside other needed road sector improvements—and requested World Bank support to evaluate the road safety situation in the country.

### World Bank Involvement:

In August 2022, the World Bank Board approved an International Development Association financing envelope of \$850 million to the Republic of Mozambique for the [Safer Roads for Socio-Economic Integration Program](#), including its Phase I financing of \$400 million.

The objectives of the program are to improve road connectivity, safety, and climate resilience, as well as to foster greater social inclusion in the program areas. The program is designed as a Multiphase Programmatic Approach (MPA), which has an expected duration of ten years over three phases.

### Program Characteristics:

- The program will finance the design and rehabilitation of safer and more climate-resilient roads, which will include improvement and maintenance of over 1000 kilometers of selected priority road sections on the N1 North South corridor.

- The MPA program will pilot a multisectoral safe systems approach to road safety including road safety management, safer roads and mobility, safer speeds, safer vehicles, safer road users, and post-crash response.
- The program will also include road safety audits to prioritize high-crash-risk locations and introduce cost-effective road safety engineering improvements, mindful of nonmotorized transport, which caters to the most vulnerable road users.
- “Mass action” interventions will be used linking causes of known crash problems with well-tested solutions. By using this mass action approach and focusing on a few highly effective intervention packages, expertise will be gained along the N1 corridor in assessing and treating such road safety risks.

### The Role of GRSF:

In FY22, GRSF supported the World Bank regional transport team in Southern Africa with the preparation of a [road safety diagnostic assessment](#), Mozambique: Preserving Human Capital through Improving Road Safety. The assessment, conducted jointly with GRSF, reviewed Mozambique's road safety performance based on the UN Pillars for Road Safety.

The resulting report identified several quick-win strategies that could enable Mozambique to make significant road safety improvements that would save lives, reduce the number of debilitating injuries, lower the economic costs of road crashes, and enhance safety culture. In addition to the road safety quick wins, the report identified a comprehensive and equally important list of policy, regulatory, institutional, and investment measures needed in the short and medium term.

The report directly contributed to the conceptualization and consequent approval of the first multisectoral transport sector MPA in the Africa region, with a total financing envelope of \$850 million.

## ENHANCING CONNECTIVITY IN NORTHERN AND CENTRAL SENEGAL

### Context:

Road safety is a major challenge in Senegal, where an estimated 3,500 die yearly on the country's roads (WHO, 2023).

In early 2023, Senegal experienced two tragic road crashes that raised public concern about the poor road safety situation. The first crash occurred near Kaffrine, killing 40 people. A second crash in Sikilo one week later caused a death toll of 35. In response, the Government of Senegal held an emergency inter-ministerial committee meeting that culminated in the development of a road safety action plan. The plan called for interventions to improve vehicle safety standards and maintenance, regulate vehicles' age limit, improve infrastructure, and enhance the driving standards and capacity of professional drivers, among others.

### World Bank Involvement:

In March 2022, the World Bank Board approved \$202 million in financing to support transport networks in Senegal's northern and central regions. Among other things, the [Enhancing Connectivity in the Northern and Central Agricultural Production Areas of Senegal](#) project is supporting the operationalization of the recently created National Road Safety Agency by financing training programs and the development of road safety management tools (procedure manuals, road safety studies, sex-disaggregated fatality data, etc.). A pilot program of road safety activities will be financed through the newly created road agency.

Given the increased road safety needs after the series of deadly crashes, the government requested additional World Bank support to scale up road safety interventions in line with its new road safety priorities. Additional financing of US\$117 million for the [Enhancing Connectivity in the northern and central agricultural production areas of Senegal Project](#) was approved in FY23, which featured a strong road safety component informed by GRSF.



### Project Characteristics:

- Technical assistance for the development of a national strategy and operational plan for the deployment of vehicle inspection in Senegal.
- Procurement of mobile vehicle inspection stations and mobile speed monitoring systems.
- Safer road infrastructure pilot on National Road 1, which will focus on the treatment of intersections, the deployment of horizontal and vertical signalization, and the installation of crash barriers.
- Technical assistance to update the national road safety audit.
- Construction of modern driving license exam centers.

### The Role of GRSF:

In recent years, GRSF has been supporting the World Bank and the Government of Senegal through various technical assistance engagements, including on vehicle safety, emergency medical system diagnostics, and the delivery of the first Regional Congress on Road Fatality Data in March 2023 in Dakar, Senegal. GRSF was instrumental in developing the road safety component of the additional project financing and has been working closely with World Bank task team in Senegal to implement the planned road safety activities.

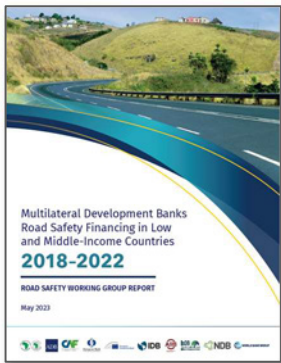


# **PARTNERSHIPS AND OUTREACH**





## 2023 CONVENING OF THE MDB ROAD SAFETY WORKING GROUP



The Multilateral Development Banks (MDBs) Road Safety Working Group was established in 2009 with the objectives of harmonizing road safety investments, adopting common approaches, and scaling up road safety financing. The World Bank is the current

chair of the working group, with GRSF actively supporting in that endeavor.

In May 2023, the Working Group—which is now comprised of 10 members—convened at the annual International Transport Forum meeting in Leipzig, Germany. At the meeting, GRSF presented the findings of a review of MDB road safety financing during the five-year period 2018-2022. The [report](#) found that, during the period, seven MDBs committed \$3.6 billion toward road safety initiatives in low- and middle-income countries.

Despite these sizable contributions, the report found that more is needed to achieve the UN's goal

of halving road fatalities in low- and middle-income countries by 2030. As motorization rates increase across the developing world, already-high fatality rates are likely to escalate. A minimum of \$200 billion in additional financing is needed to meet the UN goal. Closing the financing gap will be challenging and scaling up the contributions by governments and MDBs will require a commensurate increase in grant funding to support their country engagement process and catalyze action.

The working group members called on governments and the private sector to ramp up funding in line with the UN 2030 goal of halving road crash deaths and injuries. Group members called specifically for additional support for GRSF and a boost of its donor contributions.

In addition, the working group committed to reviewing road safety performance in low-income countries; promoting lessons being learned from the implementation of large stand-alone projects; enhancing procedures for tracking MDB road safety financing in LMICs; and sustaining ongoing efforts to harmonize road safety policies and practices across the MDBs.

## SUPPORTING THE 7<sup>TH</sup> UN GLOBAL ROAD SAFETY WEEK



The May 2023, the World Health Organization and the United Nations regional commissions celebrated the [7<sup>th</sup> UN Global Road Safety Week](#).

This year's theme, #RethinkMobility, was a call to shift to sustainable modes of transport, in particular walking, cycling, and public transport. Road safety is both a prerequisite for and an outcome of this shift.

GRSF marked the occasion by promoting sustainable modes of transport and highlighting GRSF's work in the Philippines, Vietnam, Ethiopia and Bolivia promoting safe mobility for all road users.

In addition, GRSF produced a video featuring senior leaders from across the World Bank, with each explaining why road safety is a key priority.

## ASIA TOUR WITH THE UN SGs SPECIAL ENVOY FOR ROAD SAFETY



In November 2022, GRSF traveled to Thailand, Cambodia, and Viet Nam to join the Asia mission of the UN Secretary General's Special Envoy for Road Safety, Jean Todt.

In Thailand, a meeting was held with the UN Resident Coordinator and UNCT Thailand, including WHO, UN-Habitat, and UNESCAP. The Special Envoy also participated at the opening of the ITF Regional High-Level Dialogue for Asia and the Opening of the Seventh session of the Committee on Transport, ESCAP and High-level roundtable. Two takeaways from the Thailand engagements were 1) the mechanisms for regional work and experience-sharing on road safety are in place but seem to be focusing on dialogue rather than concrete and effective actions, and 2) Thailand

has made significant progress on road safety in recent years, but more continuous evidence-based interventions are needed.

In Cambodia, meetings were held with H.E. Sar Kheng, Deputy Prime Minister of Cambodia, Minister of Interior of the Kingdom of Cambodia (who is also chairing the National Road Safety Committee), as well as other senior ministers and state secretaries. Discussions in Cambodia indicated a strong government commitment to the road safety agenda. The government is in the process of adopting a new traffic law, and the country is also advancing the use of digital systems to improve road safety and interaction with road users.

In Viet Nam, visits took place to a school engaged on road safety with the Asia Injury Prevention (AIP) Foundation and to the Protec Tropical Helmet Factory in the context of improving helmet standards and access to quality affordable helmets. Meetings were also held with the UN Resident Coordinator and the representatives of several UN Agencies, and with the Deputy Minister of Transport and his team.



# FY23 FINANCES

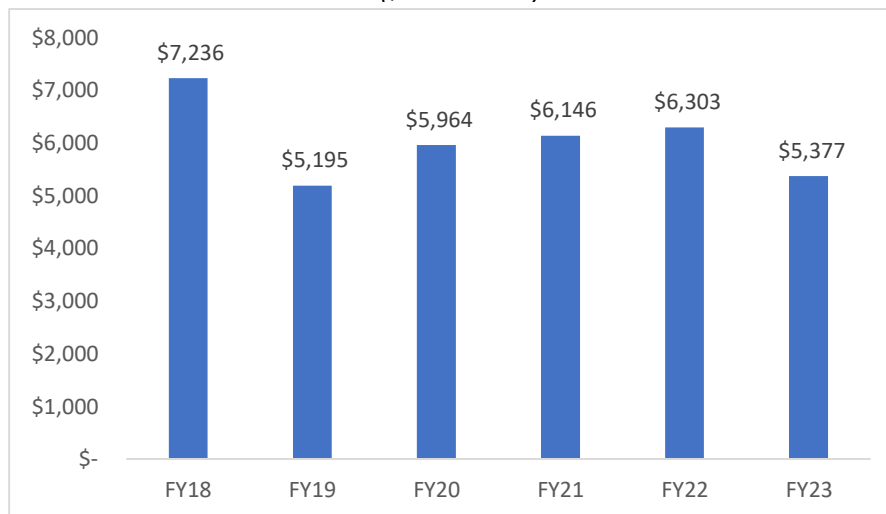




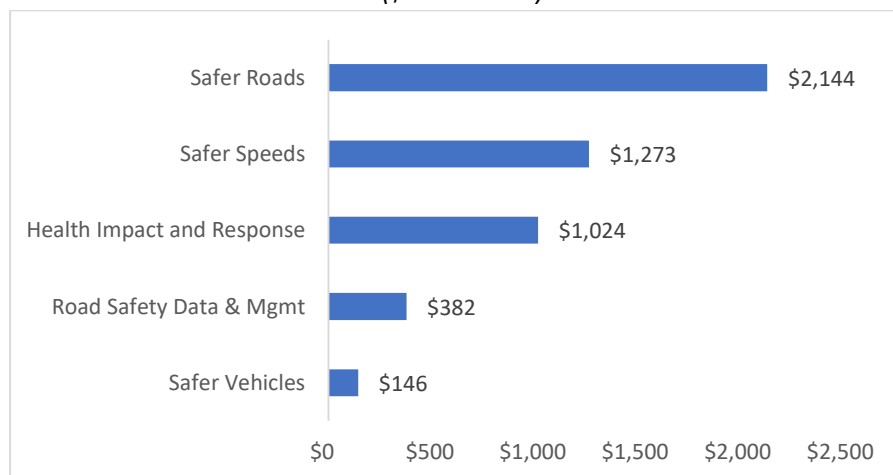
## FINANCIAL REVIEW

In FY23, GRSF disbursed \$5.4 million. Country and global activities accounted for 92.4 percent of disbursements, while GRSF's program management and administration expenditures accounted for the remaining 7.6 percent of disbursements.

**Figure 1: Disbursements by Fiscal Year**  
(\$ thousands)



**Figure 2: Disbursements by Theme in FY23**  
(\$ thousands)



# APPENDIXES





## APPENDIX A: FY23 BOARD MEMBERS

- **Kelly Larson** – GRSF Board Chair and Program Director, Bloomberg Philanthropies
- **Eduard Fernandez** – Executive Director, Comité International de l'Inspection Technique Automobile/International Motor Vehicle Inspection Committee
- **Anne Joselin** – Infrastructure Advisor, Foreign, Commonwealth and Development Office, United Kingdom
- **Dawn Wood** – Deputy Programme Manager, Foreign, Commonwealth and Development Office, United Kingdom
- **Megan Gaffey** – Global Health Research Programme Manager, Department of Health and Social Care, United Kingdom
- **Alison MacEwen** – Head of Global Health Research Programmes, Department of Health and Social Care, United Kingdom
- **Eleanor Howat** – Global Health Research Advisor, Department of Health and Social Care, United Kingdom
- **Abdoul Wahab** – Road Safety Senior Advisor, TotalEnergies Foundation
- **Binyam Reja** – Global Practice Manager for Transport, World Bank
- **Nicolas Peltier-Thiberge** – Global Director for Transport, World Bank

## APPENDIX B: EVENT HIGHLIGHTS

### GRSF @ TRANSFORMING TRANSPORTATION



The 20th anniversary edition of the Transforming Transportation conference was held at the World Bank Headquarters in Washington, D.C. in March 2023. GRSF was actively engaged in the event in a variety of ways, ensuring that road safety was high on the conference's agenda.

A panel discussion titled Strengthening Transport Resilience and Decarbonization Through Safer Roads focused on the link between improving road safety and addressing climate change. This discussion, which was co-organized by GRSF and the World Resources Institute, highlighted the complementary nature of the two initiatives and encouraged conference participants to explore opportunities for collaboration.

In addition, GRSF collaborated with the Inter-American Development Bank and the International Transport Forum to host a side event, Safe Roads to Decarbonize Mobility. This event explored the impact of road safety investments on reducing transport emissions and how such investments could lead to a safer and more sustainable transportation system.

To directly engage with the approximately 1,000 in-person attendees, GRSF set up a road safety knowledge booth, which provided participants with the opportunity to learn more about evidence-based interventions to address the road safety crisis. GRSF marked the occasion by promoting sustainable modes of transport and highlighting GRSF's work in the Philippines, Viet Nam, Ethiopia, and Bolivia promoting safe mobility for all road users.

In an interview with CNBC Africa, Said Dahdah, the Head of GRSF, discussed the challenges and opportunities for improving road safety in Africa and highlighted GRSF's commitment to reducing road traffic injuries and fatalities in Africa and across the globe.

### CONTRIBUTING TO THE DAKAR REGIONAL ROAD SAFETY CONGRESS

GRSF contributed a technical presentation on road safety data and investments to the Dakar Regional Road Safety Congress, held in Senegal in March 2023.

Organized by the National Road Safety Council of Senegal and the World Health Organization, the conference brought together experts and stakeholders to discuss ways to improve the collection and analysis of road mortality data to better inform road safety policies and interventions.



## SHARING EVIDENCE ON IMPROVING SAFETY FOR MOTORCYCLISTS



The Asia Pacific Road Safety Observatory and the Ibero-American Road Safety Observatory, with support from GRSF and other partners, co-hosted a Dialogue on Powered Two-Wheeler Safety in Manila, Philippines, in October 2022.

The event brought together over 100 global experts and practitioners addressing deaths and injuries resulting from motorcycle crashes and focused on countries where powered two-wheelers (motorcycles) are the dominant mode of transport.

At the event, GRSF presented a case study from a road connectivity project in Viet Nam financed by the World Bank, highlighting the importance of adopting a Safe System approach and demonstrating how safety can be improved for motorcyclists and other vulnerable road users through safety-oriented road design including dedicated motorcycle lanes and speed calming measures.

## ANNUAL MEETING OF THE AFRICAN REGIONAL NETWORK FOR ROAD SAFETY LEGISLATORS

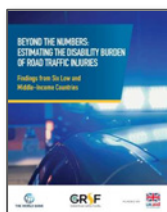
GRSF partnered with WHO and participated in the Annual Meeting of the African Regional Network for Road Safety Legislators in Kampala, hosted by the Ugandan Parliamentary Action Forum for Road Safety in May 2023. The meeting aimed to increase the number of African countries that have ratified the AU's African Road Safety Charter from 11 to at least 15 countries for the Charter to go into full force. GRSF led a breakout session and presented on the importance of road safety legislators in road safety management.



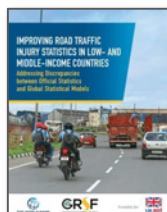


## APPENDIX C: LIST OF GRSF PUBLICATIONS\*

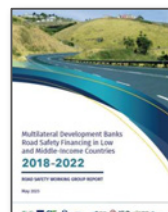
### TECHNICAL REPORTS



**Beyond the Numbers: Estimating the Disability Burden of Road Traffic Injuries – Findings from Six Low and Middle-Income Countries**



**Improving Road Traffic Injury Statistics in Low- and Middle-income Countries: Addressing Discrepancies Between Official Statistics and Global Statistical Models**



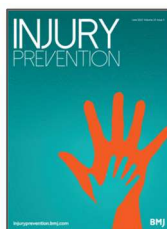
**Multilateral Development Banks Road Safety Financing in Low and Middle-Income Countries: 2018–2022**

*(prepared for the MDB Road Safety Working Group)*



**Assessment of the Enabling Environment for Road Safety Civil Society Organizations in Three Sub-Saharan African Countries**

### JOURNAL ARTICLES



**Addressing discrepancies in estimates of road traffic deaths and injuries in Ethiopia**



**Estimation of the Completeness of Road Traffic Mortality Data in Zambia Using a Three Source Capture Recapture Method**



**Profile of Low and Middle-Income Countries with Increases Versus Decreases in Road Crash Fatality Population Rates and Necessity of Motorcycle Safety**

## “GREEN MANUALS” (COLLABORATION WITH WORLD HEALTH ORGANIZATION)



Helmets: A Road Safety Manual for Decision-makers and Practitioners, (2<sup>nd</sup> edition)



Pedestrian Safety: A Road Safety Manual for Decision-makers and Practitioners, (2<sup>nd</sup> edition)



Powered Two-and Three-Wheeler Safety: A Road Safety Manual for Decision-makers and Practitioners, (2<sup>nd</sup> edition)

\* The above list are publications from GRSF's own managed projects and does not constitute a complete list of all GRSF-funded publications in FY23.

