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ANNUAL REPORT 2021

The Global Road Safety Facility (GRSF) is a global multi-donor fund hosted by the World Bank. Its mission is to help governments develop road safety management capacity and scale up road safety delivery in low- and middle-income countries (LMICs).





Bloomberg Philanthropies







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Recommended Citation for this Report: Global Road Safety Facility (2021). Global Road Safety Facility Annual Report 2021. Washington DC: Global Road Safety Facility, World Bank.

Cover photos: Unsplash and GRSF

Design and layout: Disha Arora

ABBREVIATIONS AND ACRONYMS

ADB Asian Development Bank IsDB Islamic Development Bank AfDB African Development Bank ANSV National Road Safety Agency of Colombia APSRO Asia Pacific Road Safety Observatory ARSO African Road Safety Observatory **ASE Automated Speed Enforcement** AU African Union **AVIS Assessment of Vehicle Inspection Systems BAC Blood Alcohol Content** BIGRS Bloomberg Initiative for Global Road Safety CAF Development Bank of Latin America **CITA International Motor Vehicle Inspection** Committee/Comité International de l'Inspection Technique Automobile DFAT Department of Foreign Affairs and Trade (Government of Australia) DHSC Department of Health & Social Care DPWH Department of Public Works and Highways (Philippines) DRIVER Data for Road Incident Visualization, **Evaluation & Reporting** EASST Eastern Alliance for Safe and Sustainable Transport EBRD European Bank for Reconstruction and Development EC European Commission EDSP Expressway Development Support Project **EIB European Investment Bank EMS Emergency Medical Services** ERA Ethiopian Roads Authority EU European Union FCDO Foreign, Commonwealth & Development Office (UK) FIA Fédération Internationale de l'Automobile **GPN Good Practice Note** GRSF Global Road Safety Facility **GRSLC Global Road Safety Leadership Course GRSP** Global Road Safety Partnership IDB Inter-American Development Bank IHME Institute for Health Metrics and Evaluation **iRAP** International Road Assessment Programme **IRF** International Road Federation IRTAD International Traffic Safety Data and Analysis

Group

ITF International Transport Forum LICs Low Income Countries LMICs Low and Middle-Income Countries MDBs Multilateral Development Banks MDTF Multi-Donor Trust Fund NACTO National Association of City Transportation Officials NGOs Nongovernmental Organizations NIHR National Institute for Health Research NRSC National Road Safety Council NTSC National Traffic Safety Committee **PNP** Philippines National Police QII Quality Infrastructure Investment Partnership **RAS Reimbursable Advisory Services RSO Road Safety Observatory** RSSAT Road Safety Screening and Appraisal Tool SDGs Sustainable Development Goals (UN) SEGIB International Organization serving Ibero-America SIDA Swedish International Development **Cooperation Agency** SMAT Speed Management Assessment Tool SSATP Sub-Saharan Africa Transport Policy Program **TDI Transport Decarbonization Investment TOD Transit-Oriented Development TOR Terms of Reference UN United Nations** UNECA United Nations Economic Commission for Africa UNECE United Nations Economic Commission for Europe UNESCAP United Nations Economic and Social Commission for Asia and the Pacific UNGRSW UN Global Road Safety Week UNRSC United Nations Road Safety Collaboration WHO World Health Organization WRI World Resources Institute

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LETTER FROM THE CHAIR

2021 marks the start of a new Decade of Action for Road Safety, which aims to reduce road traffic deaths by 50 percent by 2030. Today, road crashes continue to represent a pressing public health challenge and the World Bank's Global Road Safety Facility continues to be at the forefront of this fight.

The Global Road Safety Facility (GRSF) plays a key role in improving road safety by supporting effective road safety interventions, including the delivery of technical assistance, capacity development, improvements in infrastructure, and policy-making advice. As Board Chair of GRSF, I am pleased to present the 2021 Annual Report.

Over the past year, GRSF has continued to take an active leadership role in speed management activities, including the production of global guidance, technical assistance, and research in this area. In addition, the Facility is working closely with governments around the world to support their efforts to adopt safer road infrastructure designs and to improve existing road networks to accommodate all road users. This work includes conducting assessments of high-risk roads; providing recommendations for safety improvements, and technical guidance on speed management; supporting the development and/or updating of national technical guides or norms; and supporting governments adopt crash data management systems.

GRSF plays a critical role as a global road safety knowledge hub and primary partner to governments in delivering research and advisory services. Over the past year GRSF supported World Bank operations and global research in road safety through 46 grants valued at a total of \$9.78 million. In 2021, the annual Call for Proposals produced seven successful grants focused on research into managing speed in low-income and UK Aid Direct-eligible countries, totaling more than \$919,000. Over 70 percent of the grant funding through this program has gone to support external partners, increasing from 53 percent in 2020. The ongoing 2020-21 grant activities have improved safety delivered through World Bank loans with a total value of \$2.68 billion.

GRSF prioritizes engaging governments and providing global guidance on speed management that aims to support stakeholders to better understand its risks and benefits. The GRSF team actively worked to promote speed management, particularly as part of the UN Global Road Safety Week, with the production of guidance, research, and training to government officials and road safety specialists. In addition, earlier this year GRSF launched the <u>Speed</u> <u>Management Hub</u>, a critical tool for stakeholders. This online platform includes an extensive set of Frequently Asked Questions, and other key resources related to speed management, as well as technical guidance from the World Bank, GRSF, and other global partners.

Finally, I would like to congratulate GRSF for their resilience during this COVID-19 pandemic. The team has adapted their approach and continued to provide impactful capacity building through global, regional, and in-country learning events despite travel restrictions, and has reached more than 6,000 participants in 16 low-and middle-income countries.

Sincerely,

Kelly Larson GRSF Board Chair, Bloomberg Philanthropies

NOTE FROM THE NEW GRSF HEAD

I am pleased to submit the GRSF Annual Report Fiscal Year 2021. I would like to gratefully acknowledge the sustained support of the GRSF donors who have funded these efforts, and our global, regional, and country partners who have worked with us to help achieve our shared vision.

I would also like to take this opportunity to thank my predecessor, Soames Job, and the GRSF team for their contribution to the successful road safety initiatives carried out over the last year.

As we start this new Decade of Action for Road Safety 2021-2030, we look forward to working together to achieve the ambitious target of reducing road traffic deaths and injuries by at least 50 percent over that period. This can only happen through collective action and effective coordination, and the GRSF is well positioned to play a leading role in facilitating and informing the initiatives necessary to ensure sustainable success.

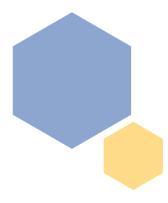
A renewed focus on scaling up road safety investment in low- and middle-income countries is a top priority for the GRSF over the coming years, and more attention will be paid to ensuring safe mobility and accessibility for all road users. Supporting transport decarbonization priorities is integral to these efforts, particularly in cities, where a safer infrastructure will support the shift to public and active transport modes.

I look forward to working with all of our GRSF partners to ensure safer and cleaner road travel for all.

Sincerely,

Said Dahdah

Head of GRSF, Global Lead for Road Safety, World Bank



OUR MPACT

1

BY THE NUMBERS: GRSF ACTION & IMPACT

Since its inception in 2006, the Global Road Safety Facility (GRSF) has received donor pledges totaling \$73.1 million. In this past fiscal year FY21 (July 1st, 2020 to June 30th, 2021), GRSF received \$4.6 million in contributions. GRSF's work in improving road safety outcomes through technical assistance, grant-funded activities, and direct delivery of road safety interventions has now expanded to 84 countries.

GRSF plays a key role in global road safety research, leadership, advocacy, guidance, as well as informing World Bank financed road safety investments. Highlights of GRSF actions and impact are:

GRSF GRANTS

IN FY21, GRSF MANAGED A PORTFOLIO OF 65 ACTIVE GRANTS, WITH A TOTAL VALUE OF \$11.69 MILLION AS OF JUNE 30, 2021



NEW GRANTS ACTIVATED IN FY21, TOTALING \$2.26 MILLION



ROAD SAFETY GRANT PROGRAM

FY21 CALL FOR PROPOSALS FOR ROAD SAFETY RESEARCH ACTIVITIES

23 PROPOSALS WERE REVIEWED BY THE GRSF TECHNICAL TEAM, RESULTING IN **7 GRANTS** ON ROAD SAFETY SPEED RESEARCH



71% OF THE GRANT PROGRAM FUNDING FOLLOWING THE FY21 CALL HAS GONE TO SUPPORT EXTERNAL PARTNERS, UP FROM 53% IN FY20

FY21 ACHIEVEMENTS

\$2.68 BILLION IN WORLD BANK TRANSPORT FINANCING APPROVED IN FY21 INFORMED

1,066 KILOMETERS OF ROADS WERE ASSESSED FOR ROAD SAFETY

 $\equiv \bigcirc$ **5**, **100+ PROFESSIONALS WERE TRAINED**





ROAD SAFETY EVENTS HOSTED/SUPPORTED





PRESENTATIONS DELIVERED



19 JOURNAL ARTICLES AND REPORTS PUBLISHED

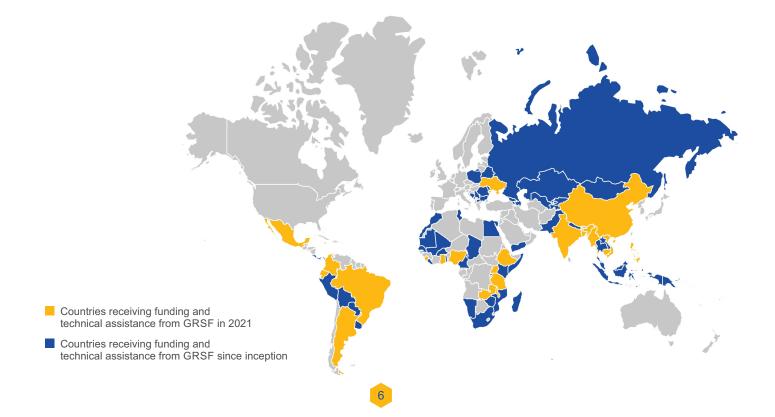






GRSF provided funding and technical assistance to road safety activities in the following 21 countries in FY21, bringing GRSF's reach to 84 countries since its inception.

EAST ASIA & PACIFIC Cambodia China Myanmar Philippines Vietnam	EUROPE & CENTRAL ASIA Ukraine LATIN AMERICA & CARIBBEAN Argentina Brazil Colombia Ecuador Mexico	SOUTH ASIA Bangladesh India	SUB-SAHARAN AFRICA Ethiopia Ghana Malawi Nigeria Sierra Leone Tanzania Uganda Zambia
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HIGHLIGHTS OF UR WORK IN FY21

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In a bid to help address the collective impact of speed as a contributor to crash risks, GRSF celebrated the <u>6th</u> <u>UN Global Road Safety Week (UNGRSW)</u> by hosting high-level events and a global social media campaign. With this year's theme "Streets for Life: #Love30," GRSF promoted key knowledge products and its <u>Speed</u> <u>Management Hub</u>, which advocates and calls for action on low-speed streets worldwide, limiting speeds to 30 kph (20 mph) on streets where people walk, live, and play.

On April 26, we hosted the <u>"Mobility & Development Webinar: Managing Traffic Speeds and Reaping Safety,</u> <u>Climate and Other Benefits</u>" as a pre-event for the UNGRSW activities, with over 180 transport practitioners, researchers, and World Bank team leaders from different regions. On May 19, 2021, we hosted the high-level panel <u>"Streets for Life: Saving Lives on the Road through Safe Speeds"</u>. And on May 20, GRSF and the World Resources Institute hosted the event <u>"Empowering Communities to Manage Speed"</u>, which marked the official launch of the <u>Low-Speed Zone Guide</u> and prelaunch of the Global Speed Management Guide. GRSF also participated in various events with Bloomberg Philanthropies Initiative Global Road Safety (BIGRS) partners in Latin America, including the <u>International Panel "Calles 30: Mejorando Ia Seguridad Vial"</u>, in partnership with the Municipality of Lima, and the <u>Webinar "Áreas 30 ou de Trânsito Calmo para Reimaginar a Cidade"</u> in partnership with the City of São Paulo.

These activities marked an important milestone in the road map toward establishing the Second Decade of Action in Road Safety. The interactive events provided information and technical sessions on evidence-based road safety knowledge to help manage speeds through infrastructure interventions, effective enforcement, targeted awareness measures, and vehicle technology.



BLOOMBERG PHILANTHROPIES INITIATIVE FOR GLOBAL ROAD SAFETY (BIGRS)

Bloomberg Philanthropies

SUPPORTED BY BLOOMBERG PHILANTHROPIES: A PARTNERSHIP FOR SAVING LIVES FROM ROAD TRAFFIC CRASHES \sim

Under the new <u>BIGRS Program 2020-2025</u>, GRSF has been taking an active leadership role in speed management activities, including the production of global guidance, technical assistance, and research. In addition, the GRSF has been working closely with governments to support their efforts to adopt safer road infrastructure designs and to improve existing road networks to accommodate all road users by conducting assessments of high-risk roads; providing recommendations for safety improvements and technical guidance on speed management; supporting the development or update of national technical guides or norms; and supporting governments in adopting crash data management systems.

- In FY21, GRSF successfully delivered activities in the three core areas of the program: **Speed Management; Road Infrastructure Safety Assessments;** and **Data Management;**
- Activities were delivered in all **16 BIGRS program countries:** Argentina, Bangladesh, Brazil, China, Colombia, Ecuador, Ethiopia, Ghana, India, Malaysia, Mexico, Philippines, Tanzania, Uganda, Ukraine, and Vietnam;
- ~ 6,000 professionals joining learning events delivered by GRSF under BIGRS in FY21;
- Over **1,000 kilometers (km) of baseline assessments** were undertaken, mainly in Ethiopia, Uganda, and Vietnam, with recommendations incorporated for now in **90 km of road designs;**
- ~ \$5.6 billion worth of World Bank investments were informed through BIGRS assessments or technical assistance during FY21.

In **Vietnam**, for example, safety assessments were completed for 258 km of national roads that will be upgraded under two World Bank loans and governmental budgeting in the following years, together with the update of two important design manual and guidelines on two-wheeler facilities. The program was also kicked off in **Ukraine**, with a successful <u>Introduction to Vision Zero for Ukraine</u> webinar delivered on May 11, 2021, and a technical study launched for the review of national road standards from a safety perspective. More assessments and capacity building are ongoing and planned for completion during the next fiscal year.

NEW SPEED MANAGEMENT HUB \sim

With the current travel restrictions due to COVID-19, in order to ensure that good practices in the field are still being disseminated and easily accessible, in February 2021 the GRSF launched the <u>Speed</u> <u>Management Hub</u> under its knowledge booth for Transforming Transportation Conference. On this online platform, the GRSF team provides evidencebased road safety knowledge to help manage speed through infrastructure interventions, effective enforcement, targeted awareness measures, and vehicular technology. Key engagements in this focus area include provision of technical expertise to program partners, countries, and cities on speed management; but also preparation and publication of relevant speed management guidelines, research and technical studies. This online platform also allows the wide dissemination of <u>frequently asked questions</u> (FAQs) on speed management, together with a comprehensive resource library and the latest news as well as examples of best practices on this topic. Some of the speed management topics addressed through the FAQs are policies and strategies; road engineering; traditional and automated enforcement; vehicle technology; road user communication, education, and engagement; and fallacies / mythbusting.

ETHIOPIA: INFORMING FOUR WORLD BANK-FINANCED PROJECTS \sim

Under the BIGRS program, GRSF has been informing four World Bank-financed projects totaling \$1.5 billion worth of investments, by providing technical assistance, undertaking site visits, joining supervision missions, and reviewing road safety documents. These activities include the following:

- Road Sector Support Project. GRSF is working with the project team, the Ethiopian Ministry of Transport (MOT) and the Ethiopian Roads Authority (ERA) to undertake iRAP baseline and design assessments, and review the road safety audit for 258 km. Under the same project, technical assistance was provided to review the terms of reference (TORs) to procure consultancy services for the preparation of Safe Road Strategy for Ethiopia.
- Transport System Improvement Project. Technical feedback was provided on the detailed designs of the project corridor (4.5 km), but also on the TORs for procuring road safety related consultancy services. The team is also closely

working with the World Resources Institute (WRI) and the Addis Ababa Transport Bureau in preparing the Work



Zone Safety Guideline for Addis Ababa.

- Horn of Africa Initiative: Regional Economic Corridor Project (Addis-Djibouti Corridor). A road safety audit of the concept design of Meisso-Diredawa (142 km) was undertaken.
- Expressway Development Support Project (EDSP). This was one of the priority projects to receive support under BIGRS. Technical assistance was provided in the review process of six road safety manuals developed by the Ethiopian Ministry of Transport. Technical feedback was also provided for the concept and preliminary design report of the 500 km A3 trunk road (Addis – Debre Markos) and the A2 trunk road (Addis – Kombolcha), which are being developed under EDSP.

COLOMBIA: AN INNOVATIVE APPROACH TO IMPROVING ROAD SAFETY \sim

Low Carbon Vital Neighborhoods, or *Barrios Vitales* (BV) in Spanish, are the Bogota city administration's initiative to implement the 15-minute city concept in up to 32 districts. This project, launched in late 2020 with GRSF support, combines strategies pioneered in Barcelona's Superblocks and London's Low Traffic Neighborhoods, building on previous initiatives on New York City's public plaza and tactical urbanism.

The key impact includes a series of deliverables, such as: three workshops with international experts from Barcelona and the Bogota City Staff who provided actionable recommendations to enhance BV designs; ten community engagement workshops to codesign and develop the Vital Neighborhood designs; two pilot test runs carried out in the BV neighborhoods of San Felipe and Las Cruces; a proposed 12-year Land User Master Plan that includes BV within its new 15-minute city planning structure; and data analytics methodology using **cell phone location data** that will allow BV and future projects to design smarter, more precise traffic management strategies.



The expected result is the

transformation at the neighborhood scale of the streetscape to create new public spaces, safer, trafficcalmed streets for all users (pedestrians, children, the elderly, those with disabilities, cyclists, etc.). BV will standardize a thoughtful approach to traffic management that increases local accessibility, favors nonmotorized transport, and promotes economic development. This approach will reduce vehiclekilometers, road fatalities, emissions, and traffic volumes throughout the neighborhoods.

GRSF ROAD SAFETY GRANT PROGRAM

SUPPORTED BY UK AID \sim

The Road Safety Grant Program supports a vital mission of GRSF in scaling up the efforts of road safety delivery in low- and middle-income countries. This program plays a key role in channeling

donor funding to advance road safety research, provide capacity building, and scale up its impacts through World Bank and other investment projects. In FY21, it continued to strengthen road safety delivery through World Bank loans as well as activities led by external partners.

- The annual Call for Proposals resulted in **seven successful grants** focusing on research on managing speed in low-income and UKAid-eligible countries, totaling **\$919,000**.
- **71 percent of the FY21 Call for Proposals has gone to support external partners,** up from 53 percent in FY20.
- Our ongoing grant activities under this program continue to strengthen road safety delivery through World Bank lending worth nearly **\$2.68 billion**.
- The GRSF's Grant Program FY21 activities are expected to result in over 1,700 lives saved by working on improving road safety outcomes of World Bank loans through technical assistance and capacity building.

CAMBODIA: ENHANCED ROAD SAFETY DATA SYSTEMS TO SAVE LIVES \sim

Within the framework of the development of the Asia Pacific Road Safety Observatory (APRSO), the World Bank and the International Transport Forum (ITF), with the support of the Ministry of Public Works and Transport in Cambodia completed a **technical assistance to assess the crash data system in Cambodia and develop a road map for strengthening it.**

This work was carried out by the World Bank and the ITF, with financial support from UK Aid through the GRSF. This <u>summary note</u> discusses the main findings of the review mission and provides a set of recommendations to further improve road crash data collection and analysis, and to improve road safety in general.

This work informed the road safety component of the World Bank-financed <u>Cambodia Road</u> <u>Connectivity Improvement</u> Project, which is being

implemented by the government of Cambodia The GRSF grant directly informed additional World Bank funding for three road safety components under this World Bank project, with a focus on updating the existing crash database; road infrastructure safety assessments; and capacity building of the Cambodian institutions involved in road infrastructure and road safety management to plan and undertake road safety improvements. The Cambodia Road Connectivity Improvement Project received a World Bank East Asia Pacific Vice President Unit award. This project exemplifies how GRSF grants can successfully support and inform World Bank lending operations.







EGYPT, KYRGYZSTAN, LEBANON AND TAJIKISTAN: SUPPORTING POST-CRASH RESPONSE CAPACITY TO IDENTIFY PRIORITY INVESTMENTS \sim

With the support of GRSF, the European Bank for Reconstruction and Development (EBRD) identified the priority investments needed to improve post-crash response in Egypt, Kyrgyzstan, Lebanon, and Tajikistan.

In addition, in May and June the EBRD and the Eastern Alliance for Safe and Sustainable Transport (EASST), with support from UK Aid provided through the GRSF, launched a <u>new training toolkit</u> for professionals in charge of organizing and delivering emergency response, with resources for enhancing the effectiveness of post-crash emergency medical and rescue operations in these three countries. These events were attended by representatives of the key health and road safety institutions in these countries, who will be promoting use of the tool among all relevant professionals.

The toolkit includes <u>six easy-to-</u> <u>follow video animations</u> covering the key stages of the post-crash response lifecycle.

It has been designed as a resource for all professionals from institutions that are in charge of organizing, planning, and delivering post-crash response, and is designed to assist them in coordinating the management and delivery of postcrash response, in order to save lives and improve outcomes for survivors.



EXPANDING POST-CRASH RESPONSE IN SUB-SAHARAN AFRICA \sim

An evaluation of the various Emergency Medical Services (EMS) models and mechanisms in place in Sub-Saharan Africa is critical in order to have a better understanding of what can be improved upon for effective prehospital and emergency care services. With grant funding provided by GRSF, the "<u>The State</u> of <u>Emergency Medical Services in Sub-Saharan</u> <u>Africa</u>" report explores the state of EMS systems in Sub-Saharan Africa through a review of the models and mechanisms that are being used and developed across various Sub-Saharan African states.

Basic information about EMS systems was collected through questionnaires distributed to national coordinators in: Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, the Central African Republic, Chad, Comoros, Congo Brazzaville, Gabon, Lesotho, Liberia, Madagascar, Malawi, Mauritania, Niger, Rwanda, Senegal, Sierra Leone, Sudan,



Tanzania, Togo, Uganda, Zambia, and Zimbabwe.

The report focuses on the fundamentals needed to effectively provide proper treatment to those in need of urgent medical care, while also recognizing that there are multiple pathways toward a more formal and sustainable EMS model, framed by the respective legislative, legal, and regulatory enabling environments.

MALAWI: THE ROLE OF ALCOHOL IN ROAD TRAFFIC INJURIES \sim

Driving under the influence of alcohol is one of the principal reasons that road traffic crashes occur. One major barrier to improving this situation is a lack of understanding of the problem. This research project was developed with the financial support of UK Aid through GRSF, and in partnership with the International Council on Alcohol, Drugs, and Traffic Safety, and the Norwegian Council for Road Safety, in order to identify the scale of road crash injuries in Malawi and the role of alcohol in such crashes. This in turn will be used to develop efficient policies and measures to



reduce the number and severity of such crashes.

The study provided detailed data on the role of alcohol in traffic crashes that result in injuries. For example, it found that about 20 percent of professional bus, minibus, and truck drivers, who often carry passengers, were involved in crashes when they tested above the blood alcohol content (BAC) legal limit. The study used reliable methodology, and has already resulted in three scientific publications in specialized journals. Based on well-documented study findings, a set of recommendations was developed for the Malawian government based on proven international good practices leading to a

reduction in traffic crashes that result in deaths and injuries. Among them: reducing the BAC legal limit, particularly for professional drivers; improving drinkdriving enforcement to reduce its scale; and supporting enforcement with public communication campaigns based on successful examples from other countries. The results of this study will be also used to convince the Malawian government to address this problem, and will inform World Bank loans or other MDB-supported projects to address the drink-driving problem in this country.

NIGERIA: "A SINGLE ORGANIZATION ROAD SAFETY" INSTITUTIONAL MODEL, ITS EFFICACY AND REPLICABILITY \sim

This study is part of a wider attempt to analyze all of the key aspects of the organization and performance of lead road safety agencies in low- and middleincome countries (LMICs) in order to analyze, document, and ultimately compare different organizational models for government oversight of road safety; to assess the effectiveness of each model; and to use them to promote the establishment or improvements of the lead road safety entities in LMICs, as one of the crucial measures leading to sustainable safety improvements. The analysis was conducted in cooperation between the World Bank, the World Health Organization, and the African Development Bank. The study was made possible thanks to financial support from UK Aid through the GRSF. It focuses on the case of Nigeria, a federal republic with three tiers of government - federal (central), state, and local – and its unique "single organizational model" for road safety management and delivery across the whole country.



The report explores how efficient and effective the Nigerian institutional setup – at both the federal and state levels – is in dealing with road safety issues in Nigeria; the strengths and weaknesses of this model; and what could be done to improve its efficiency and effectiveness. It also discusses how this model could be replicated in other LMICs, and what key factors would contribute to its successful replicability in other countries.

SOLOMON ISLANDS, SAMOA, AND VANUATU: ROAD SAFETY MANAGEMENT CAPACITY ASSESSMENTS \sim

These assessments, funded by UK Aid through the GRSF, bring a broad understanding of the road safety management capacity of the governments of <u>Samoa</u>, <u>Vanuatu</u>, and <u>Solomon Islands</u>, in order to support their development of new road safety strategies and national action plans to improve road safety outcomes, and to then implement those actions effectively. Each assessment includes a general analysis of crash data management, and a follow-up activity planned to support each of these countries in:

(i) piloting of the World Bank's Data for Road Incident Visualization Evaluation and Reporting (DRIVER) crash data management system;
(ii) the development of crash investigation guidelines; and
(iii) providing hands-on capacity building in crash investigation for traffic police and road safety



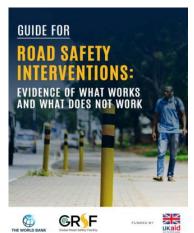
evidence based measures adapted to local conditions.



Bloomberg Philanthropies



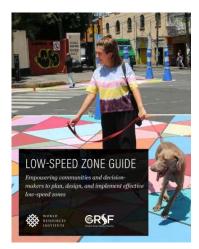
THE FIRST GUIDE TO HELP IDENTIFY WHAT WORKS AND WHAT DOES NOT WORK IN ROAD SAFETY \sim



On March 15, 2021, GRSF launched the <u>Guide for Road Safety Interventions</u>: <u>Evidence of What Works and What Does Not Work</u>. This guide responds to the critical need for effective evidence-based solutions, and offers a range of recommendations, with a focus on interventions in low- and middle-income countries (LMICs). The contents will be valuable to those working on road safety at either the policy or practitioner levels, including international development organization technical teams and others who are seeking to establish, expand, or improve road safety programs in LMICs. **It also guides action by describing effective alternative interventions and encouraging decision makers to consider and adopt the most effective options**.

This guide has been the second-highest source of traffic on the GRSF website, and has been downloaded **3,914 times** since its publication.

LOW-SPEED ZONE GUIDE: PLAN, DESIGN AND IMPLEMENT EFFECTIVE LOW-SPEED ZONES \sim



To help address the collective impact of speed as a contributor to crash risks, the World Resources Institute (WRI) and GRSF launched a new <u>Low-Speed</u> <u>Zone Guide</u>, which helps empower communities and decision makers to plan, design, and implement effective interventions.

The development of this guide was made possible through funding from Bloomberg Philanthropies. It presents strategies for planning, designing, building, and evaluating low-speed zones in cities, and is designed to equip communities and decision makers with the tools they need to implement such zones within their specific contexts. **ROAD SAFETY DATA SUPPORT**

SUPPORTED BY UK AID, BIGRS, TOTALENERGIES FOUNDATION AND QII \sim





Quality Infrastructure Investment Partnership





BETTER DATA FOR SAFER ROADS IN THE PHILIPPINES: NEW LEGISLATION SUPPORTING NATION-WIDE SCALE-UP OF "DRIVER" IN THE PHILIPPINES \sim

The Data for Road Incident Visualization, Evaluation and Reporting System (DRIVER) has been being scaled up in the Philippines since 2017, with World Bank GRSF support under the BIGRS. To further enforce this process, on July 16, 2020 the chief of the Philippine National Police (PNP) signed and released a memorandum circular institutionalizing the nationwide use and implementation of DRIVER. This means that all police stations and offices in the country will be mandated to integrate DRIVER into their daily workflow. The circular details general and specific guidelines, including indicating the key offices and personnel within the national police who will champion the adoption of DRIVER. At the national level, the directorate offices will supervise the efficient and effective implementation of the circular, while the Highway Patrol Group will provide training to key personnel involved in the use of the system. At the regional and local levels, regional, provincial, district, and city directors will ensure compliance of the lower units. Finally, the tasks of data collection, encoding, and monitoring will be given to the duty traffic investigators, investigators-on-case, and road safety officers.

The circular also specifies the procedures for the personnel responsible for uploading road crash data into DRIVER. The process is divided into seven main steps. It starts with data collection, which includes obtaining relevant information from the parties involved in a crash. After updating the necessary

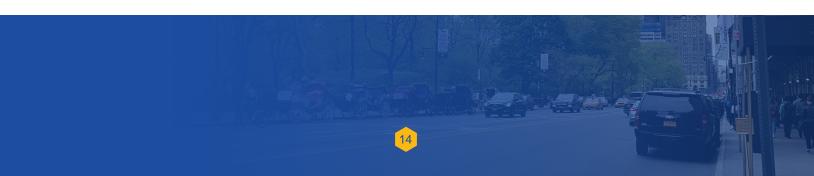
details in the Road Crash Incident Report Form, all data will then be entered and uploaded into the DRIVER system. Copies of the



incident report form will then be distributed to key personnel for filing and transcribing. Lastly, a daily accounting of all crime incidents reported in the traffic unit or office police station will be done.

This new legislation is another strong milestone in establishing DRIVER as the national crash data collection system in the Philippines; it provides a good example for other countries that are interested in using the platform.

One of the first regions to put this new legislation into practice is Western Visayas. The Development Administration Committee of the Regional Development Council VI of the Philippines endorsed the **adoption and implementation of the innovative system for road crash data collection** during its first regular meeting on March 3, 2021, and the DRIVER System is expected to be rolled out in the region within the year. Following this decision, the GRSF has been supporting a series of trainings for government partners, including the Philippine National Police, who will be facilitating the data collection. With better **informed counterparts, the road safety data gathered will be used to establish road safety interventions.**



VIETNAM: ROAD SAFETY DATA ASSESSMENT FOR THE ESTABLISHMENT OF A NATIONAL ROAD SAFETY OBSERVATORY \sim

Through observational studies, a <u>Road Safety Data</u> <u>Assessment for the Establishment of a National Road</u> <u>Safety Observatory</u> was prepared with guidance from the country's National Traffic Safety Committee (NTSC) and GRSF, and financed by the Australian Government. This study discusses the challenges of road safety data management in Vietnam; the need for better data management; and the possibility of piloting the **open-source DRIVER system in Hanoi and Ho Chi Minh City**, as the basis for expansion into a national road safety observatory. Review of the draft updated national strategy revealed that beyond the number of fatalities and serious injuries, there is insufficient attention given to the kind of overall



results framework that is required in order to achieve significant and sustainable reductions in serious road trauma. This reflects a need to strengthen both national governance and leadership arrangements for road safety, and road safety data systems (including road crash data systems) which are the focus of this report.

BRAZIL: IMPROVING CRASH DATA MANAGEMENT \sim

On December 4, 2020, the city of Fortaleza launched a new crash data management system, which includes a <u>public dashboard</u>, for the purpose of sharing detailed road crash data with the public. This is part of a wider effort by the city to improve crash data management and customize DRIVER, the World Bank's open-source system. With the support of GRSF under BIGRS, and in partnership with the University of Fortaleza, the platform was customized to meet local needs, by adding key functionalities such as Web-based data entry and multiagency data linkage, and to link data from different agencies. For example, the platform now:

- Links traffic agents;
- Provides hospital and health department data; and



• Helps forensic services,

state, and federal police to improve data regarding the road environments in which crashes occurred, the types of vehicles involved, and the outcomes for the persons involved.

DRIVER ENHANCEMENT, PILOTS, AND ROLL-OUT \sim

With the support of the government of Japan, and under the Quality Infrastructure Investment (QII) partnership with the World Bank, GRSF has been adding a series of key enhancements to the DRIVER open-source system. These enhancements include adding iRAP star ratings, crash diagrams, and Mapillary view options, among others. During FY21, the project supported the scaling up of the DRIVER program through pilots in Bolivia, Cambodia, Côte d'Ivoire, Lao PDR, Malawi, Mongolia, Myanmar, Samoa, and Zimbabwe. Additionally, a <u>DRIVER Introduction Tutorial</u> released on the new GRSF website provides:

- · A road map of the introduction to DRIVER;
- An overview and history of DRIVER;
- A summary of DRIVER pilots;
- How to adapt DRIVER to local contexts and needs;
- The latest developments in DRIVER.

AFRICAN ROAD SAFETY OBSERVATORY SUPPORTED BY UK AID AND THE TOTALENERGIES FOUNDATION \sim



The African Road Safety Observatory (ARSO) was created to build national, international, and continental cooperation in order to generate a robust body of road safety data, and to influence public policies.

The Observatory is designed to be a political and technical forum where African Union member countries can positively discuss issues on mobility and safety, in order to adopt policies and measures that will significantly reduce road traffic crashes and their consequences.

As a result of GRSF cooperation and support to ARSO, resulting in strong commitment of African countries and advancement in their cooperation in establishment of ARSO, the EU–African Union Agreement for funding support to ARSO operations in 2022-24 has been confirmed.

This project, with financial support of the TotalEnergies Foundation, is focused on capacity building activities around road safety data collection, analysis, monitoring, and management.

- Identification of existing training programs and materials for training program development;
- Initiating training for police in crash data collection, reporting, and investigation, in cooperation with the Global Road Safety Partnership (GRSP);
- Training programs for academic/research institutions to improve the quality of research in collaboration with Federation Internationale de l'Autombile (FIA), International Traffic Safety Data and Analysis Group (IRTAD), and the World Health Organisation (WHO).
- Training programs for NGOs, civil society organizations, and journalists to strengthen advocacy for result-focused road safety policies and programs in coordination with the Global Alliance of NGOs for Road Safety and the International Road Federation (IRF) to provide synergies, particularly in training for civil society.
- Capacity building and training programs for road safety data managers/staff in public sector institutions in the transport and health sectors in collaboration with the WHO, FIA, and IRTAD.

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ASIA-PACIFIC ROAD SAFETY OBSERVATORY



The Asia-Pacific Road Safety Observatory (APRSO) is a joint initiative of the World Bank, FIA, International Transport Forum (ITF), the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and the Asian Development Bank (ADB).

APRSO receives financial support from UK Aid through GRSF, and from ADB, as APRSO Secretary. Technical support also comes from WHO, ITF, GRSF, and UNESCAP.

21 countries are members of APRSO:

Afghanistan, Armenia, Australia, Azerbaijan, Bangladesh, Cambodia, Cook Islands, Fiji, Kazakhstan, Kyrgyz Republic, Lao PDR, Maldives, Marshall Islands, Mongolia, Nepal, New Zealand, Pakistan, the Philippines, Solomon Islands, Sri Lanka, Turkmenistan, and Myanmar (observer status).

7 knowledge-sharing and training activities took place:

- Road Safety Engineering
- Road Safety Management Leadership Course
- Improving Road Safety in Mongolia and Samoa
- Meeting the Global Road Safety Performance Targets: Case Studies from Pakistan and the Philippines
- Protecting the Most Vulnerable: Ensuring Road Safety in Schools
- A New Toolkit for Post-Crash Response
- Road Safety Capacity Building Program

VEHICLE SAFETY AND SUSTAINABILITY PROGRAM SUPPORTED BY CITA ~



The Comité International de l'Inspection Technique Automobile (CITA), in partnership with the World Bank's GRSF is working to improve the quality of motorization policies, and the safety and quality of vehicles in developing countries through raising appreciation and understanding of its importance.

Specific activities undertaken to advance CITA's objectives through the Multidonor Trust Fund Program 2 (MDTF2) funding are channeled through a set of advisory analytical services for improving the safety and sustainability of road vehicles. They in turn have generated or leveraged other activities within the World Bank Group that are focused broadly on issues related to motorization management, with vehicle inspection or control as a core activity.

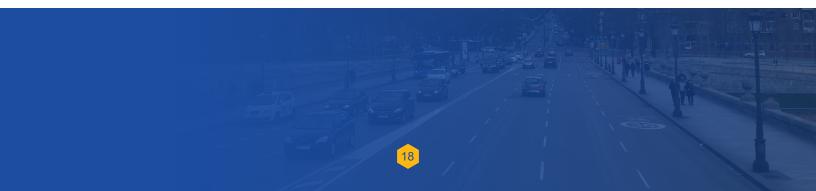
ADVANCING ASSESSMENTS OF VEHICLE INSPECTION SYSTEMS (AVIS) \sim

The Assessments of Vehicle Inspection Systems (AVIS), which was initiated in FY21, has supported countries selected in response to an internal expression of interest sent in by World Bank operational teams. The second group of countries to undertake these assessments includes Armenia, Bangladesh, Ecuador, and the Philippines, in addition to Cameroon and Togo, where AVIS has been undertaken in previous years.

World Bank teams from several additional countries--Cote d'Ivoire, Ethiopia, Kenya, Malawi, Mongolia, Mozambique, Nigeria, Peru, and Ukraine--have expressed preliminary interest in undertaking AVIS. The GRSF is in the process of verifying their commitment to improving vehicle inspection systems, and the possibility of implementing AVIS recommendations in these countries as part of World Bank loans or other assistance programs before deciding on the next group of countries for AVIS implementation, in FY22.

PROMOTING GOOD PRACTICES IN VEHICLE INSPECTIONS \sim

Compendium of Current Practices in Vehicle First-Use Certification and In-Use Vehicle Inspection: Background Study and Training. The scope of this assignment calls for the development of not only a detailed report on current practices, but also an online training program for both in-use vehicle inspection programs and first-use certification. Phase I of the project, the Background Study, which summarizes international good practices in vehicle inspection, particularly in low- and middle-income countries, has been accomplished and will become a core input into the curriculum for the on-line training program, which is being prepared in cooperation with the World Bank's Open Learning Campus. The training will focus on the importance of proven solutions for vehicle inspections from the standpoint of policy development, and institutional and financial sustainability; and will place it in the context of broad motorization management challenges.

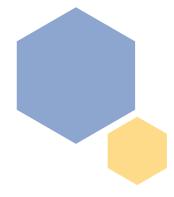


CITA/WORLD BANK PARTNERSHIP IN MOTORIZATION MANAGEMENT \sim

- · In FY21, in the context of transport sector decarbonization and the growing importance of an agenda related to motorization management, the report "Motorization Management for Development: An Integrated Approach to Improving Vehicles for Sustainable Mobility" was developed by the World Bank's GRSF as part of its Vehicle Safety and Sustainability Program. Among other objectives, this report is intended to facilitate discussions between World Bank task teams and governments concerning a variety of topics associated with the management of motor vehicles, including not only vehicle certification and in-use inspections, but also policy-setting processes; systems for managing motor vehicle information; management of the various processes along the motor vehicle value chain (spare parts, preventive maintenance and repair, on-road enforcement, end-of-life vehicle management, etc.); and the fiscal implications of all of the above.
- The Transport Decarbonization Investment (TDI) series includes six position papers and webinar events on TDI opportunities that were part of the lead-up to COP26 in November 2021. It is being

developed by the World Bank in collaboration with the Dutch government and the World Resources Institute. Based on the Motorization Management Report, an additional dedicated paper on "Motorization Management and the Trade of Used Vehicles: How Collective Action and Investment Can Help Decarbonize the Global Transport Sector" was released in June 2021.

The GRSF activities undertaken thanks to CITA's support also leveraged other activities within the World Bank Group that focused broadly on issues related to motorization management, with vehicle inspection or control as a core activity. An example of the practical impact of GRSF's promotion of the AVIS is the Lomé-Ouagadougou-Niamey **Economic Corridor Project in Togo and Burkina** Faso, which was prepared in FY21 and is financed by the World Bank. This includes nearly \$43 million in funding for motorization management-related activities, as well as the establishment and improvement of vehicle inspection programs, regulatory improvements, training centers, and fleet renewal mechanisms. This work is following on from earlier GRSF/CITA collaboration on AVIS in Togo.



GRSF FY21: TRAINING, WORKSHOPS, AND EVENTS HIGHLIGHTS

GRSF CONTRIBUTED TO THE GLOBAL ROAD SAFETY LEADERSHIP COURSE (GRSLC) TO TRAIN BIGRS-IMPLEMENTING PARTNERS

From November 16-December 14, 2020, and April 26-June 7, 2021, **GRSF led technical modules on** evidence-based approaches to speed reduction focusing on policy, enforcement, communications, infrastructure, and vehicle safety.

ONLINE VERSION OF "THINK ROAD SAFETY"

During FY21, GRSF implemented three editions of the GRSF Road Safety Facilitated Online Course, with 1,200+ participants enrolled and 3,350+ discussion posts. 267 participants completed all of the requirements.

2021 TRANSFORMING TRANSPORTATION CONFERENCE

In February 3-5, 2021, GRSF hosted a virtual **Knowledge Booth** at the <u>2021 Transforming Transportation</u> <u>Conference</u>. In this booth, GRSF presented the most innovative features of the Speed Management Hub and the DRIVER 2.0 tool, including FAQs on speed management, a rich digital library, interactive content, and more. In total, **370 participants from 79 countries** visited the booth.



WEBINAR SERIES: TRANSIT-ORIENTED DEVELOPMENT AND ROAD SAFETY

In October 2020, the workshop series <u>"Integration of Road Safety</u> <u>Considerations in Transit-Oriented Development (TOD) Projects</u>" was developed by the World Bank and the World Resources Institute, India (WRI India) thanks to financial support from UK Aid through GRSF. The series built on the new <u>Good Practice Note: Integration of</u> Road Safety Considerations in Transit-Oriented Development

<u>Projects</u>" and on the road safety-informed second edition of the "<u>TOD Implementation and Resource Tools</u>", under the Global Platform for Sustainable Cities, both funded by UK Aid through the GRSF.



ONLINE WORKSHOP: ESSENTIALS OF ROAD SAFETY ENGINEERING FOR AFRICAN NATIONS

From October 13 to November 3, 2020, GRSF hosted a series of online modules that offered practical guidance on enhancing road safety in Africa. Organized under the BIGRS program, these virtual learning sessions were part of the workshop "<u>Essentials of Road</u> <u>Safety Engineering.</u>" More than 220 participants were trained, including government officers, consultants, contractors, development

officials, and members of the police, academia, and research institutes.

WORLD BANK AND IRAP HELPING SAVE LIVES IN LATIN AMERICA: BIGRS 2020-25 - KEY OUTCOMES WEBINAR

The webinar series <u>World Bank and iRAP Helping Save Lives in Latin America</u> helped build the capacity of road authorities in Latin America who are interested in using the iRAP methodology to eliminate high-risk roads, unlock the economic benefits of three-star or better roads through results-based financing, and meet global sustainable development goal (SDG) and UN target obligations. The series was presented on December 2, 3, 9 and 10, and had a total of about **300 participants from 29 countries**.

PROMOTING SPEED MANAGEMENT IN COLOMBIA: GRSF PRESENT IN COLOMBIA'S MOBILITY WEEK AND BOGOTA'S ROAD SAFETY WEEK

In Colombia, 40 percent of fatal crashes are due to speeding. In a bid to help address the road safety crisis in lowand middle-income countries, GRSF and the BIGRS partners, together with the National Road Safety Agency of Colombia (ANSV) and the Secretariat of Mobility in Bogota, hosted two online conversations in October 2020 about speed management in Colombia within the framework of the Colombian Mobility Week <u>#SemanaMovilidadCo</u> and Bogota's Road Safety Week.



SAVING LIVES WITH INFRASTRUCTURE: WORLD BANK-GRSF REGIONAL COURSE IN LATIN AMERICA

In April 2021, GRSF organized the "<u>Saving Lives</u> <u>with Infrastructure</u>" course for leaders in the Latin America and Caribbean Region who are involved in the planning, financing, and delivery of road infrastructure.

GRSF HOSTED SPECIAL TRAINING SESSIONS AT THE 2021 WORLD BANK INFRASTRUCTURE FORUM

During the Infrastructure Forum 2021, the GRSF team hosted two special training sessions, on May 25 and 27, 2021. In the first session, *"Road Safety Requirements Demystified,"* the team shared practical hints from the <u>Good Practice Note (GPN) for Road Safety</u>, and principles for the use of road safety indicators in World Bank projects, illustrated by practical examples from recent World Bank projects. The objective of the second session, *"Assuring Safety in World Bank-Funded Road Projects: Use of Road Safety Screening & Appraisal Tool,"* was to provide hands on practice to task teams leaders on using the tool.

6TH GLOBAL INTERACTIVE FORUM ON TRAFFIC AND SAFETY

In November 2020, Soames Job, former head of GRSF, and Kazuyuki Neki, junior professional officer, presented a lecture on the role of cultural diversity in the management of road safety at the <u>6th Global Interactive</u> Forum on Traffic and Safety.



GRSF AND THE VISION ZERO ACADEMY JOINED FORCES TO INTRODUCE VISION ZERO TO UKRAINE

On May 11, 2021, GRSF hosted a workshop, "Introduction to Vision Zero for Ukraine" in collaboration with the Vision Zero Academy / Swedish Transport Administration and Reform Support Team at the Ministry of Infrastructure of Ukraine, under the BIGRS program, with over 120 participants. The workshop had the objective of engaging Ukrainian key stakeholders with the <u>Vision Zero Academy</u>.

PHILIPPINES ROAD SAFETY AUDITORS TRAIN-THE-TRAINER COURSE

The GRSF staff have been supporting closely various regional World Bank operations and advisory services. One example is the Philippines Road Safety Reimbursable Advisory Services (RAS) for the Department of Public Works and Highways, a \$1.8 million engagement focused on road safety engineering. One of the activities under this RAS was the preparation of road safety auditor certification guidelines, together with a train the trainer course for road safety auditors.

AFRICA SUSTAINABLE URBAN MOBILITY COURSE

The Special COVID19 Digital Edition of the #SUMCourseAbuja took place on November 26-27, 2020, with the theme: "Transforming Informal Transport and Road Safety Post Pandemic in Africa." GRSF staff contributed as invited speakers for the 89 experts from 28 countries around the world who participated in this course.

International Road Federation (IRF) ASIA-PACIFIC VIRTUAL CONFERENCE

<u>IRF's flagship event</u>, held March 18-29, 2021, brought together the Asia-Pacific region's leading stakeholders and experts to discuss best practices, technical innovations, new technologies, and policy recommendations that support regional connectivity and economic cooperation and development. GRSF staff contributed with a technical presentation to showcase the latest World Bank road safety policies.

GLOBAL MEETING OF REGIONAL ROAD SAFETY OBSERVATORIES

On December 8-9, 2020, the Ibero-American Road Safety Observatory, the African Road Safety Observatory, and the Asian Pacific Road Safety Observatory delivered the <u>1st Global Meeting of Regional Road Safety</u> <u>Observatories</u> in collaboration with several international institutions: the Fédération Internationale de l'Automobile (FIA), the World Bank, the International Transport Forum (ITF), the Asian Development Bank (ADB), the Sub-Saharan Africa Transport Policy Program (SSATP), the World Health Organization (WHO), the African Union (AU), and the International Organization serving Ibero-America (SEGIB).



GRSF AND THE WORLD BANK

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GRSF SUPPORT TO WORLD BANK OPERATIONS IN FY21

In FY21, GRSF provided support to 24 World Bank projects in 17 countries.

GRSF continues to support the World Bank in scaling up its road safety financing by providing technical assistance, advisory services, capacity building, and expert advice to World Bank teams and client countries. This has been achieved through the delivery of key knowledge products, stronger policies, effective training, and collaborative work with many World Bank task teams. More specifically, the GRSF support to World Bank operations consisted of:

- Operational cross-support as team leader or team member;
- Transport portfolio monitoring for road safety requirements;

- Road safety portfolio review; Peer review of project documents; and Coordinating the road safety solution area of World Bank professionals.

During FY21, the Road Safety Screening & Appraisal Tool (RSSAT), the core tool under the Transport Global Practice requirement for safer World Bank road investments, was used for assessing road works to be financed along 22 road sections in six different projects. These six projects involved a total World Bank financing of \$782 million. The expected fatality reduction along these road sections varies from 3 to 29 percent, which will yield an economic benefit of over \$79 million in 20 years of road operation.



GRSF ROLE IN THE MULTILATERAL DEVELOPMENT BANKS ROAD SAFETY GROUP

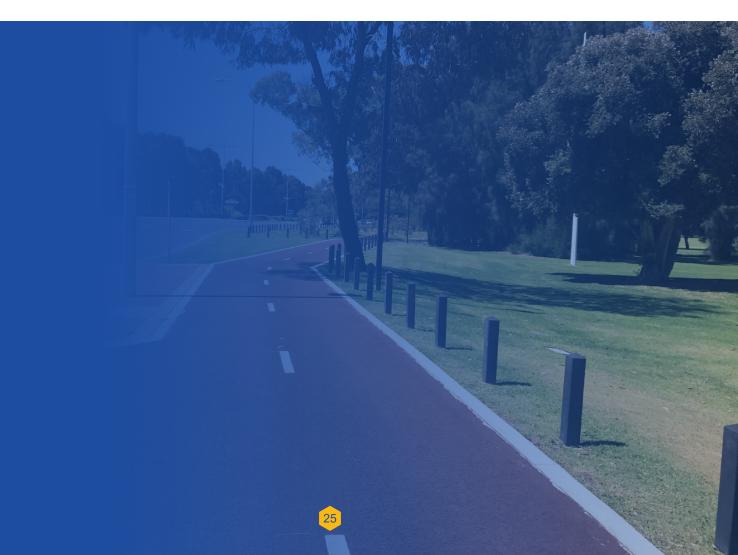
The Multilateral Development Banks (MDB) Road Safety Working Group¹, which was established in 2009, now consists of 10 MDBs. In November 2020, representative of each MDB signed the <u>Multilateral Development</u> <u>Banks High-Level Joint Statement on Road Safety</u>, confirming their commitment to actively support the Second UN Decade of Action in Road Safety.

This Declaration recognizes the high social and economic costs of road crash deaths and injuries, and the high rates of return on projects and programs that prevent deaths and injuries on roads worldwide. The group is particularly focusing on safe infrastructure for all users.

In FY21, GRSF continued to represent the World Bank in the MDB Road Safety Working Group. The World Bank is set to take over the chairmanship of this group in January 2022.

Using this platform, GRSF has promoted the harmonization of road safety practices among the MBDs. During their regular meetings, the GRSF team presented the tools developed together with the World Bank, including DRIVER and RSSAT, and received very positive feedback and strong interest from MDB partners. GRSF will continue to play a central role in this harmonization effort.

1 - African Development Bank, Andean Development Corporation - CAF, Asian Development Bank, Asian Infrastructure Investment Bank, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, Islamic Development Bank, New Development Bank and World Bank



FINANCES



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Reach

Acco

Last 30 Days 🗸

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FINANCIAL REVIEW

In FY21 GRSF disbursed over \$6.1 million, an amount similar to FY20 (\$5.9 million). Regional and global program activities accounted for 93 percent of disbursements, and management and administration 8 percent, a slight decrease from FY20 (9 percent). Figure 2 presents disbursements by thematic area. Research and Development includes the GRSF Research Program, and accounts for 28 percent of total disbursements.

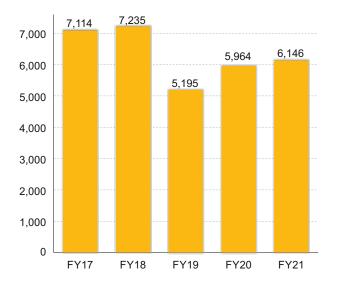


Figure 1. Total disbursements by Fiscal Year: FY17-21 (\$000")

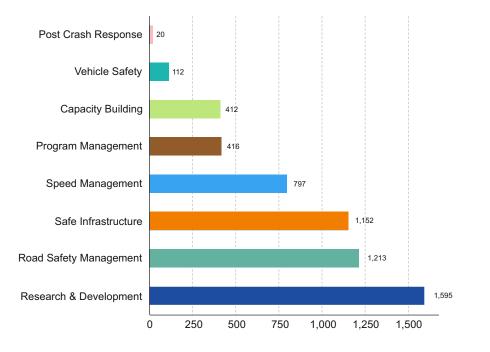


Figure 2. Fiscal Year 21 disbursements by Thematic Areas (\$000")

APPENDICES

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APPENDIX A: WINNERS OF THE CALL FOR PROPOSALS FY21

GRSF recently announced the winners of the FY 2021 Call for Grant Proposals, a key mechanism of the ongoing GRSF Grant Program in selecting top-quality road safety research initiatives. **The seven successful grants total \$919,000** and focus on improving speed management using infrastructure measures in low-income countries. This was made possible thanks to the financial support of our UK Aid donors, and the support of specialized experts from our GRSF Technical Advisory Panel.

The process was very competitive: there were 23 applications, requesting a total of \$3 million. GRSF would like to thank all of the applicants for their excellent proposals and looks forward to collaborating with the successful teams on the implementation of their research projects.



FY21 PROPOSALS SUBMITTED BY:



 WB 30% (7 PROPOSALS)

 ACADEMIA 22% (5 PROPOSALS)

 NGO 18% (4 PROPOSALS)

 MDBs 4% (1 PROPOSAL)

 FIRM 22% (5 PROPOSALS)

UN AGENCY 4% (1 PROPOSAL)

VALUE OF GRSF FY21 GRANTS BY REGION (\$'000)



Focus of this call was on speed management using infrastructure measures.

All applications were reviewed by a team of 18 road safety experts (members of the GRSF Technical Advisory Panel and WB road safety experts).

Increased external participation (70% of successful applications were external) compared to the previous year Call when it was 47% internal vs 53% external.

FY21 PROPOSALS SELECTED FOR GRSF GRANT FUNDING \sim

PROPOSAL TITLE	APPLICANT	PROJECT OBJECTIVES
Azerbaijan: Implementing child-friendly speed management around schools	European Bank for Reconstruction and Development	To provide evidence of the most salient considerations in designing speed management in urban areas with highly vulnerable road user traffic; offer a combination of trainings and workshops for planning, designing, and implementing road safety projects in these settings; develop and evaluate temporary installations to measure the impact on speeds and vulnerable road users; and to measure changes in attitudes and intentions among decision makers.
Bangladesh : Speed Management Research and Institutional Capacity Building for Rural Road Safety	World Bank	To help improve road safety on rural roads of Bangladesh through speed management and capacity strengthening.
Kenya : LMIC urban speed management model	STEER DAVIES & GLEAVE LTD, WITH AGILYSIS LTD & THE GEORGE INSTITUTE FOR GLOBAL HEALTH	To develop a replicable methodology to create an urban speed management model that will facilitate effective speed management in LMIC urban and metropolitan areas.
Lao PDR: Eliminating the systemic risks of severe road trauma involving speed	World Bank	To evaluate the relationship between speed and road trauma, develop a road classification model that will enable setting of appropriate and safe speed limits, reduce casualties related to speed and occurrence of speeding in combination with capacity building.
Rwanda: The Impacts of Automated Speed Enforcement (ASE) in Rwanda – Implementation Science to Develop a Guide for African Reproducibility	TRAFFIC INJURY RESEARCH FOUNDATION & HEALTHY PEOPLE RWANDA	To conduct research of newly installed automated speed enforcement in Rwanda as an example of low-income country and design broadly transferable LMIC implementation guidelines based on the Rwandan case study.
Cameroon, Kenya, Rwanda: Assessment of 30 km/h urban speed zones and factors contributing to local modification for lower speed	GLOBAL ALLIANCE OF NGOS FOR ROAD SAFETY	To facilitate implementation of 30 km/h speed limits on urban roads in Africa through research and advocacy.
Nepal, Fiji, Ghana: Determine the scalability and efficacy of a Speed Management and Assessment tool to multiple LMICs utilizing existing and available data.	TRL LTD	To assess the possibility of application of Speed Management Assessment Tool (SMAT)in LMICs and develop ways that it can be deployed easily and effectively in such countries.

APPENDIX B: OUR DONORS AND PARTNERS

FY21 GRSF BOARD MEMBERS \sim

KELLY LARSON

GRSF Board Chair and Program Director, Bloomberg Philanthropies

EDUARD FERNANDEZ Executive Director, CITA

ANNE JOSELIN Infrastructure Advisor, UK Aid/FCDO

ALISON MACEWEN

Global Health Research Programme Manager, DHSC

PER MATHIASEN

Principal Transport Advisor, Projects Directorate, EIB

MAX JENSEN

Head of Division, Mobility Department, Projects Directorate, EIB

ABDOUL WAHAB

Road Safety Senior Advisor, TotalEnergies Foundation

BINYAM REJA

Acting Global Director for Transport, World Bank

PAST AND PRESENT DONORS OF GRSF \sim

The GRSF acknowledges the support of:

BLOOMBERG PHILANTHROPIES

CITA (INTERNATIONAL MOTOR VEHICLE INSPECTION COMMITTEE)

GOVERNMENT OF THE UK, USING UK AID FUNDING:

- Foreign, Commonwealth & Development Office (FCDO)
- Department of Health and Social Care (DHSC) through the National Institute for Health Research (NIHR)

TOTALENERGIES FOUNDATION

WORLD BANK GROUP

 Development Grant Facility, the Transport Global Practice's Global Engagement Fund, and in-kind support.

FIA FOUNDATION

GOVERNMENT OF JAPAN THROUGH THE QUALITY INFRASTRUCTURE INVESTMENT PARTNERSHIP (QII)

GOVERNMENT OF AUSTRALIA (DFAT)

GOVERNMENT OF THE NETHERLANDS

GOVERNMENT OF SWEDEN (SIDA)

OUR PARTNERS INCLUDE \sim

- The Sub-Saharan Africa Transport Policy Program (SSATP)
- AXA Insurance
- Clinton Global Initiative
- The European Commission (EC)
- Fédération Internationale de l'Automobile Foundation (FIA)
- FIA High Level Panel
- FIA Foundation
- · Global Alliance of NGOs for Road Safety
- Global Road Safety Partnership (GRSP)
- Harvard School of Public Health
- International Association of Chiefs of Police (IACP)
- International Road Assessment Programme (iRAP)
- International Road Federation (IRF)

RESEARCH PARTNER ORGANIZATIONS INCLUDE \sim

- Addis Ababa University, Ethiopia
- Centre for Injury Prevention and Research, Bangladesh (CIPRB)
- Cheikh Anta Diop University, Senegal
- Delft University of Technology, Netherlands
- George Washington University's Milken Institute School of Public Health, US
- Global Health Advocacy Incubator
- Global New Car Assessment Programme (Global NCAP)
- Handicap International Federation, Cambodia
- · Indian Institute of Technology in Delhi
- Institute for Health Metrics and Evaluation (IHME), University of Washington, US
- Iowa State University, US
- John Hopkins Bloomberg School of Public Health, US
- Korea Transport Institute (KOTI)
- Monash University, Australia

Johns Hopkins International Injury Research

International Traffic Safety Data and Analysis

National Association of City Transportation

Road Traffic Injuries Research Network

United Nations Road Safety Collaboration

United Nations Economic Commission for

United Nations Economic and Social

Commission for Asia and the Pacific

United Nations Road Safety Fund (UNRSF)

United Nations Economic Commission for Africa

International Transport Forum (ITF)

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Group (IRTAD)

Officials (NACTO)

United Nations (UN)

(UNRSC)

(UNECA)

Europe (UNECE)

(UNESCAP)

- Unit, US
- National Technical University of Athens, Greece
- Queensland University of Technology, Australia
- School of Public Health of Kyiv-Mohyla Academy, Ukraine
- Shiv Nadar University, India
- The National Institute of Public Health (INSP), Mexico
- University of Chicago's Department of Public Health Sciences, US
- University of New South Wales, Australia
- University of Zambia, School of Public Health, Zambia
- Vital Strategies
- Warsaw University of Technology, Poland
- World Health Organization (WHO)
- World Resources Institute (WRI)

MDBs INCLUDE \sim

- African Development Bank (AfDB)
- African Union (AU)
- Asian Development Bank (ADB)
- Asian Infrastructure Investment Bank (AIIB)
- Development Bank of Latin America (CAF)
- European Bank for Reconstruction and Development (EBRD)

- European Investment Bank (EIB)
- Inter-American Development Bank (IDB)
- Islamic Development Bank (IsDB)
- New Development Bank (NDB)
- World Bank

GRSF TECHNICAL ADVISORY PANEL \sim

The credibility of the GRSF grant program has been enhanced in FY21, with the recently created Technical Advisory Panel - a panel of external experts who undertake independent reviews of all of our grant proposals, to help us meet the demand caused by the significant increase in the number of applications we are receiving.

We are deeply grateful to the following members of the Technical Advisory Panel, recognized road safety experts and specialists external to the World Bank, for their valuable contribution to the selection process of the Road Safety Grant Program Call for Proposals, and guidance on other policy issues relevant to GRSF research activities.

- Tony Bliss University of Melbourne, Australia
- Jeanne Breen Global Road Safety Expert, United Kingdom
- Harry Evdorides University of Birmingham, United Kingdom
- Subhamay Gangopadhyay India RAP, India
- Raphael Grzebieta University of New South Wales, Australia
- Eric Howard Global Road Safety Expert, Australia
- Guoqing Hu Central South University, China
- G. Gururaj National Institute of Mental Health & Neuro Science, India
- Olive Kobusingye Makerere University School of Public Health, Uganda
- Maria Segui-Gomez Global Road Safety Consultant, Spain
- Wojciech Suchorzewski Warsaw University of Technology, Poland
- Mouhamadou Habib Sy Cheikh Anta Diop University, Dakar, Senegal
- Geetam Tiwari Indian Institute of Technology, Delhi, India
- Pieter Venter Global Road Safety Partnership, Switzerland
- Barry Watson Queensland University of Technology, Australia
- Fred Wegman Delft University of Technology, The Netherlands
- George Yannis National Technical University of Athens, Greece

The GRSF team extends its deepest sympathies for the loss of our colleagues **Dinesh Mohan** from Shiv Nadar University, India, and **Gayle Di Pietro**, Global Road Safety Expert, Australia in 2021. These two valued members of our team worked relentlessly for road safety for decades.

APPENDIX C: PUBLICATIONS AND PAPERS FY21

PUBLISHED JOURNAL ARTICLES AND REPORTS OF GRSF STAFF AS AUTHORS OR CO-AUTHORS \sim

Auert, J. K. Friedman S. Job M. Khayesi, and A. Senisse. 2020. Cyclist Safety: An Information Resource for Decision-Makers and Practitioners. Geneva: World Health Organization. Licence: CC BY-NC-SA 3.0 IGO. <u>https://www.who.int/publications/i/item/cyclist-safety-an-information-resource-for-decision-makers-and-practitioners</u>

Bennett, C., S. Job, B. Turner, and A. Diehl. 2021. Road Safety Indicators for Project Monitoring. Washington, DC: The World Bank. <u>https://worldbankgroup.sharepoint.com/sites/gsg/roadsafety/SitePages/</u> <u>Detail.aspx/Documents/mode=view?_Id=13&SiteURL=/sites/gsg/roadsafety</u>

Burlacu, F.A., and A. Burlacu. 2020. Siguranța participanților la trafic în timpul și post COVID-19. România post-pandemică și antidotul digital. (July). <u>https://www.fundatiacaesar.ro/alina-burlacu-adrian-burlacu-siguranta-in-trafic-post-covid19/</u>

Burlacu, F.A., E. Howard, S. Zachulski, M. Paala, S. Michaels, K. Hanmer, and B. Murphet. 2020. Road Safety Management Capacity Review for the Independent State of Samoa. Report prepared under a GRSF grant, November 2020. <u>https://www.roadsafetyfacility.org/publications/road-safety-management-capacity-assessment-samoa</u>

Das, S., S. Chatterjee, and S. Mitra. 2021. "Improper Passing and Lane-Change Related Crashes: Pattern Recognition Using Association Rules Negative Binomial Mining." In: Singh V., V. Asari, S. Kumar, and R. Patel (eds). Computational Methods and Data Engineering: Advances in Intelligent Systems and Computing. Vol 1227. Singapore: Springer. <u>https://doi.org/10.1007/978-981-15-6876-3_46.</u>

Hoang, D.A., F.A. Burlacu, S. Michaels, E. Howard, S. Johnson, S. Zachulski, and M. Paala. 2021. Road Safety Management Capacity Assessment for Vanuatu. Report prepared under a GRSF grant, June 2021. <u>https://www.roadsafetyfacility.org/publications/road-safety-management-capacity-assessment-vanuatu</u>

Grzebieta, R., R. Czapski, F. A. Burlacu, C. Sakashita, R.F.S. Job, and A. Burlacu. 2020. "Adopting Recommendations of a Road Safety Management Capacity Review: Addressing a Tragic Decade of Road Safety in Romania." Journal of Road Safety 31 (3): 85-97. <u>https://doi.org/10.33492/JRS-D-20-00259.</u>

Job, R.F.S. and W. M. Wambulwa. 2020. "Features of Low-Income and Middle-Income Countries Making Road Safety More Challenging." Journal of Road Safety, 31 (3): 79-84. <u>https://doi.org/10.33492/JRS-D-20-00258</u>

Job, R.F.S. and L.W. Mbugua. 2020. Road Crash Trauma, Climate Change, Pollution, and the Total Costs of Speed: Six Graphs That Tell the Story. GRSF Note 2020. Washington DC: Global Road Safety Facility, World Bank. <u>http://documents1.worldbank.org/curated/en/298381607502750479/pdf/Road-Crash-Trauma-Climate-Change-Pollution-and-the-Total-Costs-of-Speed-Six-graphs-that-tell-the-story.pdf</u>

Job, R.F.S. 2020. "The Psychology and Politics of Speed." In: Speed and Speed Management. In a Road Safety Policy Executive Seminar Organized by the European Commission. Brussels: European Commission. <u>https://ec.europa.eu/transport/road_safety/conclusions-executive-seminar-speed-and-speed-management_en</u>

Kakuta, N., D. A. Hoang, F.A. Burlacu, S. Michaels, E. Howard, S. Johnson, S. Zachulski, M. Paala, and B. Murphet. 2020. Road Safety Management Capacity Assessment for the Solomon Islands. Report prepared under a GRSF grant, November 2020. Washington, DC: World Bank Group. <u>https://documents1.worldbank.org/curated/en/854451610427534437/pdf/Road-Safety-Management-Capacity-Assessment-for-the-Solomon-Islands.pdf</u>

McHeim, B., B. Matters, L. Steinmetz, and B. Turner. 2021. "Use of the Safe System Assessment Framework as a Safety Key Performance Indicator." Journal of Road Safety 32 (1): 37-44. <u>https://doi.org/10.33492/JRS-D-19-00260</u>

Mehta, P.V., A. Behera, B. Mascarehnas, J. Dhindaw, M. Pai, C. Sodaye, D. Ashar, H. Kapoor, R. Malagi, G. P. Ollivier, and F.A. Burlacu. 2020. <u>Integration of Road Safety Considerations in Transit-Oriented</u> <u>Development Projects: Good Practice Note.</u> Washington, DC: World Bank Group. Prepared under a GRSF grant, September 2020.

Mukherjee, D., and S. Mitra. 2021. "What Affects Pedestrian Crossing Difficulty at Urban Intersections in a Developing Country?" Paper presented at the 100th Transportation Research Board Annual Meeting, Washington DC.

Ryskulova, N., M. Johnson, S. Job, R. Tripathi, M. Ruas, E. Siquice, and D. Woldeargey. 2021. Mozambique: Preserving Human Capital Through Improving Road Safety. Washington, DC: World Bank Transport Global Practice.

Sharpin, A.B., C. Adriazola-Steil, N. Luke, S. Job, M. Obelheiro, A. Bhatt, D. Liu, T. Imamoglu, B. Welle, N. Leras. 2021. Low Speed Zone Guide. Washington, DC: World Resources Institute & Global Road Safety Facility. <u>https://www.roadsafetyfacility.org/publications/low-speed-zone-guide</u>

S. Mitra, S. Job, S. Han, K. Eom. 2021. Do Speed Limit Reductions Help Road Safety?: Lessons from the Republic of Korea's Recent Move to Lower Speed Limit on Urban Roads. Washington, DC: World Bank Group. <u>https://openknowledge.worldbank.org/handle/10986/36109?fbclid=lwAR2qEy2XgHIcXFSHOdx0_rv</u> xmjbvzFmm2ZqID1-ox7xt_vvVRxS--vwcJtA

Thi Tran, V.A., F.A. Burlacu, M. Small, M. Paala, L.H. Tri, and N.H. Duc. 2021. Road Safety Data Assessment in Vietnam for the Establishment of a National Road Safety Observatory. Report prepared under the Advisory Services and Analytics engagement - Towards Efficient and Sustainable Transport for Vietnam funded by the Australian Government's Department of Foreign Affairs and Trade (DFAT) under the Australian Bank Partnership (ABP2) Program, March 2021.

https://www.roadsafetyfacility.org/publications/road-safety-data-assessment-viet-nam-establishmentnational-road-safety-observatory

Turner, B., S. Job, and S. Mitra. 2021. Guide for Road Safety Interventions: Evidence of What Works and What Does Not Work. Washington, DC: World Bank. <u>https://www.roadsafetyfacility.org/publications/guide-road-safety-interventions-evidence-what-works-and-what-does-not-work</u>

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VIDEOS AND MEDIA MATERIALS \sim

GRSF. 2021. "Speeding Hurts Us All – and the Impact Is Life-Changing." <u>https://www.roadsafetyfacility.org/news/speeding-hurts-us-all-and-impact-life-changing</u>. Washington, DC: World Bank Global Road Safety Facility.

GRSF. 2021. Speed Management Hub. <u>https://www.roadsafetyfacility.org/speed-management-hub.</u> Washington, DC: World Bank Global Road Safety Facility.

GRSF. 2021. Tutorial 1| Content: Roadmap of the DRIVER introduction Tutorial. <u>https://www.roadsafetyfacility.org/publications/tutorial-i-content-roadmap-driver-introduction-tutorial.</u> Washington, DC: World Bank Global Road Safety Facility.

GRSF. 2021. Tutorial I | Part 1: DRIVER Overview and History. <u>https://www.roadsafetyfacility.org/publications/tutorial-i-part-1-driver-overview-and-history.</u> Washington, DC: World Bank Global Road Safety Facility.

GRSF. 2021. Tutorial I | Part 2: How Does DRIVER Work. <u>https://www.roadsafetyfacility.org/publications/tutorial-i-part-2-how-does-driver-work.</u> Washington, DC.: World Bank Global Road Safety Facility.

GRSF. 2021. Tutorial I | Part 3: DRIVER Pilots. <u>https://www.roadsafetyfacility.org/publications/tutorial-i-part-3-driver-pilots.</u> Washington, DC: World Bank Global Road Safety Facility.

GRSF. 2021. Tutorial I | Part 4: How to Locally Adapt DRIVER. <u>https://www.roadsafetyfacility.org/publications/tutorial-i-part-4-how-locally-adapt-driver.</u> Washington, DC.: World Bank Global Road Safety Facility.

GRSF. 2021. Tutorial I | Part 5: DRIVER Latest Developments. <u>https://www.roadsafetyfacility.org/publications/tutorial-i-part-5-driver-latest-developments</u>. Washington, DC.: World Bank Global Road Safety Facility.

GRSF. 2021. Tutorial | A Brief Overview of the Data for Road Incident Visualization, Evaluation, and Reporting (DRIVER) System. <u>https://www.roadsafetyfacility.org/publications/tutorial-brief-overview-data-road-incident-visualization-evaluation-and-reporting.</u> Washington, DC.: World Bank Global Road Safety Facility.





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