















# ANNUAL REPORT

2020



#### © 2020 Global Road Safety Facility – World Bank

1818 H Street NW Washington DC 20433 Telephone: 202-473-1000

Some rights reserved

This work is a product of the staff of the World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of the World Bank, its Board of Executive Directors, or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries. Nothing herein shall constitute or be considered to be a limitation upon or waiver of the privileges and immunities of the World Bank, all of which are specifically reserved.

#### **Rights and Permissions:**

This work is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) http://creativecommons.org/licenses/by/3.0/igo. Under the Creative Commons Attribution license, you are free to copy, distribute, transmit, and adapt this work, including for commercial purposes, under the following conditions:

**Translations** — If you create a translation of this work, please add the following disclaimer along with the attribution: This translation was not created by The World Bank and should not be considered an official World Bank translation. The World Bank shall not be liable for any content or error in this translation.

**Adaptations** — If you create an adaptation of this work, please add the following disclaimer along with the attribution: This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by The World Bank.

**Third-party content** — The World Bank does not necessarily own each component of the content contained within the work. The World Bank therefore does not warrant that the use of any third-party owned individual component or part contained in the work will not infringe on the rights of those third parties. The risk of claims resulting from such infringement rests solely with you. If you wish to re-use a component of the work, it is your responsibility to determine whether permission is needed for that re-use and to obtain permission from the copyright owner. Examples of components can include, but are not limited to, tables, figures, or images.

All queries on rights and licenses should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; e-mail: pubrights@worldbank.org.

#### **Recommended Citation for this Report:**

Global Road Safety Facility (2020). Global Road Safety Facility Annual Report 2020. Washington DC: Global Road Safety Facility, World Bank.

Cover and publication design: Giannina Raffo.

Cover photos: First photo: Bishnu Sarangi / Pixabay, Second and third photo: Daniel Silva / GRSF.



OUR DONORS AND FUNDERS	
OUR PARTNERS	(
FOREWORD	- 
LETTER FROM THE CHAIR	{
NOTE FROM THE GRSF TEAM	(
MEET THE TEAM.	1(
FY20 GRSF BOARD MEMBERS	1
PAST AND PRESENT DONORS OF GRSF	12
GRSF STRATEGIC OBJECTIVES & FOCUS AREAS	13
BY THE NUMBERS: GRSF ACTION & IMPACT	14
WHERE WE WORK	17
HIGHLIGHTS OF OUR WORK IN FY20	18
MULTI-DONOR TRUST FUND ACTIVITIES	18
GRSF'S ROAD SAFETY GRANT PROGRAM	19
GRSF RESEARCH PROGRAM	23
BLOOMBERG PHILANTHROPIES INITIATIVE FOR GLOBAL ROAD SAFETY	25
ASSESSMENT OF VEHICLE INSPECTION SYSTEMS	3
AFRICAN ROAD SAFETY OBSERVATORY	32
ASIA-PACIFIC ROAD SAFETY OBSERVATORY	32
GRSF COLLABORATION WITH THE WORLD BANK IN FY20	3/
QUALITY INFRASTRUCTURE INVESTMENT (QII) PARTNERSHIP	38

GRSF ACTIVITIES: FY20 TRAININGS, WORKSHOPS AND EVENTS HIGHLIGHTS	
GRSF GLOBAL ROLE	
ACHIEVING GLOBAL GOALS 2030	
MDB ROAD SAFETY WORKING GROUP. 47	
INTERNATIONAL RECOGNITION 47	
COMMUNICATIONS IMPACT 47	
APPENDICES 51	
APPENDIX I: FINANCES	
APPENDIX II: WINNERS OF THE CALL FOR PROPOSALS FY20	
APPENDIX III: GRSF TECHNICAL ADVISORY PANEL 54	
APPENDIX IV: PUBLICATIONS AND PAPERS FY20 55	
APPENDIX V: PRESENTATIONS; TRAININGS AND EVENTS HOSTED/ARRANGED FOR ROAD SAFETY FY20	
APPENDIX VI: ACRONYMS. 64	

The Prince Michael International Awards for Road Safety began in 1987, and are regarded as the 'academy awards' of global road safety. Each year several major successes in road safety are judged to be worthy of an award in each of 5 categories: Road Safety Management; Safer Roads; Safer Vehicles; Safer Road Users; and Post-Crash Response.

Over many years the World Bank and the Global Road Safety Facility (GRSF) have won three of these awards: In 2004 for the work with the *World Report on Road Safety* in partnership with the World Health Organization; in 2008 for the efforts developing the Ibero-American Road Safety Observatory (OISEVI) in partnership with many; and most recently for GRSF's contributions to road safety in 2017.

# THIS YEAR, THE WORLD BANK AND GRSF RECEIVED AN UNPRECEDENTED THREE PRINCE MICHAEL INTERNATIONAL AWARDS FOR ROAD SAFETY FOR ITS EFFECTIVE DELIVERY OF GLOBAL ROAD SAFETY

The first award recognizes the leadership and systemic strategic and policy changes implemented by the World Bank (including GRSF) to improve road safety. The World Bank's commitment to global road safety has steadily increased through its leadership and a series of strategic and systemic policy changes including the Good Practice Note for Road Safety guiding delivery, the Road Safety Screening and Appraisal Tool, Transport Global Practice requirements for road safety, and road safety training. Funding from UK Aid, Bloomberg Philanthropies, and CITA is also acknowledge for programs which have helped promote and shape road safety in World Bank projects.

The second award acknowledges the outstanding achievements in the development of the Africa Road Safety Observatory and the Asia Pacific Road Safety Observatory. These Road Safety Observatories have been delivered by committed institutions including the World Bank, Africa Transport Policy Program (SSATP), Africa Union, Asia Development Bank, Federation Internationale de l'Automobile, International Transport Forum, Africa Development Bank, United Nations Economic Commission

for Africa (UNECA), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), GRSF, and many others, with funding by GRSF – employing funds from committed donors: UK Aid, Total Foundation, and the Quality Infrastructure Partnership, as well funding from partner organizations. This Award also belongs to the countries in Africa and Asia-Pacific that have been working on the development of these observatories, and that are committed to improving road safety data and road safety policies to save lives.

The third award recognizes the GRSF-funded project focused on the improvement of road safety in the mountainous roads in Western Nepal. In this project, GRSF with funding from UK Aid supported the installation of 73,000 meters of crash barriers along some of the country's deadliest roads. According to GRSF projected estimates, the new barriers may save up to 3,456 lives each year over the next 20 years, in addition to preventing countless injuries.

FOR MANY YEARS I HAVE BEEN IMPRESSED BY THE BANK'S COMMITMENT TO GLOBAL ROAD SAFETY WHICH HAS STEADILY INCREASED THROUGH ITS LEADERSHIP AND A SERIES OF STRATEGIC AND SYSTEMIC POLICY CHANGES CULMINATING IN THE NEW TRANSPORT GLOBAL PRACTICE GUIDE. I AM DELIGHTED TO RECOGNIZE THIS COMMITMENT AND OUTSTANDING ACHIEVEMENTS WITH MY ROAD SAFETY AWARDS."

HRH Prince Michael of Kent

THESE AWARDS CONFIRM THE IMPORTANCE OF BRINGING TOGETHER FUNDING FROM OUR DONORS, SUCH AS UK AID, BLOOMBERG PHILANTHROPIES, CITA, TOTAL FOUNDATION, THE WORLD BANK, THE QUALITY INFRASTRUCTURE INVESTMENT PARTNERSHIP (QII) PARTNERSHIP, MANY GLOBAL DELIVERY PARTNERS, COUNTRY ROAD SAFETY LEADERS, AND PRACTICAL EXPERTISE FROM GRSF TO DELIVER SUSTAINABLE SAFETY IMPROVEMENTS IN DEVELOPING COUNTRIES."

**Dr. Soames Job**Head of GRSF
Global Lead for Road Safety, World Bank















# IN THIS FISCAL YEAR 2020 (FY20), THE GLOBAL ROAD SAFETY FACILITY WAS SUPPORTED BY THE FOLLOWING DONORS AND FUNDERS:

The United Kingdom Government through UK Aid is supporting numerous global, regional and local partners in undertaking a broad range of road safety initiatives. The Foreign, Commonwealth & Development Office (FCDO) and the Department for Health and Social Care (DHSC) through the National Institute for Health Research (NIHR), are providing funding and support to GRSF to focus on road safety research with the objective of achieving significant, measurable, and sustainable road safety outcomes in developing countries.

Bloomberg Philanthropies works to ensure better, longer lives for the greatest number of people. They focus on five key areas for creating lasting change: the arts, education, the environment, public health, and government innovation. In February 2020, Bloomberg Philanthropies announced a doubling of its support for global road safety, committing another \$240 million from 2020 – 2025 to save 600,000 more lives and prevent up to 22 million injuries in low- and middle-income countries (LMICs) around the world. The six-year reinvestment in the Bloomberg Philanthropies Initiative for Global Road Safety (BIGRS) with the GRSF and other partners is expected to double its impact to date.

The Comité International de l'Inspection Technique Automobile (CITA) is the international association of governmental bodies and private companies actively involved in road vehicle compliance. CITA aims to improve road safety and environmental conditions by ensuring lifetime compliant vehicles. CITA announced the renewal of their commitment to GRSF on February 2020.

The World Bank Transport Global Practice plays a key role in connecting people, goods, and services using efficient, affordable, and safer solutions. While modern transport helps reduce poverty and boost prosperity, the World Bank also recognizes its challenges. Road traffic fatalities and injuries are among the most pressing issues faced by the transport sector, which has led the Bank to make road safety a key priority through the cocreation and constant funding support of the GRSF from its road safety Global Engagement Budget.

The Government of Japan and the World Bank have established the Quality Infrastructure Investment Partnership (QII) with the objective of promoting and scaling-up knowledge exchange and implementation support of solutions to complex development challenges, such as road safety, through financial support and knowledge dissemination. With the support of the QII partnership with the World Bank, GRSF has been working on adding a series of key enhancements to the Data for Road Incident Visualization, Evaluation, and Reporting (DRIVER) open-source system.

In January 2020, GRSF welcomed Total Foundation as its newest donor. This new partnership has been supporting a joint collaboration in advancing data-related capacity building through the African Road Safety Observatory. The project aims to provide training, assistance and guidance to countries, with the goal of boosting their road safety analytic and data usage capacities. This program of funding strengthens the ongoing partnership between Total Foundation and GRSF. The organizations have worked together on road safety in Africa previously, including jointly supporting work on high crash risk corridors in Africa.



The GRSF partners with several Multilateral Development Banks (MDBs), including the World Bank, UN Organizations, Governments, road safety experts and delivery organizations, private sector companies, international and nongovernmental organizations (NGOs), and academia to leverage funding, technical expertise, advocacy, and learning platforms to improve road safety in low-and middle-income countries (LMICs) and to save lives.

#### **OUR PARTNERS INCLUDE** ~

- The Africa Transport Policy Program (SSATP)
- AXA Insurance
- Clinton Global Initiative
- 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
- International Road Assessment Programme (iRAP)
- International Road Federation (IRF)

- International Traffic Safety Data and Analysis Group (IRTAD)
- International Transport Forum (ITF)
- National Association of City Transportation Officials (NACTO)
- Road Traffic Injuries Research Network
- Sustainable Development Goals (SDGs)
- United Nations (UN)
- United Nations Road Safety Collaboration (UNRSC)
- United Nations Road Safety Fund (UNRSF)
- United Nations Economic Commission for Africa (UNECA)
- United Nations Economic Commission for Europe (UNECE)
- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

#### RESEARCH PARTNERS ORGANIZATIONS INCLUDE V

- Cheikh Anta Diop University
- Delft University of Technology
- George Washington University's Milken Institute School of Public Health
- Global Health Advocacy Incubator
- Global New Car Assessment Programme (NCAP)
- Indian Institute of Technology in Delhi
- Institute for Health Metrics and Evaluation (IHME)
- Iowa State University
- John Hopkins Bloomberg School of Public Health
- Korea Transport Institute (KOTI)
- Monash University

- Johns Hopkins International Injury Research Unit
- National Technical University of Athens
- Operational Knowledge (OLC K-POK)
- Queensland University of Technology
- Shiv Nadar University
- University of Chicago's Department of Public Health Sciences
- University of New South Wales
- University of Washington
- Vital Strategies
- Warsaw University of Technology
- World Health Organization (WHO)
- World Resources Institute (WRI)

#### MDBS INCLUDE ~

- 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 (IADB)
- Islamic Development Bank (IsDB)
- New Development Bank (NDB)
- World Bank (WB)



### **FOREWORD**

As the world struggles through the tragic COVID-19 pandemic, it's also important to address the current road safety crisis: Every year, road crashes claim the lives of 1.35 million people, and leave another 50 million seriously injured. Importantly, 93% of all road fatalities occur in low and middle-income countries.

Now is the time to turn ideas, experiences and shared knowledge into action. In a bid to help address the road safety crisis, GRSF is working effectively to guide and enhance road safety globally. The GRSF continues to have a pivotal role in providing funding and support to LMICs, international partner organizations, academia, and NGOs for a wide range of research studies and technical support for road safety.

Fiscal Year 2020 was a demonstration that partnerships are key to success. Thanks to our multidimensional partnership with UK Aid (represented by FCDO, DHSC and NIHR), Bloomberg Philanthropies, CITA, the QII Partnership (Government of Japan), the World Bank, Total Foundation and other funders, the GRSF achieved sustainable road safety outcomes. This collaboration and effective synergies continue to contribute to significantly reducing global deaths and injuries from road traffic crashes.

This GRSF Annual Report shows the strong commitment of the World Bank to road safety, as evidenced by:

- The increased support and close partnership between GRSF and the World Bank Transport Global Practice to provide systemic and specific guidance, policymaking support, and technical assistance to improve the delivery of road safety through World Bank and GRSF funded projects;
- The inclusion of road safety in the World Bank's Social and Environmental Framework;
- The development of strong evidence-based guidelines for delivery of road safety in the World Bank's Road Safety Good Practice Note;
- The Road Safety Screening and Appraisal Tool (RSSAT), which is currently used as a key tool for all relevant Transport Global Practice projects to assess road safety performance and identify opportunities for improvement in road infrastructure.

I am very pleased with GRSF's important research work and evidence-based guidance documents. This year, GRSF published 32 research papers, reports, blogs, and other knowledge products. Notably, the first road safety profile

report to help save lives on the road and the Speed Cameras guide were both launched at the 3rd Global High-Level Conference on Road Safety in Stockholm earlier this year.

GRSF's role in the Stockholm Conference was instrumental to review progress and define ways to accelerate action on proven strategies to save lives. The GRSF was represented on the Steering Committee and the Planning Committee for the conference and contributed to the influential Stockholm Declaration, which formed much of the basis of the 2020 UN Road Safety Declaration.

Additionally, the vital global influencing and advocacy role of the GRSF and the World Bank can be seen in the numerous engagements during the fiscal year. These engagements involved active participation in more than 100 influential global meetings, events and trainings.

We are also very proud of the collaboration created with the regional Road Safety Observatories. These have been developed with many partners in Africa (launched in 2019), Asia-Pacific (launched in 2020) and Ibero-America (established in 2011), to improve the collection of crash data for member countries. Our joint commitment with our partner MDBs to road safety is making a difference by saving lives on the road.

I would like to express my gratitude to all donors and funders of the work of the GRSF for their continuous active involvement and guidance on strategic directions. In my capacity as acting Director for the Transport Global Practice I have witnessed the GRSF work influencing the global road safety agenda, and its growing credibility and capacity to deliver high quality road safety outputs that contribute to leveraging significant additional funding for this vital agenda.

Sincerely,

Pablo Fajnzylber

Interim Global Director for Transport Director, Strategy and Operations Infrastructure



## **LETTER FROM THE CHAIR**

As Board Chair of the Global Road Safety Facility, I am pleased to present the 2020 Annual Report. The activities and impact highlighted in this report are evidence that, even with the challenges confronted with COVID-19,GRSF is continuing to work effectively.

In FY20, the Global Road Safety Facility (GRSF) effectively capitalized on strengthening road safety outcomes by strategically identifying opportunities to increase road safety impact through strong partnerships with governments. GRSF's ability to deliver on key projects both within the World Bank, and globally, has been achieved through a dynamic range of road safety activities.

Today, GRSF is working in more than 80 countries, saving thousands of lives by improving road safety outcomes through four key areas: technical assistance, research, training and capacity building, and grant funding.

GRSF leveraged road safety in World Bank-financed projects by capturing synergies from Bloomberg Philanthropies Initiative for Global Road Safety (BIGRS) funded technical assistance and training activities. In total, the GRSF-BIGRS partnership supported 24 World Bank-financed loans and advisory services across the five-year initiative, 2015-2019, including capacity building/training for over 10,000 professionals.

The GRSF Research Program developed the first data report covering all 125 low- and middle-income countries (LMICs) offering comprehensive road safety country profiles. This report, published earlier this year, provides a thorough assessment of the magnitude of road safety challenges faced by LMICs and helps policy makers understand the road safety framework and opportunities in their respective countries.

The Global Road Safety Grants Program has been recognized by both donors and partners as fair and competitive. These grants support World Bank or other Multilateral Development Bank-funded projects in delivering safe infrastructure and influencing policies across the road safety agenda, such as managing speeds and advocating for mass transit to reduce traffic deaths, greenhouse gas emissions, air pollution, as well as enhance inclusion for the poorest and most vulnerable by providing safe access to schools and health facilities. A transparent and rigorously managed grants program ensures maximum safety benefits from resources made available to GRSF.

The 3rd Global Ministerial Conference on Road Safety in Stockholm last February provided GRSF with an opportunity to launch two major reports: The aforementioned *Guide for Road Safety Opportunities and Challenges: Low- and Middle-Income Countries Country Profiles* and the *Guide for Determining Readiness for Speed Cameras and Other Automated Enforcement.* These reports offer clear and ground-breaking evidence-based knowledge to address the global road safety crisis.

Globally, GRSF has worked tirelessly to develop stronger data to ensure safer roads. In FY20, the GRSF team piloted and/or deployed the Data for Road Incident Visualization Evaluation and Reporting (DRIVER) in over 15 cities/countries, including Philippines, Lao PDR, Mumbai, São Paulo, Fortaleza, and Bangkok. The national level support on data management is complemented by GRSF's training and facilitation of inter-agency collaboration. In addition, training programs offered by GRSF to the Road Safety Observatories are contributing to a better understanding of road safety challenges, strengthening the road safety data collection and analysis skills of in-country stakeholders, and supporting the use of road crash data to improve road safety around the world.

GRSF donors – UK Aid, Bloomberg Philanthropies, CITA, the Quality Infrastructure Investment Partnership, the World Bank and Total Foundation – are pleased with the Facility's ability to better influence road safety investment in World Bank-financed projects, in addition to promoting an effective road safety culture in government agencies around the world.

GRSF is committed to building on the activities outlined in this Annual Report.

Sincerely,

Kelly Larson

GRSF Board Chair Bloomberg Philanthropies



## **NOTE FROM THE GRSF TEAM**

#### A YEAR OF SUCCESSES INFLUENCING THE GLOBAL ROAD SAFETY AGENDA $\checkmark$

Fiscal year 2020 (July 1<sup>st</sup>, 2019 to June 30<sup>th</sup>, 2020) has been an extraordinarily successful year of growth and delivery for the World Bank's Global Road Safety Facility, across all its work programs, even in the face of the COVID-19 pandemic.

The current tragic experience with COVID-19 also provides guidance on re-design of road safety work and cities as well as ideally generating revamped government accountability for health externalities caused by traffic, particularly road crashes and fatalities through the visible benefits of reduced traffic. Along with all the suffering, loss, and upheaval of COVID-19, we have the opportunity to evolve. GRSF is committed to working on capturing key issues in which road safety and COVID-19 collide to improve road safety long-term. In these times of uncertainty our partnerships are becoming stronger, especially in sharing research.

This outstanding work was recognized in the 2020 edition of Prince Michael International Road Safety Awards, in which the World Bank GRSF won three prestigious awards in collaboration with many partners.

FY20 was also an exceptional year for donors: in recognition of GRSF success, the donor support grew to be stronger and more sustainable than ever before: The GRSF program was assessed as *very successful* by the UK Government among numerous UK Aid-funded initiatives. In addition, Bloomberg Philanthropies signed a new agreement with GRSF for a 6-year partnership (BIGRS 2020-2025), in which we play a key role in supporting government's efforts to adopt safer road designs, improve existing road networks, improve crash data, and enhance management of speed to accommodate all road users, by hosting a Speed Management Hub.

GRSF also welcomed Total Foundation as a new donor, permitting broader capacity building actions in support of one of the Bank's flagship projects – the African Road Safety Observatory. GRSF also re-signed additional contributions from CITA as a donor.

The emphasis on road safety issues in LMICs sets the GRSF Research Program apart. This Program recognizes business needs and effectively addresses knowledge gaps. Critical road safety knowledge generated by GRSF and its diverse partners (universities, MDBs, academia, applied experts) has been widely disseminated globally in FY20. GRSF developed and published the first road safety country profiles report and a comprehensive guide for determining readiness for speed cameras. GRSF's evidence-based knowledge products and policy developments delivered in FY20 have

already had demonstrable impact on road and urban projects in the year.

These activities led GRSF to deliver an impressive participation in the 3rd Global Ministerial Conference on Road Safety last February. The Facility's representation was instrumental in reviewing the progress made with the Global Goals 2030 and defining ways to accelerate action on proven strategies to save lives refining the Stockholm Declaration. With the launch of those major research reports, the 3<sup>rd</sup> Global Ministerial Conference was a vital opportunity for GRSF to influence the global road safety agenda, as well as enhance the World Bank and GRSF profiles and reputations.

Within World Bank operations, GRSF has been a key advocate, influencer and trainer in road safety for World Bank projects and staff. This fiscal year GRSF led the World Bank's approach to road safety to a new paradigm: a more deeply systematic, consistent and better-informed paradigm. This was achieved though the delivery of key knowledge products, stronger policy, effective training, and collaborative work with many teams.

The following report highlights different examples on how GRSF's strong strategic focus, dedicated approach, and committed expert team have generated substantial improvement on road safety performance during FY20 – positioning the World Bank and GRSF as influential global partners in advancing the road safety agenda globally.

I am honored to be part of the GRSF team, am indebted to our donors and funders, and am most pleased to present the work of my skilled, dedicated, and energized GRSF colleagues during 2020.

Sincerely,

**Dr. Soames Job**Head of GRSF

Global Lead for Road Safety, World Bank

# MEET THE GRSF TEAM



Global Lead Road Safety, World Bank & Head of GRSF



Program Manager, MDTF



Program Manager, BIGRS



Transport Specialist, GRSF Road Safety Research



Transport Specialist, GRSF Road Safety Research



Transport Specialist, BIGRS



Transport Specialist, BIGRS



Program Coordinator



Junior Professional Officer



Program Assistant



Communications Specialist



Intern



Consultant



Senior Transport Specialist



Transport Specialist, BIGRS



Consultant



Intern

# MEET THE GRSF TEAM

#### **EXTENDED TEAM** $\checkmark$

The following road safety experts form part of GRSF's extended team. These professionals contribute systematically to GRSF activities and research, with their time and expertise.



Practice Manager, East Africa Transport Sector



Practice Manager, Transport Global Unit



Senior Transport Specialist



Senior Transport Specialist



Senior Transport Economist



Senior Transport Economist



Senior Infrastructure Specialist



Senior Transport Specialist

## **FY20 GRSF BOARD MEMBERS**

#### **KELLY LARSON**

(Chair) Program Director, Bloomberg Philanthropies

#### **EDUARD FERNANDEZ**

Executive Director, CITA

#### **ANNE JOSELIN**

Infrastructure Advisor, UK Aid/FCDO

#### DAWN WOOD

Deputy Programme Manager, UK Aid/FCDO

#### **ALISON MACEWEN**

Global Health Research Programme Manager, DHSC

#### MERYN MARTENS

Principal Transport Advisor, Projects Directorate, EIB

#### SHANE O'CONNOR

Communications Advisor, FedEx

#### **ANNE-VALÉRIE TROY**

Road Safety Senior Advisor, Total Foundation

#### PABLO FAJNZYLBER

Interim Global Director for Transport, World Bank

#### **GUANGZHE CHEN**

Outgoing Global Director for Transport, World Bank

## PAST AND PRESENT DONORS OF GRSF

The GRSF acknowledges the support of:

- BIOOMBERG 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)

- TOTAL 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)



#### GRSF STRATEGIC OBJECTIVES ~

DEVELOPING CAPACITY FOR SUSTAINABLE ROAD SAFETY DELIVERY

Strengthened global, regional and country capacity to support sustainable reductions in road deaths and injuries in LMICs.

PROMOTING A GLOBAL ROAD SAFETY NETWORK

Scaled up global road safety funding, coordination, and advocacy mechanisms to advance global road safety.

LEVERAGING WORLD BANK-FINANCED ROAD AND URBAN PROJECTS

Mainstreamed road safety components in all Bank-funded road infrastructure and urban projects.

### GRSF FOCUS AREAS V



#### ROAD SAFETY RESEARCH & DEVELOPMENT

Funding and using applied research for LMIC road safety management.



#### CAPACITY BUILDING

Focused on the GRSF Road Safety Management Capacity Reviews, exchange of knowledge, and good international practices in road safety.



#### GLOBAL ROAD SAFETY LEADERSHIP & MANAGEMENT

Partnerships for results in road safety strategy and data management, in particular with members of the UN Road Safety Collaboration.



#### SAFE ROAD & ROADSIDE INFRASTRUCTURE

Through road safety audits, star-rating risk surveys, safety inspections, crash-data analysis, and international good practices for roadway design.



#### **SAFE SPEED**

Focused on promoting infrastructure-related speed management interventions along with modern speed enforcement in partnership with Bloomberg Philanthropies.



#### **SAFE VEHICLES**

Promoting stronger regulations in vehicle design for protection and safety inspections on new and used vehicles through country partnerships with CITA.



#### **SAFE USERS**

Through knowledge exchange related to the importance of safe road-user behavior and effective communications aimed at reinforcement of other road-user related safe system measures.



#### **EMERGENCY MEDICAL SERVICES & POST-CRASH CARE**

Partnering and funding with the World Bank's Health team and organizations like WHO to scale up needed first aid, ambulatory services, trauma care and health sector crash data.





IN TOTAL, THE GRSF HAS RECEIVED TOTAL DONOR PLEDGES OF OVER



## \$74 MILLION

OF WHICH

## \$68 MILLION

HAS BEEN RECEIVED AND **\$6 MILLION**WILL BE RECEIVED OVER THE NEXT FEW YEARS.

IN FY20,



45% OF GRANT FUNDING

HAS GONE TO SUPPORT >



EXTERNAL PARTNERS

SUCH AS:

WHO, IRAP, WRI, ADB, AFDB, EBRD, GRSP, OECD AND OTHERS.

## **GRSF IN ACTION**

GRSF plays a key role in global road safety research, leadership, advocacy, guidance, and delivery by participating in numerous influential initiatives. Some highlights of the GRSF impact in FY20 are:



GRSF GRANTS
SUPPORTED WORLD
BANK INVESTMENT
PROJECTS WORTH

\$2.5 BILLION 10,5

10,500+ LIVES SAVED—V THROUGH GRSF GRANTS & WORLD BANK LOANS SINCE 2016



15,325 KILOMETERS

OF ROADS ASSESSED FOR ROAD SAFETY UNDER BIGRS 2015-2019 ~2,000 KILOMETERS

OF SAFETY ASSESSMENTS PLANNED FOR 22 BANK PROJECTS UNDER BIGRS 2020-2025



10,669

WERE TRAINED UNDER
THE BIGRS 2015-2019 IN
LEARNING ACTIVITIES LED
BY GRSF, OR WHERE GRSF
CONTRIBUTED



APPROVED FOR THE GRSF'S MULTI-DONOR TRUST FUND FY20 CALL FOR PROPOSALS FOR

**ROAD SAFETY RESEARCH ACTIVITIES** 



**PROPOSALS** BY GRSF



**PROPOSALS** 

ON ROAD SAFETY RESEARCH, ADVISORY AND CAPACITY



110 EVENTS FOR ROAD SAFETY

PRESENTATIONS, TRAININGS, **WORKSHOPS AND EVENTS** HOSTED/ARRANGED IN FY20



REPORTS, BLOGS, AND OTHER **KNOWLEDGE PRODUCTS** PUBLISHED BY GRSF



379 HARD COPIES TAKEN AND 52+ MEDIA MENTIONS

**4,000+** OF GRSF PUBLICATIONS IN FY2020



\$1 MILLION

OF ADDITIONAL GRANT FUNDS MOBILIZED IN FY20 TO ROAD SAFETY RESEARCH



**3RD GLOBAL MINISTERIAL CONFERENCE ON ROAD SAFETY IN STOCKHOLM** 

**18 EVENTS** 



GRSF WAS REPRESENTED ON THE STEERING & PLANNING COMMITTEE



GRSF CONTRIBUTED TO THE STOCKHOLM DECLARATION





## **WHERE WE WORK**

GRSF has provided funding, knowledge, technical assistance, and direct delivery to the following 81 countries to strengthen road safety interventions and save lives.



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

Cambodia
China
Kiribati
Indonesia
Lao PDR
Malaysia
Mongolia
Myanmar
Papua New Guinea
Philippines
Samoa
Solomon Islands
Thailand
Tonga
Vanuatu

Vietnam

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

Armenia Azerbaijan Belarus Bosnia and Herzegovina Bulgaria Georgia
Kazakhstan
Kyrgyz
Macedonia
Moldova
Montenegro
Poland
Romania
Russian Federation
Serbia
Tajikistan
Ukraine
Uzbekistan

#### LATIN AMERICA & CARIBBEAN

Argentina Bolivia Brazil Colombia Costa Rica Ecuador Jamaica Mexico Panama Peru Paraguay Uruguay

## MIDDLE EAST & NORTH AFRICA

Egypt Lebanon Morocco Pakistan Tunisia Yemen

#### **SOUTH ASIA**

Bangladesh India Nepal

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

Burkina Faso Cameroon

Chad Cote d'Ivoire Ethiopia Ghana Kenva Liberia Madagascar Malawi Mali Mauritius Mozambique Namibia Nigeria Rwanda Sao Tome and Principe Senegal Sierra Leone Somalia South Africa Tanzania Togo Uganda Zambia Zimbabwe



In FY20, GRSF continued to play a key role in global road safety research, leadership, and advocacy by participating in numerous influential initiatives including the sponsorship, organizing and key speaking roles in many official high-level panels, sessions and side events in the 3rd Global High-Level Conference on Road Safety in Stockholm. This representation was instrumental in reviewing the progress, defining ways to accelerate action on proven strategies to save lives, and guiding action.

GRSF's global influence also played a key role in advancing an active collaboration with the UNRSC and the MDB Road Safety Working Group, to contribute to the global commitment of significantly reducing global deaths and injuries from road traffic crashes. By closely collaborating with MDBs, GRSF has influenced the development of more uniform road safety safeguards for these organizations.

In 2020, GRSF continued its work with the Research Program with support of UK Aid donors. The Program includes two major components. The first component is related to the development of road safety data and capacity in LMICs through the establishment of Road Safety Observatories in Africa and Asia-Pacific. These observatories are improving the availability and quality of road safety data in their regions. The second component involves several applied road safety research projects to address the gap in road safety knowledge and promote scientific road safety practices in LMICs.

GRSF developed the first data report covering all 125 LMICs with comprehensive Road Safety Country Profiles. The data gives a precise assessment on the magnitude of road safety challenges faced by LMICs and helps policy makers understand the road safety framework in the context of their own country systems and performance.

Globally, GRSF's innovation is evidenced in their work for better data for safer roads. In FY20, the GRSF team

improved and piloted the Data for Road Incident Visualization Evaluation and Reporting (DRIVER) in Philippines, Lao PDR, Mumbai, São Paulo, Fortaleza, and Bangkok. DRIVER is a web-based, open-source platform for geo-spatially recording, analyzing, and reporting road crashes, addressing the deep failures in crash data in LMICs. The national level support on data management is complemented by GRSF's training and facilitation of inter-agency discussions.

The Multi-Donor Trust Fund (MDTF) funded grant program supported World Bank operations and global research in road safety with 47 grants in implementation during FY20. Thanks to financial support from UK Aid, 9 new successful proposals worth over \$1.7 million were selected through the GRSF annual Call for Proposals and will be implemented during FY21 focusing on road safety research in low-income and UK Aid Direct priority countries.

The GRSF–Bloomberg Philanthropies Initiative for Global Road Safety (BIGRS) continued to produce strong outputs in close coordination with World Bank-financed projects in priority countries, including infrastructure improvements, extensive capacity building, and practical and results-focused knowledge exchange. With the new BIRGS 2020-2025. GRSF plays a key role in engaging governments to support the initiative's efforts to adopt safer road infrastructure designs and improve existing road networks to accommodate all road users, by conducting assessments of high-risk roads, providing recommendations for safety improvements, providing technical guidance on speed management, and supporting governments to adopt crash management systems. The initiative builds from the success and impact of 12 years of investment under the BIGRS 2015-2019 and the Road Safety in Ten Countries (RS10) program.

More detailed highlights of the GRSF work program are presented below  $\ensuremath{\checkmark}$ 

## **MULTI-DONOR** TRUST FUNDED ACTIVITIES

GRSF plays a key role in global road safety research, leadership, technical-assistance, training and advocacy, all supported by the Multi-Donor Trust Fund (MDTF). Thanks to the MDTF donors, in 2020 GRSF's sustainable road safety work displayed a profound global impact with the following programs:



A vital part of the GRSF mission is the **Road Safety Grant Program**, that supports World Bank and other institutions with their road and urban transport investment projects as well as advancing global road safety research.

In FY2020, GRSF achieved significant milestones across the board making strong and sustainable road safety outcomes through increased funding, innovative activities, and strong teamwork. This was made possible by GRSF's enhanced global reputation, larger and sustainable donor funding and partnership with the World Bank's Transport Global Practice leading to stronger commitment to the road safety agenda:

- During FY20, GRSF supported World Bank operations and global research in road safety through 47 grants already in implementation.
- New Call for Proposals¹ selected 9 successful grants worth over \$1.7 million focusing on road safety research in low-income and UK Aid Direct eligible countries. These proposals will be implemented during FY21.
- The GRSF grant-funded activities influenced WB investment projects worth over \$3 billion on road safety interventions.

# THE GRSF GRANT PROGRAM HAS IMPROVED SAFETY DELIVERED THROUGH BANK LOANS WITH A TOTAL VALUE OF NEARLY \$4 BILLION.

In addition to mobilizing and guiding World Bank resources, GRSF Grants leveraged almost \$250 million of financial support from counterpart governments to safe roads investments.

The GRSF's Grant Program has expanded to 81 countries, and based on preliminary estimates, is expected to result in over 1,800 lives saved by working on improving road safety outcomes of World Bank loans through technical assistance and capacity building. Hence, the GRSF's Multi-Donor Trust Funded Grant Program has again significantly exceeded the key donor agreed performance target.

More detail of the impact of GRSF grant-funded activities advancing or accomplished in FY20 are provided below  $\lor$ 

<sup>&</sup>lt;sup>1</sup> GRSF grants are provided only following annual Calls for Proposals after rigorous evaluation process against the facility's objectives, along with the project's ability to positively affect road safety outcomes at the city, country, and/or regional level.



#### SCALING-UP DISRUPTIVE TECHNOLOGIES FOR ROAD SAFETY IN MOZAMBIQUE AND LIBERIA $\checkmark$

This GRSF grant-funded activity, in collaboration with the Governments of Mozambique and Liberia, has developed an innovative road safety assessment methodology using automated image analysis technology, saving substantial costs in assessment processes.

With this grant activity, a road safety risk assessment tool was developed and 1,000 km of national roads in these two countries were evaluated. Notably, GRSF's grants directly leveraged additional investment of approximately \$185 million: In Mozambique, the ongoing Word Bank investment project plans to finance the interventions to enhance road safety in the high-risk sections identified by this grant.

In addition, the focus on road safety increased in both countries, and specific actions to improve it have been reinforced, which led to the negotiations on a standalone road safety World Bank project. The project's team received the President's Awards for Innovation, recognizing the development of results through the creation and adoption of innovations across World Bank operations as well as client countries.



**WORKSHOPS ON ROAD SAFETY RISK ASSESSMENT TOOL** 





#### IMPROVING SIDEWALK SAFETY FOR PEDESTRIANS IN ADDIS ABABA, ETHIOPIA 🗸

This GRSF Grant Activity has improved sidewalk safety for pedestrians in Addis Ababa, where walking is the predominant transport mode. The project provided evidence on current unsafe pedestrian walking conditions, developed 'low-hanging fruit' actions and strategies, and developed a systematic approach for pedestrian and sidewalk safety for the city of Addis Ababa.

Thanks to GRSF support, a framework for Addis Ababa to plan, design, and maintain its sidewalks was created

By developing knowledge products, the project disseminated to key stakeholders in Addis Ababa a deep understanding of the current conditions of safety, security and walkability of sidewalks and linkages to urban transport and quality of life.

It is expected that the project will leverage findings and recommendations for other organizations regarding pedestrian safety, including Institute for Transportation and Development Policy (ITDP) and Bloomberg Philanthropies studies.





**WORKSHOPS ON ROAD SAFETY RISK ASSESSMENT TOOL** 

### \*

#### SUPPORTING RESEARCH TO IMPROVE CONNECTIVITY FOR CENTRAL HIGHLANDS IN VIETNAM $\checkmark$

This GRSF Grant Activity has contributed to the development of a series of road safety studies (iRAP Assessment Report; Road Safety Audit Report; Final Motorcycle Lane Specifications; Final Motorcycle Lane Design Manual, both in English and Vietnamese) in support of upgrading a road safety corridor on National Highway No. 19 (NH19), financed by the World Bank under Vietnam Central Highlands Connectivity Improvement project. These activities aim for NH19 to meet international traffic safety standards, including Vietnam's Traffic Safety Strategy requirements of a minimum iRAP 3-star rating, while reinforcing the capacity of the Government around road safety activities.

With GRSF's support, over 50 professionals were trained on motorcycle infrastructure safety, including researchers from transport institutes and universities, and professional staff from relevant departments of Ministry of Transport (MOT) and Hanoi Department of Transport (DOT).

Full research reports on motorcycle lane specification and motorcycle lane design manuals were shared with researchers of Institute for Transportation Science and Technology, lecturers for University of Transport Technology, and professional staff of MOT and Hanoi DOT before the workshop. This event helped the development of informed motorcycle infrastructure guidelines and manual for Vietnam.

The iRAP Assessment and the Road Safety Audit Reports are now being used to inform project detailed designs, whereas the final drafts for the Motorcycle Lane Specifications and Motorcycle Lane Design Manual are being used for NH19, and currently disseminated and used through a BIGRS Grant, illustrating a constant collaboration between GRSF's donors.

#### C\*

#### STUDYING AND DISSEMINATING THE SOCIO-ECONOMIC COSTS OF ROAD CRASHES IN AZERBAIJAN ightarrow

This GRSF Grant Activity, in partnership with the Ministry of Economy of Azerbaijan, is financing technical assistance for the development of a methodology on the identification of socio-economic costs of road crashes in Azerbaijan and implementation of the study based on the developed methodology. This activity is being complemented by capacity building activities for the Research Institute of the Ministry of Economy of Azerbaijan.

With this Grant, an analysis and identification of methodology about the economic costs of road crashes in Azerbaijan at the national level are being quantified. This key information is helping the project's team to increase the public and government attention to the road safety problem. From a longer-term perspective, the project seeks to influence a higher and more efficient government spending for road safety related issues in Azerbaijan. With GRSF support, the project is working on the development of:

- a series of workshops to present findings of the study on social-economic costs of road crashes in Azerbaijan and related methodology;
- development of capacity of the national economic research institute.



## DEVELOPING THE OCCUPATIONAL ROAD RISK TOOLKIT TO IMPROVE THE QUALITY OF MANAGEMENT AND VEHICLE FLEET $\checkmark$

Implemented by the European Bank of Reconstruction & Development (EBRD) and financed by the UK Aid through a GRSF Grant, an international team created the Occupational Road Risk (ORR) Toolkit – a structured and innovative e-learning program in which fleet managers, drivers, and motorcycle riders can receive tailored content.

This platform gathers the necessary knowledge products (baseline statistics, best practices, modules of training, guidance) to reduce dramatically the cost of delivering advisory support and capacity development on Road and Traffic Safety management to MDB clients operating large vehicle fleets in different sectors.

The toolkit also contains resources and free e-learning modules for different stakeholders to help manage risk across numerous road safety challenges. With this innovative tool, GRSF and EBRD seek to improve the quality of management and vehicle fleet as well as the way in which road networks are used.

The toolkit is being shared among other members of international financial institutions to gain the knowledge and support in delivering more initiatives related to ORR amongst their clients, thus reducing the number of collisions worldwide. In addition, the toolkit will become a primary source of information that can be shared and utilized by Road Safety NGOs to raise awareness of ORR within businesses.





OCCUPATIONAL ROAD RISK TOOLKIT - ROADRISKTOOLKIT.COM



#### MOVING FROM VISION TO ACTION: GRSF INVITES YOU TO BE PART OF THE VISION ZERO CHALLENGE $\checkmark$

GRSF and the World Bank are proud partners of the **Vision Zero Challenge** – an initiative that promotes leadership in implementing a Vision Zero approach to road safety in Latin America.

The Vision Zero Challenge spotlights the importance of moving from #vision2action by celebrating those cities that are taking responsibility for road safety and

providing the targeted support that their political and technical leaders need to develop a safe mobility system.

The inaugural Vision Zero Challenge 2019-2020 focuses on cities in Latin America and the Caribbean, with the goal of targeting other regions in future rounds.









SUPPORTED BY UK AID, BLOOMBERG PHILANTHROPIES AND THE WORLD BANK

#### EVIDENCE-BASED KNOWLEDGE TO ADDRESS THE ROAD SAFETY CRISIS $\checkmark$

In FY2020, GRSF initiated a new **Research Program** with support of UK Aid donors, Bloomberg Philanthropies and the World Bank. The Program includes two major components:

1. The first component is related to the development of road safety data and capacity in LMICs through the establishment of Road Safety Observatories in Africa and Asia-Pacific. A detailed report of these impactful programs can be found in the next section.



ROAD SAFETY TRAINING IN JOHANNESBURG JULY-AUGUST 2019 IN WHICH TWO AFRICAN COUNTRIES TRAINED OTHERS ON DATA AND USAGE IN ROAD SAFETY MANAGEMENT.

**2.** The second component involves several applied road safety research projects to address the gap in road safety knowledge and to promote scientific road safety practices in LMICs.

The GRSF road safety research projects aim to tackle cutting-edge road safety topics, such as innovative use of big data for road safety, the use of police, medical, health survey, census data to refine methods of road deaths and disability estimation.

The research projects also include software development to assess the effectiveness of road safety interventions and the delivery of several guidance documents to address the road safety challenges related to planning, design, policy, communications, and implementation of road safety projects.

Critical road safety knowledge generated by GRSF was widely disseminated<sup>2</sup> during the FY20 through:

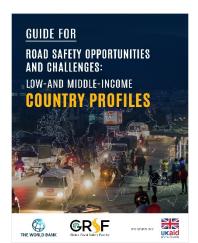
# 110 PRESENTATIONS, TRAINING, WORKSHOPS AND EVENTS; 15 RESEARCH PAPERS, REPORTS PUBLISHED; AND 15 OTHER KNOWLEDGE PRODUCTS PUBLISHED.

GRSF's publications have been highly recognized among preeminent academic papers. The total citation count of GRSF's work published in this fiscal year has had more than **4112 citations**<sup>3</sup>, illustrating a growing interest in GRSF's work that continues to pioneer much needed road safety research.

<sup>&</sup>lt;sup>2</sup> Detailed list of events, publications and knowledge products, can be found in Appendix IV and V.

<sup>3</sup> Total citation for the period July 2019 to June 2020 is 4112 citations. For calculating this number, GRSF monitored the citations of publications from GRSF team members, including their activity on Google Scholar and Scopus for this specified period.

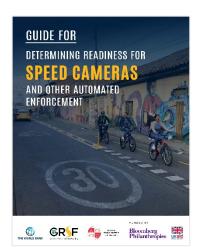
#### RESEARCH PROGRAM HIGHLIGHTS ~



#### FIRST ROAD SAFETY PROFILE REPORT TO HELP SAVE LIVES ON THE ROAD

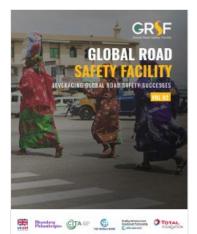
The Guide for Road Safety Opportunities and Challenges: Low- and Middle-Income Countries Country Profiles gives a precise assessment on the magnitude and complexity of road safety challenges faced by LMICs and helps policy makers understand the road safety framework in the context of their own country systems and performance. The guide also helps countries to build and appreciate the business case for vital road safety investment.

The report also guides action: clear advice and references regarding robust policies and other interventions are provided to countries facing specific challenges, allowing them to take direct action on priority issues and opportunities.



#### EDUCATING ROAD SAFETY THROUGH A COMPREHENSIVE SPEED CAMERAS RESEARCH

The Guide for Determining Readiness for Speed Cameras and Other Automated Enforcement was developed jointly between GRSF and GRSP with the aim to assist a jurisdiction to determine the level of readiness to move to automated enforcement. Speed cameras enforcing speed limits are a common application of automated enforcement and the guide covers many systemic legal and operational elements that must be in place before it can be effective. The publication, originally in English, is translated to French, Portuguese, Vietnamese and Spanish.



#### DISSEMINATING LEVERAGING GLOBAL ROAD SAFETY SUCCESSES

The report "GRSF: Leveraging Global Road Safety Successes – vol 02" highlights a few examples of GRSF's effective delivery of global road safety solutions for the period of 2017-2019. From reducing road crash deaths and injuries in Ho Chi Min City to increasing road safety investments in Addis Ababa, the report summarizes lessons and results from multiple country contexts. Road safety interventions carried out in Colombia, Ethiopia, Nepal, Morocco, Bolivia, Togo, China and Thailand present opportunities for expanding this work to other client countries.



SUPPORTED BY **BLOOMBERG PHILANTHROPIES** 

# BLOOMBERG PHILANTHROPIES INITIATIVE FOR GLOBAL ROAD SAFETY (BIGRS)

BIGRS 2015-2019 V

SINCE 2007, THE ENTIRE BIGRS INITIATIVE HAS SAVED AN ESTIMATED 312,000 LIVES AND PREVENTED UP TO 11.5 MILLION INJURIES.

## **GLOBAL KEY OUTCOMES FOR BIGRS 2015-2019**



15,325 KILOMETERS

LENGTH OF ROADS SURVEYED AND ASSESSED



LENGTH OF ROADS WHERE DESIGNS, SCENARIOS OR IMPLEMENTATION HAVE BEEN STAR RATED



944
KILOMETERS

LENGTH OF CONSTRUCTION COMPLETED BASED ON IRAP SURVEY RECOMMENDATIONS



10,669 PROFESSIONALS

WERE TRAINED UNDER THE BIGRS 2015-2019 PROGRAM IN LEARNING ACTIVITIES LED BY GRSF, OR WHERE GRSF CONTRIBUTED.











AN INNOVATIVE APPROACH WAS PROMINENT IN

#### THE HIGH TOLL OF TRAFFIC INJURIES: UNACCEPTABLE AND PREVENTABLE

THIS REPORT IS ONE OF THE FIRST SYSTEMATIC ESTIMATES OF THE ECONOMIC IMPACT OF REDUCING ROAD TRAFFIC DEATHS AND INJURIES.

- **⊘ 13,430 ABSTRACT VIEWS**
- **② 250 HARD COPIES TAKEN**



#### A PARTNERSHIP FOR SAVING LIVES FROM ROAD TRAFFIC CRASHES $\checkmark$



















The global impact of the GRSF-led interventions under BIGRS (2015-2019) has been profound through improvement in safe road infrastructure management, crash data management, economic impact assessments and capacity building in selected countries and cities.

GRSF leveraged road safety in Bank-financed projects, by capturing synergies from BIGRS-funded technical assistance and training activities. In total, the GRSF-BIGRS partnership supported 24 World Bank-financed loans and advisory services across the program period, which have a total dollar value of almost \$8 billion.

Other GRSF team roles in the Bloomberg Philanthropies program focused on advocacy through iRAP results, with a series of studies prepared and disseminated during the program.

Some of these studies are related to sensitivity of speed variation, design implementation, preparing guidelines, improving crash data systems and, very importantly, understanding the economic impact of road injuries.

Research supported by the GRSF-BIGRS partnership has shown that countries could have a 7% to 22% additional increase in GDP per capita over 24 years if they halved road traffic deaths and injuries. This has proven to be a powerful advocacy tool for road safety in discussions with many governments, as well as for global advocacy by GRSF, the World Bank and many others.

An impressive over 10,000 professionals were trained under the BIGRS 2015-2019 program in learning activities led by GRSF, or where GRSF contributed. Moreover, as part of this project, GRSF enhanced road safety management capacity in relevant institutions, by providing new technologies to collect and analyze crash data, through the Bank developed DRIVER open-source system.

#### HIGHLIGHTED STORIES IN FY20



#### SUPPORTING ROAD SAFETY INTERVENTIONS & BUILDING SUSTAINABILITY IN INDIA $\checkmark$

In India<sup>4</sup>, with GRSF's support, the BIGRS has delivered a series of key outputs and outcomes, such as:

Thanks to BIGRS 2015-19 and previous Bloomberg program, 17,600 c-km<sup>5</sup> of iRAP assessments have been undertaken on World Bank, National Highway Authority of India (NHAI) and state government supported projects in 13 states. Investments to improve many of the roads had been included in World Bank-financed projects worth more than USD 5.4 billion.

iRAP surveys were completed for about 2600 km along the Delhi-Mumbai and Mumbai-Chennai arms of the Golden Quadrilateral, and related reports were submitted to NHAI for their review and consideration in future road improvements. Two related workshops were conducted in April 2019 to disseminate the report findings to NHAI and its Road Safety Cell and to the regional officers, project implementation units from Gujarat, Rajasthan, Maharashtra, Karnataka and Tamilnadu.

Over 2,000 c-km of roads were assessed in Uttar Pradesh as part of the US\$570 million World Bank

financed Uttar Pradesh Core Road Network Development Program. It was estimated that with an investment of INR 47.3 billion (US\$772 million), the number of deaths and serious injuries on the road could be reduced by 55%, preventing more than 348,300 deaths and serious injuries over 20 years. Similarly, 2,000 c-km of roads in Tamil Nadu were assessed as part of the US\$778 million World Bankfinanced Second Tamil Nadu Road Sector Project.

The activities enabled by BIGRS and GRSF have helped to support the creation of IndiaRAP. This initiative has encouraged road authorities, universities and policy makers from around the country to share knowledge and experience in road infrastructure safety and build confidence in performing and using risk assessments.

The data generated and capacity built through the BIGRS program in India is enabling valuable contributions to be made in other forums, such as in the Indian Roads Congress which oversees design standards and national Road Safety Audit Training Courses being organized by Central Road Research Institute and Indian Academy of Highway Engineers.





INTERSECTION IMPROVEMENT AT KM 46.9 RESULTING IN 3-STARS FOR ALL ROAD USE



## LARGEST ROAD CONCESSION PROJECT IN BRAZIL WAS SIGNED, WHICH INCLUDES SAFETY ASSESSMENTS AND TARGETS $\checkmark$

In Brazil, the Governor of São Paulo signed the largest road concession contract in the country, 1,273km for 30 years concession between Piracicaba and Panorama. The concession project, which had planning support from the International Finance Corporation (World Bank Group), will be the first in Brazil to include iRAP methodology which will measure the road safety of the network.

Assessments made previously under the Bloomberg Initiative enabled early dissemination of the iRAP methodology in the state of São Paulo. The project will be supported by **BrazilRAP**, which was officially launched in November 2019, in association with the National Department of Transport and Infrastructure Brazil (DNIT).

<sup>&</sup>lt;sup>4</sup> This number is merged for the BIGRS work in Mumbai at city level, and India at national level.

<sup>&</sup>lt;sup>5</sup> C-km refers to carriageway of road length assessed. For a divided highway, each direction of carriageway is assessed separately.



#### SUPPORTING ROAD SAFETY INTERVENTIONS AND BUILDING SUSTAINABILITY IN CHINA $\checkmark$

Under BIGRS 2015-2019, GRSF worked closely with iRAP and **ChinaRAP**, and coordinated with World Bank staff working in China. From this collaboration, a series of World Bank-financed projects benefitted from BIGRS support:

- Six urban roads, totaling 4.8km, and their corresponding designs were assessed by the ChinaRAP team for the *Qinghai Xining Urban Transport Project*. As a result of speed testing analysis, the road design speed is reduced from 60km/h to 40km/h with enforcement, making the majority of the road 5-Stars for vehicle occupants and 3-Stars for pedestrians.
- A total of 36 roads, totaling 115.4 c-km are assessed in Xinjiang Yining for the Urban Transport Improvement Project. Results show that an investment of CNY 85 million (USD 12 million) could prevent 741 deaths and serious injuries over 20 years.
- 21 roads with a total length of 312.7km of roads were assessed in four counties across *Qianxinan for the Rural Transport Project*. It was estimated that by investing CNY 300.7 million (approximately USD 43.5m), 10,379 deaths and serious injuries could be prevented over 20 years, saving CNY 736 million (approximately USD\$106.7m) in crash costs.
- 2 roads, totaling 102 km in length are assessed in *Guizhou for the Tongren Rural Transport Project*. Overall, it was estimated that an investment of CNY 339 million (USD 48 million) could prevent 3,580 deaths and serious injuries over 20 years.
- Three roads, totaling 9.8 c-km, were assessed for the *Hubei Xiaogan Logistics Infrastructure Project*. An economic analysis of a series of safety countermeasure options indicated that with an investment of CNY 3.9 million (approximately USD 590,000), 33 deaths and serious injuries could be prevented over 20 years, saving CNY 7.7 million (approximately USD 1.15m) in crash costs.





#### EXAMPLES OF ROADS ASSESSED IN TONGREN



HUBEI XIAOGAN: EXAMPLE OF SUGGESTED INTERSECTION ADJUSTMENTS



#### DRIVER MOU SIGNING IN BANGKOK V

On December 2019, the Road Accident Victims Protection Company Limited led by Mr. Nopadol Santipakorn, Managing Director, signed an MoU on DRIVER together with Bangkok Metropolitan Administration and Faculty of Engineering, Chulalongkorn University to cooperate in using the data from DRIVER to analyse and solve road crash problems. This will ensure that Bangkok Metropolitan Administration will have correct and accurate road crash data and will help in improving road safety by effectively identifying and correcting high-risk areas in Bangkok.

The signing ceremony was held at Rattanakosin Meeting room, Bangkok Metropolitan Administration Bangkok City Hall.



### BIGRS 2020-2025 V

#### NEW HORIZONS: REDUCING ROAD CRASH DEATHS AND SEVERE INJURIES WITH THE NEW WORLD BANK-BLOOMBERG PHILANTHROPIES PARTNERSHIP

In the new BIRGS 2020-2025, GRSF plays a key role in engaging governments to support the initiative's efforts to adopt safer road infrastructure designs and improve existing road networks to accommodate all road users, by conducting assessments of high-risk roads, providing recommendations for safety improvements, providing technical guidance on speed management, and supporting governments to adopt crash data management systems. The initiative builds from the success and impact of 12 years of investment under the BIGRS 2015-2019.

The new phase of this impactful partnership focuses on activities in three core areas:

- ( SPEED MANAGEMENT Speed is one of the main risk factors in road crashes. As the new host of BIGRS's Speed Management Hub, the GRSF team provides evidence-based road safety knowledge to help manage speed through infrastructure interventions and effective enforcement. Key engagements from this focus area include:
  - · Providing technical expertise to program partners, countries and cities, on speed management;
  - Preparation and publication of Global Speed Management Guidelines in coordination with the World Resources Institute (WRI) and co-funded by UK Aid;
  - · Research analysis on the economics and benefits of speed management;
  - · Technical analysis for road engineering solutions promoting speed management;
- ROAD INFRASTRUCTURE SAFETY ASSESSMENTS In the 15 countries covered by BIRGS, the GRSF is working

#### SAVING LIVES ON THE ROAD ONE COUNTRY AT A TIME $\scriptstyle <$

The following 15 countries were selected to be part of this new phase of the program and receive GRSF support for national-level activities, including policy implementation initiatives, crash data management and road infrastructure safety assessments:

closely with World Bank teams to optimize the safety outcomes of their road projects. That involves, in particular, conducting complete assessments of high-risk roads and supporting the implementation of concrete measures to enhance the safety of the road infrastructure. Major engagements include:

- National-level road safety surveys and assessments;
- Bloomberg-supported Leveraging safety assessments to support World Bank-financed projects;
- · Providing technical capacity-building workshops and learning events.
- DATA MANAGEMENT Better data is a critical step toward improving road safety management. That's why GRSF has been working with countries to collect, manage and analyze crash data more effectively through the DRIVER open-source system. In this new phase of the BIGRS, GRSF will be delivering in-depth analytical work on crash management. In particular, the team will use the DRIVER system to better track crash incidents and measure the benefits of interventions infrastructure improvements speed or management. Major engagements include:
  - Continuing to pilot DRIVER in interested cities and countries;
  - Deployment of new crash database systems;
  - Review of existing crash data management practices.



#### HIGHLIGHTED STORIES ~



#### GRSF AND IRAP WEBINAR SERIES 🗸

With support from the **BIGRS 2020-2025**, the GRSF and iRAP have partnered to deliver free periodic learning events on the iRAP methodology.

The first session focused on India, specifically on how the local IndiaRAP program was created and the safety assessments conducted across the country. The 4-part series held in June 2020 received a record 670 registrations from 77 countries around the world. In total 448 people from 53 countries attended the live sessions. In addition to this, 295 participants chose to participate in the online learning course where they could complete assignments for each session and get certifications.

The intention of the online learning series was to train road authorities and engineers around the world on the iRAP methodology, and support them in eliminating high-risk roads, unlocking the economic benefits of 3-star or better roads through results-based financing, and meeting global SDG and UN targets.

Previously to this session, on December 2019, GRSF and iRAP delivered an important "key outcomes" webinar to share the success of the BIGRS Initiative (2015-2019). The webinar was conducted in English and Spanish and had over 185 participants.



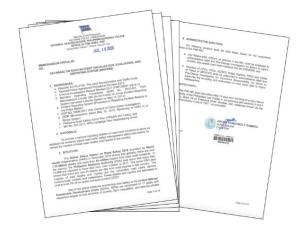
#### BETTER DATA FOR SAFER ROADS IN THE PHILIPPINES $\checkmark$

DRIVER is currently being scaled-up to national level in the Philippines with support from the BIGRS and the QII Partnership. Full deployment of the new system is already planned for the country, in coordination with the Department of Science and Technology (DOST) and Philippines National Police (PNP).

#### NEW LEGISLATION SUPPORTING DRIVER'S IMPLEMENTATION:

The chief of the PNP signed and released a Memorandum Circular (MC) institutionalizing the nationwide use and implementation of DRIVER. This means that all PNP stations and offices in the country will be mandated to integrate DRIVER into their daily workflow. The MC details general and specific guidelines including the key offices and personnel within the PNP who will champion the adoption of DRIVER.

On the national level, the Directorate offices will supervise the efficient and effective implementation of the MC while the Highway Patrol Group (HPG) will provide training to key personnel involved in the use of the system. On the regional and local levels, Regional, Provincial, District, and City Directors will ensure faithful compliance of lower units. Finally, the tasks of data collection, encoding, and monitoring will be given to the Duty Traffic Investigators, Investigators-on-Case (IOC), and the Road Safety Officer (RSO). This new legislation is another strong milestone in establishing DRIVER as the national crash data collection system in the Philippines and serves as a good example for other countries interested in using the platform.





SUPPORTED BY CITA

## **ASSESSMENT OF VEHICLE INSPECTION SYSTEMS (AVIS)**



#### GRSF AND CITA MAKING VEHICLE INSPECTIONS COUNT IN CAMEROON $\checkmark$

In Cameroon, the Assessment of Vehicle Inspection Systems (AVIS) project was undertaken within the framework of the collaboration between GRSF and CITA with a view to upgrade vehicle inspections. The main objective of the project is to identify systems for vehicle inspection and approval, and to propose an improvement strategy to make vehicles safer and travel more efficient

Cameroon is a Central African country with an area of 475,440 km² and a population of 25 million (2018). The societal cost of road crashes in Cameroon was USD 8.5 million in 2016. If population growth and the significant rate of increase in the number of registered vehicles are taken into account, this figure is now likely to be much higher. The consequences of road crashes are doubly harmful, both in social and economic terms. The report developed under this partnership, shows how in the country there is a lack of a comprehensive technical reference system to ensure vehicle safety and reduce polluting emissions both in terms of vehicle inspections and approvals.

The global objective of the AVIS projects is to carry out audits of vehicle inspection systems in various countries in sub-Saharan Africa. Cameroon is the second country to benefit from such an audit. The first study in Togo allowed a methodology to be established that improved upon and confirmed the benefit of the project. The objective of the AVIS Cameroon project is to adapt the methodology developed for Togo to the specific case of Cameroon in terms of:

- odocumenting the current practices of the vehicle approval and inspection systems,
- making specific recommendations in the context of Cameroon in order to improve the manner in which inspection and approval Programmes contribute to the country's overall capacity to manage the development of road infrastructures and improve road safety performance as well as achieving other public policy objectives,
- advocating a global programme to reinforce capacities in order to implement recommendations.

#### A CONTINUOUS COMMITMENT TO BUILD SAFER ROADS $\checkmark$



CITA announced the renewal of their commitment to GRSF on February 2020, during the CITA's side event "Road Map for Safer Vehicles 2030" at the 3rd Global Ministerial Conference on Road Safety.

We are delighted to share with you values on road safety for all, and we thank you for helping us to demonstrate that having safe and clean cars is feasible. We very much look forward to keeping on working together to achieve 2030's targets.

With these words CITA's President, **Gerhard Müller** renovated the organization's involvement in road safety and environment protection at World Bank's side.





#### ADVANCING DATA-RELATED CAPACITY BUILDING THROUGH THE AFRICAN ROAD SAFETY OBSERVATORY

#### **UK AID COMPONENT** $\checkmark$

With the support of UK Aid, the African Road Safety Observatory was able to enhance the capacity of African countries to manage road safety data and therefore design evidence-based interventions to improve road safety outcomes across the continent.

With these activities, GRSF collaborated with UN organizations, Multilateral Development Banks (MDBs), other global or regional international organizations or NGOs, including the IRTAD; ITF; WHO; FIA; AfDB; African Union; and UNECA.

GRSF funding directly leveraged US\$100,000 grant funds for road safety studies in Mozambique and Southern African countries focusing on data management and capacity. This involved the support of WHO and FIA for a workshop in Tunis for improvement of vital registration data management, and FIA for ESRA attitudinal and behavioral surveys in five African countries.

TOTAL

**FOUNDATION** 

#### HIGHLIGHTED ACTIVITIES SUPPORTED BY UK AID $\checkmark$

#### #ROADS4LIFE STORYTELLING CONTEST OF THE AFRICAN ROAD SAFETY OBSERVATORY $\checkmark$

With the goal of changing Africa's road safety narrative, SSATP with the support of the African Union Commission, United Nations Economic Commission for Africa, European Union, and the GRSF, with funding from UK Aid, launched the African Road Safety Observatory's #Roads4Life storytelling contest to generate awareness on Africa's road safety crisis and identify road safety champions who are working hard to make Africa's roads safer. SSATP received more than 150 story submissions and organically reached more than 16.9 million people worldwide.

The winners of the #Roads4Life storytelling contest were:

- Road safety leadership: Roads for Life in Zimbabwe.
- Innovations for road safety: App for Improving Road Crashes Responses in Cameroon.
- Personal stories of taking a stand to address road safety issues: **Botswana's Donkey Carts Story.**
- Notable mention under Personal Stories: Chris Kaganzi's Start Over Initiative in Uganda.

#### CAPACITY BUILDING 🗸

On April 3-5, 2019, WHO led an ARSO workshop in Tunis on improving vital registration data management with 10 countries participating: Botswana, Cameroon, Ghana, Kenya, Morocco, Nigeria, Senegal, Tanzania, Uganda and Tunisia.

The workshop explored with participants the quality of their data, the strengths and weaknesses of data systems and the ability to integrate mortality data and to develop protocols to identify gaps within existing systems and assess the extent of underreporting.

#### DATA COLLECTION $\checkmark$

A population-representative attitudinal and behavioral data was collected in six African countries: **Egypt, Kenya, Morocco, Nigeria, South Africa and Zambia**. Surveys were also delivered on an additional six countries (Benin, Cameroun, Cote d'Ivoire, Ghana, Tunisia and Uganda). **In total, 2,416 key contacts were interviewed.** 

#### **COMMITMENTS** ~

The process to acceding to African Road Safety Charter started. The African Union Commission sent out a memorandum outlining procedures for African countries to accede to and ratify the Charter in December 2019.

#### TOTAL FOUNDATION COMPONENT 🗸

In January 2020, GRSF welcomed its newest donor, Total Foundation. This new partnership has been supporting a joint collaboration in advancing data-related capacity building through the African Road Safety Observatory. The project aims to provide training, assistance and guidance to countries, with the goal of boosting their road safety analytic and data usage capacities.

The project directly assists African nations to improve their road safety data and information systems and expand the use of data for better targeting of road safety treatments, better monitoring, more rigorous evaluation, and more effective advocacy. The initiative also improves the data provided to the Africa Road Safety Observatory (ARSO), and further facilitate country to country learning opportunities from the Observatory.

This program of funding strengthens the ongoing partnership between Total Foundation and GRSF. The organizations have worked together on road safety in Africa previously, including jointly supporting work on high crash risk corridors in Africa.

#### IDEAS IN ACTION $\checkmark$

Training programs offered by the GRSF will aim to improve the understanding of the challenges faced, as well as strengthen the skills and commitment of all stakeholders, to support the use of data collection and analysis tools on the ground. The goal is to enable decision-making based on reliable information, while fostering collaboration across the continent.

#### WHY IS IT A PRIORITY TO EXPAND THE USE OF DATA?

Effective use of sound data generates powerful opportunities to save lives and prevent injuries. Resources can be allocated on a sound evidence base; advocacy can be better informed and more effective; the selection of interventions to address road safety can be more accurately targeted to the real nature of the problem; and serious crash locations (black spots) can be accurately identified from crash data for effective treatment.

## HOW WILL THE SUPPORT OF TOTAL FOUNDATION MAKE THE DIFFERENCE?

Total Foundation funding will be used by GRSF to improve understanding of the value of good data, and to increase the capacity of African countries for road safety data collection, analysis, and usage in the development of road safety projects and policies. Total Foundation funding will support buildup of a professional group of data specialists, including among academics and NGOs. It will also facilitate networking among road safety professionals capable of using data and exchanging good practices for maximizing road safety benefits.

With the African Road Safety Observatory, Total Foundation continues its commitment to advance road safety. Total is a major player on the continent, widely present on its roads. For this reason, we wish to provide support to (...) fight this scourge more effectively. We are convinced that it is through partnerships like this one, which involve governments, institutions, experts and the private sector, that we can significantly reduce the number of road traffic deaths



**Manoelle Lepoutre**, Senior Vice President, Civil Society Engagement, Total Foundation.









## ASIA-PACIFIC ROAD SAFETY OBSERVATORY (APRSO)

SUPPORTED BY UK AID, THE WORLD BANK, FIA & QII PARTNERSHIP

# FIGHTING ROAD FATALITIES AND INJURIES WITH BETTER CRASH DATA: NEW ROAD SAFETY OBSERVATORY FOR THE ASIA-PACIFIC REGION $\checkmark$

The establishment of the first Asian-Pacific Road Safety Observatory (APRSO) was announced during the 3rd Global Ministerial Conference on Road Safety in Stockholm, in February 2020. The observatory is a joint initiative of the World Bank, FIA, ITF, UNESCAP and ADB. The APRSO receives financial support from UK Aid through the GRSF. Technical support also comes from the WHO and UNESCAP.

The launch presented the observatory's mission of supporting countries of the region in boosting their capacity to collect, analyze, and share reliable road crash data, with the objective to drastically reduce the number of road deaths and crash injuries.

THE WORLD BANK AND GRSF STAND READY TO SUPPORT COUNTRIES WITH SOUND POLICY ADVICE AND INVESTMENTS ON SAFER INFRASTRUCTURE, ENFORCEMENT, AND SAFER SPEED MANAGEMENT," SAID GUANGZHE CHEN, REGIONAL DIRECTOR FOR INFRASTRUCTURE IN SOUTH ASIA, WORLD BANK.

The establishment of the APRSO was first endorsed at the high-level road safety meeting in Singapore on March 20-21, 2019. This high-level event was hosted by the World Bank and counted with the participation of government officials from 12 Asian countries (Afghanistan, Armenia, Azerbaijan, Cambodia, Cook Islands, Fiji, Lao PDR, Kazakhstan, Maldives, Mongolia, Pakistan, Philippines), multilateral development banks, bilateral donor countries and multiple international development organizations.



FIRST WORKSHOP TOWARDS THE ESTABLISHMENT OF A ROAD SAFETY OBSERVATORY IN ASIA-PACIFIC, SINGAPORE, MARCH 20-21, 2019

It was agreed that the mission of APRSO will be to generate robust road crash data, research, evidence and analysis to enhance road safety policies in order to substantially reduce road fatalities and serious injuries across the region. There will be a range of outputs from the observatory, including improving the data and evidence base through research, a road safety database, ensuring completion of other internationally required indicators, a web portal, joint surveys, development and/or implementation of common methodologies, annual reports, etc.

The Asian Development Bank has been designated as the host of the APRSO Secretariat, and each Asia-Pacific country has been officially invited to join the observatory. Afghanistan, Azerbaijan, Cambodia, Kazakhstan, Lao PDR, Mongolia have already confirmed their membership, while Myanmar has announced its interest to be an observer for the moment.



**SECOND APRSO WORKSHOP.** BANGKOK, DECEMBER 3-4, 2019

Road safety is a key deliverable for roads and urban mobility projects by the World Bank, as now reflected in the Environmental and Social Framework (via road safety in ESS4).

GRSF has been a key advocate, influencer, trainer, and technical assistance provider in road safety for World Bank projects. Until 2019, these roles were largely *ad hoc*, based on available resources and the

level of commitment of clients and World Bank project staff. This collaboration has moved the World Bank's approach to road safety to a new paradigm: a more deeply systematic, consistent and better-informed paradigm. This was achieved through the delivery of key knowledge products, stronger policy, effective training, and collaborative work with many teams:

#### GOOD PRACTICE NOTE: ENVIRONMENT & SOCIAL FRAMEWORK FOR INVESTMENT OPERATIONS ROAD SAFETY $\checkmark$

With the development of innovative pioneering knowledge products, the Road Safety Team is improving the Bank's internal processes by supporting operational teams with vital contributions: The Good Practice Note (GPN) on Road Safety provides guidance to World Bank staff on how to support the Borrowers' efforts to improve road safety on World Bank supported projects to meet the requirements of the respective World Bank Environmental and Social Standard – ESS4.

The GPN articulates a holistic systematic approach to road safety, embodying in the 'Safe System' approach with practical directions. It delivers practical steps towards the innovative approach broadly derived from Vision Zero that sets a long-term vision for road systems to be free of deaths and debilitating injuries.

#### THE ROAD SAFETY SCREENING AND APPRAISAL TOOL $\checkmark$

The World Bank has developed the Road Safety Screening and Appraisal Tool (RSSAT) for ex-ante assessment of road engineering and design and economic analysis applicable for all road infrastructure projects in the World Bank pipeline.

During FY20, the use of RSSAT during project preparation informed design decisions that will yield to a reduction between 25%-50% of road traffic fatalities in World Bank projects compared to the original interventions planned without the use of RSSAT. This innovative tool provides opportunity for identifying optimal scope of road infrastructure interventions needed to save lives through World Bank financed transport projects. During the pilot phase in FY20, RSSAT was implemented in a set of 22 road segments selected from 6 projects. Overall,

the six projects involved a total World Bank financing of 1.6 billion USD which have now been screened through the RSSAT.

After successful trials in 2019-2020, use of the RSSAT is now required for all World Bank transport projects, and it is also recommended to be used for other operations that can have road safety impacts, such as urban and agriculture projects. The RSSAT produces a metric called **Project Safety Impact**, which is the ratio of road traffic fatalities with project to without project. It also assigns a road safety risk level for the existing situation as well as the project scenario based on number of fatalities, and finally it presents the monetized road safety costs/benefits over the analysis period of the project.

## **GRSF-WORLD BANK CROSS-SUPPORT IN FY20**

IN FY20, GRSF SUPPORTED

50+ WORLD BANK PROJECTS



### **GRSF'S ROAD SAFETY PORTFOLIO MANAGEMENT INCLUDES:**



OPERATIONAL CROSS-SUPPORT AS TEAM LEADER OR TEAM MEMBER



WORLD BANK TRANSPORT PROJECTS PIPELINE MONITORING



PEER REVIEWS OF WORLD BANK PROJECT DOCUMENTS



TESTING RSSAT ON WORLD BANK PROJECTS



ADVISING ON ROAD SAFETY ACTIVITIES OR DELIVERING CAPACITY BUILDING



LEADING WORLD BANK ROAD SAFETY SOLUTIONS AREA

### GRSF'S ONLINE ROAD SAFETY TRAINING V

The new e-learning training "Think Road Safety – Do Your Part" was launched in FY20 for World Bank Staff and Clients, with support and funding of the WB Open Learning Campus Initiative and the Government of the Republic of Korea.

The training promotes a modern systems approach to road safety and provides an introduction to road safety, impacts caused by injuries and deaths, global data on road safety, and the global plan of action for safety improvement.

The training was available in three different formats: Facilitated and Self-paced for external partners; and Self-paced for World Bank staff.

The **internal self-paced version** of this training is mandatory for all transport staff and is tailored to the specific needs of World Bank operations.

The **external self-paced version** of the training is available to policymakers, planners, researchers and

any other persons interested in road safety. The online course enables the GRSF to reach beyond World Bank staff, disseminating knowledge globally. With key internal and external partners, special training programs were also delivered in Africa, Asia, Latin America and Washington D.C.

In addition, with support and funding of the same partners (WB Open Learning Campus Initiative and the Government of the Republic of Korea) **GRSF** hosted a blended training (online + in-person training in Seoul). GRSF convened delegations from 6 countries for a week-long road safety training, led by GRSF staff and Korean experts.



# **GRSF ONLINE TRAINING IN NUMBERS**

2,085 PEOPLE ENROLLED IN THESE COURSES



738 HAVE COMPLETED THE TRAINING

THE REGIONS WITH THE HIGHEST NUMBER OF PARTICIPANTS WHO COMPLETED THE COURSE WERE:

- SUB-SAHARAN AFRICA
- SOUTH ASIA



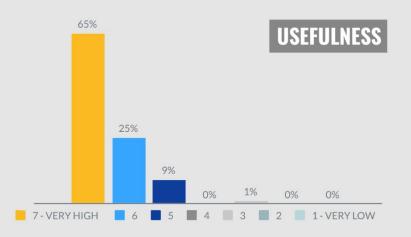


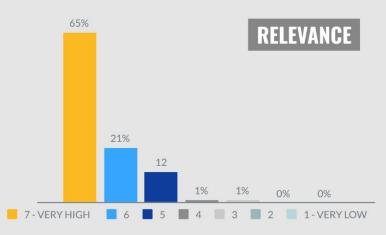
28% OF PARTICIPANTS WERE WOMEN

MOSTLY ROAD SAFETY PROFESSIONALS FROM PUBLIC AND PRIVATE SECTOR.

3,000+ DISCUSSION POSTS OVER THE FIVE-WEEK PERIOD IN THE E-DISCUSSION FORUMS

HOW THE PARTICIPANTS RATED THE OVERALL **USEFULNESS** AND **RELEVANCE** OF THE GRSF E-LEARNING TRAINING::







# QUALITY INFRASTRUCTURE INVESTMENT (QII) PARTNERSHIP

#### SUPPORTED BY THE GOVERNMENT OF JAPAN & THE WORLD BANK

With the support of the Government of Japan, under the Quality Infrastructure Investment Partnership (QII) with the World Bank, GRSF has been working on adding a series of key enhancements to the DRIVER open-source system.

During FY20, the project has supported the scaling up of the DRIVER program in the Philippines, initiating pilots in Lao and Vietnam, and extending the knowledge to other countries in the region that

showed interest. Further, through the QII grant, the GRSF has trained engineering units and academia on how to effectively collect and use crash data to design and implement road safety interventions outside of these projects. As a result, these activities are supporting sustained, long term capacity building for designing and implementing more effective and efficient road crash prevention infrastructure, further expanding the pool of potential beneficiaries.

#### **SOME HIGHLIGHTS OF DRIVER IN FY20 ARE:**

- Crash diagrams and movement codes were requested in the **Philippines** and added to DRIVER.
- DRIVER demo instances were developed in Lao PDR and Vietnam.
- A series of enhancement to DRIVER, such as iRAP star ratings layers to facilitate analysis of crashes in relation to the safety level of infrastructure, were added.

### FY20 ACTIVITIES UNDER THE QII PARTNERSHIP:

#### CLINICS ON ROAD SAFETY CRASH DATA AND DRIVER $\checkmark$

On September 23-26, 2019, GRSF organized the Road Safety Clinics on Crash Data and DRIVER at the World Bank Headquarters. The objective of these Clinics was to have one-on-one sessions with World Bank teams and Task Team Leaders (TTLs) to discuss the challenges and/or questions they had regarding crash data in their projects; and the

possibility and benefits of using DRIVER in their projects or countries they work in. In addition, the teams could learn about the regional road safety observatories – a concept strongly supported by the World Bank, and the importance of countries joining them.

#### DRIVER TRAINING IN LAO PDR 🗸

From September 9 to 16, 2019, a World Bank mission team went to Vientiane, Lao PDR to conduct a DRIVER training and computer skills training for the Ministry of Public Works and Transport (DOT, DOR, PTTI) and the Traffic Police from the Department of Traffic Police and 9 Districts in Vientiane Capital. The

main objective of the mission was to train the officials in relevant computer skills as well as encoding and analysing data in DRIVER. More specifically, the training included using Microsoft Word and Excel, creating Gmail accounts, using Google Maps and Street View, encoding Vientiane crash data from

2018 up to present, using the DRIVER mobile app and analysing these data using the DRIVER analytical tools. The participants came from agencies working on road safety such as the Department of Transport and Vientiane Traffic Police.

The activity also enabled the updating of the incident input form, preliminary discussions on road crash

data collection and reporting institutional arrangement with Department of Transport being the administrator and the Vientiane Traffic Police being the analysts, and the creation of a Terms of Reference for the hiring of a local developer who will implement local enhancements to the Lao DRIVER instance.

#### PRESENTATION AT THE PIARC 26TH WORLD ROADS CONGRESS $\sim$

On October 10, 2019, the GRSF team delivered a presentation on regional road safety observatories under the PIARC 26th World Roads Congress in Abu Dhabi. The participants learned about the importance of data-led road safety measures supported by tools for data collection and analysis, specially the Bank's DRIVER tool.





#### ROAD SAFETY ENGINEERING WORKSHOP IN PHILIPPINES $\checkmark$

On September 2-5, 2019, the GRSF was part of the Road Safety Engineering Workshop in Manila, Philippines, where DRIVER was presented as part of the "Undertaking a Road Safety Audit" session. GRSF presented on the DRIVER system and how it could support DPWH in analysing high-risk locations and prioritize safety investments.

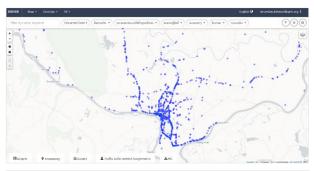


#### **ENHANCED DRIVER PLATFORM** ~

Thanks to the QII grant, the GRSF team was able to hire a web developer and bring further enhancements to the DRIVER tool, based on feedback received from counterparts or needs reported by World TTLs. The new platform will be released in late 2020, but very interesting updates were already integrated into the tool:

- Advanced Administrative Privileges.
- Support Additional Filtering by weather data and time data.
- Crash diagrams and movement codes.
- Improvement of duplicate record user interface.
- Integration with iRAP Star-Rating Data and with the iRAP Toolkit.
- Integration of *Mapillary*.
- Development of an iOS Smartphone application and update of the Android app

Based on enhancements brought to DRIVER under this grant, existing manuals and guidelines for the use of the system were updated.







# TRANSPORT GP KNOWLEDGE & LEARNING FORUM 2019 - CONNECTING THE WORLD: APPLYING OUR GLOBAL KNOWLEDGE FOR BETTER IMPACT \( \sigma \)

#### SESSION 'HOW TO USE CRASH DATA TO SAVE LIVES IN OUR CLIENT COUNTRIES'

On October 1st, 2019, GRSF organized a training session 'How to Use Crash Data to Save Lives in Our Client Countries' as part of the Transport GP Knowledge & Learning Forum 2019. The aims of this activity were to raise awareness and initiate dialogue on the importance of road safety data for building support and commitment. The training presented the GRSF newly released Country Road Safety Profiles and their best uses in dialogue with client countries. World Bank task team leaders provided examples of data use for better road safety management, demonstrated how the tools can be used to improve data quality and shared examples of GRSF projects improving quality of data and practical application of road safety data in World Bank projects.





#### TECHNICAL TRAINING ON ROAD SAFETY VISION ZERO

As part of the same Knowledge & Learning Forum, GRSF organized on October 2nd and 3rd, a technical training 'Road Safety Vision Zero', with the objective of describing the Safe System principles and to explain how Vision Zero has guided road safety in the best performing road safety countries using the example of Sweden, and discussed how such an approach can be promoted and applied to LMICs through World Bank projects. The training was led by the Safe System experts from Sweden's Vision Zero Academy with significant inputs from the GRSF Team.





#### KNOWLEDGE EXCHANGE ON ROAD SAFETY: ALIGNING LEARNING WITH DEVELOPMENT EFFECTIVENESS $\checkmark$

From December 2 to 6, 2019, the GRSF participated in the training OLC-KPOK Knowledge Exchange on Road Safety, organized by the World Bank (Open Learning Campus, Transport Global Practice, GRSF and WBG Korea Office), in collaboration with the Korea Transport Institute, the Seoul Metropolitan Government and the Global Knowledge Exchange and Development Center. In this event, GRSF convened delegations from six countries for a week-long road safety training, led by GRSF technical team and Korean experts. An interactive e-learning course on road safety was developed by GRSF in close collaboration with OLC specifically for this blended learning program.



# DELIVERING EFFECTIVE GLOBAL ROAD SAFETY SOLUTIONS IN KAZAKHSTAN AND TAJIKISTAN, AS WELL AS GLOBAL ADVOCACY AND GUIDANCE IN GERMANY AND SWEDEN $\checkmark$

From February 15 to March 6, 2020, the GRSF undertook a mission to Kazakhstan, Tajikistan, Germany and Sweden with the aim of advancing road safety agenda at the national and global levels. Here are some of the key outcomes:

In **Kazakhstan**, GRSF joined a mission on projects related to road safety including a review of a major road in challenging snow clearance conditions, and meetings with many senior Government and non-government stakeholders to explore and present road safety opportunities for Kazakhstan.

In **Tajikistan**, GRSF was part of a brief review of the road safety situation in and outside Dushanbe. This was followed by meetings with Government, that led to support for development of a road safety program adopting WB and GRSF recommendations.

In **Germany**, the GRSF team delivered a presentation to the Mobility Conference of the Executive Board of the Association of Technical Inspection Agencies (TÜV).

In **Sweden**, the GRSF was a leading participant at the 3rd Global Ministerial Conference of Road Safety. This was a vital opportunity to influence the global road safety agenda and further strengthen the profile of the World Bank and GRSF in road safety. The World Bank/GRSF delegation had many prominent roles in the sessions and plenaries, as well as through the launch of GRSF publications. A detailed report of this impactful representation can be found in the next section.

#### UNESCAP WORKSHOP ON ROAD SAFETY CAPACITY DEVELOPMENT $\checkmark$

GRSF participated in the capacity development workshop on road safety for the Southeast Asia Subregion in Manila on 27-28 August 2019. The objective of the workshop was to strengthen the capacity of the participants from the member countries in tackling the main causes of road traffic crashes, injuries and fatalities which could be achieved through active participation and support of the

delegates. Road safety policy makers from the region and international organization participants as well as stakeholders from the Philippines participated in the workshop.

#### GLOBAL ROAD SAFETY LEADERSHIP COURSE V

The Global Road Safety Leadership Course (GRSLC) is a bi-annual course coordinated and delivered by the Global Road Safety Partnership and the Johns Hopkins University's International Injury Research Unit. The course was made possible with the support of Bloomberg Philanthropies. Each course welcomes 65 participants, from partner organizations as well as key personnel from government agencies, civil society organizations and Red Cross Red Crescent National Societies who are actively engaged in road safety activities. To date 7 courses have been delivered and 439 professionals have been trained, with GRSF experts contributing with presentations on road safety leadership and infrastructure investments.



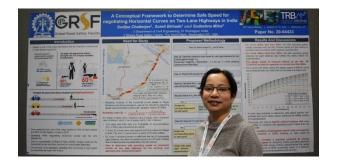
#### 2019 GRSP ASIA PACIFIC ROAD SAFETY SEMINAR V

GRSF presented in the 2019 GRSP Regional Road Safety Seminar in Kuala Lumpur, Malaysia – a high profile event of capacity building and knowledge sharing. The event focused on leadership in road safety and provided an important stage for GRSP members to promote their regional good practice and demonstrate leadership in road safety and the power of collaborative action.



#### 2020 TRANSPORTATION RESEARCH BOARD ANNUAL MEFTING V

GRSF presented in the Transportation Research Board (TRB) Annual Meeting which covered all transportation modes, with more than 5,000 presentations in nearly 800 sessions and workshops addressing topics of interest to policy makers, administrators, practitioners, researchers and representatives of government, industry and academic institutions.



#### 2020 LEADERS IN URBAN TRANSPORT PLANNING V

GRSF presented in the Leaders in Urban Transport Planning (LUTP) Course in Singapore on 10-15 February 2020. GRSF presentation "Saving People's Lives in Cities" provided examples from the BIGRS initiative and showcased a series of materials useful to improve safety by future Leaders in Urban Transport Planning.



#### **WORLD BANK SPRINGBOARD SERIES** ~

# MASTERING THE ROAD SAFETY SCREENING AND APPRAISAL TOOL (RSSAT)

The GRSF team presented this course introducing the GPN on Road Safety augmenting the new Environmental and Social Framework, followed by a detailed discussion and demonstration of RSSAT-supported project examples. The Springboard class emphasized the practical use of GPN by Task Teams and Leads and helped the TTLs to familiarize with the value of analysis using RSSAT for assuring road safety benefits of World Bank projects.

# CALCULATOR: A LIST OF TWENTY EFFECTIVE ROAD SAFETY INTERVENTIONS

There are many road safety interventions out there. However, evidence from research demonstrates that some interventions work better than others. The purpose of this Springboard class was to introduce a list of 20 Road Safety interventions that have been identified by the GRSF to be included in the Calculator software and discuss their effectiveness. This session was one of the highest attended springboard series and was moderated by Head, GRSF and presentations were delivered by GRSF team members and researchers from lowa State University.

# DATA ANALYTICS AND AI FOR EXPANDING THE EVIDENCE BASE IN ROAD SAFETY

In this interactive session, participants were able to put forward a real project to discuss the applications of the presented data and tools during the breakout group session. The session broke into small groups, each group supported by an economist, a data analyst from the Development Impact Evaluation (DIME) team and a road safety specialist from the GRSF team.

#### ADVANCING ROAD SAFETY CAPACITY BUILDING IN SOUTHEAST ASIA $\sim$

During 25 November-3 December 2019, three wrapup workshops were delivered by GRSF in Bandung, Ho Chi Minh City, and Bangkok to share with local stakeholders the most relevant BIGRS outcomes in the region; latest iRAP results; and also road safety solutions from Singapore that can be locally adapted and implemented to save lives. In total 126 participants joined these three workshops.



Additionally, in Vietnam, GRSF facilitated a technical seminar on Walking Towards Zero from an Australian perspective, on July 24, 2019 tailored for the University of Transport and Communications (UTC) staff, whereas the iRAP technical team fielded a mission in Ho Chi Minh during the week of August 19, 2019 and provided technical assistance together with analysis and reporting training for the UTC team.



A final training took place on November 28, 2020 delivered to UTC and DOT staff as part of the centre of excellence partnership. A keynote speech on the WB-GRSF engagement in road safety, including the BIGRS progress and success stories from HCMC, was delivered at the National Road Safety Conference in Vietnam on November 29, 2019, in front of 400 participants including the Minister of Transport.

#### PROMOTING DRIVER AND IRAP TRAINING IN MUMBAL $\checkmark$

Under the BIGRS, the World Bank together with Vital Strategies has been working on deploying the DRIVER system to the Mumbai Traffic Police. Geolocation of all fatal crashes that occurred between 2015 and 2018 is now available in the system. Mumbai road safety annual reports (2018-2019) were prepared using these data. An android application was also developed to facilitate recording of crashes at site; and 48 officials at both the field and executive levels have been trained in its use - through two sessions in September 2019 and January 2020.

Additionally, on August 14, 2020, GRSF organized a training workshop on iRAP for engineers of Municipal

Corporation of Greater Mumbai (MCGM), as part of the implementation support following assessment of Mumbai roads. The training was conducted jointly by World Bank and iRAP and 43 engineers from the City division of MCGM were trained on how to access and implement the iRAP recommendations to improve safety on the roads under their jurisdiction.



### OPEN DATA AND INNOVATION FOR SPEED MANAGEMENT IN SÃO PAULO, BRAZIL $\checkmark$

A Hackathon "Radartona Mobiliza Mais SP", took place on November 8, 9 and 10th, 2019 at Mobilab + São Paulo City Hall Innovation Lab. The event had the objective of providing input for speed management policies in the city of São Paulo. It had two tracks: "API Development Contest", a tool to access the database with speed data from all speed radars in the city, and a "Challenge Contest" to propose solutions for analysis of speed radar data and its interaction with other mobility data. The contestants worked for 48 hours in the hackathon to develop the projects and generate innovative solutions to improve public policies for urban mobility and road safety. The teams had access to a sample of the radar database of the city of São Paulo,

currently composed of about 900 electronic enforcement devices. The event was held by the City Hall of São Paulo in partnership with the Bloomberg Initiative for Global Road Safety and support from Vital Strategies and GRSF.



#### USING SAFETY BARRIERS TO REDUCE INJURY SEVERITY IN ROADS IN BOGOTA $\sim$

On July 24-26, 2019, under BIGRS, GRSF organized a workshop on roadside safety barriers in Bogota. The training was led by Prof. Francisco López Valdés, an expert in biomechanics from the University of Comillas in Spain and had participation from a group of engineers from the Secretariat of Mobility (SoM) and the National Road Safety Agency.

The workshop focused on how road safety barriers could mitigate the severity of motor vehicle and motorcycle crashes and included practical exercises and site visits to critical sections of Avenida Circunvalar, a high-risk road that had been rated 1 and 2 stars by iRAP and where the SoM was implementing

road safety treatments. The workshop was part of an initiative by the SoM, supported by GRSF, to develop criteria for interventions with safety barriers, allowing engineers to learn from different international practices and how they could be applied to the local context.





#### MAKING PROGRESS TOGETHER: THE 3RD GLOBAL HIGH-LEVEL CONFERENCE ON ROAD SAFETY

The 3rd Global High-Level Conference on Road Safety was held on February 19-20, 2020, in Stockholm, Sweden and offered a major opportunity for the road safety community to come together to address the road safety crisis, and to influence many key stakeholders who might not identify themselves as part of the road safety agenda. The World Bank and GRSF were actively involved in the conference and numerous side-events. Our delegation was headed by Infrastructure Vice-President Makhtar Diop, and included South Asia Regional Vice-President Hart Schafer, Global Director for Transport Guangzhe Chen, and the Head of GRSF Soames Job.

The Swedish Minister for Infrastructure, Tomas Eneroth, presented the **Stockholm Declaration**, the main outcome of the conference. **This ambitious and forward-looking statement connects road safety to the implementation of the 2030 Agenda for Sustainable Development**. The declaration noted the increased commitment of the World Bank to road safety, and the increased support for the vital work of GRSF over the decade.



NOW IS THE TIME TO TURN IDEAS, EXPERIENCES AND SHARED KNOWLEDGE AND SUCCESSES INTO ACTION. A STRONG POLITICAL COMMITMENT IS REQUIRED AT ALL LEVELS, TOGETHER WITH REGIONAL AND NATIONAL STRATEGIES, AND ROAD SAFETY ACTION PLANS AND MORE EFFECTIVE FUNDING OF ROAD SAFETY.

THE WORLD BANK AND GRSF CO-SPONSORED, CO-ORGANIZED AND HAD KEY SPEAKING ROLES IN 18 OFFICIAL HIGH-LEVEL PANELS, SESSIONS AND SIDE EVENTS IN THE 3RD GLOBAL HIGH-LEVEL CONFERENCE ON ROAD SAFETY. THIS REPRESENTATION WAS INSTRUMENTAL IN REVIEWING THE PROGRESS AND DEFINING WAYS TO ACCFIFRATE ACTION ON PROVEN STRATEGIES TO SAVE LIVES

#### GRSF INPUT TO HIGH LEVEL EVENTS ~

# HIGH-LEVEL PANEL - FINANCING SAFE AND SUSTAINABLE TRANSPORT

Presentation by Makhtar Diop

#### PARALLEL SESSION - REAPING THE BENEFITS OF SAFE SPEEDS

Presentation by Hart Schafer in the panel discussion and presentation by Soames Job

# PARALLEL SESSION - ENSURING EQUITY AND GENDER PERSPECTIVES TO ROAD SAFETY SOLUTIONS SESSION

Presentation by Karla Gonzalez Carvajal

#### PARALLEL SESSION - MANAGING ROAD SAFETY

Presentation by Veronica Raffo

# PARALLEL SESSION - ADDRESSING THE IMPLEMENTATION GAP IN ROAD SAFETY

Presentation by Tawia Addo-Ashong

# SIDE EVENT - HOW DO WE ENSURE REGIONAL BUY-IN AND DELIVERY OF WHAT'S BEEN AGREED?

Presentation by Shomik Mehndiratta

# OFFICIAL EVENT - ROAD MAP FOR SAFER VEHICLES 2030: IMPROVING THE SAFETY OF IMPORTED USED VEHICLES

Presentation by Soames Job

### SIDE EVENT - 2ND AFRICAN MINISTERIAL ROUND TABLE

Opening address by Makhtar Diop

# OFFICIAL SIDE EVENT - THE GLOBAL NETWORK FOR ROAD SAFETY LEGISLATORS

Presentation by Tawia Addo-Ashong

# OFFICIAL PRE-EVENT - ROAD SAFETY DATA AND REGIONAL ROAD SAFETY OBSERVATORIES

Presentation by Hartwig Schafer

# SIDE EVENT - INNOVATION, EMERGING MOBILITY TRENDS & THE ROLE OF THE PRIVATE SECTOR IN ROAD SAFETY

Presentation by Karla Gonzalez Carvajal & Elena Lungu

# SIDE EVENT - THE GLOBAL ROADMAP OF ACTION TOWARDS SUSTAINABLE MOBILITY

Presentation by Guangzhe Chen & Karla Gonzalez Carvajal

#### OFFICIAL PRE-EVENT IRAP INNOVATION WORKSHOPS

## Safeguards and the Catalytic Role of Development Banks in LMICs

Presentation by Guangzhe Chen

**World Bank Guidelines and LMICs Research** *Presentation by Dipan Bose* 

#### OFFICIAL PRE-EVENT - FIA HIGH LEVEL PANEL MEETING

Presentation by Hartwig Schafer, Shomik Mehndiratta, Karla Gonzalez C. & Veronica Raffo

# OFFICIAL PRE-EVENT - GLOBALIZING VISION ZERO: GENERATING SCIENTIFIC EVIDENCE FOR THE ROAD AHEAD

Presentation by Soames Job

# FROM THAT DAY OUR WORLD CRUMBLED: THE HUMAN COST OF INACTION ON ROAD SAFETY

Presentation by Soames Job

#### **BLOOMBERG PHILANTHROPIES PARTNERS MEETING**

Presentations by Soames Job, Dipan Bose & Veronica Raffo

The GRSF team also had the opportunity to meet with various ministers, delegations and other key stakeholders to thank them for their partnership and exchange ideas for new ways of collaboration. These included: Prince Michael of Kent of the United Kingdom, Baroness Vere of Norbiton, Parliamentary Under Secretary of State for the Department for Transport, Dagmawit Moges, Minister of Transport of Ethiopia, delegations from iRAP, EIB, Total Foundation, Global NCAP, Towards Zero Foundation, European Union, CITA, EASST/Fire Aid, ITF, FIA, GRSP, Independent Council for Road Safety International,

Global Alliance of Road Safety NGOs, Toyota Motors, MDB RS Working Group, and various researchers and journalists.

The World Bank's GRSF launched the *Guide for Road Safety Opportunities and Challenges: Low- and Middle-income Country Profiles* during the 3rd Global High-Level Conference on Road Safety in Stockholm. **Makhtar Diop, Guangzhe Chen and Soames Job presented the document in a press conference**, where they talked about key findings and answered questions from different international media outlets.

### MDB ROAD SAFETY WORKING GROUP $\checkmark$

GRSF's global influence also played a key role in advancing an active collaboration with the United Nations Road Safety Collaboration (UNRSC) and the MDB Road Safety Working Group, to contribute to the global commitment of significantly reducing global deaths and injuries from road traffic crashes.

By closely collaborating with MDBs, GRSF has promoted developing a more uniform road safety approach for the organizations. This impact can be seen in EBRD's adoption of a road safety safeguard which is closely modelled on the World Bank's safeguard i.e. ESS4 of the World Bank's Environmental and Social Framework. The MBD cooperation also includes an ongoing process to develop a joint statement on commitments and actions for road safety reflecting the goals of the Stockholm declaration.

Additionally, GRSF's work advancing the global road safety agenda, has made the Facility to become a valuable member for the following international committees:

- PIARC Technical Committee C1: National Road Safety Policies and Programs
- iRAP Global Policy Advisory Committee
- GRSP Executive Committee
- UNRSC Steering Committee
- Advisory Committee for the 3rd Globa Ministerial Conference on Road Safety
- Steering Committee for the 3rd Global Ministerial Conference on Road Safety

### INTERNATIONAL RECOGNITION

#### **GRSF FEATURED AT THE HOUSE OF LORDS**

GRSF was featured prominently in the March 19 session of the UK House of Lords<sup>6</sup>. The debate was initiated by Lord Robertson [represented by Lord Witty] and the discussions were appreciative of GRSF's role and importance, as well as that of the World Bank.

ETHE DEPARTMENT FOR INTERNATIONAL DEVELOPMENTI IS NOW PROVIDING MUCH-NEEDED SUPPORT TO THE WORLD BANK'S GLOBAL ROAD SAFETY FACILITIES AND, TOGETHER WITH THE DEPARTMENT OF HEALTH AND SOCIAL CARE, IS FUNDING A WORLD-LEADING ROAD SAFETY RESEARCH PROGRAMME," SAID LORD LARRY WHITTY.

### **COMMUNICATIONS IMPACT** ~

#### A DOCUMENTARY VIDEO SHOWING GRSF'S GLOBAL IMPACT

The cross-continental production of the video "GRSF in Action: Effective Delivery of Global Road Safety Solutions", highlighted GRSF's sustainable global road safety outcomes, by exploring three interlocking stories that combine human experiences with evidence-based results.

To date, the video has **934 views** and was first presented in the Transforming Transportation 2020, with over 1,200 in-person participants and 31,000 online visitors connecting to the livestream page.



47

<sup>&</sup>lt;sup>6</sup> Source: House of Lords Hansard.

Additionally, Guangzhe Chen exhibited the video in his opening remarks at the iRAP Innovation Workshop in the 3rd Global High-Level Conference on Road Safety.

This project allowed GRSF to convey to a larger audience how leaders have transformed tragedy into positive change; how in each country, changes in infrastructure, laws and policies have made roads safer; how resources from donors have already had a major impact and will continue to do so; and how world bank projects can leverage GRSF's technical expertise when financing infrastructure projects and improve road safety: benefitting individuals, countries, and development as a whole.

#### **⊘** GRSF WORKS IN CITIES - ACCRA, GHANA: IMPROVING ROAD SAFETY THROUGH SPEED MANAGEMENT

Akuba, a first-year student from West Africa Senior High School in Accra, Ghana, was walking to school when she was run over by a speeding taxi on the Madina-Adentan Highway. She lost her life. The incident galvanized the public and ignited local leaders and lawmakers to take up the cause of road safety. With the support of the BIRGS (2015-2019), pedestrian footbridges, new speed limits, crosswalks, and installation of traffic lights were completed in an effort to make roads safer in Ghana.

In Accra, GRSF under the BIGRS initiative surveyed and assessed 260 km of roads; completed 74 km of construction based on iRAP survey recommendations; trained 164 professionals on road safety; and prevented over 5,243 potential deaths and serious injuries over 20 years.

#### 

Under the Road Sector Development Project, the World Bank conducted an audit of various sections of the Nepalese road network to identify critical road safety risks and recommend solutions. Building on this work, the Global Road Safety Facility (GRSF)

supported the installation of 73,000 meters of crash barriers along some of the country's riskiest roads. It is estimated that the new barriers will save at least 3,700 lives over the next 20 years, in addition to preventing countless injuries.

#### 

Better data on road safety performance is essential when it comes to advocating for road safety, designing strategies, and implementing interventions to effectively reduce the number of road casualties .That is why the World Bank and GRSF has partnered with several institutions to work on improving road crash data across all continents through the

development of regional observatories, first in Latin America and now in Africa and Asia-Pacific. By improving road safety data and information systems and expanding the use of data for better targeting of road safety treatments, countries can achieve better monitoring, more rigorous evaluation, and more effective advocacy.

#### HIGHLIGHT STORY: GRSF @ THE ECONOMIST $\checkmark$

In the Economist's article "Globally, roads are deadlier than HIV or murder", Soames Job highlighted the importance of countries acting to make their roads safer, and how it is vital to reach this stage sooner by focusing earlier and more closely on fatal crashes. Soames explained how the answer would probably not be education nor training, but enforcement. People respond to incentives, such as traffic laws that are actually enforced.



<sup>48</sup> 

# **OVERALL GRSF ONLINE PRESENCE**

FY20 HAS BEEN AN EXTRAORDINARILY SUCCESSFUL YEAR OF GROWTH IN THE **COMMUNICATION ACTIVITIES FOR GRSF:** 



12,109 TOTAL VISITS TO THE WEBSITE IN FY20



38% MORE THAN

### **EMAIL MARKETING GROWTH (CONTACTS):**



2,201 CONTACTS



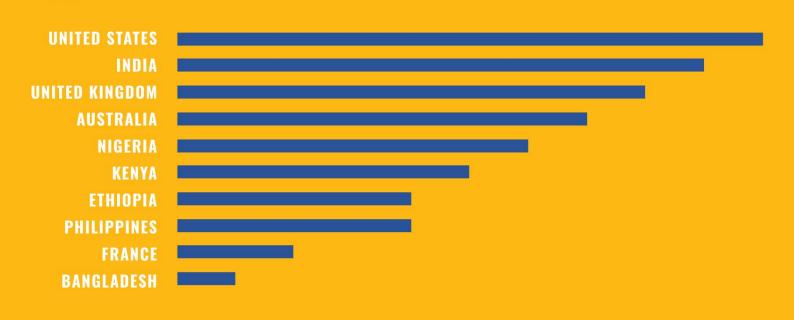
4.584+

GRSF'S KFY AUDIENCE

### TOP 3 GRSF EMAIL MARKETING CAMPAIGNS:

- 2019 WORLD DAY OF REMEMBRANCE FOR ROAD TRAFFIC VICTIMS
- GRSF SPECIAL NEWSLETTER ISSUE | THE 3RD GLOBAL MINISTERIAL CONFERENCE ON ROAD SAFETY
- GRSF'S IMPACT AT A GLANCE | EFFECTIVE DELIVERY OF GLOBAL ROAD SAFETY OUTCOMES

## GRSF'S ONLINE PRESENCE: TOP 10 COUNTRIES



#### GRSF COMMUNICATIONS ACTIVITIES AND IMPACT DURING THE STOCKHOLM CONFERENCE ightsquare

During the 3rd Global Ministerial Conference on Road Safety in Stockholm, the World Bank and GRSF presented a series of documents, multimedia content, and press releases under a holistic communications campaign that significantly increased GRSF visibility. Several GRSF and World Bank research and publication were presented in this conference:

 Country Profiles Publication; Speed Cameras **Publication: Success Stories Publication** 

### 1,531 VIEWS, DOWNLOADS AND SHARES

During the conference, GRSF was part of the "Kicking Off the Next Decade of Road Safety Action" social media campaign. This content was posted in the World Bank Transport Twitter account, and was shared for key stakeholders, donors and World Bank leadership, actively promoting GRSF evidence-based knowledge to address the road safety crisis.



- 277 interactions in social media.
- Media appearances: 43 in international media. including:

The Economic Times (India); ModernDiplomacy.eu; Business Today; Spotlight Nepal; Highways Today; Release Management; RoadSafeNews; Dawn Pakistan: BloombergQuint: DevDiscourse: India Environment Portal; The Himalayan Times; Nepal 123; Kathmandu Post: Asian Development Bank: Development Channel.

SPOTLIGHT: DAWN PAKISTAN COVERED THE COUNTRY ROAD SAFETY PROFILES REPORT USING DATA FOR THEIR ARTICLE "ROAD SECTOR NEEDS \$5.15BN INVESTMENT TO ENSURE SAFETY"

### Road sector needs \$5.15bn investment to ensure safety

By Amin Ahmed

ISLAMABAD: Pakistan needs \$5.15 billion in investment over the next decade for infrastructure development to ensure road safety, and derive economic benefits worth \$49.48bn, said a World Bank report.

According to "Road Safety Country Profiles' published by the World Bank, the investment - calculated at 0.15 per cent of the GDP annually up to 2030 - will result in reduction of 10,312 road crash fatalities per annum and reduce around 2,270,000 fatalities and serious injuries.

The profile published by the World Bank in association with Global Road Safety Facility and funded by UKAID, said that although Pakistan has a road safety strategy, the country lacks road safety strategy, the country lacks road safety strategy, the country lacks road safety strategy, the country and monitoring and evaluation of road safety strategies.

In addition, the country has not updated or issued road assessment survey data. Speeding is a major risk factor for road crash injuries, contributing to both crash risk and crash consequences. A 5pc cut in average speed can result in a 20pc reduction in number of fatal road crashes. Effective speed management measures such as establishing and enforcing speed limit laws, traffic calming through roadway design and other measures, and vehicle technology need to be widely implemented, the report says.

The South Asia region faces considerable road safety challenges. It accounts for 25pc of the world's total road crash fatalities, and rapid motorisation that is creating

greater exposure to road safety risks, the report adds.

Addressing road safety priorities in the regional trade corridors of South Asia provides opportunities for shared regional initiatives that can complement individual country road safety strategies and help accelerate their successful delivery.

Eight shared regional initiatives have been proposed including concerning crash data management and analysis systems, a regional road safety observatory, infrastructure safety design and assessment, a regional new car assessment programme, truck size and weight regulations, road policing and marketing and media campaigns, emergency medical and rehabilitation services, and injury surveillance systems.

These initiatives are adjuncted in the

ton services, and injury surveillance systems.

These initiatives are aligned with national road safety efforts throughout the region. If properly resourced and directed, they would make a major contribution to reducing the regional road safety burden and achieving wider sustainable mobility goals that address transport sector productivity, accessibility, and environmental performance, report says.

The report cautioned that poor road safety performance throughout the South Asia region signals a prevailing level of under-investment in systemic, targeted, and sustained road safety programmes.

Road safety risks within the region reflect its distinctive characteristics concerning the rate of motorisation and components.

cerning the rate of motorisation and compo-sition of its vehicle fleet. Regional road safety investment has not kept pace with the dynamic forces of development. South Asian economies are growing faster than any other region of the world.

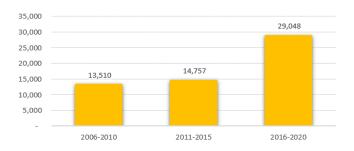


### APPENDIX I: FINANCES

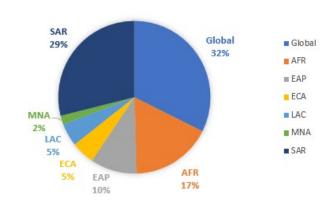
Since its inception in 2006, the GRSF has received total donor pledges of \$74 million of which \$68 million has been received and \$6 million will be received over the next two years. The GRSF program continued to expand its program in 2020: Bloomberg Philanthropies renewed its partnership with GRSF to launch the 6-year road safety initiative; GRSF welcomed a new donor Total Foundation to the Multi-Donor Trust Fund program; and CITA extended its partnership with an additional contribution.

In FY20, 56 new and continuing grant activities were supported by donor funding. The annual Call for Proposals financed by UK Aid attracted 49 proposals from all over the world and 9 proposals were competitively selected in the amount of \$1.71 million with a strong focus on road safety research in low income and DFID priority countries (Appendix II).

# GRSF EXPENDITURES (\$'000) BY FIVE YEAR PERIOD (2006-2020)



# GRSF EXPENDITURES BY REGION - FULL COST (\$'000) INCEPTION TO END-JUNE 2020



### APPENDIX II: WINNERS OF THE CALL FOR PROPOSALS FY20

### FY20 CALL FOR PROPOSALS V

GRSF recently announced the winners of the FY 2020 Call for Grant Proposals, a key mechanism of the ongoing GRSF Grant Program in selecting top quality road safety research initiatives. The **9 successful grants total \$1.71 million**, span over a large geographical area, and focus on addressing the growing crisis of road traffic deaths and injuries in low-income countries. This was made possible thanks to the financial support of our UK Aid donors (Foreign, Commonwealth & Development Office and Department

of Health and Social Care) and with the support of specialized experts from our GRSF Technical Advisory Panel.

While the process was very competitive, having received almost 50 applications requesting for \$9.98 million, GRSF would like to thank all applicants for their excellent proposals and looks forward to collaborating with the successful teams on the implementation of their research projects.

# **IN NUMBERS**

# RESULTS FROM CALL FOR PROPOSAL FY20





\$1.711M

**5 INTERNAL** (\$826K); **4 EXTERNAL** (\$885K)



### CO-FUNDING LEVERAGED BY





**CONTINUING TO INCREASE OVER LAST 3 YEARS** (FY19 183K - FY18 128K)



# FOCUS AREA OF ROAD SAFETY FOR AWARDED PROPOSALS



- POST-CRASH (13%)
  - ROAD SAFETY MANAGEMENT (29%)
- INFRASTRUCTURE SAFETY (27%)
- SPEED MANAGEMENT (15%)
  - SAFE VEHICLE (5%)
    - **ROAD SAFETY USER SAFETY (11%)**



# SHARE OF GRANTS VALUE BY REGIONS (%)



- All World Bank proposals expected to leverage road safety delivery through ongoing and FY21 projects.
- 4 proposals expected to strengthen road safety initiatives including Asia-Pacific Road Safety Observatory, UNRSC Ten Step Plan (in coordination with UN RSF) and Bloomberg work.

### FY20 PROPOSALS SELECTED FOR GRSF GRANT FUNDING $\checkmark$

PROPOSAL TITLE	APPLICANT	PROJECT OBJECTIVES
Bangladesh, Mongolia, Tajikistan, Uzbekistan, and Papua New Guinea: Crash Investigation and Reporting Assessment	ADB (WITH GRSP)	To improve the accuracy and reporting rates of crash data in the target countries. It will assess the barriers to correctly identifying contributing crash factors, high crash locations, vehicle and road factors. The research outcomes are critical to understanding the drivers of road trauma and will be disseminated directly to the Governments to improve the crash investigation and reporting systems through which informed countermeasure investments can be based.
Nigeria: Improving Road Traffic Child Safety	WB	To improve child safety in road traffic in Nigeria, including making children's journey to schools safe.
Kyrgyzstan, Tajikistan, Uzbekistan: Social and Economic Impacts of Road Traffic Injuries	WB	The objectives of this proposed regional research study are (i) based on historical and current crashes data to estimate the social-economic costs of road crashes, (ii) to fill a related knowledge and capacity gap in the countries, and (iii) by disclosing the results, to draw attention of public, governments and policy-makers to the importance of continuous focus on road safety actions.
Bangladesh: Feasibility of implementing RTI Registry and TQIP in district hospitals with high RTI burden and improvement in hospital based post-crash care.	WB	The overall goal of this study is to help reduce the morbidity and mortality from Road Traffic Injuries (RTIs) in Bangladesh by improving the quality of hospital-based trauma care. This research study will be conducted in Dhaka and four districts which have a significant RTI burden.
<b>Uganda</b> : Leveraging big data, mobile technology and ridesharing platforms for tackling the motorcycle road safety challenge	WB	The objectives are: (i) support the Government of Uganda in deploying a pilot for through positive incentives address unsafe behavior in boda-boda drivers; (ii) generate evidence based global knowledge on the use of digital technology for road safety when it comes to motorcycle ridesharing. Ridesharing companies are key players in the transportation ecosystem, and in the case of Uganda in which they rely mostly on motorcycles there is an opportunity to bring them on board as partners for road safety.
<b>Africa:</b> Mobilizing Private Financing for Road Safety in LICs in Africa through Social and Impact Investing	WB	The proposed research activity is aimed at creating the knowledge base for an adequate design of social and social impact investment instruments and vehicles for road safety. Ultimately, the goal is to increase private investment in road safety.
Tanzania: Impact Evaluation of the UNRSF Ten Step Plan for Safer Road Infrastructure in improving the safety performance of World Bank projects in Tanzania	IRAP	The research project will provide a comprehensive evaluation of the impact of the first global deployment of the UN supported Ten Step Plan for Safer Road Infrastructure in Tanzania.
Global: Research and evaluation of recent road projects and progress in meeting the Global Road Safety Performance Target 3 in eligible LMICs	IRAP	The aim of the project will be to understand progress toward, and barriers to, achieving UN Global Road Safety Performance Target 3; that by 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three star rating or better.
Africa: Motorcycle Safety by Design in African Countries: Effects of Built environment and infrastructure on the Frequency of Motorcycle-Involved Collisions	WRI	To provide evidence-based recommendations for improving roadway infrastructure design and operations in cities in Low- and Middle-Income Countries in Africa. The results will directly assist the target audience in improving motorcycle safety, while simultaneously accounting for the safety of other road users based on Safe Systems principles, through informed actions and empirically proven solutions.

### APPENDIX III: GRSF TECHNICAL ADVISORY PANEL

The credibility of the Grant program has been enhanced in FY20, with the recently created Technical Advisory Panel – a panel of external experts who undertake independent reviews of all grant proposals, significantly expanded to meet the demand of more applications.

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

- Tony Bliss Global Road Safety Expert, New Zealand
- Jeanne Breen Global Road Safety Expert, United Kingdom
- Gayle Di Pietro Global Road Safety Expert, Italy
- Raphael Grzebieta University of New South Wales, Australia
- Eric Howard Global Road Safety Expert, Australia
- Dinesh Mohan Shiv Nadar University, India
- Maria Segui-Gomez Global Road Safety Consultant, Spain
- Wojciech Suchorzewski Warsaw University of Technology, Poland
- Mouhamadou Habib Sy Cheikh Anta Diop University in Dakar, Senegal
- Geetam Tiwari Indian Institute of Technology in 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

### APPENDIX IV: PUBLICATIONS AND PAPERS FY20

#### PUBLISHED JOURNAL ARTICLES AND REPORTS $\checkmark$

Bose, D., Woodrooffe, J., Faber. J.H., Bandyopadhyay, A., Bliss, A.G., Surie, N., Erik, J.E., Srinivasan, K. (2020). <u>Delivering Road Safety in India: Leadership Priorities and Initiatives to 2030 (English)</u>. World Bank Group. Washington DC, February 14, 2020.

Burlacu, F.A. (2019). *International Road Assessment Program for Bloomberg Initiative for Global Road Safety.* Implementation Completion and Results Report. World Bank Group. Washington DC, June 25, 2020.

Burlacu, F.A., Rogers, L. (2019). <u>Speed Variation Analysis: A Case Study for Thailand's Roads</u>, available in English and Thai, peer-reviewed research report under the BIGRS, July 2019.

Burlacu, F.A., Tan, E. (2019). A brief overview on the road safety approach in Singapore, available in English, Thai, Vietnamese and Indonesia Bahasa, peer-reviewed research report under the BIGRS, Singapore, October 2019.

Global Burden of Disease Study 2017 Authors (2020). <u>Burden of injury along the development spectrum:</u> <u>associations between the Socio-demographic Index and disability-adjusted life year estimates from the Global Burden of Disease Study 2017</u>. Injury Prevention Published Online First: 08 January 2020.

Job, RFS (2020). <u>Policies and Interventions to Provide Safety for Pedestrians and Overcome the Systematic</u> Biases underlying these Failures. *Frontiers in Sustainable Cities*, 25 June 2020.

Job, RFS (2020). To sustain momentum, we must do better in two vital areas: speed management and funding of road safety. In: Can Vision Zero become a Reality? A Quick Guide to Road Safety. (pp14-15). England: PVC Group.

Job, S., Cliff, D, Fleiter, J.J., Flieger, M., & Harman, B. (2020). <u>Guide for Determining Readiness for Speed Cameras and Other Automated Enforcement</u>. Global Road Safety Facility and the Global Road Safety Partnership, Geneva, Switzerland.

Keats, N.J., Bose, D., Woodrooffe, J., Faber, J.H., Bandyopadhyay, A., Bliss, A.G., Surie, N., Nora, J.E., Srinivasan, K. (2020). <u>Road Safety in South Asia: Opportunities for Shared Regional Initiatives</u>. World Bank Group. Washington DC, February 14, 2020.

Keats, N.J., Bose, D., Woodrooffe, J., Faber, J.H., Bandyopadhyay, A., Bliss, A.G., Surie, N., Nora, J.E., Srinivasan, K. (2020). <u>Delivering Road Safety in Bangladesh: Leadership Priorities and Initiatives to 2030</u> World Bank Group. Washington DC, February 14, 2020.

Keats, N.J., Bose, D., Woodrooffe, J., Faber, J.H., Bandyopadhyay, A., Bliss, A.G., Surie, N., Nora, J.E., Srinivasan, K. (2020). <u>Delivering Road Safety in Sri Lanka: Leadership Priorities and Initiatives to 2030</u> World Bank Group. Washington DC, February 14, 2020.

Mukherjee, D., Mitra, S. (2020). <u>Comprehensive study of risk factors for fatal pedestrian crashes in urban setup in a developing country</u>, Transportation Research Record: Journal of the Transportation Research Board, pp. 1-19.

Tran, N, Nissler, W, Job, S, Avenoso, A, Adriazola-Steil, C, Bose, D, et al. (2019). <u>Global Roadmap of Action Towards Sustainable Mobility: No. 5- Safety</u>. Sustainable Mobility for All: Washington, DC. USA.

World Bank [Authors: Wambulwa, WM. & Job, S.] (2019). <u>Guide for Road Safety Opportunities and Challenges: Low- and Middle-Income Countries Country Profiles</u>. Washington, DC., USA: World Bank.

World Bank [Authors: Bennett, CR, Job, S, Sekerinska, L, Bose, D, Dahdah, S, Raffo, V, Burlacu, F.A.] <u>Good Practice Note. Environment & Social Framework for IPF Operations: Road Safety</u>. World Bank: Washington, DC. USA.

### NEWSLETTERS, VIDEOS AND OTHER PUBLICATIONS $\checkmark$

#### **GRSF NEWSLETTERS**

GRSF Newsletter Issue No.16: GRSF Spring Updates 2020

GRSF Newsletter Issue No.15: GRSF Winter Updates 2020

GRSF Newsletter Issue No.14: GRSF Fall Updates 2019

GRSF Special Newsletter Issue: The 3rd Global Ministerial Conference on Road Safety

GRSF Special Newsletter Issue: World Day of Remembrance for Road Traffic Victims 2019

GRSF Special Newsletter Issue: GRSF's Impact at a Glance - Effective Delivery of Global Road Safety Outcomes

#### **VIDEOS**

GRSF / Global Road Safety Facility in Action: Effective Delivery of Global Road Safety Solutions. (2020)

GRSF / Nepal Road Safety Barriers for Open Roads Project. (2020)

GRSF / Improving road safety through speed management in Accra. (2020)

#### OTHER PUBLICATIONS

Burlacu, F.A., Pankumhang, N. (2019). DRIVER MoU Signing Ceremony in Bangkok. *Vital Strategies newsletter for BIGRS*, December 2019.

Burlacu, FA, Bose, D, Velasquez, JM, Job, S, Mohamed, NI (2020) <u>A partnership for saving lives from road crashes: the Bloomberg Philanthropies Initiative for Global Road Safety</u>, World Bank blog published on February 18, 2020.

Burlacu, F.A., Bose, D, Velasquez, JM, Job, S, Mohamed, N.I. (2020) <u>Bloomberg Philanthropies Initiative for Global Road Safety.</u> Key outcomes from WB GRSF's engagement in BIGRS 2015-2020, Brief note published February 2020.

Job, RFS (2019). Can COVID-19 teach us something for the road safety epidemic?, World Bank blog published on April 19, 2020.

Paala, M., Burlacu, F.A., Susanj, R., Flieger, M. (2019). Joint GRSP and GRSF Crash Investigation training in Manila, Philippines. *Vital Strategies newsletter for BIGRS*, November 2019.

Smith, G., Burlacu, F.A., Dato, V. (2019). Infrastructure Safety Improvements in the Philippines. *Vital Strategies newsletter for BIGRS*, October 2019.

Velasquez, JM., Alvarez, C. (2019). Using Safety Barriers to Reduce Injury Severity in Bogotá. *Vital Strategies newsletter for BIGRS*, July 2019.

World Bank [Authors: Raffo, G., Job, S., Sultan S. (2020)] <u>Global Road Safety Facility: Leveraging Global Road Safety Successes Success Vol 2</u>. Washington, DC., USA: World Bank.

# APPENDIX V: PRESENTATIONS; TRAININGS AND EVENTS HOSTED/ARRANGED FOR ROAD SAFETY FY20

#### **PRESENTATIONS** ~

Bose, D., (2019). World Bank Group - 24 Hour Econothon. Interview: <u>The High Toll of Unsafe Roads</u>. July 25, 2020.

Bose, D., (2019) Road Safety Management: lessons on policy reforms. MoRTH Workshop on India State Support Program. October 23, 2019

Bose, D., (2020). Road Safety Consultation Workshop for National Road Safety Council. November 26, 2019, Kathmandu, Nepal

Bose, D., (2020). World Bank Guidelines and LMIC Research. Innovation Workshop 2020 - Infrastructure Innovation to Achieve the UN Targets by 2030. 3<sup>rd</sup> Global Ministerial Road Safety Conference, Stockholm, February 17, 2020.

Bose, D., (2020). Road Safety Agenda in South Asia. INF Learning Series. April 24, 2020

Burlacu, F.A., Manopiniwes, C. (2019). *Road Safety in Global Perspectives*. Presentation to the 14<sup>th</sup> Thailand Road Safety Seminar "Play your part and share the road", Bangkok, August 7-8, 2019.

Burlacu, F.A. (2019). Safer Speeds for Safer Roads. What are the right tools we can use to design roads for people? Presentation to UNESCAP Capacity Development Workshop on Road Safety for Southeast Asia Subregion. Manila, August 27-28, 2019.

Burlacu, F.A. (2019). Success stories and lessons learned from BIGRS cities and countries from East Asia. Presentation to road safety BBL on Influencing Bank Operations through Grant Activities: The Bloomberg Initiative for Global Road Safety. Washington DC, September 26, 2019.

Burlacu, F.A. (2019). Road Safety Audits and Road Safety Inspections in LICs in East Asia. Panel speaker to the workshop on Road Safety Audit and Road Safety Inspection in Low- and Middle-Income Countries under the PIARC World Roads Congress. Abu Dhabi, October 8, 2019.

Burlacu, F.A. (2019). *Importance of data-led road safety measures supported by tools for data collection and analysis – DRIVER tool.* Presentation to the workshop on regional road safety observatories under the PIARC 26<sup>th</sup> World Roads Congress. Abu Dhabi, October 10, 2019.

Burlacu, F.A. (2019). *Towards the Establishment of a National Road Safety Observatory (NRSO) for Vietnam.* Presentation to the wrap-up meeting for implementation mission of the Technical Assistance under Australia-World Bank Strategic Partnership Phase 2 (ABP2) for Vietnam. Hanoi, October 22, 2019.

Burlacu, F.A. (2019). *Towards the Establishment of the Asia-Pacific Road Safety Observatory.* Presentation to the GRSP 2019 Asia Pacific Road Safety Seminar. Kuala Lumpur, October 29, 2019.

Burlacu, F.A. (2019). Road Safety in Global Perspectives. Introduction to the new Road Safety Requirements under the latest World Bank Environmental and Social Framework (ESF). Presentation to the GRSP 2019 Asia Pacific Road Safety Seminar. Kuala Lumpur, October 30, 2019.

Burlacu, F.A. (2019). Road Safety in Global Perspectives and the Importance of Partnerships. Updates from the World Bank and the Global Road Safety Facility. Invited key-note speaker to the National Traffic Safety Conference for Vietnam, Hanoi, November 29, 2019.

Burlacu, F.A. (2019). BIGRS success stories. Online webinar, December 17, 2019.

Burlacu, F.A. (2020). *Saving lives in cities*. Invited presenter to Leaders in Urban Transport Planning course, Singapore, February 12, 2020.

Burlacu, F.A., Bose, D (2020) *Overview of the World Bank GRSF and BIGRS 2020-2025*. Presentation to BIGRS IndiaRAP webinar, June 2020.

Job, RFS (2019). Road safety developments by the World Bank and GRSF with UK Aid support. Invited Keynote Address to the International Road Safety Conference London, September 2019

Job, RFS (2019). Digitalization and Road Safety: Launching a collaboration between Ministries of Transport and Universities in Africa on Road safety data collection and analysis - use of new technologies. SSATP Annual Meeting, November 25-29, Victoria Falls, Zimbabwe.

Job, RFS (2019). Rapporteur: Pillar C- Road Safety. SSATP Annual Meeting, November 25-29, Victoria Falls, Zimbabwe.

Job, RFS (2020). Reaping the Benefits of Speed Management: Expert talk. Invited Talk to the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Job, RFS (2020). Sessions Moderator and Summary on the Business Case for Safer Roads and Investment Innovation. Official Pre-Event, iRAP Innovation Workshop, of the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Job, RFS (2020). *Evidence and Road Safety*. Invited address to the Official Pre-Event, Globalizing Vision Zero, of the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Job, RFS (2020). *Panelist.* In the Official Pre-Event, Globalizing Vision Zero, of the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Job, RFS (2020). *Improving the Safety of Imported Used Vehicles*. Invited speech the Official Pre-Event, Road Map for Safer Vehicles 2030 in the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Job, RFS (2020). *Human Capital and the Economic Burden of Crashes*. Invited talk in the Official Side-Event, The Day Our World Crumbled: The Human Cost of Inaction on Road Safety in the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Job, RFS (2020). Closing remarks in the Official Pre-Event, iRAP Innovation Workshop in the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Job, RFS (2020). *The Operation of the Speed Management Hub*. Talk to the Bloomberg Philanthropies Partners Workshop in the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Job, RFS & Turner, BM. (2020). *Implementing the Safe System: World Bank/GRSF views & interest.*Presentation to the ITF-GRSF Working Group on Implementing the Safe System, Washington DC, May 2020.

Mukherjee, D. and Mitra, S., (2020). *Pedestrian Safety Analysis of Urban Intersections in Kolkata, India Using a Combined Proactive and Reactive Approach*. Presentation in the 99th Transportation Research Board Annual Meeting, Washington DC, 2020.

Mukherjee, D. and Mitra, S., (2020). A Comprehensive Study of Risk Factors for Fatal Pedestrian Crashes in Urban Setup in a Developing Country. Presentation in the 99th Transportation Research Board Annual Meeting, Washington DC, 2020.

Chatterjee, S., Birhade, S., Mitra, S., (2020). *A Conceptual Framework to Determine Safe Speed for negotiating Horizontal Curves on Two-Lane Highways in India.* Presentation in the 99th Transportation Research Board Annual Meeting, Washington DC, 2020.

Velasquez, JM (2020). Introduction to Training on the Use of Safety Barriers to Reduce Injury Severity on the Road. Bogota, July 24-26, 2019.

Velasquez, JM (2020). *Introductory Remarks and Crash Data Analysis*. Workshop on iRAP assessments for Aricanduva BRT, Sao Paulo, Brazil, August 2019.

Velasquez, JM (2019). BIGRS success stories. Online webinar, December 19, 2019.

### TRAINING PRESENTATIONS/MODULES 🗸

Bose, D., and Dahdah, S., (2019) Road safety screening for projects and GP requirements. World Bank Transport GP Back to School Learning Series.

Bose, D., Instructor, Role of Infrastructure in Road Safety. Bloomberg Philanthropies Global Road Safety Leadership Course, Baltimore, September 17, 2019.

Bose, D., Dahdah S., Srinivasan K., (2020) Springboard Series - Mastering the Road Safety Screening and Appraisal Tool (RSSAT). World Bank. Washington D.C., USA, March 5, 2020.

Burlacu, F.A., Dato, V., Howard, E., Eichinger-Vill, E. (2019). *Draft Report on the Assessment of DPWH's Capacity in Managing Road Infrastructure Safety*. Presentation to dissemination workshop for the Department of Public Works and Highways. Manila, August 30, 2019.

Burlacu, F.A. (2019). Overview of road safety engineering tools according to international best practices: How to design roads according to their function? Presentation to road safety leadership workshop for the Department of Public Works and Highways. Manila, September 2, 2019.

Burlacu, F.A., Mustata, D. (2019). *Evidence based measures to improve road safety*. Presentation to road safety leadership workshop for the Department of Public Works and Highways. Manila, September 2, 2019.

Burlacu, F.A., Mustata, D. (2019). *Evidence based measures to improve road safety*. Presentation to road safety technical workshop for the Department of Public Works and Highways. Manila, September 3, 2019.

Burlacu, F.A., Mustata, D., Bhavsar, J. (2019). *Road network planning and road hierarchy: introduction to self-explaining roads and their impact on speed management.* Presentation to road safety technical workshop for the Department of Public Works and Highways. Manila, September 4, 2019.

Burlacu, F.A., Mustata, D., Bhavsar, J. (2019). *Safe Design Principles: Case Studies for different types of roads and road users*. Presentation to road safety technical workshop for the Department of Public Works and Highways. Manila, September 4, 2019.

Burlacu, F.A. (2019). *Importance of Partnerships in Road Safety*. Presentation to the BIGRS workshop on Adaptation and implementation of road safety international best practices in Indonesia, Bandung, November 25, 2019.

Burlacu, F.A. (2019). *Importance of Partnerships in Road Safety*. Presentation to the BIGRS workshop on Adaptation and implementation of road safety international best practices in Vietnam, Ho Chi Minh, November 27, 2019.

Burlacu, F.A. (2019). *Importance of Partnerships in Road Safety*. Presentation to the BIGRS workshop on Adaptation and implementation of road safety international best practices in Thailand, Bangkok, December 2, 2019.

Burlacu, F.A. (2019). *Brief Overview of the Road Safety Approach in Singapore*. Presentation to the BIGRS workshop on Adaptation and implementation of road safety international best practices in Thailand, Bangkok, December 2, 2019.

Burlacu, F.A. (2019). *Speed management for saving lives.* Presentation to the BIGRS workshop on Adaptation and implementation of road safety international best practices in Thailand, Bangkok, December 2, 2019.

Burlacu, F.A. (2019). *Second workshop for APRSO*. Moderator for session on country progress on crash data collection and reporting, Bangkok, December 3, 2019.

Burlacu, F.A., Howard, E., Paala, M., Zachulski, S. (2020). *Road Safety capacity assessment overview for Samoa*. Presentation to kick off workshop for GRSF grant in Samoa, Apia, February 17, 2020.

Burlacu, F.A. (2020) *Undertaking Road Safety Inspections*. Invited presenter for road safety auditor training course in Romania, June 29, 2020.

Job, RFS (2019). *Data opportunities for Road Safety: Introduction*. GRSF Road Safety Summer Workshop, World Bank, July 2019.

Job, RFS (2019). *The Importance of Data and the Africa Road Safety Observatory.* 3rd Road Safety Leadership Course, Johannesburg, July-August 2019.

Job, RFS (2019). *Pedestrian safety: The issues.* 3rd Road Safety Leadership Course, Johannesburg, July-August 2019.

Job, RFS (2019). *Speed Management and Road Safety*. 3rd Road Safety Leadership Course, Johannesburg, July-August 2019.

Job, RFS (2019). *Politics, Government and Persuasion in road safety.* Bloomberg Philanthropies Global Road Safety Leadership Course, Baltimore, September 2019.

Job, RFS (2019). *How to persuade for Road Safety Challenges*. Transport GP Learning Forum, Washington DC, October 2019.

Job, RFS & Howard, E. (2019). *Safer Vulnerable Road Users*. Presentation to the OLC-KPOK Knowledge Exchange on Road Safety, Seoul, December 2019.

Job, RFS. (2019) *Helmet and Seat belt Use and Deterrence of Illegal Behaviours*. Presentation to the OLC-KPOK Knowledge Exchange on Road Safety, Seoul, December 2019.

Job, RFS. (2019). *Safer Vehicles*. Presentation to the OLC-KPOK Knowledge Exchange on Road Safety, Seoul, December 2019.

Job, RFS & Howard, E. (2019). *Using Safety Indicators to Measure Performance and Drive Improved Performance*. Presentation to the OLC-KPOK Knowledge Exchange on Road Safety, Seoul, December 2019.

Job, RFS. (2019). *Key lessons and closing comments*. Presentation to the OLC-KPOK Knowledge Exchange on Road Safety, Seoul, December 2019.

Job, RFS (2020). *Road Safety at the World Bank.* Presentation to the IRF Fellows Meeting, Washington DC, January 2020

Job, RFS (2020). *Opening Comments on the Road Safety Calculator*. Springboard Training Series event: Calculator: A list of Twenty Effective Road Safety Intervention, World Bank, Washington DC, March 2020.

Job, RFS., Kaloustian, N., Bose, D. & Czapski, R. (2020). *ESS4 – Community health and safety ESS4: Addressing Road Safety Challenge in WB projects*. Training session for World Bank Safeguards Meeting, Washington DC, March 2020.

Mitra S., Legovini A., Milusheva S., Bedoya G., (2020) Springboard Series - Data Analytics and Al for Expanding the Evidence Base in Road Safety. World Bank. Washington D.C. USA, March 10, 2020.

Turner, BM (2020). *Application of Crash Modification Factors in projects*. Springboard Training Series event: Calculator: A list of Twenty Effective Road Safety Intervention, World Bank, Washington DC, March 2020.

Velasquez, JM (2019). *Using Crash Data and DRIVER in World Bank Projects*. Parallel session under the World Bank Transport GP Knowledge & Learning Forum 2019, Washington DC, October 1, 2019.

Velasquez, JM (2019. *Effective Road Safety Management*. Presentation to the OLC-KPOK Knowledge Exchange on Road Safety, Seoul, December 2019.

Velasquez, JM (2019). *Safe Infrastructure: Key Principles*. Presentation to the OLC-KPOK Knowledge Exchange on Road Safety, Seoul, December 2019.

Velasquez, JM (2019). *Development of Comprehensive Road Crash Reduction Infrastructure Safety Program*. Presentation to the OLC-KPOK Knowledge Exchange on Road Safety, Seoul, December 2019.

Velasquez, JM (2020). Opening Comments on Road Safety Audits and Inspections in Ecuador, Online Webinar, June 2020.

### TRAINING AND EVENTS HOSTED/ARRANGED FOR ROAD SAFETY $\sim$

Hosted by World Bank & Global Road Safety Facility, GRSP (2019). *Capacity Assessment workshop on crash investigation*. Manila, July 24, 2019.

Hosted by World Bank & Global Road Safety Facility, Secretariat of Mobility of Bogota (2019). *Training on the Use of Safety Barriers to Reduce Injury Severity on the Road.* Bogota, July 24-26, 2019.

Hosted by World Bank & Global Road Safety Facility, and University of Transport and Communications (2019). *Walking Towards Zero. Achieving Vision Zero for Pedestrians*, BIGRS workshop, Ho Chi Minh, July 25, 2019.

Hosted by Global Road Safety Facility (2019). GRSF Road Safety Summer Workshop, World Bank, July 2019.

Hosted by World Bank, Global Road Safety Facility, & iRAP (2019). *iRAP Analyst Training*. Bogota, August 9, 15, 22, 2019.

Hosted by World Bank & Global Road Safety Facility, Department of Public Works and Highways Philippines (2019). Workshop on Dissemination of Results on the Assessment of DPWH's Capacity in Managing Road Infrastructure Safety under a Reimbursable Advisory Services. Manila, August 30, 2019.

Hosted by World Bank & Global Road Safety Facility, Department of Public Works and Highways Philippines (2019). *Road safety leadership workshop* under a Reimbursable Advisory Services. Manila, September 2, 2019.

Hosted by World Bank & Global Road Safety Facility, Department of Public Works and Highways Philippines (2019). *Road safety engineering technical workshop* under a Reimbursable Advisory Services. Manila, September 3-5, 2019.

Hosted by World Bank & Global Road Safety Facility (2019). *Clinics on Road safety Crash Data and DRIVER*. Washington DC, September 23-26, 2019.

Hosted by World Bank & Global Road Safety Facility (2019). Road safety BBL on Influencing Bank Operations through Grant Activities: The Bloomberg Initiative for Global Road Safety. Washington DC, September 26, 2019.

Hosted by World Bank & Global Road Safety Facility (2019). *How to Use Crash Data to Save Lives in Our Client Countries*. Parallel session under the World Bank Transport GP Knowledge & Learning Forum 2019, Washington DC, October 1, 2019.

Hosted by World Bank & Global Road Safety Facility (2019). *Road Safety Vision Zero Training*. Event under the World Bank Transport GP Knowledge & Learning Forum 2019, Washington DC, October 3-4, 2019.

Hosted by World Bank, Global Road Safety Facility, & Municipality of Sao Paulo (2019). *Hackathon for Open Data and Innovation in Speed Management*. Sao Paulo, November 8,9, 10, 2019.

Hosted by World Bank & Global Road Safety Facility, iRAP (2019). *BIGRS workshop on Adaptation and implementation of road safety international best practices in Indonesia*, Bandung, November 25, 2019.

Hosted by World Bank & Global Road Safety Facility, iRAP and UTC (2019). *BIGRS workshop on Adaptation and implementation of road safety international best practices in Vietnam*, Ho Chi Minh, November 27, 2019.

Hosted by World Bank & Global Road Safety Facility, iRAP and University of Transport and Communications (2018). *iRAP Training for local stakeholders*, Ho Chi Minh, November 28, 2019.

Hosted by World Bank & Global Road Safety Facility, iRAP and Chulalongkorn University (2019). *BIGRS* workshop on Adaptation and implementation of road safety international best practices in Thailand, Bangkok, December 2, 2019.

Arranged by Global Road Safety Facility, Korea Program for Operational Knowledge (KPOK), & WB Open Learning Campus (OLC) (2019). The OLC-KPOK Knowledge Exchange on Road Safety, Seoul, December 2-6, 2019.

Hosted by UNESCAP and delivered together with ADB, World Bank & Global Road Safety Facility (2019). Second workshop for Asia Pacific Road Safety Observatory (APRSO). Bangkok, December 3-4, 2019.

Hosted by World Bank, Global Road Safety Facility & iRAP (2019). *BIGRS WEBINARS*, Online webinars, December 17, 2019.

Hosted by World Bank, Global Road Safety Facility (2020). *Road Safety capacity assessment overview for Samoa*. Kick off workshop for GRSF grant in Samoa, Apia, February 17, 2020.

Hosted by World Bank Open Learning Campus & Global Road Safety Facility (2020). Facilitated Online Road Safety Training, May 2020.

Hosted by World Bank, Global Road Safety Facility, iRAP & IndiaRAP (2020). *BIGRS IndiaRAP WEBINAR*, Online webinars, June 2020.

Hosted by World Bank & Global Road Safety Facility (2020). *Introduction to Road Safety Audits and Inspections in Ecuador*, Online webinar, June 2020.

Hosted by Global Road Safety Facility (2020). World Bank Springboard Series. Session: "Mastering the Road Safety Screening and Appraisal Tool (RSSAT)", March 2020.

Hosted by Global Road Safety Facility (2020). World Bank Springboard Series. Session: "Data Analytics and Al for Expanding the Evidence Base in Road Safety", March 2020.

Hosted by Global Road Safety Facility (2020). World Bank Springboard Series. Session: "Calculator: A list of Twenty Effective Road Safety Intervention", March 2020.

Hosted by World Bank & Global Road Safety Facility (2019). Transport GP Knowledge & Learning Forum 2019 - Connecting the World: Applying Our Global Knowledge for Better Impact. Session: "How to Use Crash Data to Save Lives in Our Client Countries", October 2019.

Hosted by World Bank & Global Road Safety Facility (2019). Transport GP Knowledge & Learning Forum 2019 - Connecting the World: Applying Our Global Knowledge for Better Impact. *Session: "Technical Training on Road Safety Vision Zero"*, October 2019.

Arranged by World Bank & Global Road Safety Facility, ITF, ADB and AfDB (2019) *Workshop on regional road safety observatories* under the PIARC World Roads Congress. Abu Dhabi, October 10, 2019.

Arranged by World Bank & Global Road Safety Facility, GRSP (2019). *Crash investigation technical training*. Manila, October 10-11, 2019.

Arranged by Global Road Safety Facility & WRI (2020). *Still 1.35 M Deaths Too many: What is the Road Safety Plan to 2030?* Session of Transforming Transportation 2020, World Bank, Washington DC, January 2020.

Arranged by GRSF/World Bank (2020). *Reaping the Benefits of Speed Management.* Session in the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Sponsored and Arranged jointly by GRSF/World Bank, ITF & iRAP (2020). *iRAP Innovation Workshop*. Official Pre-Event, of the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Sponsored and Arranged jointly by GRSF/World Bank, Global NCAP, CITA. *Vehicle Safety: Official Pre- Event*, of the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Sponsored and Arranged jointly by GRSF/World Bank, Global NCAP, CITA, IABD, & Towards Zero Foundation (2020). Official Pre-Event, Road Map for Safer Vehicles 2030 of the Third Global Ministerial Conference on Road Safety, Stockholm, February 2020.

Sponsored and Arranged jointly by GRSF/World Bank, ITF (2020). Observatory workshops.

### ROAD SAFETY KNOWLEDGE SUPPORT TO WORLD BANK LEADERSHIP $\checkmark$

Event Brief - Official Side Event: *High-Level Meeting on Road Safety Benchmarking and Regional Road Safety Observatories*, February 2020.

Event Brief - 6th FIA HLP Members meeting, February 2020.

Event Brief - Main Conference Plenary: *High-Level Panel: Financing Safe and Sustainable Transport Systems*, February 2020.

Event Brief - Side Event: After the Stockholm Declaration - what next? How do we ensure regional buy-in and delivery of what's been agreed? February 2020.

Event Brief - Main Conference Session 13: Reaping the Benefits of Safe Speeds, February 2020.

Event Brief - Official Side Event: *IRAP Innovation Workshop – Day1: Infrastructure Innovation to Achieve the UN Targets by 2030*, February 2020.

External Meeting Briefing Note - Meeting with Mr Md. Abdul Malek, Secretary, Administrative Wing, RTHD, Ministry of Road Transport and Bridges, GoB, February 2020.

External Meeting Briefing Note - Meeting with Mr. Basanta Kumar Nembang, Honorable Minister for Physical Infrastructure and Transport (MoPIT), Government of Nepal, February 2020.

Meeting brief - Meeting with SIDA, February 2020.

### APPENDIX VI: ACRONYMS USED

ADB Asian Development Bank

AfDB African Development Bank

ARSO African Road Safety Observatory

**AVIS Assessment of Vehicle Inspection Systems** 

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 Government of Australia** 

**DFID** Department for International Development

DHSC Department of Health & Social Care

**DIME Development Impact Evaluation** 

DPWH Department of Public Works and Highways

DRIVER Data for Road Incident Visualization, Evaluation & Reporting

EBRD European Bank for Reconstruction and Development

EC European Commission

EIB European Investment Bank

ESF Environmental and Social Framework (World Bank)

EMS Emergency Medical System

EU European Union

FIA Fédération Internationale de l'Automobile

GRSF Global Road Safety Facility

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

IsDB Islamic Development Bank

ITF International Transport Forum

LICs Low Income Countries

LMICs Low and Middle-Income Countries

MCGM Municipal Corporation of Greater Mumbai

MDBs Multilateral Development Banks

MDTF Multi-Donor Trust Fund

MOU Memorandum of Understanding

NACTO National Association of City Transportation Officials

NGOs Nongovernmental Organizations

NIHR National Institute for Health Research

NRSC National Road Safety Council

OECD Organisation for Economic Co-operation and Development

OISEVI Latin American Road Safety Observatory

PNP Philippines National Police

QII Quality Infrastructure Investment Partnership

RAS Reimbursable Advisory Services

RS GSG Road Safety Global Solutions Group

**RSO Road Safety Observatory** 

RSSAT Road Safety Screening and Appraisal Tool

RTIs Road Traffic Injuries

SDGs Sustainable Development Goals

SIDA Government of Sweden

SSATP Africa Transport Policy Program

**UN United Nations** 

UN RSTF UN Road Safety Trust Fund

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

UNIFOR University of Fortaleza

UNRSC United Nations Road Safety Collaboration

**UTC University of Transport and Communications** 

ViRAP Vietnamese Road Assessment Programme

WB World Bank

WBG World Bank Group

WHO World Health Organization

WRI World Resources Institute