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Quality Infrastructure Investment Partnership



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ANNUAL REPORT

2019





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OUR DONORS AND FUNDERS

In this Fiscal Year 2019 (FY19), the Global Road Safety Facility (GRSF) was supported by the following donors and funders:

The UK government uses UK aid to tackle the global challenges of our time including poverty and disease, mass migration, insecurity and conflict. The Department for International Development (DFID) together with the Department for Health and Social Care (DHSC) through the National Institute for Research (NIHR), are providing UK aid funding to the 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. These areas encompass the issues former New York City Mayor Michael Bloomberg and his team are most passionate about and where they can achieve the greatest good. In this light, Bloomberg became the largest single road safety donor in the world. GRSF has worked with Bloomberg on designing effective road safety programs across countries and cities, while leveraging hundreds of millions of dollars in new road safety investment.

The International Motor Vehicle Inspection Committee (CITA), is a worldwide nonprofit association involved in whole-life road vehicle compliance as one of the instruments to improve road safety and to reduce the environmental impact of road transport. Members

of CITA are both public and private organizations from around the world that take care of vehicle roadworthiness. CITA is recognized by the United Nations Economic Commission for Europe (UNECE) and the European Commission (EC) for the development of vehicle safety and environmental protection standards.

The World Bank (WB) 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. GRSF is managing a US\$400,000 grant to improve an Open Source Road Safety Platform developed by the World Bank – a platform aimed at supporting efforts to design and implement better road crash prevention infrastructure.

The Global Road Safety Partnership (GRSP), the road safety arm of the International Red Cross, is a close collaborating partner as well as a funder of GRSF work.

OUR PARTNERS

The GRSF partners with multilateral development banks (MDBs), 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, the Clinton Global Initiative, the European Commission (EC), the Fédération Internationale de l'Automobile (FIA) Foundation, the FIA High Level Panel, the Global Alliance of NGOs for Road Safety, GRSP, the Harvard School of Public Health, the Institute for Health Metrics and Evaluation (IHME), the International Association of Chiefs of Police, the International Road Assessment Programme (iRAP), the International Road Federation (IRF), the International Transport Forum (ITF), the John Hopkins Bloomberg School of Public Health, Monash University, the National Association of City Transportation Officials (NACTO), Road Traffic Injuries Research Network, the Sustainable Development Goals (SDGs), TOTAL, the U.K. National Institute for Health Research (NIHR), the Department of Health and Social Care (DHSC), the United Nations (UN), the UN Road Safety Trust Fund (UN RSTF), the United Nations Regional Economic Commissions, the World Health Organization (WHO), and the World Resources Institute (WRI).



MDBs include: the African Development Bank (AfDB), the Asian Development Bank (ADB), the Development Bank of Latin America (CAF), the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Inter-American Development Bank (IDB), the Islamic Development Bank (IsDB), and the World Bank Group (WBG).



FOREWORD



I am very pleased to present the 2019 Global Road Safety Facility Annual Report. This year, the Facility continued to have a pivotal role in providing guidance, leadership, and funding to low- and middle-income countries,

international partner organizations, academia, and NGOs for a wide range of research studies and technical support for road safety. Thanks to our multidimensional partnership with UK Aid (represented by DFID (the Department for International Development) and DHSC (the Department of Health and Social Care) Bloomberg Philanthropies, the International Committee for Vehicle Inspections (CITA), the Quality Infrastructure Investment Partnership (Government of Japan), the World Bank and other funders, the GRSF achieved many crucial fiscal road safety accomplishments in fiscal year 2019.

The continuous delivery of research, analytical and advisory support made possible by the generosity of our donors further strengthened GRSF's position as an essential global partner in providing leadership and delivery of the ambitious road safety agenda. We have been honored to work in close cooperation with global and regional partners such as the World Health Organization, the United Nations, OECD/International Transport Forum, Multilateral Development Banks, World Resources Institute, iRAP, and the Global Alliance of NGOs for Road Safety, to name just a few.

The vital global influencing and advocacy role of the GRSF and the World Bank can be seen in the numerous engagements and publications prepared during the fiscal year. These engagements involved active participation in influential global meetings and events, such as the UN Road Safety Collaboration, the FIA High Level Panel, the Transportation Research Board, and the UN Road Safety Week 2019, as well as many other global and regional events. In particular, GRSF/World Bank colleagues and I were closely involved in the development and launching of the UN Road Safety Trust Fund, which will play an

important role in the delivery of the global road safety agenda.

The strong commitment of the World Bank to road safety was confirmed in fiscal year 2019 by the new World Bank Environmental and Social Framework (ESF), which includes road safety standards for Bank operations across all sectors. To help operational teams satisfy these new requirements, the World Bank Transport Global Practice, with the support of the Facility, prepared a Good Practice Note on Road Safety in Bank Operations. The document provides WB staff with practical guidance based on risk assessments to help analyze road safety challenges, as well as the selection and implementation of appropriate road safety measures in WB interventions. A new e-learning training program for WB staff and clients will mainstream this renewed Bank policy into day-to-day operational practice. The program promotes a modern systems approach to road safety, underlining the need for result orientation adapted to specific country conditions.

The GRSF worked vigorously during the year to ensure that road safety standards are properly addressed in all World Bank road sector and urban transport loans. Thanks to the close collaboration between GRSF and the World Bank's Transport Global Practice, all fiscal year 2019 WB road sector and urban transport loans addressed road safety issues, and increasingly used road safety-related indicators for reporting results. This is a crucially effective point of influence for the Facility in collaboration with the World Bank.

I would like to express my gratitude to all donors and funders of the work of the Facility for their continuous active involvement and guidance on the strategic direction of the GRSF. I am very pleased that in my first year of leading the Transport Global Practice I have witnessed continuous growth of GRSF's global importance, credibility, influence and capacity to deliver high quality road safety outputs that contribute to leveraging significant additional funding for road safety.

Sincerely,

Guangzhe Chen
Global Director,
Transport Global Practice,
World Bank

LETTER FROM THE CHAIR



As Board Chair of the Global Road Safety Facility, I am pleased to present the 2019 Annual Report. With less than a year remaining in the UN Decade of Action on Road Safety 2011-2020, the targets set in 2011 are far from being realized.

Today, road traffic crashes are the 8th leading cause of death globally, claiming the lives of 1.35 million people and seriously injuring up to 50 million every year.

The Global Road Safety Facility goal continues to be to push the global road safety agenda of providing technical assistance and funding to countries and cities around the world.

GRSF's position to influence wider road safety vision, discourse, and programming within the World Bank provides a unique opportunity to support various donors' global road safety objectives. This year, GRSF expanded its scope of activities through the establishment of regional road safety observatories – a formal network of government representatives to share and exchange road safety data and experience in order to reduce traffic injuries across countries in the region. Building on the successful regional observatory model in Latin America, an

observatory was recently launched for African countries, with a third observatory planned for Asian countries next year.

The national level support on data management is complimented by the promotion of the World Bank-based crash data management system, Data for Road Incident Visualization, Evaluation & Reporting (DRIVER), in several cities. In urban road safety, GRSF activities supported by Bloomberg Philanthropies have yielded impressive results in terms of life saving potential and capacity building of local universities and research centers to provide governments with data to drive their road safety priorities. Bloomberg Philanthropies funding has supported the World Bank's road safety strategy in its planning, advocacy, and investments.

GRSF donors – UK Aid, Bloomberg Philanthropies, CITA, and the Quality Infrastructure Investment Partnership – 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.

The work continues and GRSF is committed to building on the activities outlined in this Annual Report.

Sincerely,

Kelly Larson
GRSF Board Chair,
and Director,
Bloomberg Philanthropies

NOTE FROM THE GRSF TEAM

2018/19 has been an impressively successful year of evolution, growth, and delivery for the Global Road Safety Facility (GRSF), based on funding and support by the World Bank, on funding from our major donors (UK Aid: DFID and DHSC, Bloomberg Philanthropies, and CITA), and on additional funding support from QII and GRSP.

Three years ago, GRSF had a five-person team (four staff and one consultant). With expanded donor support, we have grown rapidly to a team of 12 (10 staff and 2 consultants, as listed in the next page) – a team which I am immensely proud to head. Our Technical Advisory Panel has grown, as required by the increase in grant proposals to be assessed. The new UK Aid-funded Multi-Donor Trust Fund, established in October 2018, was immediately operational for continuation of the GRSF Grant Program. The Grant Program FY19 call for proposals resulted in the receipt of a record 51 applications for a record \$14.5 million. Following the competitive evaluation process involving the experts of the GRSF Technical Advisory Panel, we distributed more funding for road safety grants than ever before. We have grown in breadth and depth of influence globally and within the World Bank. Working effectively to influence Bank projects has delivered increased dividends, not only in projects in which we have been directly involved as advisors and reviewers, but also through the GRSF grants, which influence other projects, and through the Bloomberg Philanthropies program, which identified and captured synergies between this program and Bank projects, thus guiding and improving road safety delivery in 20 World Bank projects.

We have evolved in program, process, and strategic approach, based on targeting judiciously selected areas of value for road safety impact and on taking on time-sensitive opportunities. Our influence with regard to road safety within World Bank projects has evolved to be more systematic through the Bank's Environmental and Social Framework, which went into effect in October 2018, including road safety requirements. We have written a Good Practice Note for this safeguard and provided training for the road safety component of the safeguard. We have led Transport Global Practice policy reformulation to ensure a focus on road safety, including a requirement that all road and urban mobility projects use

the RSSAT (Road Safety Screening and Appraisal Tool), which we developed in partnership with other Bank staff. We have agreed upon minimum road safety requirements for urban mobility projects, with thanks to the urban mobility team for this collaboration. Our role in vehicle safety has expanded and evolved in partnership with CITA, including AVIS (Assessment of Vehicle Inspection Systems) processes. This year we also initiated the new ambitious GRSF research program agreed upon with UK Aid donors. This includes the bold aim of providing regional (continent-wide) road safety observatories covering the major regions where road safety presents challenges.

We have delivered significant projects, most often in strong partnership with the World Bank and other organizations. The Africa Road Safety Observatory was launched in June 2019 in South Africa with 40 countries participating; the first workshop of the Asia-Pacific Road Safety Observatory in Singapore was well received, heralding portents for another successful Observatory; profound influence on World Bank projects not only continues but has become more systematic and sustainable; and other MDBs are developing road safety safeguards modeled on the World Bank's wording. As a result, our global influence and reputation are increasing. We are heavily engaged in the planning for the 3rd Road Safety Ministerial Conference to be held in Stockholm in February 2020; we receive many invitations to deliver keynote addresses, deliver many systematic training programs, and host many events; and we prepare reports and publish journal papers (see the impressive list in Appendix V).

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 2019.

Sincerely,



Dr. Soames Job

Head of GRSF, and

Global Lead for Road Safety, World Bank

GRSF TEAM



Soames Job

*Global Lead
Road Safety, World Bank
and Head of GRSF*



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Egziabher Deneke

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Norma E. Silvera

Consultant, GRSF



William Majani
Wambulwa

Intern, GRSF

FY 19 GRSF BOARD MEMBERS

Kelly Larson (Chair), Director (BIGRS); Colin Gourley, Infrastructure Adviser (UK Aid/DFID); Alison MacEwen, Global Health Research Programme Manager (DHSC/NIHR); Eduard Fernandez, Executive Director (CITA); Rafael Rashid, Principal Transport Infrastructure Banker (EBRD); Shane O'Connor, Communications Adviser (FedEx); Guangzhe Chen, Global Director for Transport (World Bank).

PAST AND PRESENT DONORS TO THE GRSF

The GRSF acknowledges the support of: The government of the UK, using UK Aid (DFID and the Department of Health and Social Care (DHSC) through the National Institute for Health Research (NIHR)); the Bloomberg Philanthropies; CITA; The government of Australia (DFAT); The government of the Netherlands; The government of Sweden (SIDA); the FIA Foundation; the World Bank (Development Grant Facility and the Transport Global Practice's Global Engagement Fund), and the government of Japan through the Quality Infrastructure Investment Partnership (QII).

GRSF STRATEGIC OBJECTIVES

DEVELOPING CAPACITY FOR ROAD SAFETY SUSTAINABILITY

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



FOCUS AREAS



ROAD SAFETY RESEARCH & DEVELOPMENT

Funding and using applied research for low- and middle-income country road safety management



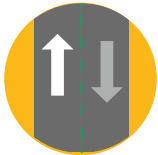
CAPACITY BUILDING

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



GLOBAL ROAD SAFETY LEADERSHIP AND MANAGEMENT

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



SAFE ROAD AND 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 AND 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

BY THE NUMBERS

Since its inception in 2006, the GRSF has received total donor pledges of **\$72 million** of which **US\$61.7 million** has been received and **\$10.3 million** will be received over the next two years. GRSF work has expanded to 78 countries, improving road safety outcomes through technical assistance and grant-funded activities. 47 percent of grant funding has gone to support external partners, such as the WHO, UN Regional Committees, AfDB, EBRD, iRAP, CAF, Deft University, the Global Alliance of NGOs for Road Safety, and many others.

ACTION & IMPACT

14,619

Kilometers of roads surveyed under the GRSF - Bloomberg Program (2015-2019)

7,890

Number of professionals trained under the GRSF - Bloomberg Program (2015-2019)

US\$40

Amount of additional funding for road safety leveraged and informed by each \$1 spent by GRSF

FY19 HIGHLIGHTS

51

The largest number of applications received for the Multi-Donor Trust Fund (MDTF) FY19 Call for Proposals

\$2.75 million

The amount in grants approved resulting in 16 proposals on road safety research

19

Number of published papers/reports

98

Total number of presentations, training/module, and workshop events



HIGHLIGHTS OF OUR WORK IN FY 19

In FY19, GRSF continued to play a key role in global road safety research, leadership, and advocacy by participating in numerous influential initiatives including the adoption of the UN Road Safety Strategy, cooperation within Sum4All, the UN Global Road Safety Collaboration, the 6th Global Meeting of NGOs for Road Safety and Road Victims, and the preparation of the 3rd Global Ministerial Conference on Road Safety planned for February 2020 in Stockholm. Active GRSF support for important regional initiatives focusing on improving quality and reliability of road safety data are worth highlighting, such as the first General Assembly for the African Road Safety Observatory, which gathered 40 African countries interested in participation, and the kick-off workshop for the Asia-Pacific Road Safety Observatory, which is planned to be launched in 2020.

Under the Multi-Donor Trust Fund (MDTF)-funded grant program, a portfolio of 26 ongoing research and development (R&D) grants was managed by the Facility, and an additional 16 proposals have been approved in FY19 with a funding of \$2.75 million. They are focused on low-income countries and are aimed at contributing to significant improvements in implementation of road safety components, and development of new analytical methods and tools that can support World Bank projects and countries in achieving sustainable road safety impact. Thanks to the UK Aid contribution to the newest GRSF MDTF, GRSF global research program planned for years 2019-21 has already been initiated.

The GRSF–Bloomberg Initiative for Global Road Safety (BIGRS) continued to produce strong outputs in close coordination with World Bank–financed projects in all 10 priority cities and 5 countries, including infrastructure improvements, extensive capacity building, and practical and results-focused knowledge exchange.

More detailed highlights of the GRSF work program are presented below.

MULTI-DONOR TRUST FUND ACTIVITIES



■ FUNDING AND COLLABORATION WITH GLOBAL PARTNERS

ASIAN DEVELOPMENT BANK (ADB)

In close cooperation with the ADB, GRSF contributed to preparatory works related to the establishment of the Asian-Pacific Road Safety Observatory. The initial workshop gathered representatives of 15 Asian and Pacific countries and paved the way for the establishment of working groups preparing details for the future Observatory. Further work on details of the Observatory is to continue in FY20 with GRSF support and in close collaboration with ADB and other regional partners.

AFRICAN DEVELOPMENT BANK (AFDB)

GRSF is supporting the AfDB in research on motorcycle safety in African countries. The objective is to identify key challenges facing the motorcycle crisis in Africa, assess international best practices, and develop sustainable improvement measures replicable across Africa.

CAF LATIN-AMERICA

The GRSF cooperation with the Development Bank of Latin-American (CAF) for work in Bolivia culminated in March 2019. In line with the SDG targets on road safety, this combined effort delivered two main components: 1) a Road Safety Plan targeting urban mobility in the cities of La Paz, Santa Cruz, and Tarija, and 2) road safety capacity building – which included speed management, road safety audits, and the upgrade of the country's national traffic law into a *Road Safety and Traffic Law* (which is in the process of being presented to congress).

CITA

Following Togo's first ever Assessment of Vehicle Inspection Systems (AVIS) conducted by CITA, with the support of the GRSF in FY18, cooperation continued in FY19 on the development of AVIS in Cameroon.

EBRD

The GRSF and EBRD continued in FY19 to prepare a toolkit on occupational safety practices for vehicle fleets. Upon completion, the toolkit will be shared among the Multilateral Development Banks (MDBs).

ITF/OECD CAMBODIA

A project to improve the national crash data system in Cambodia will result in a detailed road map for strengthening the national crash data system and to build capacity for sustainable management of crash data and its analysis.

IRAP

The GRSF continued supporting iRAP assessments along a major corridor in Vietnam connecting Cambodia and a port on the South China Sea. In addition, the use of the iRAP approach has been researched for application to rural roads in Africa. The iRAP Safe Design Tool, developed with GRSF support to assure safe design parameters of road infrastructure projects piloted in Kazakhstan, has been promoted internally for use in World Bank road projects. As required by GRSF, the tool is available for use free of charge on the iRAP website.

NORWEGIAN INSTITUTE OF PUBLIC HEALTH

GRSF has continued supporting the Norwegian Institute of Public Health and a scientific fellowship in Malawi, in collaboration with the Public Health Institute of Malawi in Lilongwe, in collecting data to improve road safety in the country along with related training and capacity-building activities.

WHO

In FY19, GRSF continued supporting WHO in the preparation and dissemination of the “Save Lives” package of manuals and guidelines for African countries, focusing on post-crash care, training, and legislation, which is to be continued in FY20.

WORLD BANK PARTNERSHIP/GRANT PROGRAM

In addition to managing a portfolio of grant-funded projects, the GRSF in cooperation with the Technical Advisory Panel chose 16 successful grant applications, out of 51 received, in response to the FY19 Call for Proposals. The Facility has also initiated its global research program supported through its new Multi-Donor Trust Fund.

More details about a sample of GRSF grant-funded activities advancing or accomplished in FY19 are provided below.

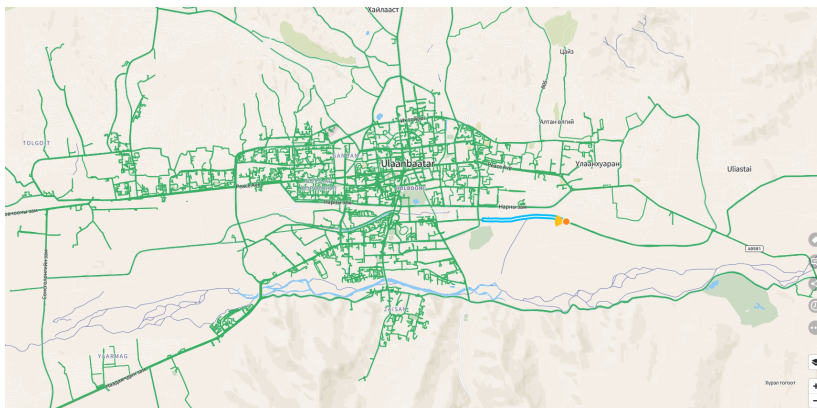
DEVELOPMENT OF MODERN ROAD SAFETY SUPPORT TOOLS

LIBERIA, MOZAMBIQUE, MONGOLIA, PAKISTAN, AND BANGLADESH

Two GRSF-funded road assessment studies in Liberia and Mozambique have resulted in the development of software from video-filming to assess road safety risk using an automated image analysis technology. A series of attributes affecting road safety risk were first selected for assessment, and an algorithm of automated image analysis that captures these attributes from video recordings was developed. The risk rating can be estimated, after automated analysis, based on the data from OpenStreetMap and video recordings. Large-scale pilot assessments have successfully been conducted in Mozambique and Liberia over roadways that total 500km in each country. The software tools used for analysis are open-source and available for anyone to use. Dissemination and training seminars on the tools were organized in these two countries, equipping professionals with skills necessary to fully conduct road safety risk assessment surveys. In both countries, GRSF also addressed the need for an appropriate set of tools and data to assess the broad range of nonmotorized transport (NMT) infrastructure impacts and how they are factored in safety risk assessments, especially for urban settings where NMT has a high modal share.

In Ulaanbaatar, Mongolia, a road safety risk assessment for the city was conducted that involved reviewing existing crash/black spot maps to inform future road safety improvements, along with collection and coding of road attributes and identification of key factors influencing the likelihood of a crash and its severity. Furthermore, image mapping of the city’s entire paved road network of 1,097 km was conducted and successfully mapped. From this

mapping, sections of roads that lack road infrastructure attributes essential for road safety, such as traffic signs, road markings and street lighting can be visualized in corresponding color-codes to develop a road safety risk map for the city. The relevant information in the geo-referenced municipal road infrastructure asset inventory will provide inputs prioritizing road repair and maintenance works in the city, taking account of safety aspects leading to a minimization of road safety risks. The technical assistance helped the municipal road development authority in allocating its scarce resources to cost-effective measures, such as improving traffic signs and markings, and addressing the road infrastructure deficiencies in the high-risk road sections (for example, black spots) of the city network.



Geo-referenced municipal road network in Ulaanbaatar, Mongolia

The GRSF-financed technical assistance in Ulaanbaatar also supported capacity building in the areas of road safety engineering and road safety audits. A series of workshops and onsite inspections were organized for the municipal road development authority and transport police. This initiative is bringing a shift in perspective whereby the roles of road engineers and planners in making the road infrastructure safer for the users are equally as emphasized as are those of the traffic police.

In Bangladesh, GRSF supported the enhancement of pedestrian infrastructure in Dhaka through collaboration with an on-going World Bank lending project. A total of 2.7km of road sections were selected and enhanced with pedestrian facilities.

ROAD SAFETY MANAGEMENT AND CAPACITY BUILDING

BANGLADESH, TANZANIA, MADAGASCAR, SAO TOME PRINCIPE, AND NEPAL

GRSF has continued to provide support in several analytical projects that conduct broad or focused management capacity reviews. These resulted in practical recommendations for improvements, road safety strategies, and action plans that identify key actions, with timelines and resources needed, together with capacity building for their implementation.

In Nepal, for example, GRSF has supported the National Road Safety Council (NRSC) in the implementation of the Nepal Road Safety Action Plan (NRSAP, 2013-20) with the objective to stabilize and then reduce traffic crashes by half in line with the goals of the UN SDGs. This involved a capacity assessment to identify technical, financial, and other resource gaps that may inhibit the implementation of the Action Plan. It included a revision of the Action Plan in line with current priorities, best practices, costs, and also the development of legal instruments and budgets, including identification of funding sources for short- and medium-term interventions.



Nepal field visit by the World Bank/GRSF team

Capacity assessments have also been conducted in Bangladesh with the aim of developing a roadmap to reform the overall road safety framework, including institutional arrangements to address road safety at both national and local levels, and the preparation of project concept notes for priority initiatives.

In Tanzania, secondary cities with the highest modal share of nonmotorized transport users have an opportunity to implement a new vision based on safe, clean, and efficient use of public space and streets. GRSF provided support in the delivery of a road safety training program targeting secondary cities to improve capacity to manage safe and sustainable mobility. A seminar was conducted that included topics of urban mobility, road safety, public design, and citizen engagement, and the trainings provided inputs in the formulation of urban design strategies and detailed plans for a pilot area in Arusha.

IMPROVING QUALITY OF ROAD SAFETY IMPACT ASSESSMENT

ETHIOPIA, LIBERIA, KENYA, AND MALAWI

The Facility has continued to support research activities and projects. In Liberia and Ethiopia, GRSF is supporting impact evaluations in order to build evidence on which road safety interventions are most effective and to inform policy decisions, such as decisions to scale-up or scale-down programs.

As part of the cooperation between GRSF and ieConnect for Impact, which is a dedicated grant-funded initiative implemented as part of Development Impact Evaluation (DIME) program by the WB Development Research Group, several grants are supporting research activities focusing on improving impact evaluation of road safety results from transport projects. These activities include research possibilities for identifying innovative ways of gathering and analyzing data to measure results and the impact of road safety interventions across all strategic road safety pillars, leading to improvements in quality of assessments. The following grant-funded projects were continued in FY19:

- Use of administrative data for analysis of road traffic crashes in Ethiopia
- Data system incorporating artificial intelligence and crowdsourcing to identify crash hotspots in Nairobi
- Trauma registries to support cross-sectoral policies for road traffic crashes in Malawi
- Impact evaluation of integrated urban corridor development in Addis Ababa

SAFER INTER-URBAN AND RURAL ROADS

VIETNAM, BURKINA FASO, INDIA

All new road infrastructure loan projects at the World Bank for improving rural and inter-urban roads are shared with the GRSF team to ensure that all road safety aspects are addressed, and that relevant road safety indicators are used to monitor projects' outcomes and impact.

In Vietnam, GRSF is addressing road safety issues in three sections of the 153km National Highway 19 (NH19). An iRAP-detailed design review was conducted together with a Road Safety Audit on NH19 to inform the Ministry of Transport's proactive management of safety improvements on NH19 by identifying risks associated with road safety deficiencies. An assessment of impacts of motorcycle lanes in Vietnam was also successfully conducted to inform the update of the draft manual for motorcycle lane design and specifications, taking into account international good practices.

GRSF also supported the implementation of the Strategy and Road Safety Action Plan for the state of Bihar, India, to improve safety management on its rural roads. A systematic and detailed road safety assessment of the state's rural roads was undertaken as part of Bihar's Road Safety Action Plan preparation, which is based on the Safe System approach and was then customized for its rural roads. The plan has been adopted by the government of



NH19 project site visit in Vietnam

Bihar, and its implementation started with the requirement that all rural roads must include road safety engineering measures as part of the road design. A practical field guide on road safety audits of rural road projects in Bihar has also been prepared and will be used to guide professionals in undertaking road safety inspections on existing rural roads and in preparation of road infrastructure safety improvement schemes.

POST-CRASH RESPONSE AND TRAUMA CARE

MALAWI AND TANZANIA

A reliable and responsive Emergency Medical System (EMS) is essential in delivering post-crash trauma care. The development of Pan-African options for scaling-up post-crash responses is currently ongoing with pilot projects in Malawi and Tanzania along the North-South corridor. The pilot projects have enhanced the capacity of Tanzania and Malawi to introduce EMS through the training of community first-responders, EMS providers and in-hospital trauma care providers, the procurement of EMS equipment and ambulances, and the setting up of an exclusive toll-free 118 phone number as part of the EMS communication systems. In parallel, reviews and assessments of standards and regulations of EMS services, including communication and training standards, across Sub-Saharan Africa are ongoing. These will aid in the identification of opportunities for regional collaboration for a broader introduction of post-crash response services across Sub-Saharan Africa. A review of the EMS financing options is also underway to inform the development of sustainability and the creation of financing plans for the scale-up of the pilot.

In Malawi, a GRSF grant supported the improvement of the quality of crash data collection. Trauma registries in 10 health facilities were set up and data clerks were trained on the collection of trauma data. Based on the trauma data, road traffic crash cases can be analyzed, together with identification of detailed information on the location, vehicles involved, and the type of crash. The data can also identify the road-user groups that are most affected, and inform policies that target the most vulnerable populations. The strong dataset collected over time in Malawi will also provide a baseline for impact evaluation of the new EMS pilot.



EMS call center in Lilongwe, Malawi

SUPPORT TO ROAD SAFETY CRASH AND OTHER DATA SYSTEMS

AFRICA REGION, ASIA-PACIFIC REGION, AND IVORY COAST

The Africa Road Safety Observatory (ARSO) is a unique initiative supported by several partners such as the GRSF (with financial support from UK Aid), the African Union Commission, the Africa Transport Policy Program (SSATP), ITF, FIA, Safer Africa, the FIA High Level Panel, the United Nations Economic Commission for Africa (UNECA), the EU, AfDB, and the WBG, among others. After extensive preparation and three rounds of specialized workshops among African countries, facilitated and supported by international partners, including GRSF, the ARSO was launched in June 2019 in Durban, South Africa. 40 countries participated in this first Annual Assembly meeting and most of them supported the Observatory and had already initiated the process of joining it. The ARSO aims to foster national, international, and continental cooperation to generate robust road safety data and to influence road safety policies in African Union Member Countries. It is also expected to improve estimates of road traffic fatalities and to expand the sharing of experiences and knowledge among African countries. A governance structure for the Observatory has already been adopted and an initial work-plan for the period 2019-21 developed. As part of the 2019-20 Work Plan, participating countries agreed to prioritize actions on the improvement of tools and methodologies for the collection of crash data and other safety-related data, and on monitoring intermediate safety performance indicators. A common road safety database for the Observatory would be created and updated by participating countries. Through the Observatory, topics of joint interest (such as motorcycle safety) would be analyzed and periodical reports on road safety will be published.

Following the launch of the African Observatory, and jointly with ADB, OECD/ITF and UN partners, the GRSF has also facilitated initial meetings between the Asian and the Pacific countries promoting the idea of creating an Asia-Pacific Road Safety Observatory. Several countries have declared their commitment to advance cooperation in this area, and preparatory work is ongoing for FY20.

Similarly, the Facility is continuing its support for improvements in crash data collection and management systems in the Philippines, Lao PDR and Ivory Coast based on its platform, DRIVER. These national level developments are expected to contribute to better quality of data, which in turn will add to the credibility and reliability of the planned observatory.

GRSF RESEARCH DEVELOPMENT AND ADVISORY PROGRAM

In FY19, and with funding support from the UK Aid, the GRSF decided to spearhead an ambitious research program on road safety. The program will comprise a total of eight research projects. The aim of the program is to tackle cutting edge road safety topics such as identification of innovative use of Big Data for road safety, exploring and demonstrating techniques of safety analytics using alternative sources of data, and the use of police and health data to refine methods of road deaths and disability estimation. The program will also include the development of software to assess the effectiveness of road safety interventions as well as the development of several manuals/guidance documents to address the road safety challenges of developing countries ranging from planning, design, policy, communications, and implementation with a specific focus on data and evidence-based findings.



BLOOMBERG INITIATIVE FOR GLOBAL ROAD SAFETY ACTIVITIES

The GRSF at the World Bank is pleased to be a core partner in, and to report on the progress under, the initiative during 2019 aimed at producing targeted results under the Bloomberg Philanthropies Initiative for Global Road Safety (2015-2019). During the fifth year of the Initiative, GRSF has successfully delivered the targeted milestones and

**Bloomberg
Philanthropies**

also additionally scaled-up the implementation of BIGRS-funded recommendations, secured institutional capacity to ensure continuity of the programs, and used the technical scope of BIGRS activities to leverage and influence road safety components in large infrastructure projects, primarily the ones financed by the World Bank. It is noteworthy to highlight that the outcome of the above achievements will have a lasting impact not only on the live-saving metrics, as they are measured today, but on the broader sustainability of the road safety agenda in the coming years. The World Bank and GRSF see their primary role and comparative advantage in the road safety arena in terms of influencing decision makers and legislators to invest in a technically sound, impactful, and sustainable manner so that the returns can be reaped in the longer time horizon. In that context, the achievements under the Initiative have been successfully made in the right direction. With sustained efforts in the critical areas, these achievements are having a meaningful impact for the 10 cities and 5 countries selected under the program.

CITY LEVEL

ACCRA, ADDIS ABABA, BANDUNG, BANGKOK, BOGOTA, FORTALEZA, HO CHI MINH CITY, MUMBAI, SÃO PAULO, AND SHANGHAI

The breadth of GRSF work during this year included working on infrastructure safety, particularly (i) on implementation, advice, and facilitation for national and municipal governments, and (ii) support for DRIVER implementation and speed management advocacy for both BIGRS cities/countries as well as their partners. DRIVER introduction workshops and presentations have been delivered in six cities; a public interface based on DRIVER was implemented in São Paulo; crash data from 2015-19 are being actively entered into DRIVER in Mumbai; and deployment is ongoing in Fortaleza.

Discussions on the best way forward to pilot DRIVER are ongoing in Mumbai, and demo versions are available for Bangkok and Ho Chi Minh City. To date, GRSF has conducted iRAP baseline assessments of more than 2,200km of roads in all ten Bloomberg cities. Road designs have been star rated in Addis Ababa, Bandung, Bangkok, Mumbai, Ho Chi Minh City, and São Paulo, and post-improvement evaluations have been performed in Accra (urgent repairs to neglected street lighting), Bangkok (pedestrian and median facilities), Bogota (improvement of bicycling and pedestrian facilities), Fortaleza (speed limit reductions, improved pedestrian crossings, and bicycle infrastructure), and Shanghai (bicycle and pedestrian improvements). Scenario testing, such as the likely impact on speed limit changes, have been performed in half of the cities. In total, design, post-improvement evaluations and scenario testing in cities have been performed for more than 1,000km of roads. As a positive outcome of the work, recommendations have been implemented on 350km of roads in nine cities.



Improvement of bicycle lane in Bogota

Local organizations in the cities, trained and supported by this program, are now capable of undertaking iRAP assessments and providing training support: Labtrans (based in the Federal University of Santa Catarina in Brazil) is supporting São Paulo and Fortaleza; the ChinaRAP team is supporting Shanghai and national level work in China; Chulalongkorn University, now ThaiRAP, is supporting Bangkok and national level work in Thailand; and the Asia Injury Prevention (AIP) Foundation in Vietnam is supporting Ho Chi Minh City with Safe Roads for Schools (SR4S) assessments, and with ongoing capacity building for the University of Transport and Communications (UTC). Another important milestone has been the signing of a memorandum between Chulalongkorn University and iRAP to develop a Center of Excellence for infrastructure safety in Thailand. Finally, in Tanzania, supplier capacity for iRAP assessments is being improved through training in four local institutions, with plans for their iRAP accreditation in place.



Road improvement in Ho Chi Minh City

COUNTRY LEVEL

CHINA, INDIA, PHILIPPINES, TANZANIA, AND THAILAND

At the country level, iRAP baseline assessments of almost 12,335km of existing roads have been conducted in the countries, with network lengths ranging from 843km in the Philippines to more than 5,500km in India. The network for assessment has been strategically selected with identification of best opportunities for improvement and availability of funding. Road designs have been star rated in China, India, the Philippines, Thailand, and Tanzania, and post-improvement design or scenario star rating has been done in China, India, Philippines, and Tanzania. In addition, the DRIVER platform is being scaled-up to the national level through regional workshops in the Philippines, and a pilot crash investigation training, together with the Global Road Safety Partnership, is being prepared for the Philippines National Police and Local Government Units under the Department of Transport.

ENGAGEMENT WITH DRIVER – DATA FOR ROAD INCIDENT VISUALIZATION, EVALUATION AND REPORTING

CITIES: BANDUNG, BANGKOK, FORTALEZA, HO CHI MINH CITY, MUMBAI, AND SÃO PAULO;

COUNTRIES: VIETNAM, THAILAND, AND THE PHILIPPINES

Beginning in 2017, GRSF, along with other BIGRS partners, has been supporting the management of crash data through the introduction or use of the DRIVER platform, as requested in six of the ten cities (Bandung, Bangkok, Fortaleza, Ho Chi Minh City, Mumbai, and São Paulo). Introductory workshops have been held in those six cities, and some of them have taken further steps to improve their crash databases. Those workshops highlighted the need to prepare demos and pilots to allow cities to provide hands-on understanding of DRIVER.

Despite some challenges, progress in piloting or implementation has been achieved in several cities. Mumbai has been using DRIVER for their crash data management and analysis, and now has four years of fatal crash data available on DRIVER. A detailed plan for piloting is being discussed with the traffic police. It is aimed at addressing relevant concerns by the city on the cost implications of implementing DRIVER. In Fortaleza, local customization of DRIVER is taking place in partnership with the University of Fortaleza (Unifor). As part of the customization, Unifor has been engaging with end users of DRIVER to involve them early on in the process and is currently working on the protocols to integrate key data sources for the database and minimize manual data input. São Paulo launched in 2018 a platform based on DRIVER, under the name of VIDA SEGURA, to share crash data with the public. Last February, a new feature was added to enable communities to propose locations for new speed cameras

on the DRIVER map. In Ho Chi Minh and Bangkok, a local DRIVER platform was created, and manuals were translated into national languages. Lastly, GRSF assisted the Department of Transportation (DOTr) and the Philippines National Police (PNP) in leading sessions of DRIVER training for the police in different regions of the country. Over 700 officers from the PNP, along with the DOTr, the Department of Public Works and Highways (DPWH), the Department of Interior, and local government, were trained in the use of DRIVER. For these events, the GRSF/World Bank team coordinated with GRSP and WHO grantees to maximize the impact of their efforts.



DRIVER training in the Philippines

INFLUENCING WORLD BANK PROJECTS

As part of the partnership, the Facility is leveraging road safety commitments for Bank-financed projects by capturing synergies from the Bloomberg-funded technical assistance and training activities. This support includes network-level evaluations of the safety of existing road infrastructure and provides guidance on investment options for safer designs as well as enhanced road safety management capacity of relevant institutions. Twenty World Bank projects are benefiting from Bloomberg-financed activities and are improving road safety, with an impact on more than 10,000km of roads. As a result of this strong engagement, further road safety technical advisory services and assistance were requested by government institutions in the Philippines, Thailand, and Colombia. For example, in the Philippines, a US\$1.8 million Reimbursable Advisory Services (RAS) dedicated to road safety was signed with the DPWH, as a result of the team's strong engagement and support through the BIGRS.





FY19 TRAININGS AND WORKSHOPS HIGHLIGHTS

GLOBAL ROAD SAFETY TRAINING

BALTIMORE, JULY 22- AUG 3, 2018 AND BUENOS AIRES, MARCH 12-22, 2019

The GRSF participated as technical faculty at the regional and annual Global Road Safety Leadership Course funded by the Bloomberg Philanthropies. Two technical sessions on the topics of “The Role of Infrastructure in Road Safety” and “Financing and Funding for Road Safety” were prepared and presented by the GRSF team. The course, being a global benchmark training on road safety management, attracted more than 60 participants from more than 20 countries including government officials, NGOs, academia and staff associated with the BIGRS.

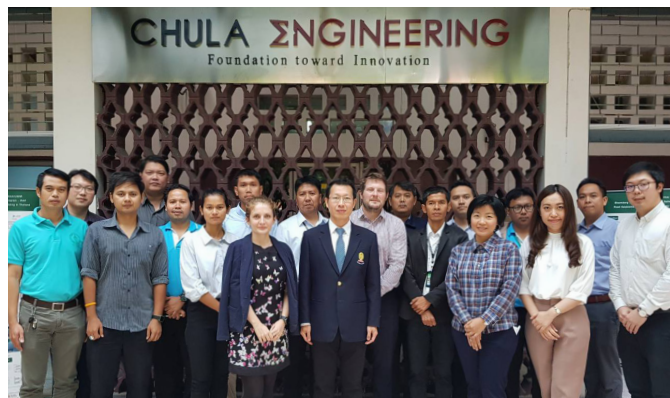


Soames Job delivering a road safety training in Baltimore, July 22, 2018

CREATING A ROAD SAFETY FOCAL TEAM UNDER TTD THROUGH IRAP TRAININGS

BANGKOK, AUG. 22-23, 2018

In an effort to create a road safety focal team in Bangkok, the GRSF and iRAP delivered an iRAP training to relevant city officials from the Traffic and Transportation Department (TTD), Bangkok Metropolitan Administration (BMA), and the Department of Rural Roads. The training, which was facilitated by the Chulalongkorn University’s Faculty of Engineering, brought together a selected team of 15 TTD officers to be trained in surveying, coding, star rating, and on the development of a Safer Roads Investment Plan for a selected 150km of street network in high districts 7-12 in Bangkok.



IRAP TRAINING

MUMBAI, AUG. 23, 2018

The GRSF along with WRI and NACTO held a joint training on iRAP where 21 officials from the Municipal Corporation of Greater Mumbai (MCGM) participated. Hands-on assessments were conducted on segments



of the demonstration corridor under the BIGRS Safer Streets/Safer infrastructure Initiative (LBS Marg) and on three high risk roads – NS Road, PD Mello Road and Sion-Panvel Highway. Following the mission, GRSF and its partners provided detailed recommendations to MCGM to improve road safety in five additional high-risk city roads. If the iRAP recommendations are fully implemented on all eight of these high-risk roads, they could improve the road safety outcomes by 25 percent.

WORKSHOP ON THE ECONOMIC IMPACT OF ROAD TRAFFIC INJURIES

BEIJING, SINGAPORE, MANILA, BANGKOK, SEPT. 14-21, 2018

During the weeks of September 14-21, 2018, the GRSF team shared the results of a flagship study “The High Toll of Traffic Injuries: Unacceptable and Preventable” in a series of workshops given in Beijing, Singapore, Manila, and Bangkok, bringing together more than 100 participants from the transport, health, and academic sectors. The study – which evaluated the economic and well-being impact of road traffic injuries (RTIs) in China, India, Philippines, Tanzania, and Thailand – was combined with practical road safety improvement examples from the BIGRS from Bangkok, Ho Chi Minh City, and Bandung. Participants, including representatives from China’s Center for Disease Control, congratulated the effort to bring in the health sector and to elevate road safety to a public health priority.



IRAP SURVEY AND CODER TRAINING WORKSHOP FOR UTC

HO CHI MINH CITY, OCT. 23-27, 2018

During this week-long workshop, the GRSF and iRAP conducted a training workshop on survey and coding designed to improve the capacity within the Vietnamese University of Transportation and Communications (UTC) and other local project partners to undertake iRAP assessments. The workshop included sessions on the iRAP coding manual, quality assurance, road attribute coding, traffic (including pedestrian and bicycle) peak flow data collection, crash data, star rating, and the development of Safer Roads Investment Plans and iRAP’s online software VIDA’s creator’s



account. The training was one of a series of capacity-building activities planned for UTC in order to create a national iRAP Centre of Excellence and potentially a Vietnamese Road Assessment Programme (or ViRAP).

TRAINING IN INTEGRATED ROAD ASSET MANAGEMENT AND ROAD SAFETY

ADDIS ABABA, NOV. 21, 2018

Following an agreement with the Addis Ababa City Roads Authority (AACRA) regarding integration of road asset maintenance and road safety processes, training and demonstration (using a road pavement condition survey vehicle) began in November 2018. The city plans to accredit maintenance engineers from Addis Ababa's five directorates as part of working to mainstream this process within the organization. The final output will be the development of a formal guide that will ensure institutionalization of practices that involve integration of road asset management and road safety assessment.



Training in road safety and road maintenance management system (RMMS), Nov. 21, 2018

VISION ZERO & INNOVATION WORKSHOP

WASHINGTON, D.C., NOVEMBER 28-29, 2018

The GRSF participated in an intensive two-day interactive workshop, organized by the IDB, iRAP and WRI, that brought together a broad range of road safety actors and practitioners such as the Pan American Health Organization (PAHO); Vision Zero Network; the Bloomberg Philanthropies; UN Habitat, and NACTO, as well as the US' Director of the Office of Safety Integration, Michael Griffith; Mexico City's former Undersecretary of Mobility, Laura Ballesteros; and Google Street View's Chief Safety Innovation Officer, Mark Rosekind. Participants shared lessons learned and experiences



Panel discussion with GRSF Soames Job, Washington, D.C., Nov. 29, 2018

from around the world and discussed steps to scale up success and to achieve the vision zero and the UN road safety targets through innovative solutions – such as the establishment of a Safer Cities Consortium; the use of Big Data and road safety innovation partnerships (i.e. autonomous mobility and Google's role in road safety action); star rating for designs and virtual reality; policy and health considerations, and more.

BOGOTA PARTNERS' MEETING – BLOOMBERG PHILANTHROPIES

BOGOTA, MARCH 6 – 8, 2019

GRSF participated in the Bloomberg Philanthropies Partner's Meeting arranged by Bogota's Secretaría de Movilidad early this year. As part of the Bloomberg Initiative, Dipan Bose gave a presentation on the crash data system to the Secretary of Mobility participants. Together with the Colombia transport team, the GRSF also delivered a presentation to the National Agency for Road Safety on the recent work done at the World Bank on the development of the Road Safety Screening and Appraisal Tool (RSSAT). The objective of the training, as requested by the agency, was to understand the Bank's approach on infrastructure safety management and on the tools that can be utilized under the broader context of the road safety Reimbursable Advisory Services (RAS) currently under discussion. GRSF attended a press conference, and a briefing meeting was arranged with Mayor Peñalosa where every initiative partner shared their experience under the last four years of the program. At the press conference, an announcement was made of the addition of two new corridors (Avenida Ciudad de Quito and Avenida Primero de Mayo) which would have a reduced 50 km/h speed limit (from 60 km/h).



Dipan Bose presenting on the crash data system to the Secretary of Mobility participants, March 6, 2019

ROAD SAFETY ENGINEERING TRAINING

MANILA AND VIENTIANE, APRIL 23 – MAY 3, 2019

With the support of QII and BIGRS, the GRSF conducted a set of road safety engineering workshops in the cities of Manila (Philippines) and Vientiane (Lao PDR) for government officials from various transport-related agencies, the police, and academia. The aim was to train officials from agencies in both governments in planning, designing, implementing, and monitoring interventions in road safety. More than 100 participants attended the 3-day training in Manila, and the 2-day training in Vientiane, which focused on various topics, including the Safe System approach, black spots management, data collection, as well as practical exercises on DRIVER and iRAP assessments, road designs, speed management, and construction site management.



The workshops highlighted the challenges faced by the respective government agencies in implementing road safety, discussed possible solutions, and shared best practices.



FY19 EVENTS AND MEETINGS HIGHLIGHTS

SIGNING OF AN IRAP CENTRE OF EXCELLENCE PARTNERSHIP AGREEMENT

BANGKOK, NOV. 7, 2018

In Thailand, under the Bloomberg Initiative and with support from the GRSF, a partnership was established between iRAP and Chulalongkorn University, through a series of projects which led to the assessments of more than 1100km of high-risk roads during 2015-19. In recognition of the University's impressive technical work, iRAP and Chulalongkorn University signed an iRAP Centre of Excellence partnership agreement in November 2018. The Centre will guarantee the training and accreditation of local experts and ensure that the application of road assessments across Thailand are completed as expected under the Global Program's standards. Moreover, as part of this agreement, a Thai Road Assessment Programme (ThaiRAP) will be developed as a self-governed, local-led program in partnership with other key agencies, including the Ministry of Transport, the Department of Highways, the Department of Rural Roads, the Office of Transport and Traffic Policy and Planning, and the University.



ThaiRAP Launch in Bangkok, November 7, 2018

FIRST PLANNING COMMITTEE MEETING FOR THE 3RD GLOBAL MINISTERIAL CONFERENCE ON ROAD SAFETY

GENEVA, NOV. 20, 2018

At the WHO, road safety stakeholders from around the world came together for the planning of the forthcoming Global Ministerial Conference on Road Safety to be hosted by Sweden in February 2020. The discussion focused

on the themes and objectives for the conference, including: a review of the achievements and shortcomings of the UN Decade of Action for Road Safety (2020); an extension or new targets for 2030 within the SDGs; an integration of road safety into wider UN efforts to tackle causes of adolescent death; and a post-2020 Action Plan on Speed Management.



Soames Job and Veronica Raffo at the First Planning Committee Meeting in Geneva, for the 3rd Global Ministerial Conference on Road Safety

SAO PAULO AND FORTALEZA DELEGATION VISIT

WASHINGTON, DC, DEC. 5-6, 2018

In partnership with the WRI, GRSF/World Bank and Vital Strategies, delegates from São Paulo and Fortaleza visited Washington, D.C. for an in-depth discussion on their upcoming road safety strategic plan for the next ten years. Based on detailed diagnosis prepared by each city, the conversation delved into the goals and action areas proposed by each plan. The feedback focused on each plan's alignment with the Safe System approach, sharing of best practices, and advice for implementation.



LAUNCH OF THE UNITED NATIONS ROAD SAFETY STRATEGY: A PARTNERSHIP FOR SAFER JOURNEYS

NEW YORK CITY, FEBRUARY 28, 2019

The World Bank and GRSF attended the launch of the first-ever UN-wide Road Safety Strategy, endorsed by the UN Secretary-General (SG) António Guterres in 2018. More than 250 participants from the UN, Member States, civil society, philanthropic organizations, academia and the private sector attended this event. The UN Special Envoy for Road Safety, Jean Todt, delivered his opening remarks calling for collaboration in strong partnerships towards achieving zero road fatalities within the UN system and sharing about the recently established UN Road Safety Trust Fund. Entitled "A Partnership for Safer Journeys," the Strategy is based on the Safe System approach and it outlines



all the factors that contribute to, and influence, the occurrence of road crashes. A similar event was held at the WHO office in Geneva to commemorate this moment and encourage all UN agencies to implement the Strategy.

TOWARDS ESTABLISHING THE ROAD SAFETY OBSERVATORY IN ASIA AND THE PACIFIC REGION

SINGAPORE, MARCH 20-21, 2019

The World Bank-GRSF, the ADB, ITF and the FIA organized a kick-off workshop in Singapore that called for the establishment of a Road Safety Observatory (RSO) in Asia and the Pacific region. The workshop included over 70 participants from 15 countries in Asia who agreed on the need for creating the Observatory in the region. Representatives from the WHO, GRSP, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), and iRAP have also contributed to the success of this event and are engaged to further support the development of this RSO.



SIXTH GLOBAL MEETING OF THE GLOBAL ALLIANCE OF ROAD SAFETY NGOS

CHANIA, APRIL 9-13, 2019

The GRSF, with UK Aid support, funded and participated at the 6th Global Meeting of NGOs Advocating for Road Safety and Road Victims, which brought together 270 delegates from NGOs, international organizations, academia, and the private sector from more than 70 countries. The aim of the meeting was to influence the global road safety agenda and to mobilize NGOs and empower them to engage their governments to take the lead in road safety and to achieve the UN SDG 3.6 standard. Highlights of this event included the High-Level Symposium on Road Safety, the FedEx Road Safety Award, the Global Meeting in preparation for the Third Global Ministerial Conference in Sweden in 2020, and the Sixth UN Global Road Safety Week.

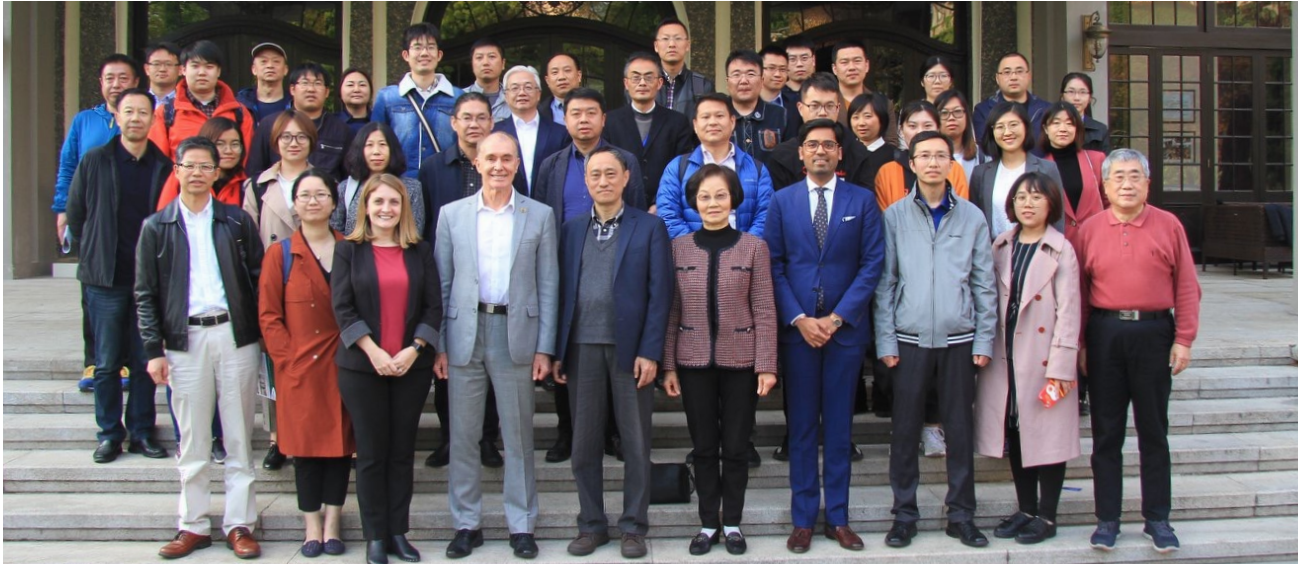


Soames Job speaking at the High-Level Symposium on Road Safety

SAFER STREETS AND SAFER MOBILITY FORUM IN SHANGHAI

SHANGHAI, APRIL 16-17, 2019

The GRSF, along with partners from the BIGRS and Chinese stakeholders, organized a two-day forum that convened about 150 road safety professionals from Shanghai and other Chinese cities to share their knowledge, lessons learned, and strategies to improve road design, infrastructure, and inter-agency coordination in Chinese cities. At this event, the Yangpu District was awarded a 5-Stars certificate for its pedestrians and cyclists upgrades on the Zhengtong road. The improvements will have a benefit-cost ratio of three in which the benefits of saving lives are three times as much as the cost of the upgrades implemented.

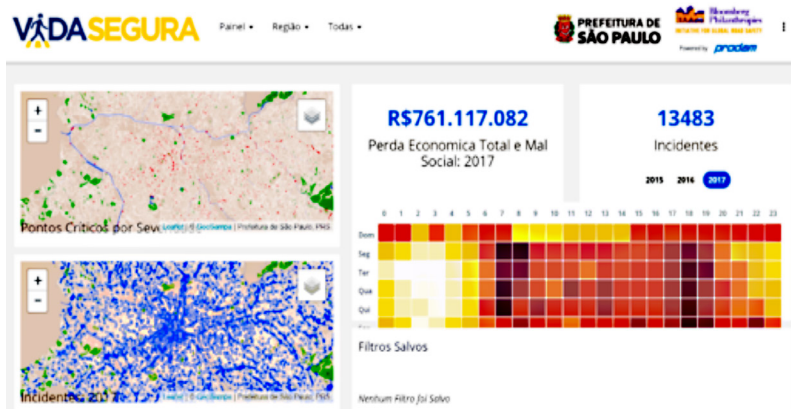


Alina Burlacu and Soames Job with main participants in the Safer Streets and Safer Mobility Forum in Shanghai, April 16, 2019

LAUNCH EVENT OF SAO PAULO'S ROAD SAFETY PLAN

SAO PAULO, APRIL 17, 2019

The GRSF participated in an event where the city of São Paulo signed a decree to launch the Road Safety Plan for 2019-28, naming it VIDA SEGURA, which aims to reduce road traffic fatalities by 50 percent. The plan is based on the Safe System approach and has received significant support from the GRSF and WRI, including workshops held in Washington, D.C. to set up an open-data platform (using DRIVER as its base code) which was launched during a Vision Zero event in September 2018. During this event, the Secretary of Mobility, João Otaviano, performed a live demo of the platform showing different features, and the mayor, Bruno Covas, showcased the importance of opening road crash data to the public as a means to engage citizens in the process of developing the 10-year Strategy.



5TH UN GLOBAL ROAD SAFETY WEEK

WASHINGTON, DC, MAY 6, 2019

To kick-off the start of the 5th UN Global Road Safety Week, on May 6, the World Bank and the GRSF hosted a high-level conference that brought together political leaders and representatives from international organizations including the UN, IRF, WRI, as well as road safety advocates and academia. The event was inaugurated by the World Bank Vice President for Infrastructure, Makhtar Diop, followed by a high-level panel discussion with policy makers from developing countries and global leaders on road safety, including Côte



d'Ivoire Minister of Transport, Amadou Koné, and Vice-Ministers of Transport in Argentina and Colombia, Manuela Lopez Menendez and Juan Camilo Ostos, respectively. The discussion centered on the path forward to realize the road safety targets of the UN SDGs and the World Bank's agenda on road safety in developing countries.

FIRST GENERAL ASSEMBLY OF THE AFRICAN ROAD SAFETY OBSERVATORY (ARSO)

DURBAN, JUNE 27-28, 2019

The World Bank and GRSF attended the first General Assembly of the ARSO, which brought together more than 80 road safety leaders from 40 African countries to discuss the growing road safety crisis in Africa. The thematic discussions focused on challenges of encouraging the creation of multisector partnerships and the designation of lead agencies with the capacity to develop and coordinate the delivery of national road safety strategies, plans, and targets to be met by all African nations. Plans to accede to and ratify the African Road Safety Charter and all UN conventions on Road Safety were also discussed.



Soames Job at the First General Assembly of the ARSO, Durban, South Africa



GRSF COLLABORATION WITH THE WORLD BANK IN FY 19

The GRSF and the World Bank's Road Safety Global Solutions Group (RS GSG) continued close cooperation and assistance to World Bank project managers and other operational staff to increase and improve the quality of road safety interventions through World Bank loans by sharing leading and practical road safety knowledge among the project teams. The new edition of its online learning course, summarizing modern road safety approaches and global road safety good practices applicable to World Bank projects, has been developed by the GRSF in close cooperation with RS GSG colleagues and will be available to all World Bank staff in FY20.

Following the World Bank adoption of the new Environmental and Social Framework (ESF), which includes explicit requirements related to road safety standards for use in all WB investments, the Facility and RS GSG have prepared the Good Practice Note, which provides road safety risk-based guidance regarding proven and practical measures for inclusion in all of the Bank road projects. The Note has been extensively reviewed to reflect the most recent research findings and experiences in using the Safe System approach to address road safety challenges in developing countries and is expected to be published in FY20 as a primary resource supporting Bank Task Team Leaders in assuring that all future World Bank road projects address road safety challenges using proven measures based on empirical evidence.

In parallel with all these activities, the GRSF in cooperation with the RS GSG continued providing assistance



to World Bank transport teams to improve road safety delivery in Bank-cofinanced road transport and infrastructure projects. Thanks to the involvement of the Facility and GSG staff, all World Bank road infrastructure and urban transport projects prepared in FY19 addressed road safety issues and used road safety-related indicators to measure impact.



GRSF has continued its involvement in the Sustainable Mobility for All (SuM4All) Initiative, coordinated by the World Bank, with transport safety among priority areas identified for cooperation among partners. During meetings of Sum4All partners, GRSF underlined the importance of joint and coordinated global, regional, and national road safety initiatives.

The GRSF staff together with the WB Transport team in the Philippines have initiated a US\$1.8 million Reimbursable Advisory Services (RAS) project for the Department of Public Works and Highways (DPWH), for road safety activities over a 2-year period. The objective of this project is to improve the capacity of DPWH in managing road infrastructure safety in accordance with international best practices, particularly with regard to the application of road safety management tools, such as iRAP and Road Safety Audits, in critical road sections in the Philippines. The Philippines recently updated the Philippines Road Safety Action Plan (PRSAP) 2017-22 which has set an interim target of reducing road traffic fatalities rate by at least 20 percent by 2022, and this RAS will support the Filipino Government in reaching this target. Under this project, the Bank and GRSF will

first undertake an institutional capacity assessment, followed by capacity building, updating of technical manuals, and providing hands-on practice for DPWH staff.

In FY19 GRSF produced an internal report to summarize the results from piloting the Road Safety Screening and Appraisal Tool (RSSAT) in Bank-financed projects under preparation. The objective of this pilot testing exercise is to evaluate the effectiveness and applicability of the RSSAT in screening and appraising a variety of road projects, including in the urban, inter-urban and rural environments. Furthermore, the exercise of pilot testing was undertaken to evaluate the RSSAT and to gain insight into readiness for running it with the availability of requisite reports needed, the level of technical expertise required, and the time taken to do the analysis. A total of seventeen projects were included in the pilot testing spanning across different geographical regions and road functional types. The results obtained so far are intended to guide task teams involved with road infrastructure projects to understand the safety impacts of project design in terms of the cross-sectional profile and of traffic parameters such as operating speed, annual average daily traffic (AADT) and flow rates for nonmotorized traffic. The results obtained from the pilot testing will also be used to facilitate discussion with the Transport GP management to develop a policy framework for the utilization of the RSSAT for Bank-financed projects to better inform measures to address road safety.



Meeting during the kick-off mission of the Philippines RAS, April 2019



GRSF GLOBAL ROLE

PREPARATION OF THE GLOBAL MINISTERIAL ROAD SAFETY CONFERENCE – STOCKHOLM 2020

GRSF representatives participated in all preparatory meetings related to this key global event planned for February 2020, which is widely expected to summarize the decade 2011-20 and build consensus around ambitious targets for the new decade until 2030. The World Bank and GRSF are planning prominent involvement in this high-level conference.

DEVELOPMENT OF REGIONAL ROAD SAFETY OBSERVATORIES

Based on the example of the Latin American Road Safety Observatory (OISEVI) and following GRSF continuous cooperation with international partners active in Africa, such as Safer Africa, SSATP, EC, AfDB, FIA, OECD-ITF and the financial support provided by UK Aid for preparation, the African Road Safety Observatory was formally launched at the conference in Durban in June 2019, while a kick-off workshop for the Asia-Pacific Observatory took place in March 2019.

GLOBAL ROAD SAFETY PARTNERSHIP (GRSP)

Coordination of global knowledge exchange continued through joint participation of the GRSP and GRSF experts in training programs, conferences and other capacity building events in developing countries.

UNITED NATIONS ROAD SAFETY TRUST FUND (UN RSTF)

Following the creation of the UN RSTF in April 2018 by the UN General Assembly, the Facility and World Bank has actively supported the establishment of this fund by advising on strategic and operational aspects through involvement in the UN RSTF Advisory Board and numerous meetings suggesting cooperation between UN RSTF and GRSF in fundraising and delivery of road safety projects.

UN ROAD SAFETY COLLABORATION (UNRSC)

In FY19, GRSF actively supported cooperation within UNRSC by participating in regular meetings and contributing to the work of five “Project Groups” established to support collaboration among key global stakeholders to achieve the UN Decade of Action goals.



26th Meeting of the UNRSC, Geneva, Switzerland

INFLUENTIAL CONTRIBUTIONS TO INTERNATIONAL CONFERENCES AND CONGRESSES

GRSF played an active role in many important global events in FY19, promoting global knowledge and experience on efficient road safety actions, advocating for ambitious new targets for the next decade, and guiding policy makers and road safety professionals on implementation of successful policies, strategies, and action plans. A full list of events, trainings, and presentations are provided in Appendix V.



APPENDICES

APPENDIX I: ACRONYMS

AACRA	Addis Ababa City Roads Authority
AADT	Annual average daily traffic
ADB	Asian Development Bank
AfDB	African Development Bank
AIP	Asia Injury Prevention
ARSO	African Road Safety Observatory
AVIS	Assessment of Vehicle Inspection Systems
BIGRS	Bloomberg Initiative for Global Road Safety
BMA	Bangkok Metropolitan Administration
BRT	Bus Rapid Transport
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
DOTr	Department of Transportation
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

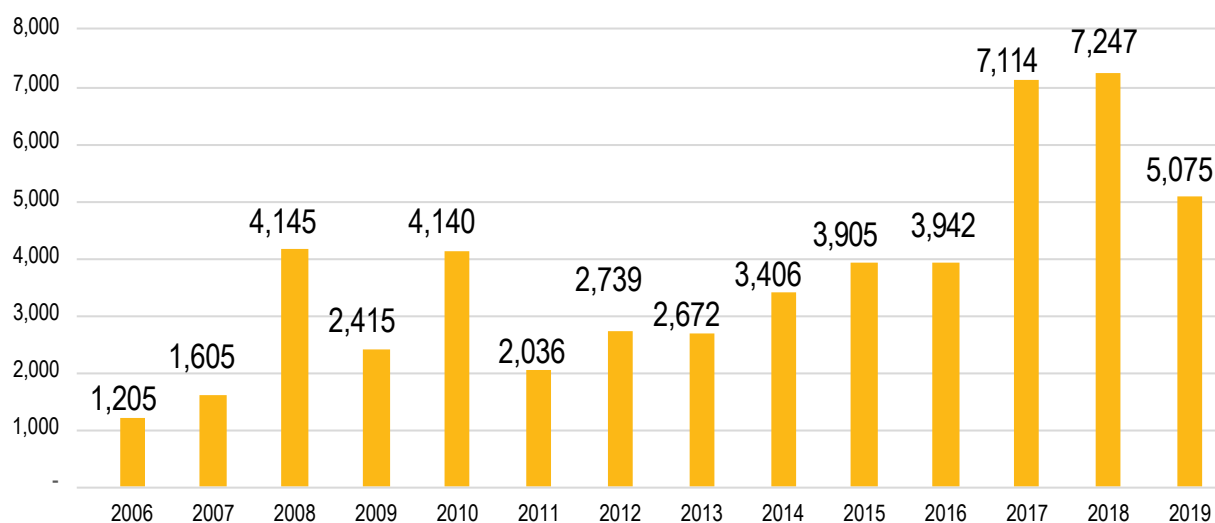
IHME	Institute for Health Metrics and Evaluation
iRAP	International Road Assessment Programme
IRF	International Road Federation
IRTAD	International Traffic Safety Data and Analysis Group
IsDB	Islamic Development Bank
ITF	International Transport Forum
LICs	Low Income Countries
LMIC	Low and Middle-Income 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
NMT	Non-motorized Transport
NRSAP	Nepal Road Safety Action Plan
NRSC	National Road Safety Council
OECD	Organisation for Economic Co-operation and Development
OISEVI	Latin American Road Safety Observatory
PAHO	Pan American Health Organization
PNP	Philippines National Police
PRSAP	Philippine Road Safety Action Plan
QII	Quality Infrastructure Investment Partnership
RAS	Reimbursable Advisory Services
R&D	Research and Development
RS GSG	Road Safety Global Solutions Group
RSO	Road Safety Observatory
RSSAT	Road Safety Screening and Appraisal Tool
RTIs	Road Traffic Injuries
SDG	Sustainable Development Goal
SIDA	Government of Sweden
SR4S	Safe Roads for Schools
SSATP	Africa Transport Policy Program

STA	Swedish Transport Administration
SuM4All	Sustainable Mobility for All
ThaiRAP	Thai Road Assessment Programme
TTD	Traffic and Transportation Department
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

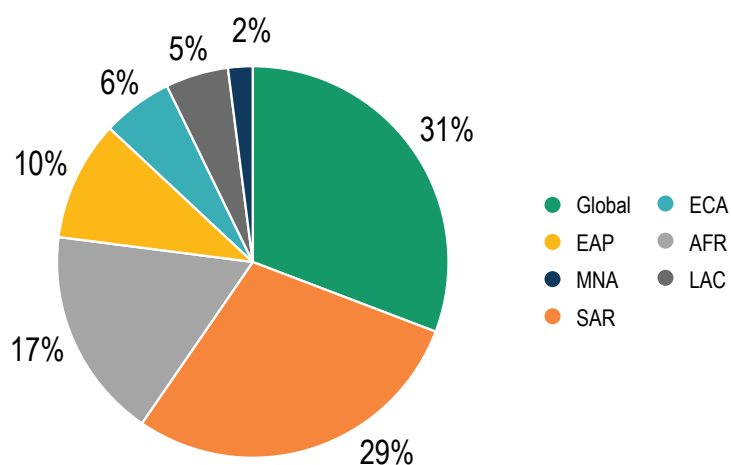
APPENDIX II: FINANCIAL REVIEW

Since its inception in 2006, the GRSF has received total donor pledges of US\$72 million of which \$61.7 million has been received and \$10.3 million will be received over the next two years. In FY19, 49 ongoing grant activities were supported by GRSF's portfolio. With new funding support from UK Aid (£10.6 million), the GRSF expanded its program to launch the new Multi-Donor Trust Fund (MDTF) program (phase 3) focusing on road safety research, technical assistance, and capacity building in low-income and DFID priority countries. The new funding has already supported the GRSF FY19 Call for Proposals awarding 16 proposals in the amount of \$2.75 million (Appendix III). The program is also supporting research initiatives (\$3 million) which will be managed and implemented by GRSF in the next three years.

GRSF EXPENDITURES (\$'000) BY FISCAL YEAR (2006-2019)



GRSF: EXPENDITURES BY REGION - FULL COST INCEPTION TO END-JUNE 2019



APPENDIX III: WINNERS OF THE CALL FOR PROPOSALS FY19

The GRSF's new MDTF program, financed by UK Aid, announced the winners of its FY19 Call for Proposals. These **16 proposals** totaling **US\$2.75 million** will focus on road safety research, technical assistance, and capacity building in low-income countries and are aimed at advancing the global road safety agenda.

AFRICA

ETHIOPIA – WB IMPROVING SIDEWALK SAFETY FOR PEDESTRIANS IN ADDIS ABABA

Activity to develop a systematic approach for pedestrian and sidewalk safety in Addis Ababa through holistic research to provide evidence on current unsafe pedestrian walking conditions.

TANZANIA – WB IMPROVING ROAD SAFETY IN DAR ES SALAAM

To formulate urban design strategies to improve road safety in public transport and community facilities; undertake road safety audits to improve road safety in ongoing road improvement/construction packages around schools; and expand capacity building in government agencies and councils in road safety.

REGIONAL – WB QUANTIFYING THE ROAD SAFETY CHALLENGE IN FRAGILE CITIES IN AFRICA – FROM THEORY TO SOLUTIONS

Research activity to quantify the benefits of improving road safety through improvements in the use of public space and preparing a guidance note to bring research ideas into practice in fragile cities in Africa.

REGIONAL – AFDB AND WB ROAD SAFETY LEAD AGENCY MODELS IN AFRICA, THEIR EFFICACY AND REPLICABILITY (BASED ON TWO PROPOSALS SUGGESTED TO BE MERGED)

To investigate performance of different models of road safety lead agencies in Africa for evidence-based policy dialogue to initiate institutional reforms in Africa towards improving road safety management.

REGIONAL – GLOBAL ALLIANCE OF NGOS FOR ROAD SAFETY ASSESSMENT OF THE ENABLING ENVIRONMENT FOR ROAD SAFETY CIVIL SOCIETY ORGANIZATIONS IN THREE SUB-SAHARAN AFRICAN COUNTRIES

To enable NGO's integration and participation in road safety projects on local, national, and regional levels through assessment, development of a framework, a practical implementation report and workshops to build capacity in multisectoral cooperation.

ASIA

BANGLADESH — WB TECHNICAL ASSISTANCE FOR BANGLADESH ROAD SAFETY PROGRAM

To provide technical assistance and research-based advice to the government in conceptualizing a road safety program and in building-up the capacity of local academia and NGOs to represent Bangladesh as part of the Asia-Pacific Road Safety Observatory.

CENTRAL ASIA & MEDITERRANEAN — EBRD ASSESSMENT OF POST-CRASH RESPONSE CAPACITY TO IDENTIFY PRIORITY INVESTMENTS IN DFID COUNTRIES

Developing an in-depth study to identify and quantify priority investments including post-crash response infrastructure, vehicles, equipment, and training to pave the way for future financial support in post-crash response measures to improve emergency response systems.

LAO PDR — WB IMPLEMENTATION OF CRASH DATA COLLECTION SYSTEM, SUPPORTED BY CAPACITY BUILDING AND RESEARCH ACTIVITIES IN LAO PDR

This activity will improve overall road safety in Lao through assessment of current policies and the management capacity of stakeholders, implementation of the DRIVER crash database, and piloting research and development in several areas, including road safety inspections, by leveraging two active road projects in Lao.

MYANMAR — WB BRTS AND MOTORCYCLE BAN: COMPARISON STUDY BETWEEN YANGON AND MANDALAY REGARDING SAFETY AND CONGESTION

To provide direct and practical lessons and recommendations on tackling the increasing challenge of managing motorcycles in urban environments and road safety in public transport through a comparative study of Yangon, which implemented a motorcycle ban, and Mandalay, which has no restrictions on motorcycles.

REGIONAL — WHO IMPROVING ROAD TRAFFIC FATALITY DATA IN SELECT COUNTRIES IN ASIA

To strengthen the existing health information systems in two Asian countries to provide accurate and timely data through civil registration on vital statistics for road crash fatalities to reduce the under-reporting gap.

REGIONAL — WB ROAD SAFETY MANAGEMENT CAPACITY ASSESSMENTS WITH AN EMPHASIS ON CRASH DATA SYSTEMS IN SELECTED PACIFIC ISLAND COUNTRIES: SAMOA, VANUATU AND THE SOLOMON ISLANDS (BASED ON TWO PROPOSALS SUGGESTED TO BE MERGED)

This activity will assess the road safety management capacity and crash data collection system in Samoa, Vanuatu and the Solomon Islands to develop/update national strategies and plans to improve road safety outcomes, to propose a roadmap to implement DRIVER, and to build capacity in crash investigation and implementation of evidence-based road safety interventions.

EUROPE

AZERBAIJAN – WB SOCIAL-ECONOMIC COSTS OF ROAD ACCIDENTS AND SAFETY OF PEDESTRIANS AND NMT USERS IN AZERBAIJAN

To identify the root causes of the high fatality rates of vulnerable road users in the country and to reveal the socio-economic costs of road crashes in order to raise public and government awareness and to develop recommendations to improve the situation.

GLOBAL

WHO ORGANIZATION AND PERFORMANCE OF ROAD SAFETY LEAD AGENCIES IN LOW- AND MIDDLE-INCOME COUNTRIES: A COMPARATIVE CASE STUDY ANALYSIS

To conduct an in-depth analysis of the organization and performance of road safety lead agencies in LMICs to create a global database of detailed case studies and examples for decision making, analysis and dissemination as policy briefs.

WB IMPROVING EFFICIENCY OF ROAD SAFETY SCREENING AND APPRAISAL IN LICs, USING STREET VIEW COMPUTER VISION AND MACHINE LEARNING

Use of street viewing computer vision and machine learning to identify key road features to reduce time and cost of implementation of World Bank's Road Safety Screening and Appraisal Tool.

APPENDIX IV: GRSF TECHNICAL ADVISORY PANEL

We are 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 V: PUBLICATIONS, PAPERS, ADDRESSES FY19

PUBLISHED PAPERS AND PUBLISHED REPORTS

- Azmin, M., A. Jafari, N. Rezaei, K.S. Bhalla, D. Bose, S. Shahraz, M. Dehghani, P. Niloofar, S. Fathollahi, J. Hedayati, H. Jamshidi, and F. Farzadfar. 2018. "An Approach towards Reducing Road Traffic Injuries and Improving Public Health through Big Data Telematics: A Randomized Controlled Trial Protocol." *Archives of Iranian Medicine (AIM)* 21 (11).
- Bose, D. 2017. "Global, regional, and national age-sex-specific mortality and life expectancy, 1950–2017: a systematic analysis for the Global Burden of Disease Study 2017." In *Global Burden of Disease Study 2015 Authors (2018)*. *Lancet* 392(10159): 1684-1735.
- Bose, D., and F.A. Burlacu. 2018. "Sharing knowledge on the 'Economic Impact of Road Traffic Injuries' study in Asia." *Vital Strategies newsletter for BIGRS* (October 2018).
- Burlacu, F.A. 2018. "Re-energizing the National Road Safety Agenda in the Philippines." *Vital Strategies newsletter for BIGRS* (July 2018).
- Burlacu, F.A., A. Burlacu, and C. Racanel. 2019. *Manualul Auditorului de Siguranta Rutiera*. ISBN 978-973-100-487-7. Bucharest, Romania, (June 2019).
- Burlacu, F.A., and R.F.S. Job. 2019. "Safer Streets and Safer Mobility Forum in Shanghai." *Vital Strategies newsletter for BIGRS* (May 2019).
- Burlacu, F.A., and R.F.S. Job. 2019. "Safer Streets and Safer Mobility Forum Held in Shanghai." *TransFORM newsletter* (June 2019). World Bank.
- Burlacu, F.A., and G. Kurgan. 2018. "Improving Non-Motorized Transport Facilities for a Safer and Greener City: A Case Study on Shanghai's Yangpu District." *TransFORM newsletter*. (December 2018). World Bank.
- Burlacu, F.A., C. Racanel, and A. Burlacu. 2018. "Preventing aquaplaning phenomenon through technical solutions." *GRAĐEVINAR*, 70 (12), 1057-1062. doi: <https://doi.org/10.14256/JCE.1578.2016>.
- Burlacu, F.A., and G. Smith. 2018. "ThaiRAP Launch." *Vital Strategies newsletter for BIGRS* (December 2018).
- Hatfield, J., A. Williamson, E.J. Kehoe, J. Lemon, A. Arguel, P. Prabhakaran, and R.F.S. Job. 2018. "The effects of training impulse control on simulated driving." *Accident Analysis & Prevention* 119, 1-15.
- Job, R.F.S. 2018. "Safe Speeds Part 1: Political Decisions and the Limited Adoption of Speed Management for Road Safety." *Journal of the Australasian College of Road Safety* 29 (3), 65-69.
- Kavi, B., and M. Shotten. 2019. "Building Road Safety Institutions in Low- and Middle-Income Countries: The Case of Argentina." *Health Systems & Reform* 5:2, 121-133, DOI: 10.1080/23288604.2019.1565061
- Krambeck, H., R.F.S. Job, and S. Sultan. 2018. "Better Crash Data Can Improve Road Safety." *Connections Note* 2018-3. World Bank, Washington, DC.
- Kamalarkul, Y., K. Norkum, and F.A. Burlacu. 2018. "Creating a road safety focal team under Transport and Traffic Department through iRAP trainings." *Vital Strategies newsletter for BIGRS* (August 2018).
- Musikeaw, S., and F.A. Burlacu. 2019. "Review of the current status of crash data systems used in Thailand." Report under BIGRS. May 2019.
- Paala, M., and F.A. Burlacu. 2019. *Philippines: DRIVER Status Report*. Report under BIGRS. Manila, Philippines: April 2019.

Paala, M., and F.A. Burlacu. 2019. "Using iRAP Star Ratings and Building Safer Roads" - A Training Course in Manila, Philippines." *Vital Strategies newsletter for BIGRS* (June 2019).

Welle, B., A.B. Sharpin, C. Adiazola-Steil, R.F.S. Job, M. Shotten, D. Bose, A. Bhatt, S. Alveano, M. Obelheiro, and T. Imamoglu. 2018. *Sustainable & Safe: A vision and guidance for zero road deaths*. World Resources Institute and Global Road Safety Facility, World Bank Group.

NEWSLETTERS

GRSF. 2018. "Leveraging Road Safety through Bloomberg Philanthropies Grant Funding." *Newsletter No. 11*, August 16, 2018. Washington, DC: World Bank.

GRSF. 2018. "UK Reaffirms Support to Global Road Safety Facility with a new 10.6 million Commitment in Aid Funding." *Newsletter No. 12*, November 8, 2018. Washington, DC: World Bank.

GRSF. 2019. "Spring Recap – Boosting Road Safety Results". *Newsletter No. 13*, June 27, 2019. Washington, DC: World Bank.

PRESENTATIONS

Bose, D. 2018. "The Macro-Economic and Welfare Benefits of Reducing Road Traffic Injuries in China." Presentation to the Workshop on the Economic Impact of Road Traffic Injuries," Beijing, September 14, 2018.

Bose, D. 2018. "Economic Impact and Welfare Benefits of Reducing Road Traffic Injuries." Presentation to BBL on "The Economic Impact of Road Traffic Injuries," Singapore, September 17, 2018.

Bose, D. 2018. "The Macro-Economic and Welfare Benefits of Reducing Road Traffic Injuries in Thailand." Presentation to the Workshop on the Economic Impact of Road Traffic Injuries, Bangkok, September 18, 2018.

Bose, D. 2018. "The Macro-Economic and Welfare Benefits of Reducing Road Traffic Injuries in Philippines." Presentation to the Workshop on the Economic Impact of Road Traffic Injuries, Manila, September 20, 2018.

Bose, D. 2018. "Bloomberg Initiative for Global Road Safety: Economic Impact of Road Traffic Injuries." Presentation at the Bloomberg Philanthropies Partner Meeting, October 12, 2019.

Bose, D. (2018). "Developing Road Safety Screening and Appraisal Tool for World Bank Projects." Presentation at the EaP road safety working group, October 19, 2019.

Bose, D. 2018. "The Macro-Economic and Welfare Benefits of Reducing Road Traffic Injuries in China." Webinar presentation to the training workshop hosted by PPSU Beijing, November, 2019.

Bose, D. 2018. "Suggestions on Developing the Bangladesh Road Safety Program 2020-2030." Presentation at the RTHD Workshop, Dhaka, December 11, 2019.

Bose, D. 2019. "The Sustainable Development Goals and Challenges to the Transport Sector." Presentation to the IRF Fellow Class 2019, Washington, DC, January 10, 2019.

Bose, D. 2019. "Pedestrian Safety Risk Assessments in Developing Countries." Presentation at the TRB Sunday Workshop on Uncontrolled Pedestrian Crossings, January 13, 2019.

Bose, D. 2019. "Speed Management in LAC Cities." Presentation at the WRI Speed Management Workshop, Washington, DC, January 2019.

Bose D. 2019. "Overview of the Bloomberg Philanthropies Road Safety Program." Presentation for UN Road Safety Week, Washington, DC, May 6, 2019.

- Bose, D. 2019. "Overview of the Good Practice Note." Presentation to World Bank BBL: UN Road Safety Week, Washington, DC. May 6, 2019.
- Burlacu, F.A. 2018. "Current progress and future workplan for Ho Chi Minh, Bandung and Bangkok." Presentation to the BIGRS Partners' Monthly Call, August 13, 2018.
- Burlacu, F.A. 2018. "World Bank's engagement in SEAP region." Presentation to meeting with the Land Transport Authority, Singapore, August 20, 2018.
- Burlacu, F.A. 2018. "Crash data collection system to prevent speeding: Data for road incident visualization evaluation & reporting (DRIVER)." Presentation to meeting with local stakeholders in Bangkok, August 21, 2018.
- Burlacu, F.A. 2018. "Sustainability of road infrastructure safety assessments using ChinaRAP in Shanghai." Presentation to the BIGRS Partners' Monthly Call, September 13, 2018.
- Burlacu, F.A. 2018. "General Context of Road Safety in Southeast Asia and the Pacific - World Bank's engagement." Presentation to BBL on the Economic Impact of Road Traffic Injuries, Singapore, September 17, 2018.
- Burlacu, F.A. 2018. "General Context of Road Safety in Southeast Asia and the Pacific - World Bank's engagement." Presentation to Workshop on the Economic Impact of Road Traffic Injuries, Bangkok, September 18, 2018.
- Burlacu, F.A. 2018. "General context of road safety in the region – World Bank's engagement and overview of "Bloomberg Philanthropies" Initiative for Global Road Safety" (BIGRS)." Presentation to Workshop on the Economic Impact of Road Traffic Injuries, Manila, September 20, 2018.
- Burlacu, F.A. 2018. "Remarks on ThaiRAP launch." Invited speaker, Bangkok, November 7, 2018.
- Burlacu, F.A. 2018. "*Data for Road Incident Visualization, Evaluation, and Reporting (DRIVER)*." Presentation to meeting with Bangkok Metropolitan Administration, Bangkok, November 7, 2018.
- Burlacu, F.A. 2018. "Road Safety Engineering tools. Road Safety Audit." Invited presenter to High-level Road Safety Seminar, Shanghai, November 20, 2018.
- Burlacu, F.A. 2019. "Reviewing progress - Looking at the future in Shanghai and China." Presentation to the BIGRS Partners' Meeting, Shanghai, January 21, 2019.
- Burlacu, F.A. 2019. "Reviewing progress - Looking at the future in Bangkok and Thailand." Presentation to the BIGRS Partners' Meeting, Bangkok, January 24, 2019.
- Burlacu, F.A. 2019. "Reviewing progress - Looking at the future in Bandung." Presentation to the BIGRS Partners' Meeting, Bandung, February 14, 2019.
- Burlacu, F.A. 2019. "Reviewing progress - Looking at the future in Ho Chi Minh." Presentation to the BIGRS Partners' Meeting, Ho Chi Minh, March 7, 2019.
- Burlacu, F.A. 2019. "Global Overview for Data for Road Incident Visualization, Evaluation, and Reporting (DRIVER)." Online presentation to World Bank unit meeting for Middle East and North Africa Transport GP, March 18, 2019.
- Burlacu, F.A., and J. Leather. 2019. "General overview of country profiles and main data challenges in Asian countries." Presentation at the Workshop Towards the Establishment of a Road Safety Observatory in Asia, Singapore, March 20, 2019.
- Burlacu, F.A. 2019. "Data for Road Incident Visualization, Evaluation and Reporting (DRIVER) platform – a World Bank tool for crash data collection." Presentation at the Workshop Towards the Establishment of a Road Safety Observatory in Asia, Singapore, March 20, 2019.
- Burlacu, F.A. 2019. "Reimbursable Advisory Services (RAS) – Road Safety Technical Support for the Philippines." Presentation to kick-off meeting with the Department of Public Works and Highways. Manila, April 10, 2019.

- Burlacu, F.A. 2019. "Best practices on Road Safety Engineering." Presentation to the Safer Streets and Safer Mobility Forum, Shanghai, April 17, 2019.
- Burlacu, F.A., N. Mohamed, and J.M. Velasquez. 2019. "Success Stories from the Bloomberg Initiative. Saving Lives on the Road – Time for Leadership. UN Road Safety week, May 6, 2019.
- Burlacu, F.A. 2019. "Towards Establishing an RSO for Asia and the Pacific." Online presentation to World Bank unit meeting for Southeast Asia Transport GP, May 9, 2019.
- Burlacu, F.A. 2019. "DRIVER (Data for Road Incident Visualization, Evaluation, and Reporting). The World Bank's Tool for Crash Data Visualization, Evaluation and Reporting." Invited presenter to UNESCAP and ITF meeting for Supporting Traffic Safety Information System of Countries in Southeast Asia, Bangkok, June 14, 2019.
- Burlacu, F.A., and B. Murphet, 2019. "Implementing the Safe System Approach & the Establishment of an Asian Road Safety Observatory." Invited presenter to the 1st IRF Regional Conference and Exhibition for Road Safety, Kuala Lumpur, June 28, 2019.
- Czapski, R., "Global Road Safety Facility – Recent Developments and Views on Global Cooperation in Road Safety" address at 24th Meeting of the UN Road Safety Collaboration Platform, WHO, Geneva - Switzerland, October 3-4, 2018.
- Czapski, R., "Trends in Speed Enforcement in Advanced and EaP countries. Good Practice Examples from EU Countries.", presentation at Workshop of Road Safety Working Groups of Eastern Partnership, Minsk - Belarus, October 17, 2018.
- Czapski, R., "Up-date on the Status of EaP road Safety Cooperation Framework and next steps", presentation at Workshop of Road Safety Working Groups of Eastern Partnership, Minsk - Belarus, October 18, 2018.
- Czapski, R., "Role of Infrastructure in Road Safety" presentation at International Road Safety Conference, European Transport Safety Council (ETSC) & Government of Romania/Ministry of Transport, Bucharest - Romania, March 20-21, 2019.
- Czapski, R., "Eastern Partnership Road Safety Cooperation Framework - Concept of the Regional Road Safety Observatory", presentation at 16th Eastern Partnership Transport Panel, Brussels - Belgium April 10, 2019.
- Job, R.F.S. 2018. "Improving Road Safety: Challenges, Misunderstandings & Solutions." Invited GLed (Global Lead) Talk, World Bank, July 2018.
- Job, R.F.S. 2018. "Reinvigorating Planning and Tracking of Global Road Safety." Invited address to the Vision Zero and iRAP Innovation Workshop, Washington, DC, November 2018.
- Job, R.F.S. 2018. "The Importance of Research and Measures to Address Serious Injuries Globally." Keynote Address to the Enhanced Crash Investigation Study (ECIS) Symposium, TAC, Melbourne, August 2018.
- Job, R.F.S. 2018. "The Importance of Research & What Research to Undertake." Invited presentation to the research workshop of the First Africa Road Safety Congress, Marrakech, November 2018.
- Job, R.F.S. 2018. "The Global Policy Context & the Role of International Organisations." Invited address to the Inaugural Meeting of the Africa Regional Chapter of Global Forum of Road Safety Legislators, Abuja, July 2018.
- Job, R.F.S. 2018. "The Role of Legislators." Invited address to the Inaugural Meeting of the Africa Regional Chapter of Global Forum of Road Safety Legislators, Abuja, July 2018.
- Job, R.F.S. 2018. "DRIVER – A World Bank Tool for Crash Data Collection." Invited address to the Second Workshop towards the Establishment of a Road Safety Observatory in Africa, Abuja, July 2018.
- Job, R.F.S. 2018. "Demonstration of DRIVER." Presentation to the Second Workshop towards the Establishment of a Road Safety Observatory in Africa, Abuja, July 2018.
- Job, R.F.S. 2018. "Research Needs and Challenges for Safe System." Invited Presentation to the TRB Standing Committee on Transportation Safety Management (ANB10), Washington, DC, July 2018.

- Job, R.F.S. 2018. "Managing Speed in the BIGRS Program." Invited presentation to the Bloomberg Initiative for Global Road Safety, New York, October 2018.
- Job, R.F.S. 2019. Development of a Safe System Approach: Barriers to be Overcome. Invited presentation to TRB Road Safety Workshop "From Silos to Safe System," January 2019, Washington, DC.
- Job, R.F.S. 2019. "World Bank Commitments and Activities for Road Safety." Keynote address to the CITA International Conference, Seoul, April 2019.
- Job, R.F.S. 2019. "Vehicle Compliance in Low- and Middle-Income Countries." Invited address to the CITA International Conference, Seoul, April 2019.
- Job, R.F.S. 2019. "Why Road Safety?" Invited presentation to the CITA International Conference, Seoul, April 2019.
- Job, R.F.S. 2019. "Speed Management." Invited presentation to the CITA International Conference, Seoul, April 2019.
- Job, R.F.S. 2019. "Welcome and Stage Setting Remarks." Keynote presentation to the Safer Streets and Safer Mobility Forum, Shanghai, April 16-17, 2019.
- Job, R.F.S. 2019. "Speed Management, e-bikes and Heavy Vehicles." Keynote presentation to the Safer Streets and Safer Mobility Forum, Shanghai, April 16-17, 2019.
- Job, R.F.S. 2019. "Road safety Policy Perspectives toward 2030." Invited talk on High Level Panel Global Road Safety 2030: "What is the Target?" Chania, Greece, April 2019.
- Job, R.F.S. 2019. "Road Safety: A Global Crisis." Invited address to the UNESCAP Regional Seminar on Road Safety, New Delhi, April 2019.
- Job, R.F.S. 2019. "Improving Road Safety Globally and in Bangladesh." Keynote address to the Accident Research Institute, BUET, Dhaka, May 2019.
- Job, R.F.S. 2019. "Global Perspective on Road Safety & Bangladesh." Invited presentation to the meeting of NGOs, Dhaka, May 2019.
- Raffo, V.I., T. Addo-Ashong, and F.A. Burlacu. 2019. "Road Safety Observatories. Saving Lives on the Road – Time for Leadership." UN Road Safety week, May 6, 2019.
- Velasquez, J.M. 2018. "Investments using a Safe System Approach." Invited to the Road Safety Plan Forum, Sao Paulo, Brazil, September 2018.
- Velasquez, J.M. (2018). "Challenges for implementation of a Speed Management Plan." Panel moderation at the International Road Safety Week, Bogota, Colombia, October 2018.
- Velasquez, J.M. 2019. "Economic Cost of Traffic Crashes." Invited to the Road Safety Plan Forum, Sao Paulo, Brazil, February 2019.

TRAINING PRESENTATIONS/MODULES

- Bose, D. and R.F.S. Job. 2018. "Role of Infrastructure in Road Safety." Bloomberg Philanthropies Global Road Safety Leadership Course, Baltimore, July 2018.
- Bose, D. 2018. "Managing Bank Operations to Deliver Road Safety Results using the Road Safety Screening and Appraisal Tool (RSSAT)." Back 2 School Training, World Bank, September 26, 2018.
- Bose, D. 2019. "Crash Data Management." BIGRS Bogota Partners Meeting, Bogota, March 5, 2019.
- Burlacu, F.A. 2018. "Bloomberg Initiative for Global Road Safety Overview." Presentation to iRAP Training for local stakeholders, Bangkok, August 22, 2018.
- Burlacu, F.A. 2018. "Introduction on BIGRS and Overall Engagement in Ho Chi Minh." Presentation to iRAP Training for local stakeholders, Ho Chi Minh, October 23, 2018.

- Burlacu, F.A. 2018. "Bloomberg Initiative for Global Road Safety Overview." Presentation to iRAP Training for local stakeholders, Bandung, November 8, 2018.
- Burlacu, F.A. 2019. "Road Safety Engineering Tools." Presentation to road safety technical workshop for the Department of Public Works and Highways. Manila, April 12, 2019.
- Burlacu, F.A. 2018. "The Importance of Crash Data in Improving Road Safety. Presentation to DRIVER training, Bangkok, June 13, 2019.
- Job, R.F.S. 2018. "Overview of Road safety Policies Worldwide." Delft Road Safety Training Course, Accra, November 2018.
- Job, R.F.S. 2018. "Global Status Report and Road Safety Knowledge (manuals)." Delft Road Safety Training Course, Accra, November 2018.
- Job, R.F.S. 2018. "Road Safety Advocacy: Getting Political and Public Support." Delft Road Safety Training Course, Accra, November 2018.
- Job, R.F.S. 2018. "Funding of Road Safety Interventions." Delft Road Safety Training Course, Accra, November 2018.
- Job, R.F.S. 2019. "Road safety and the World Bank." Presentation to the IRF Fellowship Program, Washington DC, January 2019.
- Job, R.F.S. and D. Bose. 2018. "Role of Infrastructure in Road Safety." Bloomberg Philanthropies Global Road Safety Leadership Course, Buenos Aires, Baltimore. Job, R.F.S. 2018. "Politics, Government and Persuasion in Road Safety." Bloomberg Philanthropies Global Road Safety Leadership Course, Baltimore.
- Job, R.F.S. 2018. "Vehicle Safety & Vehicle Inspections BBL: Their Role in Road Safety." Presentation to the Back to School FY19, "Vehicle Inspections: their Role in Road Safety and Impact on Economic Development — the Case of Togo." World Bank, Washington, DC, September 2018.
- Job, R.F.S. 2019. "Global perspective on Road Safety." Training module to African Road Safety Leadership Programme, Cote d'Ivoire, February 2019.
- Job, R.F.S. 2019. "Pedestrian Safety: the Issues." Training module to African Road Safety Leadership Programme, Cote d'Ivoire, February 2019.
- Job, R.F.S. 2019. "Speed Management and Road Safety." Training module to African Road Safety Leadership Programme, Cote d'Ivoire, February 2019.
- Job, R.F.S. 2019. "Why Data is Critical for Road Safety. Presentation to World Bank BBL: "Data Innovations to take Africa's Road to Safety," Washington, DC, May 2019.
- Job, R.F.S. and C.R. Bennett. 2019. "Good Practice Note on Road Safety: Guidance on Implementing the ESF Road Safety Requirements." Presentation to the Transport Knowledge Board Meeting, World Bank, May 2019.
- Job, R.F.S. and D. Bose. 2019. "Role of Infrastructure in Road Safety." Bloomberg Philanthropies Global Road Safety Leadership Course, Buenos Aires, April 2019.
- Job, R.F.S. 2019. "Politics, Government, and Persuasion in Road Safety." Bloomberg Philanthropies Global Road Safety Leadership Course, Buenos Aires, April 2019.
- Job, R.F.S. 2019. "How NGOs can work with the Safe System Approach." Invited presentation to the Sixth Global Meeting of Nongovernmental Organizations Advocating for Road Safety and Road Victims, Crete, April 2019.
- Job, R.F.S. and R. Rohatgi. 2019. "Global perspective for Road Safety & World Bank ESS4." Invited presentation to the World Bank BBL, Dhaka, May 2019.
- Job, R.F.S. 2019. "Why Data are Critical for Road Safety." Presentation to the DIME and GRSF Joint BBL, "Data Innovations to take Africa's Road to Safety," Washington, May 2019.
- Job, R.F.S. 2019. "Welcome Address." Invited presentation to the First Annual General Assembly of the African Road Safety Observatory Durban, South Africa, June 2019.

- Job, R.F.S. 2019. "Road Safety Resourcing Panel Discussions." Invited to the First Annual General Assembly of the African Road Safety Observatory Durban, South Africa, June 2019.
- Job, R.F.S. 2019. "DRIVER – A Tool for Crash Data Collection Available from the World Bank." Invited presentation to the First Annual General Assembly of the African Road Safety Observatory Durban, South Africa, June 2019.
- Velasquez, J.M. 2018. "Introductory presentation on DRIVER." Presentation to Transport and Traffic Authority, Panama City, Panama, September 2018.
- Velasquez, J.M. 2018. "Introductory presentation on DRIVER." Webinar-style presentation to the Colombian National Road Safety Agency, Washington, DC, November 2018.
- Velasquez, J.M. 2018. Stakeholder workshop for crash data. Workshop with local government agencies, Fortaleza, Brazil, December 2018.
- Velasquez, J.M. 2019. "Introductory Presentation on DRIVER." Presentation to Urban Transport Management Unit, Lima, Peru, May 2019.

TRAINING EVENTS HOSTED/ARRANGED FOR ROAD SAFETY

- Hosted by World Bank and Global Road Safety Facility, iRAP, and Chulalongkorn University. 2018. iRAP Training, Bangkok, August 22, 2018.
- Hosted by World Bank and Global Road Safety Facility. 2018. BBL on *"The Economic Impact of Road Traffic Injuries,"* Singapore, September 17, 2018.
- Hosted by World Bank and Global Road Safety Facility. 2018. Workshop on *"The Economic Impact of Road Traffic Injuries,"* Bangkok, September 18, 2018.
- Hosted by World Bank and Global Road Safety Facility. 2018. Workshop on *"The Economic Impact of Road Traffic Injuries,"* Manila, September 20, 2018.
- Hosted by World Bank and Global Road Safety Facility, iRAP, and University of Transport and Communications. 2018. iRAP Training for local stakeholders, Ho Chi Minh, October 23, 2018.
- Hosted by World Bank and Global Road Safety Facility, iRAP, and Institute of Road Engineering Bandung. 2018. iRAP Training for local stakeholders, Bandung, November 8, 2018.
- Hosted by World Bank and Global Road Safety Facility, iRAP, and ChinaRAP. 2018. iRAP results workshop, Shanghai, November 20, 2018.
- Hosted by World Bank GSG and Global Road Safety Facility. 2018. iRAP Star Rating for Design (SR4D) Tool – Introduction and Demonstration, December 3, 2018.
- Hosted by Global Road Safety Facility. 2019. The Transport Global Practice and DIME presentation *"BBL: Data Innovations to take Africa's Road to Safety."* Washington, DC: World Bank.
- Hosted by Global Road Safety Facility. 2019. IRF Fellowship Program, Washington, DC, January, 2019.
- Hosted by Global Road Safety Facility. 2019. *"Saving Lives on the Road – Time for Leadership."* The UN Global Road Safety Week 2019 Joint BBL. Washington, DC, May 6, 2019.
- Hosted by World Bank and Global Road Safety Facility. 2019. Workshop on Road Crash Data. Panama, September 2018.
- Hosted by World Bank, Global Road Safety Facility, and WRI. 2018. "Road Safety Strategic Planning in Fortaleza and Sao Paulo," Washington, DC, December 2018.
- Hosted by World Bank and Global Road Safety Facility. 2019. *"DRIVER Training under BIGRS and QII."* Manila, January 22-23, 2019.
- Hosted by World Bank and Global Road Safety Facility, Philippines National Police. 2019. "DRIVER Training under BIGRS and QII." Zamboanga (Philippines), March 4-6, 2019.

Hosted by World Bank and Global Road Safety Facility, FIA, ITF, and ADB. 2019. *Workshop towards the Establishment of a Road Safety Observatory in Asia*. Singapore, March 20-21, 2019.

Hosted by World Bank & Global Road Safety Facility, Philippines National Police (2019). "DRIVER Training under BIGRS and QII." General Santos (Philippines), March 28-29, 2019.

Hosted by World Bank and Global Road Safety Facility, Department of Public Works and Highways Philippines. 2019. *Technical Workshop on Road Safety Engineering*. Under Reimbursable Advisory Services. Manila, April 12, 2019.

Hosted by World Bank, Global Road Safety Facility and Shanghai Institute of Traffic Engineering. 2019. Safer Streets and Safer Mobility Forum under BIGRS, Shanghai, April 16-17, 2019.

Hosted by World Bank and Global Road Safety Facility, iRAP, and University of the Philippines. 2019. Workshop under BIGRS and QII, *"Using iRAP and Building Safer Road,"* Manila, April 23-25, 2019.

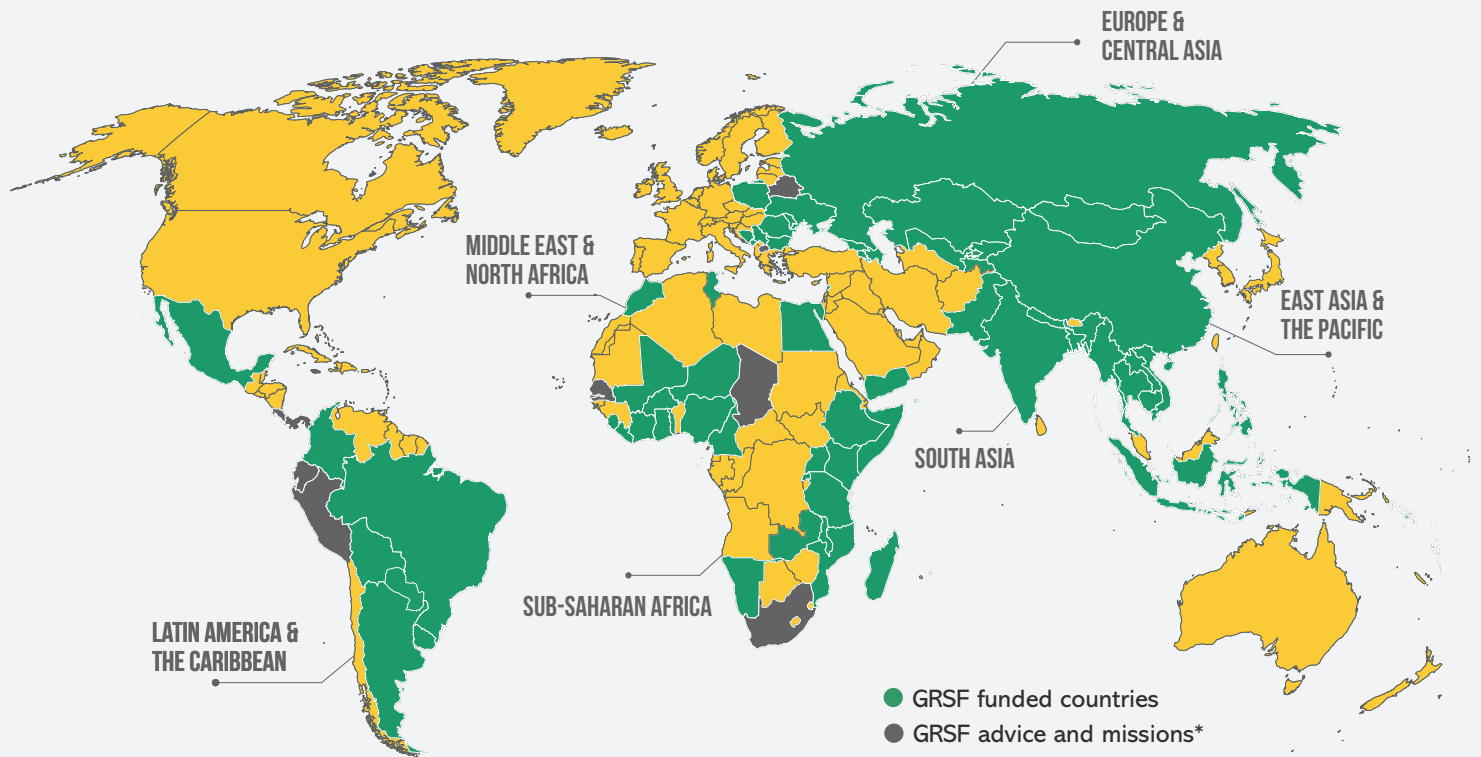
Hosted by World Bank and Global Road Safety Facility. 2019. Road Safety Engineering workshop under QII. Vientiane, May 2-3, 2019.

Hosted by World Bank and Global Road Safety Facility. 2019. DRIVER Training under BIGRS, Bangkok, June 13, 2019.

Hosted by World Bank and Global Road Safety Facility, Philippines National Police. 2019. DRIVER Training under BIGRS and QII. Manila, June 20-21, 2019.

WHERE WE WORK

From its inception in 2006, GRSF has provided funding, knowledge, and technical assistance to the following **78 countries** to strengthen road safety interventions and save lives.



EAST ASIA & PACIFIC

Cambodia
China
Kiribati*
Indonesia
Lao PDR
Mongolia
Myanmar
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
Kenya
Liberia
Madagascar
Malawi
Mali
Mauritius
Mozambique
Namibia
Nigeria
Rwanda
Sao Tome and Principe
Senegal*
Sierra Leone
Somalia
South Africa*
Tanzania
Togo
Uganda
Zambia

About the Global Road Safety Facility (GRSF)

Established in 2006, the GRSF is a global multi-donor fund managed by the World Bank. Its mission is to help governments develop road safety management capacity and scale up road safety delivery by providing funding, knowledge, policy guidance and evidence-based technical assistance to leverage road safety investments in transport and health operations in low- and middle-income countries (LMICs).

