



Global Road Safety Facility

# 2016

## ANNUAL REPORT

Global Road Safety Facility



# LEVERAGING GLOBAL ROAD SAFETY SUCCESS

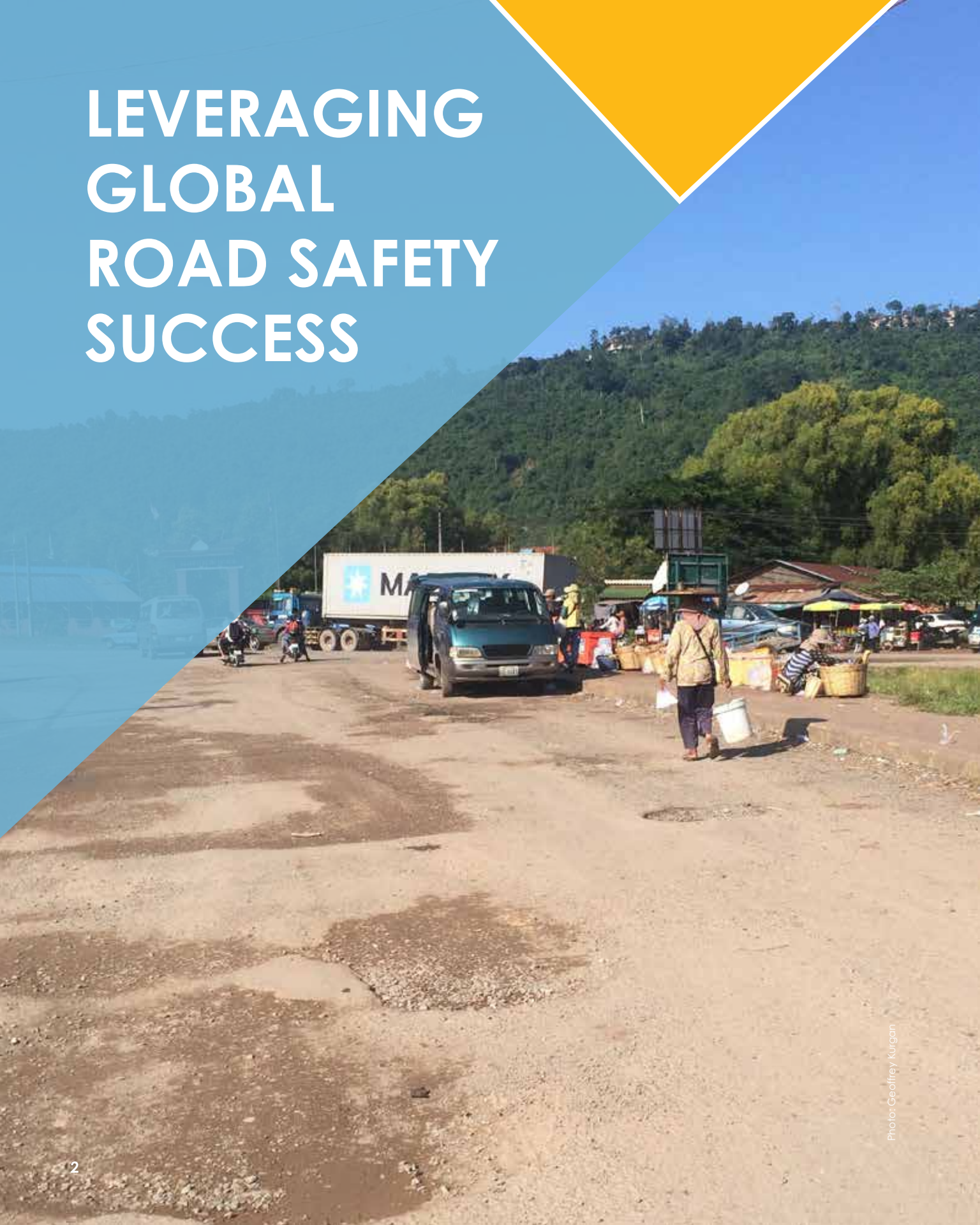


Photo: Geoffrey Kurgan

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**The Global Road Safety (GRSF)** strives to reduce deaths and injuries from road crashes in low- and middle-income countries by offering comprehensive assistance around road safety management and delivery through funding support, technical expertise, and knowledge products.

As a global fund, we have taken a leadership role in advancing the road safety agenda.

Working with our partners and housed in the World Bank since its 2006 establishment, we seek to achieve the road safety targets set forth in the UN Sustainable Development Goals and the UN Decade of Action for Road Safety .

# OUR DONORS

**The Department for International Development (DFID)** leads the UK's work to end extreme poverty, building a safer, healthier, more prosperous world for all of us which is firmly in the UK's national interest. The UK government recognizes the public health crisis and development burden that road crashes present on a global scale. To support the global effort on road safety, DFID allocates resources to the Global Road Safety Facility (GRSF) to achieve significant, measurable, and sustainable results 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 FIA Foundation** has an international reputation for innovative global road safety philanthropy; practical environmental research and interventions to improve air quality and tackle climate change; and high impact strategic advocacy in the areas of road traffic injury prevention and motor vehicle fuel efficiency. The FIA Foundation represents the Global Road Safety Facility's longest standing donor.



Photo: World Bank Group

# OUR PARTNERS

The GRSF partners with the multilateral development banks, nongovernmental organizations, and academia to leverage technical expertise, advocacy and learning platforms, as well as financing to ensure a maximum impact on improving road safety for all users.



Multi-lateral Development Banks: African Development Bank, Asian Development Bank, CAF-The Development Bank of Latin America, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, Islamic Development Bank



# ANNUAL LETTER



I am pleased to present the Global Road Safety Facility Annual Report 2016, which highlights the results and progress achieved by GRSF over World Bank Fiscal Year 2016 (the period July 2015 through June 2016). GRSF has supported 57 active World Bank projects and has assisted 58 countries since it provided its first grant in March 2006. GRSF's work is supporting 16 projects in the World Bank's FY16 road transport portfolio, while leveraging \$411 million of the total \$446 million the World Bank committed to road safety last fiscal year.

In fiscal year 2016 (FY16), the global road safety agenda received positive momentum from two significant global developments. The first was the adoption of the UN Sustainable Development Goals (SDGs) in September 2015 included two major road safety targets, including the specific goal of halving of road traffic fatalities by 2020. The second development was the 2nd Global High Level Conference on Road Safety in Brasilia, Brazil in November 2015, which focused on the international cooperation and action that would be needed to meet the road safety targets

included in the SDGs.

In order to align ourselves with the global developments and renewed momentum around the international road safety agenda, GRSF and the World Bank have worked together to create the necessary environment, policy, and organization to contribute significantly towards the achievement of the 2020 SDG target. The World Bank has formed a Road Safety Global Solutions Group, which brings the Bank's transport leaders and staff from many global practices (including transport, health, and climate) together with GRSF in order to better mainstream and scale up road safety lending and interventions that support the safe systems approach. This Global Solutions Group will help strategize, design, and improve the implementation of impactful and sustainable road safety solutions across World Bank regions and global practices moving forward. The World Bank has also made it mandatory that all road transport projects contain a road safety component, a goal that was achieved in both FY15 and FY16.

In January 2016, GRSF hosted a Global Road Safety Partnership Meeting to continue building on the cooperation established in Brasilia, highlight the good work being done by its partners globally, bring new partners to the table, and highlight its own impactful work while presenting its vision as we move toward 2020. GRSF's innovative partnership with the Bloomberg Road Safety Initiative continues, with important capacity building, safe infrastructure engineering, and policy oriented interventions taking place across 10 cities and 5 countries. Through its multi-donor trust fund, GRSF has also continued scaling up its efforts in low income countries, where road traffic fatality rates are highest. GRSF funding and expertise has been invaluable to road safety in the World Bank and I call on GRSF to continue its good work, strengthen old partnerships while building new ones, and continue to focus on the goal of helping the world meet the 2020 SDG road safety target.

Finally, I would like to express my deep appreciation for our donors and partners for their support over this last highly productive year for GRSF and the World Bank.

Sincerely,

**Pierre Guislain**  
Senior Director, The World Bank Group  
Transport & ICT Global Practice



# LETTER FROM THE CHAIR



As Chair of the Global Road Safety Facility Board, I am pleased to present the GRSF's 2016 Annual Report highlighting the work and achievements of the programme. Road safety is a critical global health and economic development issue. The UN Decade for Action on Road Safety 2011-2020, the Sustainable Development Goals (SDGs), and two global ministerial conferences (in 2009 and 2015) have all helped to increase awareness of road crashes worldwide. 90% of road crash deaths occur in low and middle-income countries. Road crashes are the biggest killer of youth (15-29 year olds) globally and are a major contributor to disability in low and middle-income countries. As such road safety should be a critical issue in taking forwards the 2030 agenda of leaving no-one behind and poverty elimination.

The challenge is now to implement road safety improvements both at pace and at scale. The GRSF plays an important role in thought leadership, profile, research, building evidence and funding for road safety. Some of the partners GRSF works with include the World Health Organisation (WHO), Global Road Safety Partnership (GRSP), UN Regional Commissions, NGOs, International Road Assessment Programme (iRAP), research organisations and Multi-lateral Development Banks (MDBs). Without strong partnerships and working at scale the SDG target 3.6 on Road Safety is at risk of not being achieved.

The UK Government's Department for International Development (DFID), Bloomberg Philanthropies and FIA Foundation constitute the GRSF Board. DFID are pleased to see GRSF re-balancing its portfolio to ensure Low Income Countries in addition to Middle Income Countries are adequately partnered. I congratulate GRSF on the achievements of:

- Road safety now being a Safeguard priority within the World Bank wide Social and Environmental Safeguard Framework
- A World Bank wide policy that all its transport programmes will have a Road Safety component
- Increased working in partnership with international partners such as MDBs, UN and NGOs
- Building the evidence base through research and capacity development.

## **Elizabeth Jones**

Senior Transport Adviser  
Department for International Development



# NOTE FROM THE GRSF MANAGEMENT TEAM

**The Global Road Safety Facility (GRSF)**, The Global Road Safety Facility (GRSF), a global partnership program hosted by the World Bank, was established in 2006 with a mission to help address the growing crisis of road traffic deaths and injuries in low and middle-income countries (LMICs). GRSF provides funding, knowledge, and technical assistance designed to scale-up the efforts of LMICs to build their scientific, technological and managerial capacities. Since its inception, the GRSF has operated as a hybrid grant-making global program, allowing it to distribute funding externally for global, regional and country activities, and internally through World Bank-executed grants, which enhance the work of the World Bank's transport global practice and leverage road safety investments in transport operations in client countries. Through this process over the last several years, GRSF has established itself as one of the highly impactful leaders of the global road safety agenda.

The Global Road Safety Facility has three main objectives, which are detailed in the Strategic Plan for 2013-2020. The GRSF management team is pleased to present the annual report for the 2015-2016 fiscal year.



*R.F. Soames Job*

**Dr. Soames Job**

Global Lead Road Safety and Head of the  
Global Road Safety Facility





# GRSF MANAGEMENT TEAM



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



**Marc Shotten**, Program Manager, Global Road Safety Facility



**Dipan Bose**, Program Manager for the Bloomberg Initiative, GRSF

Past and Present Donors to the GRSF--the GRSF acknowledges the support of:

The Government of Australia (DFAT); The Government of the Netherlands; The Government of Sweden (SIDA); The Government of the UK (DFID); Bloomberg Philanthropies; the FIA Foundation; the World Bank (Development Grant Facility and the Transport and ICT Practice Global Engagement Fund).

## GRSF STRATEGIC OBJECTIVES

### DEVELOPING CAPACITY FOR 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 ROAD PROJECTS

**Mainstreamed** road safety components in all World Bank funded road infrastructure projects

## GRSF FUNDING

As the funding demand for road safety continues to increase in low and middle income countries, GRSF continues to allocate its resources toward leveraging substantial and effective road safety interventions. To achieve this, Facility resources are frequently mobilized in the early stages of larger initiatives with priority given to helping client countries and states build the institutional capacity to sustain and improve on road safety solutions over the short- and long- term. GRSF works closely with the World Bank to leverage and influence road safety interventions in World Bank lending projects and operations.

Projects are results driven with ambitious, but pragmatic and measurable outcomes. Written government endorsement for grant requests guarantees stronger country ownership, favors more sustainable outcomes, and provides a greater possibility for additional road safety investment in the client country.

More information is available on our website:

<http://www.worldbank.org/grsf>

## IN RECENT HISTORY, GRSF HAS

- Leveraged loans and other funding in road and urban transport projects
- Provided pure road safety grants to initiatives independent of World Bank lending aligned with the achievement of the road safety SDG
- Given grants for road safety related training, research, and data development
- Provided global leadership influencing the understanding of and advocacy for road safety action
- Played a role in the creation and leadership of the new Road Safety Global Solutions Group within the World Bank
- Delivered more effective and sustainable road safety solutions by supporting the shift away from fragmented, one-off interventions (often referred to as the “first generation approach”) to a more systematic, results-focused approach that recognizes the multi-sectoral nature of road safety (called the “second generation” or “Safe System” approach)



# OUR GLOBAL REACH


SINCE ITS INCEPTION IN 2006, THE GRSF HAS WORKED TO IMPROVE ROAD SAFETY IN **58** COUNTRIES AROUND THE WORLD

## ACTION & IMPACT


GRSF's work is having a major impact on road safety at a consistently increasing rate. Highlights of this impact include:



US \$30 million in total GRSF disbursements



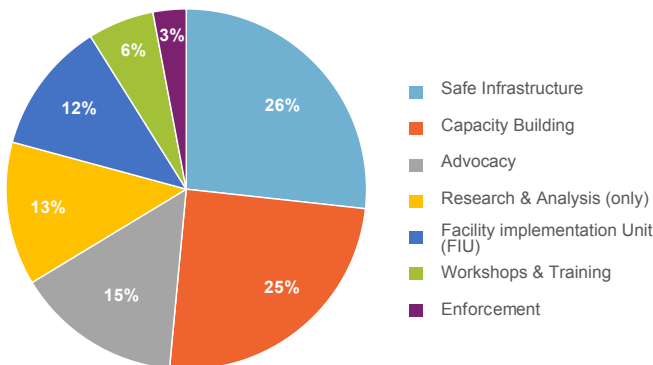
**75%**  
Reduction of road traffic fatalities on project corridors in Argentina since FY10



**30%**  
Reduction of road traffic fatalities on the Abuja-Kaduna-Zaria-Kano Corridor in Nigeria since FY11

**43%**  
Disbursement to external agencies including: WHO, Global Road Safety Partnership, iRAP, UN Regional Commissions, UN Economic Commission for Europe, Global Alliance of NGOs for Road Safety

### Disbursements by Activity (MDTF)



**\$1.5 billion**  
Government budget committed for adopting ChinaRAP recommendations after GRSF technical assistance & funding

# BY THE NUMBERS

## FY16 HIGHLIGHTS

\$

US \$3.75 million in total  
GRSF disbursements



\$\$\$

\$411 million in World Bank  
road safety lending as of  
FY16

15

New GRSF Projects  
Approved

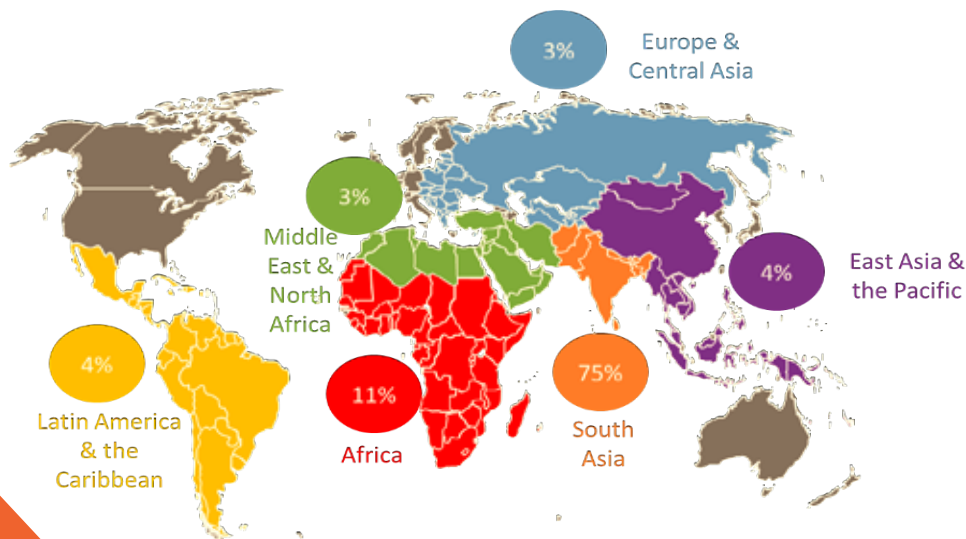


Safe infrastructure capacity development  
in 10 Cities & 4 Countries with Bloomberg  
Philanthropies

16

World Bank Projects  
Launched with Support  
of GRSF

### Regional Disbursements



75%

Of disbursements  
in low income  
countries

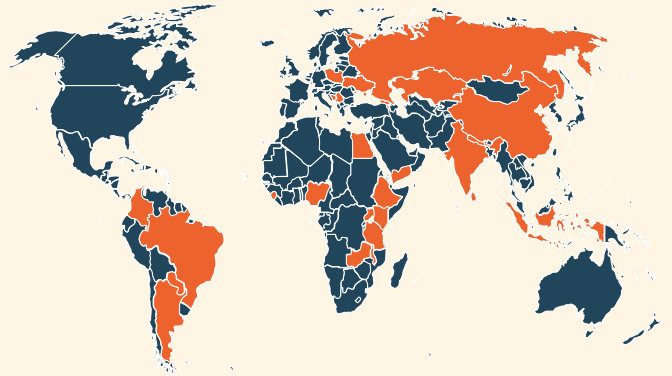
# WHAT WE DO

## ■ CAPACITY BUILDING

In developing countries, setting up good road safety practice is a challenge due to a variety of issues including weak agency capacity, insufficient funding, and absence of political will.

To address these challenges, GRSF developed the Road Safety Management Capacity Review, which is an appraisal tool to help assess a country's road safety management capabilities.

The review guides the process of shifting from weak to strong institutional management capacity by working with client governments to identify systematic gaps and prioritize investments and interventions to achieve and sustain improved road safety outcomes.

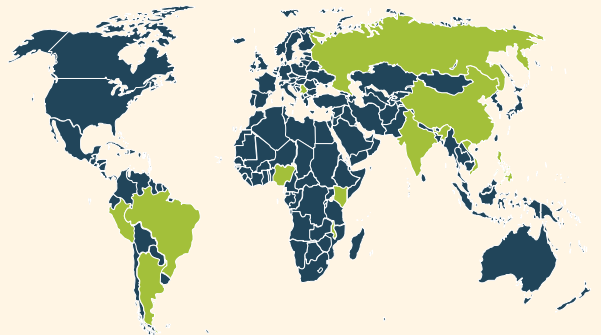


**Of 37 capacity reviews supported by GRSF at the national, state/provincial, and municipal level, 35 have led to concrete road safety interventions (ex. Establishment of road safety lead agency, development of national strategy, World Bank projects, etc.)**

## ■ SAFE INFRASTRUCTURE

Unsafe roads and roadsides are a key contributor to casualties in LMICs. In an effort to address road infrastructure, the GRSF continues to build its partnership with the International Road Assessment Program (iRAP) as well as support operations with funding and expertise to build capacity and streamline road safety audits, safety inspections, crash data analysis, and international good practice for roadway design. GRSF seeks to help protect users from head-on crashes, hitting roadside objects, brutal side impacts, and being involved in vehicle trauma incidents.

**40,000 KM ASSESSED THROUGH GRSF FUNDED IRAP SURVEYS**



**In India, recommendations from GRSF-funded IRAP surveys and safer investment plans are being implemented on 2,000km of road network**

## ■ POLICE ENFORCEMENT:

Through the establishment of RoadPol, the GRSF has supported the development of professional and effective traffic police forces around the world that have the necessary capacity to enforce improving laws.

GRSF has sponsored the exchange of police managers and provided grants for road safety policing strategies, for example in Moldova, Georgia and Nigeria.

## ■ EMERGENCY MEDICAL SERVICES AND POST-CRASH CARE

Through lending operations and partnerships, the GRSF has supported the improvement of first-aid training, ambulance services, and trauma care facilities as well as the collection and reconciliation of relevant health sector data.

## ■ RESEARCH AND DEVELOPMENT WITH INFLUENCE AND IMPACT:

### GRSF ROAD SAFETY MANAGEMENT GUIDELINES



### Influence

Used in many World Bank road safety projects including Vietnam and Argentina Road Safety Projects, as well as the largest road safety management capacity review ever undertaken, in Brazil, on the request of the national government

### Impact

- Decrease in fatalities each year since a road safety capacity review started in Poland in 2012
  - Contributed to 12% reduction in road traffic fatalities nationally in Argentina
  - A 61% decrease in fatalities on project corridors in the Vietnam Road Safety Project



# OUR WORK

## GRSF IN FY16

In FY16, GRSF continued working toward its strategic objectives, highlighted in the GRSF 2013-2020 Strategic Plan, while supporting the UN Decade of Action's goal of reducing road traffic deaths by 50% by 2020, and improving the longer-term sustainability of road safety interventions. GRSF is also working towards the new Sustainable Development Goals, which call for halving road traffic deaths and injuries by 2020, and continuing to improve urban road safety and access to safe transport by 2030.

### ACTIVITIES IN FY16 INCLUDED:

- Expanded capacity building and safe infrastructure work across 10 cities and four countries with the Bloomberg Initiative for Road Safety
- Interventions to improve road safety institutional management capacity in Paraguay, Tanzania, Romania, Nepal, Morocco, Brazil, Mexico, and several Pacific Island nations
- Assessing and enhancing the safety of road infrastructure in Ukraine
- Strong supporting and hosting events at the 2nd High Level Meeting on Road Safety (2nd Ministerial Meeting) in Brasilia
  - Funding research and development to incorporate the iRAP methodology into the International Study on Road Asset Management and Modeling (ISRAMM)
    - 75% of disbursements went to low income countries, with another 21% of disbursements assisting lower-middle income countries
      - Helped ensure that 100% of World Bank road projects had a road safety component for a second consecutive year, as it influenced Bank road safety lending to hit a record high of \$446 million in FY16
    - GRSF is currently supporting or has supported 57 active World Bank projects across 38 countries, including 16 new projects in FY16 (through recent or new activities) with \$411 million in road safety commitments

# NEW AND ONGOING PROJECTS



Advocacy based activities and some trainings/workshops are not listed on the map above

**BLOOMBERG INITIATIVE ROAD SAFETY COUNTRIES:  
INCLUDING CHINA, INDIA, TANZANIA, THE  
PHILIPPINES, THAILAND, PLUS THE TEN CITIES  
PROJECT**



# KEY TAKEAWAYS FROM THE GRSF'S ENGAGEMENTS IN FY16

## BLOOMBERG INITIATIVE FOR GLOBAL ROAD SAFETY

- The GRSF continued its partnership with the Bloomberg Philanthropies (2015-2019) in 10 low- and middle-income cities (infrastructure safety assessments) and 5 countries (infrastructure safety assessments, policy, and management capacity)
- Tasked with addressing road safety infrastructure management, the GRSF led assessments of 1,400 km of roads and trained approximately 2,700 relevant stakeholders while aligning the efforts with at least US\$315 million in Bank loans across a number of the cities and countries since the start of the initiative
- Partnering with the World Resources Institute and the National Association of City Transportation Officials, the GRSF continued to provide strategic advice on the planning and design of road safety improvements in cities while sustaining the efforts for the long-term by building capacity within local universities and research institutes

## INTEGRATION OF IRAP INTO THE INTERNATIONAL STUDY ON ROAD ASSET MANAGEMENT AND MODELS

- In FY16, the GRSF collaborated with the International Study on Road Asset Management and Models (ISRAMM) team to investigate effective ways to integrate iRAP capabilities into a common framework for road asset management data collection
- The partnership believes that by mainstreaming iRAP into the ISRAMM resources, road safety improvements can be more efficiently implemented in line with recurrent budgets in developing countries

## PARAGUAY: ROAD SAFETY MANAGEMENT CAPACITY DEVELOPMENT

- GRSF's work is leveraging a US\$12 million component in the Paraguay Transport Connectivity Project through upstream advice on managing the national driver license registry and evaluation system, strengthening the country's road safety observatory, as well as improving the driver infractions system

## ROMANIA: ROAD SAFETY MANAGEMENT CAPACITY DEVELOPMENT

- In advance of a European Union grant and a loan aimed at improving road infrastructure safety, the GRSF spearheaded a capacity review to improve institutional management capacity in line with the Safe Systems approach and to enhance technical standards

## UKRAINE: ROAD ASSESSMENT PROGRAM AND CAPACITY REVIEW

- Between two Bank lending operations, the GRSF conducted an institutional capacity review and led the risk mapping of 1,500 km of the national road network
- Leveraging a total of US\$102 million, the effort is projected to result in a 24-38 percent reduction in fatalities and serious injuries between the two projects

## TANZANIA: ROAD SAFETY MANAGEMENT CAPACITY DEVELOPMENT

- In line with the launch of the World Bank financed Dar Es Salaam Bus Rapid Transit (BRT) system, the GRSF funded and guided a road safety audit of the BRT corridor, trained and certified the bus drivers, and the preparation of the system's communications and operations program

## NEPAL: IMPLEMENTING NEPAL'S ROAD SAFETY ACT

- Continuing a strong relationship with Nepal, the GRSF assisted the government implement the National Road Safety Act and action plan in advance of US\$7.5 million Bank loan
- Significant action was taken on formulating and building consensus to finalize the road safety legislation, developing university level curricula to build and sustain road safety expertise, as well as identifying and designing road safety infrastructure improvements along two pilot corridors totaling 700 km in western Nepal

## THE PACIFIC ISLANDS

- The GRSF supported the upstream design of a US\$7.2 million IDA grant to build a Pacific Islands Road Safety Observatory, develop sample safety legislation, train police and first responders, as well as deliver enforcement and emergency medical equipment through a partnership with the Secretariat of the Pacific Community (SPC)

- The project will reach up to 10 low-income SPC with Fiji likely to join the partnership using domestic financing

## MEXICO: ROAD SAFETY MANAGEMENT CAPACITY DEVELOPMENT

- With an increased focus on urban road safety, the GRSF funded and steered the preparation of guidelines for road safety management in Mexican cities that included capacity assessments, identification of financing methods, as well as planning and administrative tools
- The guidelines are now available to inform Mexico's US\$2.7 billion Federal Mass Transit Program and the Urban Transport Transformation Project as well as to the other 22 member states of the Ibero-American Road Safety Observatory

## MOROCCO: A NEW NATIONAL ROAD SAFETY STRATEGY

- The GRSF played a critical role in the evaluation of Morocco's old national road safety strategy as well as the establishment of a new lead road safety agency and the eventual launch of its new national road safety strategy (2016-2025)

## BRAZIL: FEDERAL ROAD SAFETY MANAGEMENT CAPACITY REVIEW

- With the backdrop of the Second High-Level Conference on Road Safety, the GRSF supported the largest national road safety management capacity review ever undertaken in the country
- Leveraging two Bank lending operations with discussions of a third ongoing, the effort resulted in a combined US\$46 million in road safety investment in two states

## BAHIA, BRAZIL: BAHIA ROAD SAFETY MANAGEMENT CAPACITY REVIEW

- The State of Bahia is now investing US\$37.5 million in road safety based on management review conducted by the GRSF



# Brasilia

## THE 2ND HIGH LEVEL CONFERENCE ON ROAD SAFETY

### CONFERENCE AND DECLARATION



The 2nd High level Conference on Road Safety, hosted by the Brazilian government in Brasilia, Brazil (also known as the 2nd Global Road Safety Ministerial) was held in November 2015 with the attendance of 70 ministerial-level government delegations and 2200 total participants from 136 countries. The World Health Organization and the World Bank (with GRSF support) played major roles in the organization of this event. The Brasilia Declaration ([http://www.who.int/violence\\_injury\\_prevention/road\\_traffic/Brasilia\\_Declaration/en/](http://www.who.int/violence_injury_prevention/road_traffic/Brasilia_Declaration/en/)), called to “intensify both national and international cooperation” to meet the road safety targets for 2020 and 2030 from the UN Sustainable Development Goals (SDGs). The recommended actions from the declaration include:

- Stronger road safety management, legislation and enforcement
- Promotion of safer roads and sustainable modes of transport
- Protection of vulnerable road users
- Development and promotion of safer vehicles
- Increased awareness and capacity of road users
- Improvements in emergency services and post-crash care
- Strengthened cooperation and coordination towards global road safety
- An upscaling of financing for road safety.

**“In five years, I hope we can reflect on the Decade of Action for Road Safety in a positive light and build on the success into the next decade.”**

~Dilma Rousseff,  
President of  
Brazil



Zoleka Mandela (on right), a road safety advocate and Nelson Mandela's granddaughter, opened the 2nd High Level Road Safety Conference with Brazil's President



Brazil's President, Dilma Rousseff, addressing the 2nd High Level Conference on Road Safety

## GRSF & THE WORLD BANK IN BRASILIA

GRSF and the World Bank played a substantial role in organizing the 2nd High Level Road Safety Conference in Brasilia, including major financial sponsorship of the Low-Income Country Travel Fund administered by WHO.

World Bank Managing Director and Chief Financial Officer, Bertrand Badre, chaired plenary and parallel sessions on meeting the goals of the UN Decade of Action for Road Safety and financing road safety. The World Bank and Senior Director Pierre Guislain, in collaboration with GRSF, also chaired and participated plenary and side events at the Brasilia conference.

The World Bank/GRSF hosted “Implementing and Achieving the Decade Goals-The Challenge for Africa”, allowed 15 ministers from the African continent along with officials from the UNECE, African Development Bank, Islamic Development Bank, and the European Investment Bank to review road safety progress in Africa. A key outcome of the meeting was the creation of a roadmap, endorsed by most African countries, outlining key areas of focus such as strengthening lead agencies, improving data collection, and launching an Africa Forum on Road Safety.

Other important GRSF and Bank-hosted events included “Road Traffic Policing Challenges in the Decade of Action,” “The Role of the Insurance Sector in Strengthening Road Safety,” and “Road Safety Management.”



Soames Job speaks at the GRSF sponsored road traffic policing panel in Brasilia

**“To make significant progress, governments must commit now to making road safety a priority and start thinking creatively of ways to increase funding domestically.”**

~Bertrand Badre, former World Bank Managing Director and Chief Financial Officer



Marc Shotten moderates a Ministerial panel on road safety management

**“The GRSF and World Bank are uniquely positioned to lead in the achievement of the SDG road safety targets. However, achieving these targets will require a concerted effort to create a consensus of action and financial commitment from LMIC governments.”**

~Marc Shotten, GRSF Program Manager

# GRSF'S ROAD SAFETY PARTNERSHIP FORUM



Elizabeth Jones, Chair of the GRSF Board & Senior Transport Advisor at DFID, welcomes partners to GRSF's 2016 Road Safety Partnership Forum.

On January 12, 2016 Elizabeth Jones (Chair of GRSF Board and Senior Transport Advisor at DFID), and Soames Job, Global Lead for Road Safety and Head of the GRSF at the World Bank, welcomed many global partners to the World Bank for a Road Safety Partnership Forum. The Forum highlighted the successful partnerships of the past decade, but discussed the partnerships and strategies that would be needed in the future to achieve the ambitious road safety targets in the UN Sustainable Development Goals (SDGs).



Marc Shotten, Program Manager of GRSF, celebrates the 10th anniversary of GRSF by highlighting the achievements of the Facility over the past decade



Dipan Bose, Program Manager of the Bloomberg Initiative for Global Road Safety (with GRSF), and Kelly Larson, Director of Public Health Programs at Bloomberg Philanthropies, detail the innovative collaboration between GRSF and Bloomberg Philanthropies that has been making countries and cities across the developing world safer for road users since 2010.



The Forum proved to create a robust discussion amongst participants, highlighting the need to focus strongly on improving systems of data collection and metrics, greater collaboration with private sector, and the need to build a greater number of more strongly coordinated partnerships to meet the SDG targets.

The Forum was closed with call for greater funding of the GRSF and the global road safety agenda, more extensive and well planned collaboration and coordination between relevant stakeholders, and the need for urgent action and implementation.



Soames Job, Head of GRSF discusses meeting the Sustainable Development Goals for road safety.



Mohammed Essakali, a World Bank Senior Infrastructure Specialist (pictured left), and Boboye Oyeyemi, Marshall of Nigeria's Federal Road Safety Corps (pictured right,) detail the collaborative effort between GRSF, the World Bank, and Nigeria's FRSC to implement effective road safety measures in Nigeria that have, to date, produce an 11% reduction in fatalities on project roads.



Veronique Feypell, a Senior Expert from the OECD's International Road Traffic and Accident Database (IRTAD), outlines collaborative work between GRSF & IRTAD in the establishment of the Ibero-American Road Safety Observatory



GRSF and its partners have worked together to take impactful action to create a paradigm shift for road safety around the world.

2016 marks the 10th Anniversary of the GRSF operational launch and the Forum celebrated its achievements in a special session highlighting its work in low and middle income countries.

# GRSF AND WORLD BANK PARTNERSHIP 2016

The GRSF and World Bank's Road Safety Global Solutions Group (GSG) work closely to ensure best practice road safety policy and projects can occur by bringing together the Bank's regional transport, urban, health and ICT teams.

In 2016, the Road Safety GSG and GRSF teams organized sessions at the annual Transport and ICT Learning Forum on: applying behavioral science and road safety in urban mobility, hosted jointly with the Bank's Urban team. It also jointly organized the annual Transforming Transportation event with the World Resources Institute.

The GRSF administered support and funding to ensure topic specific success stories were disseminated in coordination with GSG. A special learning session was also hosted together with the ICT team on post-crash emergency care and adoption of IT solutions.

The Road Safety GSF also led in-depth discussion with the NGO 3-star coalition group to help shape the organization's commitment and approach towards the elimination of high risk roads by assisting countries to see the value of 3 star roads.

GRSF members also attended the Winter Meetings of the Clinton Global Initiative on behalf of the World Bank and Road Safety GSG to exchange ideas and meet practitioners in the road and urban design space.

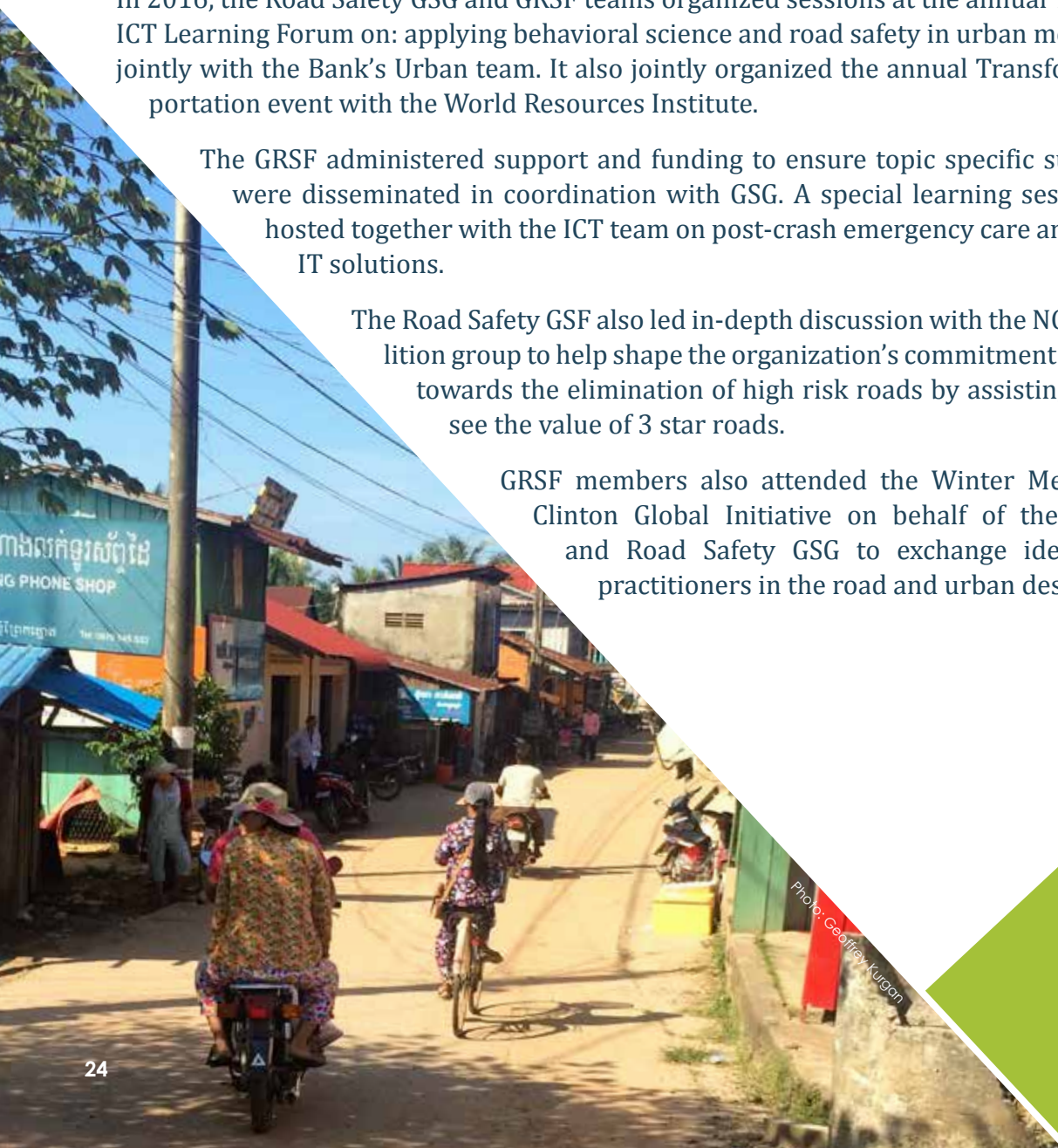


Photo: Geoffrey Kurgan



# GRSF AND GLOBAL LEADERSHIP



FY 2016 Highlights (see Annex – for a more complete list):

- Delivered major events at the 2nd Global Ministerial Conference of Road Safety
- Members of the Global Road Safety Partnership Executive Board
- Members of the FIA High Level Panel for Road Safety Advisory and Expert Panel
- Contributing authors to the Global Burden of disease study
- Core members of the Multi-lateral Development Bank working group on road safety
- 10 Peer-reviewed journal papers/conference proceedings
- 42 In-country or event talks delivered on road safety capacity building in developing countries.

Photo: Geoffrey Kurgon



# ANNEXES

# ACTIVITIES FROM DONOR PARTNERSHIPS

## THE BLOOMBERG INITIATIVE FOR GLOBAL ROAD SAFETY

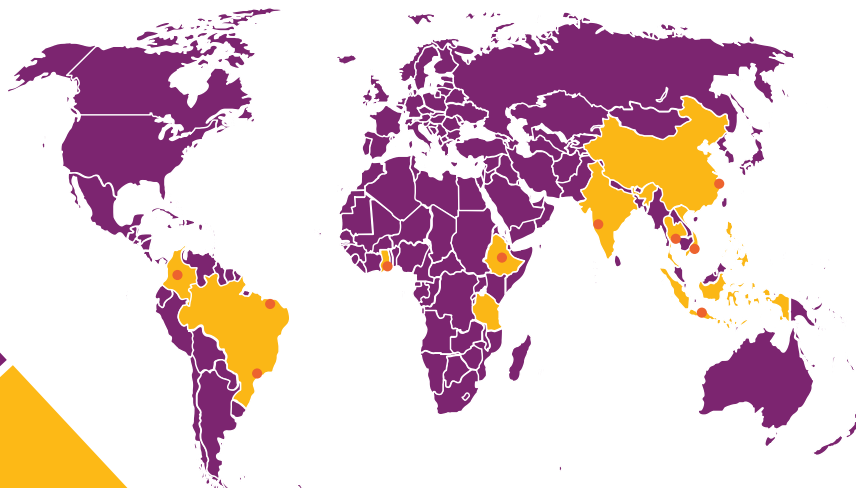
### THE PARTNERSHIP

GRSF's partnership with the Bloomberg Philanthropies Initiative for Global Road Safety (2015—2019) aims to reduce road deaths and serious injuries in ten selected cities, all in low- and middle-income countries and to improve road safety legislation in five selected countries.

The primary objective of the initiative is to improve road safety in rapidly growing cities, while improving policy and management capacity in five countries (China, India, Thailand, The Philippines, and Tanzania). Under the initiative, cities receive funding to support three full-time staff members embedded in city agencies, comprehensive technical assistance from the collaborating organizations, training and capacity-building for enforcement agencies, and assistance in developing media and social awareness campaigns.

The initiative focuses on the following:

1. Develop local capacity and deliver training for sustainable implementation of infrastructure safety management
2. Undertake assessments and quantitative ratings of high-risk urban roads
3. Leverage related road safety investment in countries where a significant impact on lives saved can be achieved



### City Level Activities

Accra, Ghana  
Addis Ababa, Ethiopia  
Bandung, Indonesia  
Bangkok, Thailand  
Bogota, Colombia  
Fortaleza, Brazil  
Ho Chi Minh City, Vietnam  
Mumbai, India  
Sao Paulo, Brazil  
Shanghai, China

In 2015, the first year of the initiative, iRAP assessments were piloted over 430 km across 4 cities including Addis Ababa, Ho Chi Minh City, Mumbai, and Sao Paulo. GRSF is now working with each city to make safety improvements that will reduce fatalities and injuries on the surveyed roads. In 2016, road assessment work was initiated in Accra, Fortaleza, Bogota, and Bangkok. These iRAP assessments lead into 3 main functions of work as highlighted by the graphic below.

BIGRS Funded iRAP Assessments

- Leveraging infrastructure safety assessments with ongoing World Bank loan projects in cities with committed funding (e.g., urban road projects in Addis Ababa and the Bus Rapid Transit [BRT] project in Ho Chi Minh City).
- Providing strategic guidance for the design of high-risk sections of the urban corridor. This work is being done in collaboration with the World Resources Institute and National Association of City Transportation Officials.
- Developing local capacity among universities and research institutions to undertake iRAP surveys and assessments.



**A future Bus Rapid Transit Corridor in Ho Chi Minh City, Vietnam in need of safety upgrades.**

## PROJECT OBJECTIVES AND METRICS FOR THE 2015-2019 PERIOD INCLUDE:

OBJECTIVES	METRICS	OUTPUT/OUTCOME AS OF JUNE 2016
Improve the capacity of local stakeholders to identify high risk roads and design and build safe roads	Number of people trained	<b>2700 officials and relevant stakeholders trained</b>
Complete iRAP assessments on up to 150km of roads in each city and up to 3,000km of roads in each country	Length of road assessed	<b>1400 km assessed between 10 cities and 3 countries, with more assessments underway</b>
Improve road infrastructure safety	Length of road where safety countermeasures have been included in designs or installed	<b>Now underway</b>
Increase government spending on safe road infrastructure	Dollars invested or committed	<b>At least \$315 million through leveraging World Bank lending.</b>

With the help of funding by Bloomberg and our partners in the BIGRS (such as iRAP), GRSF has been able to leverage or support up to USD 314.7 million in World Bank road safety lending since the beginning of fiscal year 2015 (see table below). While non-BIGRS activities have also contributed to and leveraged many of the projects listed, the BIGRS contribution has been essential to making this substantial impact in the World Bank's road safety portfolio, which was \$446 million in FY16 alone. With the approval of several FY17 World Bank projects in the near future, this work is likely to leverage tens of millions of dollars in further road safety funding next year.

In addition to the main infrastructure, capacity building, and technical assistance, the BIGRS has also undertaken a study entitled "Assessing the macroeconomic consequences of road traffic injuries: critical review of potential approaches." This study compares and contrasts the strengths and limitations of a variety of economic models and approaches that could be used to undertake the holistic costing and socio-economic impact analysis of road traffic injuries and deaths in the five BIGRS countries.

Country-World Bank Project	Fiscal Year	Road Safety Lending (USD)
Ethiopia- Expressway Development Support	FY15	30 million
Ghana-Transport Sector Project Additional Financing	FY15	1.25 million
China- Yunnan Highway Asset Management Project	FY15	3.6 million
China- Gansu Rural-Urban Integration	FY15	12 million
Colombia-Second Programmatic & Sustainable Cities	FY15	8.75 million
India-Second Tamil Nadu Road Sector Project	FY15	60 million
Ethiopia- Transport Systems Improvement Project	FY16	155 million
Vietnam-Local Road Asset Management Project	FY16	17.5 million
China-Wuhan Integrated Transport Development	FY16	26.6 million
<b>Total</b>	<b>FY15&amp;16</b>	<b>\$314.7 million</b>

GRSF thanks Bloomberg Philanthropies for its continued support behind the positive impact we've been able to make on global road safety and we look forward to producing even more impactful and sustainable results over the 2017-2019 funding period.



Pictures from a GRSF site visit to Addis Ababa, Ethiopia (left & right)

# MULTIDONOR TRUSTFUND RECENT ACTIVITIES

ACTIVITIES FUNDED  
BY DFID AND FIA  
FOUNDATION



# Integration of iRAP into ISRAMM



Over the last fiscal year, an interesting research and development opportunity presented itself for GRSF to further support the International Road Assessment Programme (iRAP), which it helped fund and support since its inception. This opportunity consisted of finding an applicable and effective way to integrate the iRAP methodology and tools into the International Study of Road Asset Management and Models (ISRAMM). The goal of ISRAMM is to mobilize resources and support to undertake a substantial international effort to develop the next generation of tools to assist countries with determining investment priorities in their road transport infrastructure.

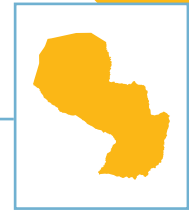
Within this framework, the objective of the GRSF funded work was to propose a common framework of road safety data collection and evaluation among different road asset management systems, models and software tools to promote a consistent approach to road safety interventions' selection, prioritization, economic justification, and monitoring. Ultimately, the true goal of this work is to mainstream safe infrastructure engineering globally through ISRAMM, which is expected to be widely used in road transport decision making and management.

VISION	ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Create a common framework of road safety data collection and evaluation among different road asset management systems, models, and software tools to promote a consistent approach to road safety interventions' selection, prioritization, economic justification, and monitoring and evaluation for integration into ISRAMM.</li> </ul>	<ul style="list-style-type: none"> <li>- Reviewed IRAP methodologies with the specific objective of assessing its data requirements and evaluation tools.</li> <li>- Reviewed available road asset management systems, models and software tools and available road crash databases, in terms of road safety data collection, evaluation, and presentation of the results obtained.</li> </ul>	<ul style="list-style-type: none"> <li>- Study completed.</li> <li>- Results documented and disseminated in a workshop at the World Bank.</li> <li>- Final report has been distributed to 100 relevant stakeholders that part of the ISRAMM mail and email distribution list.</li> </ul>	<ul style="list-style-type: none"> <li>- ISRAMM will have its formal mandate, and have integrated road safety methodologies and modeling into road asset management decision making, including the development of tools for implementation.</li> <li>- As ISRAMM becomes a widely used resource in developing countries, road infrastructure safety is mainstreamed into more road transport infrastructure.</li> </ul>





# Paraguay



## ROAD SAFETY MANAGEMENT CAPACITY DEVELOPMENT

GRSF invested \$150,000 to improve road safety management capacity in Paraguay. Our vision involves:

1. Helping develop the institutional capacity and improving the management of the national driver license registry and evaluation system;
2. Enhancing the monitoring and evaluation of road safety performance through the strengthening of the National Road Safety Observatory
3. Improving the legal framework on road safety (particularly the infractions system)

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Providing technical assistance to the government on the achievement of these objectives.</li> <li>- Provide training to technical teams in lead road safety agency and the Ministry of Public Works on data collection and analysis tools, systems, and reporting.</li> <li>- Provide expert opinion on draft legislation to improve legal framework and participate in workshops and technical meetings with members of congress and senators to advance dialogue and consensus around key aspects of legal framework.</li> </ul>	<ul style="list-style-type: none"> <li>- Draft Regulatory Decrees completed for (i) Driver License System; (ii) Tests for issuing new driver license (theoretical and practice test); (iii) Manual for Drivers Schools/Academies.</li> <li>- Three National Road Crashes Reports prepared and published by the National Road Safety Observatory.</li> <li>- New legislation presented by lead RS agency to Congress for approval on overall legal framework for road safety and the infraction system (currently under review by Senate).</li> </ul>	<p style="text-align: center;"><b>\$80</b></p> <p style="text-align: center;"><b>OF ROAD SAFETY INVESTMENT IS BEING GENERATED IN PARAGUAY FOR EVERY \$1 INVESTED BY GRSF</b></p> <ul style="list-style-type: none"> <li>- Upcoming creation of urban road safety plans and the training of municipal teams and officials in coordination with the national lead agency.</li> <li>- GRSF's work is <u>leveraging a \$12 million</u> road safety component in the World Bank's FY17 Paraguay Transport Connectivity project. Of this \$12 million, \$5 million will be dedicated to implementing the urban road safety plans, once they are developed and approved.</li> <li>- The capacity and effectiveness of the National Road Safety Observatory will continue to grow as partnerships with IRTAD and the IberoAmerican Road Safety Observatory (which GRSF helped create) are leveraged through future activities such as an upcoming benchmarking exercise with IRTAD and observational studies financed by OISEVI using the World Bank's grant.</li> </ul>



# Romania



## ROAD SAFETY MANAGEMENT CAPACITY DEVELOPMENT

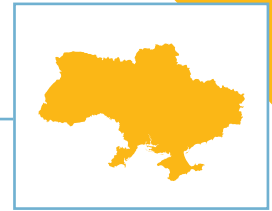
GRSF is financing a road safety management capacity review in Romania in order to:

1. Contribute to improved road safety institutional management capacity in accordance with safe system approach and international best practice.
2. Recommend sustainable improvements in the safety of road infrastructure, focusing on design and other technical standards related to road infrastructure along with the preparation of medium-term “black spot” treatment program following the new approach.

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Diagnosis of the road safety crashes database and role of infrastructure related to safety problems on national roads.</li> <li>- Preparing catalogue of solutions to infrastructure safety problems.</li> <li>- Revitalizing a mediumterm blackspot road infrastructure treatment program.</li> <li>- Reviewing road infrastructure safety management system to identify and suggest key areas for improvements</li> <li>- Identification of problems with technical regulatory framework related to safety aspects of national road infrastructure to suggest improvements in logic, structure and content of technical regulations.</li> </ul>	<ul style="list-style-type: none"> <li>- Draft Regulatory The work is still in its early stages.</li> <li>- The scope of the work has been revised, improved, and confirmed with the client.</li> <li>- Operational cooperation is now established and preliminary data on key infrastructure safety challenges has been collected.</li> <li>- The inception report detailing the approach of our work has been drafted and is under review by Romania.</li> </ul>	<ul style="list-style-type: none"> <li>- Additional financial resources will be leveraged for the “black spot” program aimed at improvement of national road infrastructure safety in the medium term (most likely from a combination of European Union grant funding and World Bank or international financial institution loans).</li> <li>- This work is likely to leverage followup activities for further World Bank technical support in implementing key road safety oriented procedures modifying technical regulations with the Ministry of Infrastructure in order to encourage quick and cost efficient infrastructure safety improvements.</li> </ul>



# Ukraine



## ROAD ASSESSMENT PROGRAM & CAPACITY REVIEW

Ukraine represented a tremendous opportunity for GRSF to influence, scale up, and leverage road safety lending in two World Bank projects in Ukraine, approved in FY13 and FY16. Considering this opportunity, GRSF conducted a road safety management capacity review (\$100,000) and provided a \$135,000 grant to conduct iRAP risk mapping and iRAP star ratings on 1,500 kilometers of the road network. GRSF also wanted to provide an iRAP Safer Roads Investment Plan to help Ukraine implement the necessary safe infrastructure engineering activities in order to meaningfully improve road safety outcomes.

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Conducting a road safety management capacity review to identify gaps in Ukraine's road safety system and recommend solutions to improve management and road safety.</li> <li>- Developing a risk map and star rating analysis using European Road Assessment Program methodology.</li> <li>- Preparing a network and corridorlevel countermeasure plan.</li> <li>- Developing the highest rate of return iRAP Safer Roads Investment Plan.</li> </ul>	<ul style="list-style-type: none"> <li>- Capacity review completed and recommendations made.</li> <li>- Risk mapping of 1,500 km of road infrastructure completed.</li> <li>- Star ratings for 1,500km of road infrastructure completed.</li> <li>- The highest return Safer Roads Investment Plan has been completed for the M12 highway and the audit and design for M12 improvements were also completed.</li> </ul>	<p style="text-align: center;"><b>\$433</b></p> <p style="text-align: center;"><b>OF ROAD SAFETY INVESTMENT IS BEING GENERATED IN UKRAINE FOR EVERY \$1 INVESTED BY GRSF</b></p> <ul style="list-style-type: none"> <li>- GRSF's combination work in Ukraine is <u>leveraging a total of \$102 million</u> in road safety investment in Ukraine through World Bank projects.</li> <li>- The road safety improvement for M12 highway will be completed within the next two years to provide an exemplary safe road investment, likely saving many lives each year. GRSF will continue to monitor progress.</li> <li>- A projected <u>38% reduction</u> in combined fatalities and serious injuries on project roads in the World Bank's Ukraine Road Sector Development Project by the end of the project.</li> <li>- A projected <u>24% reduction</u> in combined fatalities and serious injuries in the World Bank's Second Road and Safety Improvement Project in Ukraine.</li> </ul>



# Tanzania



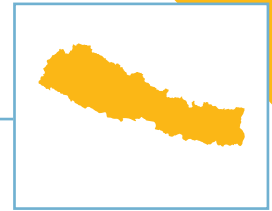
## ROAD SAFETY MANAGEMENT CAPACITY DEVELOPMENT

In Tanzania, GRSF is financing infrastructure capacity development around Tanzania’s newly launched Dar Es Salaam bus rapid transit system (BRT), which has been developed through a World Bank project. In the recent past, GRSF financed a road safety management capacity review in Tanzania, which leveraged about \$27 million in road safety lending through the World Bank’s Southern African Trade and Transport Facilitation Project. GRSF found a good opportunity to continue building on Tanzania’s capacity, while helping improve urban road safety through the inspection of the BRT corridor and training of the BRT operators in Dar Es Salaam. GRSF is confident that this work will help save lives and prevent injuries by leveraging larger investments in road safety through the upcoming Dar Es Salaam Urban Transport Improvement Project.

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Conduct an inspection and audit for the trunk corridor for the first phase of the BRT in Dar Es Salaam, Tanzania.</li> <li>- Provide a final report on the results and recommendations for improvements in the management and infrastructure safety of the BRT corridor.</li> <li>- Conduct training for BRT drivers and for local trainers who will help sustain the developed capacity.</li> <li>- Prepare the communications and awareness program for BRT operations.</li> </ul>	<ul style="list-style-type: none"> <li>- The inspection and audit of the BRT corridor are now complete, with a final report expected in September 2016.</li> <li>- Recommendations for institutional arrangements required to conduct BRT drivers' certification and training program have been provided.</li> <li>- The training sessions for both the BRT drivers and the trainers have been conducted.</li> <li>- Additional training workshops were provided on crash data collection and analysis, and on legal and institutional frameworks for road safety management.</li> </ul>	<p style="text-align: center;"><b>\$131</b></p> <p style="text-align: center;"><b>OF ROAD SAFETY INVESTMENT WAS GENERATED IN TANZANIA FOR EVERY \$1 INVESTED BY GRSF BETWEEN FY11-FY15</b></p> <ul style="list-style-type: none"> <li>- This work has the potential to leverage millions of dollars in road safety investment in the World Bank’s Dar Es Salaam Urban Transport Improvement Project.</li> <li>- Recommendations from the inspection and audit will be included in the design of the infrastructure on and around the BRT corridor through the Bank project.</li> <li>- The government has expressed interest in using this work to replicate success in other nonWorld Bank funded transport projects</li> </ul>



# Nepal



## IMPLEMENTING NEPAL'S ROAD SAFETY ACT

Nepal has been an important part of GRSF's portfolio over the last few years. In total the facility has invested nearly \$250,000 in Nepal through a variety of capacity building, road infrastructure safety, and technical assistance based activities. In FY16, GRSF provided approximately \$158,000 to Nepal in order to assist its government implement the national Road Safety Act and action plan in an effective manner. As Nepal begins to fund and implement its road safety action plan to the tune of \$7.5 through the World Bank alone, GRSF is confident this technical assistance will help Nepal maximize positive and sustainable road safety outcomes.

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Facilitate and finalize the formulation of effective road safety legislation and policy.</li> <li>- Develop curricula for road safety expertise at the undergraduate and postgraduate level for Nepalese Universities and Institutes.</li> <li>- Improve the safety of road infrastructure along 700km of road network in the Western region of Nepal by leveraging World Bank lending</li> <li>- Implement two pilot road safety projects by leveraging World Bank lending.</li> </ul>	<ul style="list-style-type: none"> <li>- National road safety legislation and policy is being drafted and is due for completion in December 2016.</li> <li>- The road safety curricula is now in development and is slated for completion in December 2016.</li> <li>- 40 engineers from the public and private sectors have undergone road safety training.</li> <li>- The implementation of the infrastructural improvements has begun and will be completed by 2017.</li> <li>- The two pilot road safety projects (one urban, one highway) launched.</li> </ul>	<p style="text-align: center;"><b>\$30</b></p> <p style="text-align: center;"><b>OF ROAD SAFETY INVESTMENT IS BEING GENERATED IN NEPAL FOR EVERY \$1 INVESTED BY GRSF</b></p> <ul style="list-style-type: none"> <li>- Strong road safety legislation and regulations are in place, with future investments leveraged to ensure the appropriate enforcement of the law.</li> <li>- An accurate data collection and analysis system is in place to effectively monitor road safety outcomes.</li> <li>- Well trained road safety officials and engineers are able to sustain outcomes and help fuel the growth of the safe system approach in Nepal.</li> <li>- Reduced fatalities and injuries on the 700km of road network where infrastructural improvements were implemented.</li> <li>- Pilot projects produce a reduction of fatalities and replicability in future interventions.</li> </ul>

# The Pacific Islands

## ROAD SAFETY PROJECT

The GRSF is supporting the World Bank’s Pacific Islands Regional Road Safety Project, which will improve regional capacity for road safety management and strengthen the multi-sectoral coordination and integration of road traffic and crash data in the Pacific Island Countries and Territories. GRSF’s support (\$142,000) is leveraging a \$7.2 million IDA grant, working in close cooperation with the Bank’s East Asia Transport team and the Secretariat of the Pacific Community (SPC).

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Establish a regional, cloudbased road safety data observatory for the Pacific Island countries.</li> <li>- Develop a regional, scopebased set of sample legislation for countries to adopt.</li> <li>- Train police to enforce road safety law effectively, especially around key risk factors such as seat belt use.</li> <li>- Train first responders to ensure effectively and timely emergency response to traffic crashes and injuries.</li> <li>- Provide health related equipment and tools to better ensure that emergency response and postcrash care can save more lives and reduce the burden of longterm injuries.</li> </ul>	<ul style="list-style-type: none"> <li>- Preparation of the project at the technical level is complete.</li> <li>- A workshop has been held with all participating Pacific Island countries.</li> <li>- Consensus on the approach of the work will be achieved shortly.</li> <li>- The coordination mechanisms between clients have been established.</li> <li>- Financial and economic appraisal of the project has been completed.</li> </ul>	<p style="text-align: center;"><b>\$50</b></p> <p style="text-align: center;"><b>OF ROAD SAFETY INVESTMENT IS BEING GENERATED IN THE PACIFIC ISLANDS FOR EVERY \$1 INVESTED BY GRSF</b></p> <ul style="list-style-type: none"> <li>- Better management level decision making and well designed and implemented road safety interventions due to increased road safety management capacity underpinned by improved data collection, management, analysis, and reporting.</li> <li>- Well trained law enforcement can lead to more effective law enforcement that will create much needed behavioral changes and save lives.</li> <li>- Well trained emergency response and the increase in capacity for postcrash care will also contribute to saving lives and preventing serious injuries.</li> </ul>



# Mexico



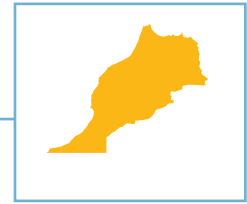
## ROAD SAFETY MANAGEMENT CAPACITY DEVELOPMENT

GRSF’s increasing focus on urban road safety led to the creation of a guideline for road safety management in Mexican cities, along with other capacity building activities based on the guideline. This guideline will contain a review of the institutional and legal frameworks at the national and international level to assess capacity needs, financing methods, and road safety planning and management methods with the focus on sustainable urban mobility at the city level. This analysis will be used as the baseline for the implementation of road safety applicable tools and recommendations for city officials. The main goal of this work is to strengthen the capacity of urban stakeholders and improve coordination between different levels of government in the development and implementation of road safety strategies and programs, while contributing to sustainable urban road safety solutions.

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Review the institutional and legal framework to assess capacity needs, financing methods, and road safety planning and management methods with a focus on sustainable urban mobility.</li> <li>- Create a guideline of road safety planning and management in Mexican cities as a tool and reference to implement safety policies in municipalities, and to adopt best practices for developing internal capacity, financing schemes and road safety plans.</li> <li>- Conduct workshops to disseminate best practice findings and recommendations from the guidelines to officials and stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>- The Final Report on road safety planning in urban areas has been completed.</li> <li>- Dissemination workshops for this report have been conducted for a large variety of important stakeholders across several Mexican cities including Mexico City, Guadalajara, and Leon.</li> <li>- Targeted dissemination to leverage further road safety work in current or future World Bank projects has been conducted.</li> </ul>	<p style="text-align: center;"><b>\$200 million</b></p> <p style="text-align: center;"><b>POTENTIALLY AVAILABLE FOR ROAD SAFETY WORK ON THE BASIS OF THESE GUIDELINES</b></p> <ul style="list-style-type: none"> <li>- Leveraging significant road safety investment is likely through Mexico’s Federal Mass Transit Program and the Urban Transport Transformation Project (\$2.7 billion), \$150 million of which comes from World Bank loans.</li> <li>- The guidelines have been adapted for use in Paraguayan cities, and can now be adapted for use in other countries who are members of the IberoAmerican Road Safety Observatory (OISEVI).</li> </ul>



# Morocco



## A NEW NATIONAL ROAD SAFETY STRATEGY

GRSF funded the review of Morocco’s old national road safety strategy to help the Moroccan government identify strengths and shortcomings with the strategy. This review and the lessons it provides, along with further GRSF and World Bank technical assistance, will then be used to help develop a new, more effective national road safety strategy for Morocco. The GRSF and World Bank also convinced and have helped Morocco build a new road safety lead agency and management capacity to affect positive road safety outcomes. Morocco, with a road safety lead agency, has launched its new national road safety strategy for the 2016-2025 period. GRSF is confident that if the Moroccan government funds this strategy, the nation can significantly reduce fatalities and serious injuries on its roads.

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Review Morocco's old road safety strategy.</li> <li>- Evaluate the shortcomings of the old strategy and existing challenges that Morocco must tackle to improve road safety management capacity and road safety outcomes.</li> <li>- Assist Morocco in the formulation of a new, more effective, and sustainable road safety strategy for the 2016-2025 period.</li> <li>- Provide technical trainings to the relevant stakeholders on capacity management, safe infrastructure, and other important topics in road safety.</li> </ul>	<ul style="list-style-type: none"> <li>- The evaluation of Morocco's old road safety strategy was completed.</li> <li>- Recommendations for the new road safety strategy were made.</li> <li>- Morocco's road safety lead agency has been established.</li> <li>- Morocco's National Road Safety Strategy 2016-2025 has been completed and launched.</li> <li>- Technical trainings were provided to improve Morocco's capacity to manage road safety and implement effective interventions.</li> </ul>	<ul style="list-style-type: none"> <li>- Morocco's national road safety lead agency has now been established, and utilized the GRSF work substantially in its development and institutional framework and operations.</li> <li>- The GRSF work has the potential to leverage tens of millions or hundreds of millions of dollars once the Moroccan government begins funding and implementing its national road safety strategy. GRSF and the World Bank will continue working to convince Morocco to fully fund its national strategy.</li> <li>- Once the national strategy is implemented, thousands of lives will be saved and thousands of serious injuries will be prevented.</li> </ul>





# Brazil



## FEDERAL ROAD SAFETY MANAGEMENT CAPACITY REVIEW

In Brazil, GRSF provided a grant of \$48,000 toward the largest national road safety management capacity review ever undertaken. The purpose of this grant was to help Brazil create an efficient strategy to improve road safety nationally. GRSF had previously conducted four state level capacity reviews and an iRAP assessment on 3,400km of road network, which convinced the Brazilian government of the need to conduct a national level review as well. This capacity review along with the Sao Paulo state and Bahia state capacity reviews conducted by GRSF, are leveraging two World Bank projects in the state of Sao Paulo and Bahia with a combined \$46 million in road safety investment.

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Assess Brazil's ability to effectively manage road safety, and identify gaps and shortcomings in management capacity and the current road safety system.</li> <li>- Recommend solutions via an action plan to enhance capacity and improve the effectiveness and sustainability of road safety interventions.</li> <li>- Provide the final road safety management capacity report.</li> </ul>	<ul style="list-style-type: none"> <li>- The federal capacity review has been completed.</li> <li>- The final report was provided to the Brazilian government and will serve as the key component for a new road safety strategy with 14 key areas for improvement detailed.</li> <li>- The capacity review was conducted at a time where World Bank projects in Sao Paulo and Bahia can benefit from the technical assessments and recommendations.</li> </ul>	<p style="text-align: center;"><b>\$46 million</b></p> <p style="text-align: center;"><b>OF ROAD SAFETY INVESTMENT IS BEING LEVERAGED BY GRSF'S BRAZIL WORK PROGRAM IN TWO WORLD BANK ROAD PROJECTS</b></p> <ul style="list-style-type: none"> <li>- As a result of this work, discussions are now taking place with the federal government around a new potential lending operation that would involve a substantial road safety component.</li> <li>- \$80,000 fatalities and serious injuries could be prevented over the next 20 years in the state of Sao Paulo alone if Brazil implements recommendations from an iRAP Safer Roads Investment Plan funded by GRSF.</li> <li>- The momentum to solve the road safety problem has grown substantially in part due to GRSF efforts and made clear by Brazil's hosting of the 2nd High Level Conference on Road Safety in November 2015.</li> </ul>



# Bahia, Brazil



## BAHIA ROAD SAFETY MANAGEMENT CAPACITY REVIEW

GRSF funded a state level road safety management capacity review in Bahia, Brazil (\$99,000) to help the state government develop the capacity to manage road safety, while informing the design of the road safety component in the World Bank’s FY16 Bahia Road Rehabilitation and Maintenance project. GRSF has conducted several other capacity reviews at the state and federal levels in Brazil with the hopes of increasing and improving coordination between the federal and state governments in order to find and implement the optimal road safety solutions both in the state of Bahia and across the country.

ACTION	ACHIEVEMENT	IMPACT
<ul style="list-style-type: none"> <li>- Assess Bahia’s ability to effectively manage road safety, and identify gaps and shortcomings in management capacity and the current road safety system.</li> <li>- Recommend solutions via an to enhance capacity and improve the effectiveness and sustainability of road safety interventions.</li> <li>- Provide the final road safety management capacity report</li> <li>- Use this work to design to the road safety component of the World Bank’s Bahia Road Rehabilitation and Maintenance Project.</li> </ul>	<ul style="list-style-type: none"> <li>- The Bahia capacity review has been completed.</li> <li>- The final report was provided to Bahia and will serve as the key component for a new road safety strategy with 10 key areas for improvement detailed.</li> <li>- The capacity review was used to design the road safety component in the World Bank’s Bahia Road Rehabilitation and Maintenance Project, which was approved in FY16.</li> </ul>	<p style="text-align: center;"><b>\$38</b></p> <p style="text-align: center;"><b>OF ROAD SAFETY INVESTMENT IS BEING GENERATED IN BAHIA FOR EVERY \$1 INVESTED BY GRSF BETWEEN</b></p> <ul style="list-style-type: none"> <li>- The government of Bahia is now investing \$37.5 million in road safety through World Bank lending, with a road safety component designed on the basis of the road safety management review conducted by GRSF.</li> <li>- The results of the capacity review report will be further disseminated at a workshop in Bahia this year.</li> <li>- A statewide action plan, designed on the basis of this capacity review, is now strongly being encouraged and will be reinforced at the upcoming dissemination workshop for the capacity review.</li> </ul>

# PEER-REVIEWED JOURNAL PAPERS AND CONFERENCE PROCEEDINGS

Bhalla K, Khurana N, Bose D, Navaratne KV, Tiwari G, Mohan D (2016). Official government statistics of road traffic deaths in India under-represent pedestrians and motorised two wheeler riders. *Injury Prevention*. doi:10.1136/injuryprev-2016-042053

Cornish M., Job R.F.S., Sakashita C (2015). Enhancing the Evaluation of Road Safety Communication Programs: Developing an Evaluation Strategy. *Proceedings of the Australasian Road Safety Conference 2015, Gold Coast, Australia, 14-16 October 2015*.

Global Burden of Disease Study Authors (2015). Global, regional, and national disability-adjusted life years (DALYs) for 306 diseases and injuries and healthy life expectancy (HALE) for 188 countries, 1990–2013: quantifying the epidemiological transition. *The Lancet*, 386 (10009), 2145-2191.

Global Burden of Disease Study Authors (2015). The global burden of injury: incidence, mortality, disability-adjusted life years and time trends from the Global Burden of Disease study 2013. *Injury Prevention*, 22 (1), 3-18

Job,S. Sakashita, C. & Czapski, R. (2015). Efektywność funkcjonowania systemu zarządzania bezpieczeństwem ruchu drogowego w Polsce (Developing efficient road safety management system in Poland). Chapter in *Bezpieczny Transport (Safe Transport)*. Publisher: United Nations Global Compact, Warsaw. Nov 2015

Magableh, F, Grzebieta, R. & Job, R. F. S. (2015). Views of Drivers and Traffic Police on some Road Safety Issues in Jordan. *The 7th Traffic Safety Conference, 19-20 November 2015 Amman, Jordan*.

Sakashita, C. Job, RFS. (2015). Employing refined licensing conditions to reduce the serious crashes of young drivers. *Journal of Local and Global Health Science*, 2015, 43.

Small, M. Job, S Excell, R. Sakashita, C. (2015). *Safety Management Systems for Road Agencies ISO 39001 and the Next Step Towards a Safe Road Transport System*. Austroads Research Report AP-R496-15. Austroads, Sydney.

# NON PEER-REVIEW PUBLICATIONS, PAPERS AND REPORTS

Assailly, J-P., Job, S. & Czapski, R. (2015). *Road Safety Education (RSE) in Poland: Diagnosis of and Recommendations for Improvement*. World Bank Report for Poland.

Job, R.F.S. (2016). *Proposal aspiring to deliver the GSG and UN Decade of Action Road Safety Targets for 2020: Managing Speed*. Paper to the WHO meeting on a Strategic Approach to achieving the SDG road safety targets, Geneva, February, 2016.

Job R.F.S. and Sakashita C. (2016). Management of speed: the low-cost, rapidly implementable effective road safety action to deliver the 2020 road safety targets. *Journal of the Australasian College of Road Safety* 27(2):65-70. [[http://acrs.org.au/wp-content/uploads/Vol27No2\\_Web.pdf](http://acrs.org.au/wp-content/uploads/Vol27No2_Web.pdf)]

Job, S., Lancelot, E., Gauthier, G., de Melo e Silva, F., Howard, E., Ledesma, R., and Carneiro, E. (2015) *Brazil: National Road Safety Management Capacity Review*. November 2015. Washington, DC: GRSF World Bank.

Sakashita C. and Job R.F.S. (2016). Global Road Safety: two special issues. *Journal of the Australasian College of Road Safety* 27(2):3-4. [[http://acrs.org.au/wp-content/uploads/Vol27No2\\_Web.pdf](http://acrs.org.au/wp-content/uploads/Vol27No2_Web.pdf)]

Shotten, M., Bose D., Tabbara R., Hettiarachi S., and Job R.F.S. (2016). Making Impacts through the Global Road Safety Facility. *Journal of the Australasian College of Road Safety* 27(2):60-64. [[http://acrs.org.au/wp-content/uploads/Vol27No2\\_Web.pdf](http://acrs.org.au/wp-content/uploads/Vol27No2_Web.pdf)]

Shotten, Marc (2016). World Bicycle Ownership is Going Downhill. Contributing Comments. *SciDev.Net*. <https://www.scidev.net/global/transport/news/world-bicycle-ownership-data-motor-vehicles.html>.

## TALKS DELIVERED

Bose, D (2016). Bloomberg RS-10 project and Cities. *Presentation to the GRSF Partnership Forum, Washington, January 2016*.

Bose, D (2016) Engineering Approaches To Safety – Estimating Injury Thresholds and Response Corridors from Biomechanical Test Data. *Presentation to the Johns Hopkins Center for Injury Research and Policy, Graduate Seminar Series, February 22, 2016*.

Bose, D (2016). Safety assessment and inspection: star rating a urban road environment. *Presentation to Transport and ICT Learning Week, Washington, March 2016*.

Bose, D (2016). Vehicle Safety Standards and Regulations. World Bank mission to Ethiopia and Kenya on *Vehicle Fleet Management project under the Africa Sustainable Transport Forum, Addis Ababa and Nairobi, May, 2016.*

Bose, D (2016). Panel on Safer Streets and Mobility. *Moderator at the Bloomberg Technical Partners meeting, Bangkok, July 2016.*

Bose, D (2016). World Bank and iRAP Activities in Ho Chi Minh City. *Invited Presentation to the Quick-win highlight session at the Bloomberg Technical Partners meeting, Bangkok, July 2016.*

Job, RFS. (2015). Successes from the World Bank: Panel discussion. *Invited Presentation to Side Event Maximising Travel on 3-Star or Better Roads - How to Halve Road Deaths by 2020. 2nd Global High-Level Conference on Road Safety, Brasilia, Nov. 2015.*

Job, RFS. (2015) Implementation in Urban planning & infrastructure for Children in Child Health & Urban Mobility. *Invited Presentation to Side Event Safe Roads, Healthy Futures. 2nd Global High-Level Conference on Road Safety, Brasilia, Nov. 2015.*

Job, RFS. (2015) Moderator's comments and closing. *Invited Presentation to Side Event Road Traffic Policing Challenges In The Decade Of Action. 2nd Global High-Level Conference on Road Safety, Brasilia, Nov. 2015.*

Job, RFS. (2015) Star ratings, SGDs, and World Bank Projects. *Invited Presentation to A World Free of High Risk Roads, iRAP, London, September, 2015*

Job, RFS. (2015) The Global Road Safety Facility and Future Directions in Road Safety Infrastructure Lending. *Invited Presentation to iRAP Innovation Workshop, London, September, 2015*

Job, RFS. (2015). How GRSF works with the World Bank and Star Ratings of roads. *Invited presentation to the iRAP Workshop in the Australasian Road Safety Conference, Gold Coast, October 2015*

Cornish M., Job R.F.S., Sakashita C (2015). Enhancing the Evaluation of Road Safety Communication Programs: Developing an Evaluation Strategy. *Invited presentation to the Australasian Road Safety Conference 2015, Gold Coast, Australia, 14-16 October 2015.*

Magableh, F. Grzebieta R. & Job, S. (2015). The Role of Gender in Road Safety in Jordan. *Presentation to the Australasian Road Safety Conference, Gold Coast, October 2015*

Job, RFS. (2015). If money was no option, what would an enforcement model look like? *Invited Presentation to Policing Workshop, Australasian Road Safety Conference, Gold Coast, October 2015*

Job, RFS (2016). Developments in Road Safety and the Global Road Safety Facility. *Invited presentation to the OISEVI Annual Meeting, Cartagena, March 2016.*

Job, RFS (2016). A description of global road safety, GRSF, and their relevance to the private sector. *Invited presentation to the Transport Mission to the World Bank, Washington, February 2016.*

Job, RFS & Sakashita, C. (2016). Development of the Safe System Approach: Re-invigorating Safe Systems. *Invited presentation to the TRB Sunday Road Safety Workshop, TRB Meeting Washington, D.C. January 2016.*

Job, RFS (2016). Overview of renewed GRSF work program. *Presentation to the GRSF Partnership Forum, Washington, January 2016.*

Job, RFS (2016). Update on the Global Road Safety. *Presentation to the GRSF Partnership Forum, Washington, January 2016.*

Job, RFS (2016). Road Safety and the UN Sustainable Development Goals. *Panel Discussant, Transforming Transport 2016, Washington, January 2016.*

Job, RFS (2016). Road Safety Leadership around the World: Vision Zero. *Keynote address to the 8th International Conference on Urban Traffic Safety April 2016, Edmonton, Canada*

Job, RFS (2016). The Value of Lowering BAC limits. *Invited Address: BAC in the Caribbean: IRF Caribbean Regional Congress (Myths and Reality) Jamaica, May 2016*

Job, RFS (2016). Introduction to Road Safety and Designing Safe Streets. *Presentation to the Transport and ICT Learning Week, Washington, March 2016.*

Job, RFS (2016). The Psychology of Behavior Change in Road Safety: Application of sounds evidence based effects. *Presentation to the Transport and ICT Learning Week, Washington, March 2016.*

Job, RFS (2016). Global Road Safety Leadership & Management. *Invited presentation to the Johns Hopkins Center for Injury Research and Policy, Graduate Seminar Series, February 2016, Baltimore.*

Job, RFS (2016). Reinvigorating Road Safety: the Role of the Global Road Safety Facility. *Presentation to the United Nations Road Safety Collaboration Meeting, April, 2016, New York.*

Job, RFS (2016). Overview of Road Safety Management and session moderator. *Invited presentation to the 2do Foro Internacional de Seguridad Vial Infantil (The 2nd International Children's Road Safety Forum), Santiago, June, 2016.*

Job, RFS & Bose, D. (2016). Mainstreaming Infrastructure Safety in World Bank Projects. *Invited presentation to the 2do Foro Internacional de Seguridad Vial Infantil (The 2nd International Children's Road Safety Forum) Santiago, June, 2016.*

Job, RFS (2016). Lessons from Successes in pedestrian Safety in New South Wales, and Australia. *Invited presentation to the Road Safety Workshop, Warsaw, Poland, June, 2016.*

Job, RFS (2016). Opportunities for Road Safety in Senegal. *Invited presentation to the Government of Senegal Workshop on Road Safety Opportunities, Dakar, Senegal, June 2016.*

Shotten, Marc (2015). Road Safety and Cities. *Invited presentation to the WRI Cities Safer By Design Launch, Washington, DC, July 2015.*

Shotten, Marc (2015). The GRSF and Future Directions. *Presentation to the IRAP Innovation Workshop. London, UK. September 2015.*

Shotten, Marc (2015). Transport for Health. *Invited presentation to the FIA Foundation Workshop: "Breaking the Deadlock: A Social Impact Investment Lens on Reducing Costs of Road Trauma and Unlocking Capital for Road Safety."* London, UK. September 2015.

Shotten, Marc (2015). Future Directions in Global Road Safety. *Keynote Address to the Road Safety Support Policing Conference. Manchester, UK. September 2015.*

Shotten, Marc (2015). New Trends in Emergency Response for Road Traffic Injuries: Technical Innovation and Business Models for Low and Middle-Income Countries. *Moderator and Commentator, World Bank Knowledge Management Series, Washington, DC October 2015.*

Shotten, Marc (2015). Leadership and Management of Road Safety. *Invited Presentation to Instituto Cervantes/Spanish Embassy, Brasilia, Nov. 2015*

Shotten, Marc (2015) Moderator's comments and closing. *Invited Presentation to Side Event Road Safety Management. 2nd Global High-Level Conference on Road Safety, Brasilia, Nov. 2015*

Shotten, Marc (2015). Mobility and Sustainability. *Comments to UN Radio, 2nd Global High-Level Conference on Road Safety, Brasilia, Nov. 2015*

Shotten, Marc (2016). Ten Years of GRSF Catalysing Action. *Presentation to the GRSF Partnership Forum, Washington, DC, January 2016.*

Shotten, Marc (2016). The Global Road Safety Challenge. *Presentation to the International Roads Federation Fellows Class of 2016. Washington, DC January 2016.*

Shotten, Marc (2016). Designing Cities for Greater Road Safety. *Presentation to the and Moderator Role. Transforming Transportation, World Bank, Washington, DC January 2016.*



Global Road Safety Facility

**Soames Job** Global Lead Road Safety,  
World Bank, and Head GRSF

[sjob@worldbank.org](mailto:sjob@worldbank.org)

**Marc Shotten** Program Manager, GRSF

[mshotten@worldbank.org](mailto:mshotten@worldbank.org)

**Dipan Bose** Program Manager for Bloomberg  
Initiative for Global Road Safety, GRSF

[dbose@worldbank.org](mailto:dbose@worldbank.org)

**Sudanthi Hettiarachchi** Program Analyst, GRSF

[shettiarachchi@worldbank.org](mailto:shettiarachchi@worldbank.org)

**Ramzi Tabbara** Consultant, GRSF

[rtabbara@worldbank.org](mailto:rtabbara@worldbank.org)

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[www.worldbank.org/grsf](http://www.worldbank.org/grsf)