

Conclusions

During the UN Decade of Action for Road Safety, the MDBs have provided support to increase awareness and importance of road safety throughout the world. The year 2015 marked the mid-term of the Decade of Action, which prompted the need to evaluate actions and results obtained, and identify the gaps and actions required to ensure that the goals are achieved by the end of the Decade. MDBs' main achievement in the first half of the decade is the commitment to establish mandatory audits and inspections in transport projects funded by MDBs.

In addition, MDBs have established common guidelines for road safety to ensure better awareness and integration of road safety in MDBs financed projects and program appraisals. These guidelines are part of MDBs' joint effort to share tools and procedures on road safety taking into consideration the different approaches and levels of development in road safety that each MDB manages.

Moving forward, it is necessary to continue mainstreaming road safety in MDBs to ensure its inclusion as an essential component in transport projects financed by the MDBs. The MDBs reaffirm their commitment with governments in supporting capacity building for road safety, the need for certification in road safety audits and increased focus on vulnerable users.

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Making Impacts through the Global Road Safety Facility

by Marc Shotten¹, Dipan Bose², Ramzi Tabbara,³ Sudanthi L. Hettiarachchi⁴, R.F. Soames Job⁵

¹Program Manager, The Global Road Safety Facility, the World Bank, mshotten@worldbank.org

²Transport Specialist, The Global Road Safety Facility, the World Bank, dbose@worldbank.org

³Consultant, The Global Road Safety Facility, the World Bank, rtabbara@worldbank.org

⁴Program Analyst, The Global Road Safety Facility, the World Bank, shettiarachchi@worldbank.org

⁵Global Lead Road Safety & Head, The Global Road Safety Facility, the World Bank, sjob@worldbank.org

Introduction

The Global Road Safety Facility (GRSF) is a global fund hosted by the World Bank that is designed to build the managerial and operational capacity of low and middle income countries in order to improve efficacy and scale up road safety efforts. Its goals are aligned with the UN Decade of Action 2011-2020, as well as the new UN road safety targets under the Sustainable Development Goals.

Established in 2006, the GRSF provides funding, knowledge, and technical assistance designed to leverage road safety investments in existing or prospective transport and health operations, as well as other sectors relevant to road safety. GRSF's 2015 disbursements are highlighted in Figure 1. The GRSF's partnerships include national governments, state/municipal agencies, the World Bank Group's Global Practices, multi-lateral development banks, international organisations such as the World Health

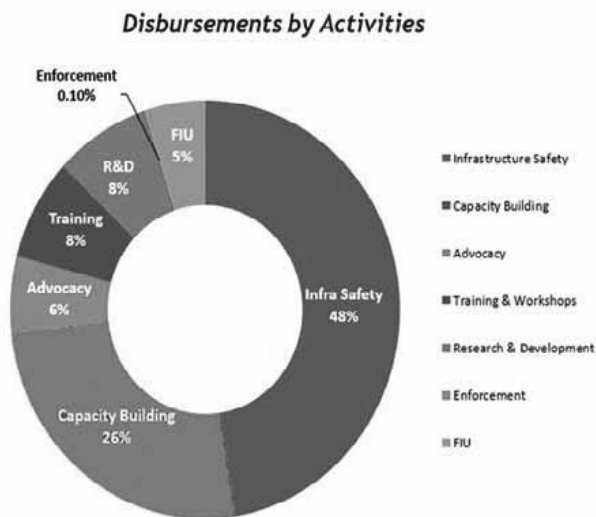


Figure 1. GRSF Disbursement by Activities in Fiscal Year 2015 (FIU = Facility Implementation Unit)

Organization and UN Regional Commissions, NGOs, the private sector, and other key stakeholders (World Bank, 2016).

Key priorities of GRSF are: funding to leverage large sums of road safety investment especially in client countries in which the World Bank is providing assistance for relevant infrastructure: roads or urban projects; and helping clients build the institutional capacity to sustain and improve on road safety solutions over the long-term. GRSF has piloted and supported development and delivery of road safety solutions, in particular with regards to safe road infrastructure engineering and institutional capacity to manage road safety outcomes in client countries.

A key measure of success for GRSF is the extent to which funds donated to GRSF have been deployed to leverage additional funding of road safety. This is achieved by deploying GRSF funds to projects which guide action and improve the commitment to road safety activities. The GRSF has achieved a leveraging ratio averaging over 40 to 1, with some projects delivering leveraging of 80 to 1. That is, on average each dollar donated to GRSF results in over \$40 dollars being directly spent on road safety, by the World Bank, Governments and others.

This article briefly highlights some specific success stories of GRSF's effective delivery of road safety solutions, especially regarding the development of national, institutional road safety management capacity and safe road infrastructure engineering.

Supporting road safety management capacity development

Road safety management covers a number of underlying core functions under the UN Decade of Action Plan. In particular, it addresses the aim to "encourage the creation of multi-sectoral partnerships and designation of lead agencies with the capacity to develop and lead the delivery of national road safety strategies, plans and

targets, underpinned by the data collection and evidential research to assess countermeasure design and monitor implementation and effectiveness." (WHO, 2011)

One of GRSF's main activities over the past decade has, for example, involved funding country road safety management capacity reviews, which help assess the capacity of a client country to manage road safety, while recommending specific and customised interventions to help the client improve its road safety management capacity, as well as overall road safety in the country. GRSF has supported over 30 such reviews at a country or state/province level.

Developing the Ibero-American Road Safety Observatory

The GRSF played a key role in the establishment and growth of the Ibero-American Road Safety Observatory (OISEVI), which is a regional road safety observatory brought together by international cooperation of the highest road safety authorities across Latin America and the Caribbean. In partnership with the International Traffic Safety Data and Analysis Group (IRTAD) under the OECD's International Transport Forum, the GRSF established a partnership to exchange best practice between IRTAD member countries and data agency counterparts in the developing world. The OISEVI's main objective is to share relevant information about road safety indicators and best practices concerning policy-making, planning and other topics related to road safety. The program links the participating countries to the IRTAD resources on harmonised data collection methods (the "IRTAD-LAC Database").

This process started in 2009, when the World Bank, with assistance and funding from GRSF, financed a stand-alone project in Argentina to provide strategic guidance for strengthening the institutional framework and improving the management of road safety interventions. The project included a key component of US\$10 million for developing a road safety monitoring and evaluation system within the Argentinian National Road Safety Agency-National Road Safety Observatory (ANSV). (Bliss & Raffo, 2013)

With support from GRSF and the Spanish government, a pilot training/twinning arrangement was initiated between the ANSV National Observatory and the Spanish Directorate General of Traffic (DGT). The improved capacity for data collection and maintaining a data management system resulted in the inclusion of Argentina in the IRTAD Group.

The Argentina twinning program directly contributed to broader cooperation regarding road safety among the regional countries particularly on important issues like harmonised data collection and sharing mechanisms. Following the 9th and 10th Ibero-American meetings of Heads of Road Safety and Traffic Agencies, 18 countries agreed to create the Ibero-American Road Safety Observatory (OISEVI). Supported by the Global Road Safety Facility, the monitoring program was scaled up to link 22 countries in the region to create the

initial framework and web-based platform. (OISEVI, 2016; Raffo & Bose, 2014). OISEVI continues to gather momentum, with the latest collaborative meeting of the member countries in Cartagena, Colombia in March 2016, also being attended by other countries seeking to join as members.

State and national level capacity development in Brazil

GRSF has funded road safety management capacity reviews across Brazil in the states of Bahia, Rio Grande do Sul, Sao Paulo, and Minas Gerais. State level capacity reviews, along with GRSF and World Bank engagement, have garnered increasing state and federal government interest in road safety. This resulted in GRSF providing Brazil with funding for the largest federal level road safety management capacity review ever undertaken (Job et al 2015). Some of the state level capacity reviews funded by GRSF are leveraging World Bank projects in Brazil, and this recent national level capacity review has a strong chance of leveraging further road safety initiatives in Brazil as well. At the Second Global High-level Conference on Road Safety: “Time for Results,” in November 2015 the Government announced action reflecting a number of the key recommendations discussed with the national government in the capacity review, including the harmonisation of vehicle safety standards with Europe.

Argentina Road Safety Project

With GRSF grant and advisory support, the World Bank launched a \$38.5 million road safety project in Argentina. The project development objective is to contribute to the reduction of road traffic injuries and fatalities in the borrower’s territory through the strengthening of the borrower’s institutional framework and management capacity for road safety, and the reduction of road crashes in selected pilot corridors.

The project strongly contributes to the development of a safe system in Argentina and has three main components to work toward this goal, including (World Bank, 2016a):

1. **Institutional Capacity Building:** This component provides support to increase the institutional capacity of ANSV (lead agency), conducts communication, awareness, and education campaigns, improves response capacity in emergencies to improve post-crash care, and strengthens the capacity of traffic control and enforcement.
2. **Demonstration Corridors and Incentive Fund Program:** This component operates a “Safe Corridors” Demonstration Program on 458 kilometres of high risk road network, and works to create an incentive fund for the implementation of road safety policies and practices.
3. **Road Safety Monitoring and Evaluation System within the National Road Safety Observatory:** See the discussion of OISEVI above.

Intermediate project results highlight a number of successful interventions delivering strong outcomes, including: a 35% reduction of road traffic fatalities on the project’s pilot corridors; contribution to the national 12% reduction in the road traffic death rate; a national increase of 36% in the seat-belt wearing rate for drivers from 2011 to 2014; and a contribution to an increase in the national motorcycle helmet wearing rate from 39% to 62% in the same period (International Traffic Safety Data and Analysis Group, 2014).

Nigeria Federal Roads Development Project

Over the last several years, GRSF has engaged with the Federal Road Safety Corp. (FRSC), the lead agency for road safety management in Nigeria. In 2008, the World Bank approved the Nigeria Federal Roads Development Project, which initially included a \$6 million road safety component. In coordination with FRSC and the project team, GRSF funded a country road safety management capacity review and iRAP survey in 2010. In 2011, the Nigerian government, convinced on the benefits of the road safety component, redesigned and increased the road safety component funding from \$6 million to \$20 million (World Bank, 2016b). Recommendations from the capacity review and iRAP survey are being implemented in the project.

The newly redesigned and ongoing road safety component includes:

1. **Support to the Federal Road Safety Corps (FRSC):** The main elements of this support include training, capacity building, and vehicle and equipment procurement.
2. **Safe Corridor Demonstration Programs:** Safe corridor demonstrations are being conducted on five high risk roads: This safe corridor approach involves targeted interventions around infrastructure safety improvements, road safety management, enforcement, education and awareness, and emergency services.

Reported success from the project to date include an 11% reduction of road traffic fatalities on project roads (with goal of 25% by project’s end); a 30% reduction in road traffic fatalities on the Abujua- Kaduna-Zaria-Kano Corridor from 2010-2013 (project corridor); a 20% decrease in road traffic fatalities in the Abuja Metropolis, despite continued urbanisation and motorisation; and an 8% reduction in road traffic fatalities in Nigeria between 2012 and 2013. (International Traffic Safety Data and Analysis Group, 2014).

Karnataka- integrating transport & health through a road safety demonstration corridor

Karnataka presented a unique situation for GRSF, which is helping support two World Bank-funded projects, within the transport and health sectors, collaborating on a multi-sectoral road safety demonstration corridor program. While the transport project is focusing on interventions related to infrastructure, police training and behaviour change programs, the health project is concentrating on building

capacity for emergency care systems and estimating the baseline burden of injuries related to road crashes. An important aspect of the collaboration was to develop a consistent monitoring and evaluation framework to measure the progress on the demonstration corridor for a period of multiple years.

Under the transport project, GRSF helped leverage a \$14 million road safety component and employ a safe corridor demonstration program on two high risk corridors. The key highlight of the transport project was the establishment of a multi-sectoral road safety cell, which includes representation from all the key stakeholders. The project also focused on target setting for the infrastructure safety on the demonstration corridor, aiming for a minimum iRAP 3-star rating on the upgraded designs. This target goal exhibits strong commitment from the client.

The health project collected valuable injury data from three districts to serve as the baseline estimates for the demonstration corridor. Funded by the Bloomberg Philanthropies grant, GRSF in collaboration with the Johns Hopkins University (JHU) Injury Research Unit, worked to estimate the burden of road injury and deaths on a Bank-funded project in the state of Karnataka. The road safety component of this project addresses many areas of road safety (World Bank, 2016c).

Development and implementation of road safety infrastructure tools and interventions

Infrastructure is justifiably recognised as a key component contributing to safe road outcomes. A core component of the Decade of Action Plan revolves around safer roads and mobility, in particular how to achieve stronger protection for vulnerable road users utilising road infrastructure assessments and improved planning, design, construction and operations of roads (WHO, 2011). Since its early operational days, GRSF has sought and worked with many partners to help achieve this outcome. This section focuses in particular on one key partnership, iRAP.

Financial and technical collaboration with iRAP

From 2007, the GRSF partnered with the International Road Assessment Programme (iRAP), **a registered charity dedicated to preventing road deaths by providing tools and training to help automobile associations, governments, funding agencies, research institutes and other non-government organisations in more than 70 countries make roads safe. Its road safety infrastructure process involves road surveys that help iRAP develop risk maps, star ratings, and safer investment plans so that client countries may implement the appropriate infrastructure engineering solutions to make roads safe for all road users, including vulnerable road users (iRAP, 2016).**

Through funding support from Bloomberg Philanthropies, GRSF has managed the iRAP assessments of more than 40,000 kilometres of high-risk roads in 13 low and middle countries. Subsequent analysis of 14,000 km of the surveyed roads showed the potential to avoid 280,000 deaths and serious injuries over

a 20-year period. Just as GRSF has strongly supported the development and global use of iRAP tools, GRSF is also strongly encouraging and incentivising infrastructure solutions based on iRAPs star ratings and safer investment plans, as well as on non-iRAP infrastructure solutions such as road safety audits. For example, with strong engagement through World Bank, India has committed over \$240 million to incorporate iRAP recommendations on designs covering 1950 km of highways across several states in India (internal report for the World Bank-iRAP India Phase 1 & 2). In the current Bloomberg Initiative for Global Road Safety 2015-2019 (Bloomberg Philanthropies, 2016), the World Bank is collaborating with iRAP to provide safety inspection of urban streets in 10 cities across LMICs along with increasing sustained capacity for road safety for city officials.

Supporting the development and growth of ChinaRAP

Through both technical and financial assistance, GRSF played a significant role in the establishment and growth of China's Road Assessment Program (ChinaRAP). ChinaRAP is the first country-owned Road Assessment Program (RAP) in the developing world. ChinaRAP has rapidly expanded its operations both nationally within various provinces, as well as by winning international contracts in both developing and developed countries. Currently, ChinaRAP's star ratings and countermeasure plans are being incorporated in 14 different city and highway projects, totalling over US\$1.5 billion, in China by the World Bank, Asian Development Bank, and is additionally supporting the Bloomberg Philanthropies sponsored "Road Safety in 10 Countries" initiative. ChinaRAP is also engaging beyond China's national borders. For example, in 2014, the team undertook assessments in Yemen with the World Bank that will help shape a number of projects, such as the Second Rural Access Project (iRAP, 2014).

The GRSF and future operations

This article has focused on two areas in particular regarding GRSF interventions, infrastructure and road safety management. The global road safety agenda is still greatly underfunded. Regardless, as a technical implementing global program, the GRSF will -to the extent its grant financing base allows - work to scale up effective and evidence-based operations globally around road safety by taking a holistic, safe-system, and five-pillar approach to road safety.

An increased focus will likely be placed on areas around improved data collection and analysis, urban road safety, vulnerable road users, digital transport solutions, public-private partnerships, and innovative road safety solutions, through, for example, partnerships with the insurance sector. Low-income countries will also require a great deal more attention given the WHO-reported scale up in fatalities under its last Status Report.

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