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Global Road Safety Facility

Leveraging Global Road Safety Successes

GRSF

Managed by

WORLD BANK GROUP

What is GRSF?

Established in 2006, the Global Road Safety Facility (GRSF) is a global multi-donor fund managed by the World Bank. Its mission is to help governments develop road safety management capacity and scale up road safety delivery in low- and middle-income countries.

What are the goals of GRSF?

GRSF provides funding, knowledge, policy guidance and evidence-based technical assistance to leverage road safety investments in transport and health operations. Its goals are aligned with the UN Decade of Action for Road Safety 2011–2020, as well as with the new road safety targets included in the UN Sustainable Development Goals.

In fiscal year 2015 (FY15), GRSF achieved a leveraging ratio of 1:39 (on average, each dollar of grant funding provided by GRSF resulted in $39 spent directly on road safety through World Bank project lending). GRSF will continue to fund and prioritize activities that have the potential for similar leveraging capacity of donor-aided funds. Funded projects include the following initiatives, among others:

- Helping client countries build the institutional capacity to sustain road safety solutions and improve them over time
- Effectively using funding to leverage the large sums found in road safety investments
- Guiding the most effective road safety investments

GRSF partners with:

- National governments and state/municipal agencies
- World Bank teams in low- and middle-income countries involved in the transport and health sectors
- Multi-lateral development banks
- International organizations such as the World Health Organization and the UN Regional Commissions, NGOs, the private sector and other relevant stakeholders

Bloomberg Philanthropies

Department for International Development

FIA Foundation for the Automobile and Society

Australian AID

Sida

Government of the Netherlands

This booklet highlights a few examples of GRSF's effective delivery of global road safety solutions.

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Success stories from GRSF engagement

The following section highlights past and ongoing success stories and achievements, delivering sustainable life-saving improvements in road safety management and capacity-building in low- and middle-income countries.

GRSF often engages in the early preparation stages of World Bank projects. These examples highlight how GRSF can be involved in any stage of a project's implementation to help develop the Safe System in a client country, to achieve ambitious road safety outcomes and to contribute to national road safety sustainability.

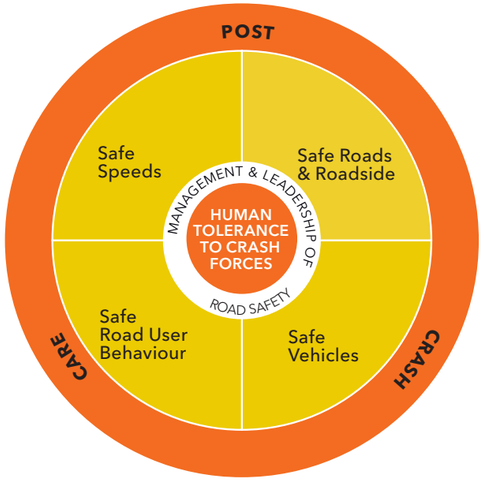

Figure 1. The Safe System Approach starts with the basic assumption of human vulnerability at the center and moves outward to form the pillars of safe system action, with the last line of defense being post-crash care

GRSF & World Bank:
A Partnership Delivering Global Road Safety Solutions

The publication of the World Report on Road Traffic Injury Prevention in 2004 gave recognition to the global epidemic of road traffic deaths and injuries and reinforced the need for strong support of road safety solutions in low- and middle-income countries.

In 2006, the World Bank established GRSF within the Transport unit because of its relationship with developing countries' ministries of finance, transport, health, interior and education — which all play important roles in improving road safety outcomes.

Mainstreaming Road Safety Interventions

One of GRSF's most important accomplishments has been its effectiveness in mainstreaming road safety interventions within World Bank–funded projects and donor-funded operations.

In FY06, the year in which GRSF was founded, World Bank lending for road safety was just $56 million. Ten years later, in FY15, road safety lending stands at $239 million, a 327% increase.

With guidance from GRSF, the breadth of road safety activities—from adequate legislation to safer road design—continues to increase in low- and middle-income countries. While FY06 had just one Bank project with a road safety component that covered more than one of the five pillars of road safety, FY15 had 13 such projects.

Proportion of World Bank road projects with multi-sectorial road safety component (%)

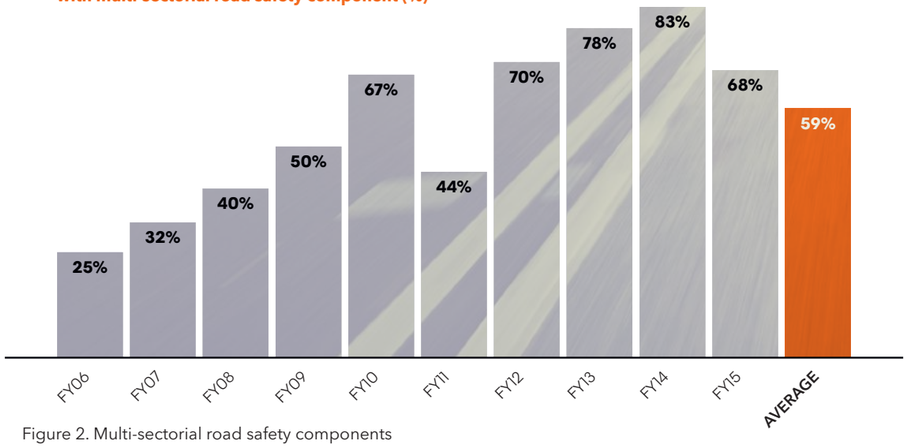

Figure 2. Multi-sectorial road safety components

$3.9 million

in grant financing leveraged $151 million in approved road safety – related lending across the World Bank. 1:39 ratio

$850 million

of World Bank's road safety lending was influenced by GRSF support

Training and Workshops

Since its inception, GRSF has held trainings and workshops for World Bank staff to better enable them to incorporate road safety components into their projects. GRSF has also created a mandatory road safety e-learning course that introduces World Bank staff to the fundamentals of road safety. By providing staff with case studies and guidance, GRSF aims to support both the Pillars of Road Safety and the Safe System approach to improving road safety.

Through the involvement of GRSF, the World Bank transitioned from one-off interventions in road safety to sustainable multi-sectorial projects based on the Safe System approach. GRSF provides technical assistance, infrastructure safety support, road safety management capacity reviews and advisory services to World Bank projects, staff and client countries to maximally leverage GRSF funds.

With sustained additional funding, GRSF can scale up the technical operations of the World Bank, along with other multilateral development banks and international organizations, to increase road safety project delivery, thus continuing to save lives and prevent serious injuries around the world.

Increasing Road Safety in Argentina

Objective

In 2010, with a GRSF grant and advisory support, the World Bank launched a $38.5 million road safety initiative in Argentina. The objective was to reduce road traffic injuries, crashes and fatalities by strengthening the institutional framework and management capacity on selected pilot corridors.

Three main components contributed to the development of a safe system in Argentina:

1. Institutional Capacity-Building: Provided support to the lead road safety agency with the goal of improving response capacity in emergencies and post-crash care, as well as strengthening traffic control and enforcement and conducting communication, awareness and education campaigns.
2. Demonstration Corridors and Incentive Fund Program: Operated a "Safe Corridors" program to increase safety on 458 kilometers of high-risk road network. In addition, an incentive fund was established to implement and develop road safety policies and practices in the demonstration corridors.
3. Road Safety Monitoring and Evaluation System Within the National Road Safety Observatory: Supported by a GRSF grant, this crash data system incorporates best practice guidelines using a peer-based mentoring program; it initiated a pilot training/twinning arrangement between the Agenzia Nazionale per la Sicurezza del Volo (ANSV) National Observatory and the Spanish Directorate General of Traffic (DGT).

Achievements

- Strengthened Argentina's institutional framework and management capacity for road safety, including the launch of a National Driver Licensing and Infraction System and the National Road Safety Observatory.

35% **A 35% reduction of road traffic fatalities in selected pilot corridors between FY2010 and FY2015.**

12% **A national 12% reduction in the road traffic death rate for every 100,000 inhabitants.**

50% **A national 50% reduction of deaths per 10,000 vehicles from 2008–2014.**

36% **From 2011–2014, national seat belt use increased by 36%, while national motorcycle helmet rates increased from 39% to 62%.**

Building Enforcement Capacity in Nigeria

Objective

Since 2008, GSRF and the World Bank have supported the efforts of the Federal Road Safety Corps, Nigeria's leading road safety management agency, in developing a road safety component as part of the Nigerian Roads Development Project. The newly redesigned and ongoing road safety component is focused on:

- Development of the Federal Road Safety Corps (FRSC): Includes training, capacity-building and vehicle and equipment procurements.
- Safe Corridor Demonstration Programs: Demonstrations are being conducted on five high-risk road networks. This approach involves targeted interventions around infrastructure safety improvements, road safety management, enforcement, education and awareness, and emergency services.

Achievements

- In 2011, the Nigerian Government increased funding for its road safety component from $6 million to $20 million after becoming convinced of the importance of life-saving road safety measures on its highways.

30% **reduction in road traffic fatalities on the Abujua-Kaduna-Zaria-Kano Corridor, one of the highest-risk corridors in the country, from 2010–2013 (project corridor).**

20% **decrease in road traffic fatalities in the Abuja Metropolis between 2010 and 2014.**

8% **decrease in road fatalities, nationally, between 2012 and 2013.**

11% **reduction of road traffic fatalities on project roads between 2010 and 2014.**

ChinaRAP – Assessment and Rating of High-Risk Roads in China

Objectives

With technical and funding support from GRSF, ChinaRAP became the first country-owned Road Assessment Program (RAP) in any low- or middle-income country. The program is hosted within the Research Institute of Highways (RIOH) as part of the Ministry of Transport, China. GRSF supported the Building the China Road Assessment Program (ChinaRAP) in partnership with the International Road Assessment Program (iRAP) to develop and field test risk assessment models for application in China.

One of the primary outcomes of ChinaRAP was to integrate local research into Road Assessment models for use in China, including:

- The potential for the program to provide real-time risk information to road users in the form of dynamic Star Rating linked with vehicle-activated signs that adjust according to traffic flows and weather conditions.
- Application of risk assessments on public transport corridors.
- Application of risk assessment on expressways that feature highly consistent design.
- Assessment of road infrastructure safety for electric bikes.
- Advanced data collection equipment, including automatic detection of road attributes such as lines, signs, curvature and grade.

Achievements to date

- With support from Bloomberg Philanthropies, the World Bank and the Asian Development Bank, ChinaRAP's rating systems and countermeasure plans are being incorporated into 14 different city and highway projects in China, totaling more than $1.5 billion in works.
- In 2013, the ChinaRAP team assisted in the AusRAP assessment of national roads in Australia.
- In 2014, the team, with assistance from the World Bank, undertook assessments in Yemen that will help shape a number of projects there, including the Second Rural Access Project.
- The team is now leading road-attribute data collection for an innovative KiwiRAP project in New Zealand.

In 2014, ChinaRAP was awarded the iRAP Asia-Pacific Star Performer, which recognizes its commitment to successfully support multiple road safety projects financed by the World Bank, the Asian Development Bank and local agencies.

$1.5 billion

government budget committed for adopting ChinaRAP recommendations in 12 cities & highway projects in China

Road Safety Demonstration Corridor in Karnataka, India: Integrating Transport and Health

Objectives

Karnataka, a state in south India, presented a unique opportunity for GRSF to collaborate on a road safety demonstration corridor program encompassing two World Bank–funded projects led by the transport and health sectors. The project is ongoing.

Transport: The transport project focuses on infrastructure as well as police training and awareness programs. GRSF provided technical assistance and grant support of $233 thousand, which leveraged a $14 million component in the loan project. This demonstrates a successful leveraging ratio of 1:60 through GRSF funds for multi-sectorial interventions. The goals of the project are to improve safety on two high-risk corridors and to establish a multi-sectoral road safety agency in Karnataka's Transport Department.

Health: The health project concentrates on building capacity for emergency care systems and for estimating the baseline burden of injuries related to road crashes.

Supported by funds from GRSF and Bloomberg Philanthropies, the World Bank, in collaboration with the Johns Hopkins University Bloomberg School of Public Health International Injury Research Unit, worked to estimate the burden imposed by road injuries and deaths to serve as the baseline estimates for two high-risk corridors.

Achievements to date

- Establishment of a Road Traffic and Safety Agency housed within the Transport Department to strengthen institutional management capacity.
- Demonstration corridor program established and endorsed through the state government as an effective opportunity to coordinate across stakeholder departments and undertake targeted interventions to reduce road deaths.
- Improved road safety engineering and capacity-building with the Public Works Department—aiming for a minimum iRAP 3-star rating for the upgraded infrastructure, a target goal that exhibits strong commitment from the client.
- Coordination with the health sector and local hospitals to estimate reliably the number of deaths and injuries from road crashes and the burden of disability on the state's economy.

* The iRAP star rating is a quantitative metric that evaluates the road safety risk assessment of a road section for individual categories of road users (vehicle occupants, motorcyclists, bicyclists and pedestrians). The rating is on a scale from one (most unsafe) to five (safest), and ratings of one and two stars are considered as high risk for serious and fatal injuries.

Establishment of the Ibero-American Road Safety Observatory Monitoring Program and Support (2011–2013)

Objective

GRSF, together with the World Bank, played an important role in establishing the Ibero-American Road Safety Observatory (OISEVI). The OISEVI is a regional road safety monitoring program brought together by the international cooperation of the highest road safety authorities across Latin American and the Caribbean. The objective of this initiative was to share relevant information about road safety indicators and best practices in regards to policy making, planning and related topics in order to develop better monitoring and make evidence-based decisions for improving road safety.

Achievements

OISEVI linked participating countries to the International Traffic Safety Data and Analysis Group's International Road Traffic and Accident Database for Latin America and the Caribbean, which offers resources on harmonized data collection methods.

- Supported by GRSF, the OISEVI was scaled up to link 22 countries in the region to create the initial framework and web-based platform for the monitoring program. At the end of 2011, a regional road safety database, based on the IRTAD model, was created.
- OISEVI provides annual reports that consolidate regional road safety data and holds annual training workshops for national data collection teams.
- OISEVI has produced baseline data to analyze behavioral changes in pilot countries, so they are better able to track factors such as use of seat belts, distracted driving, use of child restraints and drunk driving.
- OISEVI has created guidelines detailing how to set up both national and local road safety monitoring programs, as well as training workshops for regional media and a website to host the observatory and database.

GRSF support influenced and made possible these initiatives, with positive long-term results for road safety in the region.

OISEVI website: www.oisevi.org/a/

22 **number of countries in the Latin American and Caribbean region as part of the OISEVI observatory.**

Bloomberg Philanthropies Initiative for Global Road Safety – Improving Safety on Urban Streets

Objectives

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. In this partnership, GRSF works alongside eight other global organizations supported by Bloomberg Philanthropies. Those organizations include: The World Health Organization, World Resources Institute, Global New Car Assessment Programme, Global Road Safety Partnership, Johns Hopkins University, National Association of City Transport Officials, Vital Strategies and the Bloomberg Advocacy Incubator, plus their local and national counterparts.

The primary objective of the initiative is to improve road safety in rapidly growing cities. 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.

GRSF's role in the city-level initiative, with technical collaboration provided by the International Road Assessment Programme (iRAP), is to initiate and support the improvement of infrastructure safety management. The initiative focuses on the following:

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

Working with the World Resources Institute and the National Association of City Transportation (NACTO), GRSF complements its partners' efforts in improving safer mobility in selected cities.

Achievements to date

2015 **In 2015, the first year of the initiative, iRAP assessments were piloted across four cities (Addis Ababa, Ho Chi Minh City, Mumbai and Sao Paulo) for a total survey length of 430 kilometers. GRSF will now work with each city to make safety improvements to reduce crashes, fatalities and injuries on the surveyed roads.**

2016 **In 2016, road assessment work has been initiated in Accra, Fortaleza, Bogota and Bangkok.**

- **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 World Resources Institute and National Association of City Transportation Officials.**
- **Developing local capacity among universities and research institutions to undertake iRAP surveys and assessments.**

Other Examples of GRSF Success

Road Infrastructure Safety Assessments

GRSF financing assisted in the establishment and growth of the iRAP, now commonly used as an international best practice in infrastructure safety rating. Further, GRSF financing enabled the assessment of more than 40,000 kilometers of high-risk roads in 13 countries. Analysis of 14,000 kilometers showed the potential to avoid 280,000 deaths and serious injuries over a 20-year period.

Brazil – State- and National-Level Capacity-Building

GRSF and the World Bank have funded road safety management-capacity reviews across Brazil in the states of Bahia, Rio Grande du Sol, Sao Paulo and Minais Gerais. State-level capacity reviews have garnered increasing state and federal government interest in road safety. This resulted in GRSF funding the federal-level road safety management capacity review of Brazil, the largest such review ever undertaken. Brazil has already announced commitment to some key recommendations for improving road safety.

China – The Jiaozuo Green Transport and Safety Improvement Project

The Government of China committed $112 million for road safety with interventions that build institutional management capacity, data collection, safe road infrastructure, road safety education campaigns, enforcement, and capacity for post-crash and short- and long-term care. GRSF has both funded elements of this project and provided advisory services.

Poland – Capacity-Building and a New National Road Safety Strategy

A GRSF-funded road safety management-capacity review played a critical role in decreasing the number of deaths on Poland's roads (2011–2014), leading to a 31% reduction in road fatalities. Poland has since sought technical assistance from GRSF funded by the government for further assistance in developing data systems, road safety education programs and road safety communication campaigns.

Georgia – Capacity-Building and a New National Road Safety Strategy

GRSF guided the development of a Road Safety Strategy, a management-capacity review and the design of the Fourth East-West Highway project. In 2015, a new Road Safety Strategy was drafted; because of GRSF guidance, most critical issues highlighted in the draft had already been covered by the initial strategy, and several issues were addressed by the stakeholder agencies in advance of the final draft of the strategy.

Colombia – New National Road Safety Lead Agency

GRSF funds directly influenced the creation of Colombia's National Road Safety Agency, which has been employing an investment strategy that uses both traditional and innovative techniques – including bringing insurance companies and other sources of funding on board. This work has already leveraged an Inter-American Development Bank loan of $10 million for the team setting up the operational structure of the new lead agency to implement a national road safety policy.

India – A Package of Multi-Sectoral Road Safety Projects

The World Bank has several well-designed, multi-sectoral, safe system – based road safety interventions underway in Karnataka, Gujarat, Kerala, Assam, Andhra Pradesh, Punjab, Tamil Nadu, Uttar Pradesh and Rajasthan. GRSF has played an influential funding and advisory role in several of these World Bank projects.

Kenya and Uganda – Africa Road Safety Corridors Initiative

A partnership between the World Bank and Total, a French energy company, has resulted in the Africa Road Safety Corridors Initiative. The initiative is a campaign aimed at increasing road safety awareness, changing behavior and reducing fatalities along Africa's major transit corridors and road networks. The first corridor being targeted by the campaign is the Mombasa Kampala Northern Corridor, which is East Africa's deadliest corridor.

There are many other success stories that were influenced or supported by GRSF funding and expertise. The ongoing work GRSF initiated in the last few years, as well as the launch of GRSF's renewed 2016–2020 Work Program, will help achieve the UN's Sustainable Development Goals for road safety. If fully funded, and thanks to the efforts of all of the teams and donor partners involved in GRSF, including Bloomberg Philanthropies, FIA Foundation, the UK's Department for International Development (DFID), the World Bank, and other funders who make this work possible, the next five years should offer more road safety success stories and greater sustainable outcomes and results across the world.

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[1] Provinces: Sante Fe, Cordoba
[2] Brazil State projects: Minais Gerais, Sao Paulo, Rio Grande de Sul
[3] Provincial projects: Hubei, Anhui, Yunnan
[4] State projects: Karnataka, Gujarat, Rajasthan, Tamil Nadu, Uttar Pradesh, Kerala, Assam, Andhra Pradesh, Uttar Pradesh