## **Business and International Development**

# The Global Road Safety Partnership and Lessons in Multisectoral Collaboration



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## **Foreword**

Some of the fastest growing markets of the future are found in developing countries. These markets hold both opportunities and risks for corporations seeking to do business in them. While some of these risks are directly related to core business activities, others are posed by the social, political, health, and security frameworks in which business is done. Companies, the public sector, and civil society trying to manage these risks and opportunities are confronting the challenge of building public capacity to generate a stable business climate and encourage development. Increasingly, these three sectors are working in tandem to address critical social and environmental issues in emerging markets.

The Business and International Development program of the Corporate Social Responsibility Initiative at Harvard's John F. Kennedy School of Government undertakes research and convenes meetings to examine the private sector's role in multisectoral partnerships and the effectiveness of these partnerships in achieving international development goals. It seeks to understand the most efficient and effective approaches to realizing these goals, concentrating on opportunities and risks for business, likely achievability, and how business is engaging on key issues. The program currently focuses on the following development challenges:

- Health: road safety, nutrition, and building public sector capacity to tackle HIV/AIDS.
- *Local economic development:* business linkages, partnerships, and intermediaries to support small and medium enterprise development.

This report focuses on road safety and the Global Road Safety Partnership (GRSP), examining the relevance of road safety to economic growth and public health in a developing country context. In particular, the report examines some of the challenges of increased mobility and vehicle penetration, why this is important to business, and in turn, what the private sector is doing, or could do, to address the growing economic and health burden of road injuries and fatalities. The brief goes on to look at the Global Road Safety Partnership, its structure, function, and activities, as well as how some corporations and multilateral agencies are involved with the initiative. It addresses the question of whether a multisectoral partnership is a useful framework for addressing the road safety issue and what some of the challenges and lessons have been thus far. Finally, key policy recommendations are provided, as are questions for students and for further research. A bibliography is appended for teaching and research purposes.

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## **Executive Summary**

The world is witnessing an unprecedented increase in demand for motorized vehicles, particularly in rapidly developing economies such as China and India. Per capita GDP growth creates a demand for faster modes of passenger and freight transport.<sup>2</sup> Additionally, increasing motorized mobility fosters a feedback loop in which the need for better roads propels expansion of infrastructure assets, which in turn drives GDP3 While motorization and enhanced mobility have positive impacts on individual lives and national GDP, without appropriate strategies to improve road safety, road accidents and deaths are becoming an ever-increasing problem.

The world faces a global road safety crisis that has not yet been fully recognized and that will continue to grow unless appropriate action is taken. International organizations—including United Nations agencies, nongovernmental organizations, and multinational corporations—and donor countries and agencies have important roles to play in addressing this crisis and in strengthening road safety around the world...Road traffic crashes are predictable and therefore preventable. In order to combat the problem, though, there needs to be close coordination and collaboration, using a holistic and integrated approach, across many sectors and many disciplines.1

According to a World Health Organization (WHO)/World Bank jointly produced report, road traffic injuries were the 11th leading cause of death in 2002. However, without appropriate action, the WHO estimates that by 2020 they will outpace AIDS, malaria, and war as the world's third largest public health challenge after ischemic heart disease and unipolar major depression. In addition to road deaths, it is estimated that between 30 and 45 injuries occur for every road death, many involving permanent disability and high lifetime costs of ongoing care, support, and lost earnings. Developing countries are, and will continue to be, the hardest hit. Road accident injury and death also pose a significant monetary cost. The most productive age group (15–44 years), often in the lowest income sector, accounts for the highest injury and death rate. The combined costs of health care, loss of income, and funeral costs can have a ruinous effect on both households and communities.

At a macroeconomic level, the WHO estimates that road traffic injuries cost lowand middle-income countries between 1% and 2% of their gross national product and carry approximately a US\$65 billion price tag in developing countries, outstripping the amount these nations receive in development assistance.<sup>4</sup>

A link between increased demand for vehicles and road accidents has been noted at the early stages of motorization in developed countries. This generally peaks and tends to level off. The increased injury trend levels off, however, as a result of government regulation, enforcement, safer vehicles, better infrastructure, a culture of safer road use behavior, and education. Developing countries are now going through similar cycles, but due to population size and other factors, the fatality burden remains substantial. A key challenge for governments and other actors is to share and implement the public policy lessons, technologies, and institutional innovations that have underpinned safety improvements in developed countries to attenuate the evolving trends in developing countries rapidly and proactively.

The private sector—in particular, multinationals and large national companies working in developing countries—has become involved in multisector road safety initiatives in part because of the risks and opportunities posed by this issue to core business activities, and in part because it recognizes that the factors driving road safety fatalities require a total systems approach engaging all stakeholders.

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The Global Road Safety Partnership is an example of one global project that has been established to address this challenge. It is predicated on an understanding, by all sectors, that road safety has far-reaching effects on business, markets, consumers, workers, and society-at-large, and that government in many countries, with limited funds and competing priorities, cannot solve this problem single-handedly.

It cannot be assumed, however, that public—private partnerships hold all of, or the only, solution to these types of complex, systemic social problems. Currently, there is an implicit assumption that public—private partnership outcomes are "greater than the sum of their parts"; in other words, that the partnership is more effective than each player could be individually. However, this is difficult to assess in many cases, including in that of GRSP, since most such partnerships are newly created and still evolving. In GRSP's case, the organization has not been rigorously measuring the impacts of its programs until recently, although an evaluation system has now been established.

This paper explores why road safety is of growing importance as a public health and economic development issue and why public and private sector entities have joined in partnership to address the challenge. It examines the Global Road Safety Partnership in particular, the benefits of partnership that the sectors have identified, challenges that must be overcome, further research questions, and recommendations for the way forward.

<sup>1.</sup> First Joint World Health Organization and World Bank "World Report on Road Traffic Injury Prevention," 2004, 41–42

<sup>2.</sup> Giuliano, Genevieve. Institute for Transport Policy, University of Southern California, 2003.

<sup>&</sup>lt;www.jterc.or.jp/josei\_shinpo2.24/HP03\_Giuliano.pdf>

<sup>3.</sup> Calderon, Cesar A., and Luis Servén.

<sup>4.</sup> World Report on Road Traffic Injury Prevention, WHO, p. 15.

## 1 Challenges of Increased Mobility

Creating economic growth and stability in developing countries is a goal being pursued by both the private and the public sectors—the former to foster a positive business climate and new markets, the latter to achieve better standards of living. Mobility is essential to making this a reality: physical mobility increases people's access to basic goods and services, it supports labor flows, facilitates access to more and better jobs, and enables goods to be brought to market—all of which can lead to economic growth and improved standards of living.

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Motorization is projected to increase dramatically in the developing world. The Energy Information Administration estimates that the road vehicle population will grow from 170 million vehicles in 1996 to 454 million in 2020 in developing regions.<sup>5</sup> According to the International Energy Agency (IEA), projected real income growth will drive transport activity growth, both in personnel and goods.

In China, for example, car ownership is increasing almost as quickly as GDP, and by 2020 it is estimated that between 88.85 and 132.24 million privately owned cars will grace China's roads.6 In 2003 alone, car sales leapt an unprecedented 80 percent, when more than two million vehicles were sold. Road accidents and deaths are rising in tandem with increased car use: "Road accidents caused over a hundred thousand deaths in each of the past two years (in China, and) seventy percent of these fatalities were attributed to driver error."

The link between mobility and economic growth means that the current trends hold the potential to positively transform lives. However, the fact that increased motorization also results in negative impacts, including a rise in road accidents in the absence of appropriate interventions, underscores the challenge of increasing mobility while preventing associated harmful effects.

Rapidly emerging challenges associated with increased mobility include environmental damage, safety, noise, unmanageable urbanization, and access to safe, clean, and efficient transport. According to the World Business Council on Sustainable Development's (WBCSD) Sustainable Mobility Project Final Report based on current technology, policy, and behavior, projected mobility trends are not sustainable.8 This group of 12 leading energy and automotive companies, in addition to the WBCSD, the IEA, and MIT, examined the issue for four years and defined sustainability as "the ability to meet the needs of society to move freely, gain access, communicate, trade and establish relationships without sacrificing other essential human or ecological values today or in the future." Further, the group has identified seven key factors that society must strive toward in order to

meet the growing demand for transport, while addressing, and where possible avoiding, inherent sustainability challenges. These are:

- 1. reduce transport-related conventional emissions,
- 2. limit transport-related greenhouse gas emissions,
- 3. significantly reduce the worldwide number of deaths and serious injuries from road crashes.
- 4. reduce transport-related noise,
- 5. mitigate transport-related congestion,
- 6. narrow "mobility divides" that affect the poorest members of societies and the developing world, and
- 7. preserve and enhance mobility opportunities available to the general population.

This report focuses on the ways that companies are working in partnership with others, particularly within the framework of the Global Road Safety Partnership, to address the third challenge: significantly reducing the worldwide number of deaths and serious injuries from road crashes.

<sup>5.</sup> Energy Information Administration International Energy

<sup>&</sup>lt;a href="http://tonto.eia.doe.gov/FTPROOT/international/edexfiles/1">http://tonto.eia.doe.gov/FTPROOT/international/edexfiles/1></a> 6. Zhongyuan, S. "Outlook for China's Motorization and Energy Consumption," IEEJ, 2002.

<sup>7.</sup> Handwerk, Brian "China's Car Boom Tests Safety, Pollution Practices," National Geographic June 28, 2004.

<sup>8.</sup> Mobility 2030 Report, WBCSD, 2004. p. 6.

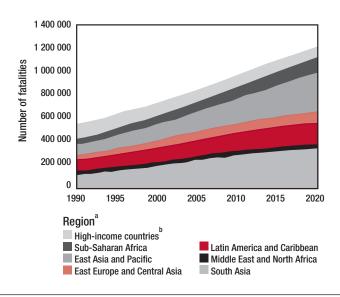
<sup>&</sup>lt;a href="http://www.wbcsd.org/web/publications/mobility/overview.pdf">http://www.wbcsd.org/web/publications/mobility/overview.pdf</a> 9. Ibid, p. 5.

## 2 Road Safety: A Neglected Development Challenge

There are a number of challenges associated with achieving safe mobility—creating a culture of safe roadway usage, addressing the dire state of much of the world's roads, road transport systems, unsafe vehicles, weak regulatory frameworks, corruption, and rapidly increasing road usage. These combined factors lead to road deaths and injuries climbing rapidly up the WHO "burden of disease" rankings.

Road safety is both a public health problem and an economic issue, particularly in the developing world. The "hidden epidemic" of road accident injuries and deaths often goes unacknowledged in discussions of public health crises facing emerging economies. However, in 2002 alone an estimated 1.2 million people were killed worldwide, and 20-50 million more injured, in road accidents<sup>10</sup> with 80 percent of fatalities occurring in low- and middle-income countries.

FIGURE 1 ROAD TRAFFIC FATALITIES, ADJUSTED FOR UNDERREPORTING, 1990–2020



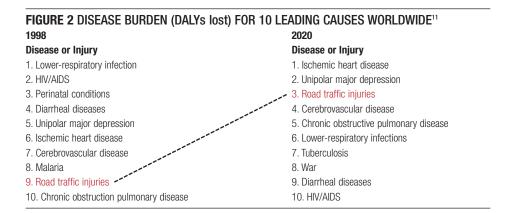
World Health Organization World Report on Road Traffic Injury Prevention, 2004

As developing countries become increasingly motorized, cars, scooters, and other vehicles compete with pedestrians, bicyclists, and animals for road space that is often ill-equipped to handle such diverse means of transport. In addition to the congestion resulting from different modes of transport, lack of separation of users, lack of helmets and safety restraints, unsafe vehicles, dangerous driving habits, lack of legal enforcement, corruption, inadequate administration, and poor capacity contribute to the problem. "Vulnerable" road users such as two-wheelers and

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Road accident injury and death also pose a significant monetary cost. The most productive age group (15–44 years), often in the lowest income sector, accounts for the highest injury and death rate. The combined costs of health care, loss of income, and funeral costs can have a ruinous effect on both households and communities. The WHO estimates that road traffic injuries carry approximately a US\$ 65 billion price tag in developing countries, outstripping the amount these nations acquire in development assistance.

pedestrians are at greatest risk in developing countries while overloaded converted pick-up trucks and minibuses are often the only affordable means of motorized transport for the poorest members of society. In Nigeria, for example, such vehicles are called *molue* ("moving morgues") and *danfo* ("flying coffins"). The combination of unsafe vehicles, poor road conditions, and unsafe driving habits translates into injuries and deaths among those who can ill-afford to pay for hospital bills or lose a breadwinner.



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<sup>10.</sup> World Health Organization *World Report on Road Traffic Injury Prevention*. Geneva: 2004, p. 33.

<sup>11.</sup> Murray, Christopher, Allan Lopez. *The Global Burden of Disease: A Review.* 1990.

<sup>12.</sup> Silcock, D. *Preventing Death and Injury on the World's Roads.* Transport Reviews: July–September 2003, vol. 23, no. 3, 263–273 (11).

## 3 The Need For Systemic Approaches

In order to adequately address the growing problem of road safety, a systems approach must be taken. The public health field has modeled this issue in such terms and it is a paradigm that can be broadened to include a multidisciplinary, multisector approach to solving the problem.

#### i) Holistic Interventions

As a public health issue, attempts to identify solutions to road injury and death have traditionally been mapped along the *Haddon Matrix*, created two decades ago by William Haddon Jr. who saw road transport and its flaws as a system that demanded systemic treatment. His model charts interacting factors along two axes: how human, vehicle, and environment intersect at three phases—precrash, crash, and postcrash. Each of the resulting nine cells plots possible interventions to decrease road crash injury.

As a combined public health, economic, and infrastructure challenge, road safety is an issue that effects, and is affected by, a wide array of stakeholders ranging from governments to business, civil society, and the general public. These sectors work individually and collectively to accomplish the tripartite goal of creating safer roads, safer road users, and safer vehicles.

#### FIGURE 3 THE HADDON MATRIX

	PHASE	HUMAN	VEHICLE & EQUIPMENT	ENVIRONMENT
Precrash	Crash prevention	Information	Roadworthiness	Road design and layout
		Attitudes	Lighting	Speed limits
		Impairment	Braking	Pedestrian facilities
		Police	Handling	
		enforcement	Speed management	
Crash	Injury prevention	Use of restraints	Occupant restraints	Crash-protective roadside
	during crash	Impairment	Other safety devices	objects
			Crash protective design	
Postcrash	Life sustaining	First-aid skills	Ease of access	Rescue facilities
		Access to medics	Fire risk	Congestion

#### ii) Multistakeholder Engagement

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Historically, road injury and death have been viewed as an issue for governments particularly those parts of government overseeing transportation infrastructure issues and health. While this remains true today, other sectors are becoming involved, particularly with respect to road safety in developing countries, as a result

of the rising cost and impact that road injury and death have on all spheres of society. Governments both at the local and national level, supported by donor agencies, continue to work to improve infrastructure, create policy and laws, ensure enforcement, and educate the public about road safety issues. Civil society, including nongovernmental organizations and multilateral organizations, advocate for and support similar activities, while universities conduct research to understand and evaluate the issue more comprehensively. Society-at-large plays a role by adopting safer behaviors and demanding safer conditions, and business works individually and collectively to produce safe vehicles, safety products, engage communities, and take part in policy dialogues.

While a great deal of work has been done on the role of government in addressing the road safety matter, little has been done to examine the private sector's involvement in the road safety issue.

## **4** A Private Sector Concern

The impact of road accidents and deaths has direct relevance to, and is often impacted by, multinational and large national corporations in various sectors. Transporting and obtaining supplies, getting goods to market, and ensuring employee attendance is all predicated on safe and efficient transport. Poor road conditions imperil stable and regular supply chains and worker safety. In addition, trucks used by companies to move goods can be a contributing factor to road accidents and deaths.

The following figure illustrates some of the key road safety issues faced by different industry sectors.

FIGURE 4 THE NEXUS BETWEEN THE PRIVATE SECTOR AND ROAD SAFETY ISSUES		
Auto	safe product development and use, protection of customer base, regulatory costs	
Oil & Gas, Chemical	transport of product is key to business and improved road transport management helps to manage major safety and environmental risks	
Alcoholic & Other Beverage	safe product use, protection of consumers, ensuring safe transport of product that guarantees supply	
Diversified Technology	market for goods	
Consumer Device	safe product use (cell phones, handheld devices)	
Construction	transport of materials, safety of workers	
Agribusiness /Forestry	transport of product is key to business and improved road transport management helps to manage major safety risks	
Banking & Insurance	bears burden of insuring and paying out on accidents	
Tourism	safe transport of tourists to sites, creating positive image of locale to increase number of visitors	

## 5 Private Sector Interventions into Road Safety

While the private sector can play a vital role in addressing the issue of road safety, individual action may be insufficient. Providing "public goods" and managing issues of safety and urbanization fall squarely in the realm of government, so collective action by the private sector, government, and civil society may be an important approach to address this twenty-first century challenge.

Depending on the industry sector and local context, business can engage both directly and indirectly, and in many cases is doing so, to seek solutions to the road safety issue. This can be done individually at a variety of levels—through core business activities, community and philanthropic work, engagement with public policy issues, and institution building—and/or collectively, with other companies within an industry, across industries, or across sectors. Figure 5 illustrates the private sector's potential intervention in different spheres.

#### FIGURE 5 POTENTIAL PRIVATE SECTOR INTERVENTIONS INTO ROAD SAFETY

	ENABLING FRAMEWORK		ON-THE-GROUND DELIVERY				
	SAFETY CULTURE, RULES & STANDARDS	MANAGEMENT	FUNDING	AWARENESS RAISING	TRAINING & CAPACITY BUILDING	PRODUCT DEVELOPMENT & DISTRIBUTION	INFRASTRUCTURE ADAPTATION
CORE BUSINESS	Company policies requiring personnel to practice safe driving; safe device use (cell phones); safe alcohol consumption	Identify leaders within the company to drive safety culture	Part of core business or country/ regional business	Training company personnel on importance of safety as part of corporate culture; leadership within company on safety	Fleet driver training; educate and train business partners along the supply chain	Safety features embedded in vehicle; minimization of distractive features in vehicle; technological adaptations to address distractibility and use of handheld devices while driving	Road markers; safety signage; other products to increase infrastructure safety
COMMUNITY INVESTMENT & PHILANTHROPY	Community safe driving campaigns; community campaigns on seatbelt and child seat use; community campaigns on safe alcohol consumption	Encourage managers to engage with organizations to share business skills/help in assessments/ donate expertise	Donations for training and awareness-raising programs	Engage in child seat, seat belt use, safe driving campaigns; engage in schools	Donating expertise, products, and premises for training-the-trainer purposes	Donate materials (reflective materials to schools and high- impact areas, etc.); donate car seats; donate inspection services	Enable technical employees to donate time to engage with other experts to create infrastructure adaptation solutions
POLICY DIALOGUE & RULE MAKING	Encourage vehicle and road worthiness standards; encourage anti-corruption campaigns and law enforcement, including speed, blood alcohol limits, vehicle maintenance	Identify relevant legal and policy bodies related to road safety and engage in local capacity building	N/A	Policymaker education on health and economic impacts and indicators	Encouragement of anti-corruption and law enforcement	Engage in policy dialogue around safe technologies, technology transfer, and rigorous science-based approaches based on good practices and assessment	Encourage rigorous assessment of current state of roads and road mix; facilitate discussions on best approaches to deal with road user mix/ congestion/safe vehicles, etc.

While the private sector can play a vital role in addressing the issue of road safety, individual action may be insufficient. Providing "public goods" and managing issues of safety and urbanization fall squarely in the realm of government, so collective action by the private sector, government, and civil society may be an important approach to address this twenty-first century challenge. Engagement by different actors along different parts of the road safety system may create the best results by leveraging the full range of expertise and resources along a continuum. In addition, cross-sector partnerships may lend greater legitimacy to the endeavor-working across sectors can discount suspicion that companies are involved simply for market purposes, multilateral organizations contribute both expertise and gravitas to the endeavor, and government participation ensures sustainability and country-appropriate outcomes.

The Global Road Safety Partnership offers one example of a joint public-private sector initiative that operates at a global level, with country-level implementation in ten countries.

## 6 The Global Road Safety Partnership

Through the framework of this new multistakeholder partnership model, the GRSP hopes to create an innovative, scalable, and systemic approach to issues such as road safety that involve business, government, civil society, and donor agencies.

#### i) Creation

The Global Road Safety Partnership (GRSP) was established by the World Bank in 1999 as a collaborative mechanism for business, civil society, and governmental organizations to address and improve road safety conditions worldwide. Governments and development banks and agencies had had limited success, due in part to financial and institutional constraints, in improving road safety in developing and transitional countries that are becoming rapidly motorized. Too few countries were willing to spend or borrow funds for road safety and a variety of factors including lack of local expertise, corruption, and lack of prioritization of road safety contributed to this lack of success. The World Bank believed that convening the players affected by road safety issues and subsequently shifting the problem-solving paradigm from being solely in the realm of government to a multistakeholder model could address this gap.

The GRSP was established as one of four World Bank "Business Partners for Development" (BPD) initiatives. BPD advanced the notion that public–private partnerships could meet societal needs and benefit long-term business interests by creating stable social and financial conditions.

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While the World Bank initiated the Global Road Safety Partnership, it was prompted to do so by safety-related companies. The Bank's Director for Transport and regional transportation staff, many of whom were motivated by strong personal interest in the subject, took the lead on establishing the partnership. The road safety issue was already acknowledged to be a significant social problem and as such, the Bank had adopted internal guidelines to increase attention to road safety in lending and related operational work. Often, however, these components were generally rather small components of large road infrastructure projects, not implemented in a sustainable way or with lasting impact, and would often be considered as "underperforming" in project evaluations.<sup>13</sup>

The fact that the 1998 Red Cross World Disaster Report focused on road fatalities, raising awareness of this "hidden epidemic," helped to bring worldwide attention to the issue and presented a unique opportunity for the Bank to cooperate with a nongovernmental organization of such stature. In addition, the British government's Department of International Development (DFID), through its

<sup>13.</sup> Interview with Brett Bivans, formerly of GRSP, December 13, 2004.

The Partnership's main activities are to identify and promote relevant good practice, and in selected developing and transition countries (the focus countries), to support projects involving collaboration between two or more partners that are designed to test and demonstrate good practice in reducing the number of road casualties.

Transport Research Laboratory; the Swedish International Development Cooperation Agency (Sida); and the Dutch government, through its Ministry of Transport, were also involved, providing the expertise of their national institutions, monetary contributions, and staff. Many business-oriented international organizations (e.g., ICAP, IRF, AIT-FIA), multinational companies (e.g., DaimlerChrysler, 3M, Shell, Ford-Volvo), and committed individuals ensured that the partnership was truly multisectoral and achieved a balance of interests. For example, the International Center for Alcohol Policies (ICAP) was a founding member of GRSP, in part to ensure a balance of interests, and in particular to contribute to addressing the drunk-driving issue. The combination of all of these groups gave GRSP a momentum that could not have been achieved by any one institution.

#### ii) Aims, Objectives, and Strategy

GRSP states that its "principal objective is to facilitate the sustainable reduction of road traffic casualties in developing and transition countries through partnerships between business, civil society, and governments. The Partnership's main activities are to identify and promote relevant good practice, and in selected developing and transition countries (the focus countries), to support projects involving collaboration between two or more partners that are designed to test and demonstrate good practice in reducing the number of road casualties. GRSP is not a funding agency and does not finance road safety interventions normally financed by governments."14

While the GRSP is not a funding agency, it builds local partnerships and finances small-scale interventions and projects demonstrating that there are cost-effective methods to make road safety improvements. In addition, partners urge governments to engage in activities such as major infrastructure improvements and road safety database analysis, which only the public sector can deliver.

#### iii) Governance

The GRSP is overseen by a Steering Committee that meets once a year to establish overarching policies; it is governed by an Executive Committee that meets three times a year, and it functions through a small Secretariat that handles day-to-day management. As of January 2005 there are nine corporate members, eight noncorporate members, six multi/bilateral members, and eight supporting members of the program. At the national level, partnerships are comprised of government, local and international business, and local civil society organizations. Teams of advisors work part-time in-country to oversee implementation, facilitate communication among partners, and monitor on-the-ground impact. [See Appendix 1 for GRSP governance and operational structure.]

#### iv) Operations

GRSP is hosted by the International Federation of Red Cross and Red Crescent Societies (IFRC) in Geneva, which has lent its credibility and influence as well as serving as a neutral convening body. The IFRC's global network provides wide access to delegations at the global public policy level and to volunteers at the national and community levels in the field, as well as helping to open doors to government and donors at the country level. Since GRSP is not constituted as a legally registered entity, the IFRC provides essential governance and operational support, providing offices, legal support, human resources support (GRSP staff are employees of the IFRC), and auditing on GRSP accounts.

Due to limited resources and the desire to focus on tangible results, GRSP works in 10 countries: Brazil, Costa Rica, Ghana, Hungary, India (Bangalore), Poland, Romania, South Africa, Thailand,<sup>15</sup> and Vietnam. These countries were chosen based on three criteria: road safety had been identified as a problem; governments were willing to tackle the issue; an agreed upon framework existed within which GRSP could operate.<sup>16</sup> GRSP does not engage in a country unless there is an explicit government invitation to do so. It also tries to ensure that both health and transport ministries are supportive and to work with local offices of IFRC and WHO, as well as its corporate partners and bilateral or multilateral donors. The GRSP team aims to deliver two broad types of results.

- 1. Process support: GRSP's effort to support local capacity building and create sustainable local processes is influenced, in large part, by existing institutional models and structures within a country and by local leadership. One of the inherent tensions is that the strongest local organizations run their own operations and are very focused on their local agenda, but sometimes neglect to communicate back to GRSP headquarters. This, ironically, can mean that local strength and effectiveness makes monitoring from the center and spreading best practices across countries and regions difficult. An additional challenge in creating generalized methodologies and spreading best practices is that different local initiatives have different areas of focus and core competencies. For example, Brazil has been effective at getting statistics while Poland has very effectively mobilized and engaged NGO support.
- 2. Products: GRSP has defined two types of products. On-the-ground projects are implemented by a local initiative with support and evaluation by the GRSP team, while "learning and knowledge" products are established to build capacity, spread good practice, and share lessons among countries and regions.

These learning and knowledge products include website development, documents, new material on guidelines, and courses, which vary enormously from very technical papers on in-country road safety management, to managing national planning processes. The public, private, and nonprofit sectors involved in GRSP are expected to contribute their expertise and resources to the three major concentrations of the

<sup>14.</sup> GRSP Constitution 2004.

<sup>&</sup>lt;www.grsproadsafety.org/mission/more\_mission.asp
?Category\_ld=8 >.

<sup>15.</sup> See Appendix 3 for an example of GRSP in-country work

<sup>16.</sup> GRSP website <www.grsproadafety.org>.

initiative: safer roads, safer road users, and safer vehicles. Governments are at the helm of infrastructure planning and investing resources in these projects, business and nongovernmental organizations contribute expertise and finances to innovative programs, and all partners share information and best practices.

The evaluation component is still a new "service" and is partially a result of an overall evaluation of the partnership in 2004.

GRSP is moving toward a model of establishing country-level organizations that are sustainable and based in a legal context that reflects local conditions. In some focus countries, GRSP's on-the-ground operations have been given local legal status and recognition. These include:

Ghana - GRSP Ghana is a registered NGO recognized in the government's road safety strategy as the lead NGO for road safety;

South Africa - a not-for-profit company has been registered to deliver GRSP projects;

Thailand - GRSP Thailand is a foundation under Thai law and works closely with the government to deliver elements of the national road safety plan (see Appendix 3 for more details);

Hungary - GRSP Hungary is now an association under Hungarian law, similar to a not-for-profit company, and receives government support, including funds.

#### v) Evaluation

Assessment plays a fundamental role in public-private partnerships such as GRSP, both as a management tool and as an accountability framework. Evaluation can take place at three levels-internally as an organization, from the perspective of each of the partnership members and their level of satisfaction, and in terms of impact on the issue around which the organization was convened. Three methods can be undertaken for such evaluations—through self-assessment; through a formal, independent third-party review; and through solicited and/or unsolicited stakeholder feedback.

In terms of GRSP, historically there had been no formal methodology to evaluate the partnership itself, or the partnership's activities, though biannual executive meetings provided a general forum for revision and critique of the endeavors.

In 2004, however, the Norwegian Institute of Transportation Economics (TØI) evaluated GRSP for Sida<sup>17</sup> through a group of external third-party experts. This evaluation measured GRSP along four criteria illustrated in Figure 6.

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#### FIGURE 6 SIDA EVALUATION OF GRSP18

CRITERIA	SECRETARIAT	FOCUS COUNTRIES
Relevance	Of obvious relevance. Directed toward reduction of road traffic casualties and promotion of partnerships to this end.	Clearly relevant and in-line with national policies on road safety.
Effectiveness	Objectives are formulated in quite general and vague terms, making precise assessment of performance with respect to effectiveness and other core criteria of evaluation more difficult. Two weaknesses: difficulties in generating road safety activities in some focus countries; no ability to demonstrate good practice in focus countries when few proper evaluations of projects are undertaken.	Seems to be good, though objectives are formulated in quite general terms.
*Note: Stated that this was much more difficult to assess partly due to the fact that the evaluation framework did not allow in-depth investigation and because some data required for this purpose are not available.	Follows lean operational guidelines and appears to be an efficient organization. Furthermore, efficiency has improved over the years and has developed into a professionally strong entity.	Difficult to assess because hardly any data are available.
Impact *Note: Generally impacts have been very difficult to assess. This is largely because comprehensive evaluations are largely missing, thereby making it very difficult to identify possible good practices in respect to GRSP's own projects. This is considered a serious organizational weakness, as one of GRSP's objectives is to identify and promote good practices.	The main role of the secretariat is linked to generation of road safety activities in focus countries. It is active in generating new focus countries, though results will materialize on the years to come.	Results of impact evaluations differed across countries.

17. Evaluation of the Sida Support to the Global Road Safety Partnership: Final Report. November 2004.
18. Lauridsen and Bjornskau. Evaluation of SIDA Support to the Global Road Safety Partnership. 2004, 11–12. TØI found that GRSP's activities between 2000 and 2004 had been relevant and addressed global- and country-level road safety policies in a meaningful way. Generally, it found GRSP's activities appeared effective as they addressed the objectives defined. To this end, TØI recommended continued Sida funding, and the organization has decided to provide US\$1.12 million for the coming three years.

The report did, however, note two weaknesses in the organization. One involved the challenge of generating activities in some focus countries, while the other involved the demonstrability of good country-level practices given a lack of metrics and measurements of success. Because comprehensive assessment metrics were missing from GRSP projects, evaluators found it hard to measure project impacts.

The GRSP secretariat has developed a set of 11 key criteria, supported by 23 quantitative and qualitative indicators and "values" to help assess impact and progress at the country level and to guide future country selection. These cover four stages of "country progression" and are outlined in detail in Appendix 2. The criteria cover the following broad categories:

• Scale and nature of the problem—if there is an information system in place and key fatality indicators for situations where data are available.

Road-user education and awareness-raising as means of reducing crashes through "defensive drivers" was particularly faulted as an ineffective approach. Findings from the Insurance Institute for Highway Safety corroborate these findings, citing further scientific evidence that driver education has either a neutral or a negative effect.

- Partner interest—an assessment of the interest level and availability of both global and local partners.
- Resources—availability of local resources through partners, external development funding, and government funds committed specifically to road safety.
- GRSP activities, structure, and coordination—where an existing GRSP initiative already exists, the criteria cover the sustainability, scalability, and effectiveness of GRSP activities and projects; sustainability and stability of the local GRSP structure; and the relationship and information flow between the local GRSP activities and the GRSP secretariat.

In addition to the formal external and internal evaluations mentioned above, unsolicited evaluation, or rather a serious critique, was levied at GRSP and the World Bank by a group of internationally prominent road safety experts in a 2001 commentary in Traffic Injury and Prevention.19 The seven authors, holding positions at the Indian Institute of Technology, the Insurance Institute for Highway Safety, the Institute of Road Safety Research, and the Cochrane Group at the London School of Hygiene and Tropical Medicines, among others, took issue with GRSP's approach, which they maintained had failed to reduce deaths in the developed world as it was motorizing, and in some cases delayed implementation of effective approaches. Road-user education and awareness-raising as means of reducing crashes through "defensive drivers" was particularly faulted as an ineffective approach. Findings from the Insurance Institute for Highway Safety corroborate these findings, citing further scientific evidence that driver education has either a neutral or a negative effect.<sup>20</sup> In their critique of GRSP and the World Bank, the authors asserted that education campaigns are ineffective without intensified police enforcement. The letter included six recommended activities that GRSP and the World Bank could undertake to reduce vehicle crash fatalities.<sup>21</sup>

Establishment of national/regional road safety agencies with funding earmarked from road-building costs. These agencies should be staffed with professionals specifically trained in road safety management and responsible for accident data surveillance and analysis; funding of research activities; setting of vehicle and road safety standards; sponsorship of safety seminars and conferences; training programs; and education/public liaison activities. (Note: this recommendation is beyond the scope of GRSP and aimed solely at the World Bank.)

Government enabling frameworks for road safety—existence of policy statements; priority of budget allocations; clarity of implementation responsibilities and powers; existence of a road safety strategy, action plan, and monitoring system; level of institutional capacity; and government policies and examples of partnerships.

<sup>19.</sup> O'Neill, Mohan, et al., Traffic Injury Prevention 3: 190-194, 2002.

<sup>20.</sup> Williams, Allan, and Susan Ferguson. "Driver Education Renaissance: Why We Need Evidence-Based Highway Safety Policy," Inj Prev 2004:10:4-7.

<sup>21.</sup> O'Neill, Mohan, et al., "The World Bank's Global Road Safety Partnership," Traffic Injury Prevention 3:190-194, 2002.

- Promotion of speed control measures including traffic calming suited for specific locations. Pilot projects should be done to develop detailed guidelines for traffic calming designs that work in conditions specific to less motorized countries.
- Development of vehicle safety standards for bus and truck fronts, cars, threewheeled taxis, *tuk-tuks becaks*, and so forth, to make them less hazardous for their occupants and for pedestrians and bicyclists. (Note: this recommendation is beyond the scope of GRSP and aimed solely at the World Bank.)
- Pilot projects to develop guidelines for highway designs suited for nonmotorized traffic and high-density habitations in rural areas.
- Promotion of safety measures likely to work in all the locations (e.g., daytime running lights for motorcycles, more conspicuous bicycles and other small vehicles, compulsory helmet use for motorcyclists, speed control, enforcement of laws against alcohol-impaired driving).
- Human resource development. At present, fewer than a dozen road safety
  professionals work in less motorized countries. Training programs need to be
  institutionalized. This will happen only if road safety and transportation
  research departments or centers are set up in selected universities and research
  institutions.

In response to this early criticism, GRSP, while acknowledging that it is but one player in an issue that needs a comprehensive systems approach, has taken up several of these recommendations. Its updated website materials mention that, "research shows that a road safety publicity campaign, by itself, has only modest impact on attitudes and behavior and no significant impact on crashes. Campaigns work best when combined with other interventions, such as enforcement of traffic laws and regulations, or provision of other safety services and products."<sup>22</sup> In addition, GRSP has added information on the necessity of collecting rigorous road crash and injury data, as well as suggested methods of collection and data management.

Further, GSRP both contributed to, and stands fully behind, the 2004 WHO/World Bank *World Report on Road Traffic Injury Prevention*, which stresses the need to focus on effective interventions and the need for institutional development. Additionally, through working in concert with six companies and other sectors, as part of the newly established Global Road Safety Initiative (see p. 32 for more details), GRSP is implementing some of the other recommendations made in the 2001 commentary. The organization has progressed significantly since this early critique, both organizationally and in terms of its on-the-ground work and effectiveness.

The open letter by these experts highlights one of the challenges inherent to an issue about which different professionals sometimes hold significantly diverse and

<sup>22. &</sup>lt;www.i-connect.ch/grsp/grspdev/campaign.htm> 23. *Moving Ahead: Emerging Lessons*, GRSP, p. 13 & GRSP Annual Report 2005.

sometimes opposing views on appropriate interventions. One of the solutions, which GRSP has established, is to convene a technical advisory board to provide guidance—in GRSP's case, all of its technical publications are subject to an external independent review panel, on which some the authors of the 2002 critique sit.

#### FIGURE 7 GRSP PARTNERS<sup>23</sup>

#### **BUSINESS**

3M

**British Petroleum** 

DaimlerChrysler AG

Ford Motor Company/ Volvo Car Company

**General Motors** 

Honda Motor Company, Ltd.

International Center. For Alcohol Policies (ICAP)

Michelin

Renault SAS

Shell International

Total

**Toyota Motor Corporation** 

#### **CIVIL SOCIETY**

**Asia Injury Prevention Foundation** 

FIA (Foundation for the Automobile & Society)

IDI (Infrastructure Development Institute )-Japan

IFRC (International Federation of the Red Cross and Red Crescent Societies)

International Road Transport Union

ISTED (Institut des Sciences et des Techniques de l'Equipement et de l'Environement pour le Dévelopement)

MADD (Mothers Against Drunk Driving)

Transport Research Laboratory (UK)

#### **GOVERNMENT (BILATERAL & MULTILATERAL)**

African Development Bank

Asian Development Bank

DFID (UK)

**Dutch Government** 

**European Commission** 

Inter-American Development Bank

Japan GRSP Committee

Ministry of Transport of the Netherlands

National Highway Traffic Safety Administration (USA)

**Swedish International Development Agency** 

**Swedish National Road Administration** 

**UN-ECA** 

**UN- ECE** 

**UN-ESCAP** 

World Bank Group

World Health Organization

Sources: Moving Ahead: Emerging Lessons, GRSP, p. 13 & GRSP Annual Report, 2005

#### vi) Examples of Private Sector Partners and Interventions

From its inception, GRSP has tried to engage heavy fleet and automobile companies, as well as other companies with a direct or indirect interest, in road safety at the global and local level. The companies that have become involved in GRSP have done so for a variety of reasons and come from a wide array of industries that include the auto, product services, extractives, and drinks sectors. Brief reviews of activities and motivations of three firms from different industries follow.

Headquartered in St. Paul, Minnesota, 3M operates in over 70 countries and serves customers in nearly 200 countries. 3M has worldwide sales of US\$18.232 billion, and more than 67,000 employees worldwide.

3M is a founding member of the Global Road Safety Partnership and has road safety at the core of its business activities, as well as a making it a philanthropic focus.

Core business: 3M is the world's leader in reflective materials for signs, license plates, garments, and high performance reflective pavement marking tapes. In addition, the company produces electronic traffic control and guidance technology. 3M developed the first reflective sheeting in the 1930s and continues to be the technology leader in this market. "3M is almost always the first and largest multinational business in developing countries because highway and infrastructure are one of the highest priority needs when economies grow."<sup>24</sup>

The company's involvement with GRSP is a natural link with its core business functions, good for its image, and a route to growing markets for its products. "If GRSP is successful (in making road safety a priority in the world's fastest growing economies) 3M will win a strong position in the marketplace—because if the converse is true and countries are not using safety products, 3M is not selling." M is involved with improving road signage using reflective materials, increasing vehicle visibility through contour markings on trucks and rickshaws, and creating school safety zones with retro-reflective material being integrated into clothing and safety devices, as well as special road signing in the vicinity of schools.

*Social investment and philanthropy:* 3M is involved in 15 GRSP projects in five countries in both an advisory role and through *pro bono* donations of materials. (Please see examples in Figure 8.)

*Public policy:* 3M's work, as both a founding member of GRSP and as an active participant in the organization's efforts, is predicated on bringing road safety issues to the fore in the policy arena. Success of both in-country programs and of the company's reflective materials business relies on governments' understanding the

grave impact of road deaths and injuries on their potential economic growth and

public health costs.

3M's work with GRSP is based largely on the understanding that road deaths cannot be reduced without taking a holistic approach—this is accomplished by enlisting governments (which is a key for success), as well as international agencies and other companies that deal with and address transportation safety from a variety of angles to take an active role. 3M's commitment is both a business decision and based on an assumption that GRSP will eventually make a meaningful impact by significantly, and measurably, reducing road deaths. It sees GRSP, and multisector partnerships, as the most effective way to replicate programs and scale up to have

Tom Chaffin, VP, Traffic Safety Division, 3M December
 2004.
 Ibid.

a far-reaching impact. In addition, working within the partnership context, with the World Bank, IFRC, and NGOs, removes the perception of self-promotion and allows the work on road safety to be done without suspicion.

3M & GRSP	
SOUTH AFRICA	Pedestrian Safety & Visibility: Supplying retro-reflective material for integration into clothing and safety devices; special road signing in the vicinity of schools using fluorescent retro-reflective materials.  Traffic Safety Education Packages for Schools: Partnering to ensure the distribution of GRSP SA packages.  Two- Wheeler Safety Training: Partnering to promote safe behavior in road traffic.  Responsible Alcohol Use (Pedestrians and Drivers): Partnering to establish safety campaigns and educational material for distribution to all parties concerned in selling and consuming alcoholic beverages.  Assess Management, Maintenance, & Funding: Project leader to elaborate and implement software program to allow authorities to manage and update their road safety equipment, signs, and markings.
THAILAND	Mobile Kids: Partnering to visit schools to provide practical road safety training for children.  Improved Road Signs and Markings: Project leader in 3M-developed system to improve signage on the approach to bends to give information on maximum speed and early warnings.  Safer School Zones and Better Discipline: Project leader on new crossing signs in school zones.  Improved Vehicle Visibility: Project leader to review vehicle markings regulations for buses, trucks, trailers, and hazardous goods and developed an improved vehicle marking design.
HUNGARY	Improving the Visibility and Safety at Black Spots: Project leader—installed signs and markings to demonstrate the effects of improved road alignment, nighttime visibility, and traffic signs at a number of identified black spots. Improving the Visibility of Heavy Goods Vehicles at Night: Project leader.
POLAND	A-Degree Driver: Partnering to run contest to raise the profile of responsible driving, create a positive image of young people driving safe, and appoint a group of youngsters as road safety ambassadors that would be susceptible to make followers among their peers. 3M fitted cars with specific markings.  Black Spot Treatment Innovative Solutions in Unconventional Black Spot Signing
BRAZIL	Safety for Schools

#### General Motors

GM, the world's largest automaker, designs, builds, and markets cars and trucks. Headquartered in Detroit, Michigan, the company has been the global industry sales leader since 1931 and today accounts for approximately 15 percent of the global vehicle market. GM employs about 317,000 people worldwide, has manufacturing operations in 32 countries, and its vehicles are sold in nearly 200 countries.

GM addresses road safety in all three of its spheres of influence—through its core business activities, social investment and philanthropy, and engagement with public policy issues. Its corporate approach to road safety acknowledges that there are many interested parties that must play a role, including governments, public health officials, the medical community, roadway users, and the private sector. Vehicle manufacturers, according to GM, must, "design, build and distribute safe products; meet or exceed all applicable regulations; satisfy consumer demand for safety performance and features; deliver affordable products; work in collaboration with regulators to establish cost effective solutions that satisfy society's safety needs; support public policy initiatives regarding the non-vehicle factors in collision causation; and introduce safety performance criteria and technologies as local markets can absorb and afford them." Within GM these goals are addressed through the following:

Core business: The company has developed a comprehensive "before-during-after" safety model to understand and address vehicle crashes. At the "before" stage, GM has embedded technologies to help drivers avoid crashes. This includes innovations in design and manufacturing, such as daytime running lamps, which statistics show can reduce vehicle-pedestrian crashes by as much as 15 percent.<sup>27</sup> During a crash, GM offers a variety of occupant protection technology, including front and side airbags and safety belt pretensioners designed to minimize injury in a crash. Finally, if a crash occurs that causes an airbag to deploy, OnStar® embedded cellular technology automatically dials an OnStar advisor who contacts the vehicle and calls emergency authorities. GM was also instrumental in pushing for vehicle-to-vehicle crash compatibility standards to address a mismatch between light trucks and passenger cars in crashes. This led to voluntarily industry standards that were established in 2003. Beginning in 2005 and taking full effect gradually over the next two years, GM is making OnStar and electronic stability control standard features for all retail customers in the United States and Canada.

Social investment and philanthropy: GM has developed parent education information on safely securing children in rear seats, which is posted on the Internet (www.ourpreciouscargo.com), and partners with its Chevrolet Division and Safe Kids Worldwide to sponsor the "SAFEKIDS Buckle Up" car seat inspection program. GM also supports Mothers Against Drunk Driving, and played a leadership role in creating the Air Bag and Seat Belt Safety Campaign, which has supported a variety of safety belt use initiatives. The company also

<sup>26. &</sup>quot;A Manufacturer's Viewpoint Concerning Motor Vehicle Safety in the Global Environment," R.C. Lange Jan 26, 2005. Presented to Symposium of International Automotive Technology, Pune, India.

<sup>27. &</sup>quot;An Assessment of the Crash Reducing Effectiveness of Daytime Running Lamps (DRLs), National Center for Statistics and Analysis, September 2004.

<sup>28.</sup> General Motors website

<sup>&</sup>lt;www.gm.com/company/gmability/safety/resources /organizations.html>

created a campaign tailored to Chinese drivers that, "includes educational messages about the lifesaving benefits of wearing safety belts, following traffic regulations, safe driving practices and an explanation of how various vehicle safety features work to help protect drivers and their passengers. According to a GM poll conducted earlier this year, 48% of motorists in Shanghai admit that they do not always wear safety belts, despite local laws requiring their use."28

Public policy: GM is a member of the Global Road Safety Partnership and is the project leader in the GRSP's Thai Child Seat Campaign. This publicity campaign, run in conjunction with government and the public sector to safeguard children through use of child seats, is being carried out through dealers and servicing outlets. General Motors provides a mobile unit used in events at schools, universities, hospitals, and road shows that are specifically targeted at new families. In addition, GM is one of seven firms that established the Global Road Safety Initiative that will seek to build public sector capacity and regional expertise around the road safety issue. (See page 32 for more information.)

#### Shell

Founded in 1883 and operating in over 145 countries, Royal Dutch Shell is headquartered in the United Kingdom and the Netherlands. It is a global group of energy and petrochemical companies and ranks as the word's third largest oil and gas companies. It has approximately 119,000 employees and annual sales of US\$41,468 million (2003).

Core business: Shell's involvement with GRSP was a natural fit from the outset before the partnership's inception, the company had identified road accidents as a cost and a risk to business. According to one General Manager, "The most dangerous thing our staff and contractors do each day is drive to work. The crash rate on New Zealand roads is many times higher than the accident rate for working in the oil and gas industry. This means that Shell Todd Oil Services is very proactive at managing road safety."29

29. Chris Beath, General Manager, Shell Todd Oil Services, <www.ltsa.govt.nz/commercial/safe-driving/prep.html>

> As a global transporter of oil and gas, some of Shell's workers were being injured or killed as a result of their own behavior, road conditions, or the behavior of other drivers. Prior to GRSP, Shell ran free driver training classes in South Africa. Today, road safety remains a high priority for the company and it has developed several programs for its personnel and contractors that address the issue. Some of these include:

- Global minimum road transport standards applicable to employees and contractors.
- Driver training (employees and contractors) in Defensive Driving Techniques and medical examinations to establish fitness to drive, including eyesight testing.

- "Hearts and Minds" attitude and behavior-based safety program to raise personal awareness of work related risks and get them "intrinsically motivated" to work and drive safely.
- Hour limitations and driver health screenings to combat driver fatigue.
- Testing of new technologies such as an alert system that senses micromovements in the steering wheel sensing if it becomes too erratic.
- Route hazard maps across countries of operation to establish major high risk spots on main tanker lorry routes, as well as communication systems among drivers to effectively manage hazards.
- In-Vehicle Monitoring Systems that measure a range of parameters, such as speeding, over braking, over accelerating, fuel consumption, seat belt use, and driving time—data are downloaded and used to coach drivers.
- Driver Leagues that act as financial and status-based incentive systems to benchmark contractor health, safety and environmental performance. In some countries, positive points are given for following safety rules and negative points for not following them; in others, safe driving is rewarded by a bonus or reduction in insurance tariffs.
- Improving truck safety standards: contractor and Shell lorry fleets are required
  to have safety guardrails to protect motorcyclists and pedestrians. In addition,
  since truck construction and maintenance was identified as a cause for load
  spills, new standards were developed that include lower center of gravity and
  increased tanker strength.

Social investment and philanthropy: In addition to its involvement with training and education through GRSP, Shell has developed nine driver safety booklets for the community that address issues such as driving in inclement weather and tiredness. It sponsors the "Shell Traffic Games" to educate children in safe behavior and its foundation is sponsoring work in Mexico City and Shanghai to design innovative mass transit systems that reduce time and cost, as well as improve environmental performance and safety.

Public policy: Shell is a founding member of the Global Road Safety Initiative (see page 32), as well as a founding member of GRSP, which is implementing the new GRSI initiative. Shell was initially motivated to join the organization in part because it was questioning whether it could have any further positive impact on the road safety issue. Alone, according to Rick Weidel, Downstream Health Safety and Environment Policy, Planning & Reporting Adviser, the company did not feel it was being effective with governments in some areas where other priorities were higher. Teaming up with other companies and nongovernmental organizations made it possible to have greater influence at the national level and to work in partnership with local entities.

## Each of the sectors involved in a public-private partnership usually joins anticipating that there will be mutual benefit in such an endeavor, and with wariness of potential risks that may emerge. Multisector partnerships are even more complicated by nature because they usually address a complex issue that requires a multipronged systems approach.

### vii) Striving for Mutual Benefit

Each of the sectors involved in a public-private partnership usually joins anticipating that there will be mutual benefit in such an endeavor, and with wariness of potential risks that may emerge. Multisector partnerships are even more complicated by nature because they usually address a complex issue that requires a multipronged systems approach. The solutions that materialize from such relationships usually require joint efforts from sectors that work in vastly different ways, sometimes at different paces, and, though the expected outcomes are generally the same, each partner may have differing expectations and motivations. This can create both great opportunities and challenges for the players. In striving for mutual benefit, and to positively affect the road safety issue, some positive aspects of the GRSP partnership have been identified.

Working in Partnership with Business: According to the GRSP secretariat, some positive elements of private sector involvement have been the following:

- 1. Ability to mobilize extra funds—companies pay about SFr 75,000 per year, but the real value is in helping to leverage funds at country level.
- 2. Ability to work with local subsidiaries of multinational corporations—this is a potential benefit that has not yet been fully utilized. Much seems to depend on individuals leading at both the corporate and national level and this process must be better institutionalized.
- 3. Research on road safety—some of the best research capabilities and facilities are within private companies.
- 4. Corporate relationships can be crucial in getting government engagement.
- 5. Corporate management skills can be very important at the country level, particularly in terms of sharing project management skills with road safety NGOs and alliances.
- 6. Marketing, communications, and branding skills—according to GRSP, research shows that good publicity campaigns make a difference and companies can help to fund and implement these initiatives.
- 7. Transport-related industries, particularly the oil sector, have been critical in raising and spreading standards at the national levels. They maintain the highest global safety standards and help to spread these through subcontractors, local communities, on-the-ground training programs, and by establishing fully fledged training centers.

Benefits to Business: From a private sector perspective, partnership allows for a total systems approach to a systemic problem that cannot be resolved by one sector in isolation. In addition, partnership lends credibility to the effort and removes some of the stigma of assumed corporate self interest. It also helps to focus government attention on an issue that it may otherwise ignore or not prioritize. Finally, partnership is an approach that allows for replication across countries and regions because lessons can be shared.

While private sector players did not express any negative repercussions of working in partnership, some overall operational and strategic challenges were identified by a variety of players.

#### viii) GRSP Challenges

After five years of operations, GRSP now faces key challenges in terms of scaling up the work, institutionalizing the processes it has established in its pilot countries, and ensuring that the local networks it has created are sustainable. Aside from funding, one of the greatest external obstacles to GRSP having widespread impact on the road safety issue is ensuring sustained interest and commitment from governments. Changes in regimes often signal a shift in the weight that road safety is given by developing country governments grappling with a host of competing priorities. "We can't do anything without consistent government interest," says Tom Chaffin, 3M's Vice President of Traffic Safety Division. A policy framework within which to address vehicle safety is critical to success. Ironically, it is often corporate participation that provides continuity and consistency, despite the common perception of short-term corporate vision and drivers.

In addition to the contextual challenges, GRSP faces some internal issues as well. The rapid pace of change within the organization has meant, in some cases, that methodology and lessons have not been well recorded, leading to missed opportunities to shape the ongoing program based on those lessons. In addition, rather than one approach, the Partnership implemented 10 approaches (one for each country) leading to a level of complexity that was multiplied by the engagement of eight consultants who had too few days in-country and worked, largely, at a distance. While use of consultants in the early years may have been both positive and necessary, there is acknowledgment that the trust and relationships built in-country, because of the consultants' long tenure, was not necessarily going to lead to the long-term organizational sustainability. This is now changing with increased recruitment of full-time staff, though both institutional and financial challenges remain.

In addition, the power dynamic between the global body and the national entities has led to an understanding that the global executive committee must become comfortable ceding project ownership, while the national programs must prioritize, and allocate resources to, sharing lessons and experiences more widely. In addition, ownership of project outcomes can be an issue because of branding tensions between individual companies and GRSP, both of which may want to maintain their own brand identities.

After five years of operations, GRSP now faces key challenges in terms of scaling up the work, institutionalizing the processes it has established in its pilot countries, and ensuring that the local networks it has created are sustainable.

<sup>30.</sup> Tom Chaffin, VP, Traffic Safety Division, 3M December 8, 2004.

On the most practical level, variability and context-specific differences between countries makes it very difficult to identify, let alone promote, one model for success and effectiveness. These differences range from cultural and contextual, to different types of local champions, participants, funding, and institutional and governance structures.

#### FIGURE 9 GRSP CHALLENGES

#### **EXTERNAL**

- · Skills in developing countries
- · Limited resources and budgets
- Willingness of governments to use their own and borrowed resources for safety-related issues
- Enforcement
- Creating corporate engagement at the country level to give more ownership

- Articulating methodology: GRSP has grown organically and must now clearly and succinctly articulate its methodology.
- Moving beyond focus country approach: while this approach was appropriate at the outset to scale up and show results quickly, it is now an obstacle to regionalizing the work. This is changing, in part due to external political reasons (Hungary and Poland joining the European Union) and in part due to new relationships (work with the Asian Development Bank, ASEAN, and GSRI).
- Using consultants: GRSP long-term use of consultants has meant that in-country relationships have been built and trust has been established between the consultant and the partners in-country. GRSP is beginning to get beyond this.
- Effective use of funds.

#### Lessons Learned<sup>31</sup>

GRSP is now at a turning point. After five years of work and a unique structure drawing players in multiple sectors together at both the global and the local levels, GRSP is becoming increasingly professionalized and accountable. However, it is too early to tell whether the process of supporting country-level initiatives through a combination of funding, capacity building, networking, evaluation and other process support will result in sustainability of its national initiatives and scalability of its efforts across regions. In fact, GRSP has acknowledged that such scalability is unlikely without government and intermediary organizations for training and technology transfer. The hope is that the inception and application of the Global Road Safety Initiative (see page 32) will enhance GRSP's ability to reach scalability and sustainability. Some lessons from GRSP's work to date include the following:

- Governments must be committed from the outset.
- A systemic approach is critical—addressing only one issue will not create a solution. Rather, there must be combined efforts on creating safer road infrastructure, traffic laws, safety mechanisms, training, and education.
- Sensitivity and awareness to local conditions is crucial for success, both culturally and the current state of national road safety organizations.

<sup>31.</sup> Synthesized from: McElroy, Andy. Moving Ahead: Emerging Lessons Global Road Safety Partnership, TØI Report, and interviews with GRSP and companies.

- Business must be engaged in the project planning stage.
- National subsidiaries or affiliates of international corporate partners are fundamental mechanisms to build networks.
- NGOs must be engaged further because of their ability to secure new partners.
- Collaboration with the World Bank and other international development agencies is critical and must be improved.
- Advocacy for building new roads, as well as improving old ones, should be linked to advocating for safer roads; GRSP is currently working with two road builders lobbies, the World Road Association (PIARC) and the International Road Federation (IRF), on this issue.

#### x) The Global Road Safety Initiative (GRSI)

GRSI has been established as a stand-alone program managed and implemented by GRSP, but with a dedicated \$10 million funding stream and stand-alone projects.

The initiative evolved out of a series of interrelated activities during 2004. The catalytic event, from the private sector perspective, was the publication of findings of the World Business Council on Sustainable Development's (WBCSD) Sustainable Mobility Project, which identified rising rates of traffic fatalities in developing countries as one of the impediments to sustainable mobility.<sup>32</sup> This led seven of the world's largest oil and auto companies that had been involved in the long-range research to seek solutions with a regional focus. Concurrently, the World Report on Road Traffic Injury Protection, co-produced by the World Health Organization and the World Bank and to which GRSP contributed, further highlighted the road safety issue and brought it to the attention of key policymakers. Finally, the UN General Assembly debates on road safety in 2004, followed by a multistakeholder forum, focused even more attention on the matter of road safety and highlighted that this is an issue where a confluence of factors are at play.

32. Mobility 2004: World Mobility at the end of the 20th Century and its Sustainability. 7–4. <www.wbcsdmobility.org>

The seven companies involved in GRSI—Ford, GM, Honda, Michelin, Renault, Shell, and Toyota—began looking for an implementing body for their work to support regional road safety centers and training programs. They identified GRSP, which had gained growing recognition during 2004 as an expert resource on business—government—NGO partnerships for road safety and as a potential implementation and delivery organization. One of the most compelling features of GRSP, and what made it particularly attractive, was that it brought together governments, UN agencies, development banks, NGOs, and a mix of private sector entities, in addition to its relationship with the IFRC.

The group recognized that all the companies involved in GRSI were already engaged in a variety of different projects and countries. It did not want to supplant or diminish this work, but rather wanted to create a complementary initiative. The

group also recognized that there was a gap to be filled between "thinking globally and acting locally." With this understanding as a base, GRSI's general focus will be to make a material difference on the road safety issue in key developing and transitional countries or regions, through the following:

- a) Institutional development and project delivery—establishing and/or strengthening regional training and development centers to groom a cadre of road safety professionals for target countries and regions. The focus will be on training the trainers, developing regional knowledge bases, and building local capacity. The goal is to create regional centers that will be the initiative's "lasting legacy" by working with and handing over to regional banks, local corporate subsidiaries, the IFRC, and other institutions.
- b) International guidelines—each addressing a major road safety challenge and providing best practices, access to resources, and training materials.

The World Bank and GRSI will use a combination of macro and micro quantitative and qualitative metrics to guide progress and determine accountability.

## **7** Conclusion

While GRSP has undergone significant change in the last few years, it still remains to be seen if a multistakeholder partnership approach is the most effective and efficient way to address the issue of road safety. It makes intuitive sense that such a systemic problem involving interactive elements concerning, and thus linking, all of the sectors requires a cross-sector solution. However, trisectoral partnerships can address some, but not all, issues effectively, and the current lack of data and rigorous program results make it difficult to assess this approach and compare its efficacy with others. Moving forward, key suggestions include some applicable across the system and others relevant to either policy makers or the private sector.

# 8 Recommendations for Policy Makers and **Business Engagement**

In their 2004 paper World Report on Road Traffic Injury Prevention, the World Bank and World Health Organization provided a set of recommendations to comprehensively address the growing challenge of road injuries and fatalities. These recommendations, summarized in Figure 10, are aimed primarily at governments. It is suggested, however, that in cases where governments cannot implement the suggestions on their own, for example due to resource and financial constraints, they can join with other sectors. Additional interventions and risk factors can be found in Appendix 4.

#### FIGURE 10 WBG/WHO ROAD INJURY INTERVENTIONS

- 1. Identify lead agency in government to guide the national road safety effort
- 2. Assess the problem, policies and institutional setting relating to road traffic injury and the capacity for road traffic injury prevention in each country
- 3. Prepare a national road safety strategy and plan of action
- 4. Allocate financial and human resources to address the problem
- Implement specific actions to prevent road traffic crashes, minimize injuries and their consequences, and evaluate the impact of these actions
- 6. Support the development of national capacity and international cooperation

Additional policy recommendations include:

- Understand the impact that poor road conditions and use leading to injury and death have on a wide variety of sectors in addition to health—and the ways that this, in turn, affects macro-economic growth.
- Identify ways of addressing road safety in a cost-effective manner, such as education and road repairs.
- Identify components of political and legal infrastructure that, if ameliorated, could positively impact road safety. Consider refining and enforcing law to assure proper usage of roads and good car conditions.
- Work with multilateral agencies for lessons learned in other country contexts. Become part of regional road safety initiatives.

In addition to contributing to work around the WHO/World Bank recommendations (Figure 10), business can also:

Become involved in national/regional road safety coalitions and consider lending technical expertise.

<sup>33.</sup> World Health Organization World Report on Road Traffic Injury Prevention. Geneva: 2004, 39-42.

- Examine if there is a road safety impact on the company and/or if in the normal
  course of business there are impacts on road safety—if yes, endeavor to build in
  mitigations to the business model.
- Engage communities and stakeholders around the issue of road safety.
- Work in partnership with other companies or sectors to address elements of the road safety issue that are relevant to your business.
- Identify corporate leaders to propel the safety message throughout the firm.

# 9 Key Questions

#### **Students**

- Why is road safety more than a "public good" and should business be involved?
- What risks and opportunities are taken and/or created for business involved in road safety issues?
- Will GRSP fulfill its mandate if it is not scaled-up and broadened to reach other countries?
- If deliverables and outcomes are not measured and reported on (i.e., national road death reduction, positive impact on public health budgets through lowering fatality rates), what is the likely impact on GRSP?
- How and why should transport safety feature in a list of competing government priorities in a rapidly developing economy?

#### **Further research**

 Investigation of whether the outcomes of multisector partnerships, looking at specific cases, are more effective than those that each player could evoke individually.

# 10 Ten Key Lessons on Partnership from the **Global Road Safety Partnership**

- 1 Take a systems approach to systemic challenges.
- 2 Good data and rigorous science are crucial at the outset to establish effective programs and baselines and to measure performance/create impact metrics.
- 3 Get technical experts onboard early.
- 4 Establish communications systems to share lessons across program early on.
- 5 Establish clear reporting, measurement, and cooperation systems within the partnership.
- 6 Understand the challenges, expectations, and motivations facing each of the sectors involved in partnership and try to work effectively within these constraints.
- 7 Identify leaders/champions in the field and in the political arena to advocate, help focus attention, and underscore the issue's importance.
- 8 Underscore that the social issues around which these partnerships emerge are largely ones for governments to solve-engage in crosssector thinking about how to enable government to more effectively address these issues in the long term, thereby building sustainability into the system.
- Focus on the contextual need and create programs that can provide the 9 best benefit—cost ratio. Do not assume that the most convenient program is the best one to establish.
- Engage and build the capacity of local experts and establish long-term relationships; try to avoid engaging "roving consultants."

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International Road Federation http://www.irfnet.org

Institute of Road Safety Research, Leidschendam, The Netherlands www.swov.nl/en/index.htm

Insurance Institute for Highway Safety, Arlington, Virginia, USA www.iihs.org

World Road Safety Network www.wrsn.net

# **Appendix 1: GRSP Governance and Operational Structure**

#### **Systems & Focus**

Systems for selection, assessment, monitoring, and evaluation are now being developed.

Creation of a regional focus through links with World Bank Group Sub-Saharan Africa Transport Program and ASEAN. Regional Initiative with facilitation by the Asian Development Bank.



#### **10 Focus Countries**

Traditionally, selection of projects and countries was ad hoc, and included issues such as:

- · partners interest
- consensus
- · local need
- · individual leadership

#### **Global Road Safety Initiative**

Regional focus, train-the-trainer

# **Appendix 2:** GRSP Country Progression – List of Indicators and "Values" to Move Forward<sup>34</sup>

CRITERION	INDICATOR	STAGE 1	STAGE 2	STAGE 3	STAGE 4
Scale/nature of problem	(1) Information system for road traffic injuries	Some data available	Quality and quantity of data well understood	Information system and data supply improves	Consistent and regular reporting and widespread access
	(2) Hard data Fatalities Fatalities per 10K popl'n Fatalities per 100K veh's % pedestrians % p2w users	Fatalities Fatalities per 10K population Fatalities per 100K vehicles % pedestrians % p2w users	Fatalities Fatalities per 10K population Fatalities per 100K vehicles % pedestrians % p2w users	Fatalities Fatalities per 10K population Fatalities per 100K vehicles % pedestrians % p2w users	Improvements can be seen Fatalities Fatalities per 10K population Fatalities per 100K vehicles % pedestrians % p2w users
Government road safety policy	(3) Policy statements  (4) Priority and budgets given	Problem recognized and government wishes to tackle issues  Low priority and no specific	Policies clarified  Willingness to increase	Polices under review and casualty reduction targets set  Priority rising and budgets	Policies subject to systematic review and relevant sectors have clear goals or targets Priority accepted and budgets
	to road safety	budget	priority and to define budgets	growing	updated on a regular basis to reflect needs
	(5) Implementation responsibilities	Responsibilities may be unclear	Government clarifies some departmental responsibilities	Responsibilities defined for relevant departments	Clear responsibilities linked to powers
Road safety framework	(6) Road safety strategy	Exists or under preparation	Strategy in place as framework for action	Strategy guides activities	Strategy determines stakeholder activity
tramework	(7) Road safety action plan	Exists or under preparation	Plan includes partnership Program & budget prepared	Action program by department or agency	Monitor and update plans on a regular basis
	(8) Monitoring system	Unlikely to exist	Under preparation	Monitoring process in place	Feedback to policies and plans
	(9) Institutions with adequate capacity	Little influence and few trained staff	Needs acknowledged and training taking place	Capacity continues to be developed	Capable institutions in place
Government view on partnership	(10) Partnership policy	Government willing to work with other sectors	Partnership process applied in road safety	Policy statements being made	Policy reviewed and improved where necessary
	(11) Examples of partnerships	Evidence of working partnerships in other fields	Examples of partnerships in place and working	Road safety partnership involves other sectors	Good examples of active road safety partnerships
	(12) Partnership programmes integrated into strategy	None	Willing to consider partner- ship as part of strategy	Strategy reviews introduce partnership elements	Partnership approach integrated into procedures
-	(13) Partner commitments and activities	Partners express interest at global level	Local reps of global partners confirm support	Local reps of global partners active in projects	Global partners continue to support
	(14) Recruitment of local partners	No local partners	Local partners express interest	Local partners commit to projects	Local partners accept share of ownership
GRSP activities	(15) Sustainable program of projects	None	Pilot projects	Program of GRSP projects in place	Annual GRSP program forms part of government action plan
	(16) Partnership program scaled up	No program	Pilot projects capable of scaling up	Projects being scaled up	Roll out of projects as part of action plan
	(17) Effectiveness of activities	No program	Pilot projects offer potential	Projects being evaluated; results used to scalie up in order to make a contribution to casualty reduction targets	Most projects being evaluated as a matter of course and GRSP activities demonstrate contribution to national targets
Resources for GRSP projects	(18) Extent of local resources available through partners	Potential exists through global partners and local representatives	Potential confirmed locally—global partners commit resources	Local GRSP establishes activities and available resources grow through partners and local efforts	Annual "business plan" in place with regular updates of project resources showing that sustainable funding and staffing is possible

34. GRSP internal document, 2005.

CRITERION	INDICATOR	STAGE 2	STAGE 3	STAGE 4	STAGE 5
External funding	(19) Extent of development funding available for road safety	Existing or proposed development projects with opportunities for road safety component	Development projects in road safety and able to support GRSP activities	Pilot projects lever development funds to support partnership and new external funds attracted as a result of GRSP activities	Project funds expand so that a pipeline of projects established New funding agencies join in
Government funds for road safety	(20) Extent of government funds committed to road safety	Government has earmarked funds, or believed willing to consider this	Government position established with a commitment to future funds	Government funds available for action plans; move to sustainable funding mechanism for road safety	Sustainable funds in place with growing revenues devoted to road safety
Local GRSP structure	(21) Stability and sustainability of local GRSP	Does not exist	Partners set up local steering committee	Local SC effective & active with projects delivered & monitored	Self-sustaining as NGO or local association Outward looking activities-
Relationship with GRSP Secretariat	(22) Level and direction of support  (23) Information flow	GRSP secretariat contacts established and confirm interest and potential champions From secretariat to country	Appraisal visits; advisor appointed and active  Regular communication with local SC and evidence of activity	Advisor program agreed; Visits reduce over time with local coordinator in post and working effectively Reporting process in place— from country to secretariat	"Arm's length" contact effective  Regular flow of information to Secretariat and support being offered to neighbor countries

# **Appendix 3: GRSP in Thailand**<sup>35</sup>

#### Institutional development, 2000-onward

Since the year 2000 TGRSP members have worked to establish and formalize Thailand GRSP (TGRSP) in a number of ways: roundtable meetings for road safety stakeholders, launch of TGRSP projects, creation of TGRSP as a foundation under Thai law (2004), hosting agreement with OTP, and full-time staff allocation (OTP, Road Accident Victims Protection Co. Ltd). The group regularly invites new organizations or companies to join in the partnership. As a follow-up to the March 2005 conference, a road safety declaration has been signed by over 45 interested parties and TGRSP is now inviting new committed organizations to join the partnership. TGRSP was also invited both to the ASEAN workshop in Kuala Lumpur (May 2004) and a road safety stakeholder meeting in Jakarta (Jan 2005) to share their experiences of partnership building in the Asian region.

#### **TGRSP PROJECTS**

#### Safe People

#### MOTORCYCLE INSTRUCTOR AND RIDER TRAINING

Project leader: A.P. Honda / Thai Motorcycle Enterprise Association (TMEA)

Project partners: Land Transport Department, Shell, Royal Thai Police

TGRSP and Honda run training courses for dealers and other instructors, as well as conducting defensive rider training courses for individuals. There are two levels of instructor courses: a five-day "subinstructor" course and a three-day follow-up course. There are three levels of training for users ranging from Introductory (2 hours) and Basic (1 day) to "License," which provides basic training for new riders and also requires a whole day at a Honda training center in Bangkok. The center has a large off-road area for rider training and is equipped with motorbikes, lecture rooms, and state-of-the-art motorcycle simulators. In 2002 Honda trained approximately 400,000 people. Since Honda and TMEA started the training courses, about 1 million licences have been issued. The program is scaled up through the dealer network in the provinces.

35. Source: GRSP Office, Thailand.

#### TURN ON HEAD LIGHT - WEAR AND TIGHTEN HELMET CAMPAIGN

Project leader: Road Accident Victims Protection Co. Ltd

Project partners: Thai Motorcycle Enterprises Association, AP Honda, MoT

The issue of motorcycle collisions has been given priority by many of the local TGRSP partners since 2003. In particular the Road Accident Victims Protection

Co. Ltd, TMEA, and Honda have been promoting helmet wearing through campaigns, public events, donating free helmets to new riders who attend training courses, and to motorcycle taxi riders. More than 100,000 helmets and 800,000 light bulbs were donated in 2003-04.

#### **HELMETS FOR KIDS**

Project leader: Road Accident Victims Protection Co. Ltd

Project partners: MoT, Grammy Entertainment Group, MopH, AIPF

Motorcycles are the main mode of transportation in Thai cities and one vehicle is often used for the whole family simultaneously. Children are vulnerable road users and often don't wear a helmet. In March 2005 TGRSP launched a competition on child helmet design to raise parental awareness in ensuring that children always wear helmets, and to encourage more fashionable and attractive helmet designs. Four age groups of competitors were asked to submit drawings.

#### SUBSIDIZED STANDARD HELMET CAMPAIGN

Project leader: Road Accident Victims Protection Co. Ltd

Partners: TGRSP, General Insurance Association

To increase the rate of helmet use in Thailand a TGRSP a joint government-insurance industry project was initiated in 2004 to heavily subsidise motorcycle helmets. Under this scheme the government will pay one-third of the helmet cost, the insurance industry will bear the cost of one third, and the individual will pay the last third (to support idea of ownership and value). It has also been suggested that a pilot study of the correlation between helmet use and reduction in insurance premiums and crash records be undertaken as part of this project.

#### **DEFENSIVE DRIVER TRAINING**

Project leader: Shell

Project partners: Land Transport Department, Transport Co. Ltd, Express Transport Organization, Bangkok

Mass Transit Authority, OTP, DaimlerChrysler, Volvo, Toyota, Thai Red Cross

Shell promotes defensive driving courses by training trainers of other organizations using in-house resources and programs. The training takes place at the grounds of Department of Land Transport, which recognizes that Shell provides one of the highest standards of training available. Lately first aid education has been included in the training curriculum (2004).

There are other training programs under TGRSP. Thai Petroleum is running a course with assistance from Shell and the Department of Land Transport. All training courses are been tested and analyzed to ensure their quality. A number of training audits took place in 2004 (Michelin and Mitsubishi). Other courses are being developed for 4-10 wheelers as part of the TGRSP Road Safety Institute.

#### DON'T DRIVE DRUNK PUBLICITY AND ENFORCEMENT CAMPAIGN

Project leader: Don't Drive Drunk Foundation (established in 2002)

Project partners: Thai Police, MoT, MopH, municipalities, Thai Health Foundation

One of the most critical road safety risk factors in Thailand is drinking and driving/riding. It is claimed that today 50 to 60 percent of traffic victims are affected by alcohol, and in about half the cases of crash-related fatalities, alcohol can be traced in the driver's blood. The Don't Drive Drunk Foundation is leading a campaign in Thailand against drunk driving by organizing combined enforcement and publicity campaigns, lobbying for responsible driving, sensitizing and activating students and communities, and discussing how to introduce more effective enforcement with the police. Examples of the latter include introduction of breathalyzers, improving detection strategies, and raising penalties. The Don't Drive Drunk Foundation focuses its initiatives just before and during the big holidays like New Year and Songkran (Thai New year) when the problem of alcohol in combination with road users is at its worst.

#### **MOBILE KIDS**

Project leader: Daimler Chrysler

Project partners: MoE, MoT, Thailand Red Cross, Petroleum Thailand Company PTT, Shell, Esso, 3M, Jumicar

This program aims to help children learn traffic rules and signs and how to behave safely in traffic. The approach includes formal instruction and demonstrations with practice on a model road, drawing contests, and simulated driving tests. A trained and equipped DaimlerChrysler's team visits schools to provide practical road safety training. Initially tested at one orphanage, phase two included visits to 21 schools with mobile equipment. In 2004 first aid education was included in the curriculum.

#### CAMPAIGN AGAINST DRIVERS' USE OF MOBILE PHONES

Project leader: Volvo

Project partners: Shell, Medical Institute of Accident and Disaster, Ministry of Public Health (DopH)

A multimedia campaign started in 2000 using TV, radio, press, posters, and stickers to inform drivers of the dangers of using a mobile phone while on the move and advising them on safe practices. The campaign was finished when the traffic law was revised to forbid the use of mobile phones while driving.

#### Safe Roads

#### IMPROVED ROAD SIGNS AND MARKINGS

Project leader: 3M

Project partners: Department of Highways (DoH), Expressway and Rapid Transit Authority, Yontrakit Intersales,
Office of Transport and Traffic Policy and Planning (OTP), Insurance Department, Police, Department of
Accelerated Rural Development

3M developed an improved signage system when approaching curves, which gave information on maximum speed as well as early warnings. The signs were piloted at four sites, two on rural roads and two on major highways. The signs and markings were made using 3M's Diamond grade, which is the highest standard available.

#### SAFER SCHOOLS ZONES

Project leader: 3M

Project partners: Ministry of Education (MoE), Khoen Kaen Hospital, Thai Health Foundation, Asian Institute of Technology (AIT), Srisaket Municipality. Khoen Kaen Municipality, Department of Land Transport, Police

In the first pilot phase of this project, new pedestrian crossing signs were installed at five school sites in Srisaket Municipality with the support of the Mayor. The site improvements were integrated with education for the school children. In the second phase at Khoen Kaen municipality, a more comprehensive improvement of the zone around trial schools was integrated with education programs for the children and the community.

The third phase initiated in mid-2004 prepared a major study on "safer routes to schools" in five different towns in Thailand together with municipalities, local police, and local departments of land transport. In each town, two schools have been chosen for the study to be able to compare behavior changes. One school is given a broad range of improvements including new road markings, flashing warning lights at school crossings, education programs for students, trained school patrols (police and students), road safety competitions for the students, and special events and "walks/parades" to inform the public about road safety. The other school just gets new road "school zone" street signs. The purpose of the study is to show that new street signs on their own are not enough to change to safe road user behavior. Two cities (Nakronratchasima and Udontani) have been completed (March 2005) and the improvements at the next three towns will be implemented before the end of 2005. Monitoring and evaluation are being prepared by the University of Suranelee for all five cities and the collection of data will be done in partnership with the nearest university to the chosen cities. The evaluation will be based on both the number of road crashes but also the understanding of road safety and learning to take the right precautions.

#### **Safe Vehicles**

#### IMPROVED VEHICLE VISIBILITY

Project leader: 3M

Project partners: Bangkok Metropolitan Administration (BMA), Bangkok Metropolitan Transport Authority (BMTA), Land Transport Department, Police, Express Transportation Organization of Thailand, Transport Co. Ltd., Yontrakit Intersales, Shell

The project reviewed the regulation for vehicle markings for buses, trucks, trailers, and hazardous goods and developed an improved vehicle marking design. The project included providing 50 trucks carrying dangerous goods (oil/gas) from Shell retail with reflective markings and it advocated for new regulations on vehicle visibility as many nighttime road crashes involve unlit broken down vehicles.

#### CHILD SEAT CAMPAIGN

Project leader: General Motors Thailand

Project partners: DaimlerChrysler, Medical Institute of Accident and Disaster (MIAD), NSCT, MoT, Police, Dep of Insurance, Thai Industry Standards Institute, Ramathibodi Hospital

A publicity campaign through public events at dealers and servicing outlets to encourage better protection of child occupants through the use of child seats. General Motors has a mobile unit they use for their events (schools, university, hospitals, press conferences, road shows). They try specifically to target new families, sometimes through their children.

#### **Systems and Procedures**

#### THAILAND ACCIDENT RESEARCH CENTRE (TARC)

Project leader: Department of Highways

Project partners: Department of Highways (DoH), Ministry of Transport (MoT), Shell, Asian Institute of Technology (AIT), Volvo Car Corporation Thailand, Volvo Car Sweden, Police, Thai Health Promotion Foundation, Insurance Department

The research center was established in 2001 to provide a national center for collecting scientific information about the road crash problem in Thailand and to boost the basic information available from other sources. The project was launched with a high profile media event at the TARC Center located at the Asian Institute of Technology (AIT), and opened by King Carl XIV Gustav of Sweden. Experts from Volvo Cars Accident Research Commission in Sweden have trained a Thai accident investigation team who are carrying out in-depth studies of crashes collecting data from the crash sites (from 2002). The team consist of members from DoH, OTP, the police, and AIT. This information will be used to improve the road safety program and strengthen evaluation programs. In 2005, TARC was awarded six scholarships from the Thai Health Promotion Foundation to support four Masters and two PhD students. Individuals have been nominated coming from the police, OTP, rural highways department, and Khon Kaen Hospital, and contracts have been signed. The students will carry out the extensive data collection and analysis.

#### **Dissemination Activities**

#### FM RADIO PROGRAMS ON ROAD SAFETY

Project leader: Radio Jor Sor 100

Partners: TGRSP members

Radio interviews are regularly organised with TGRSP members to talk about their projects and raise awareness about road safety.

#### THAILAND GRSP CONFERENCE, 26 MARCH 2005

Project leader: TGRSP

The 2005 Thailand GRSP Conference was held at the Bangkok International Motor Show March 26, 2005 sponsored by Standard Chartered Bank and TGRSP. The conference was opened by the TGRSP chairman Dr. Prapansak who in his opening speech launched a TGRSP video and website (www.thailandgrsp.or.th). After the keynote speakers a road safety declaration was signed first by keynote speakers, later by the participants, declaring, "to undertake concerted efforts to achieve safer roads, safer vehicles, safer drivers, and safer systems in Thailand to save lives through partnership approach" and to "foster safety initiatives for safer roads, to patronize safer vehicles manufacturers, to cherish safer driver development, to save lives via safe drivers, to pave the road to survival, and to drive and stay alive." After a press briefing, a panel discussion followed with leaders from the governmental road safety bureau, medical and insurance sectors, as well as the private sector. The chairman of the Bangkok Motor Show expressed his concern of the safety on the roads and wishes to work with TGRSP on including strong safety messages at the next show. More than 100 people participated in this first TGRSP conference. The second day of the conference took place at the Bridgestone Proving Ground, demonstrating what actually happens just before a crash, including reaction time, delays in the system, and breaking distance.

#### WORKSHOP ON DATA COLLECTION, JANUARY 2005

Project leader: TGRSP

TGRSP presented a half-day seminar on road crash data collection, what to collect, databases, and how to combine existing databases and analyze the data. The workshop was held at OTP and was well attended from the transport, health, and insurance sector. The workshop was conducted by the GRSP advisor.

#### ASEAN ROAD SAFETY PLANNING WORKSHOP, 7-9 JANUARY 2004

Project leaders: ADB, OTP, and GRSP

The workshop brought together representatives from relevant Thai government departments, TGRSP, and nongovernment agencies including the Thai Red Cross to develop a national road safety action plan. The multisectoral plan was developed through sectoral working groups and facilitated by ADB consultants and a GRSP advisor. The action plan was built on previous national road safety action plans and was produced as one of a series of national plans being developed by each ASEAN country. The action plan was approved by the Thai government in October 2004. The ten national road actions plans from each of the ASEAN countries were aggregated into a regional program in September 2004.

#### ASEAN ROAD SAFETY NETWORK WORKSHOP, 11-13 DECEMBER 2003

Project partners: ADB, Sida, AIT, GRSP

Participants: Representatives from 10 ASEAN countries

The workshop was supported by the ADB and Sida. It was the first in a series of workshops to set up a road safety distance learning and knowledge-sharing network in ASEAN countries. The network is based on a system piloted in Africa by Linkoping University and VTI Utveckling in Sweden. The workshop was held at AIT, which will form the regional network center. Linkoping University staff set up the software systems and network on the Internet and they trained the country representatives with support from ADB consultants and the GRSP advisor. The workshop concluded with the group exercises aimed at providing answers to typical ministerial questions. Each ASEAN country provided a representative from government and a leading university with road safety experience. These universities will form national centers. A second workshop was held in Kuala Lumpur in May 2004 as a follow up on the first workshop.

#### 3RD GRSP ASEAN ROAD SAFETY SEMINAR, MARCH 2003

Project leader: Thailand GRSP

Project partners: Ministry of Transport, OTP, UNESCAP, Japan GRSP, JICA

The seminar (March 2003) was launched by the Thai Minister of Transport and attended by representatives from the ASEAN countries from both the public and private sectors. It was highly successful in sharing lessons learned in road safety within the region particularly in partnership projects.

#### **WEBSITE AND PUBLICATIONS**

Project leader: TGRSP

A TGRSP website has been developed (2005), www.thailandgrsp.or.th, and newsletters and brochures are regularly produced. A mobile conference stand was produced for World Health Day in April 2004 and has been used at several other occasions. Press packets have been developed both for World Health Day (2004) and the Thailand GRSP Conference (2005), creating high media attention with newspaper articles and news briefs on television. A group of Danish journalists and media students focused on road safety with the help from TGRSP for their final assignment. The interactive website can be accessed through the GRSP website: www.GRSProadsafety.org following the link: Raging roads of Bangkok—take a trip!

# Appendix 4:36 World Bank Group / World Health Orgnanization Road Injury Interventions and Risk Factors

#### 1. MANAGING EXPOSURE WITH LAND-USE AND TRANSPORT POLICY

Reducing exposure through land-use and transport planning

Encouraging the use of safer modes of travel

Minimizing exposure to high-risk road traffic scenarios

#### 2. PLANNING AND DESIGNING ROADS FOR SAFETY

Safety-conscious design of roads that account for traffic mix

Safety audits (have proven to be highly cost effective, creating long-term savings)

Remedial action at high risk crash sites

#### 3. PROVIDING VISIBLE, CRASHWORTHY, SMART VEHICLES

Improving the visibility of vehicles and vulnerable road users

Improving the crashworthiness of motor vehicles

Designing smart Vehicles

#### 4. SETTING ROAD SAFETY RULES AND SECURING COMPLIANCE

Setting and enforcing speed limits

Setting and enforcing alcohol limits

Addressing the issue of medicinal and recreational drugs

Addressing the problem of driver fatigue

Reducing the risk of junction crashes

Requiring seatbelts and child restraints

Requiring helmets on two-wheelers

Banning drivers from using handheld mobile phones

Educating and informing the public

#### 5. DELIVERING CARE AFTER CRASHES

Improving care before reaching a hospital

Improving hospital care

Improving rehabilitation

#### 6. DOING RESEARCH

36. World Health Organization World Report on Road Traffic Injury Prevention. Geneva: 2004.

## Corporate Social Responsibility Initiative at the Kennedy School of Government, Harvard University

The CSR Initiative at the John F. Kennedy School of Government, Harvard University, is a multidisciplinary program that undertakes research, education, and outreach activities to study and enhance the public role of private enterprise and develop the next generation of leaders. It focuses on exploring the intersection of corporate responsibility, corporate governance and strategy, public policy, and the media. The CSR Initiative is a cooperative effort among the Kennedy School's Mossavar-Rahmani Center for Business and Government, Center for Public Leadership, Hauser Center for Non-Profit Organizations, and Joan Shorenstein Center on the Press, Politics and Public Policy. It was founded in 2004 with the support of Walter H. Shorenstein, Chevron Corporation, The Coca-Cola Company, and General Motors.

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