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Note on International Examples of Road Safety Funding Systems

Final Version

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1. Background and Purpose of This Report

The World Bank is assisting Poland in relation to managing national funding of road safety, following a national road safety management capacity review¹ which identified funding as a key road safety management and delivery issue in Poland. Funding is often the element which determines whether a road safety strategy or plan is a theoretical document or a guide for practical delivery which really occurs. The Poland road safety management capacity review identified funding as a key limiting factor in the success of the previous 10 year road safety strategy for the country.

This report presents a number of example models from other countries and independent states, as requested by the client, followed by a brief review of the international research done on road safety funding good practice.

In order to assist the Secretariat National Road Safety Council (SNRSC) the review will aim to present:

- What are the generally available sources of funding for road safety to be considered
- What constitutes good practice in road safety funding, especially in relation to:
 - Partnerships in road safety resourcing and delivery
 - Sustainable funding of road safety
 - Provision of sufficient flexibility in allocation of funding to programs and projects
 - Selection and prioritization of funding allocations

This report presents the perspective of the practical necessities and positive features, from analysis of practice in other jurisdictions, from experience of leading a large road safety budget and being accountable for its expenditure as the head of road safety, and from strong awareness of the current funding and management situation in Poland.

In order to inform the above issues, the report presents two broad areas of review:

- a) Description of a number of country and state case studies, and
- b) Commentary based on scientific and management articles considering road safety funding good practice internationally.

2. Country and State Case studies

The following countries and independent states are reviewed as international case studies of good practice.

1. Sweden
2. The State of New South Wales, Australia
3. United Kingdom
4. New Zealand

¹ Job RFS, McMahon C, Czapski R, & Giemza J (2013). *Country Report on Poland Road Safety Management Capacity Review*. Warsaw: World Bank.

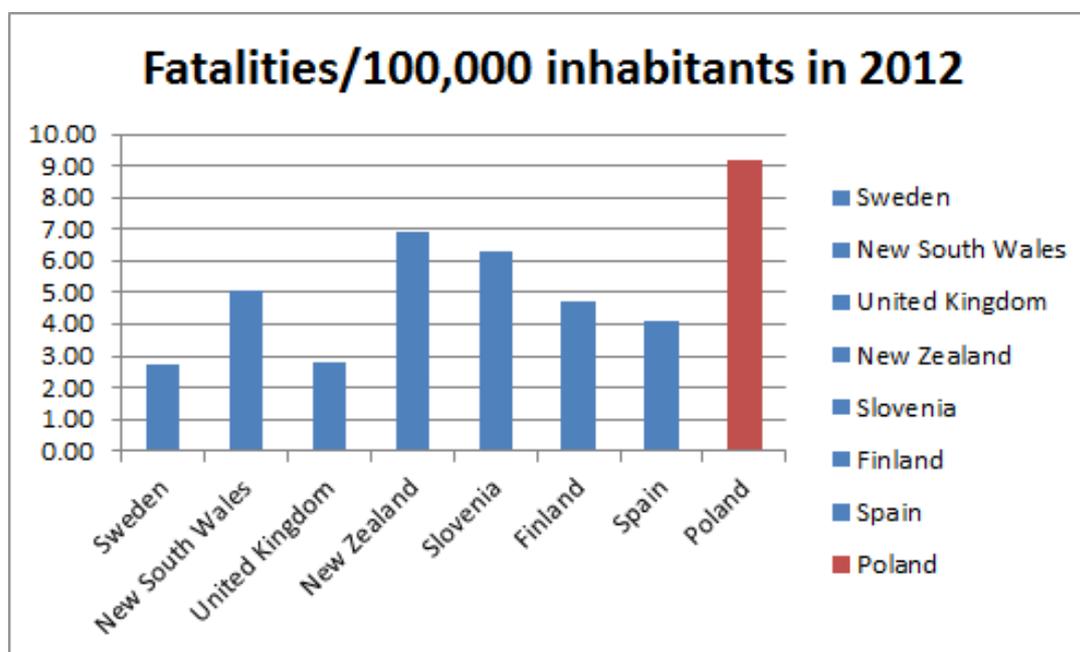
5. Slovenia
6. Finland
7. Spain

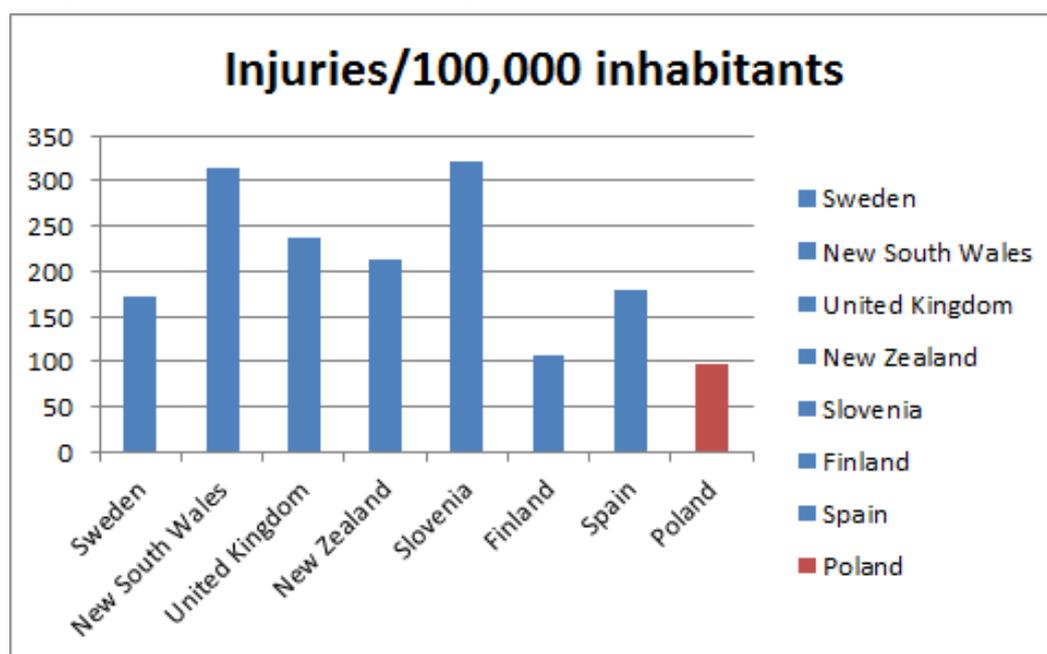
Summaries of the information for each of these countries are given in the Report, with more comprehensive background information presented in the Annexes.

For each case study the funding arrangements vary and are complex, with funds arising from different sources and distributed in different ways. In addition, detailed budget expenditures (which could be reported by wages, materials, contracts, or by management structures, or revenue versus capital expenditure) are necessary to detect the precise amount spent on road safety. Finally, expenditure for other primary purposes can be (and sometimes is) claimed to be for road safety. For example, road maintenance is often presented to be for road safety when it is to preserve the road asset and to allow vehicles to travel faster. Road maintenance often compromises safety by facilitating faster speeds. For these reasons, and in order to clarify complex situations, a summary of the key beneficial features of each country case is provided.

The graphs below show the numbers of fatalities and injured per 100,000 population for the Example Countries, with Poland included for comparison purposes.

Graph 1: Fatalities per 100,000 population for Example Countries and Poland



Graph 2: Injuries per 100,000 population for Example Countries and Poland

2.1. General Comment on Road Safety Funding

Before assessing the international experience on road safety funding it is important to highlight three key considerations which provide a general background that facilitates the comparisons across countries.

1. There are very large expenditures in road safety over and above public sector budgetary allocations which result from allocations made by individuals, companies, as well as health and emergency sectors which are significant and often are not recorded in parallel to public expenditures.

a) it is important to appreciate that a large amount of funding in support of road safety arises from private decisions made by individuals. Some of these behaviours and choices are forced by regulation and others are voluntary. Costs forced by regulation, include maintaining a vehicle to pass registration inspection, undertaking training and testing for a drivers licence, and buying child restraints. Examples of voluntary spending on road safety include buying a safer vehicle (such as a EuroNCAP [European New Car Assessment Program] 5 star rated vehicle). Speeding and other fines may be seen as private expenditure for road safety by providing a disincentive for dangerous behaviour.

b) a significant amount of expenditure for road safety also arises from expenditures by companies. Again this includes behaviours required by regulation (fatigue management and monitoring systems, extra license training and testing for commercial vehicles and trucks, and inspection, insurance, and registration of those vehicles). Companies may spend more than the minimum required elements for road safety such as road safety management systems, additional costs for safer vehicles, etc. Indeed ISO 39001 (International Standard for road Safety) encourages such extra expenditures.

- c) in most countries some areas of expenditure for road safety are not disaggregated from the broader expenditure to allow estimation of the funding of road safety. This is commonly the case for health services, emergency services and rehabilitation. For instance, most countries and states do not centrally record what percentage of costs of ambulance calls are for road crashes, or what proportion of hospital costs are for road crash victims.
2. **The ‘good practice’ examples need to be considered carefully over time, since they often document historical systems and structures which may have worked well during earlier periods. Such systems do not change quickly and current road safety funding mechanisms may not always be the best fit to address present day conditions. The financial reality of Governments has evolved and existing funding systems and structures may not always reflect well such changes.**
 3. **The case studies only capture a few elements of international ‘good practice’. However, local culture and conditions are critical to define and develop systems that work best in the country. Not every element of international ‘good practice’ is needed to achieve good reductions in crashes.**

2.2. Summary of Road Safety Funding case studies

This Note summarizes country case studies that have achieved an improved road safety track record through the introduction of a variety of funding mechanisms and institutional set ups. These cases reflect different societal experiences with road safety and points in time when decisions to tackle road safety were introduced. The country cases offer a comparative point of view for Poland to contrast and learn from, and highlight similarities in successful approaches to suggest the essential elements of a financing system which would support the achievement of the road safety targets for Poland.

The table below presents the specific key characteristics of each road safety financing system in the seven case countries, with full details presented in the annexes. The commonalities suggest the following conclusions:

- a) Good practice countries manage to ensure a **sustainable financing** of road safety measures, which is a core element of their national road strategy and involves a multi-year financing plan. Most often, the core part of this financing is secured from general budget revenues and supplemented through a list of additional revenues.
- b) The management of road financing is entrusted to a **lead agency** which decides on road safety fund distribution to all relevant entities (including decentralized governments and sometimes civil society and professional associations) based on cost-benefit analysis. The lead agencies establish a detailed mechanism to determine the **socio-economic cost of crashes** which are then regularly updated so as to be considered in the cost-benefit analysis.
- c) Road safety expenditure allocations are linked to specific **targets on road safety** and monitoring is regularly maintained so as to ensure the introduction of cost effective measures in road safety. The **monitoring** is most often done by the lead agency.
- d) Good practice countries continuously examine possibilities for additional source generation for road safety through a variety of sources, such as: speed cameras, third party insurance, personalized license plates, etc.

Table 1. Key characteristics of road safety funding practices in case countries

	SWE	NSW	UK	NZ	SLO	FIN	ESP
Availability of sustainable road safety funding	YES. 10 year plan	Three year plan.	yes	yes	Partially, two year plan.	No, planning is annual.	YES.
Active role of Lead Agency in funding management	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.
Funding distributed in view of Strategy for road safety	Yes.	Yes.		Yes.	Yes.		Yes.
Expenditure allocation considerate of cost-benefit analysis	Yes.	Yes.	Yes.	Yes.			
General government revenues as source of funding	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	
Funding from speed cameras	Yes.	Yes.	Yes.	Yes.		Yes.	Yes.
Funding from third party insurance		Yes.		Yes.		Yes.	
Funding from personalized license plates	Yes.	Yes.					
Close cooperation with civil society	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	

2.3. Case Study 1: Sweden [Annex 1]

Sweden has been chosen as an excellent international case study in road safety funding and management because of the outstanding record of the country in delivering road safety. These impressive records have been achieved in significant part by the commitment of extensive funding to road safety infrastructure.

Road safety has a high priority in Sweden. There is a strong vision (vision zero) and a safety strategy with objectives and targets. They take a data-led approach and the crash data are analysed, regularly reported to guide the investment and used for monitoring measures. Sweden's long-term road safety goal is that there should be no fatalities or serious injuries in road traffic. This goal was ratified by the Swedish Parliament in 1997 and is based on the "Vision Zero" programme which is ongoing today. Funding supports this high profile strategy and objective and the safe systems approach to delivering it.

The following Agencies are identified as core areas of road safety funding - the Swedish Transport Administration (STA) and the Swedish Police.

The **Swedish Transport Administration** is responsible for infrastructure planning and the operation and maintenance of state-owned roads, railways and ferries. The total annual budget is 29B SEK (approximately EUR 3 billion). STA funding comes from tax revenues and there is a 10 year budget plan, which enables sustainable funding. Some estimates have suggested that approximately SEK 75 million (approximately EUR 7.8 million) per year are spent on road safety projects. This is, however, a gross under-estimation, which appears to leave out the large infrastructure spending Sweden has undertaken for road safety.

The STA provides funding to the police for road safety including the speed camera program operation. The **Swedish Police** have an extensive road safety policy covering speed, drivers under the influence of either alcohol or drugs, seatbelt use and aggressive driving. Their Annual Budget is over 20 billion SEK (about EUR 2.1 billion).

Funding is mainly provided by government and through general revenue to the Police and the STA. The STA obtains sustainable annual funding for road safety from general tax revenues, which it allocates to its Agencies through annual agreements and transport plans in support of Vision Zero intervention. Sustainable governmental funding is supported by 10 year budget planning as well as strong community support. In 2013, most road safety funding came from Government consolidated revenue. The STA uses benefit cost ratio (BCR) analysis to decide allocations of expenditure. Socio-economic costs of crashes are regularly estimated.

In the absence of current details being available for road safety expenditure, earlier figures suggest approximately the following distribution: 30% on safe infrastructure, 13% on speed cameras, 24% on research and development, and 33% other.

Additionally, fees from the personalised number plate scheme are dedicated largely to road safety. In 2013, SEK6.85m (approximately EUR 730,000) for road safety was secured from the personalised number plate fund.

Better practices emerging from road safety funding in Sweden include:

- sustained high level funding (though in large majority from Government rather than many sources),
- linkage to a strong high profile strategy and action plans,
- multiple government and non-government agencies involved,
- strong government lead agency with control of road safety funding,
- performance and contract linked funding distributed by the lead agency,
- Benefit Cost Ratio (BCR) based assignment of funding to road safety activities,
- road safety has a clear focus for police allocation of their resources.

2.4 Case Study 2: New South Wales (NSW) [Annex 2]

New South Wales (NSW) has the largest population of any State of Australia, and has quite independent road safety management. It sets its own legislation and penalties, has its own road agency, tax base, licensing system, vehicle registration, and Police. NSW has an excellent road safety record, especially considering the low population density. NSW has made strong road safety gains and is now around 4.7 deaths/100,000 population.

In NSW there is relatively stable funding for road safety for the delivery of two long term strategies: The National Road Safety Strategy 2011-2020 and the NSW Road Safety Strategy. The National Strategy is explicitly based on the safe system principles and sets a long term vision of eliminating deaths.

The following agencies are identified as core areas for road safety funding: NSW Centre for Road Safety (CfRS), Roads & Maritime Services (RMS), Police, Motor Accident Authority and local municipalities.

The **CfRS** is the lead agency for road safety in the State. It is accountable for road safety and manages and/or funds the road safety work of a number of other agencies. The CfRS sits as part of Transport for NSW. The CfRS is responsible for road safety strategy, policy,

leadership, legislation, co-ordination, mass-media promotion, partnership management, research and development.

Funding is from annual budgets and comes from: consolidated state government revenue, speed camera revenue, funding from the Federal Government for road safety (blackspots program), and funds committed to road safety by the Motor Accidents Authority. The total budget was A\$273M (approximately EUR 161 million) in 2013/14, of which A\$35M (approximately EUR 24 million) was from the Federal government. Funding is mainly provided by government and through general revenue, to Police, RMS, and CfRS. The CfRS allocates funds to many government agencies and NGOs for road safety delivery. Additional sources for road safety include a small fee collected on compulsory insurance by the MAA, speed camera revenue, and proceeds of the personalised number plate program.

The CfRS uses benefit cost ratio (BCR) analysis to decide allocations of expenditure. Socio-economic costs of crashes are estimated nationally, but NSW has moved to its own process based on willingness-to-pay cost methodology, which produces substantially higher cost estimates for deaths and serious injuries. This estimate is updated each year by correcting for inflation.

Some funding is earmarked. For example A\$10m (approximately EUR 6 million) of the revenue from speed cameras goes to a Spinal Injury Unit; the federal funding is only for engineering treatments of black spots. Most of the funding, however, is not earmarked, but is still committed consistently over years by long term contractual arrangements and expectations. Money is transferred across organisations based on contract or Memorandum of Understanding (MOU) arrangements.

Roads & Maritime Services (RMS) is the roads agency responsible for development and maintenance of the state road network. It has a budget of A\$5.1 Billion (approximately EUR 3 billion), but only a small percentage of RMS funding is genuinely dedicated to road safety engineering works. RMS has a large sustained commitment to road safety at an operational level through the licensing and vehicle registrations programs and the operation of speed cameras. The Federal Government provides funds to each state for blackspot treatments, with these funds transferred to Roads & Maritime Services for management and delivery of projects, often by local councils.

The annual budget for NSW **Police** is A\$3.3billion (approximately EUR 2.2 billion). Around 7.6% of resources, A\$250M (approximately EUR 170 million), are used for Highway Patrol. Road safety rates second priority behind crime.

The **Motor Accidents Authority** regulates the NSW Compulsory Third Party Insurance (injury) Scheme. Its participants provide education and information to stakeholders and service providers, and it operates an independent assessment and resolution service.

Local Councils receive funds on a competitive bids process for road safety from the State Government (State blackspots program) and the Federal Government (Federal blackspots program). These programs total over A\$20million (approximately EUR 14 million) per year, but not all these fund go to municipalities.

Historically, in NSW there has been relatively stable and slightly increasing funding for road safety. However, the level of funding is not assured by any long term commitment but rather by political decision making at budget time each year within a broad three year budget plan. The Police have stable long term funding, and in the last few years have allocated specific number of officers to highway patrol, creating more sustainable commitment to road safety.

Better practices emerging from road safety funding in NSW include:

- sustained high level funding (though in large majority from Government rather than many sources),
- commitment of all speed camera revenue to road safety,
- linkage to a high profile national strategy as well as a state road safety strategy,
- multiple government and non-government agencies involved,
- a clear lead agency distributing funds to other agencies,
- performance and contract linked funding distributed by the lead agency,
- BCR based assignment of funding to road safety activities,
- Sustained and now more programmatically identifiable commitment to road safety enforcement by NSW Police.

2.5 Case Study 3: United Kingdom [Annex 3]

The UK is one of the best performing road safety countries in the world, with less than 3 deaths/100,000 annually. Historically the UK has had a strong commitment to road safety, with national road safety strategies containing objectives and targets. There has been a scientific data-led approach based on a strong research base and robust crash data collection and analysis. There is a valuation of road crash victims which is updated annually. More recently this has been replaced by a Road Safety Framework, which is far from a 'system-based' approach.

The following agencies are identified as core areas of road safety funding: Department for Transport (DfT), Police and Local Government (Shire and City Councils).

The **Department for Transport (DfT)** is the government department responsible for the English transport network. The Department determines strategy for transport services, which are delivered through many public and private sector bodies including its own executive agencies, which are: Driver and Vehicle Licensing Agency (DVLA); Driver and Vehicle Standards Agency (DVSA); Highways Agency (HA); Maritime and Coastguard Agency (MCA); and Vehicle Certification Agency (VCA). Money is transferred across a large number of organisations mainly from the DfT. This has included strong funding of NGOs and advocacy groups for road safety.

Total budget for 2012-13 for DfT was £13,722M (approximately EUR 18 billion). This is government funding from tax revenues. The extent of spending on road safety is not reported directly.

The UK has a strong tradition of assessing the costs and benefits of road projects and road safety interventions in the funding of national and local road safety. Great Britain annually updates its estimates of the value of preventing road traffic death and injury and property damage for national cost benefit analysis activity and publishes the results. This process allows a strong business case to be made to secure funding for road safety projects and programs and allows road safety to be weighed against other costly elements (e.g., reduction in travel time). Historically, the UK has been strong in producing reports on crash and injury statistics, and in undertaking road safety research. These continue and provide a sound base for road safety investments, including cost-benefit analysis.

In the **Police**, there were 134,101 full-time equivalent (FTE) police officers in the 43 police forces of England and Wales in 2012. Funding is government based, from the Home Office. However, highway patrol or traffic policing activity is a low priority and not separately reported.

Local government is an important player in the delivery of road safety for the UK as they run education programs, road work projects, and operate speed cameras. The extent of direct funding of road safety by local councils is not identified. The funding arrangements for speed cameras have proven to be vulnerable to vocal community views and political expediency. The political handling of speed cameras highlights the uncertainty of road safety funding arrangements which are almost entirely delivered by government.

Total Funding and Sustainability

In 2011, the DfT produced the Strategic Framework for Road Safety. It is noteworthy that this is far from a safe systems approach and in fact leaves out road and roadside infrastructure and regulating for safer vehicles entirely. This is an outdated victim blaming focus and a reduction of departmental responsibility for road safety on local roads.

Better practices emerging from road safety funding in UK include:

- sustained high level funding (though in large majority from Government),
- multiple government agencies involved,
- a clear lead agency distributing funds to other agencies,
- strong funding of NGOs and advocacy groups which assists in sustaining road safety funding in political processes (though the speed camera funding decisions suggest that this is not enough),
- BCR based assignment of funding to road safety activities with a strong tradition of research and evidence based decisions.

2.5 Case Study 4: New Zealand [Annex 4]

New Zealand is one of the best performing countries outside Europe, despite its challenges with lower population density than most EU countries. New Zealand has a distinctive funding model with a strong national government structure and no state/provincial governments.

The following agencies are identified as core areas of funds management for road safety: New Zealand Transport Agency (NZTA), Ministry of Transport, Accident Compensation Commission (ACC), Police and local councils.

New Zealand Transport Agency (NZTA) is the roads agency and lead agency for road safety, though the Ministry of Transport may be seen as the lead agency for road safety at a senior political level. NZTA distributes funding to the other agencies. NZTA also funds and undertakes education/mass media campaigns as well as road engineering actions, legislation, driver licensing, and vehicle inspections.

NZTA administers the New Zealand Transport Fund, which is the main source of funds for roads. The National Land Transport Fund (NLTF) is the government's contribution to funding the land transport activities approved in the National Land Transport Programme. The actual expenditure of the NZTA was NZ\$3,027M (approximately EUR 2 million) in 2010/11. According to the NZTA Annual Report for 2012, "\$868.5 million (approximately EUR 560 million) was invested in road user safety in 2011/12, covering policing, road safety

promotion and specific benefits from road, public transport, cycling and walking, infrastructure improvements, maintenance and operations.” However, this claimed amount should not be taken at face value. Maintenance is often not effective for road safety and is carried out for other purposes which may not benefit road safety.

The **Ministry of Transport** is a second government agency involved in road safety. The Ministry is less operational than the NZTA, and deals more directly with Government. Its total budget was NZ\$52,472M (approximately EUR 34 billion) in 2010/11. It is not possible to assign expenditures to road safety versus other elements of transport, but road safety is a significant point of focus of the Ministry.

ACC is a government owned organisation which manages the compulsory injury insurance scheme of New Zealand as well as other injury insurance areas. The ACC funds and is directly involved in road safety activities, often in partnership with the NZTA and Police. Road safety injury prevention activities involve a young driver program, education, research, and specific regional program undertaken in partnership with the NZTA.

NZ Police are strongly committed to road safety, and work with the NZTA and ACC on various road safety projects. Police operate the speed camera program (with funding from NZTA) as well as on road enforcement and promotional activities. The NZTA provides around NZ\$290 million (approximately EUR 190 million) for road safety police activities.

Local government is important in road safety in New Zealand because it is the second primary layer of government. Interactions with central government on road safety and land transport are a key.

Funding is linked to a long term strategy (New Zealand’s Safer Journeys Strategy) which is based on safe systems but falls short of specifying a zero deaths vision, with more cautious wording around having roads increasingly free of deaths. It is mainly provided by government and through general revenue, to Police and NZTA, while ACC earns funds from insurance levies. Money is transferred extensively across organisations based on contract arrangements. The NZTA’s funding of Police is quite large, and the NZTA, ACC and Police work in more effective partnerships than exist in most countries and states.

Allocations are based on best evidence with BCR analysis common for road works. Historically, funding has been relatively stable but is not programmatically assured. Nonetheless, road safety is a strong political focus, and large cuts to road safety funding would seem unlikely.

Better practices emerging from road safety funding in NZ include:

- sustained high level funding (though in large majority from Government rather than many sources),
- strong funding and direct partnerships across government for the benefit of road safety,
- linkage of funding to a national strategy and well developed action planning,
- lead agency distributing funds to other agencies,
- BCR based assignment of funding to road safety activities.

The unusual step of having the road safety lead agency role somewhat ambiguously split between the operational and planning agency (NZTA) and the more political conduit agency

(Ministry of Transport) is not helpful for the effective flow of strategy, planning, and political support, and is not recommended.

2.6 Case Study 5: Slovenia [Annex 5]

Slovenia has many similarities to Poland, including road crash rates. They share similar historical backgrounds, which are reflected in the Government systems and structures. Road Safety, although growing in importance, has not been a high priority in the past and is yet to receive the highest significance. Economic development and mobility have been the driving forces.

The following agencies are identified as core areas of funds management for road safety: Agency for Traffic Safety, Interdepartmental Working Group on Monitoring and implementation of national program, and non-governmental organizations.

The country's strategy to tackle road safety is set out in a National Road Safety Program adopted for the period from 2013 to 2022. The Government allocates budgets on the basis of a two year implementation plan. In this plan, different Ministries are identified to lead and finance some of the preventive and other actions in the area of road safety. For example the Ministry of Health allocates budgets for alcohol related actions, Police – speed; the National Road Administration allocates budgets for road improvements, etc. All the Ministries make their own financial plans. The National Road Safety Plan has a section on financing road safety, but it is very general and there is no overall strategy or view.

The **Agency for Traffic Safety** is a relatively independent governmental organization. The Director is appointed by the Government, based on the recommendations of the Minister of Transport. The Director post has a significant political content, which is reflected in the appointment.

The Agency gets the money and other resources from the budget of the Ministry of Transport. The programme and financial plan follow the recommendations of the Agency's Council. The Agency is responsible for road, rail and maritime safety and the total budget was €4,155 million in 2012.

For technical implementation of the program of road safety, the Slovenian government set up an **Interdepartmental working group to monitor and implement the national program**. It is formed from a group of experts representing the relevant bodies and organizations. The members include representatives from road transport, professional organisations and individual experts, civil society organisations, businesses, Pan-Slovenian Insurance Association and local self-governing communities. The Interdepartmental Working Group on Monitoring and implementation of the program is led by Agency for Traffic Safety.

Road safety is supported by the action of the **NGOs and its volunteers**, who assure with their work a direct transfer of preventive measures to different groups and individuals. There are more than ten NGOs in the Slovenian Road Safety System. They have their own chapter in the National Road Safety Plan. Slovenian society recognises and trusts them with the role of operators on different preventive fields (drink drive, speed, pedestrians, victims, etc.) The largest one is the Association of drivers and auto mechanics, ZŠAM.

There is no sustainable budget for long term strategy. The ministry responsible for transport produces a two year financial plan where are funds allocated for the Agency for Traffic Safety (material costs, salaries, for some of the preventive actions, for some modernizations in the area of vehicles, driver licenses, etc.). Since 2011 consecutive budget restrictions have

resulted in a 50 percent decrease of funds for state roads available to the National Road Administration in 2014 compared to the previous year. The Agency for Traffic Safety has been affected in the same way, with a decrease of more than 70 percent of funding for preventive actions.

Better practices emerging from road safety funding in Slovenia include:

- A Lead Agency for road safety.
- Close cooperation with civil society.

2.7 Case Study 6: Finland [Annex 6]

Finland has a good road safety record and since 1990 the death rate per 100 000 population has decreased by 63.8%, while the number of vehicles per 1 000 population has increased by 48%. In 2012, the death rate per 100 000 population was 4.7.

The vision for road safety is that no one is killed or seriously injured in traffic. The aim is to improve traffic safety continuously, so that by 2020 the number of road fatalities has been halved and the number of serious injuries has been cut by one fourth from the 2010 figures.

Finland has a national safety plan which contains targets and measures for better safety. The measures are funded from the organizations' own budgets; there is no separate road safety budget. Then the measures are cost shared with all partners.

Improvements to road safety are made in accordance with a Government resolution from 2012 and the Transport Policy Report (2012). The Parliament decides on the funding of the infrastructure management. The Ministry of Transport and Communications allocates the funds for roads, railways and waterways to the Finnish Transport Agency. All road safety funding comes from national budgets and there is no minimum level set. There are no other sources of funding and the amount of spend is related to achieving the targets set.

The key players in the field of road safety within the Ministry's branch of government are the Finnish Transport Agency (FTA), the Finnish Transport Safety Agency, and Liikenneturva - the central organisation for Finnish traffic safety work.

- The Transport Agency is responsible for road design, construction and management, and for road and traffic signs.
- The responsibilities of the **Finnish Transport Safety Agency, or Trafi**, include vehicle registration, supervision of driving schools and driving licence operations, and organisation of matters related to vehicle inspection. Road and traffic safety campaigning is also included in Trafi's responsibilities.
- Liikenneturva campaigns for road and traffic safety, disseminates information, contributes to road safety education for different age groups and provides further training for drivers.

Liikenneturva is the Central Organisation for Traffic Safety in Finland that operates under the supervision of the Finnish Ministry of Transport and Communications. The Finnish Government appoints the Chairperson and four members representing the Ministry of Transport and Communications, the Ministry of Education, the Ministry of the Interior, and the Ministry of Social Affairs and Health. Liikenneturva's operations are financed by funds

collected via the traffic safety component of motor insurance fees. The annual funding level is determined by the Ministry of Social Affairs and Health.

The Ministry of Transport and Communications cooperates with other ministries in combating drunken driving and in developing traffic control. The **Police** road safety activities are funded from their own budgets but the program is planned with the FTA. Speed cameras, implemented during the past decade, cover around 3 000 km of the main roads. The Ministry of Transport and Communications is involved in the *Eläköön* traffic safety campaign and in the *Liikennehaitti* campaign aimed at preventing drink-driving

Cities and municipal areas are responsible for their own projects (for example measures for pedestrian and cycling).

Better practices emerging from road safety funding in Finland include:

- Strong Lead Agency for road safety.
- History of crash data analysis and road safety management approach.
- Road safety has a high priority in Government.

2.8 Case Study 7: Spain [Annex 7]

Spain is the fifth country in the European Union with the lowest number of fatalities per population. Spain also has also lower rates than other countries with significant levels of development such as the United States, Japan and Australia. The willingness to improve road safety in Spain has been articulated in the "Road Safety Strategy 2011-2020" approved by the Council of Ministers on 25 February 2011; the strategy includes the realization of 13 challenges.

The central entity responsible for road safety in Spain is the General Directorate of Traffic (*Dirección General de Tráfico*). In consideration of the country's territorial organization, responsibilities on road safety are also carried out by these levels and the High Council for Road Safety has a relevant coordinative role.

The **General Directorate of Traffic (DGT)** is an autonomous body which develops and manages actions aimed at improving the behaviour and training of road users, the safety and smooth flow of vehicles and the provision to citizens of all administrative services related to them. The DGT has a wide traffic management responsibility for the road network in the country outside the urban areas, with some exceptions, which arise from the territorial decentralisation, especially with regard to Catalonia and the Basque Country. This authority includes wider aspects of road safety including: traffic management and infrastructure, vehicle registration, driving licencing, speed control. The DGT develops and manages actions aimed at improving the behaviour and training of road users, the safety and smooth flow of vehicles and the provision to citizens of all administrative services related to them.

In accordance with Spain's territorial organization (including municipalities, provinces and self-governing communities) competences in road safety involve all levels of government. Municipalities enjoy full legal entity and exercise the resolution of traffic and road safety in urban areas.

The DGT and local governments meet regularly in the **Road Safety High Council** (*Consejo Superior de Seguridad Vial*) set up to promote and improve traffic and road safety in the urban and interurban area. It is chaired by DGT and composed of representatives of the

central, regional and local government, as well as professional, economic and social organizations and consumers and users linked to traffic safety.

Regarding the **police**, in 2013, the Traffic Division of the Civil Guard carried out speed controls to more than 34 million vehicles; 2,170,881 vehicles were reported for potential speeding violations detected by both fixed and mobile radars.

The DGT has an annual budget which is consisted of income generated through the various fees and taxes for services rendered by the DGT and also the fines from driving violations. In 2014 the overall budget was approximately EUR 847 million. About EUR 460 million of their income was generated from the service fees and about EUR 384 from fines. The services provided by DGT include: issuing registration certificates, obtaining driving licenses, authorisations and operation of private driving schools, centres recognition, certifications, extension of validity of permits etc. Road safety activities are funded from a separate budget expenditure line, named “132B program” and this comes on top of actions undertaken by other government agencies, such as through investments on public roads. In 2014, the road safety budget was about EUR 711 million.

Better practices emerging from road safety funding in Spain include:

- sustained high level funding (though own revenue collection)
- a clear lead agency developing road safety program activities
- economic evaluation of road safety measures
- strong coordination with decentralized levels of government and civil society.

3. Road Safety Funding Good Practices – Scientific and Management Literature Review

3.1 Good practice in Funding Sources for road safety

Aeron-Thomas et al.² provide a useful review of road safety funding as part of their broader review of road safety management and list road safety funding sources as:

- General government, and alternative revenue sources:
- Levy on insurance;
- Hypothecation/Administrative Costs;
- Road Funds; and
- Private sector (business) sponsorship.

In addition, they note the important contributions of the community via actions such as driver training, car maintenance, etc.

² Aeron-Thomas, A., Downing, AJ, Jacobs, GD., Fletcher, JP., Selby, T. and Silcock, DT. (2002). *Review of road safety management practice: Final report*. GRSP, TRL, Ross Silcock, Babbie Group Ltd. TRL Report INT/216/2002

However, the potential sources of road safety funding constitute a larger list than above. In broad terms, cases we have seen around the world reveal 15 identifiable sources of funding for road safety, as follows, with illustrative examples where necessary:

1. **Core government funding**, from consolidated/general revenue as exists for road safety in most countries and independent states.
2. **Levies on private sector operated insurance** (usually compulsory injury insurance) which are exclusively dedicated (hypothecated) to road safety funding (for example, Finland appears to have been the first country to use this with a 1% levy, and there is a 10% levy in Victoria, and a smaller levy in New South Wales. Some states of the USA and Canada also use this mechanism: Hawaii has a levy to fund road safety education programs, as does Quebec, Canada³).
3. **'Profit' from exclusively government operated compulsory injury insurance** may be exclusively or partially dedicated (hypothecated) to road safety funding. For example, the profit of the Motor Accidents Commission (MAC) in South Australia is partly dedicated to road safety, supporting advertising, education, and communications as well as making a contribution to road safety road infrastructure expenditure. These contributions come from profits made by MAC from the compulsory injury insurance scheme which MAC exclusively provides. There is no road safety levy, as such.
4. **Road user charges, such as fuel excise, truck weight taxes, distance based charges, or tolls** may be exclusively or partially dedicated (hypothecated) to road safety funding. For example, New Zealand's Roads Fund arises from fuel excise and road user charges dedicated to the fund. However, this funding mechanism is under-utilized. A recent review of road user charges in the EU, Canada, USA, and Australia reveals massive funds a collected by governments through these mechanisms⁴. For example, in 2008 the USA fuel taxes alone raised almost US\$ 28 billion (federal diesel tax raised approximately EUR 6.4 billion and the gasoline (petrol) tax EUR 15.7 billion⁵). In other countries, such as Australia, a disappointingly small proportion of the fuel excise collected goes back into roads and an even smaller amount of this is spent on road safety. In many developed countries road safety funding is much less than the amounts of tax collected by these means.
5. **Additional fees or levies for set road safety purposes** may be added to road user charges. For instance, Virginia collects an additional fee of a few dollars on all motor vehicles for a special fund for emergency medical services⁶. Several years ago the state of Victoria also added a levy on motorcycle registration with the funds dedicated to motorcycle safety projects.
6. An alternative method for, in effect, pushing road user charges into the funding of road safety exists **via management of privately operated toll roads**. Governments may require toll road operators, by contract and specific performance measures, to spend funds on road safety, through setting targets such as specifying the instillation of wire rope barriers or other safety features, or through setting casualty reduction targets for those roads to be met by the operating company. For example, some states in Brazil are

³ Aeron-Thomas, A., Downing, AJ, Jacobs, GD., Fletcher, JP., Selby, T. and Silcock, DT. (2002). Review of road safety management practice Final report. GRSP, TRL, Ross Silcock, Babbie Group Ltd. TRL Report INT/216/2002

⁴ Hysten, B. Kauppila, J. Chong, E. (2013). Road Haulage Charges and Taxes - Summary analysis and data tables 1998-2012. Discussion Paper No. 2013-8. April 2013. Paris: International Transport Forum at the OECD.

⁵ Hysten, B. Kauppila, J. Chong, E. (2013). Ibid.

⁶ Aeron-Thomas et al (2002) Op cit.

developing revised contracts with toll companies, which will require them or incentivise them to meet a certain safety performance level in terms of casualties or deaths. These toll road operators are already required to address road safety through provision of emergency medical response on their roads.

7. Funds from specific road safety related activities such as **finances from automated speed and/or red light camera program or other enforcement programs** may be exclusively or partially dedicated (hypothecated) to road safety funding. For example, this occurs in Vietnam for all traffic fines, and in Western Australia and New South Wales for all speed camera fines.
8. A **surcharge (an extra amount of fine) may be added to fines specifically for road safety**. For example, two states of the USA (Mississippi and New Mexico) have added a surcharge to penalties and use the funds raised by the surcharge for road safety activities⁷.
9. **Donor assistance** is another source of funds for road safety. Donations of funding, grants, low interest loans, or other support arises for road safety from various organisations, such as the Bloomberg Philanthropies, World Bank, International Red Cross, etc.
10. **Funding may be provided from higher levels of government** (such as EU funding to member countries, or Federal Government grants to the semi-independent states/regions/provinces which make up the federation). For example, states of Australia receive funding from the Federal Government for crash black spot treatments.
11. **Private sector (Company) sponsorship** and support may occur for government run road safety programs (e.g., child restraint manufacturers may support child restraint promotion; biscuit and coffee/tea makers support stop-revive-survive anti-fatigue programs in New South Wales which involve volunteers supplying free hot drinks and snacks to drivers who stop at many rest areas throughout the state during holiday periods; mining companies have voluntarily funded road safety infrastructure improvements for public roads to their mines in Western Australia).
12. Road safety programs run by private sector companies also assist road safety (such programs may be implemented for ISO39001 accreditation, or to save on crash costs, etc.).
13. **Volunteers and local community groups** may support road safety (for example, the community road safety councils in municipal government in Victoria are supported by local community groups, as well as State government funding).
14. and 15. Finally, although it is not often identified as road safety funding because the funds are not controlled directly by any road safety agency, there are two further sources of road safety funding. First, **road users pay fees and costs for various legislatively required activities for road safety** and may go beyond the required levels to improve their own safety. For example, although these vary from jurisdiction to jurisdiction, commonly road users are required to undergo driver training and testing, have their vehicles maintained, inspected and registered, purchase child restraints, or bicycle or motorcycle helmets. Companies may be required by workplace health and safety laws to improve road safety for their workers. This is a large proportion of the total road safety expenditure, and in many countries may be the majority of road safety expenditure.

⁷ Froning P (1992), *Potential Revenue Sources for Virginia's Transportation Safety Programs: Review of Virginia's Revenue Sources and a Survey of Other States* Final Report, Charlottesville, Va. (Cited by Aeron-Thomas et al. Op cit.)

Second, an extensive array of **government funded activity directly contributes to reducing road safety harm but is not typically identified as road safety funding** (though some of it is included in estimates of costs of road safety). These arenas of funding are those which serve a broader purpose including addressing road safety, where inefficiencies and system duplications would result from attempts to separate the road safety from the other elements of work, and thus the work is not (and should not be) under the control of road safety authorities. Examples vary from country to country but may include ambulance services, hospital emergency care, rehabilitation services, legal aid, lifetime care services for the permanently disabled, and a narrow range of road maintenance activities. A narrow range of maintenance is specified because while maintenance of line marking, most signage, traffic lights and roadside barriers contributes to road safety, the large majority of road maintenance funding goes to maintaining the driving surface and this generally does not improve road safety. Other areas of government activity, likewise, are aimed at improving road safety (through improving road user behaviour) but are often not under road safety budgets or management. For example, road safety may be taught in schools, including teaching children how to cross the road safely, or training bicycle safety (or in some road safety counterproductive instances, how to drive a car⁸). In some cases these activities are funded as road safety. For example police or fire brigades may undertake road safety school based education from road safety budgets (e.g., in South Australia, Poland, Brazil, and many other countries) or it may be undertaken by school teachers as part of the school program but with some funding support from road safety (e.g. New South Wales), or it may be largely funded by the education sector. Through regulation governments may increase these expenditures to the benefit of road safety.

3.2 Good practice in road safety funding: a practical perspective

The following features of road safety funding are identified from the case studies described, various references, and practical experience of experts involved in leading and managing large road safety budgets at the country, state, program and project levels, and close involvement in funding and program decisions in numerous countries and states.

Aeron-Thomas et al.⁹ reviewed road safety management and concluded with the following recommendations regarding funding of road safety:

- Funding merits the same consideration as other technical aspects, i.e. road safety engineering, traffic law enforcement.
- Governments should assume responsibility for road safety funding and ensure ministry and other governmental institutions budgets include road safety financing.
- Road maintenance budgets and Road Funds should include a hazardous location treatment programme budget.
- Road user charges should be used to provide a regular and dedicated funding source.
- A proportion of traffic fines should be allocated to traffic law enforcement for road casualty reduction activities only.

⁸ Such programs have been shown not to improve road safety: Roberts IG & Kwan I (2008). School-based driver education for the prevention of traffic crashes (Review). Cochrane Library (Wiley).

⁹ Aeron-Thomas, A., Downing, AJ, Jacobs, GD., Fletcher, JP., Selby, T. and Silcock, DT. (2002). Review of road safety management practice Final report. GRSP, TRL, Ross Silcock, Babbie Group Ltd. TRL Report INT/216/2002

- Road Safety Funds should be established for those activities not the direct responsibility of a ministry.”

The authors also hint at the importance of financial expertise in development of funding for road safety.

Wetteland and Lundbye¹⁰ suggest that infrastructure design and construction, education and law enforcement can be considered to be part of a basic government service and as such should be provided from the government budget. This potentially useful suggestion from Wetteland and Lundbye leaves more road safety funding available for other deliverables. However, its efficacy depends on the ownership of the programs of delivery by the relevant non-road safety agency, and this is sometimes identifiably lacking. For example, road safety is often not genuinely built into the road design standards and we have witnessed instances of core road safety features being left out of road designs and building so that road safety funds were forced to pay for retro-fitting of these features after deaths occurred. We have also seen a number of jurisdictions in which education departments took little responsibility for road safety education, and in some instances ignored national laws to include road safety materials on the basis that the curriculum is too full already.

Specific recommendations by Wetteland and Lundbye included:

- The public road sector agency should cover infrastructure costs and specific services;
- Road users should pay for costs associated with reducing crash risks (e.g. driver training/testing and publicity campaigns);
- Road users tariffs could be used to improve hazardous locations; and
- Levies on insurance premiums could be used to finance co-ordination, awareness campaigns, education, enforcement equipment and research.

The levy is a sound recommendation, however the suggestion that the levy be specifically for certain activities only limits flexibility of programming road safety activities (see further discussion on flexibility below).

Several core features of sound funds management are covered by Bliss and Breen¹¹, and these are incorporated in the presently developed list of recommended features below.

Conclusions

Based on the above analysis the key features suggested for sound road safety funding include the following:

Feature 1: Road Safety Funding must be sufficient for the program of works required. This is a commonly identified good practice feature. In practice this means funding should match deliverables required in the strategy and action planning including funding the lead agency to manage road safety delivery.

Feature 2: Road Safety Funding is sustainable. This is a commonly identified feature¹².

¹⁰ Wetteland T and Lundbye S. (1997). *Financing of Road Safety Actions*. 3rd African Road Safety Congress. Pretoria, April, 1997. Publisher: World Bank: Washington, DC.

¹¹ Bliss, A. & Breen, J (2009). *Country guidelines for the conduct of road safety capacity reviews and the specification of lead agency reforms, investment strategies and safe system projects*. World Bank Global Road Safety Facility, Washington, D.C.)

Feature 3: All sources of funding, as listed above, should be explored as options for supporting road safety in Poland.

Feature 4: Road Safety Funding is certain or at least reasonably predictable. Planning for road safety is often based on a strategy or program which covers a decade and action plans of 1 or 2 or 3 years. For such planning to be effective, predictable funding is required. Again this is an acknowledged requirement.

Practical mechanisms by which sufficient sustainable road safety funding may be achieved include strong political will, based on strong community demand, and specific funding mechanisms and legislation which governments may be reluctant to undo.

A Road Safety Fund or Road Accident Fund (a mechanism for setting aside funds for roads or road safety in particular, by determining that a certain proportion of funds from certain sources are assigned to the fund and limiting the uses of the fund) may help by providing a sustained source of funds. Many countries (including a number in Africa, where there is an aim to develop and sustain road safety in the absence of alternative sustained funding) have road safety or roads funds. Roads Funds which serve a broader purpose (maintenance and development of roads) may also provide a set percentage of funds for road safety. However, a pure road safety fund is likely to be superior to a broader road fund which may be swallowed up with road maintenance costs especially in a common context of victim blaming as a convenient political tool for avoiding government responsibility for road safety.

Aeron Thomas et al. note that Creightney (1993)¹³ identified the main benefit of hypothecation as increased certainty about the funding available for investment and maintenance. However, Creightney also noted that “there is no clear evidence that hypothecation actually leads to sustainable increases in funding”. In this respect hypothecation can be in name only with say PLN 80 million in funding hypothecated but a reduction of around PLN 80 million in core funding from general government revenue.

Feature 5: Thus, create a road safety fund in preference to a roads fund.

Feature 6: Thus, with hypothecation government should be required to commit not to reduce the existing level of core funding.

Feature 7: Road Safety Funding is supported by the community, the media, NGOs, and thus by the politicians. This assists with sustained sufficient funding as noted above.

Feature 8: The business case for road safety funding should be developed, based both on the suffering saved and the real economic saving to be achieved through reduced deaths, injuries, and crashes. The case should also identify the extent to which costs are being borne by Government.

Feature 9: Road Safety Funding mechanisms should alleviate accusations of revenue raising. For example, the hypothecation of funds for speed cameras to road safety has reduced the revenue raising perception in Western Australia and New South Wales.

Feature 10: Road Safety Funding may be improved by clear elements of social justice and selective adoption of the user pays principle. For example, the state of Victoria (Australia)

¹² Sustainable funding sources were identified as critical in a review of successful road safety management (Aeron-Thomas, A., Downing, AJ, Jacobs, GD., Fletcher, JP., Selby, T. and Silcock, DT. (2002). Review of road safety management practice Final report. GRSP, TRL, Ross Silcock, Babbie Group Ltd. TRL Report INT/216/2002) and in the World Bank Management guidelines (Bliss & Breen, 2009. Op cit.)

¹³ Creightney C. (1993). *Road User Taxation in Selected OECD Countries*. Sub-Saharan Africa Transport Policy Program Working Paper No. 3. The World Bank and Economic Commission for Africa.

has recently added a levy on motorcycle registration with the funds dedicated to motorcycle safety projects. Thus, motorcyclists (with much greater risk of death or serious injury at considerable cost to the overall community) are directly funding some of the costs of motorcycle safety improvements.

Feature 11: Road safety fund expenditure is fully controlled by those responsible for road safety. This can be most directly achieved through providing road safety funding to the lead agency for road safety, with that agency distributing funds to other agencies with contracts and performance agreements tied to them. This has worked well in the case studies above.

Control of funding is authority, which allows incentives and controls over partner agencies with real contingencies to increase the consistency and quality of road safety work. Examples include the “Enhanced Enforcement Program” in NSW in which the Centre for Road Safety (the Lead Agency) funds Police overtime for extra clearly prescribed dedicated and audited road safety enforcement. A similar program exists in South Australia.

Without such direct control of budgets by road safety (the Lead Agency), apparent road safety resources and funding may be expended on activities and works which are more aligned to the core (non-road safety) business of the delivery partner. For example, in a number of jurisdictions road safety funding for road engineering improvements controlled by the road agency has been spent on core road maintenance with no identifiable road safety benefits, while clear road safety works were left unfunded.

Some countries have moved to be less centralised on this management process, and this can work if the partners with their greater autonomy are genuinely motivated to deliver road safety. This is often not the case because partners do not share the pain of road safety, and they do not own the problem. The community does not blame many authorities if the toll goes up or attribute it to them if it goes down. So these authorities often do not own the road safety problem and will focus all available resources on the performance elements for which they will be held accountable. Thus, other countries such have moved in the direction of greater direct control from road safety lead agencies.

Feature 12: Multiple relevant agencies should be funded through the lead agency so that specialist skills and arrangements of the various agencies are harnessed for road safety.

Feature 13. Road maintenance should not be seen as road safety and funded from road safety resources. Most (but not all) road maintenance is to preserve the road asset against damage and allow mobility. While these are legitimate aims, they are not road safety aims. Furthermore, improved road surfaces often allow faster travel speeds and may harm road safety.

Feature 14. Road Safety actions and the funding required for them should be incorporated in the budgets and plans of delivery agencies each year.

Feature 15: Expenditure of road safety funding should be flexible from year to year. This allows for changes in action plans as the nature of the problem evolves and the effects of previous actions are seen (or not seen). Thus, it is preferable not to narrowly specify the uses of road safety funds from particular sources.

For example the limiting of hypothecated funds from speed cameras to education only may be unhelpful. The budget generated may for certain years (or always) generate more funding than is effectively usable for education. However, the specification of particular uses of the funds may be a required political concession to obtain the funds for road safety, and thus a balancing of factors may be required.

Feature 16: Road safety expenditure by each agency should be separately and identifiably reported in Annual Reports to allow tracking of funds and assessment of BCRs. This reporting should be directed by prescriptions on which activities really are road safety activities.

It is recommended that these Features be considered when developing a road safety funding model for Poland.

ANNEX 1. Sweden

Why Sweden?

Sweden has been chosen as an excellent international case study in road safety funding and management because of the outstanding record of the country in delivering road safety and because these impressive records have been achieved in significant part by the commitment of extensive funding to road safety infrastructure. Sweden is now one of the best performing road safety countries, along with The Netherlands, the UK, and a few other countries. It may reasonably be argued that for its size and relatively low population density it compares with other top road safety countries. As The Economist reported in February 2014¹⁴: “LAST year 264 people died in road crashes in Sweden, a record low. Although the number of cars in circulation and the number of miles driven have both doubled since 1970, the number of road deaths has fallen by four-fifths during the same period. With only three of every 100,000 Swedes dying on the roads each year, compared with 5.5 per 100,000 across the European Union, 11.4 in America and 40 in the Dominican Republic, which has the world's deadliest traffic, Sweden’s roads have become the world’s safest.”

Road Safety Funding

The following agencies are identified as core areas of funds management for road safety: Swedish Transport Administration (STA), Swedish Police (Polisen), and local government.

STA

The Swedish Transport Administration (*Trafikverket*) is a government agency established in 2010 which took over from the Swedish Roads Administration. It is responsible for long-term infrastructure planning for all transport types: road, rail, shipping and aviation. It owns, constructs, operates and maintains all state-owned roads and railways and operates ferry services. The total annual budget for the STA is described in Table 2.

Table 2: Income for the Swedish Transport Administration in 2013 (Source: Swedish Transport Administration Annual Report for 2013, dated 2014)

Source	Income for 2013 (in SEK ‘000)	Income for 2013 (in EUR ‘000)
Income from appropriations (Government)	20,576,270	2,175,895
Income from fees and other compensation	6,885,324	728,108
Income from grants	2,302,613	243,496
Financial income	98,813	10,449
Total	29,863,020	3,157,949

Some estimates have suggested that approximately SEK 75 million (just above EUR 7.9

¹⁴ The Economist, February 2014. Why Sweden has so few road deaths
<http://www.economist.com/blogs/economist-explains/2014/02/economist-explains-16>

million) per year of the STA budget are spent on road safety projects. However, this is a gross under-estimation, which appears to leave out the huge infrastructure spend Sweden has undertaken for road safety, mainly in terms of the famously successful “2+1” roads which include a median wire rope barrier and two roadside wire rope barriers. Recent annual expenditures by STA on road safety include: approximately SEK 1.8 billion (EUR 190 million) spent on infrastructure safety projects (2+1 treatments), with approximately SEK 80 million (EUR 8.5 million) provided to police for operation of the speed camera program, approximately SEK 200 million (EUR 21 million) spent on other road safety programs and some SEK 150 million (EUR 15.8 million) spent on road safety research.

Swedish Police

In Sweden, the lead agency, STA, provides special allocations to the police for various road safety outputs including the speed camera program operation.

Swedish Police have an extensive road safety policy.¹⁵ The areas the police are focussing on in particular are:

- speed;
- drunken driving, drivers under the influence of either alcohol or drugs;
- seatbelt use; and
- traffic offences which can affect other road users and aggressive driving.

The police perform 2.5 million breathalyser tests annually.

The *Swedish Police – an introduction*¹⁶ identifies that police have a total complement of 28000 employees with 20,000 officers. Their Annual Budget is over 20billion SEK (about EUR 2.1 billion).¹⁷ Because road safety is seen as the responsibility of all officers it is not possible to clearly identify the proportion of the budget which is focused on road safety.

Local government

The exact expenditure contributed by local governments to road safety is distributed over many councils and not known. The STA has used ring-fenced funding on a regional basis to encourage local road safety engineering activity and Vision Zero demonstration projects.

Funding Sources

Funding is mainly provided by government and through general revenue, to Police and STA. Fees from the Personalised number plate scheme are dedicated largely to road safety.

Total Funding and Sustainability

- The STA obtains sustainable annual funding for road safety from general tax

¹⁵ see: The Swedish Police Road Safety Policy.

http://www.polisen.se/Global/www%20och%20Intrapolis/Informationsmaterial/01%20Polisen%20nationellt/Engelskt%20informationsmaterial/Road_Safety_Policy_eng070831_webb.pdf

¹⁶ See: http://www.polisen.se/Global/www%20och%20Intrapolis/Informationsmaterial/01%20Polisen%20nationellt/Engelskt%20informationsmaterial/Polisen_en_presentation_110506.pdf

2011

¹⁷ source: http://en.wikipedia.org/wiki/Swedish_Police_Service

revenues, which it allocates to its agencies through annual agreements and transport plans in support of Vision Zero intervention.

- Sustainable governmental funding is supported by 10 year budget planning as well as strong community support.
- Police have stable funding.

Linkage to Long Term Strategy

Sweden's long-term road safety goal is that there should be no fatalities or serious injuries in road traffic. This goal was ratified by the Swedish Parliament in 1997 and is based on the "Vision Zero" programme which is ongoing today. Funding supports this high profile strategy and objective and the safe systems approach to delivering it.

Specific Activities and Allocation Processes for Expenditure

In 2013, most road safety funding came from Government consolidated revenue, with SEK6.85m (EUR 725,000) for road safety from the personalised number plate fund.

The Swedish Transport Administration Preliminary Action Plan for road building and improvement projects only has one project which identifies road safety as central (with a budget to 20m SEK, approximately EUR 2.1 million). 22.5m SEK (about EUR 2.4 million) was donated to non-profit organisations in 2013 for road safety, mainly to the National Society for Road Safety. Nonetheless, much more than this is spend on road safety. However, annual reports and other documents do not separate expenditure for road safety. The STA Annual Report shows that 9.028b SEK (about EUR 954 million) was spent on road maintenance in 2013. Most road maintenance does not improve road safety unless it is deliberately designed to do so (e.g., by including widened shoulders or special non-skid pavement at relevant blackspots).

STA uses benefit cost ratio (BCR) analysis to decide allocations of expenditure.¹⁸ Socio-economic costs of crashes are regularly estimated.¹⁹ In the absence of current details being available for road safety expenditure, earlier figure suggest approximately: 30% on safe infrastructure, 13% on speed cameras, 24% on research and development, and 33% other.²⁰

Better practices emerging from road safety funding in Sweden include:

- sustained high level funding (though in large majority from Government rather than many sources).
- linkage to a strong high profile strategy and action plans.
- multiple government and non-government agencies involved.
- strong government lead agency with control of road safety funding.

¹⁸ For details see:

http://www.trafikverket.se/PageFiles/155458/22_english_summary_a51.pdf

¹⁹ For example, the socio-economic valuation based on the number of deaths and injuries in 2010 amounts to approximately SEK 55 billion.

http://publikationswebbutik.vv.se/upload/6816/2012_162_review_of_interim_targets_and_indicators_for_road_safety_in_2010_2020.pdf

²⁰ Bliss & Breen (2009)

- performance and contract linked funding distributed by the lead agency.
- BCR based assignment of funding to road safety activities.
- Road safety is a clear focus for police allocation of their resources.

ANNEX 2. Australia, New South Wales

Why New South Wales?

As background, the states of Australia, including NSW, are strongly independent in road safety funding, legislation, policy and implementation. The states do receive some funding for roads from the Federal Government. Thus, the states can be viewed as analogous to countries of Europe with Federal funding being analogous to funding from the EU.

New South Wales (NSW) is the largest population state of Australia, and has quite independent road safety management: it sets its own legislation and penalties, has its own road agency, tax base, licensing system, vehicle registration, and Police. NSW has excellent road safety record, especially for the low population density of the state compared with European countries (Population densities in people per sq.km: NSW 9; New Zealand 17; Sweden 21; UK 255; Netherlands 406²¹). Low population density makes road safety more challenging with more remote roads, less population tax base to the road network coverage, and remote areas with less enforcement and less effective emergency response. Despite this, NSW has made strong road safety gains (stronger than the rest of Australia in the last decade or more) and is now around 4.7 deaths/100,000 population.

Road Safety Funding

The following agencies are identified as core areas of funds management for road safety: The Centre for Road Safety, Roads & Maritime Services, Police, Motor Accident Authority, and local municipalities, with the State and Federal Governments as key sources of funds.

The NSW Centre for Road Safety (CfRS)

The CfRS is the lead agency for road safety of the state. It is accountable for road safety and manages and/or funds the road safety work of a number of other agencies. Under a government restructure in 2011 to create a smaller number of super-agencies, the CfRS sits as part of Transport for NSW. The CfRS is responsible for road safety strategy, policy, leadership, legislations, co-ordination, mass-media promotion, partnership management, research and development.

Funding is from annual budgets, as follows:

1. Consolidated state government revenue
2. Speed camera revenue
3. Smaller amounts of funding from the Federal Government for road safety (blackspots program)
4. Most funds committed to road safety by the Motor Accidents Authority are transferred to the CfRS for expenditure.

Details for the last several years are provided in Table 3.

²¹ Source: http://simple.wikipedia.org/wiki/List_of_countries_by_population_density Accessed June 2013.

Table 3: CfRS Five year road safety funding table²²

Year	State Government contribution	Federal Government contribution	TOTAL (A\$million)	TOTAL (million euro)
	(total, A\$million)	(total, A\$million)		
2013/14	\$238	\$35	\$273	190
2012/13	\$231	\$39.60	\$270	188
2011/12	\$214	\$21	\$235	164
2010/11	\$214	\$31	\$245	170

The CfRS allocates funds to many government agencies and NGOs for road safety delivery: RMS, Police, Department of Education, Kidsafe, the Association of Independent Schools, Catholic Schools Commission, the Australian New Car Assessment Program, and AUSTRROADS (a national body funded by all states for road safety research and development).

Roads & Maritime Services (RMS)²³

RMS is the roads agency responsible for development and maintenance of the state road network (but not municipal roads). Table 4 identifies funding and sources. Only a small percentage of RMS funding is genuinely dedicated to road safety engineering works. However, other significant activities of RMS are for road safety. Key Road Safety activities of RMS:

- Driver and rider licence testing and administration including the administration of demerit points
- Vehicle inspections and registration
- Management of the speed camera program
- Delivery of the Federal Blackspots program and
- Delivery of the State Blackspots program
- Regional offices assist Councils with road safety
- Safety around schools program including school crossing supervisors
- Operates Crashlab (vehicle testing, helmet testing)

Finally, the CfRS has significant influence on safety features for new road construction.

²² Source: <http://www.transport.nsw.gov.au/media-releases/road-safety-funding-increases-201314>

²³ Sources: Information know to the first author who was head of the NSW CfRS and for recent budgets and arrangements annual, reports and papers from <http://www.rms.nsw.gov.au/>

Table 4. RMS Funding Sources (Source: RMS Annual Report)

Source	Amount (A\$) and approximate percentages from each source
Motor vehicle taxes (State)	29%
State consolidated fund allocation	26%
State Government Subtotal	55%
Australian Government (Federal)	31%
RMS revenue (vehicle registration fees, driver licence fees, etc.)	14%
Grand Total	A\$5.1 Billion (3.5 billion Eur)

NSW Police

As described by the Police on their website, services provided by the New South Wales Police Force include:

- Preventing, detecting and investigating crime;
- Monitoring and promoting road safety;
- Maintaining social order;
- Performing and coordinating search and rescue operations; and
- Emergency management

It is noteworthy that road safety rates second behind crime.

Annual Budget for NSW Police is A\$3.3billion (Eur 2.3 billion) (with most of this coming from NSW Government, with small amounts for road safety from the CfRS and the MAA). While there is no breakdown of the budget to road safety, it is possible to reasonably estimate this from operational numbers. Operational strength at August 2014: 15,380.5 officers, with 1,166.8 being Highway Patrol (i.e., 7.6%). 7.6% of the budget equals A\$250million (approximately Eur 174 million) for highway patrol.

Motor Accident Authority

The Motor Accidents Authority regulates the NSW Compulsory Third Party Insurance (injury) Scheme and its participants, provides education and information to stakeholders and service providers, and operates an independent assessment and resolution service.

The MAA's vision and role is to lead and support a Compulsory Third Party scheme that minimises the social cost of motor vehicle crashes by:

- Delivering and supporting injury prevention initiatives
- Regulation, governance and planning for a competitive Compulsory Third Party scheme
- Provision of information on the scheme to stakeholders and general public
- Providing an effective and efficient medical and claims assessment service
- Providing services as the Nominal Defendant

- Promoting positive health and social outcomes through injury management and rehabilitation initiatives.

The MAA operates a small grants program for road safety, and assists with funding of education programs with RMS, Police, and others. Total road safety budget estimated at A\$4 to A\$5 million (Eur 2.8 to 3.5 million) annually.

Local municipalities

Local Councils (municipalities) receive funds on a competitive bids process for road safety from the State Government (State blackspots program) and Federal Government (Federal blackspots program). These programs total over A\$20million (approximately Eur 14 million) per year but not all these funds go to municipalities. The CfRS also funds road safety officers and projects (to around \$7m/Eur 4.9 million) jointly with many councils. Local Councils may also spend small amounts of their own funds (from rate collections on properties in their boundaries) on road safety projects, but the extent of this is unknowable, but anticipated to be small.

Funding Sources

Funding is mainly provided by government and through general revenue, to Police, RMS, and CfRS. Additional sources for road safety include a small fee collected on compulsory insurance by the MAA, speed camera revenue, and proceeds of the personalised number plate program.

Total Funding and Sustainability

Historically, in NSW there has been relatively stable and slightly increasing funding for road safety. However, the level of funding is not assured by any long term commitment but rather by political decision making at budget time each year within a broad three year budget plan. Nonetheless, there are many strong high profile advocates for road safety active in the state (research organisations such as at the University of NSW, The Australasian College of Road Safety, the Pedestrian Council, and the motoring club- NRMA) and thus it is not seen as politically viable to significantly cut road safety funding. Some sources of funding are strongly committed – in particular the commitment to spend all revenue from speed cameras on road safety.

The Police have stable long term funding, and in the last few years have allocated specific number of officers to highway patrol, creating more sustainable commitment to road safety.

Linkage to Long Term Strategy

In NSW there is relatively stable funding for road safety for delivery of two long term strategies: The National Road Safety Strategy 2011-2020 to which NSW is a signatory, and the NSW road safety strategy. The National strategy is explicitly based on safe system principles and sets a long term vision of eliminating deaths.

Specific Activities and Allocation Processes for Expenditure

The NSW CfRS uses benefit cost ratio (BCR) analysis to decide allocations of expenditure. Socio-economic costs of crashes are estimated nationally, but NSW has moved to its own process based on willingness-to-pay cost methodology, which produces substantially higher cost estimates for deaths and serious injuries. This estimate is updated each year by correcting for inflation.

Some funding is earmarked. For example \$10m (about Euro 7 million) of the revenue from speed cameras goes to a Spinal Injury Unit; the federal funding is only for engineering treatments of black spots. However, most of the funding is not earmarked, but is still committed consistently over years by long term contractual arrangements and expectations. For example, the NSW Centre for Road Safety has contract arrangements for road safety education with the Education sector (public and private). Other commitments include the maintenance of speed cameras and the wages of school crossing supervisors.

Within the Centre for Road Safety some allocations are set by contracts as above. Allocations are made to road safety pillars by the Director of the Centre in consultation with others. Money is divided broadly by pillars, and allocation to specific projects is determined on the basis of evidence, often working to the level of Benefit Cost Ratio (BCRs) calculations. For example, engineering treatments are selected based on BCRs, and mass media promotion campaigns are based on estimated BCRs.

Money is transferred across organisations based on contract or MOU arrangements. Examples include:

1. The Centre for Road Safety funds the NSW Police to undertake extra enforcement operations in overtime. Budget is typically \$10-12m (Euro 7-8.3 million) per year.
2. The Centre for Road Safety funds road safety programs by Local Councils (around A\$7m (Eur 4.8 million) per year).
3. The Centre for Road Safety funds the education sector for road safety education in schools, including production of materials and training of teachers (around 2m per year). Note: Road safety education is part of the compulsory curriculum.

The Federal Government provides funds to each state for blackspot treatments, with these funds transferred to Roads & Maritime Services for management and delivery of projects often by local councils.

RMS has a large sustained commitment to road safety at an operational level through the licensing and vehicle registrations programs and the operation of speed cameras.

Better practices emerging from road safety funding in NSW include:

- sustained high level funding (though in large majority from Government rather than many sources).
- commitment of all speed camera revenue to road safety.
- linkage to a high profile national strategy as well as a state road safety strategy.
- multiple government and non-government agencies involved.
- a clear lead agency distributing funds to other agencies.
- performance and contract linked funding distributed by the lead agency.
- BCR based assignment of funding to road safety activities.

- Sustained and now more programmatically identifiable commitment to road safety enforcement by NSW Police.

Annex 3. United Kingdom

Why the United Kingdom?

The UK is one of the best performing road safety countries in the world. Although it has some inherent advantages not directly related to its road safety management, such as being an island nation without the large problems of through traffic faced by other countries of Europe, high population density, and extensive and effect public transport, its road safety performance is undeniably impressive, with less than 3 deaths/100,000 annually.

Road Safety Funding

Road safety management, performance and funding is rendered extremely difficult to identify and assess for several reasons. First, while in some respects reporting is for the entire UK (England, Scotland, Wales and Northern Ireland) in other respects management reporting is not for the same coverage (e.g., reporting for England and Wales only). Second, many departments are involved. Third, road safety funding is typically not separately identified in reporting. Fourth, the scene is further complicated by the roles of organisations working at a local level, which have a large policy and programmatic role. For example, Transport for London's introduction of a congestion tax in London has improved road safety. Sixth, large organisations funding transport may fund and oversee many smaller organisations. For example, the Department for Transport funds five executive agencies and four non-departmental agencies, as well as many NGOs. There are 43 police forces in in England and Wales (note even this statistic from the UK Home Office does not cover the whole UK). Seventh, devolution for Transport management varies greatly, with Scotland having the most devolved control. Furthermore, increasingly devolved control around the UK is likely following the close result in the Scottish independence referendum in 2014. Finally, transport overall not just road transport is administered by various organisations with road transport not separated in many aspects of reporting. Thus, road safety funding in the UK is more complex to unravel than the other case studies.

Department for Transport

The Department for Transport (DfT) is the government department responsible for the transport network. However it only administers and funds the English transport network, and a limited number of transport matters in Scotland, Wales and Northern Ireland that have not been devolved. Thus the ongoing administration and safety works on the existing transport network in Scotland, Wales and Northern Ireland are not covered. It employs over 18,000 staff.

The DfT²⁴ reports having four strategic objectives:

- Sustain economic growth and improved productivity through reliable and efficient transport networks;
- Improve the environmental performance of transport;
- Strengthen the safety and security of transport; and
- Enhance access to jobs, services, and social networks, including for the most disadvantaged people.

²⁴ Source: http://en.wikipedia.org/wiki/Department_for_Transport

The Department determines strategy for transport services, which are delivered through many public and private sector bodies including its own executive agencies. Executive agencies are:

- Driver and Vehicle Licensing Agency (DVLA)
- Driver and Vehicle Standards Agency (DVSA)
- Highways Agency (HA)
- Maritime and Coastguard Agency (MCA)
- Vehicle Certification Agency (VCA)

Funded non-departmental public bodies are:

- British Transport Police Authority
- Northern Lighthouse Board
- Passenger Focus
- Trinity House Lighthouse Service

The DfT also funds a large number of advocacy and private road safety organisations, including the Royal Society for the Prevention of Accidents (ROSPA), RoadSafe, RAC Foundation, Parliamentary Advisory Council for Transport Safety (PACTS), and ADEPT²⁵.

Total budget for 2012-13 for DfT was 13,722,850,000 pounds²⁶ (approximately Euro 17.9 billion). Of this, the Highways Agency received 1,855,000,000 pounds (approximately Euro 2.4 billion). This is government funding. However, the extent of spend on road safety is not reported, and other agencies (such as local authorities) are funded by DfT to undertake road safety activities.

Police

There were 134,101 full-time equivalent (FTE) police officers in the 43 police forces of England and Wales in 2012²⁷. Funding is government based, from the Home Office. However, highway patrol or traffic policing activity is not separately reported.

Local Government (Shire and City Councils)

Local government is an important player in road safety for the UK, though some key decisions are made more centrally (e.g., by Transport for London). The extent of direct funding of road safety by local councils is not identified. However, they do run relevant education programs; road works projects, and operate speed cameras. The funding arrangements for speed cameras are complex and volatile (as described below under Funding Sources).

²⁵ Source; UK Government <https://www.gov.uk/government/policies/making-roads-safer>

²⁶Source- annual report.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/324031/dft-annual-report-2014-web.pdf

²⁷ Source: Home Office Statistical Bulletin. Police Service Strength- England and Wales, 31 March 2012
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/115783/hosb0912.pdf

Funding Sources

Funding for road safety is mainly provided by government. Local authorities can operate speed cameras. The funding arrangements for these have proven to be vulnerable to vocal community views and political expediency. In a political response to campaigns against speed cameras, in 2010, the new Coalition government said that the 'Labour's 13-year war on the motorist is over' and that the new government 'pledged to scrap public funding for speed cameras'. The Road Safety Minister reduced the Road Safety Grant for the year to Local Councils from £95 million to £57 million (approximately Euro 123 million to Euro 74 million), saying that local authorities had relied too heavily on safety cameras for far too long. It is estimated that as a result the Treasury is now distributing £40 million (Euro 52 million) less in Road Safety Grant than is raised from fines in the year.²⁸

Total Funding and Sustainability

Money is transferred across a large number of organisations mainly from the DfT. This has included strong funding of NGOs and advocacy groups for road safety. However, the political handling of speed cameras highlights the uncertainty of road safety funding arrangements which are almost entirely delivered by government.

Linkage to Long Term Strategy

In 2011, the DfT produced the Strategic Framework for Road Safety. The DfT reports that it was designed to focus on 3 main areas in increasing road safety:

- freeing local councils to make their own decisions on how best to make their roads safer
- improving public education and training
- penalising the minority of offenders who drive dangerously.

It is noteworthy that this is far from a safe systems approach and in fact leaves out road and roadside infrastructure and regulating for safer vehicles entirely. This is an outdated victim blaming focus and a reduction of departmental responsibility for road safety on local roads.

Specific Activities and Allocation Processes for Expenditure

The UK has a strong tradition of assessing the costs and benefits of road projects and road safety interventions in the funding of national and local road safety. Great Britain annually updates its estimates of the value of preventing road traffic death and injury and property damage for national cost benefit analysis activity and publishes the results. Good practice willingness to pay methods for the valuation of what is termed a statistical life are used. This process allows a strong business case to be made to secure funding for road safety projects and programs and allows road safety to be weighed against other costly elements (e.g., reduction in travel time).

Historically the UK has been strong in producing reports on crash and injury statistics, and in undertaking road safety research. These continue and provide a sound base for road safety investments, including cost-benefit analysis.

²⁸ Source: http://en.wikipedia.org/wiki/Traffic_enforcement_camera

Better practices emerging from road safety funding in UK include:

- sustained high level funding (though in large majority from Government)
- multiple government agencies involved
- a clear lead agency distributing funds to other agencies
- strong funding of NGOs and advocacy groups which assists in sustaining road safety funding in political processes (though the speed camera funding decisions suggest that this is not enough)
- BCR based assignment of funding to road safety activities with a strong tradition of research and evidence based decisions.

The UK's strong road safety position is largely the product of having it as a high priority in the past. A sound crash collection and analysis system, linked with research, a strong strategy and a commitment to reducing crashes has given several decades of good progress. Unfortunately this seems to be less the case currently and the downward crash trends in the UK are slowing down.

The complexity of arrangements, complexity of tracking funding and accountability, and the outdated behaviourally focussed strategy, which drives poor road safety funding decisions, are features to be avoided. To a significant extent, the UK's road safety performance arises despite, not because of, the strategy.

ANNEX 4. New Zealand

Why New Zealand?

New Zealand is one of the best performing countries outside Europe, despite its challenges with lower population density than most EU countries. New Zealand has improved its number of road deaths substantially from 2000 to 2012. New Zealand is a distinctive funding model to examine because it has a strong national government structure and no state/provincial governments.

Road Safety Funding²⁹

The following agencies are identified as core areas of funds management for road safety: New Zealand Transport Agency, Accident Compensation Commission, NZ Police, and Ministry of Transport.

New Zealand Transport Agency (NZTA)

NZTA is the roads agency and lead agency for road safety, though the Ministry of Transport may be seen as the lead agency for road safety at a senior political level. NZTA distributes funding to other agencies, including a large funding block to NZ Police for road policing. NZTA also funds and undertakes education/mass media campaigns as well as road engineering actions, legislation, driver licensing, and vehicle inspections.

NZTA administers the New Zealand Transport Fund, which is the main source of funds for roads. The National Land Transport Fund (NLTF) is the government's contribution to funding the land transport activities approved in the National Land Transport Programme. Table 5 shows the budget and actual expenditure of NZTA.

²⁹ Information on agencies and functions is based on the first author's experience working with the relevant agencies in New Zealand as well as reports from the relevant agencies.

Table 5: Budget and actual income and expenditure for NZTA, 2011 and 2012
(Source: Annual Report³⁰)

	Note	Actual 2011/12 \$m	Budget 2011/12 \$m	Actual 2010/11 \$m
INCOME INFLOWS³				
Land transport revenue	3	2,692	2,766	2,634
Government contribution to land transport revenue		1	0	44
Management of Crown land and interest		48	39	50
Total income flows		2,741	2,805	2,728
OUTFLOWS				
NZTA National Land Transport Programme		1,790	1,802	1,746
NZTA National Land Transport Programme – capital contribution	4	573	685	987
NZ Police		297	296	288
Search and rescue		6	6	6
Total outflows		2,666	2,789	3,027
NET SURPLUS/(DEFICIT)		75	16	(299)

A large component of revenue comes from licensing activities, motor vehicle registration and regulatory activities.

According to the NZTA Annual Report for 2012, “\$868.5 million [approximately Euro 564 million] was invested in road user safety in 2011/12, covering policing, road safety promotion and specific benefits from road, public transport, cycling and walking, infrastructure improvements, maintenance and operations.” However, this claimed amount should not be taken at face value. Maintenance is often not effective for road safety and is carried out for other purposes which may not benefit road safety.

Ministry of Transport

The Ministry of Transport is a second government agency involved in road safety. The Ministry is less operational than the NZTA, and deals more directly with Government. Its income sources are described in Table 6. It is not possible to assign expenditures to road safety versus other elements of transport, but road safety is a significant point of focus of the Ministry.

³⁰ <http://www.nzta.govt.nz/resources/annual-report-nzta/2011-12/docs-nltf/section-c-financial-performance.pdf>

Table 6: Income for the Ministry of Transport (in NZ\$)

2010/11 (\$ thousand)		Notes	Actual 2011/12 (\$ thousand)	Main estimates 2011/12 (\$ thousand)	Supplementary estimates 2011/12 (\$ thousand)
32,865	Revenue Crown	2	30,371	32,254	30,954
18,773	Revenue from fees	3	17,758	19,284	20,258
834	Other revenue	4	750	600	793
52,472	Total operating income		48,879	52,138	52,005

Accident Compensation Commission (ACC)

ACC is a government owned organisation which manages the compulsory injury insurance scheme of New Zealand as well as other injury insurance arenas. Table 7 and 8 show the income and expenditure of the organisation. The revenue table indicates that income is mainly from insurance levies paid by motorists and others. Only 21.7% of insurance levy income arises from motor vehicle insurance.

ACC funds and is directly involved in road safety activities, often in partnership with the NZTA and Police. Table 7 shows that only around 6.5% of expenditure is on injury prevention (and most of this is not related to road crashes), with most expenditure going on claims management. Road safety injury prevention activities involve a young driver program, education, research, and specific regional program undertaken in partnership with the NZTA.

Tables 7 and 8: Expenditure and Revenue for the ACC
(Source: Annual report 2012, in NZ\$)

Expenditure

Output class \$M	Administration		Claims Paid		Revenue	
	Actual	Budget	Actual	Budget	Actual	Budget
Output class 1 – Levy setting and collection	93	88	–	–	4,865	5,056
Output class 2 – investment management	54	47	–	–	1,711	1,082
Output class 3 – claims management	315	323	2,603	2,811	–	–
Output class 4 – injury prevention	32	37	–	–	–	–
Total ACC	494	495	2,603	2,811	6,576	6,138
Other activity e.g. subsidiaries	1	3	–	–	2	6
ACC group total	495	498	2,603	2,811	6,578	6,144

Revenue

Source \$M	2011–12 Actual	2011–12 Budget	2010–11 Actual
Net levy revenue			
– Work Account	1,034	1,190	1,034
– Motor Vehicle Account	1,054	1,047	985
– Earners' Account	1,523	1,604	1,529
– Non-Earners' Account	905	939	957
– Treatment Injury Account	349	276	325
Total net levy revenue*	4,865	5,056	4,830
Investment income	1,711	1,082	1,755
Total revenue	6,576	6,138	6,585

*Net levy revenue includes Government appropriations of \$1,096 million (2011–12) and \$1,188 million (2010–11).

NZ Police

NZ Police are strongly committed to road safety, and work with the NZTA and ACC on various road safety projects. Police operate the speed camera program (with funding from NZTA) as well as on road enforcement and promotional activities.

The NZ Police Annual Report 2014³¹ for previous year identifies the following revenue sources:

Crown	NZ\$1,488,182 (Eur 960,000)
Other	NZ\$18,533 (Eur 12,000)
Total Revenue	NZ\$1,506,715 (Eur 979,900)

NZTA provides around NZ\$290million (Eur 188 milion) for road safety police activities.

Local Councils

³¹ <http://www.police.govt.nz/sites/default/files/publications/annual-report-2014.pdf>

Local government is important in road safety in New Zealand because it is the second primary layer of government. Interactions with central government on road safety and land transport are a key issue (for example, see news coverage from Front Page, Nov 22, 2013, in the Box 1 below).

**Box 1: Local and central government on road safety
(Note: LGNZ is Local Government New Zealand)**

The Government Policy Statement on Land Transport (GPS) 2015 will set out the Government's priorities for expenditure from the National Land Transport Fund over the next 10 years.

LGNZ president, Lawrence Yule, said that the sector is already in discussions with the Ministry of Transport to ensure the views of local government are understood.

"The GPS 2015 is really important to local government. It will set out how funding is allocated between activities such as road safety policing, state highways, local roads and public transport," said Mr Yule.

"A GPS cannot determine which projects will be funded, or how much funding any particular project will receive. However, the government will confirm its plans to invest billions through the National Land Transport Fund over the next ten years, with a focus on projects supporting economic growth, value for money and road safety. Local government will need to guide this."

NZTA provides funds for road safety and other road expenditure to local councils.

Hamilton City Council

There is no central repository of road safety funding and activities undertaken by all the councils of New Zealand, from which total expenditure and projects can be described. However, in the first authors view, Hamilton City Council has shown significant commitment to road safety, and so it was selected as a good practice example.

The annual report provides the income sources for the Council which are presented in Table 9.

Table 9: Annual budget for the Hamilton City Council for 2014
(Source: Annual Report³²)

Revenue 2104	
Rates, excluding targeted water supply rates	126,473
Targeted rates for water supply	7,678
Revenue from activities	41,681
Subsidies and grants#	10,732
Development and financial contributions	16,103
Other revenue	37,998
Operating revenue (excluding gains)	240,665

#note: NZTA supplies \$9.9m (about Eur 6.4 million) of this

The road safety activities of the council and its expenditure on road safety are not explicitly described in annual report, but are to an extent identifiable from other sources. Hamilton City Council's Strategy and Policy Committee meetings noted activities in road safety, especially speed limit changes and education.³³ The Council also undertakes road works for road safety.

Road safety is also noted in the Annual Report: "We are committed to making our roads safer for all users. Council has introduced a range of measures to improve safety including footpath, pedestrian crossing and localised roading improvements, safer 40km/hr speed areas and ongoing education initiatives."

The Council spent NZ\$43.4million (Eur 28 million) on transport but road safety is not separated.

Funding Sources

Funding is mainly provided by government and through general revenue, to Police and NZTA, while ACC earns funds from insurance levies.

Total Funding and Sustainability

Historically, funding has been relatively stable but is not programmatically assured. Nonetheless, road safety is a strong political focus, and large cuts to road safety funding would seem unlikely.

³² Annual report 13/14

<http://www.hamilton.govt.nz/our-council/council-publications/annualreport/Documents/201314%20Annual%20Report%20-%20Document%20-%20Final%20Report.PDF>

³³

<http://www.hamilton.govt.nz/AgendasAndMinutes/Strategy%20and%20Policy%20Committee%20Agenda%20-%2028%20June%202012.pdf>

Linkage to Long Term Strategy

Funding is linked to a long term strategy (New Zealand's Safer Journeys Strategy) which is based on safe systems but falls short of specifying a zero deaths vision, with more cautious wording around having roads increasingly free of deaths.

Specific Activities and Allocation Processes for Expenditure

Money is transferred extensively across organisations based on contract arrangements. The NZTA's funding of Police is quite large, and the NZTA, ACC and Police work in more effective partnerships than exist in most countries and states.

Allocations are based on best evidence with BCR analysis common for road works.

Better practices emerging from road safety funding in NZ include:

- sustained high level funding (though in large majority from Government rather than many sources)
- strong funding and direct partnerships across government for the benefit of road safety
- linkage of funding to a national strategy and well developed action planning
- lead agency distributing funds to other agencies
- BCR based assignment of funding to road safety activities.

The unusual step of having the road safety lead agency role somewhat ambiguously split between the operational and planning agency (NZTA) and the more political conduit agency (Ministry of Transport) is not helpful for the effective flow of strategy, planning, and political support, and is not recommended.

ANNEX 5. Slovenia

Why Slovenia?

Slovenia has many similarities to Poland, including road crash rates. They share similar historical backgrounds, which are reflected in the Government systems and structures. Road Safety, although growing in importance, has not been a high priority in the past and is yet to receive the highest priority. Economic development and mobility have been the driving forces.

Road deaths in Slovenia have fallen from 294 in 2007 to 141 in 2011, but the past rapid rate of reductions appears to be slowing down. They have a target to reduce fatalities to 75 and seriously injured to fewer than 500 by 2021. There were 919 people seriously injured in 2012.

Road Safety Funding

There is no sustainable budget for long term strategy. The ministry responsible for transport produces a two year financial plan where are funds allocated for the Agency for Traffic Safety (material costs, salaries, for some of the preventive actions, for some modernizations in the area of vehicles, driver licenses, etc.)

The Agency for Traffic Safety is a relatively independent governmental organization. The Director is appointed by the Government, based on the recommendations of the Minister of Transport. The Director post has a significant political content, which is reflected in the appointment.

The Agency gets the money and other resources from the budget of the Ministry of Transport. The programme and financial plan follow the recommendations of the Agency's Council. There are eleven Council members - 4 of them are nominated by the Minister (political nominations) and 7 others are professionals and scientists.

The Agency is responsible for road, rail and maritime safety and the total budget was €4,155Million in 2012. There are around 116 employees, with a large number of these at driver test centres. Agency tasks begin with road safety and include:

- Organization and implementation of analytic research in the field of road safety
- Preventive and Education programmes (topics include mobile phones, pedestrians, motorcycles, alcohol, speed, cyclists, and children/schools)
- Task related to the National road safety programme
- Task related to drivers and vehicles
- Organization and implementation of independent investigation of the most serious traffic accidents
- Road safety audits relating to all phases of road planning, constructing and maintaining, in accordance with directive 2008/96/EC of the European Parliament and of the Council of 19 November 2008 on road infrastructure safety management
- Implementation of rehabilitation programmes for drivers convicted of speeding, driving under the influence of alcohol, drugs and medicines

Interdepartmental Working Group on Monitoring and implementation of national program

For technical implementation of the program of road safety, the Slovenian government set up an interdepartmental working group to monitor and implement the program. It is formed from a group of experts representing the relevant bodies and organizations. The members include representatives from safety road transport, professional organisations and individual experts, civil society organisations, businesses, Pan-Slovenian Insurance Association and local self-governing communities. The Interdepartmental Working Group on Monitoring and implementation of the program is led by Agency for traffic safety.

The tasks of the Interdepartmental Working Group for monitoring and implementation of the program include:

- Prepare and, if necessary, deal with intermediate problem reports, which require additional resources to implement planned actions;
- Monitor the implementation of the tasks of the national program;
- Produce reports on the performance of programs of action;
- Adopt an action plan for a two-year period within the strategy which extends to 2022;
- Be responsible for coordinating the implementation of programs that require the participation of government authorities, other organisations, civil society and Slovenian Insurance Association and experts
- Oversee the implementation of operational programs for certain periods,
- Assist in the work of local committees and participates in the coordination of programs for solving problems go beyond the local level,
- Be responsible for the presentation and implementation of the program.

In order to ensure coordination and monitoring the implementation of the objectives of the National Programme, the inter-ministerial Working Group prepares each year a report on the effectiveness of the implementation of the national program. The reports constitute the basis for planning future annual action plans. At the end of each calendar year, from the current year up to 2022, the interagency working group will prepare a report including the evaluation implementation of the National Programme. The Government will then discuss the findings of the report with the National Assembly and decide on any further action.

For the safety of road transport they are also actively participating with local authorities. These are in accordance with the program set up their programs, which are covered by the powers and duties of safety road transport in their area.

The Government establishes a Board of Directors to provide political coordination and strategic guidance for the implementation of the National Programme for monitoring, managing and overseeing of the national program (hereinafter: Committee).

The Board shall consist of: General Manager of Directorate for Infrastructure, General Manager of the Directorate of Transport in Ministry of Transport, Manager of the Public Agency of the Republic of Slovenia for traffic safety, Director Directorate of the Republic of Slovenia for Roads, President of Board of DARS, General Manager of the Directorate of elementary schools and kindergartens, General Manager of the Directorate for secondary schools in the Ministry of Education, Science, Culture and Sport; Director-General of Police, Director General of Directorate for Public Health and General Manager Directorate of Health Ministry of Health, General Director Directorate for Employment Relations, General Manager Directorate for Social Affairs Ministry of Labour, Family and Social Affairs, the Director-General Directorate of Justice and Director of the Office of the Republic of Slovenia for Civil Protection and Disaster Relief Ministry of Defence. The Board of Directors is headed by of the Ministry of Infrastructure and Spatial Planning. The Board of Directors shall perform the following tasks:

- Preparing strategic directions and baseline measures in the development of road safety;
- Discuss the annual and final report on the results and the implementation of the program;
- Gives concrete tasks for the effective implementation of measures in the field of road safety
- Provides financial and other resources necessary for the implementation of the national program
- monitors the implementation of the national program of road safety.

Box 2: Structure of Board of Directors of the provision of road safety

There is a National Road Safety Program that sets out a strategy and programme from 2013 to 2022. The contents are given below.

Box 3. Slovenia National Road Safety Programme 2013-2020

THE NEW NATIONAL ROAD SAFETY PROGRAMME (2013-2021)

1. Introduction
2. Vision zero
3. Road Safety Principles
4. Strategic Goals of the National Road Safety Programme
5. Organisational Aspects Regarding the Implementation of the National Road Safety Programme
 - 5.1. National Assembly
 - 5.2. Board of General Directors for Monitoring the National Programme
 - 5.3. Interdepartmental Working Group for Coordination and Monitoring the National Programme
6. Areas of Road Safety and Goals
 - 6.1 Road infrastructure
 - 6.2 Vehicles
 - 6.3 Road Safety Education and Lifelong Learning
 - 6.4 Surveillance
 - 6.5 Medical Assistance to the Injured
 - 6.6 Occupational and Road Safety
 - 6.7 Assistance to Victims and Relatives of Victims of Road Accidents
7. Partial Areas of Road Safety and Goals
 - 7.1 Speed
 - 7.2 Alcohol
 - 7.3 Powered Two-Wheelers
 - 7.4 Cyclists
 - 7.5. Tractor Drivers
 - 7.6 Pedestrians
 - 7.8 Seat Belt and Restraint Systems
 - 7.9 Young Drivers
 - 7.10 Elderly Drivers
 - 7.11 Road Railway Crossings
8. Civil Society
9. Socially Responsible Companies and Other Companies in the Road Safety Field
10. Implementation, Monitoring and Implementation Assessment of the National Road Safety Programme
11. Financing
12. Conclusions

The Government allocates budgets on the basis of a two years implementation plan. In this plan different Ministries are identified to lead and finance some of the preventive and other actions in the area of road safety. For example the Ministry of Health allocates budgets for alcohol related actions, Police – speed, etc. The National Road Administration allocates budgets for road improvements, etc. All the Ministries make their own financial plans. The National Road Safety Plan has a section on financing road safety, but it is very general and there is no overall strategy or view.

Information on the total amount of money spent on road safety is not available, as this information is not collected. Money is spent on topics including:

- local roads
- community preventive actions (the main finance source for road safety are national and local communities budgets)
- first aid
- modernisation of the theoretical driving test
- drink driving preventive actions (for 25 days per year)
- modernisation

These are not aggregated into a total. There are no central road safety funding mechanisms or specific road safety budgets. Since 2011 there have been finance cuts and the National Road Administration has got 50% less money for state roads in 2014 than in the previous year. The Agency for Traffic Safety has been affected in the same way, with cuts of more than 70% for preventive actions.

Road Safety Management in Slovenia

The following information has been taken from a Report by the UN Economic Commission for Europe, who in turn based it on the OECD Road Safety Annual Report 2014.

The Ministries for infrastructure, health, education, labour, justice and interior affairs have an important role in the Slovenian road traffic safety.

Local police and hospital reports are aggregated at the national level in the Police Traffic Accident Data Base.

i. Sub-National Level

Slovenia is divided into 212 municipalities. They are responsible for road safety at the sub-national level. Some of them have their own local road safety plans. Self-governing local authorities are responsible for local roads, traffic regulation, public transport and traffic management of the local traffic. Road Safety Councils assure preventive work in more than 100 municipalities.

ii. Non-Governmental Organizations

A successful realisation of the preventive activities is closely linked to the action of the NGOs and it's volunteers, who assure with their work a direct transfer of preventive contents to different groups and individuals. There are more than ten NGOs in the Slovenian Road Safety System. They have their own chapter in the National Road Safety Plan. Slovenian society recognises and trusts them with the role of operators on different preventive fields (drink drive, speed, pedestrians, victims, etc.) The largest one is the Association of drivers and auto mechanics, ZŠAM.

ROAD SAFETY PROGRAMS AND INITIATIVES

i. Transport Development Strategy

The parliament passed the Resolution on the Transport Policy of the Republic of Slovenia 'Intermodality - time for synergy (June 2006)'. This document specifies the baselines,

objectives and measures needed to realise the goals and the key operators and institutions bearing responsibility for transport policy. For the implementation of this document, the Government produced implementation documents, which determined the measurable and concrete goals and activities for their achievement, competencies and responsibilities, as well as performers of activities and the financial strategy. The priority list of the general objectives of transport policy at the national level is as follows:

- internalisation of external costs incurred by transport,
- reaching the social optimum in the part referring to the transport sector,
- increased transport safety and protection,
- efficient energy consumption and clean environment,
- increased volume and quality of public passenger road and rail transport,
- transfer of transit goods to railway,
- harmonised operation of the entire transport system,
- establishment of intelligent transportation systems architecture with the implementation of regional, national and European specificities, policies and interests,
- raising awareness and providing information to population on sustainable mobility,
- providing necessary transport infrastructure for land as well as maritime and air transport following the principles of sustainable and harmonised regional development,
- providing reliable, safe, price competitive and environment friendly transport in freight and passenger transport,
- optimum exploitation of available sources,
- established operation of market economy effects,
- deregulation of individual transport subsystems and sale of state ownership
- interest in accordance with the legislation in force where public interest is not at risk and private providers may, following the market economy principle, provide a more competitive and quality service whereas the safety level may not be lowered and precise targeting of fiscal measures to provide the services which may not be provided as such by principles of market economy.

The National Road Safety Plan 2013-2022 is one of the implementation documents which determined the measurable and concrete goals, activities for their achievement, competencies and responsibilities.

Better practices emerging from road safety funding in Slovenia include:

- A Lead Agency for road safety.
- Close cooperation with civil society.

ANNEX 6. Finland

Why Finland?

Finland has a good road safety record and since 1990, the death rate per 100 000 population has decreased by 63.8%, while the number of vehicles per 1 000 population has increased by 48%. In 2012, the death rate per 100 000 population was 4.7. As the 2014 IRTAD Report³⁴ informs in 2012, 255 persons were killed and 7 088 injured in road traffic crashes. This corresponds, respectively, to a 13% and 11% decrease in comparison with data for 2011.

The revisional data for 2013, according to IRTAD, show a 2% increase in the number of road deaths. Fatalities among young people (15–24 years) decreased by around 20% while for the elderly (65+ years) fatalities increased by 20%.

- Measures identified to have contributed to these achievements include: Lower speed limits in most urban areas;
- Construction of pedestrian and bicycle paths;
- Construction of 250 km of new motorways;
- Installation of automatic speed cameras on nearly 2 000 km of main roads;
- Reform of driver education;
- Renewal of the car fleet, with better safety performance and occupant protection than 15 years ago.

Road Safety Funding

Roles in road safety

The Ministry of Transport and Communications is responsible for drafting legislation on road safety. Improvements to road safety are made in accordance with a Government resolution from 2012 and the Transport Policy Report (2012).

The key players in the field of road safety within the Ministry's branch of government are the Finnish Transport Agency, Finnish Transport Safety Agency, and Liikenneturva - the central organisation for Finnish traffic safety work.

- The Transport Agency is responsible for road design, construction and management, and for road and traffic signs.
- The responsibilities of the Finnish Transport Safety Agency, or Trafi, include vehicle registration, supervision of driving schools and driving licence operations, and organisation of matters related to vehicle inspection. Road and traffic safety campaigning is also included in Trafi's responsibilities.
- Liikenneturva campaigns for road and traffic safety, disseminates information, contributes to road safety education for different age groups and provides further training for drivers.
- The Ministry of Transport and Communications is involved in the *Eläköön* traffic safety campaign and in the *Liikennettä* campaign aimed at preventing drink-driving.

³⁴ Summary of numbers on road safety (IRTAD) IRTAD Report 2014

Liikenneturva

Liikenneturva is an association governed by public law that operates under the supervision of the Finnish Ministry of Transport and Communications. It is the Central Organisation for Traffic Safety in Finland (Act on Liikenneturva, 278/2003).

Liikenneturva's administrative bodies are the General Assembly of the Central Organisation and the Board of Directors. The Management Group acts as an advisory body to the Managing Director. In addition, Liikenneturva has an Advisory Committee for Communication, an Advisory Committee for Pedestrians and Bicyclists and a Remuneration Committee, the members of which are appointed by the Board of Directors. The Finnish Government appoints the Chairperson and four members representing the Ministry of Transport and Communications, the Ministry of Education, the Ministry of the Interior, and the Ministry of Social Affairs and Health.

The General Assembly of the Central Organisation convenes twice per year, and the Board of Directors meets four times per year. The Finnish Government appoints the Chairperson and four members representing the Ministry of Transport and Communications, the Ministry of Education, the Ministry of the Interior, and the Ministry of Social Affairs and Health. The General Assembly of the Central Organisation elects seven members to the Board of Directors as well as a personal alternate member for each.

The Chairperson and other members of Liikenneturva's Board of Directors are appointed or elected for a term of two calendar years per time. The terms are staggered, with half of the members having their term of office conclude each year.

The Management Group meets approximately eleven times per year. In addition, there are meetings of the Remuneration Committee, the Advisory Committee for Communication, and the Advisory Committee for Pedestrians and Bicycling during the year.

Liikenneturva, Finnish Road Safety Council, influences the values, attitudes, and traffic behaviour of Finnish citizens as well as contributes to greater traffic safety awareness and respect for safety in society. Liikenneturva is a national central organisation for volunteer traffic safety work. It has 56 member communities. It cooperates with the Finnish Transport Agency with projects, particularly at the local level.

According to the Act on Liikenneturva (278/2003), the organisation's purpose is to promote road safety through communication, education, and training as well as by carrying out research activities that support its operations. In addition, the central organisation guides and coordinates the traffic safety work of its member organisations, develops initiatives, and works to promote traffic safety in other ways.

Financing - Liikenneturva's operations are financed by funds collected via the traffic safety component of motor insurance fees. The annual funding level is determined by the Ministry of Social Affairs and Health.

The Finnish Transport Agency (FTA) controls the development and use of the nationwide transport system. The regional development work is carried out in cooperation with the provinces and municipalities. The provinces are responsible for the planning of the transport system in their own regions.

The Centres for Economic Development, Transport and the Environment (ELY Centres) are in charge of the condition of the road network and the development in their own regions. The condition and development of railways and waterways on the other hand are the responsibility of the Finnish Transport Agency.

Planning, maintenance and building are procured from service providers.

Funding:

The Parliament decides on the funding of the infrastructure management. The Ministry of Transport and Communications allocates the funds for roads, railways and waterways to the Finnish Transport Agency. All road safety funding comes from national budgets and there is no minimum level set. There are no other sources of funding and the amount of spend is related to achieving the targets set.

Infrastructure management (maintenance, financing of public transport, traffic management and small-scale investments) are funded from the state budget.

The Parliament decides on large investments (new connections and extension of old ones) separately in connection with the budget process. Budgets are set annually and targets set to cover four years.

Finland has a national safety plan which contains targets and measures for better safety. The measures are funded from the organisations' own budgets; there is no separate road safety budget. Cities and municipal areas are responsible for their own projects (for example measures for pedestrian and cycling). Then the measures cost share with all partners.

Control:

The Finnish Transport Agency's operates under the jurisdiction of the Ministry of Transport and Communications.

The Finnish Transport Agency is responsible for the operations control in the traffic and infrastructure sector of the ELY Centres. One third of the transport funds are used by the ELY Centres (road management, public transport, subsidies for private roads, commuter ferry traffic). The Finnish Transport Agency monitors the use of the funding by means of operational performance agreements.

The Ministry of Employment and the Economy exercises the general administrative control over the ELY Centres.

Finish Police

The Ministry of Transport and Communications cooperates with other ministries in combating drunken driving and in developing traffic control. The Police road safety activities are funded from their own budgets but the programme is planned with the FTA.

Speed cameras, implemented during the past decade, cover around 3 000 km of the main roads.

Linkage to Long Term Strategy

The vision for road safety work is that no one is killed or seriously injured in traffic. The aim is to improve traffic safety continuously, so that by 2020 the number of road fatalities has been halved and the number of serious injuries has been cut by one fourth from the 2010 figures.

Organisation of road safety³⁵

The Ministry of Transport and Communications is responsible for drafting legislation concerning road safety. The national road safety programme is drafted and monitored by the

³⁵ <http://www.internationaltransportforum.org/pub/pdf/14IrtadReport.pdf>

Consultative Committee on Road Safety, with representatives from ministries and expert organisations.

The key players in the field of road safety within the Ministry's administrative branch are the Finnish Transport Agency, the Finnish Transport Safety Agency and Liikenneturva (the central organisation for Finnish traffic safety work).

The Finnish Transport Agency is responsible for road design, construction and maintenance, and for road and traffic signs. The FTA is also the regional centre for economic development, transport and the environment. Safety camera infrastructure is provided by the FTA. They also undertake collaborative projects, where the costs are shared. Many of the infrastructure projects are with municipalities.

The responsibilities of the Finnish Transport Safety Agency include vehicle registration, supervision of driving schools and driving licence operations, and organisation of matters related to vehicle inspection. The agency's responsibilities also include campaigning for road and traffic safety. The FTA reports the results of the road safety programme (crash and casualty data) every year to the Ministry.

Liikenneturva campaigns³⁶ for road and traffic safety, disseminates information, contributes to road safety education for various age groups and provides further training for drivers.

National Road Safety Strategy for 2011-2020

The National Road Safety Strategy³⁷ was published on 17 Feb 2012. The targets set in the strategy are guided by the EU road safety targets and include:

- Less than 219 fatalities (or 40 fatalities per million inhabitants) by 2014;
- Less than 137 fatalities (or 24 fatalities per million inhabitants) by 2020;
- Less than 5 750 injuries by 2020;
- Long-term target: less than 100 fatalities by 2025.

Monitoring

The development of safety performance indicators for the complete transport system was completed in 2012 by the Finnish Transport Safety Agency. For road traffic, there are about twenty core indicators. These indicators concern, among other things, the number of fatalities and injuries, driving speed on main roads, the proportion of drink-drivers in traffic, the median age of the vehicle fleet and the utilisation rate of different safety devices.

Specificities

Road safety work makes use of information and communications technology via in-vehicle applications, electronic traffic management, and road condition information, for example.

³⁶ One such campaign was to get people involved and interested in improving road safety (www.elakoon.fi).

³⁷ Available in Finnish at: http://www.lvm.fi/c/document_library/get_file?folderId=1986563&name=DLFE-14137.pdf&title=OS0112_Liikenneturvallisuussuunnitelma_moniste

Better practices emerging from road safety funding in Finland include:

- Strong Lead Agency for road safety.
- History of crash data analysis and road safety management approach.
- Road safety has a high priority in Government.

ANNEX 7. Spain

Why Spain?

In 2013 the number of fatalities has continued to drop and has placed Spain as the fifth country in the European Union with the lowest number of fatalities per population. Also, Spain has also lower rates than other countries with significant levels of development such as the United States, Japan and Australia. The finding of this advance in the numbers of road accidents is an incentive to continue implementing actions that reduce the number of victims has been done so far.

In 2013 the different law enforcement agencies reported 89,519 casualty accidents. According to police sources, these accidents resulted in 1,680 fatalities at the time of the accident or within 30 days of its occurrence; 10,086 casualties were admitted to hospital and 114,634 people were slightly injured. Although these figures are high, they show a reduction in the number of fatalities (-12 per cent) and seriously injured (-3 per cent) over the previous year. There has, however, been an increase in the number of casualty accidents (8 per cent) and slightly injured (9 per cent). These increases could be related to the improvement in accident reporting, especially in urban areas.

In 2013, the Traffic Division of the Guardia Civil carried out speed controls to more than 34 million vehicles; 2,170,881 vehicles were reported for potential speeding violations detected by both fixed and mobile radars.

In 2012, the last year for which hospital discharge data are available, the number of years of life lost due to road traffic accidents was 46,773 for males and 10,998 for females. These years are known as potential years of life lost (PYLL). If the average PYLL value is considered, road traffic accidents are the third cause of death for males with a value of 35 years and the fourth cause of death for females with an average of 30 PYLL.

Road Safety Funding

The central entity responsible for road safety in Spain is the General Directorate of Traffic (*Dirección General de Tráfico*). In consideration of the country's territorial organization, responsibilities on road safety are also carried out by these levels and the High Council for Road Safety has a relevant coordinative role.

General Directorate of Traffic (DGT)

The General Directorate of Traffic is an autonomous body (set up in accordance with the provisions of Article 43.1 paragraph a) of Law 6/1997 of 14 April, on the Organization and Functioning of the General State Administration). It is an autonomous entity, having public legal responsibility, property and treasury management autonomy and full legal and acting capacity³⁸. The Ministry of Interior can exercise law stipulated specific controls over its functioning.

³⁸ It is governed by the provisions of Royal Decree 339/1990 of 2 March, by which the text of the Law on Traffic, Motor Vehicle Traffic and Road Safety and all the rules that may be adopted apply, subject to the peculiarities contained in the published rules. It is under the Ministry of Interior, which can exercise effective control by the terms stipulated in Article 51 of Law 6/1997.

The DGT has a wide traffic management responsibility for the road network in the country outside the urban areas, with some exceptions, which arise from the territorial decentralisation, especially with regard to Catalonia and the Basque Country. This authority includes wider aspects of road safety including: traffic management and infrastructure, vehicle registration, driving licencing, speed control. The DGT develops and manages actions aimed at improving the behaviour and training of road users, the safety and smooth flow of vehicles and the provision to citizens of all administrative services related to them.

The DGT also manages the Traffic Civil Guard Division (in charge of traffic control and traffic law enforcement), which has around 10 000 officers.

Role of municipalities, provinces and self-governing communities

In accordance with Spain's territorial organization (including municipalities, provinces and self-governing communities) competences in road safety involve all levels of government. Concerning traffic and motor vehicle traffic, the State has exclusive legislative competences. Some self-governing communities (Autonomous Communities, "Comunidades Autónomas") such as Basque Country, Catalonia or Navarra have assumed executive competences concerning traffic. These powers are developed in conformity with the principles of coordination with the state. Other self-governing communities just exercise indirect competences connected to traffic and motor vehicles traffic like technical inspection of vehicles, usually more connected to industry. Municipalities enjoy full legal entity and exercise the resolution of traffic and road safety in urban areas. The relationship between the State and the local entities are regulated by the principles of self-government and cooperation.

Road Safety High Council

The Council is responsible for implementing and financing road safety activities and very often coordinate measures with DGT, particularly regarding public education program and media activates targeting issues such as drinking while driving. The DGT and local governments meet regularly in the Road Safety High Council (*Consejo Superior de Seguridad Vial*)³⁹ set up to promote and improve traffic and road safety in the urban and interurban area. It is chaired by DGT and composed of representatives of the central, regional and local government and professional, financial and social bodies and organisations related to road safety⁴⁰.

Financing of road safety

The DGT has an annual budget which is consisted of income generated through the various fees and taxes for services rendered by the DGT and also the fines from driving violations. In 2014 the overall budget was approximately EUR 847 million. About EUR 460 million of their income was generated from the service fees and about EUR 384 from fines. The services provided by DGT include: issuing registration certificates, obtaining driving licenses, authorisations and operation of private driving schools, centres recognition,

³⁹ <http://www.dgt.es/es/seguridad-vial/consejo-superior-de-seguridad-vial/>.

⁴⁰ The legislative act establishing the Council and presenting its full functions is accessible here: <http://www.dgt.es/Galerias/seguridad-vial/consejo-superior-de-seguridad-vial/Real-Decreto-317-2003-de-14-de-marzo.pdf>

certifications, extension of validity of permits etc. The rates for each of these services are set in specific legislation⁴¹ on fees. With regard to fines collected, legal provisions⁴² require that "the amount of economic sanctions obtained for violations of the Law on Traffic, Motor Vehicle Traffic and Road Safety, [...], will go entirely to the financing of activities and services in road safety, prevention of accidents and assistance to victims".

Road safety activities are funded from a separate budget expenditure line, named "132B program" and this comes on top of actions undertaken by other government agencies, such as through investments on public roads. The fundamental and permanent objectives of the program are to reduce the number of casualties and accidents, ensure mobility through proper traffic management and provide management of all procedures associated with traffic management. In 2014, the road safety budget was about EUR 711 million.

Interestingly, budget expenditure on road safety (132B Program) is approached from a global perspective, especially if we consider that monitoring road and traffic management and mobility, as well as monitoring network traffic management centres, requires a significant investment in staff and infrastructure. Also, the powers of the Traffic Department are exercised through several areas that integrate the administrative management of vehicles, drivers, transport and sanctions (with some exceptions arising from the territorial decentralisation, especially with regard to Catalonia and the Basque Country).

There is an expenditure budget of the Autonomous Central Headquarters Traffic corresponding to financial year 2014; this is part of the 132B, "Road Safety" program. This budget is structured according to an economic classification that groups expenditures by economic nature, according to criteria of National Accounts. (The levels of this classification are chapters that are broken down into articles and these concepts). The expenditure budget of the Agency focuses on Chapter I (Staff costs) Chapter II (current expenditure on goods and services) and Chapter VI (investments).

Chapter I, staff costs, make up more than 50% of the program. For this purpose it is necessary to consider that monitoring and traffic assistance is made by the Traffic Civil Guard whose functional guidelines and budgets are dependent on this Agency. The remuneration to such grouping is about 70% of total staff costs of the Agency.

Chapter II is based on current expenditure on goods and services, and as an example we can report that it includes expenses such as electricity, vehicle fuel and lease of buildings.

Chapter VI integrates investments of various kinds such as targeting the traffic signal management, speed controls, road investments in helicopters, purchase of vehicles, equipment purchase computers, speed detection systems, telecommunications systems, development of technological infrastructure, and education and information dissemination through media, among others.

Linkage to long term strategy

The willingness to improve road safety in Spain has been articulated in the "Road Safety Strategy 2011-2020" approved by the Council of Ministers on 25 February 2011; the strategy includes the realization of 11 areas of action presented in the table below.

⁴¹ The law is available here: <http://www.boe.es/buscar/act.php?id=BOE-A-1979-23768>.

⁴² Additional Provision Three of Law 18/2009, by amending the Text Articles of the Law on traffic, movement of motor vehicles and road safety, approved by Royal Decree 339/1990 of 2 March.

Box 4. Arias of action in the Road Safety Strategy 2011-2020 in Spain

Area of Action	Mission of the area of action
Education and training	“Promote civic, responsible and safe behaviour amongst road users”
Areas of intervention: <ul style="list-style-type: none"> • In the educational environment • In access to driving • In updating knowledge 	
Communication	“Inform and involve society in its responsibility to improve road safety”
Areas of intervention: <ul style="list-style-type: none"> • Information and awareness campaigns • Involvement of civil society 	
Regulations and enforcement	“Consolidate the change in road users’ behaviour by supervising observance of the regulations”
Areas of intervention: <ul style="list-style-type: none"> • Regulatory reform • Enforcement • Law enforcement tools 	
Health and road safety	“Ensure driving skills in order to prevent traffic accidents”
Areas of intervention: <ul style="list-style-type: none"> • Driver skills • Involvement of health professionals 	
Vehicle safety	“Vehicles equipped with more and improved safety elements”
Areas of intervention: <ul style="list-style-type: none"> • Vehicle technical information • Towards a more sustainable vehicle • Towards a safer vehicle 	
Infrastructure and ITS	“Safer roads that help drivers”
Areas of intervention: <ul style="list-style-type: none"> • Information concerning the safety of infrastructures • Exploitation and preservation of infrastructures • Safe infrastructure design • Intelligent Transport Systems (ITS) and traffic management 	
Urban area	“Ensure safe mobility of the most vulnerable users”
Areas of intervention: <ul style="list-style-type: none"> • Towards sustainable and safe urban mobility • Urban design based on road safety • Discipline in urban areas 	
Driving for work and professional transport	“Reduce risks in work-related journeys”
Areas of intervention: <ul style="list-style-type: none"> • Incorporate a road safety culture in companies • Improve information on work-related traffic accidents • Vans • Goods and passenger transportation 	
Victims	“Support those affected by traffic accidents”
Areas of intervention: <ul style="list-style-type: none"> • Assistance at the scene of the accident • After the accident • Victims associations 	
Research and knowledge management	“More and better information to ensure the efficient treatment of road safety issues”
Areas of intervention: <ul style="list-style-type: none"> • Road safety statistics and indicators • Research related to road safety 	
Coordination and participation	“Create synergies by promoting the joint action of the different agents”
Areas of intervention: <ul style="list-style-type: none"> • The participation of civil society 	

- Intergovernmental coordination
- International action

Annual activities on road safety are developed by the DGT in consideration of the Strategy in order to ensure that these contribute toward the target achievement. Annual reports on the results of DGT's operation are produced and presented to government, but also published in the Official Journal. The DGT is in charge of collecting road traffic statistics and also coordinating crash investigations.

The economic evaluation of road safety measures and road measures in general is considerate of the benefits of road safety measures are calculated considering the set value of preventing fatality (VPF). The VPF is updated on an annual basis in line with the nominal GDP per head growth. Road crashes' cost⁴³ to society is based on the calculation of a monetary value of statistical life, based on a willingness-to pay approach.

Better practices emerging from road safety funding in Spain include:

- sustained high level funding (through own revenue collection)
- a clear lead agency developing road safety program activities
- economic evaluation of road safety measures
- strong coordination with decentralized levels of government and civil society.

⁴³ Main figures in road safety data, Spain 2012; GDT, 2011: http://www.dgt.es/Galerias/seguridadvial/estadisticas-e-indicadores/publicaciones/principales-cifras-siniestralidad/cifras_siniestralidad_2012.pdf

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