



UNITED NATIONS
ECONOMIC COMMISSION FOR EUROPE



Republic of Serbia
Ministry of Construction, Transport and
Infrastructure



Republic of Serbia
Road Traffic Safety Agency



Regional Cooperation Council



Global Road Safety Facility



Ministero delle Infrastrutture e dei Trasporti



***Regional Road Safety Capacity Building Workshop
BW Hotel M (Belgrade), October 15-16, 2014***

**World Bank Country Guidelines:
Road Safety Management Capacity Reviews, Lead Agency
Reforms, Investment Strategies and Safe System Projects -
AN OVERVIEW**

Eric Howard, Whiting Moyne Consulting

Road Safety Management

Presentation Overview

- Context/ Why it matters
 - Need for ambitious vision
-

- The Road Safety Management System
 - Reviewing Capacity
 - Priority areas for strengthening
 - Investment Plans
-

- Safe System & Demonstration Projects
-

- *Case Study: Serbia RSMCR findings 2007*

Effective Road Safety Management?



High risk travel on major highways/
urban areas - in many middle
income countries

Context:

Business as Usual Will Not Bring Success

- Growth in motorisation
- Increase in travel speeds
- Respect for rule of law
- Recognise why road use is unsafe
- Many separate agencies and levels of government involved
- Leadership essential
- Accept that a changed approach, applied over time, is required

“We cannot solve our problems with the same thinking we used when we created them”

EINSTEIN

Context:

Viewing Road Safety as Manageable Product

- Road safety is *produced*, like any other goods and services.
- This production process can be viewed as a *management system*
- Use of the road network and its elements has grown *without* planning or positive management intervention in many countries.

Context:



DECADE OF ACTION FOR ROAD SAFETY 2011-2020

UN *Decade of Action* 5 Pillars adoption



Pillar 1: Road safety management



Pillar 2: Safe roads and mobility



Pillar 3: Safe Vehicles



Pillar 4: Safer Road Users



Pillar 5: Post-crash Response

Global Plan for the Decade of Action for Road Safety 2011-2020



DECADE OF ACTION FOR
ROAD SAFETY 2011-2020

Establishing an Ambitious Vision and Strategic Agenda for Road Safety Performance

Challenges

- Lack of awareness in community
- Agency and political leaders fear of change
- Failure to realise it can readily be changed
- Failure to inform and advocate change to leaders

What Level of Ambition ?

- Progression to a specified 'next' milestone of reductions in fatalities & serious injuries ?

OR

- Ultimate **elimination** of fatalities & serious injuries (with steady progress - through strategies and targets proposed in the interim)?



Context:

Substantial guidance and tools available

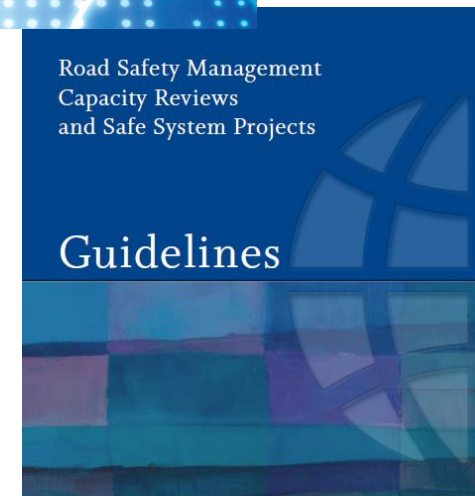
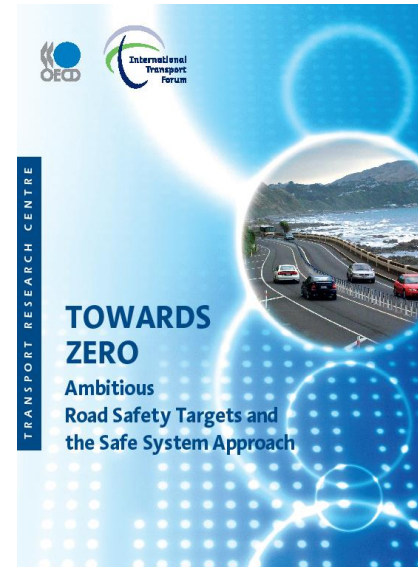
- **Key References:**

- (1) ITF/OECD: *Towards Zero: Ambitious Road Safety Targets and the Safe System Approach*, Paris, 2008

<http://www.internationaltransportforum.org/jtrc/safety/targets/targets.html>

- (2) Global Road Safety Facility: *Road Safety Management Capacity Reviews and Safe System Projects Guidelines*, Bliss T, Breen J, May 2013

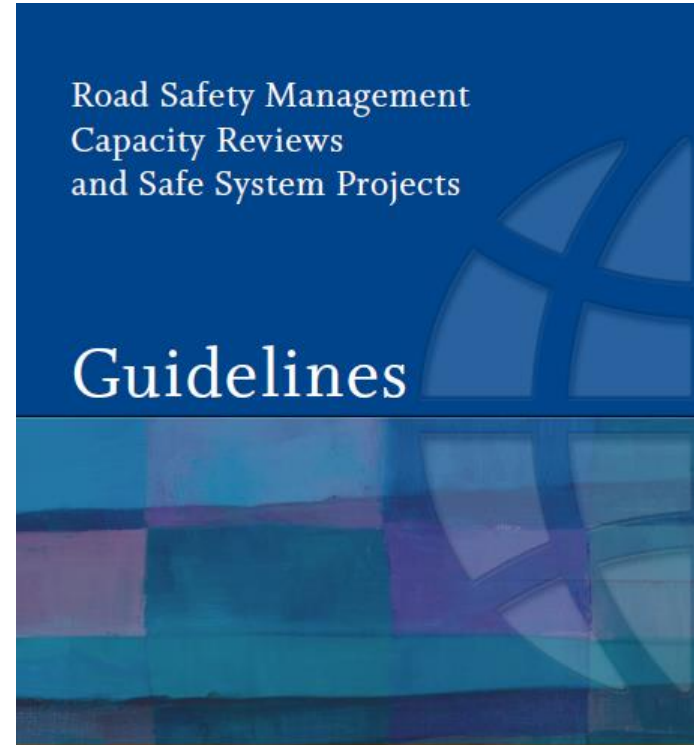
<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTTRANSPORT/EXTTOPGLOROASAF/0,,contentMDK:23430275~pagePK:64168445~piPK:64168309~theSitePK:2582213,00.html>



Updated Edition

The Road Safety Management System (RSM)

- Comprehensive road safety management approach necessary to deliver good performance
- Changed institutional management arrangements to strengthen capacity need to be identified and put in place



Updated Edition

The Road Safety Management System (RSM): *‘Focusing on Results’*

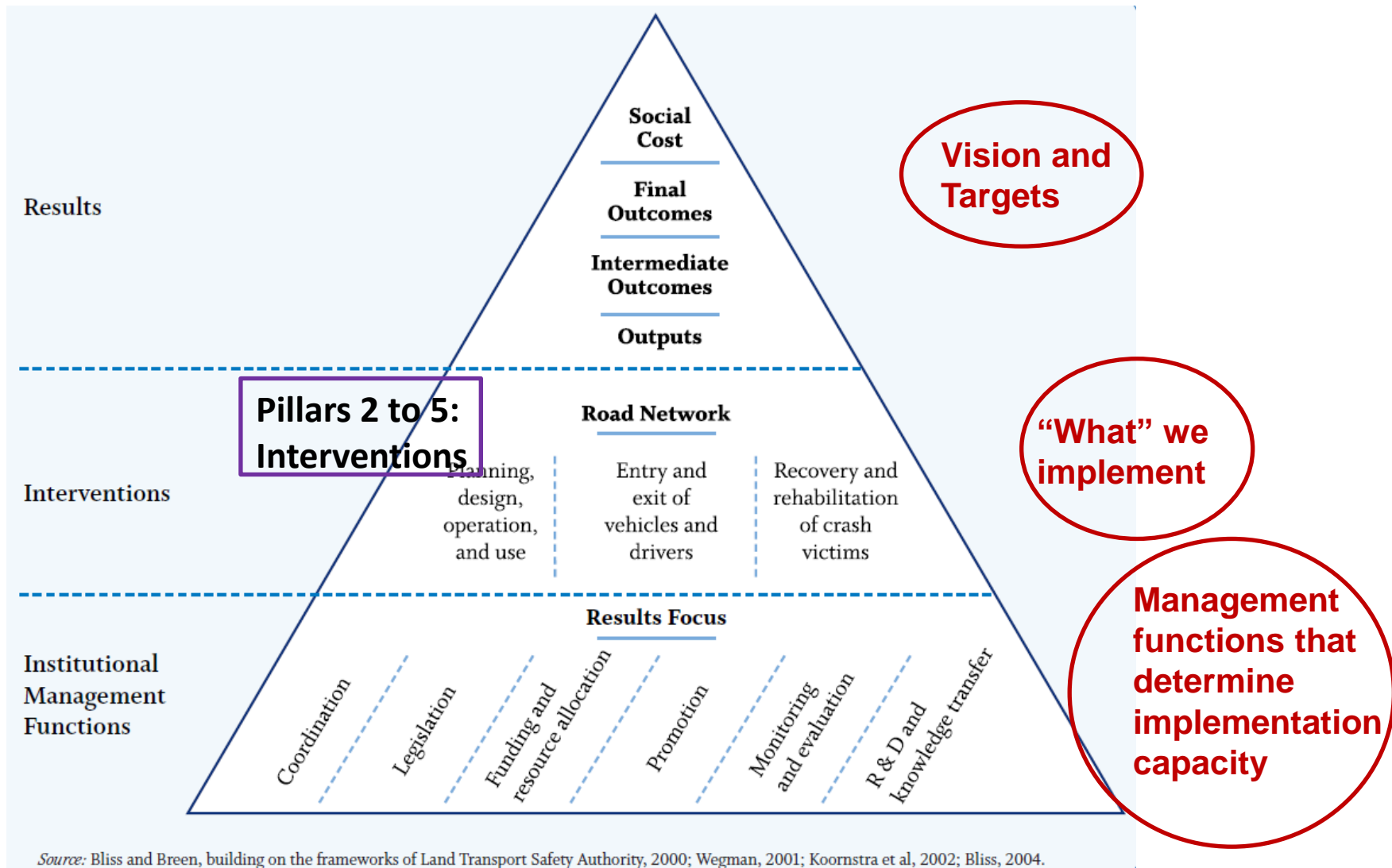
Road safety performance limited by implementation capacity and - to a lesser extent – by intervention production and financing.

Improving road safety capacity and performance requires clear understanding of road safety management system:

- institutional management functions
- interventions
- results sought

Road safety discussion in most communities usually (unhelpfully) focuses on interventions alone.

Road Safety Management System



RSM: Institutional Management Functions

Seven institutional management functions can be identified:

- Results focus
- Coordination
- Legislation and supporting systems
- Funding and resource allocation
- Promotion and advocacy
- Monitoring and evaluation
- Research and knowledge transfer

Results Focus: the Key Institutional Management Function

- ‘**Results focus**’ is overarching institutional management function.
- Effective RSM requires leadership, accountability and ‘ownership’.
 - What are you trying to achieve?
 - How are you going to get there?
 - Who is accountable for this?
 - Identifying and strengthening lead agency to build institutional management functions and guide road safety effort
- The other **six** functions contribute to achievement of desired results.
 - How do you coordinate for this?
 - Legislate for this?
 - Fund this?
 - Monitor progress ?

Interventions

Interventions address:

- planning, design, operation and use of road network (Pillars 2 and 4 - part)
- entry and exit of vehicles and road users to and from road network (Pillars 3 and 4 – part)
- recovery and rehabilitation of road crash victims from road network (Pillar 5)

Standards and rules are to be set for these activities, and compliance with them is required - using enforcement, public education and incentives - and within agencies, peer review.

Results

Results can be expressed in terms of (1) final outcomes, (2) intermediate outcomes, or (3) outputs.

- Final outcomes include fatalities, injuries and social costs
- Intermediate outcomes include reduced speeds, higher seat belt and helmet wearing rates, improved road and vehicle safety ratings, etc.
- Outputs consist of deliverables including: hours of police patrol, volume of infringement notices, length of road treated, etc.
- **Intermediate outcomes as Safety Performance Indicators**

Reviewing Capacity to Manage Road Safety

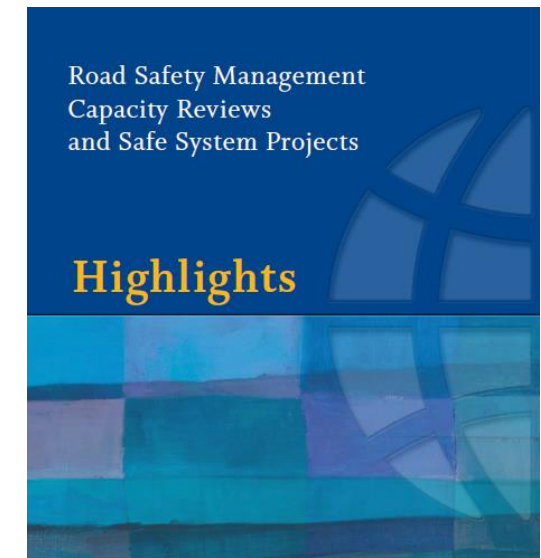
Two stage process

Stage 1 – conduct country RSM capacity review:

GRSF Capacity Review Guidelines - contain 12 Checklists. Use as guide to:

- Identify government ownership of performance
- Assess lead agency role
- Assess current management system strengths and weaknesses and all elements of RSM system
- In what areas is capacity improvement most critical?
- Investment plan - Identify *safe system* demonstration projects to commence long term investment program

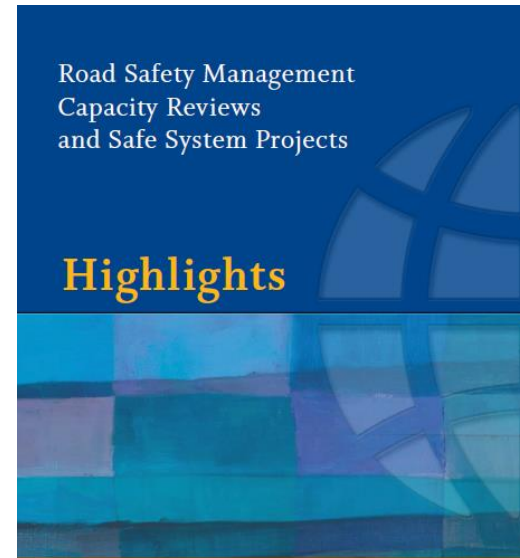
<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTTRANSP/ORT/EXTTOPGLOROASAF/0,,contentMDK:23430275~pagePK:64168445~piPK:64168309~theSitePK:2582213,00.html>



Reviewing Capacity to Manage Road Safety

Institutional framework
and governance

*(In what areas is capacity improvement
most critical?)*



Reviewing Capacity to Manage Road Safety

Priority areas for strengthening

Government Ownership

- What political and senior bureaucratic commitment exists ?

Lead agency role

- Crucial importance of the lead agency role - in directing the strategic effort across management functions
- Lead agency forms follow these necessary functions. No single structural model for a successful lead agency.

Reviewing Capacity to Manage Road Safety

Priority areas for strengthening

Ownership, authority and accountability

Good practice countries:

- Coherent, active machinery of government evident
- Agencies have clearly mandated safety roles and responsibilities
- Agencies work together under the direction of an accountable lead agency to achieve agreed results.

Without this well-defined institutional '*ownership, authority and accountability*' the problem of bringing road safety performance under control cannot be solved.

Priority areas for strengthening

Coordination

The horizontal and vertical orchestration and alignment of interventions and associated institutional management functions delivered - by government partners and related community and business partnerships - to achieve agreed performance targets.

A top-tier coordination committee (or executive group) will only be effective when there is an accountable lead agency that 'owns' and uses it to mobilize resources and align multi-agency partnerships.

Reviewing Capacity to Manage Road Safety Priority areas for strengthening

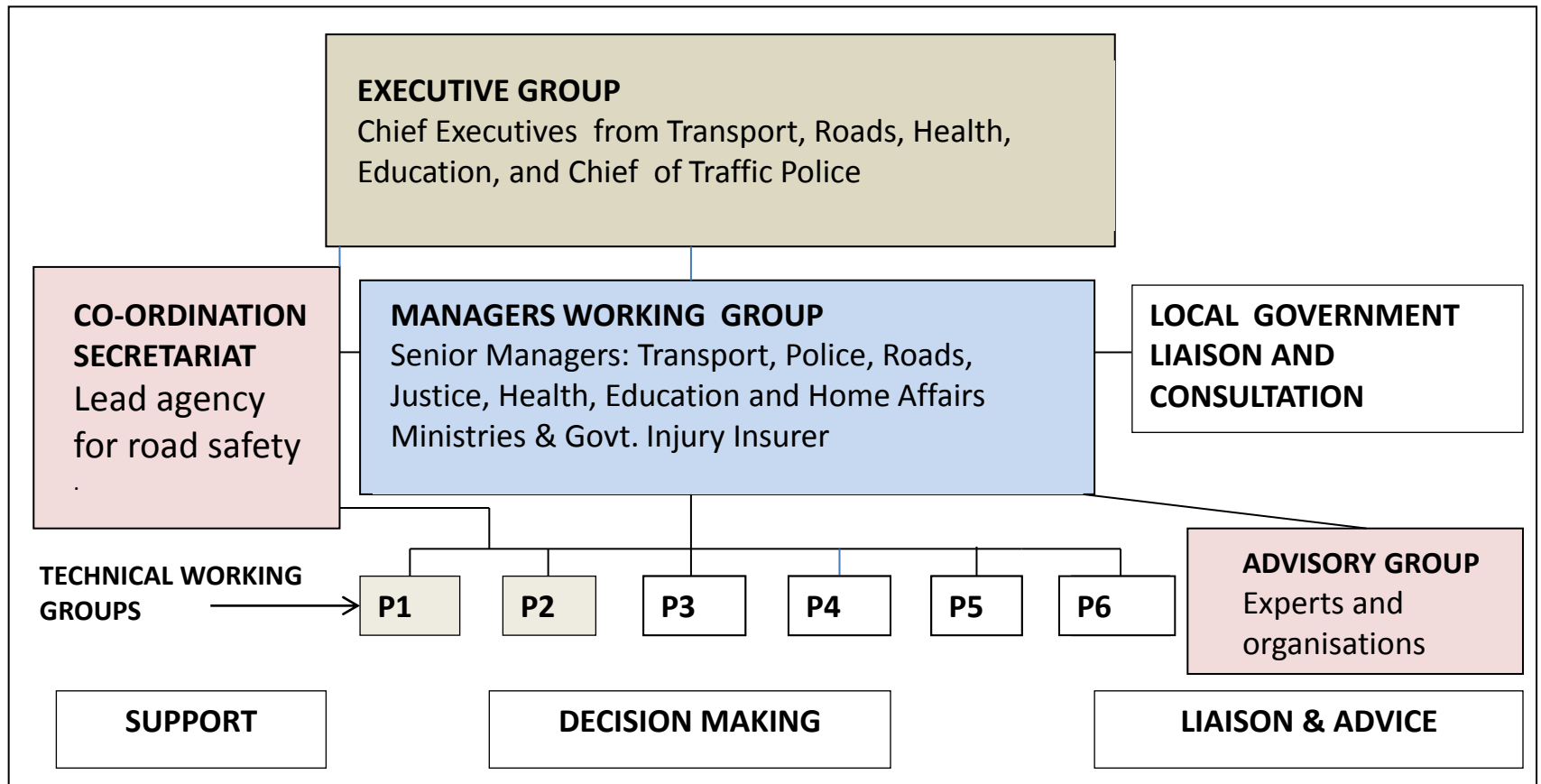
Coordination (cont'd)

A high-level working group necessary to support strategic decision-making and directing role of the *top-tier coordination committee*.

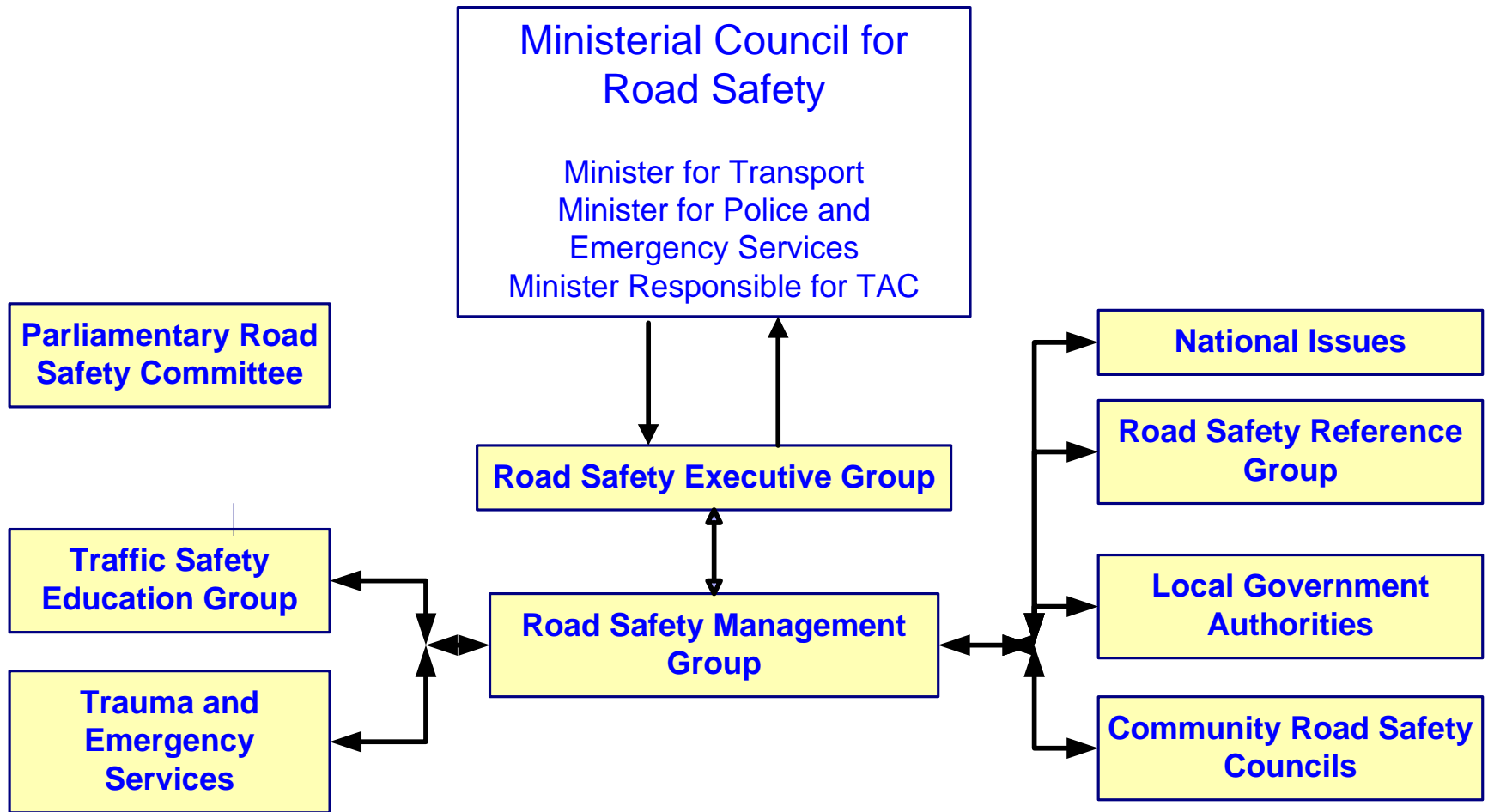
This working group must comprise empowered senior managers from participating agencies and is usually resourced and sustained by a road safety secretariat in the lead agency.

Technical working groups to support the senior managers working group

Potential Road Safety Management Arrangements at National Level



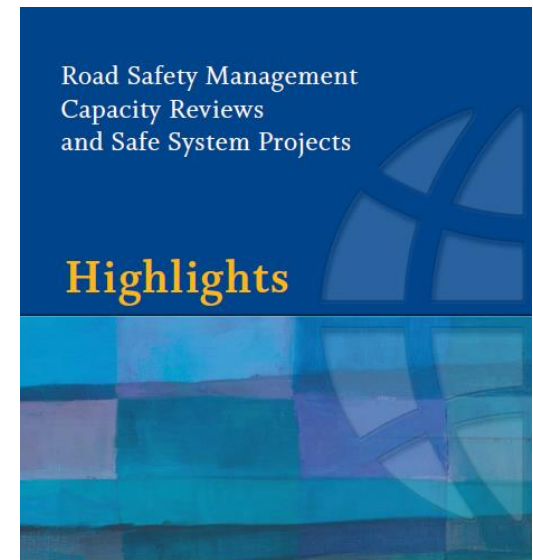
Case Study: Multi-sectoral Coordination in Victoria, Australia



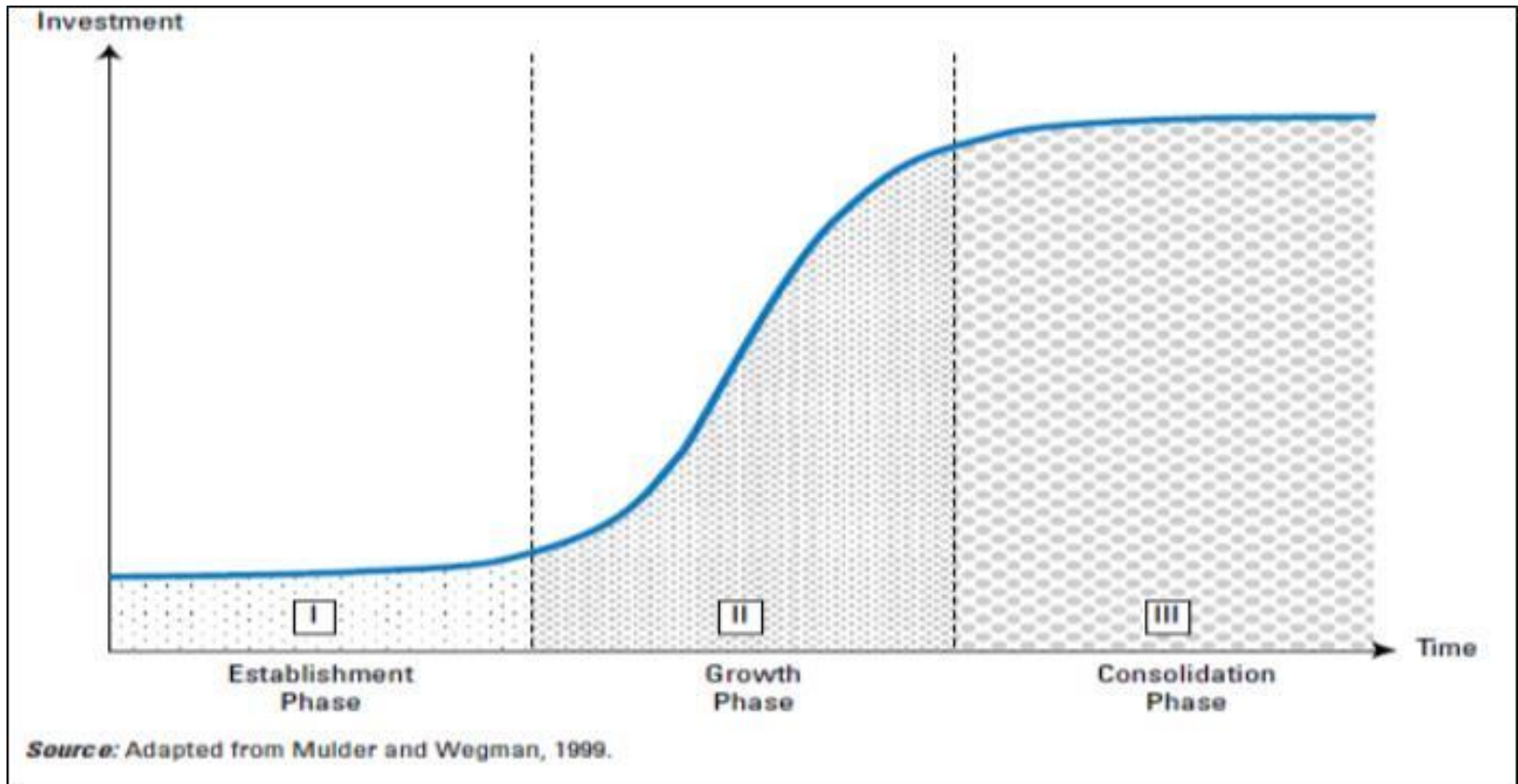
Reviewing Capacity to Manage Road Safety

Two stage process: Stage 1

Stage 1 to also include identifying safe system demonstration projects for establishment investment phase



Investment: A Staged Approach to a Long Term Strategy



Investment: Planning Demonstration Projects – based on Safe System Principles

Responsibility for crashes and injuries is ***shared*** between the providers and users of the road transport system.

Human life and health are paramount and **should not be traded off against mobility goals.**

Humans make **errors**

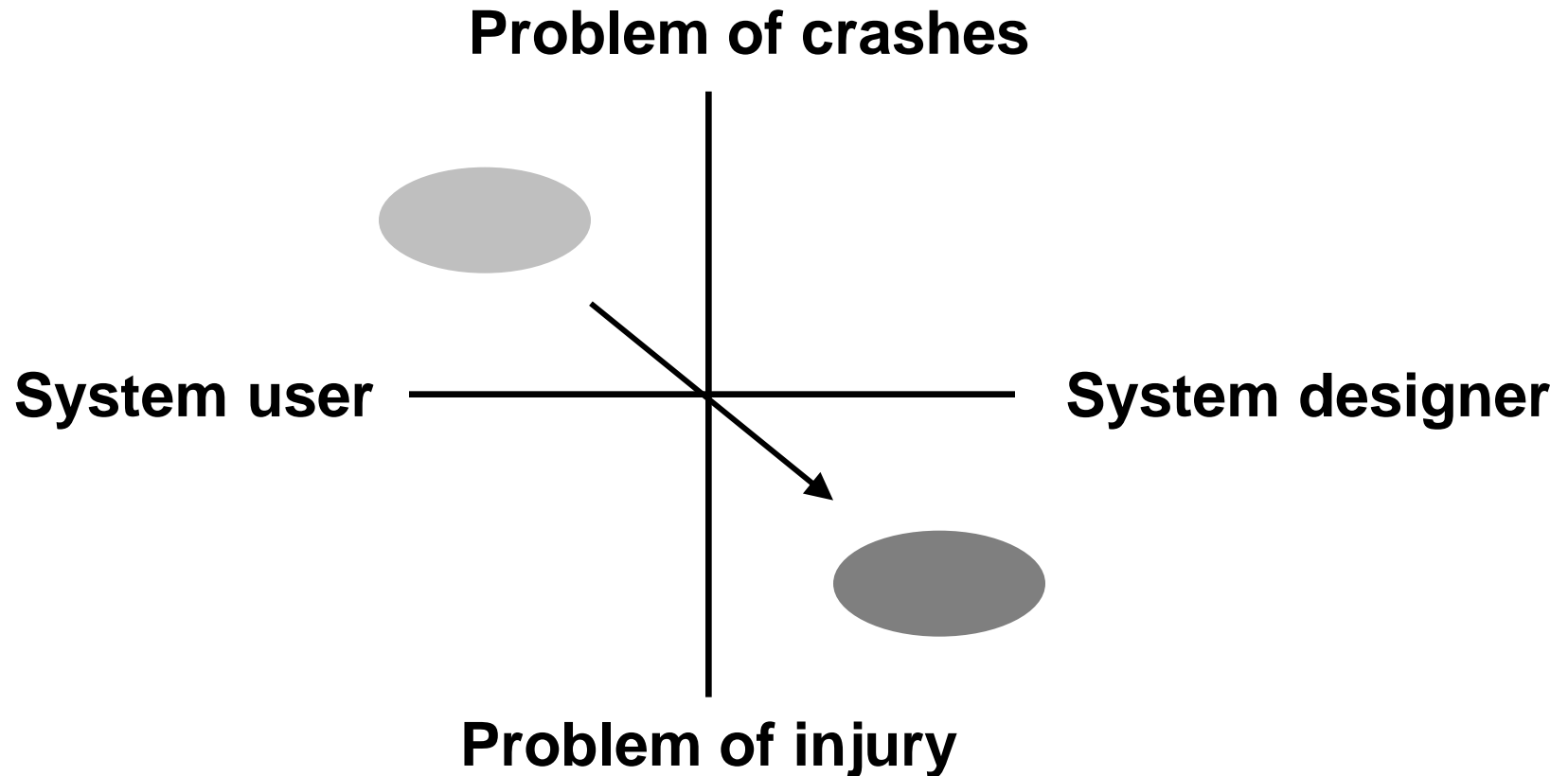
Investment: Planning Demonstration projects – based on Safe System Principles (cont'd)

Inherent safety of road system: determined by its users **not being exposed to forces** that go beyond **human tolerance** to injury.

Shifting to the Safe System approach requires sustained innovation to **proactively** reshape the road system to achieve the desired goal, rather than **reactively** making incremental improvements when evidence suggests system failures could be economically addressed.

Safe system:

Sweden's Vision Zero: Focus on Injury Prevention

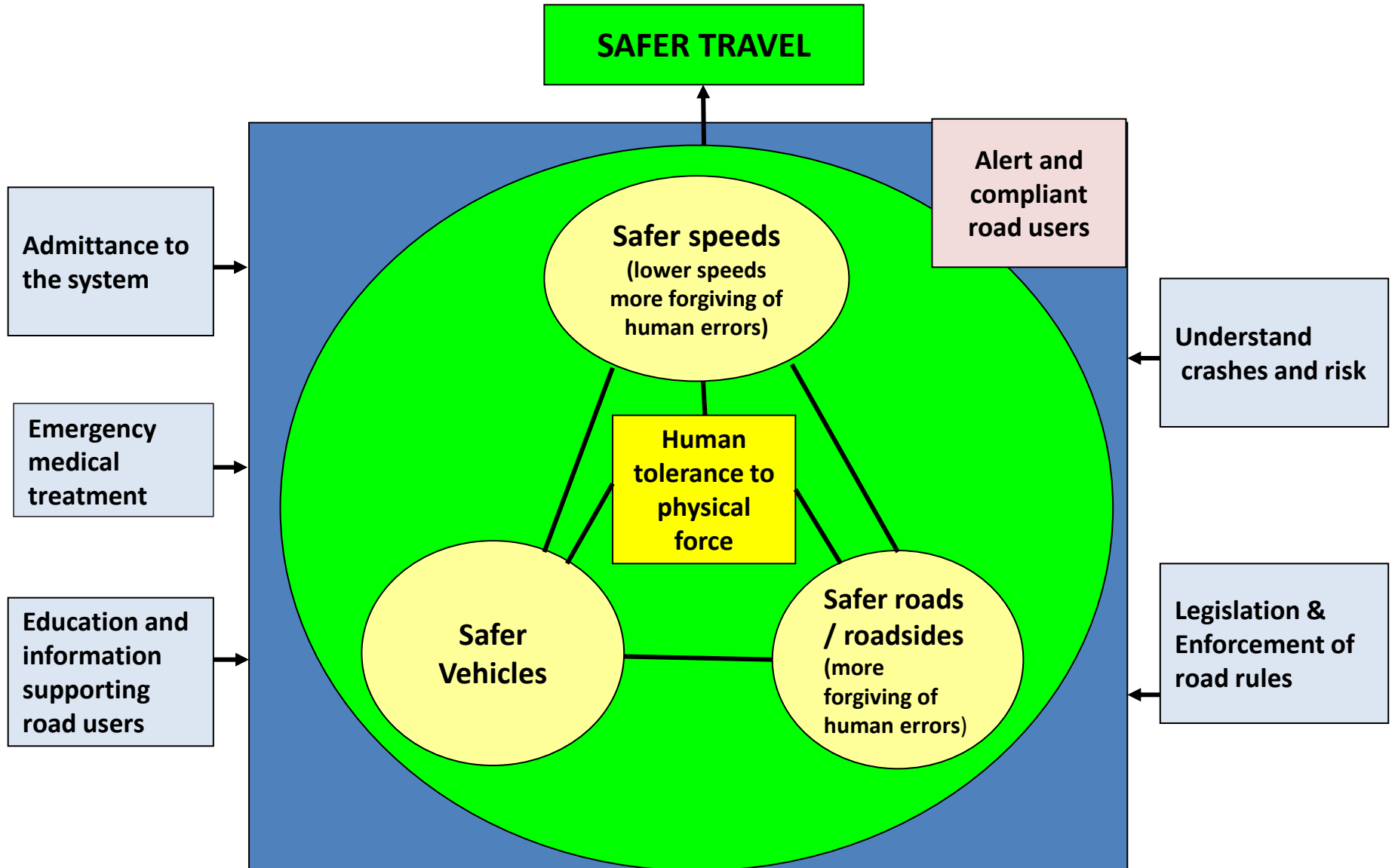


Safe System: Dutch Sustainable Safety: Design Principles

Sustainable Safety principle	Description
Functionality of roads	Monofunctionality of roads as either through roads, distributor roads, or access roads, in a hierarchically structured road network
Homogeneity of mass and/or speed and direction	Equality in speed, direction, and mass at medium and high speeds
Predictability of road course and road user behaviour by a recognizable road design	Road environment and road user behaviour that support road user expectations through consistency and continuity in road design
Forgivingness of the environment and of road users	Injury limitation through a forgiving road environment and anticipation of road user behaviour
State awareness by the road user	Ability to assess one's task capability to handle the driving task

Wegman F, Aarts L (Eds), (2006). *Advancing Sustainable Safety: National Road Safety Outlook for 2005 – 2020*, SWOV Institute for Road Safety Research, Leidschendam, the Netherlands

SAFE SYSTEM



Safe System Elements

- Roads and roadsides
- Travel speeds
- Vehicle safety characteristics (and vehicle types)
- Emergency medical care
- Road user compliance with the law
- Legislation
- Driver and rider entry and exit to/ from the system
- Understanding crashes
- Education and information supporting road users



Safe System Approach

- considers safety as an ethical imperative
- seeks to align safety decisions with broader community values – economic, human & environmental health, consumer goals
- long term goal of a safe system will take time to achieve
(substantial retrofitting task for roads, vehicles, enforcement, emergency management)



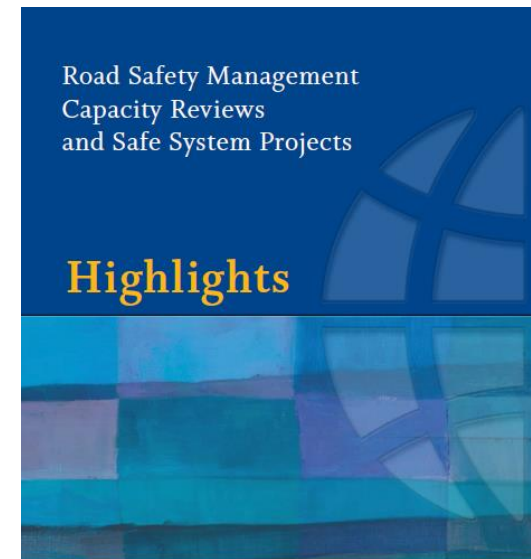
Safe travel speeds

Types of road infrastructure and traffic	Safe travel speed (km/h)
Locations with possible conflicts between cars and pedestrians/cyclists	30
Intersections with possible side impacts between cars	50
Roads with possible frontal impacts between cars	70
Roads with no possibility of side impact or frontal impact (only impact with the infrastructure)	>100

Reviewing Capacity to Manage Road Safety Demonstration Projects

Stage 1: Investment (Interventions) planning for demonstration projects

- Set project objectives and scale of project investment
- Identify project partnerships
- Identify safe system demonstration projects: (safe corridor or urban areas) plus policy reviews.
- Specify project components - Base on good practice solutions that address priorities
- Continue to strengthen capacity (and conduct existing activities/ interventions)



Reviewing Capacity to Manage Road Safety Demonstration Projects

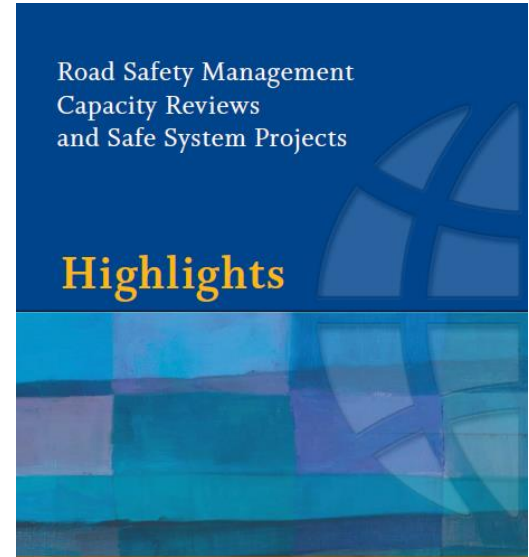
Two stage process: Stage 2 - Implement *safe system* demonstration projects

- Establish project management arrangements
- Specify monitoring and evaluation procedures
- Prepare detailed project design
- Highlight project implementation priorities

- Monitor performance

- Learn from demonstration project activity and feed into larger scale application

- Set targets (results) for *growth* investment phase (*medium term* stage)



Reviewing Capacity to Manage Road Safety

Demonstration Projects

Rural Corridor project components

- Systematic infrastructure safety improvements (head-on, run-off road, intersections, vulnerable road users)
- Dedicated highway patrol programs (enforcing speed, alcohol & drugs, safety belts & helmets, commercial vehicles)
- Publicity and awareness campaigns supporting highway patrol enforcement programs
- State-wide publicity and awareness campaigns promoting government strategy and context for project
- School-based education programs
- Community-based programs
- Corporate social responsibility programs
- Post-crash services
- Project management support
- Monitoring and evaluation systems

SUMMARY: Reviewing Capacity to Manage Road Safety

TWO STAGE PROCESS OF REVIEW AND INVESTMENT PLANNING

STAGE 1:

Identify capacity needs and address

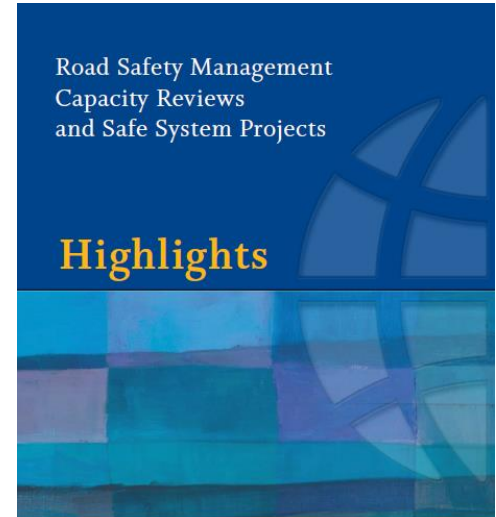
Identify demonstration projects for establishment investment phase

STAGE 2:

Implement demonstration projects

SUPPORTS:

- **WB Guidelines plus OECD *Towards Zero*, 2008.**
- **PIARC (World Road Association) Road Safety Manual (to be web based) nearing finalisation. May be launched in 2015.**
- **WB and ADB have offered Road Safety Management Training Courses - for two to four days duration**



Case Study: RSMCR: Serbia 2007

WB RSMCR Serbia: 2007

Findings: institutional management

- Road safety management across government has yet to be established
- Leadership role and coordination not yet in place
- Little focus on achieving results in last decade
- Serious lack of human and financial resources in road safety across government
- Unsurprisingly, interventions are fragmented and outcomes are challenging

.

WB RSMCR Serbia: 2007

Findings: interventions

Roads: Safety quality of network is not high

- designed to old standards
- poor speed management and urban safety management
- inadequate pedestrian facilities
- lack of good practice safety audit
- unrestricted roadside development



WB RSMCR Serbia: 2007

Findings: Interventions

Users: Rules being established but not yet deterring unsafe behaviours through combined publicity and enforcement, e.g

- excess speed
- excess alcohol
- non use of seat belts
- non use of crash helmets



WB RSMCR Serbia: 2007

Capacity Review: conclusion

Serbia has to re-start its long road safety journey

With political will to ensure

- national leadership capacity
- focus on achieving results-led strategy
- effective multi-sectoral coordination
- improved funding mechanisms and source
- high-level promotion of strategy
- appropriate knowledge transfer and research

Many lives could be saved and injuries prevented

WB RSMCR Serbia: 2007

How will interventions be coordinated ?

- A new coordination decision-making hierarchy at national level
- Involve key Ministries – Infrastructure, Interior, Justice Health, Education, Public Enterprise
- Organise at various levels – Executive, senior managers, (and technical groups) and stakeholder consultation
- Provide a funded secretariat from lead department for strategy development
- Without adequate funding, technical resource and a lead department in support, multi-sectoral coordination has little chance of success

Reviewing Capacity to Manage Road Safety

Planning to Bring Road Safety Outcomes Under Control in Ways which Fully Reflect Country Capacity

- Assessing and strengthening country road safety management capacity - critical to governing production of improved road safety results which can be sustained in long term.
- In pursuing this goal, must take account of management capacity in country concerned - to ensure that institutional initiatives are properly sequenced and adjusted to its learning capacity

GRSF Capacity Review Highlights Document


Reviewing Capacity to Manage Road Safety

Strengthening support – from the community and the political level

- Lead agency establishment
- Agency coordination and decision making arrangements in place and working
- Well targeted Strategy and Action plan drafted
- Involve political level broadly - in briefings and information sessions
- Gain funding to commence
- Implement actions
- Evaluate and Learn
- Tell the good news widely
- Build capacity and foster evidence based research

Observations from workshop

- Information exchange: We all have had opportunity to learn from each other
- Importance of these international forums
- More of this exchange and support is essential
- Very interesting to observe road safety changes in Region since 2007/8
- Road safety in Region has moved forward in last 6 years – variable but positive



‘Donosioci odluka mogu da učine sistem saobraćaja u Evropi bezbednim onoliko koliko to žele – problem saobraćajnih nezgoda uzrokuje čovek i on se može rešiti’

P.A.M. Cornelissen MEP

**Izvestilac za bezbednost u saobraćaju
Evropski parlament, 1999.**

‘Policymakers can make the traffic system in Europe as safe as they want to - the road crash problem is man-made and can be remedied’

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THANK YOU

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