



**XXIVth World
Road Congress
Mexico 2011**
Mexico City 2011.

National Road Safety Policies and Plans - Comparison between Nations

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World Road Association Technical Committee C2.1

Objectives:

1. Identify national road safety policies and plans
2. Compare national road safety performance
3. Examine relationship between policies/plans and performance.



Survey of PIARC member countries

1. Survey of road safety policies
2. Survey of road safety strategies

Responses received from 16 countries and 8 states/provinces.



Countries	States / Provinces
U.S.A	Washington, U.S.A
South Africa	Minnesota, U.S.A
Netherlands	Missouri, U.S.A
Sweden	Ontario, Canada
Norway	Victoria, Australia
Denmark	Queensland, Australia
Germany	Western Australia
Switzerland	Tasmania, Australia
U.K	
Canada	
New Zealand	
Malaysia	
Hungary	
Japan	
Poland	
Singapore	



PIARC Member Countries



Road Safety Vision

- Sweden and Norway: Vision Zero
- The Netherlands: Sustainable safety
- Australia: Safe System approach
- U.K: Making Britain's roads the safest in the world

Australia's Safe System approach



Safe Road
Users



Safe Roads &
Roadsides



Safe Vehicles



Targets

Japan:	Half fatalities or less by 2010
Hungary:	Reduce personal injuries and fatalities by 30% by 2010
Poland:	50% reduction in fatalities by 2013, compared with 2003
Norway and Sweden:	Vision Zero Nobody killed or seriously injured in the long term
Australia:	5-6 fatalities per 100,000 population or less by 2010
Western Australia:	Towards Zero
Victoria, Australia:	30% reduction in fatalities and 30% reduction in serious injuries 2008 - 2017



Drink Driving

A factor in up to 30% of annual fatal crashes.

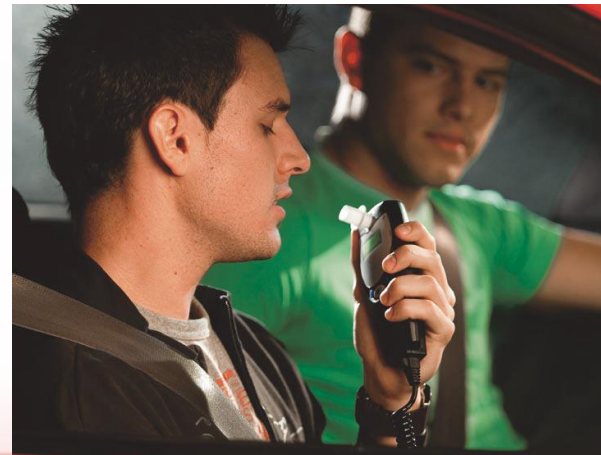
World Health Organisation recommends 0.5 g/l or lower.



Jurisdiction	B.A.C. level
Hungary	Zero
Czech Republic	Zero
Ontario, Canada	0.05 g/l
Sweden	0.2 g/l
Norway	0.2 g/l
Poland	0.2 g/l
Japan	0.3 g/l
Australia	0.5 g/l
Germany	0.5 g/l
Switzerland	0.5 g/l
Netherlands	0.5 g/l
Denmark	0.5 g/l
U.S.A	0.8 g/l
New Zealand	0.8 g/l
U.K	0.8 g/l
Singapore	0.8 g/l

Drink Driving - Best Practice

- Random roadside blood alcohol testing programs
- Alcohol interlock program
- Licence suspension or cancellation
- **Model Jurisdictions:** Victoria, Australia and Norway



Drug Driving

A factor in up to 30% of annual fatal crashes

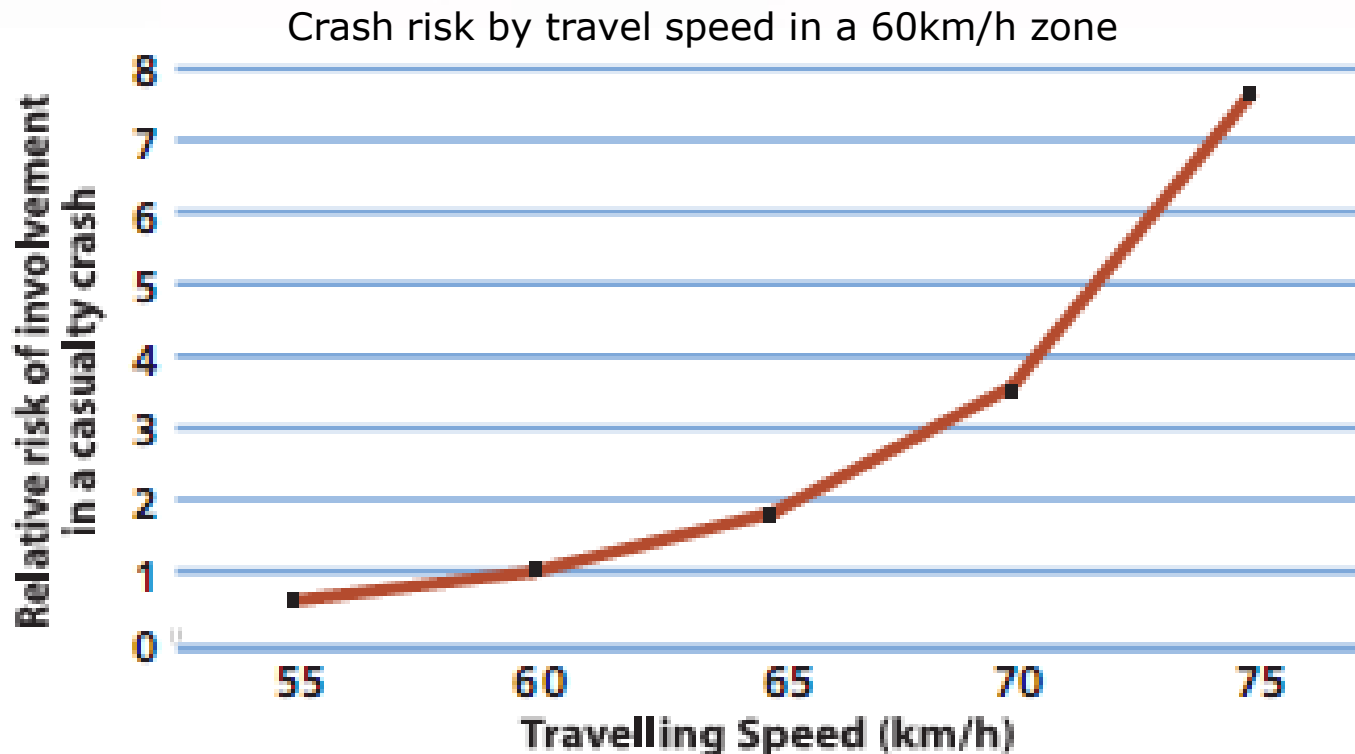
Best Practice

- Random roadside drug testing
- Licence suspension or cancellation
- **Model jurisdictions:** Victoria, Australia and Norway



OECD Report, October 2006: Speed Management:

- Speeding is the number one road safety problem
- responsible for about one third of road fatalities.



Speeding

Inconsistent approach by jurisdictions for:

- Enforcement effort
- Extent of covert operations
- Fines and other penalties for offending.

Best Practice

- Camera systems with minimal tolerance levels before offence prosecuted.
- **Model jurisdictions:** U.K, The Netherlands and Victoria, Australia.



Intelligent Speed Assist

- Informative ISA
- Limiting ISA
- Restrictive ISA



Seat Belt Wearing

Most jurisdictions:

- All seats to have seat belts and
- vehicle occupants to use them.

Few jurisdictions:

- All vehicle occupants to be belted.

Country

Seat belt wearing rate

U.S.A

83%

Germany

96-98% front seat

Malaysia

Up to 93% for front seats

Most nations

95% for front seats



FASTEN SEATBELT



Seat Belt Wearing

Each year in Victoria:

- Around 20% of car occupants killed are not wearing seat belts
- Over 50% of these crashes involve drinking.

Best Practice

- Education campaigns in combination with enforcement.
- Require all vehicle occupants to wear seat belts and no more occupants than available belts.
- Technology that restricts vehicle speed if the driver or passenger is not wearing a seat belt.
- **Model jurisdictions:** Germany, Australian states.



Motorcycle Helmet Wearing

Wearing rates

- U.S.A: 63%
- Australia: 95%
- Germany: 97%

Many developing nations have very low wearing rates.

Best Practice

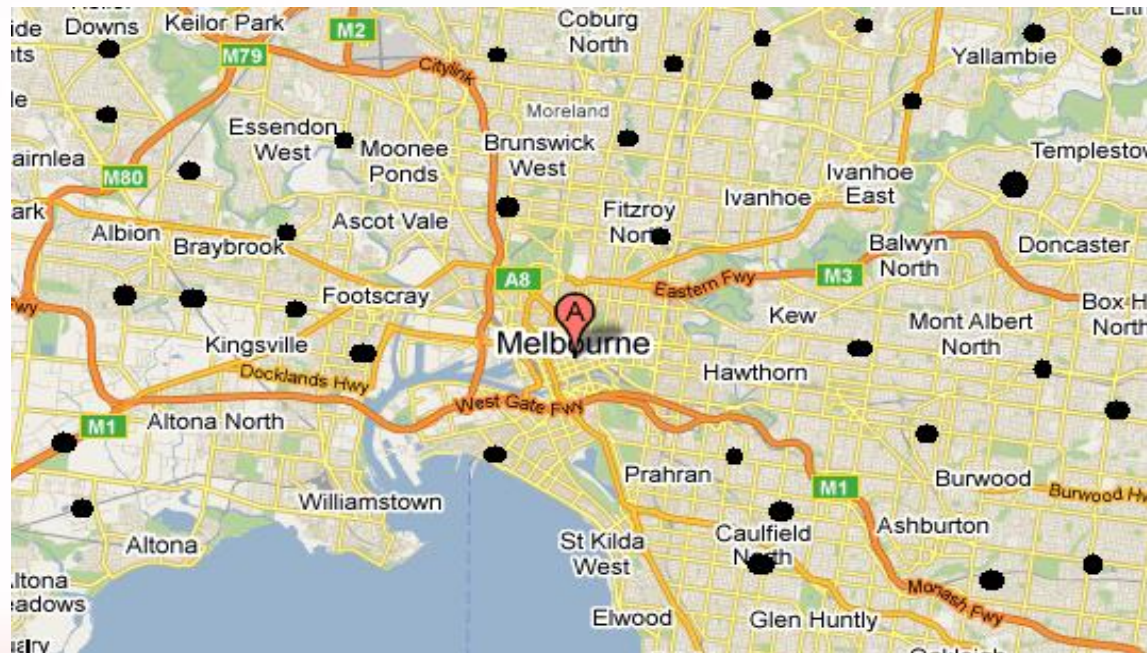
- Mandatory wearing of helmets.
- Helmets required to comply with safety standards.



Road Infrastructure

Most jurisdictions:

- Good at identifying specific locations where crashes are the highest.



Road Infrastructure

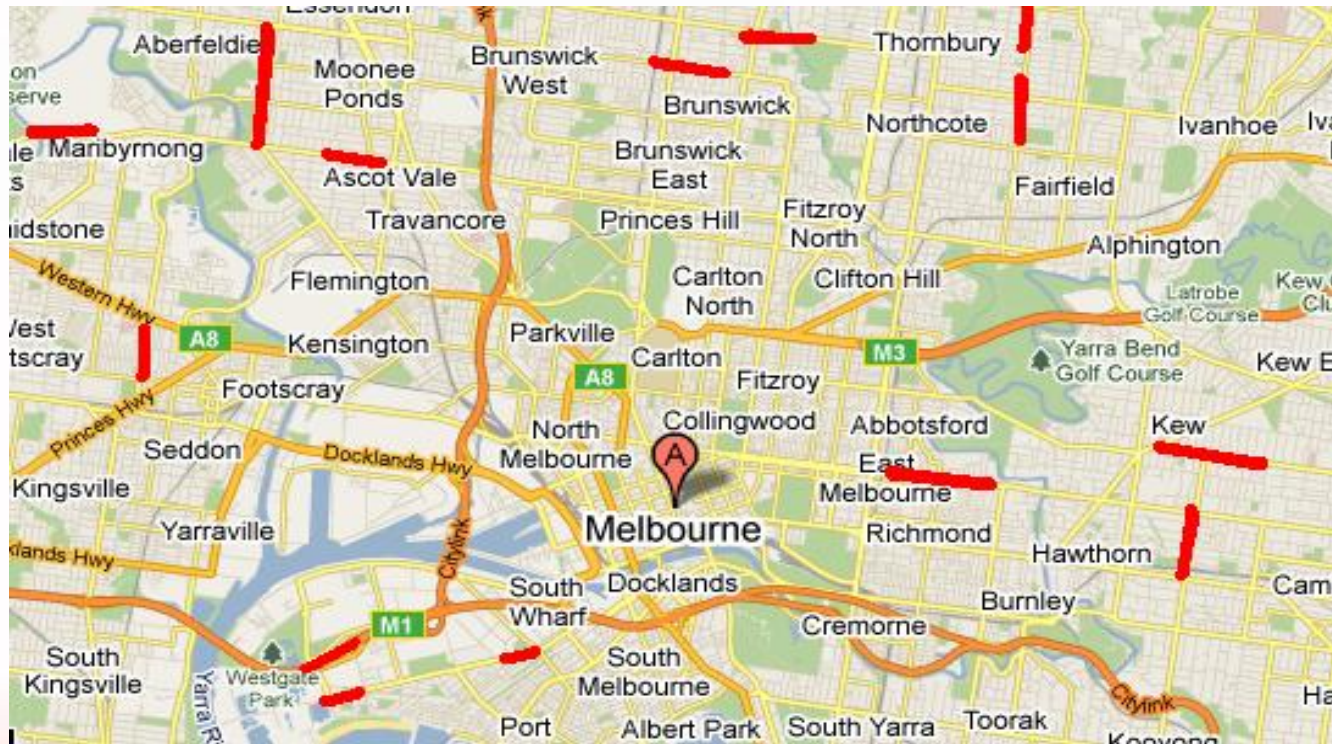
Treatments are determined and prioritised:

- roundabouts
- traffic signals
- traffic islands.



Road Infrastructure

- Identify and treat highest risk lengths of the network.
- Use benefit/cost analysis



Road infrastructure

- In Victoria, run-off-road crashes make up about 45% of fatal crashes in rural areas.



Before



After



Road infrastructure treatments



20 JUL 2005

The International Road Assessment Programme (iRAP):

- inspects high-risk roads
- develops star ratings and safer roads investment plans
- provides training, technology and support
- tracks road safety performance
- Road Assessment Programmes (RAP) active in more than 50 countries.

Best Practice – Road infrastructure

- Route treatments in combination with Blackspot Programs
- **Model jurisdictions:** U.K and Victoria, Australia.



Setting Speed Limits

Most nations have lowered urban speed limits.

Typically, 40 km/h or less.

Ontario: Default limit of 50km/h in built up areas

Default limit of 80km/h elsewhere

Best Practice

Speed limits are set according to safe system requirements.

Model jurisdictions: The Netherlands, Sweden, Germany.



Vehicle Safety

Many nations provide vehicle safety rating information to consumers.



Some governments and their agencies set minimum safety standards for their vehicle fleet.

Sweden: State Agencies

5 star EuroNCAP rating

2 star EuroNCAP rating for pedestrian protection

Alcolocks

Victoria: All new vehicles manufactured after 31 December 2010, must have Electronic Stability Control.



Vehicle Safety

Best Practice

- High standards for design requirements and registration (especially ESC and head protection).
- Strong promotion of vehicles safety ratings.
- Incorporation of high standard vehicles into government fleets.
- Power restrictions for inexperienced drivers.
- **Model jurisdictions:** Sweden and Germany.



National Road Safety Strategies/Action Plans

A strategy is about how to achieve an outcome. This is usually supported by an action plan.

Country	Road safety strategy
U.S.A	States are required to develop and implement strategic highway safety plans
Australia	National Road Safety Action Plan. Each state has its own Strategy and Action Plan.
South Africa	2009 – 2015 Road Traffic Safety Management Plan
Sweden	Vision Zero
Denmark	Nation Plan 2005 – 2012 (includes 100 actions)



National Road Safety Strategies/Action Plans

Targets

Typically they are aspirational, with some based on evidence.

Victoria uses targets based on a model.

Targets for serious injuries – about 50% of the countries surveyed indicate targets, or will do so shortly.

Performance indicators

- Absolute numbers
- Rates e.g. fatalities per 100,000 population
 fatalities per 10,000 registered vehicles
 fatalities per billion vehicles-km travelled

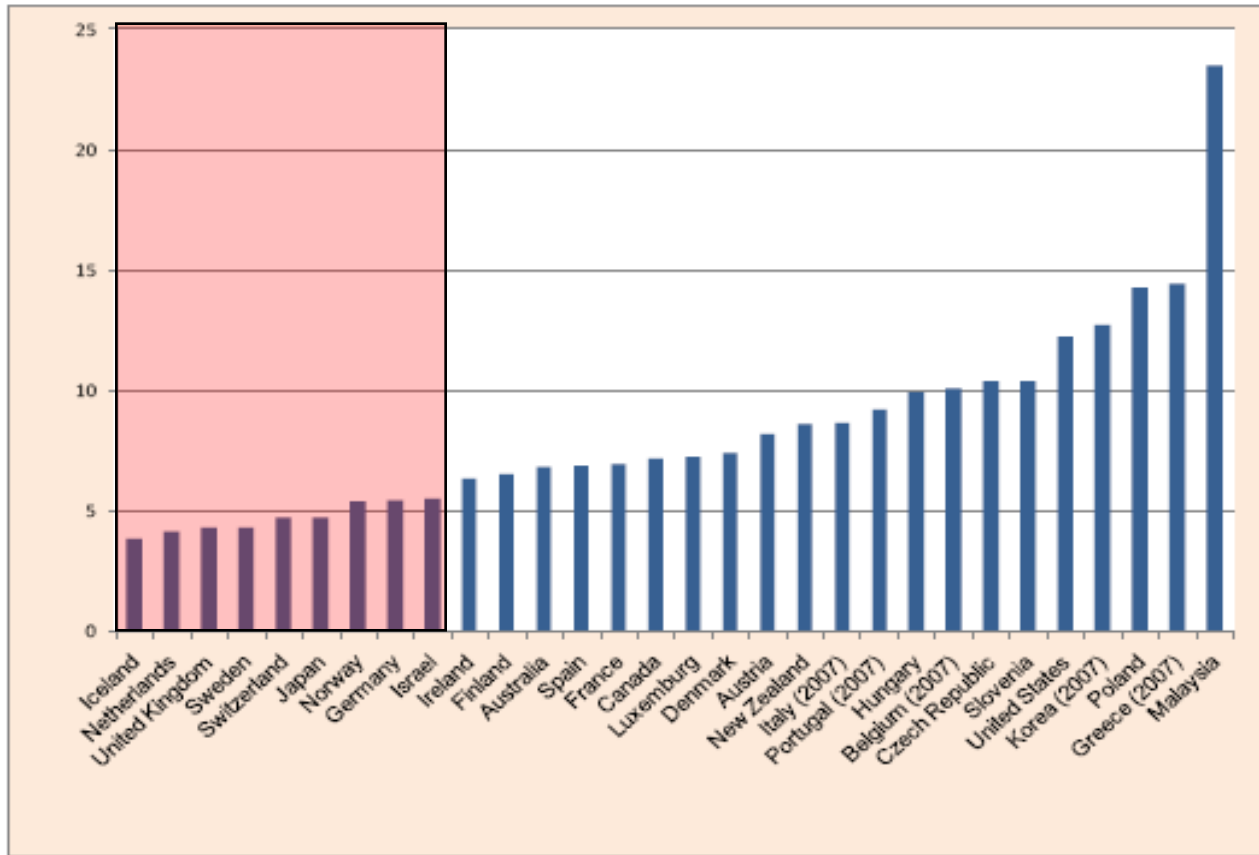
More use is being made of lead indicators, such as:

- Measure of mean travel speed
- Seat belt wearing rates
- Excess alcohol detection rates.



Performance Comparison

Deaths per 100,000 population (IRTAD data, 2008)



Country	Rate (2008)
Iceland	3.81
Netherlands	4.13
United Kingdom	4.31
Sweden	4.32
Switzerland	4.70
Japan	4.72



Characteristics of best performing nations

- A clear vision / targets for long term performance
- A lead road safety agency
- Involvement of senior bureaucrats and politicians
- All key agencies know their shared and individual responsibilities
- Comprehensive set of actions targeting roads, road users and vehicles

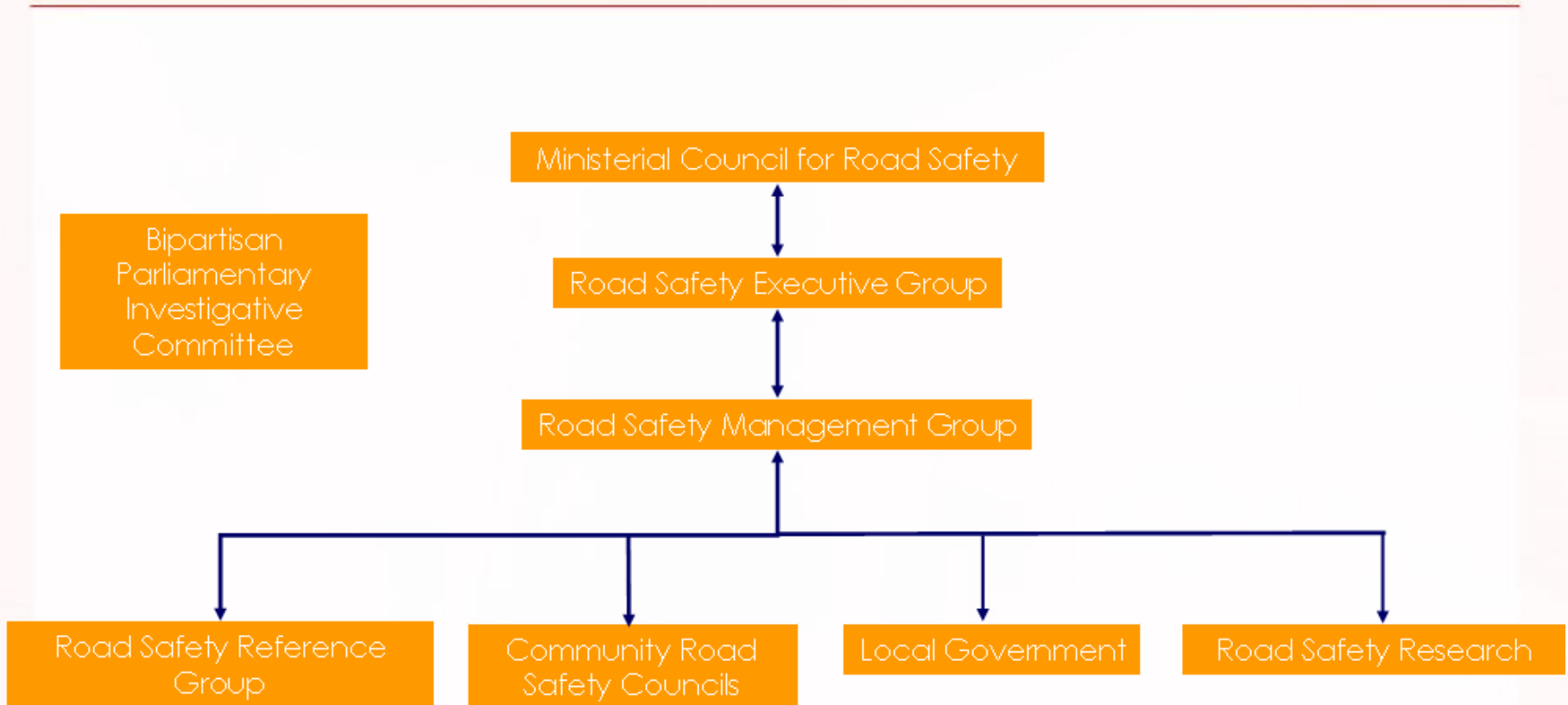


Characteristics of best performing nations

- Strong research programs
- Leading road safety policy
- Effective road safety legislation, supported by strong enforcement
- Good public communication activity
- Regularly measure performance
- Usually have long experience with motorisation



Road Safety Management Structure



UN Decade of Action for Road Safety

- 1.3 million road fatalities a year across the world
- 1.9 million deaths per year by 2020 if no action is taken
- Goal: To stabilise and then reduce the number of lives lost on the world's roads



Thank you

