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Launch of the

GUIDE FOR SAFE SPEEDS

Managing Traffic Speeds to Save Lives and Improve Livability

March 21, 2024
Washington, D.C.

Presenters

Alina F. Burlacu

Senior Transport Specialist
World Bank, GRSF

Eva M. Eichinger-Vill

Senior Road Safety Consultant
World Bank, GRSF

Siba El-Samra

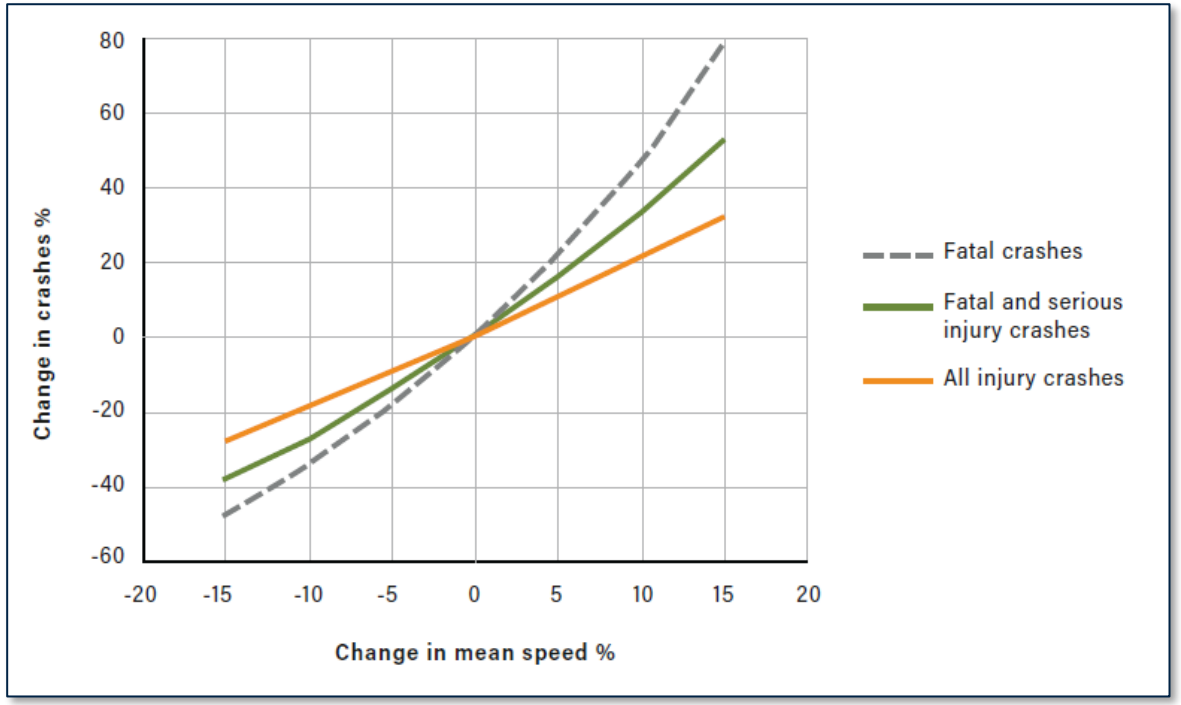
Urban Mobility Manager for Health and Road Safety
World Resources Institute

Blair M. Turner

Senior Road Safety Consultant
World Bank, GRSF

Why speed management matters

- Speed is the single biggest contribution to road deaths and serious injury
- Higher involvement in road traffic deaths than previously thought: 60-70% of road deaths linked to speed – this is true for LMICs and HICs
- Reducing speed can bring significant road safety benefits as well as benefits for environment, health, livability and travel time
- Interventions needed are often highly cost-beneficial



Why a new Speed Management Guide?

Aren't there enough guides and manuals already "on the market?"

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Why a new Speed Management Guide?

The Guide for Safe Speeds <u>covers a broad range of topics on speed management:</u>

- All types of roads – from cities to inter-urban roads and motorways, existing or new
- All types of road users – from VRUs to motorized traffic
- All types of speed limit changes – from national general speed limits to localized changes based on risk
- All types of challenging boundary conditions – from lack of resources to lack of data
- All types of target groups – from low- and middle- to high-income countries; from decisions-makers to practitioners
- **Everything you need to select, set, implement and support speed limits that are safe for all**

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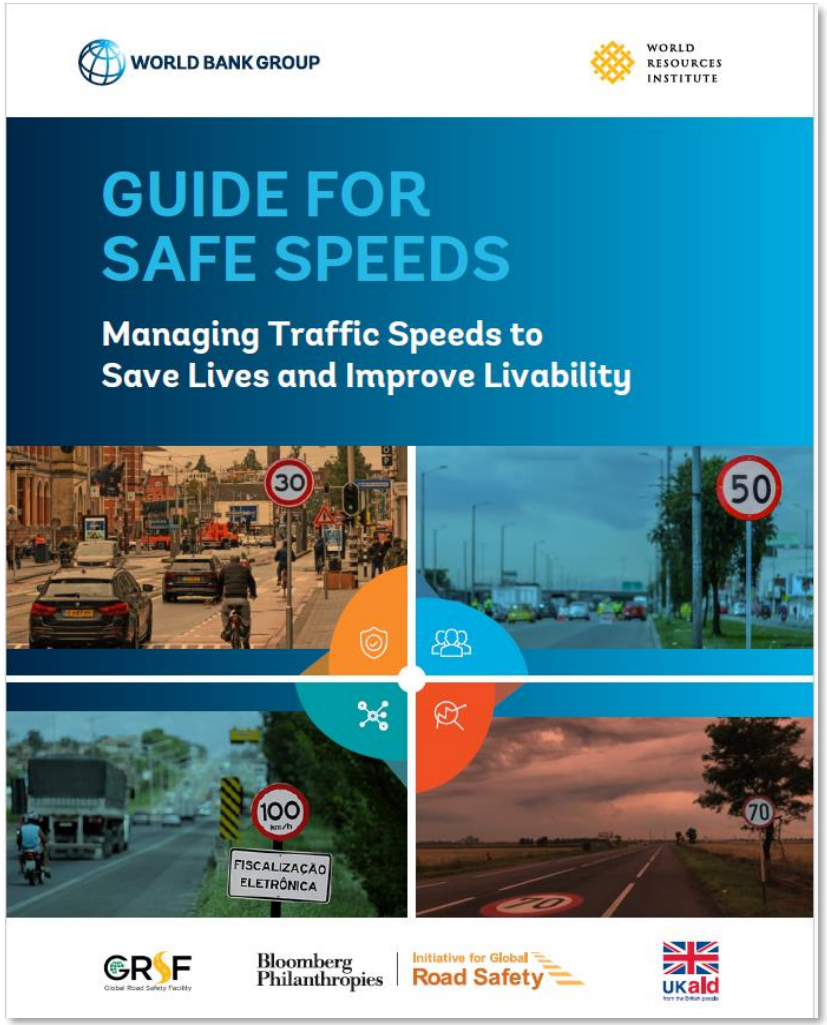
So, what is in the new Guide?



What's the added value of the new Guide?

The Guide for Safe Speeds includes:

- A speed limit setting approach that takes Safe System survivable speeds into account, and ensures speed limits are not just set on the basis of motorized traffic
- Content on the broader policy links with speed (emissions, noise, modal shift etc.)
- Guidance on strategy development
- Evidence to dispel the key barriers (myths) in road safety/speed management
- Guidance for those who have limited data and resources etc.

And there is even more…

- Quick tips for practitioners
- Myth busting boxes
- Nice case studies

Quick tips for practitioners

To have better acceptance, speed limit changes should start where the strategic impact of a speed reduction is high. In this context, school areas are often ideal, as these areas have some of the most vulnerable road users. It is very hard for local stakeholders as well as the general public to not support protection of school children by limiting speeds. Strive to ensure the school zone is not too small and that access roads also maintain a low speed.

Box 3.1. A national vision for safer, healthier, more sustainable and livable cities in Spain

In May 2021, the Ministry of Interior in Spain promulgated a measure that sets speeds throughout Spanish cities, aiming to improve road safety, reduce traffic crashes, and create more livable urban environments. The decision came after a surge in urban crashes caused many fatalities and serious injuries. It supports the national Road Safety Strategy Seguridad Vial 2030, designed to consolidate a culture of safe mobility, advance Spain towards the goal zero traffic fatalities and serious injuries by 2050, and contribute to other mobility policy objectives.

The Ministry's road safety policy is aligned with the Safe System approach that emphasizes the risk caused by speeds over 30 kph, and the 2020 Stockholm Declaration. It sets speed limits on urban roads and crossings as follows:

- 20 kph on roads that have a single roadway and sidewalk platform
- 30 kph on single lane roads in each direction of travel
- 50 kph on roads with two or more lanes in each direction of travel

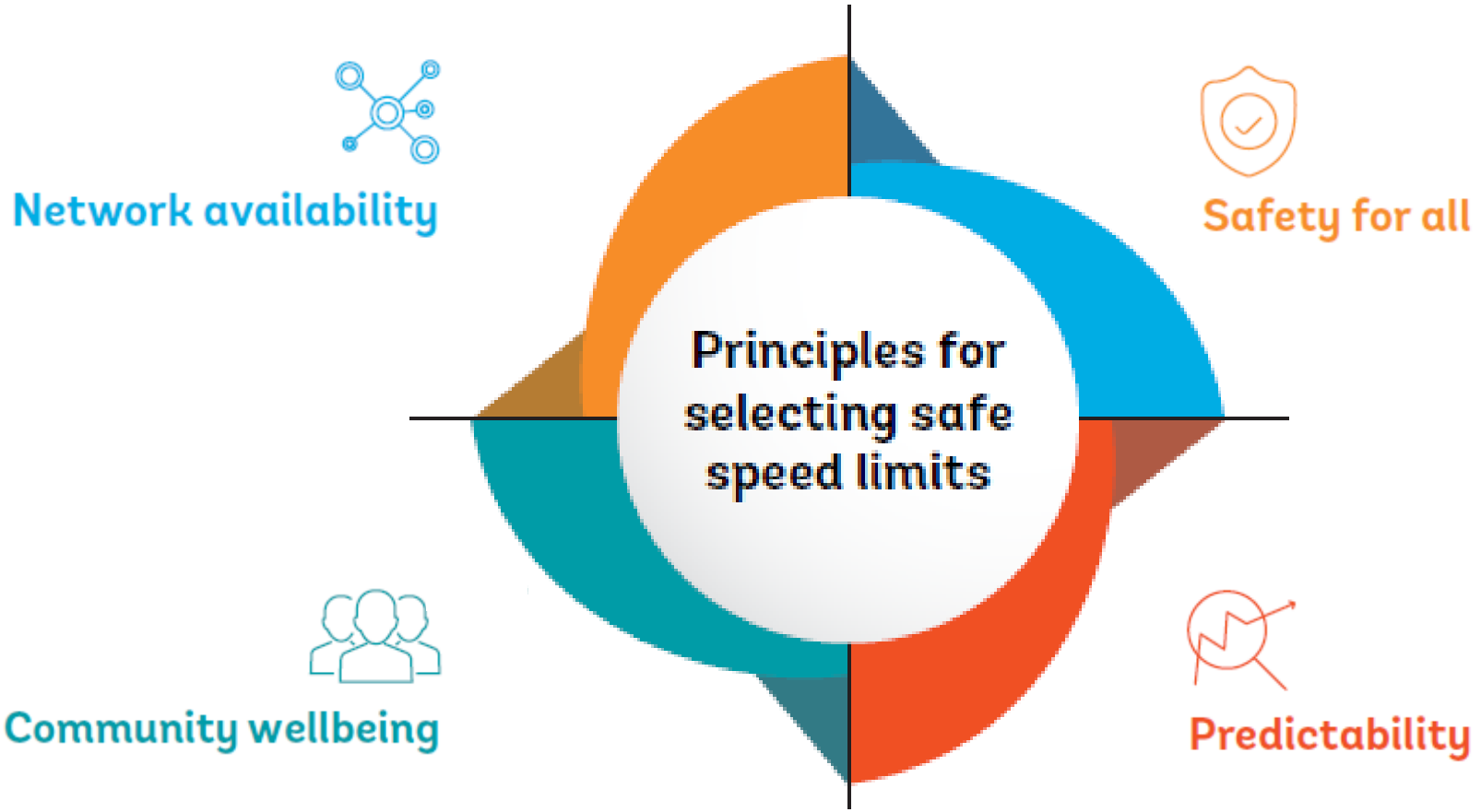
Popular speed myths busted

MYTH: THE PUBLIC / COMMUNITIES WANT HIGHER SPEEDS

- ESRA survey – 35,000 respondents across 32 countries (see www.esranet.eu)
- Less than 20% find it acceptable to drive faster than the speed limit; less than 10% in built up areas
- Most people believe that speed is a cause of road crashes (up to 80%)
- Up to 90% suggested traffic rules should be stricter
- Do a local survey to help convince!

Figure: Speed bumps made by local people on Wendogenet Road, Ethiopia (Source: WRI, Ethiopia)

Selecting safe speed limits: Key principles



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Selecting safe speed limits: Survivable speeds

Type of road/road section	Safe System speed
Roads/road sections with possible crashes between cars and vulnerable road users	Max. 30 km/h
Roads/road sections with intersections with possible side-on crashes between cars	Max. 50 km/h
Roads/road sections with possible frontal (head-on) crashes between cars	Max. 70 km/h
Roads/road sections with no likelihood of side-on or frontal crashes between cars	Max. 100 km/h

max. 30

max. 50

max. 70

Selecting safe speed limits: The R4L framework

Why a new framework for selecting safe speed limits?

- What we have:
  - Most countries use a traditional road classification system (road hierarchy) as a basis
  - Road classification systems were developed at a time where the main focus was on motorization and on fast and efficient motorized transport, neglecting the safety of the most vulnerable road users
- What we need:
  - Comprehensive classification system for speed limit setting, that matches road use, speed limits, and road design elements (example: the Netherlands)
  - Implementing such a system requires a vision, a long implementation period, and adequate funding as protection for all types of road users should be provided through adequate design on all types of roads
- And in the meantime????

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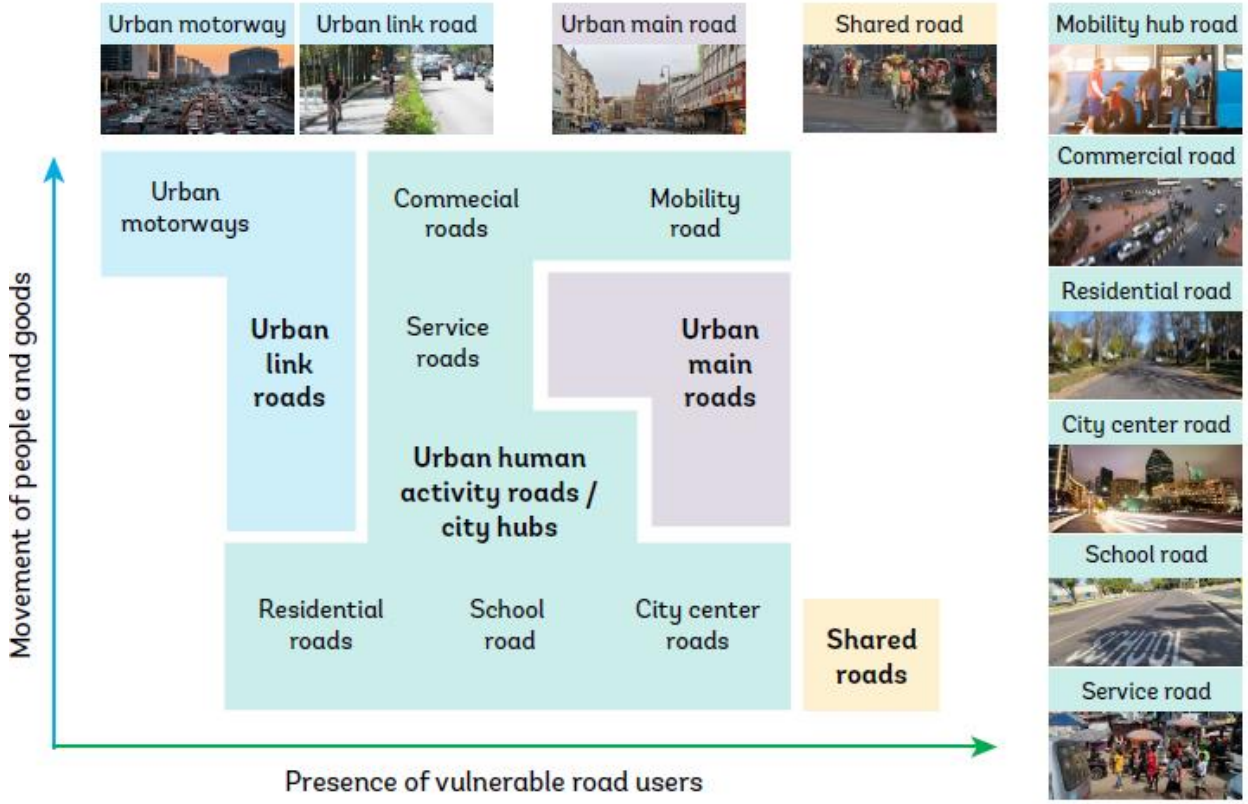
Selecting safe speed limits: The R4L framework



The Roads for Life framework – Speed limits for urban roads

max. 10 km/h on shared roads

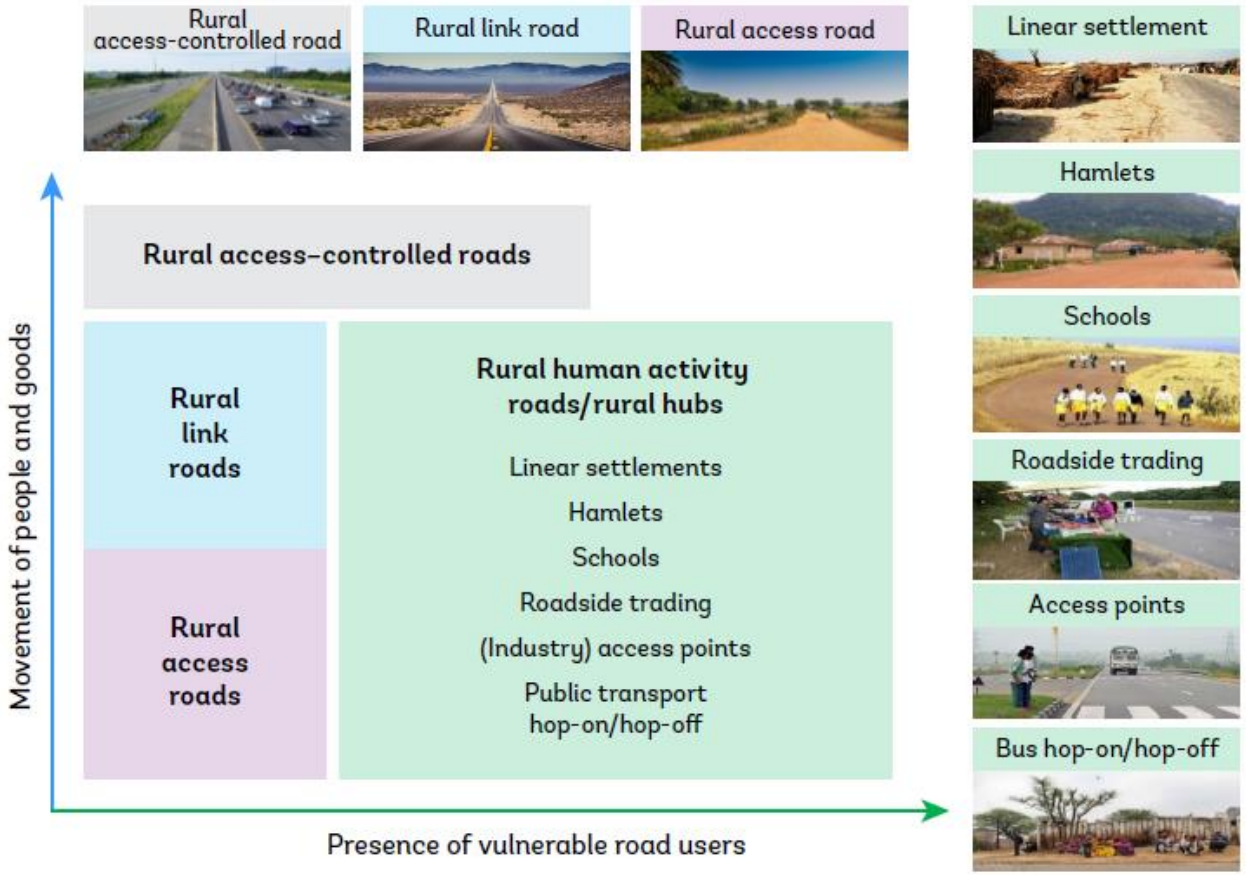
max. 30 km/h on urban human activity roads

max. 30-50 km/h on urban main roads

max. 50 km/h on urban link roads

max. 80 km/h on urban motorways

Selecting safe speed limits: The R4L framework



The Roads for Life framework – Speed limits for rural roads

max. 30 km/h in Rural human activity areas

max. 50-70 km/h on Rural access roads

max. 70-80 km/h in Rural link roads

max. 100 km/h in Rural access controlled

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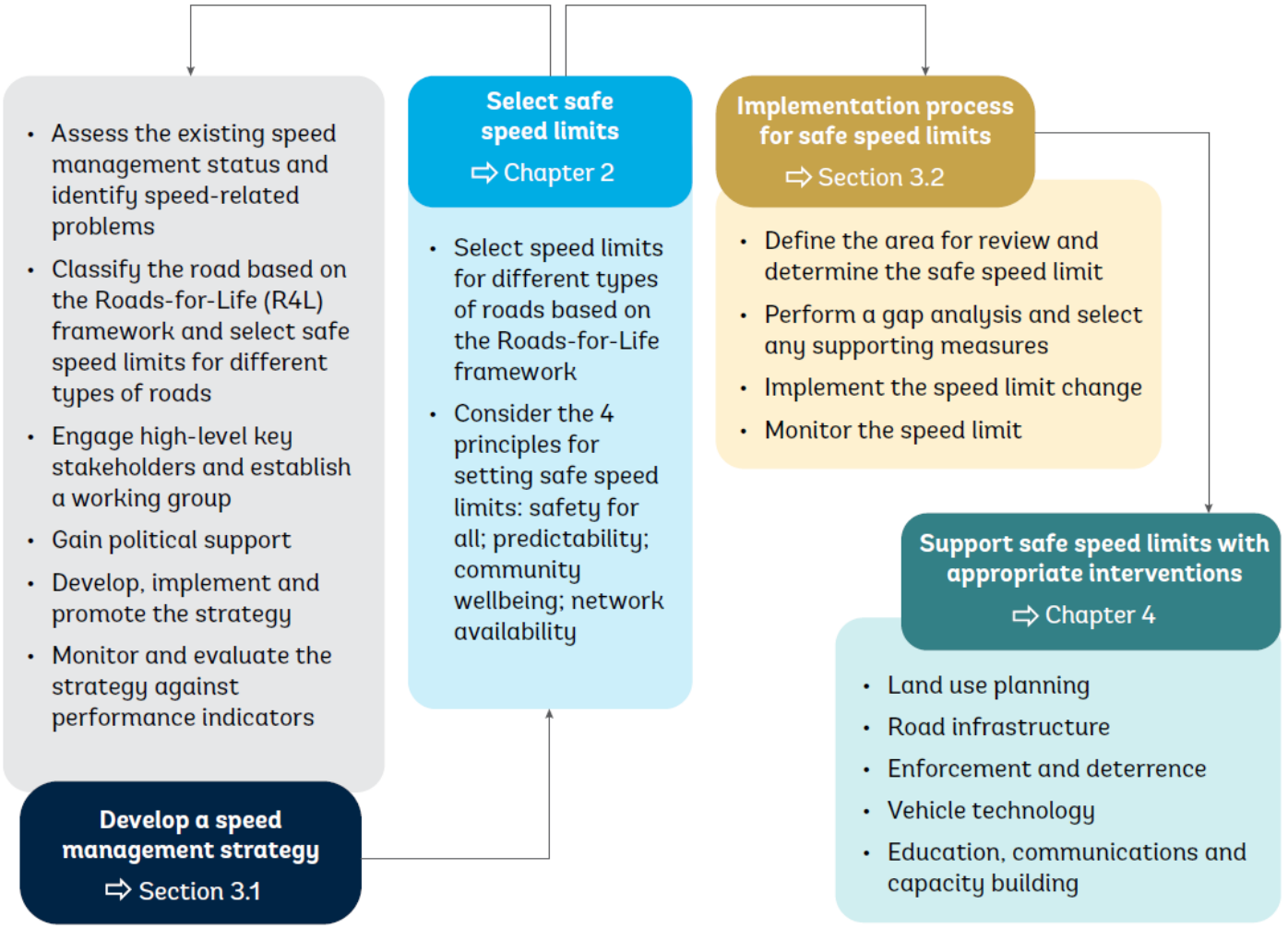
How to realize Safe Speeds?

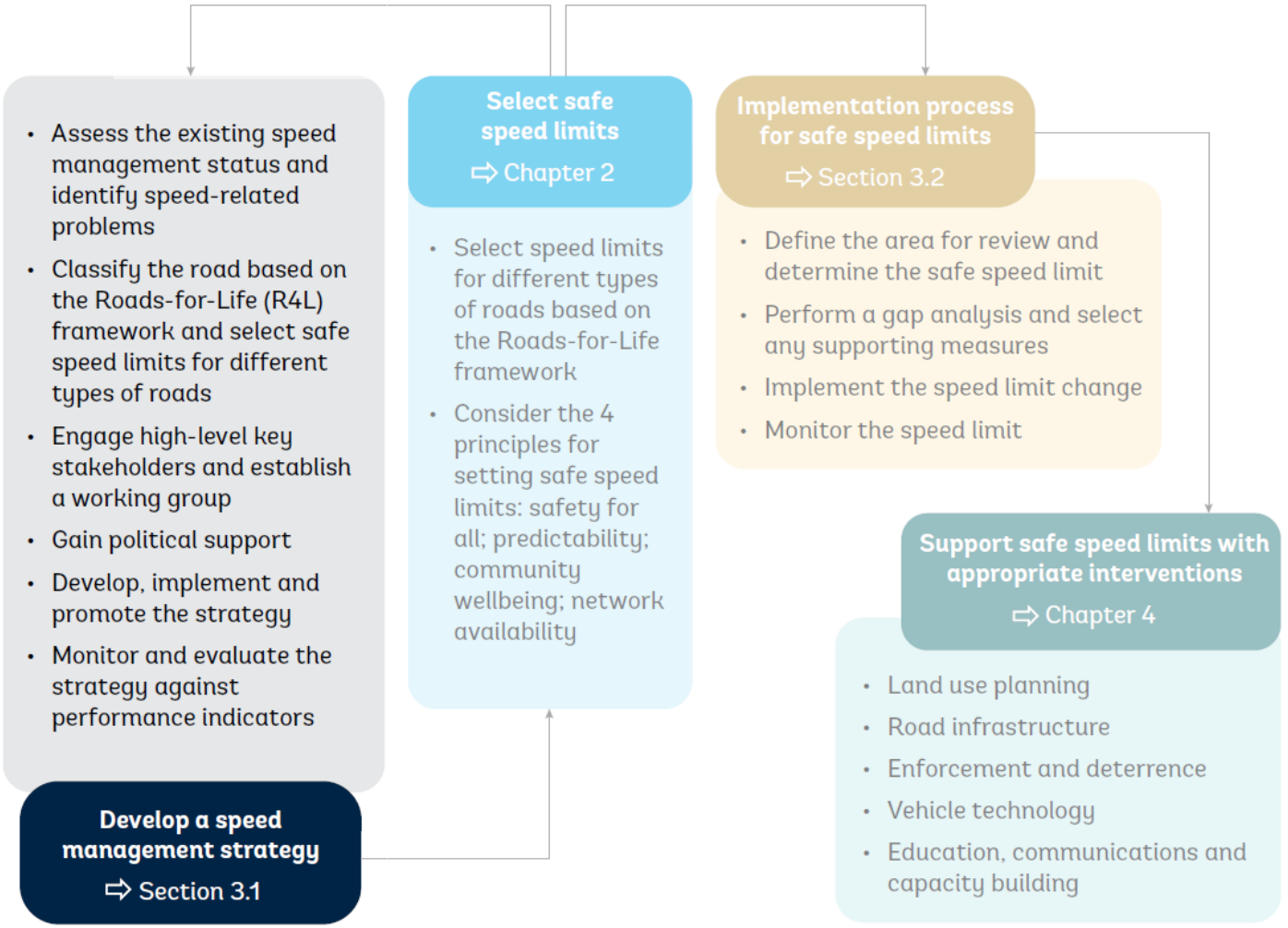
It takes more than speed signs. The key is

1. Using an evidence-based strategic approach
2. Supporting safe speed limits with effective speed management interventions

What is an ideal speed management process?

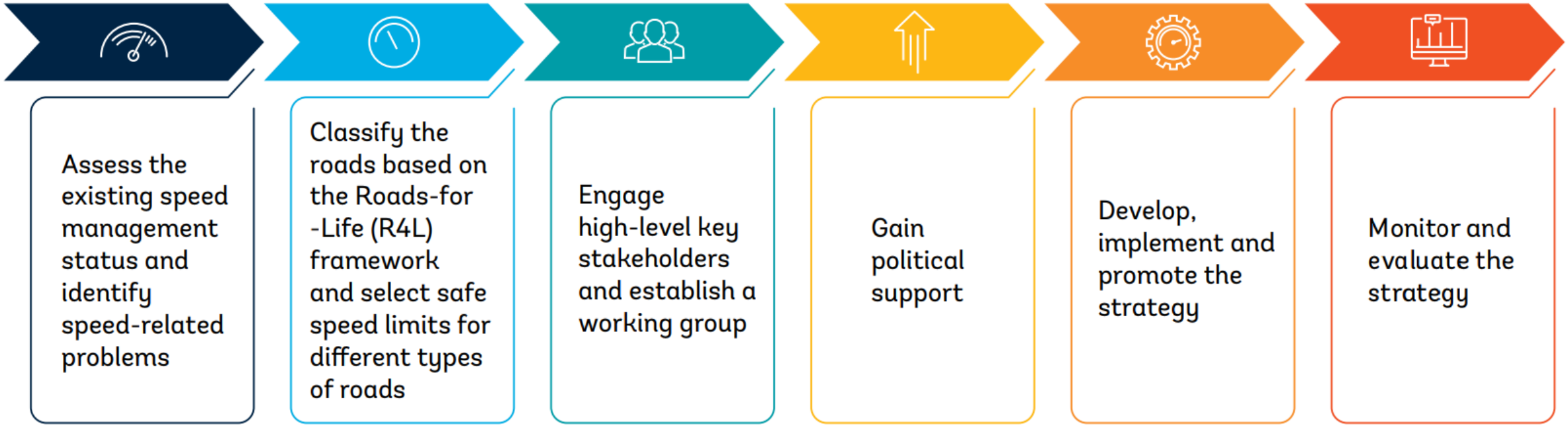


Implementing safe speeds: Speed strategy



Implementing safe speeds: Speed strategy

Develop and implement a speed management strategy to <u>systematically tackle the speed problem in your country</u>

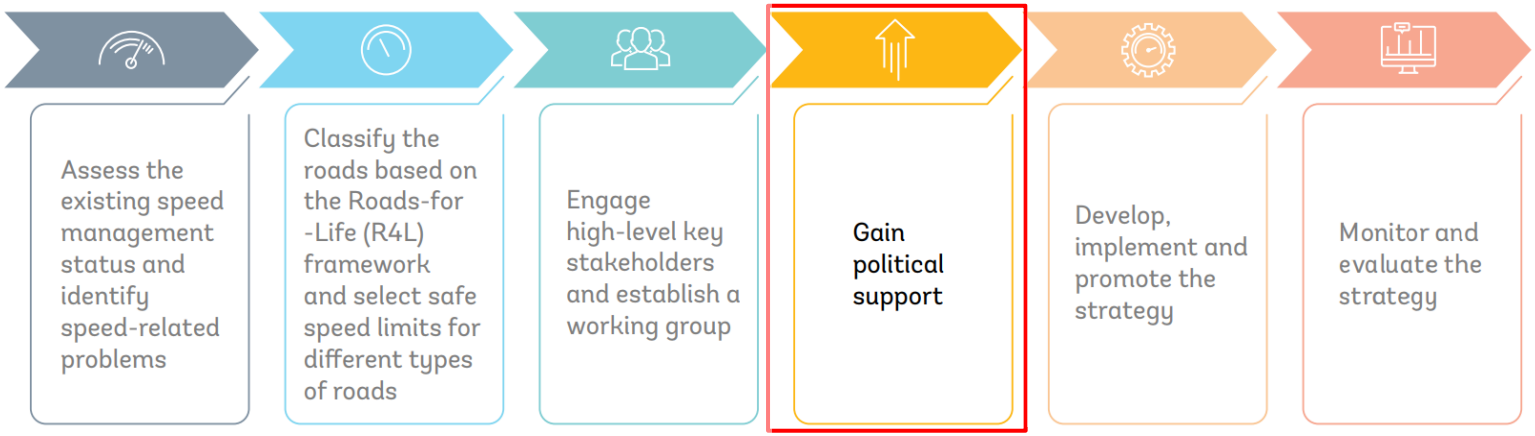


Implementing safe speeds: Speed strategy

Speed management can be a controversial topic that makes it very sensitive politically.

Tools to gain political support:

- Providing data and evidence
- Implementing pilot projects
- Engaging key stakeholders
- Sharing community input and first-hand experiences



Speed management through 3 mayors

Mayor

Petro

Peñalosa

López

2015	BIGRS kicked off in Bogotá
2016	Vision Zero adopted, Training workshops were delivered to journalists and decision makers to highlight why speed matters
2017	Ave. Boyaca: Police enforcement pilot project on critical locations
2018	Speed management program launches
2019	SMP is published to lower speed limit from 60 to 50 km/h
	50 km/h speed limit to 5 corridors then to 10
2020	50 km/h speed limit is implemented city wide
	90 speed cameras were implemented on key locations

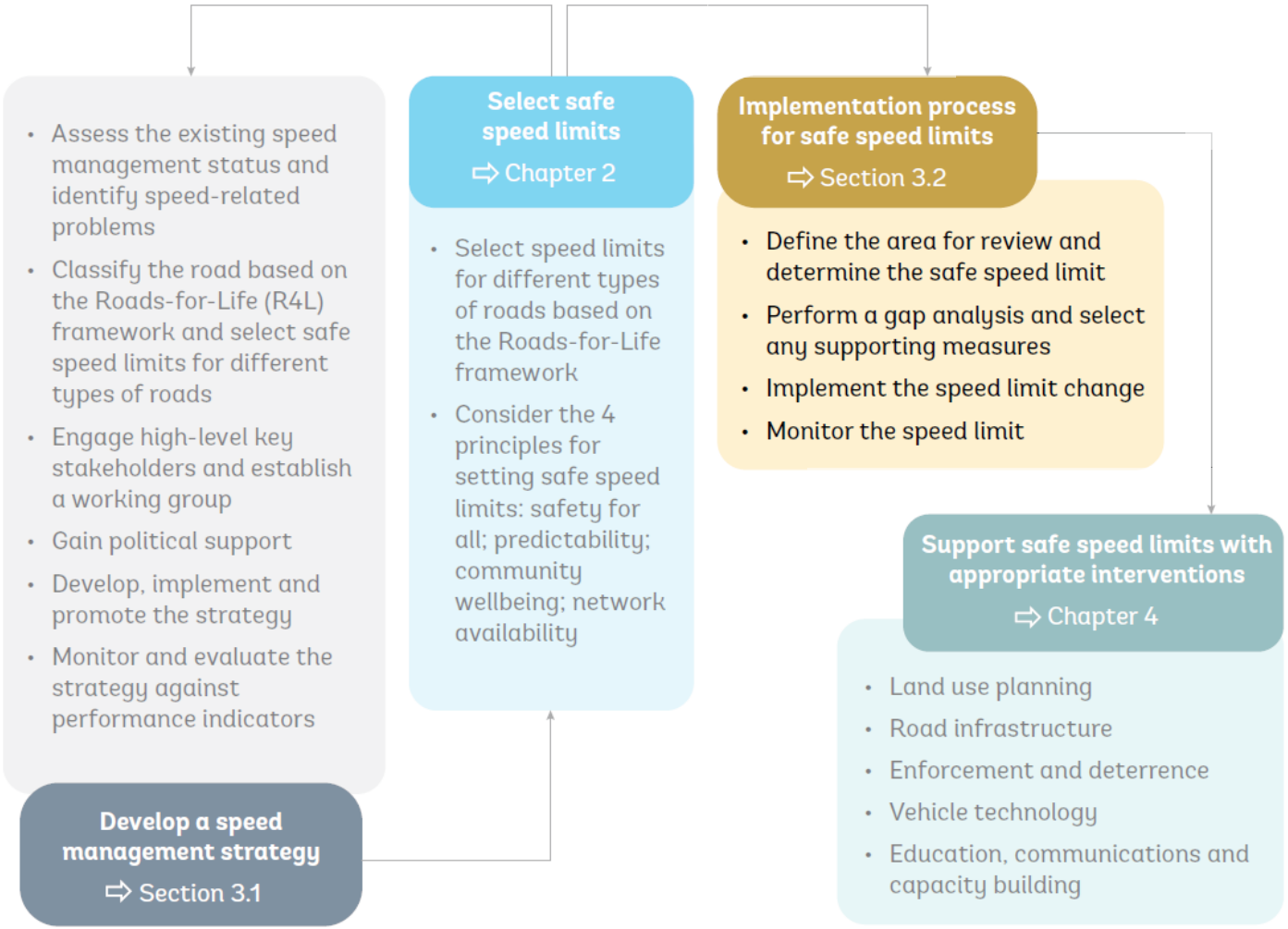
VISIÓN CERO BOG

~600 annual Fatalities in last decade

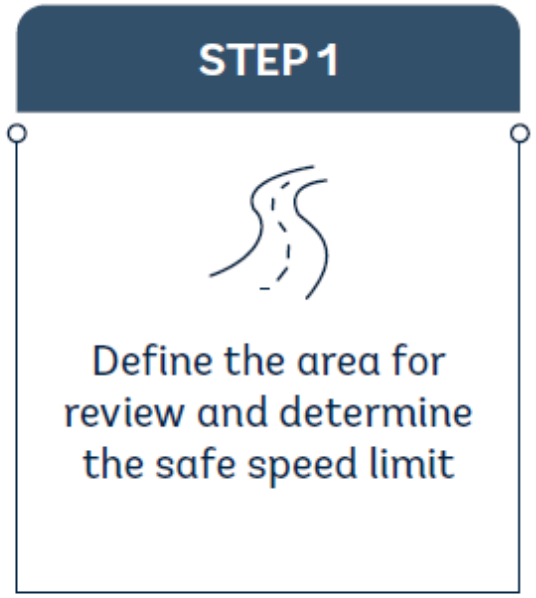
95% are VRUs 72% on arterial roads

21% decrease in fatalities US$12.6 million in savings

Implementing safe speeds: Setting speed limits



Implementing safe speeds: Setting speed limits



All roads/road sections subject to the speed limit review, a recommended “risk assessed” speed limit is assigned.

When the review is aimed at a whole city, the process can move faster by focusing on higher risk areas. Complex roads, may require further review. In areas such as the city center, residential areas and school zones, speeds can be set at 30 kph.

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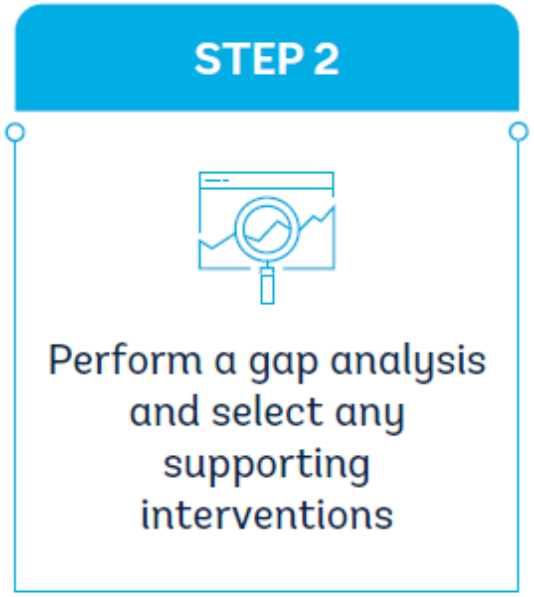
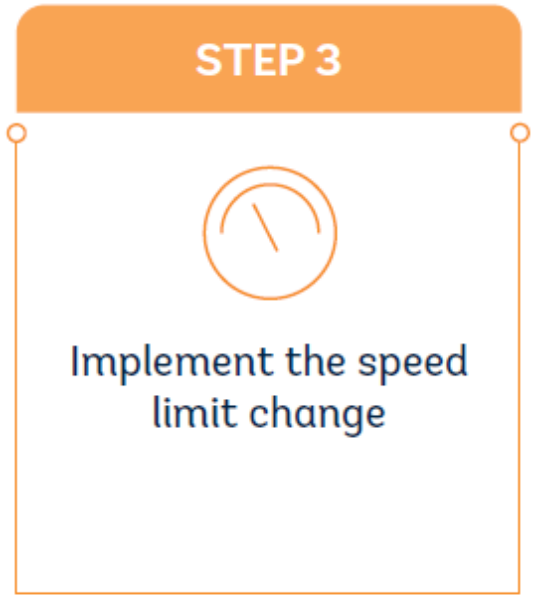
Implementing safe speeds: Setting speed limits



This step requires comparing recommended risk assessed speed limit to current speeds, posted and operating.

Where road users exceed the recommended risk assessed speed limit (mean speed is 5 kph or more higher) a speed limit may need to be supported by infrastructure or enforcement.

Implementing safe speeds: Setting speed limits



Once new speed limits are agreed on, there are several processes to ensure successful implementation.

- Considering legal obligations
- Updating speed limit registers
- Informing the public
- Installing signs
- Providing supporting infrastructure, enforcement, and communication activity where required

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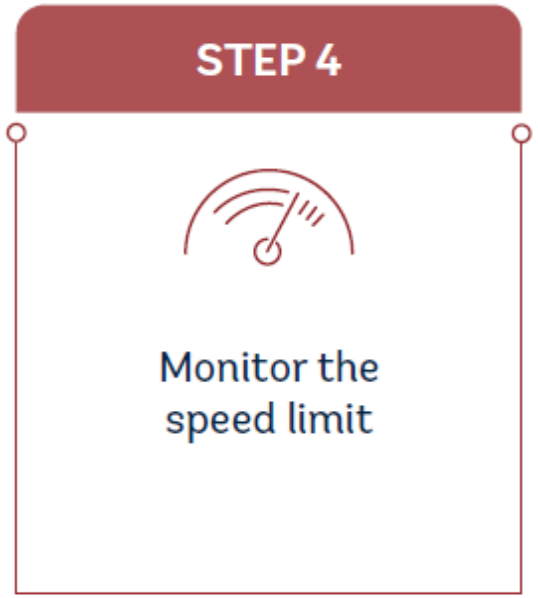
Implementing safe speeds: Setting speed limits



Throughout this process, a monitoring process should be in place.

- Speed limit changes are constantly monitored.
- Indicators and targets are defined.
- Data is collected to compare current conditions to the baseline.
- Changes are made and adaptations implemented where necessary.

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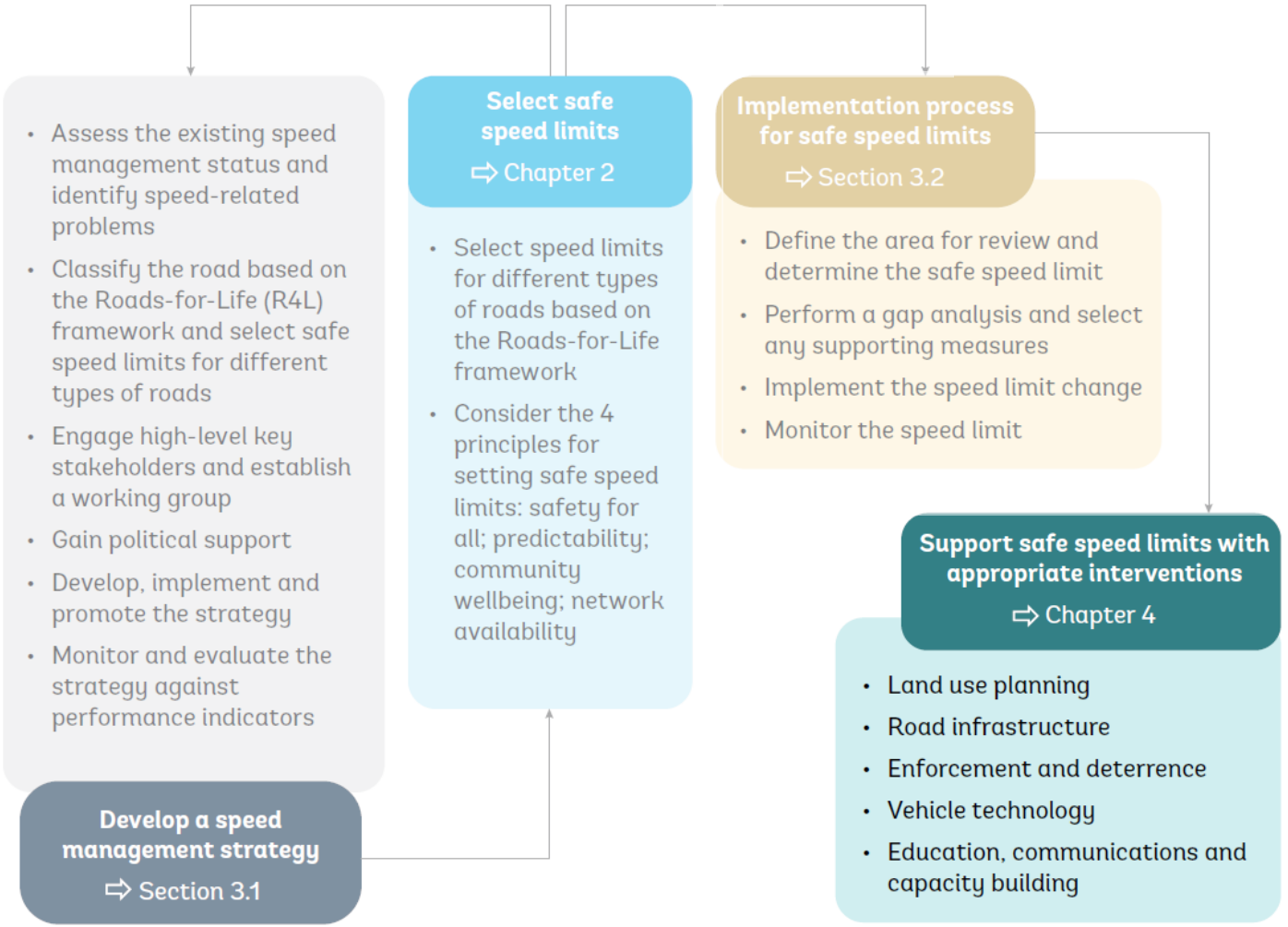
Supporting safe speeds



Supporting safe speeds: Effective interventions

I. Consider speed in all land-use planning and multimodal transport activities

II. Establish speed limits appropriate to the road users

III. Build or modify roads to include features that influence speed

IV. Enforce speed limits

V. Use in-vehicle technologies

VI. Raise awareness about the dangers of speeding

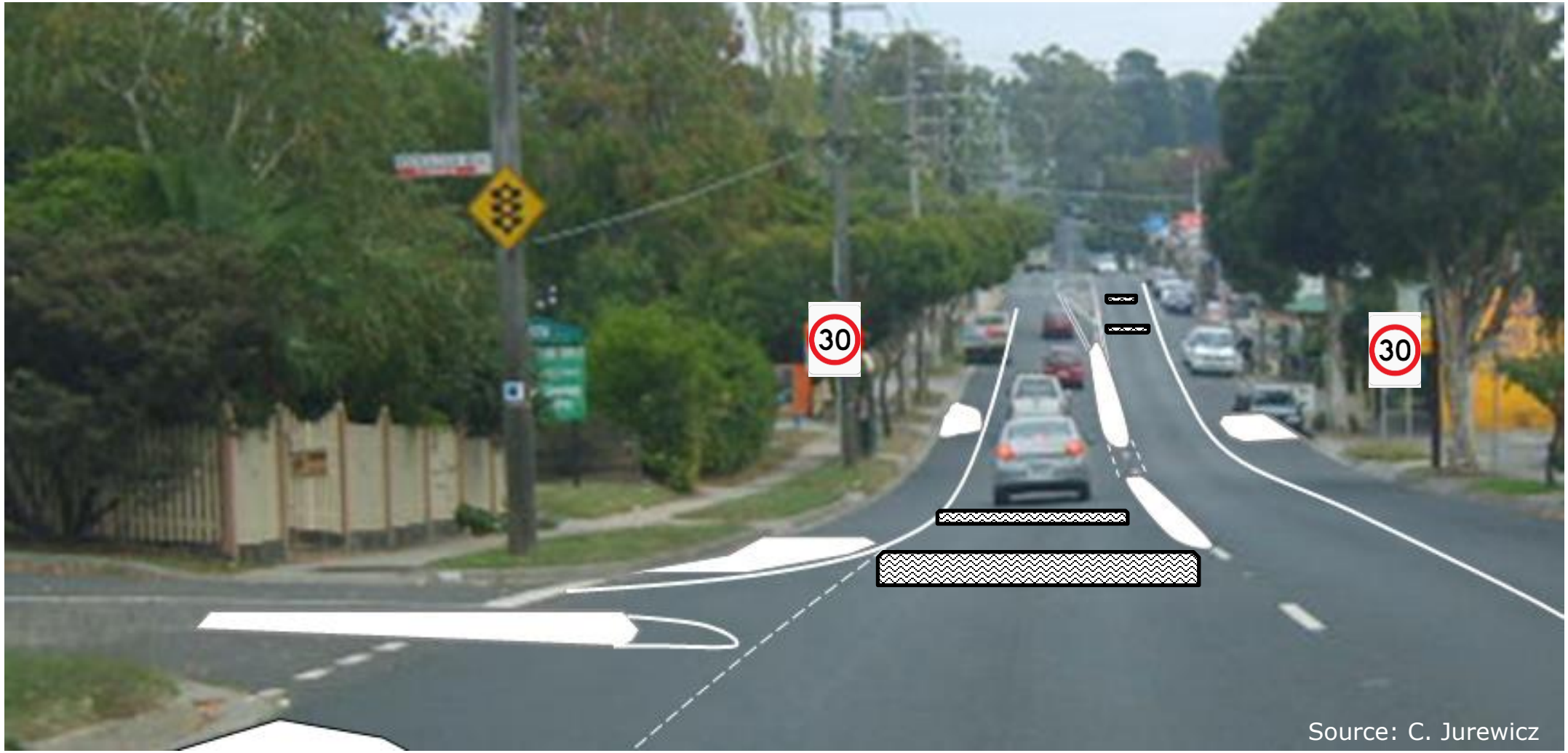
This is often the real game changer

Supporting safe speeds: Effective interventions

Supporting safe speeds: Effective interventions

Source: C. Jurewicz

Supporting safe speeds: Effective interventions

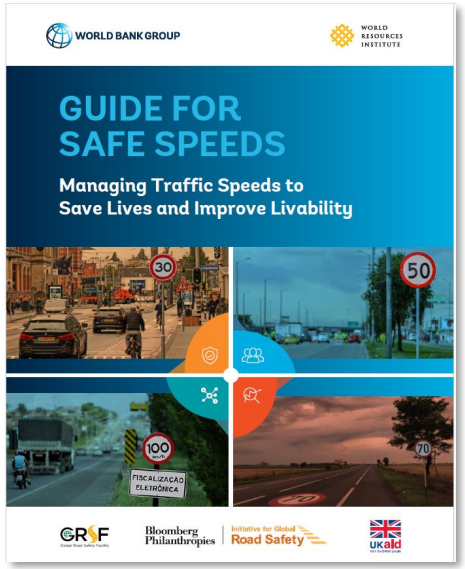


Source: C. Jurewicz

Supporting safe speeds: Effective interventions

Not sure which intervention to choose?

➔ Check out Appendix A of the Guide, which has them all and shows you what works and what doesn't



Infrastructure and Road Design Interventions

Intervention and brief description	Image	Speed environment where interventions can be applied: From max. 10 to max. 30	From max. 40 to max. 70	From max. 80 to max. 100
Vertical deflection				
Raised pedestrian crossings The pedestrian walking surface is raised above the surface of the roadway, providing a safer crossing. This intervention reduces vehicle speeds as well as increasing the visibility of people crossing. It can be used in conjunction with flashing lights where appropriate.		✓	○	X
Speed humps (also: speed bumps) Speed humps are raised sections of pavement with a parabolic or flat top that extends across the road to maintain the intended speed and cause abrupt discomfort when traversed at higher speeds. These are the most used traffic calming devices. They are made of either concrete or asphalt and are relatively inexpensive to maintain. The dimensions of the speed humps and the distance between them must be adjusted to the desired speed.		✓	○	X
Speed tables Speed tables are larger than speed humps or speed cushions. They may be designed in conjunction with curb extensions to narrow the roadway, creating a shorter crossing for pedestrians.		✓	X	X

Supporting safe speeds: Effective interventions

Our top infrastructure interventions:

- Speed limit signs
- Gateway treatments
- Traffic calming - humps
- Raised pedestrian crossings
- Road narrowing – including intersections

Try them and love them as much as we do ☺

Supporting safe speeds: Effective interventions

If it is not infrastructure interventions:

- Manual enforcement
- Automated enforcement

- Intelligent speed adaptation
- Vehicle speed limiters
- Monitoring for trucks / buses

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Thank you very much for your kind attention.

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