# SELIVES

# INFRASTRUCTURE DESIGN.& IMPROVEMENT

Every year an estimated 1.25 million people die because of road traffic crashes, and millions more are injured. The World Health Organization has synthesized evidence-based measures that can significantly reduce road traffic fatalities and injuries.

The result is **Save LIVES**: a package of 6 strategies to reduce injuries and deaths from road traffic crashes.



The components of the **Save LIVES** package are: **S**peed management, **L**eadership, **I**nfrastructure design, **V**ehicle safety standards, **E**nforcement of traffic laws and **S**urvival after a crash.

This flyer summarizes **INFRASTRUCTURE DESIGN** & **IMPROVEMENT** – one of the six strategies of the Save LIVES road safety package.

#### IMPROVING INFRASTRUCTURE

Traditionally, road infrastructure has focused mainly on motorized transport - often at the expense of safety for pedestrians, cyclists and motorcyclists. Today most countries, while promoting walking and cycling, have not developed infrastructure that reduces the risk of road traffic injuries, and pedestrians and cyclists are forced to share the road with high-speed vehicles.

#### **SOLUTIONS**

Governments should prioritize updating road design standards and ensure that new roads are planned, designed and operated according to safety standards. Among these interventions government should:

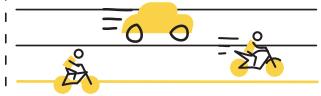
#### Provide safe infrastructure for all road users

- Build sidewalks and install safe signalized crossings indicating pedestrian right of way.
- Create pedestrian kerb build-outs, refuge islands and medians to reduce pedestrian exposure to vehicles when crossing the street.
- Introduce accessible and safe pedestrian overpasses and underpasses in risky areas.



### Put in place bicycle and motorcycle lanes

- Plan and develop a network of continuous and safe routes for cyclists and motorcyclists and manage any interaction with other road users in a safe manner.
- Plan for facilities both on the road and on the pavement according to safe design principles that are appropriate to the speed and function of the road.



### Make the sides of the roads safer

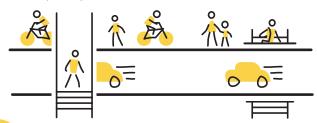
- Create rumble strips and other warnings about curves to alert drivers they are leaving the road.
- Put in place emergency lanes to help drivers recover control when they leave the road.
- Build clear zones, frangible poles and crash barriers to reduce crash severity when drivers leave the road.





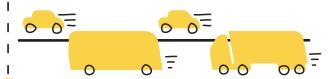
## Design safer intersections

- Install roundabouts that reduce approach speed and make the angle of any possible collisions less likely to cause serious injury.
- Build overpasses and underpasses in places with a high volume of traffic.
- Build signalized intersections to separate traffic and potential conflicts.
- Provide turning lanes, raised platform intersections and priority control at uncontrolled intersections.



#### Separate access roads from through-roads

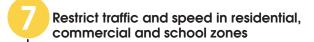
• Separate through traffic and freight from local neighbourhood access and commercial centres.



## Prioritize people by putting in place vehicle-free zones

- Develop and implement policies that recognize pedestrians and cyclists as legitimate road users.
- Set and enforce traffic laws ensuring the safety of pedestrians and cyclists.
- Pay attention to the specific needs of people with disabilities, children and the elderly.





- Put in place traffic calming measures such as road narrowing, raised platforms and speed bumps and rumble strips.
- Install warning signs that alert drivers who exceed the speed limit.
  - Enforce low speed limits in these areas.



## Provide better, safer routes for public transport

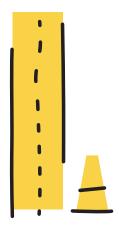
- Take measures to improve public transport services, for example, by providing services closer to residential areas and improving route design.
- Improve public transport safety to encourage its use.



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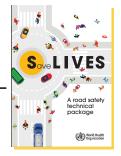
#### BENEFITS

Infrastructure design and improvement reduces road traffic injuries and fatalities, lowers emissions - when integrated into speed management
I strategies - promotes walking and cycling, and facilitates the shift from private car use to public transport. Improving the top 10% highest-risk roads in each country over 20 years can prevent millions of deaths and serious injuries.



## Does infrastructure design in your country include safety standards?

Assess your country's infrastructure design with the tool provided in the appendix of the Save LIVES technical package.



The 2030 Agenda for Sustainable Development includes a target to reduce road traffic deaths and injuries by 50% by 2020. This is an ambitious goal that can be achieved only if we work collaboratively to build a culture of road safety.



