



# Pedestrian Safety Interventions

Fact Sheet

*Working together to prevent road trauma*




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Pedestrians form the largest, single road user group because almost everyone is a pedestrian at some point.<sup>1</sup> Reducing the risks of urban traffic not only saves lives, it enables sustainable forms of transport which reduce pollution, cut emissions, fight congestion and improve the physical and mental health of citizens<sup>1</sup>

### Background

Pedestrians form the largest, single road user group because almost everyone is a pedestrian at some point.<sup>1</sup> Safer streets are crucial for making a city more liveable. If streets remain dangerous, efforts to promote walking and cycling are undermined. Reducing the risks of urban traffic not only saves lives, it enables sustainable forms of transport which reduce pollution, cut emissions, fight congestion and improve the physical and mental health of citizens<sup>2</sup> The default position should always be to deliver Safe System performing infrastructure from the start.<sup>3</sup>

### Vision Zero

Vision Zero is the Swedish approach to road safety thinking. It can be summarised in one sentence:

**No loss of life on our roads is acceptable.**

Vision Zero was first adopted by Sweden in 1997 when the Swedish parliament passed a Road Traffic Safety Bill that wrote Vision Zero into law. The Bill sets a definitive objective of no deaths or serious injuries on Sweden's roads. (Ministry of Transport and Communications, 1997)<sup>4</sup>. To achieve zero, we must change our mindset to set safety as a precondition for mobility. Transport systems are traditionally designed for maximum capacity and mobility – not safety! The responsibility for safe driving is also placed on the shoulders of the road user, not on the design of the traffic system. Vision zero takes the opposite approach by focusing on the design and management of our traffic system.<sup>4</sup>

**ZERO** is achievable.

### Safe System

The safe system seeks to create forgiveness in the system, so that when a crash does occur it doesn't have to result in serious harm.<sup>5</sup> The Safe System Approach focuses on the design and management of our road traffic system. It acknowledges that people can make mistakes that can lead to crashes. A safe system accommodates human error and the vulnerability of the human body.<sup>5</sup>

Within a safe system the interactions between behaviours, vehicles and speed with road and roadside infrastructure can be managed to protect road users.

Safe System Principles:<sup>5</sup>

- Humans are fallible – they make mistakes that can lead to crashes
- The human body has a limited physical ability to tolerate crash forces before harm occurs
- A shared responsibility exists among those who design, build, manage and use roads and vehicles and provide post-crash care to prevent crashes resulting in serious injury or death.

All parts of the system must be strengthened to multiply their effects; so, if one part fails, road users are still protected.

### Pedestrian Risk Factors

Pedestrians and cyclists are vulnerable in the road environment where motor vehicles are allowed to dominate environments without full consideration for all users.<sup>3</sup>

People walking and cycling are at greater risk of serious injury or death in road crashes due to:

- Having limited protection if involved in a crash. Unlike those in a motor vehicle, vulnerable road users will take all the force straight in their bodies.
- The human body not being designed to withstand significant violent forces. It can only take so much before serious injury occurs.
- The transport system having largely been designed for maximum capacity and mobility - which involves inherent hazards for people walking and cycling.

### Pedestrian Protective Factors

There are many examples where roads or pedestrian facilities have been upgraded or treated to enable pedestrians to move around more easily.

Outlined below are some initiatives that will help improve safety for pedestrians:

- Vehicle speeds – as the human body can only tolerate limited force before injury occurs, the faster a vehicle is travelling the more force is produced in a crash. Lowering speed limits in pedestrian areas to 30km/hr complies with evidence that at this speed, more than 90% of pedestrians involved in a crash with a motor vehicle would survive.
- Increase pedestrian facilities – adequate land use planning and road design which incorporates infrastructure to provide safe pedestrian access and inclusion such as footpaths or pedestrian access at intersections.
- Visibility of pedestrians / vehicles – increasing mechanisms which would improve visibility of pedestrians. These can include road lighting, vehicle lights, and pedestrians wearing dark clothing.
- Enforcement – of traffic laws, unsafe driving, driver distraction, driver fatigue, pedestrian distraction, failure of driver to give way to pedestrians, vehicle design (bull bars, high rigid fronts etc.).

### Countermeasures

Some examples of countermeasures implemented by Local Governments to help improve pedestrian safety and encourage more pedestrian friendly and liveable neighbourhoods include:

- Self-explaining roads – City of Stirling
- Lower area-wide speed limits – City of Vincent
- Lower speed limits in high pedestrian areas – main streets or around shopping precincts
- Bicycle Boulevards

- Traffic calming – tactical urbanism – cafes using street lanes or parking as outdoor seating
- Shared spaces – where pedestrians have priority.



### Worldwide Examples

Identifying high pedestrian zones and implementing traffic calming which gives pedestrians the priority is key to ensuring the space feels like a pedestrian priority area. Many areas have increased footpath widths, created wide medians and narrowed the road area - providing safer pedestrian crossings throughout a length of an activity area and offering a sense of a slow speed environment.



The above photo shows use of wide medians. In addition to providing a safe waiting spot between cross directional traffic, it allows bicycle parking, street trees, space for public seating and other features to enhance the surrounding area.

*Photo source: Austroads Integrating Safe System with Movement and Place for Vulnerable Road Users.*



An example of a shared zone where pedestrians have priority include the above shared crossing points at Sutton Street and Redcliffe Parade, Redcliffe, Queensland. Motorists must give way to pedestrians, meanwhile pedestrians must not step in front of vehicles already in the shared zones. Fines apply to both vehicle and pedestrians for not complying.

*Photo source: Google Maps Street View, 18 September 2020.*



Liverpool Street, between Elizabeth and Murray Streets, Hobart, shows that pedestrian activity has been prioritised in recognition of the high place value. The street is lined on both sides with shops, cafes, financial institutions and other business which attract high levels of pedestrians and vehicular activity. Priority has been given to pedestrians and cyclists followed by buses, access for general traffic and delivery, emergency and service vehicles.<sup>3</sup>

*Photo source: Google Maps Street View, 18 September 2020.*

In Buenos Aires, the City is recovering public space for pedestrians with a Sustainable Mobility Plan (SMP) with goals to strengthen the relationship between transport and urban development, enhance accessibility, and prioritises public and non-motorised transport.

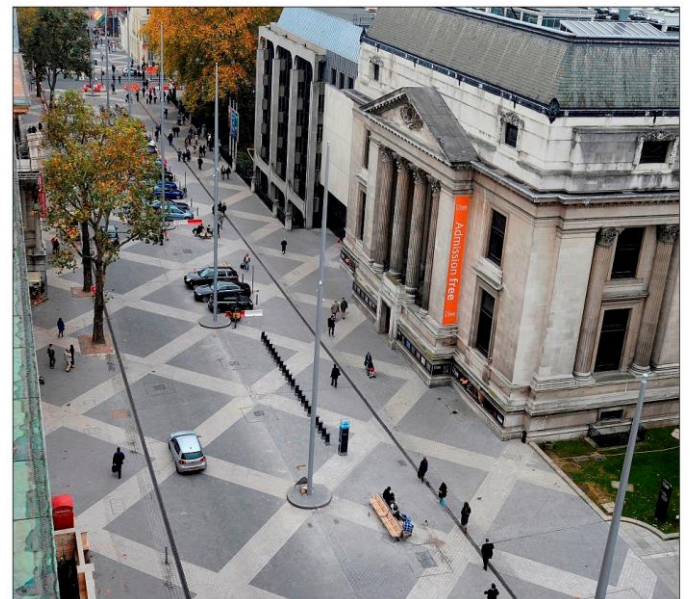
The intervention offers more street space to pedestrians and cyclists in the city centre - restricting car use in the area, with smaller side streets being transformed into shared space.<sup>2</sup>



Source: Gobierno de la Ciudad de Buenos Aires (GCBA) (2015).

*Photo source: International Transport Forum, Best Practice for Urban Road Safety Case Studies.*

London is one of the cities at the forefront of planning to eliminate all traffic deaths and injuries. The City has established ambitious targets for the coming years, placing road safety high on their agenda.<sup>2</sup> The City has a Vision Zero approach to reduce the number of people killed or seriously injured on London's streets by 2041 to zero.<sup>2</sup>



The above example, Exhibition Road in the heart of London, has removed all signage, lights, kerbing and pavements to create an environment where drivers take more care when travelling through the area.<sup>6</sup>

**Contacts Us**

**Email** [roadwise@walga.asn.au](mailto:roadwise@walga.asn.au)

**Website** [www.roadwise.asn.au](http://www.roadwise.asn.au)

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<sup>1</sup> Road Safety Commission, *The Safety of People Walking and Riding Pedestrians*, 2018.  
<https://www.rsc.wa.gov.au/RSC/media/Documents/Resources/Pedestrians-Information-Sheet.pdf>. Sourced September 2020.

<sup>2</sup> International Transport Forum, *Best Practice for Urban Road Safety Case Studies*, <https://www.itf-oecd.org/sites/default/files/docs/best-practice-urban-road-safety.pdf>. Sourced 25 September 2020

<sup>3</sup> Austroads, *Integrating Safe System with Movement and Place for Vulnerable Road Users*, 2020.  
<https://austroads.com.au/publications/road-safety/ap-r611->

[20/media/AP-R611-20-Integrating-Safe-Systems-with-Movement-and-Place-for-Vulnerable-Road-Users.pdf](https://austroads.com.au/publications/road-safety/ap-r611-20/media/AP-R611-20-Integrating-Safe-Systems-with-Movement-and-Place-for-Vulnerable-Road-Users.pdf). Sourced September 2020

<sup>4</sup> RoadWise, *Towards Zero Fact Sheet*, 2019. Sourced September 2020

<sup>5</sup> RoadWise, *The Safe System Approach, Fact Sheet*, 2019. Sourced September 2020

<sup>6</sup> Daily Mail, *Britain's Longest Clutter Free Street Unveiled To Make Things Safer*, <https://www.dailymail.co.uk/news/article-2094939/Britains-longest-clutter-free-street-unveiled-make-things-SAFER.html>, Source September 2020.