

Road Safety

The City of Perth's streets reflect the pressures of a busy, compact city that supports high levels of walking, cycling and vehicle movement. Strong activity in the city centre increases the risk of conflict, particularly for pedestrians and cyclists. Crashes are concentrated at key intersections and along major corridors. Vulnerable road users are overrepresented in serious injuries and fatalities. Responding to this requires a coordinated approach to safer street design, including lower speeds to create a safer, more liveable and people-focused place.

Context

The City of Perth has the state's highest concentration of walking, cycling and public transport use, and a large daytime population drawn by employment, education and events. This intensifies road safety challenges and requires City-specific responses. The City is made up of streets that serve a variety of functions, including moving people and serving as public spaces.

There is a need to improve safety for people walking, cycling, and using public transport. By adopting a Safe Systems approach, aligning with national and state strategies and the global Vision Zero initiative, we can enhance safety for all and ensure a safe, accessible and liveable capital city.

Quick Facts

Analysis of crash data between 2019 and 2023 showed the following:

- A total of 11,242 people were involved in 6,129 crashes.
- Eight crashes resulted in fatalities and 1,625 in injuries requiring hospital admission or medical attention.
- Pedestrians and cyclists are over-represented in serious crashes – although involved in only 6% of crashes, they accounted for more than half of the fatalities, almost a third of hospital admissions. Motorcycles were similarly over-represented in fatal and casualty crashes.
- Crashes involving pedestrians and cyclists tend to be focused within the city centre, where high volumes of people and vehicles converge, particularly William Street, Wellington Street and Beaufort Street/Barrack Street.
- Excluding the Mitchell and Graham Farmer Freeways, 56% of crashes occurred at intersections. The intersections with the highest crash rates tend to coincide with key entry points into the central city area, particularly Thomas Street, the Charles Street on-ramp and the Causeway access. William Street and Barrack Street also stand out, particularly at intersections with St Georges Terrace and The Esplanade.

Issues and Constraints

Some of the challenges that shape road safety in the City of Perth are as follows:

Safety of Vulnerable Road Users in an Inner City Context

The dense mix of pedestrians, cyclists and vehicles sharing compact streets creates a high-risk environment in the City, particularly for vulnerable road users.

Governance and Network Management

Most arterial roads are managed by Main Roads WA, along with signalised intersections, restricting the City's direct influence over design and operational decisions.

Design Standards and Guidance

Standards and guidelines tend to focus on suburban or highway contexts, making them less adaptable to the compact urban environment of the City.

Balancing Priority Between Modes of Transport

Balancing the needs of various trips requires careful trade-offs and stakeholder engagement, particularly when reallocating road space to improve safety.

Lessons from Other Cities

The City can draw on lessons and successes from other cities:

Safe Systems and Vision Zero

The concept of Vision Zero originated in Sweden and has been adopted in many cities globally. This paradigm shift focuses on reducing crash severity and designing forgiving road networks that account for human physical limits.

Safer Speed Limits and Intersection Improvements

Lowering speed limits to 30 km/h has been adopted by an increasing number of cities. Combined with intersection treatments and design measures that prioritise pedestrians and cyclists, this coordinated approach has been central to safety strategies in many European cities. It has helped Helsinki and Oslo achieve Vision Zero.

Opportunities

Key opportunities for the City include:

Embedding Safe System principles in City projects

The Safe System approach (illustrated in Figure 1) is led by the Western Australian Road Safety Commission, with their Road Safety Strategy 2020-2030 and Road Safety Action Plan. This includes a target to reduce the number of people killed or seriously injured by 50-70% by 2030. Meeting this target with the Safe Systems approach involves a shift in focus from the actions of individuals to improving system design. This includes the way streets, vehicles and policies work together to prevent serious harm.

“The Safe System (otherwise known as Vision Zero, Towards Zero, or Sustainable Safety) views human life and health as paramount to all else and should be the first and foremost consideration when designing a road network.”
– Towards Zero Foundation

Linking crash data findings to program priorities

Implementation of safe systems thinking at locations of high crash intensity or where vulnerable road users are overrepresented, is vital to achieving Vision Zero objectives. Funding for initiatives could be sought

under the Black Spot Program or other Local Government Support Programs such as the Low-Cost Urban Road Safety Program.

Design and Infrastructure Options

Safe Systems principles can be applied to street design elements to recognise the diverse needs and users within our public spaces. This includes influencing road user behaviour to achieve safer outcomes, such as slowing speeds to minimise the consequence of a crash. This will make urban environments feel safer for pedestrians and other vulnerable road users.

Behaviour and Culture

Education and awareness campaigns tailored for inner-city environments. Especially those focused on issues like pedestrian distraction, driver inattention, and safe speeds, can help highlight the shared responsibility of all road users and the benefits of safer, more walkable environments in high-activity areas.

Technology and Data

Enforcement technology such as speed and red-light cameras can be effective in reducing serious crashes. They are often located on arterial roads. The City can advocate for cameras where they will have the greatest safety impact, helping to reinforce lower-speed environments.



Figure 1 Safe Systems approach in Western Australia