

# ACRS Submission

## Draft Greater Adelaide Regional Plan



### ***About the Australasian College of Road Safety***

The Australasian College of Road Safety was established in 1988 and is the region's peak organisation for road safety professionals and members of the public who are focused on saving lives and serious injuries on our roads.

The College Patron is His Excellency General the Honourable David John Hurley AC DSC (Retd), Governor-General of the Commonwealth of Australia.

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## Introduction

The Australasian College of Road Safety is the region's peak membership association for road safety with a vision of eliminating death and serious injury on the road. Our members include experts from all areas of road safety including policy makers, health and transport professionals, academics, community organisations, researchers, federal, state and local government agencies, private companies and members of the public. The purpose of the College is to support our members in their efforts to eliminate serious road trauma through knowledge sharing, professional development, networking and advocacy. Our objectives include the promotion of road safety as a critical organisational objective within government, business and the community; the promotion and advocacy of policies and practices that support harm elimination; the improvement of relative safety outcomes for vulnerable demographic and user groups within the community; the promotion of post-crash policies and practices; and the promotion of a collegiate climate amongst all those with responsibilities for and working in road safety.

The College believes that we should prevent all fatal and serious injuries on our roads; the road traffic system must be made safe for all road users; system designers should aim to prevent human error and mitigate its consequences; life and health are not exchangeable for other benefits in society; and that all College policy positions must be evidence based.

### Greater Adelaide Regional Plan (GARP)

According to the consultation website, *"the State Planning Commission (the Commission) have released a Discussion Paper for the Greater Adelaide Regional Plan and want to hear from community, councils and industry on how we prepare for future growth. The discussion Paper is an evidence-based document with a strong focus on what the Greater Adelaide Region may look like in 30 years' time. It presents key considerations and trends that we need to consider in our future planning. Bold decisions are required to strengthen the sustainability, liveability and prosperity of the Region."* ACRS welcomes the opportunity to make this submission.

## ACRS response to the Discussion Paper

### a) The burden of road trauma

In the 10 years between 2013 and 2022, 950 lives were lost and more than 7,100 people were seriously injured on South Australian roads.<sup>(1)</sup> Over this time, 56% of lives lost and 72% of serious injuries occurred in the Greater Adelaide Regional Plan (GARP) area (Figure 1).

This level of road trauma has now been steady for many years, noting that South Australia's statewide road fatalities have plateaued at around 100 per year since around 2006 as shown in Figures 2 and 3.

Without radical change to the way we plan and manage our road networks, we are currently on track to see almost 3,000 people killed on our state's roads over the next 30 years. At the current rate of 56% of fatalities and 72% of serious injuries occurring on roads within the GARP area, this equates to around 1,600 people killed and 15,000 people seriously injured on these roads over the 30-year horizon of the GARP.

With the population projections for the Greater Adelaide Region showing growth by up to 670,000 people over the next 30 years (an increase of up to 46%) as noted in the discussion paper, the number of fatalities and serious injuries from road crashes would be expected to be even higher without significant actions being implemented to improve road safety.

Beyond the human trauma, it should also be acknowledged that poor road safety is also a burden to the economy and the health system.

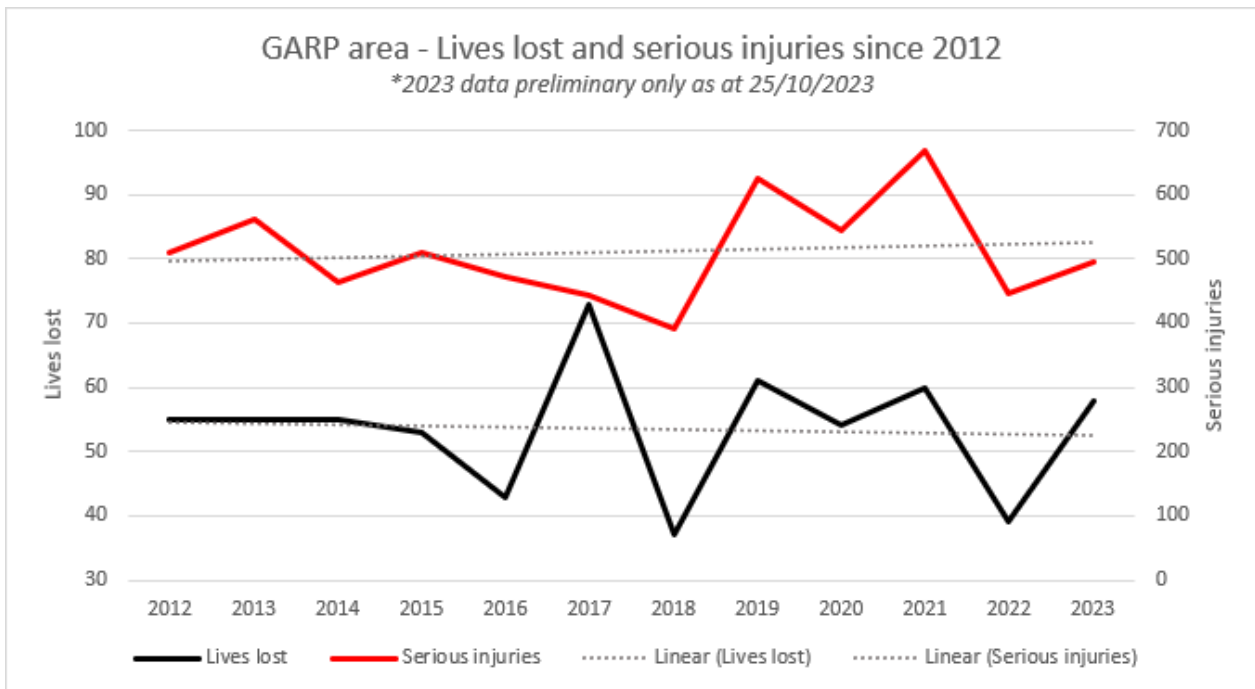


Figure 1  
Source: Generated from data obtained from DIT

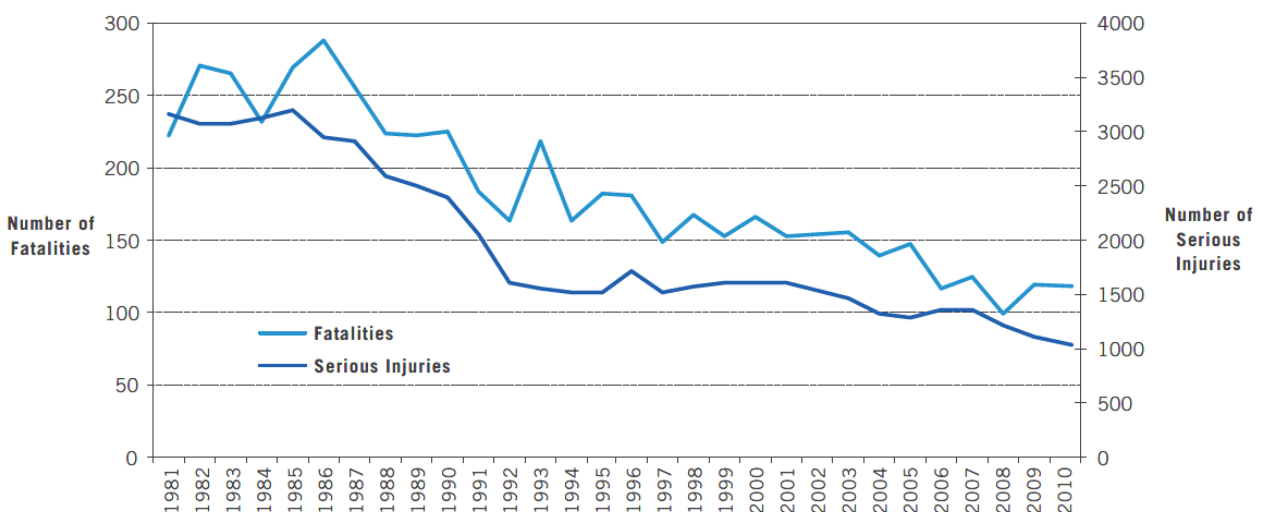


Figure 2  
Source: Towards Zero Together – South Australia’s Road Safety Strategy 2020(2)

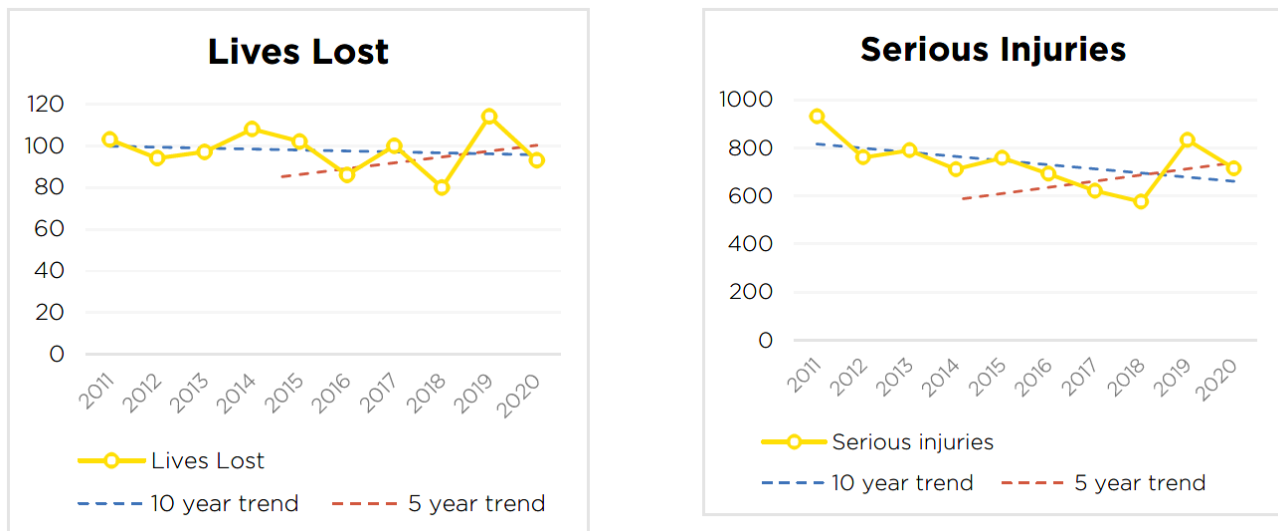


Figure 3

Source: South Australia's Road Safety Strategy to 2031(3)

### b) Prioritisation of road safety

Greater Adelaide's future population deserves to experience safe travel on the road network, without the risk of being killed or seriously injured. There is good conceptual alignment between many areas of road safety and the GARSP discussion paper, such as:

- Avoiding the need for road journeys (page 49);
- The understanding that social inequity leads to greater vulnerability to crash risk (page 59);
- The concepts of Living Locally, incorporating:
  - Increased use of public transport,
  - Increased use of active transport,
  - Inclusion of active transport infrastructure in new builds (page 91),
  - Encouragement of shorter journeys making use of locals streets/roads; and
- The strategic separation of lands (and transport infrastructure) dedicated to industry vs housing.

However, it is concerning that the Discussion Paper makes no direct mention of the vital need to embed road safety into any planning vision, given that it is impossible to achieve universal liveability when people continue to be killed or seriously injured on our roads. Past experience has shown that improvements to road safety do not come quickly, or cheaply, and so a strategic approach is required.(4) As such, it is vital that the GARP acknowledge and prioritise road safety as a key objective.

We draw the Commission's attention to South Australia's Road Safety Strategy to 2031(3), with its vision of "Zero lives lost on our roads by 2050". This strategy and its accompanying Action Plan has the important targets of at least a 50% reduction in lives lost and at least a 30% reduction in serious injuries on South Australian roads by 2031. The Strategy contains the "Principles for decision making and investment", which states that "road safety will be a key criteria in all decision making frameworks for investment decisions and policy setting". We note that the document also states that these principles "will guide the South Australian Government's decision making on transport related investments, policy setting, programs and initiatives".

### c) Modern strategic concepts for improving road safety

In addition to South Australia's Road Safety Strategy to 2031 we would like to bring the Commission's attending to the following road safety concepts.

#### The safe system

South Australia's Road Safety Strategy to 2031 states that "The Safe System model is regarded as international best practice and is the framework for improving road safety across Australia"(3). Austroads defines the Safe System as a philosophy that brings a public health focus to road safety that aims for harm minimisation, centred on the acknowledgement that human errors can lead to unintentional death and injury and highlighting that human wellbeing should take precedence over efficient movement(5). The key principles of the Safe System Model are that:

1. People make predictable mistakes that can lead to road crashes;
2. The human body has a limited physical ability to tolerate crash forces before harm occurs;
3. A shared responsibility exists amongst those who plan, design, build, manage and use roads and vehicles to prevent crashes resulting in serious injury and death; and
4. All parts of the road and traffic system must be strengthened to multiply their effects; and if one part fails, road users are still protected(6).

In applying this approach there must be an emphasis on prevention, not just mitigation, of road trauma through design which prevents crashes, with a recognition that:

- The road traffic system is a complex interaction of many interrelated components, involving many participants in different situations;
- Many road user errors and crashes are created by the interactions between road system components;
- The design and operation of a safe road traffic system must respond to the capacities as well as the limitations and vulnerabilities of the human user; and
- Understanding the causes of road traffic crashes and injuries requires understanding interactions within the broader road traffic system and other aspects of society.(7)

#### Movement and Place

This is a concept that considers road function in road design and operation and categorises the role of roads and streets based on their local context. Roads with a 'movement' function, such as motorways, provide for high traffic volumes and speeds and have little pedestrian activity or local community function. Roads with a 'place' function are typically local streets that accommodate high numbers of pedestrians, with any passing vehicles travelling at low speeds. This approach informs speed management and road design(3).

The Movement and Place approach significantly underpins the application of the Safe System and is a key way of making roads safer for vulnerable road users. Speed is a major consideration. South Australia's Road Safety Strategy to 2031 states that "Pedestrians are at greater risk of death and serious injury if hit at impact speeds above 30 km/hr. The most vulnerable pedestrians are children and older people". This is evidence based – see the ACRS Policy Position Statement on Speed Management(8). Accordingly, we consider urban designs should be aiming for 30 km/hr speed environments on areas with high levels of pedestrian activity such as residential streets.

## Vulnerable Road Users and Active Travel

On roads where vehicles interact with pedestrians and cyclist, these users are inherently more vulnerable in crashes as they have little to no protection to mitigate the forces experienced by the human body in a collision event(9). Whilst the benefits of active travel are widely established, the risk of injury or death to these vulnerable road users is often a major barrier for people seeking more sustainable and accessible travel modes.

### AusRAP

AusRAP (Australian Road Assessment Program) is the Australian version of the International Road Assessment Programme (iRAP), which involves a standardised process to apply star ratings to roads as an objective measures of the level of safety that is “built in” to the road(10). AusRAP measures and communicates the safety risk of road infrastructure and is being increasingly utilised in Australia.

On Monday 18<sup>th</sup> September 2023, Australia’s states and territories announced they had agreed that they will publish AusRAP star ratings on all arterial roads by 2025, as part of a wider commitment to a national target of at least 80% of travel occurring on 3-star or better roads by 2030.

### CLOCS-A

CLOCS-A or Construction Logistics and Community Safety Australia, is a national good practice approach for managing the risks and impacts associated with a construction project’s on-road transport and logistics activities to improve community road safety. The primary goal of CLOCS-A is to achieve reduction in lives lost and serious injuries associated with construction logistics in Australia(11). To achieve this, CLOCS-A designates a set of minimum standards that heavy vehicles should meet (e.g. the fitment of safety equipment or the removal of dangerous fixtures like bull bars) to reduce the likelihood (or consequences) of a collision with a vulnerable road user.

### Shared responsibility in road safety

The Safe System approach seeks to recognise the responsibility shared by all contributors to the elements of the system. There is a responsibility to collectively manage all inputs so the likelihood of a crash is minimised. The responsibility also continues so that when a crash occurs, every attempt is made to minimise the likelihood it results in fatal or serious injury. Contributors to the system include the people who plan, design and build roads or vehicles, as well as anyone whose actions can influence road trauma, including road managers, vehicle manufacturers, legislators, commercial transport operators, police, employers and individual road users(6).

The ACRS has published a Policy Position Statement on “A new systems thinking approach to road safety” which highlights the need to consider the accountability of governments and government agencies in governing and managing road safety performance(7). Whilst “shared responsibility” is a principle of the Safe System, the ACRS recognises the different participants within the road system hold different levels of authority, responsibility and power.

In South Australia, all South Australian Government agencies hold the highest level of authority as (whilst they are not solely responsible for road safety) they set societal expectations, regular the safety of roads, and oversee the delivery of system-wide safety activity through investment. The GARP represents a vital

opportunity for the South Australian government to acknowledge and action its primary level of authority and accountability.

#### **d) Responses to selected consultation questions**

**What do you think of the four outcomes guiding how Greater Adelaide should grow? Are there any other outcomes the commission should consider?**

ACRS considers that the four outcomes are appropriate and necessarily strategic in nature. We point out that improved road safety will contribute to all of the outcomes through more localised, lower speed and active transport occurring in communities leading to lower emissions, greener spaces (particularly along active transport corridors), wider housing choices and improved health through much lower road crash trauma and more active travel.

ACRS believes that the GARP should prepare for an Adelaide in which vehicle speeds are lower, alternate transport options are available, accessible, reliable and affordable; and the safety of active travel modes are prioritised.

**What other major trends and drivers might shape the future of Greater Adelaide? How should a land use plan address these trends and drivers?**

As stated above, a major driver missing from the discussion paper is the officially stated vision of zero deaths and serious injuries from road crash trauma by 2050, and the 2031 target of at least a 50% reduction in deaths and 30% reduction in serious injuries.

A principle of *South Australia's Road Safety Strategy to 2031* is: *"In planning the transport network we will consider the function of roads and the adjacent land use to provide safe movement and safe use for road users and visitors"*. The *Strategy* further notes that the embedding of the "Movement and Place Approach" into the design of safer roads, suburbs and towns is a key strategy to improve safer roads for all road users.

We strongly content that any contemporary land use planning strategy or policy must acknowledge the Movement and Plan Approach as a foundation towards harmonising the transport networks that serve urban development to be safe. Making strong references to the Movement and Place Approach would reinforce the Commission's Guiding Principle for GARP: "Integrated – Bringing together land use planning with the delivery of transport infrastructure and public spaces".

**What else would the Greater Adelaide Regional Plan do to contribute to a more equitable and socially cohesive society?**

In acknowledgment that social inequity leads to greater crash risk(12, 13), the GARP should identify ways that all transportation modes can be made safer. This can be informed by two of the concepts previously noted. First, the adoption of a Movement and Place Approach will guide the implementation of safe transport corridors for the entire community, regardless of socio-economic status. Secondly, full and proper accountability for poorly performing road infrastructure, under a shared responsibility model which recognises differing levels of power, authority and responsibility, will drive investment to the most at-risk locations.



### How can greenfield development achieve an urban form that is consistent with the principles of Living Locally?

Greenfield development provides an ideal opportunity to design and build road networks that facilitate highly walkable neighbourhoods and encourage greater use of active travel. This should be founded on Safe System compliant street typologies, including features that restrict vehicle speeds to a maximum of 30 km/h and providing comprehensive and convenient walking and cycling networks linking housing with local attractions. The provision of active transport infrastructure as part of master planned growth (page 91) is supported and should be a required component in new land developments.

Higher-order roads must also have high-quality walking and cycling elements, ideally separating these users from moving vehicles and having effective and convenient pedestrian crossing facilities that force vehicles to travel at low speeds, such as wombat crossings. The GARP should recognise that the greatest impediment to the uptake of active travel is safety(14-16). Active travel routes need to be connected, continuous (without high-risk sections or crossings), and provide proper amenity for users (wide, flat, maintained, etc).

Provision of public transport opportunities that are safe, convenient, efficient and accessible is also vital to reduce the dependence on private vehicle travel, which has been typical for greenfield sites located on the fringes of Metropolitan Adelaide.

We consider that the GARP should call for new roads to have an AusRAP star-rating of at least 3 stars. This would assist the Living Locally concept as potential design features would be low speed and friendly to active transport modes. Furthermore, we consider that the GARP should call for developers to publish the star ratings of both newly constructed roads, as well as upgrading roads and intersections where greenfield developments interact with existing established road infrastructure. It is important to note that when upgrading existing roads to accommodate new growth, a primary focus seeking to increase road capacity and/or vehicle speeds such as by widening the formation may be contrary to the Movement and Place approach. In many cases, the narrowing of roads to re-purpose the space away from vehicles to better accommodate pedestrians, cyclists and green space is likely to provide overall net benefits consistent with the principles of the GARP.

### What is the ideal urban form to support the growth of satellite cities like Murray Bridge and Victor Harbor?

Design principles that facilitate highly walkable neighbourhoods should also apply to satellite cities, with densities concentrated around activity centres. Where such areas also have high tourist demands, particular care must be taken to design infrastructure that accommodates the high level of temporal fluctuations that are experienced in these areas.

It should also be acknowledge that growth of satellite cities will increase travel between those cities and Adelaide. This. Travel will occur through regions that retain rural characteristics, and, as such, will continue to have rural roads that are often high speed, often narrow, often windy, and too often the scene of tragic crashes. In terms of land use and development, any new rural roads or alterations to rural roads and intersections arising from developments should be built to the highest practical level of safety and achieve an AusRAP star rating of 3 stars or more.

### What do you see as the benefits and potential drawbacks of greenfield development?

The primary benefit of greenfield development is to be able to implement the latest best practices for infrastructure design. Whilst the up-front construction costs of high-quality infrastructure may be perceived as being too expensive, safer roads can provide tremendous value when the current social cost of road crashes in Australia has been estimated to range between \$22.2 and \$30.3 billion annually between the years 2016-2020(17). Greenfield development is the optimal time to provide a safe road system up-front that minimises the potential for harm to all future road users.

A major drawback of greenfield development is the entrenched social disadvantage that often occurs due to the higher transport costs associated with living in outer suburbs. The lower up-front cost of housing in these areas tends to attract residents from lower socio-economic cohort, but lack the more convenient travel opportunities typically available in established suburb. This tends to result in higher levels of car dependence, with the subsequent higher levels of vehicle interactions on our roads increasing the probability of collisions and trauma.

### How can infill development achieve an urban form that is consistent with the principles of Living Locally?

We support the “Living Locally” concept which aligns strongly with the Walking, Cycling and Public Transport strategic focus areas of South Australia’s Road Safety Strategy to 2031. The encouragement of shorter journeys making use of local streets and roads would reduce the potential exposure to crashes and thus help improve road safety. Application of the Movement and Place approach as outlined above should be a key methodology for achieving a greater degree of living locally.

### What do you see as the benefits and potential drawbacks of infill development?

Of particular note, with regard to infill development, is the proposed development of urban corridors. Transit corridors and residential zones are not a suitable mix unless vehicle speeds are lower than those generally applied across the metropolitan area. In the Prospect Road example (page 136) it is encouraging to note that the speed limit was reduced. However, Figure 10 (page 137) suggests that virtually all major roads leading into and out of the CBD are being considered as urban corridors and it seems impractical (and likely unpopular with the community) that speeds on all these roads will be reduced to a level that is consistent with the intended increase in pedestrian activity. It is suggested that the Movement and Place approach be utilised in the next phase of urban development corridor planning to select which corridors are more amenable for development and which are better suited to serve as movement corridors.

### What are the most important factors for the Commission to consider in meeting future demand for employment land?

In locations where there are frequent interactions between heavy vehicles and vulnerable road users such as pedestrians, cyclist and motorcyclists there is an increased risk of serious consequences when a collision occurs. The GARP prudently makes the point that land areas dedicated to traditional industries should be separated from areas designated for housing. However, the point is also made that knowledge intensive industries and population service areas are more strategically located close to residential areas which will

result in the presence of pedestrians and cyclists. In these locations there are still likely to be significant numbers of heavy vehicles performing tasks such as delivering goods or construction activity.

In these areas, it is suggested that the implementation of CLOCS-A should be considered. This will significantly contribute to the attraction of businesses and their employees, thus contributing to growing and sustainable economic activity.

There are several areas mentioned within the GARP discussion paper that could be considered for the implementation of CLOCS-A to improve safety and amenity, such as:

- Osborne
- Edinburgh Parks
- Adelaide Airport
- Wingfield
- Mawson Lakes
- Tonsley
- LeFevre Peninsula
- Outer Harbour
- Gilman
- Lonsdale
- Lot Fourteen
- Thebarton BioMed

## Conclusion and Recommendations

ACRS supports the broad aims of the GARP and recognises that the GARP discussion paper is necessarily a very high-level strategic document outlining ways forward for the Greater Adelaide Region's land use planning and associated infrastructure and environmental needs.

Accordingly we make the following broad recommendations to improve the GARP and the safety of the residents within and visiting the Greater Adelaide Region:

1. South Australia's Road Safety Strategy to 2031 and its associated Action Plan be referenced in the GARP as a key companion strategy, including with an explicit acknowledgement of the opportunities to improve road safety through GARP, showing that the government acknowledges and is actioning its primary level of authority and accountability.
2. Incorporate the Movement and Place approach as a key concept within GARP.
3. That GARP has a stated objective that urban designs should be aiming for 30 km/h speed environments in areas of high pedestrian activity such as on residential streets.
4. That GARP call for a requirement that all new and improved roads associated with greenfield land and infill developments have an AusRAP star rating of at least 3 stars.

We appreciate the opportunity to make this submission and contribute to improved road safety for all road users in the Greater Adelaide Area through the GARP. Please do not hesitate to contact us should you need any further information.



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