

WALKING / WHEELING

Discussion Paper for the Integrated Transport Strategy

October 2024

ACKNOWLEDGEMENT OF COUNTRY

The City of Adelaide acknowledges that we are located on the traditional Country of the Kaurna people of the Adelaide Plains and pays respect to Elders past, present and emerging.

We recognise and respect their cultural heritage, beliefs and relationship with the land. We also extend that respect to visitors of other Aboriginal Language Groups and other First Nations.

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1. INTRODUCTION

Walking and Wheeling

Wheeling refers to people using wheelchairs or mobility scooters.

When we talk about walking, we include running and moving with a pram or pusher.

Collectively, people walking/wheeling are often referred to as 'pedestrians'.



As CoA grows, health, sustainability and liveability concerns become more critical, and it is important that there are attractive options for people to travel more actively and efficiently. Walking/wheeling as a mode of transport and a form of recreation has the greatest potential to create healthier, safer, and more accessible communities.

A large proportion of short trips could be walked/wheeled and even for longer trips - whether the main mode of transport is by private car, public transport or cycling - the road user is a pedestrian at some stage of the journey. Walking/wheeling is a key element in the way we travel to work, school and local facilities. As identified in the *South Australian Walking Strategy*, there is a need to invest in walking/wheeling for economic benefits, a stronger local economy and city attractiveness for tourism and visitation¹.

Planning, designing and building good walking/wheeling infrastructure with well-connected networks that are comfortable and safe, will benefit the whole community. Creating places that encourage and facilitate options for the community to choose to walk/wheel is a way to foster more sustainable, healthier and safer communities. It will also facilitate independent travel for a greater proportion of the CoA community including older adults, children, families and people with disability. Greener, healthier, active streets support community wellbeing and successful main streets and city businesses².

2. STRATEGIC CONTEXT AND CURRENT SITUATION

2.1 The Need and Opportunity for Change

Walking/Wheeling for City Competitiveness

Jan Gehl³ highlighted, "...today the best cities in the world offer their citizens something more than traffic capacity" and that in a globalised, highly mobilised society, "it is only the cities that are the most attractive, healthy, safe, vibrant and liveable that will compete in the global market."

Comparisons and assessments of Adelaide's walkability with other international cities have found Adelaide is performing poorly for people. A recent [Lancet Global Health report](#)⁴ analysed urban design, transport and health outcomes for 25 cities across 19 countries and found cities such as Adelaide, "were developed primarily in the 20th century under a car-centric planning model." Professor Billie Giles-Corti has highlighted⁵, the challenge to transform Australian cities for improved liveability, "**How do we create 15 or 20 minute neighbourhoods in our existing cities so that everyone can enjoy the benefits of living in a healthier, more sustainable community?**"

¹ Wellbeing SA and National Heart Foundation of Australia. (2022). *South Australian Walking Strategy 2022-2032 – More people walking more often; all ages, all abilities*.

² [Economics of Walking \(victoriawalks.org.au\)](https://victoriawalks.org.au/)

[Walking and cycling: the economic benefits \(tfl.gov.uk\)](https://tfl.gov.uk/walking-and-cycling-the-economic-benefits)

³ Gehl, J. (2011). *Public Spaces & Public Life Study: City of Adelaide*.

⁴ [Using open data and open-source software to develop spatial indicators of urban design and transport features for achieving healthy and sustainable cities - The Lancet Global Health](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(22)00072-9/fulltext)
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⁵ https://www.theguardian.com/australia-news/2022/may/11/australian-cities-among-worst-performing-on-walkability-and-public-transport-access?CMP=Share_iOSApp_Other

Health and Wellbeing

Increasing walking is critical to addressing the problems of physical inactivity (including it being the fourth leading risk factor for global mortality⁶) and delivers a multitude of benefits, including health outcomes (Figure 1). Physical inactivity is a major risk factor for poor health and contributes to people being overweight and obese. Obesity⁷ is now the leading risk factor in preventable health conditions in South Australia, and that due to rising rates of obesity, children born last year will have a reduced life expectancy (by seven months). Cities lacking pedestrian friendly streets create barriers to active, healthy and sustainable lifestyles⁸.



Figure 1 Walking and Health Outcomes (WHO 2022⁹)

The *South Australian Walking Strategy* identifies that South Australians are not sufficiently active to meet the Australian Physical Activity and Sedentary Behaviour Guidelines¹⁰ (Figure 2), which has significant ramifications on the health and wellbeing of our community, and associated economic outcomes.

⁶ World Health Organisation (WHO). (2020). *Physical activity, Fact Sheets*. Geneva, WHO. 2020. <https://www.who.int/en/news-room/fact-sheets/detail/physical-activity> accessed 21 April 2021.

⁷ Obesity now the biggest preventable health risk | Premier of South Australia

⁸ Australian cities failing on walkability | Pursuit by The University of Melbourne (unimelb.edu.au)

⁹ Walking and cycling: latest evidence to support policy-making and practice. Copenhagen: WHO Regional Office for Europe; 2022. Licence: CC BY-NC-SA 3.0 IGO.

¹⁰ Department of Health | Australia's Physical Activity and Sedentary Behaviour Guidelines and the Australian 24-Hour Movement Guidelines, accessed 21 April 2021

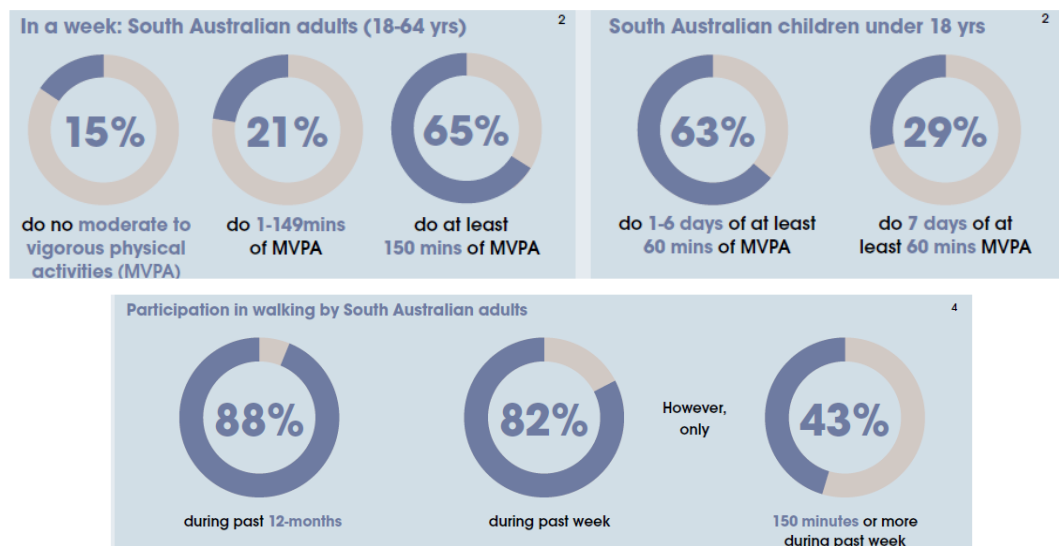


Figure 2 Moderate-Vigorous Physical Activity Levels and Walking Participation (SA Walking Strategy)

Levels of physical inactivity also increase with age, largely due to the prevalence of chronic conditions, and can vary by gender. Just over half (52%) of adults aged 18 - 64 years did not undertake sufficient physical activity compared with 75% of adults aged 65 years and over. In general, women across all age groups were more likely to be insufficiently active compared with men. Further variations caused by socioeconomic status, with those in lower socioeconomic groups were less likely to meet recommended physical activity guidelines.¹¹

A report by Torrens University commissioned by the SA Local Government Association suggests that by increasing walkability and providing safe and accessible areas ... for active recreation ... councils can contribute to improving opportunities for their residents to be more physically active.¹² Economic analysis of the survey also indicates there would be substantial economic benefits to the South Australian Economy resulting from the reduced utilisation of health services by a more active community. Initial estimates suggest that during an adult's lifetime, insufficient physical activity has the potential to cost the South Australian public health system an additional \$86,366¹³.

Walking/Wheeling is Critical to the City

High levels of driving within the City of Adelaide have multiple detrimental impacts, including those on people's health and wellbeing, city liveability and productivity. Walking/wheeling is key **within the city**, as typically people are seeking to visit multiple destinations in proximity and enjoy the city as a place. Even if people use other ways of getting to or from the city, walking/wheeling will be part of the end/start of the journey. The 'door-to-door' experience of public transport is important to more people wanting to choose this mode, so the walking/wheeling experience to and from stops and stations should be a focus.

¹¹ Australian Institute of Health and Welfare (AIHW). Insufficient physical activity, Australia's health 2018. Australia's health series no. 16 AUS 221. Canberra: AIHW. URL: <https://www.aihw.gov.au/getmedia/2fe90038-73c3-40bd-9273-8f7d3e42a277/aihw-aus-221-chapter-4-8.pdf.aspx>, accessed 21 April 2021.

¹² Updated Population Health Data, Local Government Association of South Australia, April 2021.

¹³ Eckermann S, Crisp M and Willan AR (2020) *Active Lives South Australia Health Economic Analysis – an evidence base for potential of health promotion strategies to reduced public health costs with meeting of adult physical activity guidelines*. A report prepared for SA Office of Recreation, Sport and Racing and SA Health. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

The Greater Adelaide Regional Plan¹⁴ (in draft for public engagement, September 2024) sets out significant growth for the Greater Adelaide Region, while City of Adelaide's City Plan aims for ambitious growth within CoA (Figure 3).

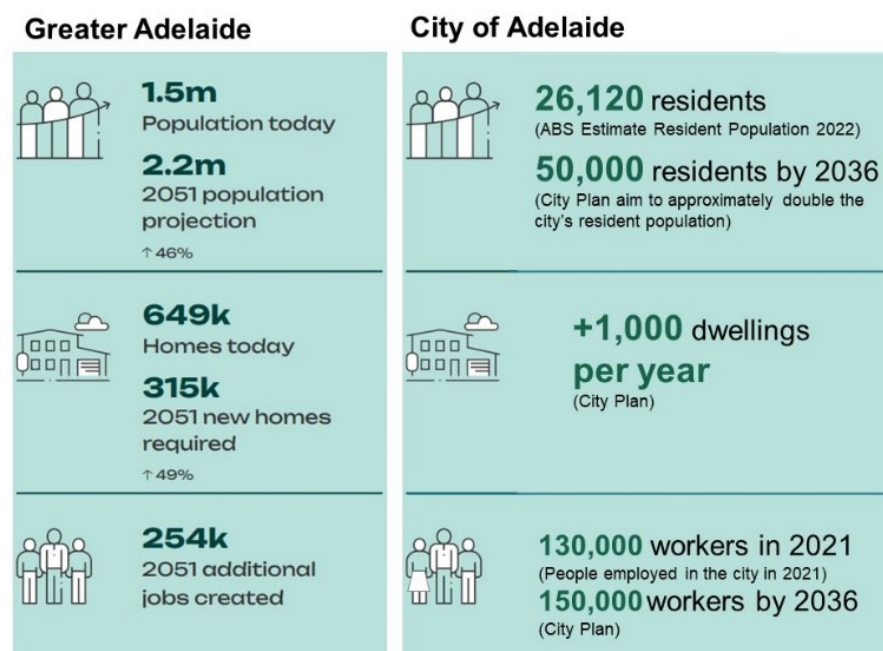


Figure 3 Growth in Greater Adelaide (left: from the Greater Adelaide Regional Plan Draft, September 2024) and City of Adelaide (right: based on City Plan)

Current levels of driving to/from and within CoA cannot continue with this growth, or people driving will experience increased congestion and the city will have reduced liveability. It is important that the transport system encourages as many people as possible to use public transport and active travel. Public transport use typically involves walking/wheeling to and from the stop/station. About 89% of Adelaide's population walks (for at least ten minutes outside their home) in a typical week and among this group about 18% walk in combination with public transport use¹⁵.

For residents, active travel and public transport need to be made a more attractive way to get to other parts of the city. CoA is a relatively compact area, with most residents having good walking accessibility (by distance) to open space, shops and other businesses and services to meet their everyday needs. Just because a distance can be walked/wheeled, does not mean people are doing so – as reflected by the Census. People choose to walk/wheel based on a range of factors, including safety, and the relative proposition compared to other modes.

2.2 Who is Walking in Adelaide and Why/Why Not?

Automobility is still dominant in the City of Adelaide. The City of Adelaide *Smart Move Transport and Movement Strategy 2012-22* set a target to have public transport, cycling and walking form more than half of all journeys to work. Census data indicates this has not been achieved. The Census 2016 Working Population Profile for CoA indicated approximately 40% of people working in CoA travelled by active or public transport to work, with no change from 2011. Although 2021 Census results reflect COVID conditions, there were similar outcomes.

Household car ownership is associated with driving, and by reducing car ownership we reduce car use¹⁶. In the 2021 Census, car ownership data demonstrated CoA households have much lower car ownership compared to households in Greater Adelaide (Table 1).

¹⁴ South Australian Government, 2024, *Greater Adelaide Regional Plan*.

¹⁵ Munro, C (2023). *National Walking and Cycling Participation Survey – South Australia*.

¹⁶ Jain, T., Johnson, M., & Rose, G. (2020). Exploring the process of travel behaviour change and mobility trajectories associated with car share adoption. *Travel Behaviour and Society*, 18, 117–131. <https://doi.org/10.1016/j.tbs.2019.10.006>

Table 1 Household Car Ownership

Household car ownership	City of Adelaide	Greater Adelaide
No car	30.8%	7.6%
One car	48.7%	36.7%
Two or more cars	19%	54.6%

The percentage of CoA households without a car has remained at approximately 30% since 2011. With residential population growth, the number of cars is growing, with about 3170 additional household cars between 2016 and 2021. There needs to be a significant effort to increase the number of households living 'car-free'.

The Census indicates that a significant proportion of resident workers drove to work, despite these trips being distances that most people could walk, or cycle.

Table 2 Method of Travel to Work for CoA Resident Workers

Method of travel to work (Resident workers)	% (2016 Census ¹⁷)	% (2021 Census)
Car	38.3	35
Public Transport	11.9	12.6
Cycling	3.7	2.8
Walking	26.9	24

CoA is 15.5km² in size while the City of Sydney is 26.15km² so for CoA residents, trips are relatively short and more people should be choosing to walk/wheel, use micromobility or public transport. The City of Sydney is setting a target for 2030 of 10% resident workers driving to work from a 2011 base of 30%. This shows the significant potential for commuter mode shift in CoA.

CoA residents on average exercise on three to four days per week, with exercise frequency increasing around retirement age. Exercise frequency and daily visitation to the Park Lands are positively correlated¹⁸.

Children cannot drive and creating streets and paths that enable them to walk/wheel to destinations such as shops, parks and playgrounds, schools and libraries is important to creating a child friendly city. Walking/wheeling is an important way for children to get to school. Surveys indicate that children are unable to realise the benefits of Active School Travel (AST), and the majority are not getting to travel how they would like to. There is a stark difference between how children in Greater Adelaide would like to, versus how they travel to school: 70% are driven to school but only 21% of them say this is how they want to travel. 71% of children want to use active travel but only 20% do (based on Way2Go program primary school data 2015-2020 survey of 16,843 students in years 3-7).

As part of the CoA School Travel Safety Reviews (2024), students were asked about how they travelled to and from school. Rates of walking/wheeling to schools within CoA vary but are generally low by best practice standards. The highest level of walking is about 32% of students, at Gilles Street Primary School (Figure 4).

¹⁷ Resident workers characteristics | Adelaide | economy.id

¹⁸ City of Adelaide, (2021). *Resident Survey Summary Report*

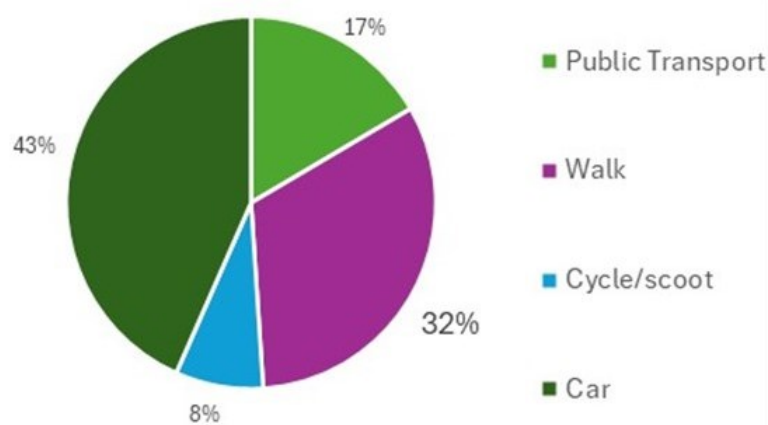


Figure 4 Mode of Journey to School for Gilles Street Primary School Students

Children were also asked if they were driven to school, how they would prefer to travel. Preferences vary significantly between schools but there are numerous schools, including North Adelaide Primary School (Figure 5), that have significant potential to change (based on distances children are travelling) to align with child preferences.

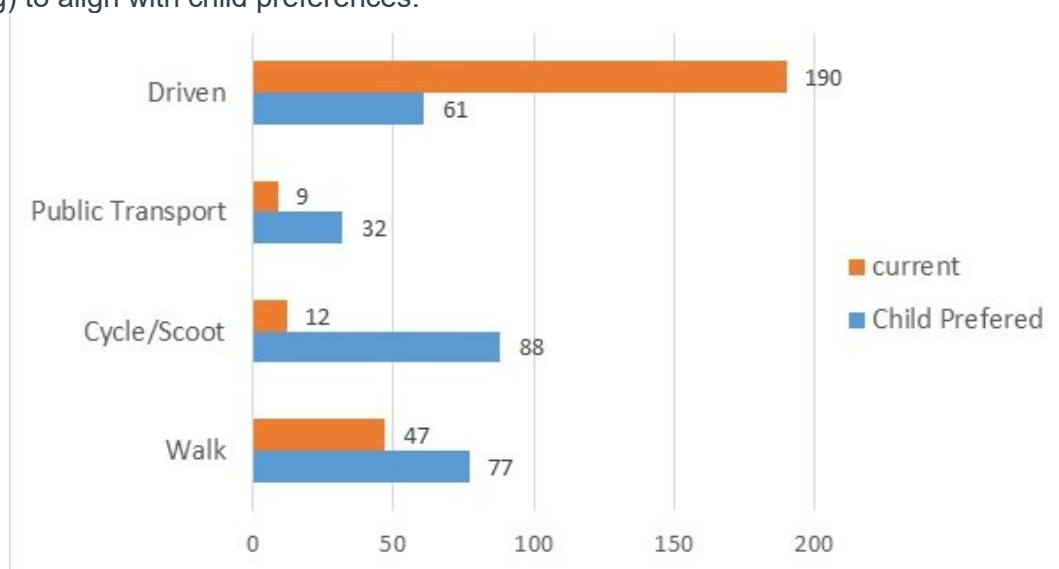


Figure 5 Current and Child Preferred Travel to North Adelaide Primary School

Rates of walking to school could and should be higher for many schools (based on distances travelled). Many children currently driven would like to use active or public transport. There is significant difference between schools, which may be a function of realistic travel distances, travel time or availability of public transport and the culture and norms in the school community. There were also differences between primary school students' and high school students' preferences within the same school. The National Walking and Cycling Participation Survey 2023 South Australia¹⁹ indicates a significant drop in cycling participation once girls reach their teens. Peer pressure and norms may play a role in travel choice, especially for teens. This is another reason why it is important to increase levels of active travel to school for primary aged children, so it is normalised for the teen years.

City User Profile Surveys ask survey respondents how they travel to the city. Of the approximately 2000 respondents to the 2021-2023 City User Profile Surveys, 17% reported walking to the city (Figure 6).

¹⁹ <https://www.cwanz.com.au/wp-content/uploads/2023/08/NWCPS-SA-2023.pdf>

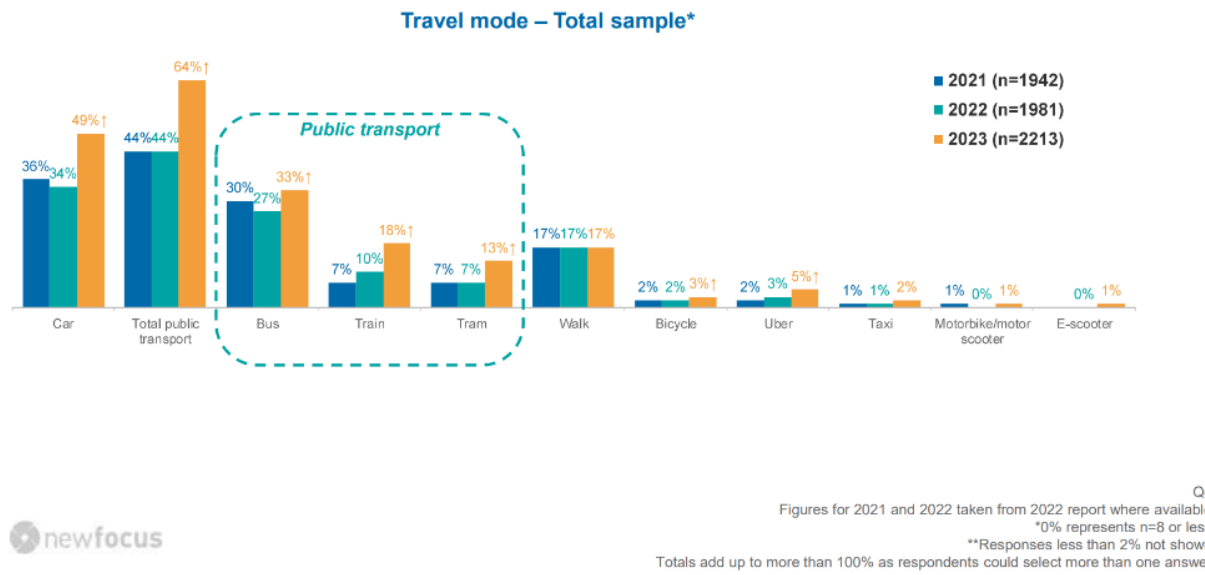


Figure 6 Travel Mode for City Users (City User Profile Survey Report 2023)

The way people travel is influenced by multiple factors, including safety and convenience. When City User Profile Survey (2022) respondents were asked about why they chose to travel to the city this way, 60% of city users said it was because it was the most convenient way of travelling for them. Only around a quarter of the respondents also said that their mode of travel was the one they preferred. This suggests that the current transport system is not providing enough choice, nor meeting people’s needs.

2.3 Policy and Strategy

The South Australian Walking Strategy 2022- 2032 was prepared by the Heart Foundation on behalf of Wellbeing SA (now Preventative Health SA). The Strategy involved a cross-sectoral approach involving 13 agencies collaborating and committing to actions. The vision and priorities are shown in Figure 7: SA Walking Strategy Vision and Priorities

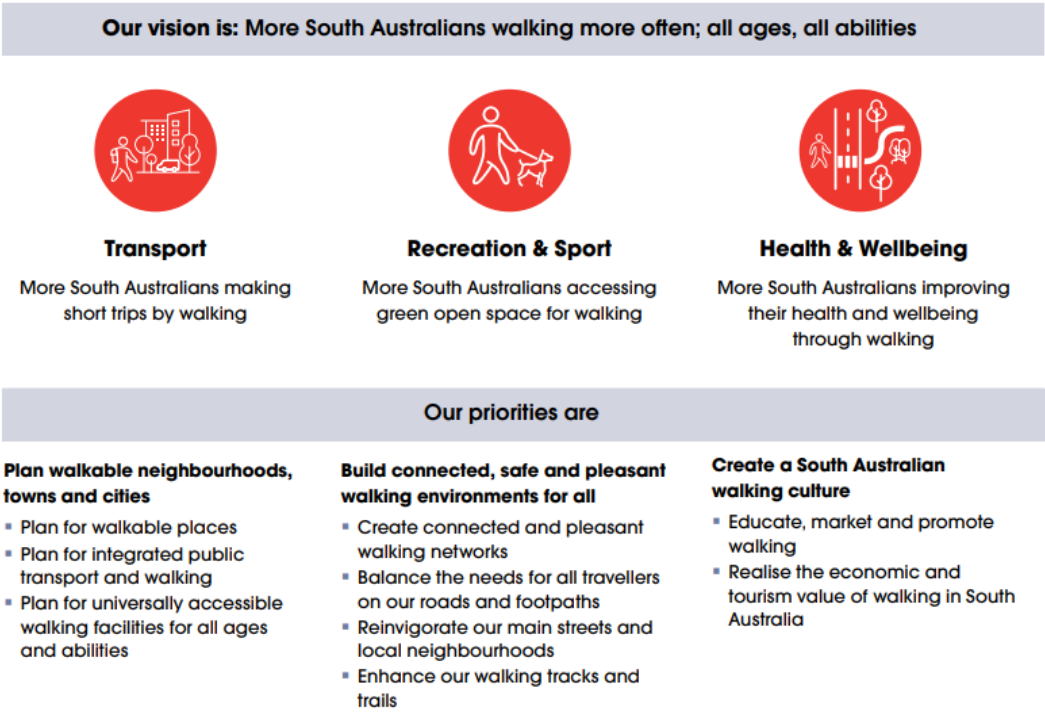


Figure 7: SA Walking Strategy Vision and Priorities

CoA strategies highlight the importance of creating a walkable/wheelable Adelaide:

- The *Strategic Plan 2024-2028* has the aspiration Our Places: Interesting, purposeful and safe (Figure 8). CoA is to establish targets (in the Integrated Transport Strategy) that align with *South Australia's Road Safety Strategy to 2031*.

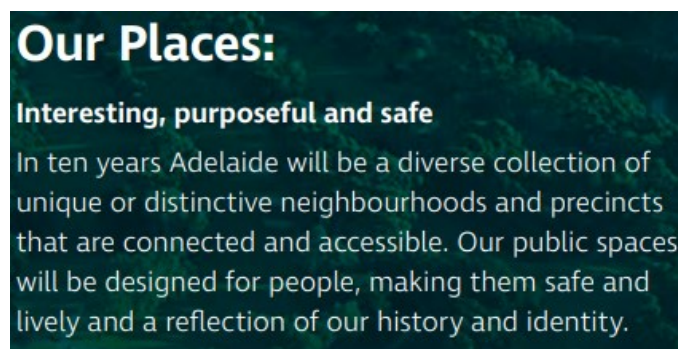


Figure 8 Strategic Plan Aspiration - Our Places

- The *City Plan 2036* sets out a significant increase in residential and worker populations. It has four priorities (Figure 9 and Figure 10), which are interlinked with walkability. It seeks to improve the walkable experience, with:
 - cooler, greener streets
 - residents being able to walk/wheel to services and amenities they require for their health and wellbeing.



Figure 9 City Plan Priorities



Figure 10 City Plan: Urban Design Elements - The Primary Components

Planning, designing and building good infrastructure with well-connected networks that are comfortable and safe, will benefit the whole community. Creating places that encourage and facilitate options for the community to choose to walk/wheel is a way to foster safer, more sustainable and healthier communities, and achieve the *City Plan* objective, “To ensure increasing density creates liveability”.

The *Integrated Climate Strategy* sets out the need to reduce carbon emissions from transport, which is a major source of emissions and without significant interventions will continue to grow. It highlights that **increasing active travel is critical to meeting carbon targets and creating liveable neighbourhoods**. It sets a target to **double the number of residents who walk to work**.

The City of Adelaide Wellbeing Indicators are a set of population-level indicators aligned to best practice and the Strategic Plan and Wellbeing Plan 2020-2025²⁰:

- Less than half (42%) of residents self-assess their health as excellent or very good.
- Almost half (46.6%) of residents are overweight or obese.
- Only about half (51%) of residents meet the recommended physical activity levels.
- 46.5% of residents walk or cycle to work: 37% walk.

²⁰ City of Adelaide (2020) [Resident Survey 2020](#), City of Adelaide.

2.4 Current Safety Situation

South Australia's Road Safety Strategy to 2031 and the *Road Safety Action Plan 2023-2025* seek to reduce the number of people killed and seriously injured on South Australian Roads. As well as identifying the need for applying Movement and Place as part of speed limit reviews, Action 14 is to improve pedestrian and cyclist safety through changes to intersections, reduced speed zones, separated bike routes and crossing facilities.

Table 3 Serious Injuries 2019-2023

Pedestrian SI	40
Total SI	127
Ped SI as % SI	31%
Total Ped SI Female	25
Total Ped SI Male	15

In 2023 there was a rise in people being killed and seriously injured in road crashes in South Australia, and this included a significant rise in pedestrian lives lost (19 compared to an average of 11 from 2018-2022). In CoA too, as shown in Figure 11, serious injuries are not trending towards the 30% reduction set out in *South Australia's Road Safety Strategy to 2031*. In the five-year period 2019-2023 there have been 40 pedestrian serious injuries in CoA, which is almost a third of total serious injuries in CoA (Table 3)

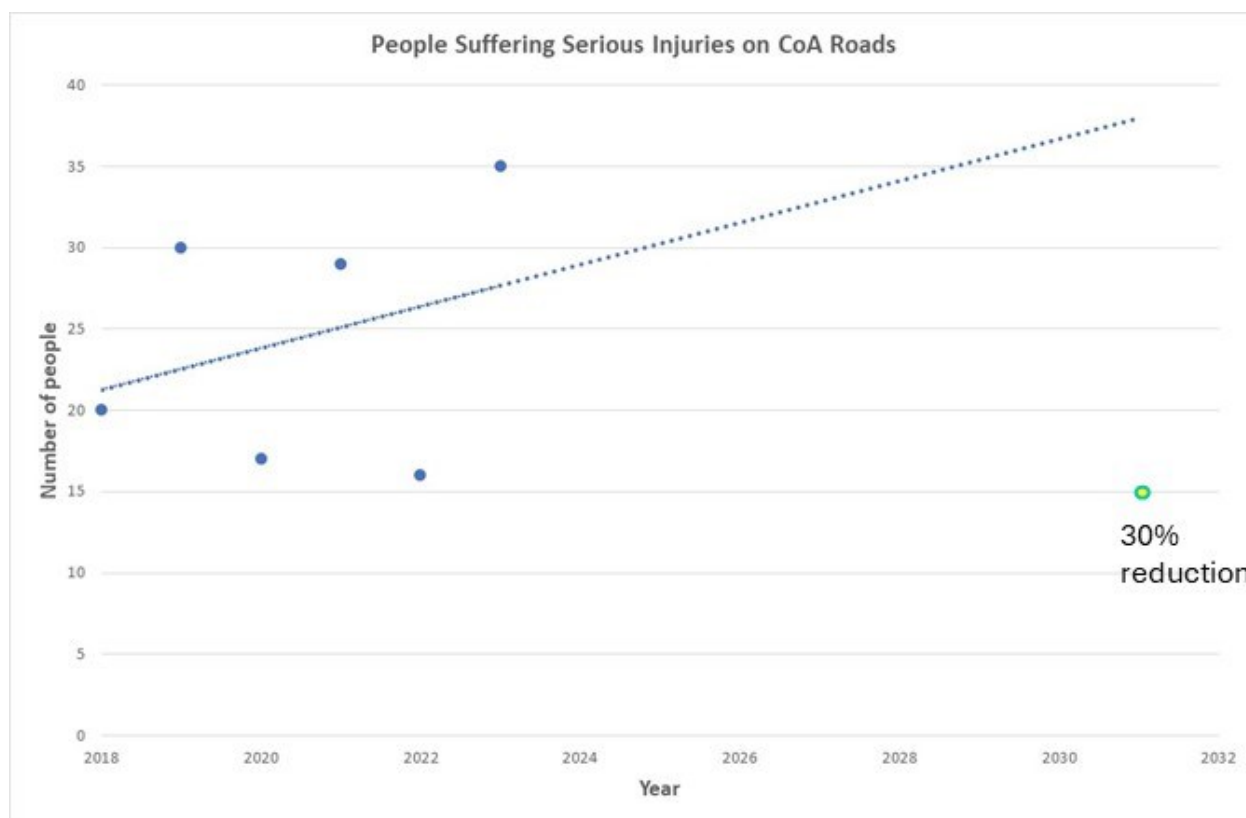


Figure 11: Tracking of Serious Injuries in CoA

The crash history for the five-year period 2019-2023 was reviewed as part of the City-Wide Speed Limit Review (Stantec, 2024). As shown on Figure 12, there is a higher incidence of pedestrian crashes in the busier, northern half of the city and along the main streets: O'Connell Street and Melbourne Street, in North Adelaide. The distribution of all crashes across CoA, points to the need for Safe System aligned speeds across CoA. As outlined in this and the Shared Micromobility and Cycling and Cycle Parking Discussion Papers, safer speeds also enable more people to feel safe using active travel (and to access and use public transport stops, which is often done by walking/wheeling).

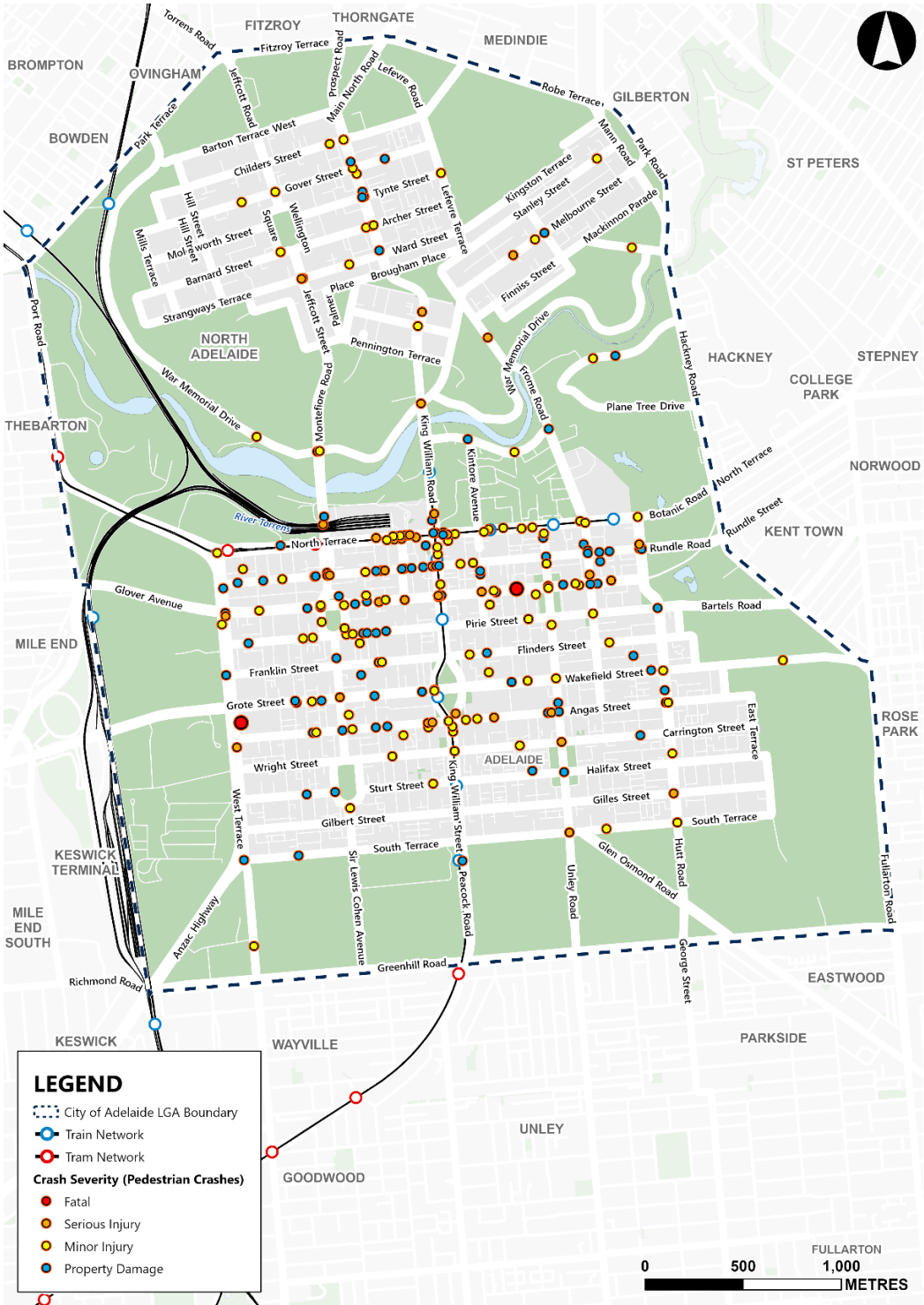


Figure 12: Crashes in CoA Involving a Pedestrian, 2019-2023

3. BEST PRACTICE REVIEW

3.1 Strategy Best Practice

A review of numerous international and local walking (and some integrated transport) strategies was undertaken. The review identified:

- The need to set a clear narrative for walking/wheeling as a priority, and for investment in both infrastructure *and* behaviour change support
- That walking is framed as the most efficient transport mode in cities, and walkability as a key part of liveability and place outcomes, delivering a multitude of benefits.
- That many documents highlight the role of motorised vehicle traffic on walking/wheeling (and healthy street) outcomes, and policies and actions often incorporate measures to limit through motorised vehicle traffic and calm motorised vehicle traffic.
- The importance of walking/wheeling network mapping, using the Movement and Place framework (noting NSW has integrated Healthy Streets into their framework).
- The importance of establishing an implementation process review²¹.

Austroroads²² identifies the following points for best practice transport documents:

- Language used reflects walking as an important mode, avoiding terms such as 'vulnerable', 'special' or 'alternative'.
- Report structure places pedestrians first.
- Documents should highlight planning, design, operation and maintenance aspects for other road users that impact pedestrians.
- Clarity about how good pedestrian planning and design supports travel demand management and other transport objectives.

Use of Frameworks

Direction from State Government policy and Austroroads is to use the Movement and Place (M&P) framework with Safe System approach to create a safer, more inclusive transport network and streets that are places for people too.

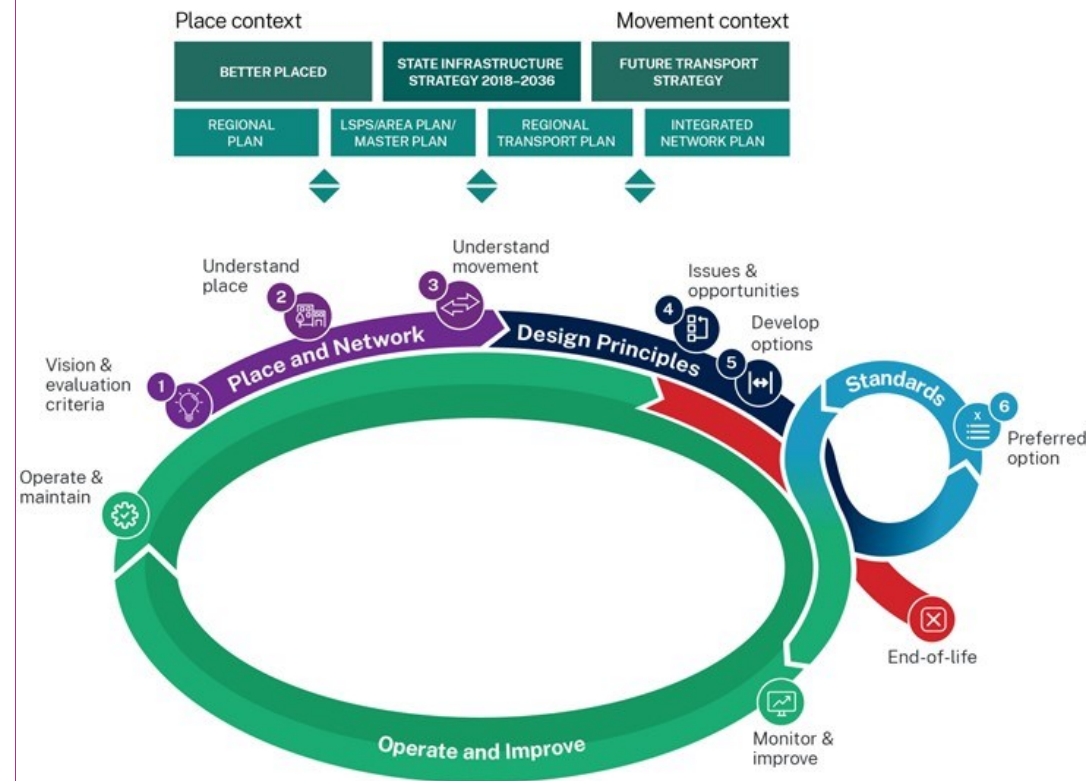
M&P walking maps are developed with different walking classifications based on the role of the link and its proximity to places (of different strategic place significance). The M&P assessment incorporates gap analysis to compare current Level of Service (LOS) outcomes with target outcomes (based on all the assigned classifications: for mode and place) and review of the performance gaps to determine trade-offs more holistically.

²¹ *Victoria Walks (2013) Developing a Walking Strategy - a Guide for Councils*

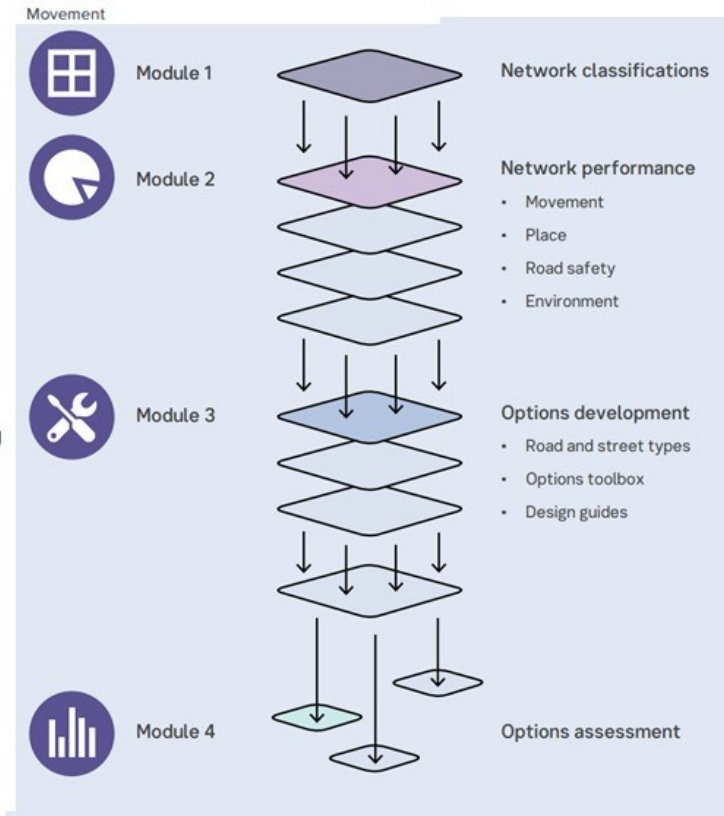
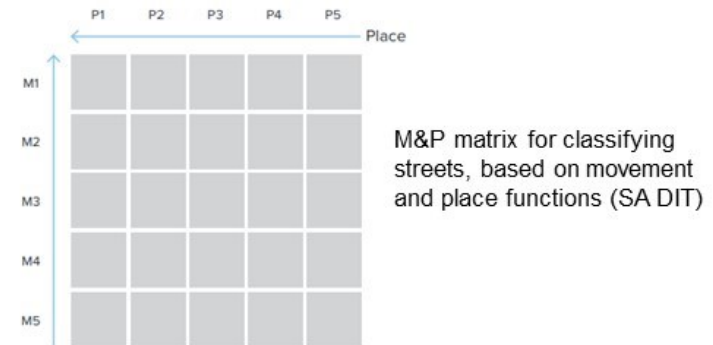
²² Ward, J., Head, A., Fleming, T., Munro, C. & Smith, D. (2020). *Updating Austroroads Pedestrian Planning and Design Guidance in line with International Best Practice*, Austroroads.

Movement and Place (M&P) is a framework that recognises the role of streets for movement and places for people to live, work, learn and enjoy. M&P focuses transport planning on the needs of people, more safely and equitably. M&P is a more consistent, common language to

- Define strategic objectives and directions for streets and the overall network.
- Engage with communities about how we change our streets and transport network.
- Manage expectations about different networks and street outcomes, through sharing maps of different networks and their classifications, together with the expected facilities/street typologies.
- M&P frameworks are being applied across Australia, including NSW and Victoria, and is referred to now in numerous SA DIT documents, including the [Active Travel Design Guide](#).



NSW M&P framework approach [How it all fits together \(nsw.gov.au\)](https://www.nsw.gov.au/transport/active-travel/movement-and-place)



M&P framework overview (Victoria)

[Movement-and-Place-in-Victoria-February-2019.PDF \(www.vic.gov.au\)](https://www.vic.gov.au/transport/active-travel/movement-and-place-in-victoria-february-2019.pdf)

The Healthy Streets approach²³ is an evidence-based, holistic approach developed in the UK and now in use in many places. It is aligned with the Heart Foundation's *Active by Design Guidance*. As an evidence-based, holistic approach, it

- encourages collaboration between disciplines.
- can be used to assess the existing outcomes on streets and expected healthy street outcomes with different options.
It can demonstrate value for money for proposed improvements or projects and improve the quality of decision-making.
- can be used for on-going monitoring and accountability, to improve the overall health of communities and cities.

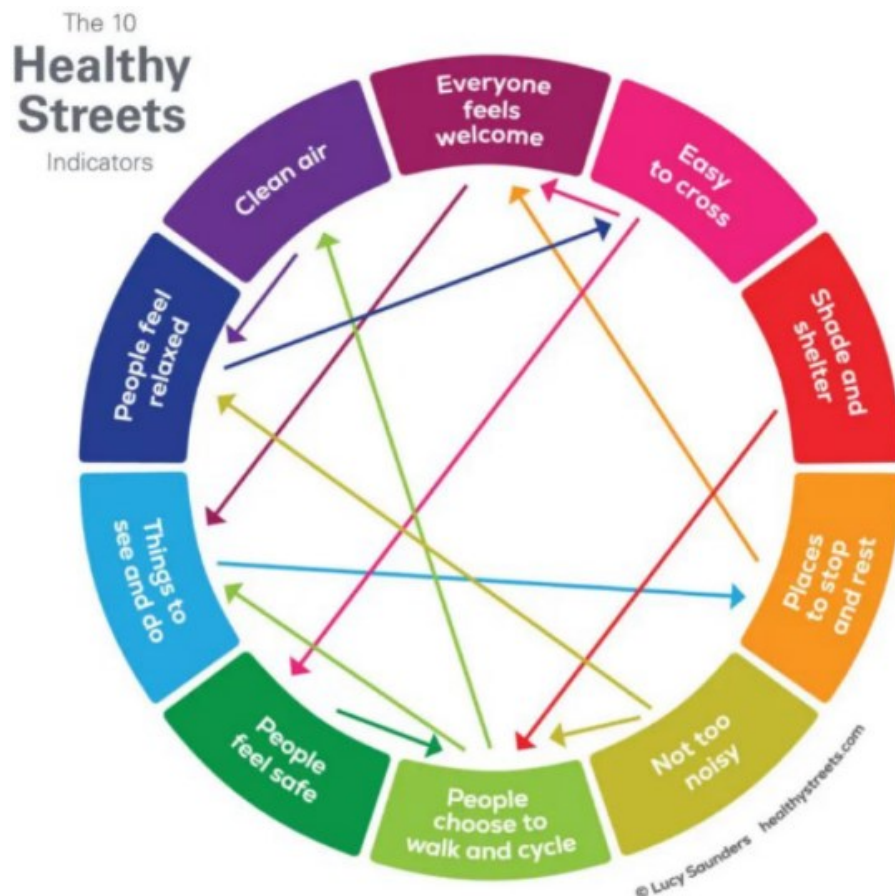


Figure 13 The 10 Healthy Streets Indicators²³

3.2 The Role of Walking/Wheeling in Cities: Economics & Streets as Places,

The Australian Institute of Traffic Planning and Management (AITPM)²⁴ advocates for “smarter planning for an efficient transport and land use system” as an integral part of decarbonising transport. This planning includes “**high quality walking and cycling networks to access local destinations**”, together with compact, mixed use development (for local living and reduced need to travel and shift to active travel) and high quality public transport for medium to long distance travel.

²³ What is Healthy Streets? — Healthy Streets <https://www.healthystreets.com/what-is-healthy-streets>

²⁴ AITPM (2024). Issues Paper *The Path to Net Zero: Decarbonising Australia's Transport System*

As stated in the Austroads report (AP-R639-20) about updating Austroads to reflect international best practice for walking,

A key message from the review of international best practice is that cities are striving to be more walkable to encourage healthy, inclusive communities... recent [UK and US] guidance has changed the way of presenting guidance, promoting good street design for people rather than focusing on 'modes'.

Traditionally, travel is an economic disutility, with the aim to minimise travel time (as it is a cost)²⁷. While convenience is still important for active transport, especially when streets are attractive, active trips can be a positive experience and utility, "...being 'on the move' is a rich experience interlaced with profound shared and individual meanings that can have positive implications on quality of life, well-being and personal development." (p.1, *ibid*).

Guidance documents, including more traditional 'engineering' Austroads documents are now highlighting that designing for walking is more than physical built attributes and compliance with limited engineering parameters. There is a shift towards 'walking' policy and guidance having a more holistic focus on creating streets for people to enjoy, so people want to walk and streets are 'places' in their own right – with value associated with walkability.

Place Quality and Economic Success

Walkability is valued by visitors and is good for business²⁵. High levels of 'foot traffic' are key to successful main streets and creating walkable/wheelable neighbourhoods, as outlined in City Plan, will help achieve successful, sustainable growth. Transport for London (TfL) has done extensive research about the economic benefits of increasing levels of walking and cycling²⁶. TfL highlights the economic benefits to high (main) streets and town centres, reporting increased retail spend by up to 30% with walking and cycling improvements. Creating streets for more active travel is also highlighted to reduce staff absenteeism, increase productivity and reduce health system costs and environmental damage. Increasing walkability (and cycleability) increases social access and inclusion, with streets that are more welcoming, social spaces.

TfL reports that businesses overestimate their customers' car use, thinking that the majority drive. Customer surveys instead found that most people walked and used public transport. Surveys in Australia have similarly found this over-estimation of driving and under-estimation of the role of walking and the issue that walking is often, 'invisible' ²⁷.

3.3 Safety and the Safe System Approach

South Australia's Road Safety Strategy to 2031 vision is "Zero lives lost on our roads by 2050". It identifies the critical role that local government plays in **risk management and responsibility**. It highlights the need to adopt the **Safe System** approach (Figure 14) and the role of **vehicle speeds**, "Pedestrians are at greater risk of death and injury if hit at impact speeds above 30km/h. The most vulnerable pedestrians are children and older people [nearly a quarter of pedestrians who die or are seriously injured are aged 70 years or older]". It acknowledges the role that safety for walking and better public transport plays in mobility and access for older people and children.

The Strategy also noted that speed is key to creating comfortable, healthy streets and encouraging higher levels of walking, "In urban areas, safer, lower speed environments can provide environmental, health and access benefits by making roads feel safe and choose more active transport".

Safer speeds are a pillar of the Safe System and *Austroads Guide to Traffic Management 4* (2020) states, "**Reducing vehicle speeds** in urban areas where pedestrians and cyclists are expected is a

²⁵ Tolley, R. (2011). *Good for Business discussion paper*. National Heart Foundation of Australia

²⁶ <https://tfl.gov.uk/corporate/publications-and-reports/economic-benefits-of-walking-and-cycling>

²⁷ https://www.victoriawalks.org.au/Assets/Files/Arup-economic-case-for-walking_Final.pdf

fundamental prerequisite to improving safety and comfort for these users" (p.52) and notes that speed reductions are the most effective measure to improve pedestrian safety.

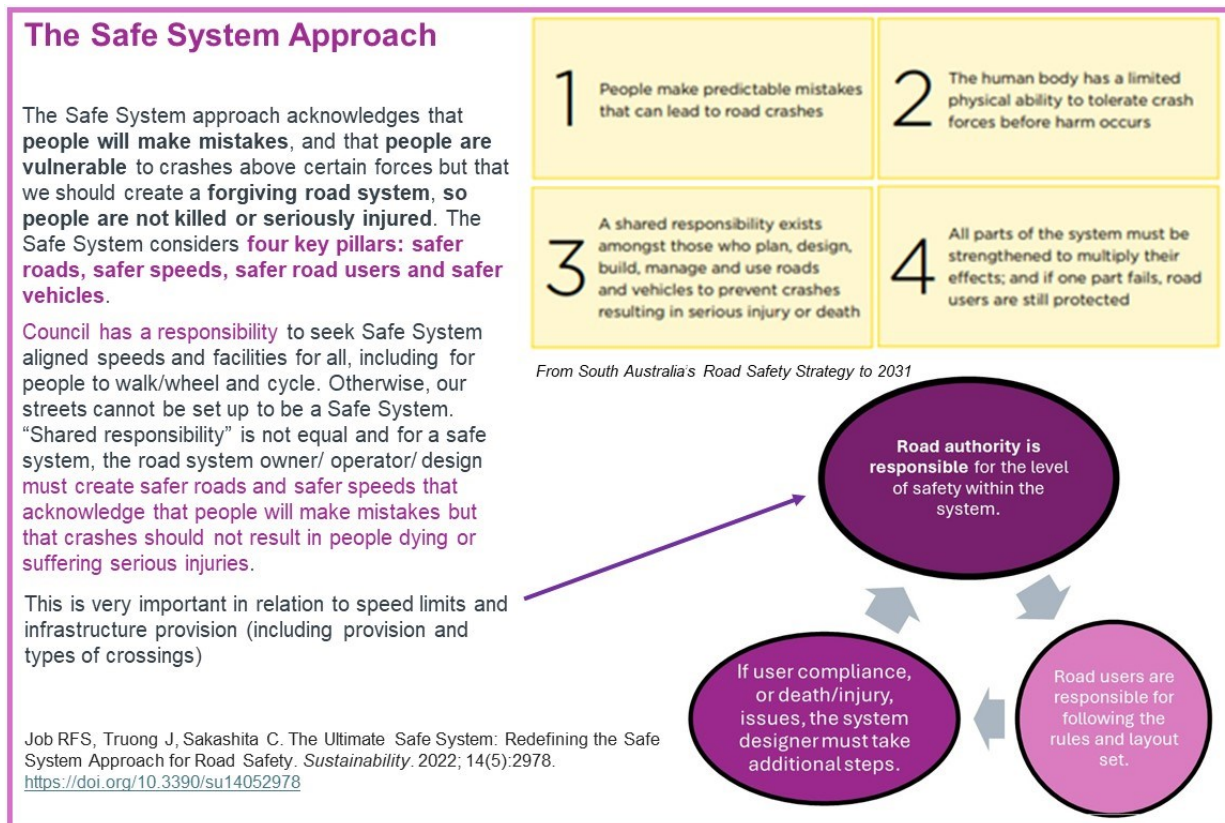


Figure 14 The Safe System Approach

There is a global best practice shift towards the urban default speed limit, or at least non-arterial road speed, being set to 30km/h. The Stockholm Declaration highlights that 30km/h will achieve significant road safety, environmental and health benefits. Many international cities have adopted 30km/h as an urban default speed limit or on most of their streets. A review of 40 cities that have adopted city-wide 30km/h indicate that safer speeds have reduced the likelihood of crashes occurring and the severity of crashes that occur. There is growing evidence of multiple benefits of safer speed limits, especially 30km/h (Figure 15).

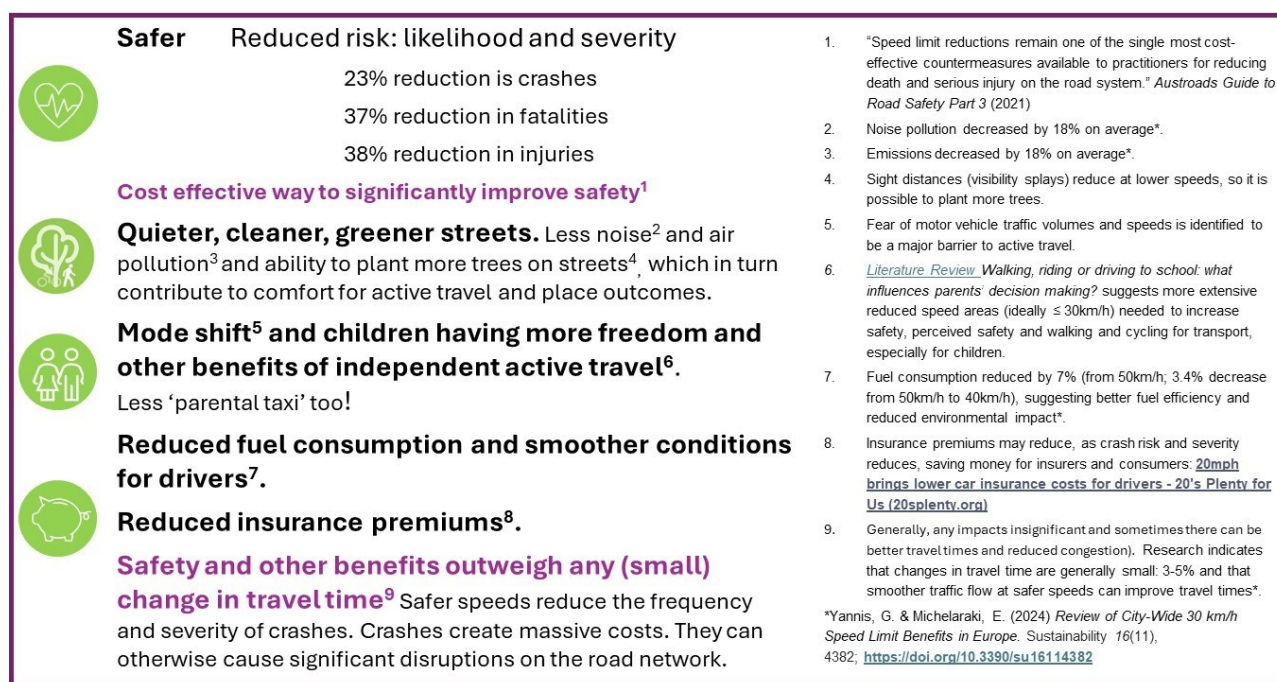


Figure 15 Benefits of 30km/h

Where there are speed limits above 30km/h and pedestrian crossings or signalised intersections, primary safe system treatments such as raised safety platforms (see example in Figure 16), should be used to achieve primary Safe System outcomes (as set out in Austroads).



Figure 16 People Crossing on a Raised Safety Platform as Part of a Bicycle Pedestrian Actuated Crossing (BPAC)

3.4 Accessibility and Gender Equity

There is increasing focus on the need to consider gender issues and transport, in addition to other inclusivity and equity issues. Gender Impact Assessment (GIAs) are a legislated requirement in some places. Victoria's *Gender Equality Act 2020* requires local governments to complete GIAs, so "new policies, programs and services which directly and significantly impact the public, benefit all Victorians."²⁸

Fear of crime in public places is a gendered issue. Transport network user surveys find a "stark difference between male and female perceptions of danger...this fear impacts on women's mobility and their basic right of access to the city...women adjust their behaviour and travel patterns to accommodate this fear."¹⁸ Furthermore, there is an intersectionality issue as women with low-income have higher levels of fear: in part as they are more likely to live in areas with higher crime rates but also as they often work in jobs with non-standard office hours and need to travel at night time.

Active School Travel – for Children and Gender Equality

Active school travel (AST) is very important to children's health, wellbeing and development, and studies suggest it improves children's ability to learn. Creating streets that enable Children's Independent Mobility (CIM) is an important issue as parent-accompaniment is associated with driving rather than active school travel (AST) and trip-chaining (where parents or carers drive children to school, then drive to work or another location) is associated with reduced AST¹⁹. As a gender issue, women are more likely to accompany children to and from school, so creating environments for CIM should be a focus for both the multitude of beneficial outcomes for children *and* for women. There are also intersectionality issues associated with children's travel, including

²⁸ [Gender impact assessments | Commission for Gender Equality in the Public Sector \(genderequalitycommission.vic.gov.au\)](https://www.genderequalitycommission.vic.gov.au)

that girls are less likely to be allowed independent mobility and that single mothers are less likely to allow CIM²⁹.

Starting school (and to some extent recommencing each year) is a 'life event': a key opportunity for children to establish healthy travel habits.

3.5 Best Choice – Relative Proposition

People's choice of transport (or decision to travel at all) depends on a range of relative considerations, and it is important that the role of motorised vehicle traffic and the relative car driving proposition (including user needs or level of service and costs) is incorporated. With system thinking, strategies to increase walking will need to manage car use, while creating conditions for walking, plus cycling and public transport to be modes of choice.

Better access with improved infrastructure or service is the most important intervention for people to change their travel behaviour³⁰. Infrastructure improvements supplemented with support by behaviour change programs helps people have incentives or information until the new travel behaviour becomes habit. Transport for NSW³¹ has found that people's travel choices need to be easy, attractive, social and timely; for mode shift from driving, sustainable options need to be stronger in these aspects than driving. A recent Austroads report³² has similarly emphasised the need for driving (and car parking) to have costs that reflect their impacts, and to make people better consider short driving trips, for example, by making driving routes less direct than active travel.

²⁹ Crawford, Sharinne; Bennetts, Shannon; Cooklin, Amanda; Hackworth, Naomi; Nicholson, Jan; D'Esposito, Fabrizio; et al. (2015). *Parental fear as a barrier to children's independent mobility and resultant physical activity: final report 2015*. La Trobe. <https://doi.org/10.26181/5c3d64c04f071>

³⁰ Albarracin, D, Fayaz-Farkhad, B & Granados Samayoa, J.A. (2024) Determinants of behaviour and their efficacy as targets of behavioural change interventions, *Nature Reviews Psychology* 3, 377-391 <https://doi.org/10.1038/s44159-024-00305-0>

³¹ Transport for NSW and AITPM (2021) Travel Demand Management in NSW – Impacts of Behavioral Science on TDM [Webinar]. <https://www.aitpm.com.au/events/templates/online-cpd-recordings/recording-travel-demand-management-in-nsw-series-2-impacts-of-behavioural-scienc>

³² Austroads Report: Prioritising Active Travel 12 June 2024 <https://austroads.com.au/publications/active-travel/ap-r711-24>

4. ENGAGEMENT: WHAT WE HAVE HEARD

There has been a significant amount of engagement on strategies and projects including on the CoA Strategic Plan, City Plan, Adelaide Park Lands Management Strategy (APLMS). Key feedback is arranged under themes:

Safety – Speed Limits

Facilitating active transport through lowering of speed limits where appropriate (*Integrated Climate Strategy Consultation Summary 2024*)

Crossings and Connectivity

Make it simple and safe for people to cross the street through a combination of the following: wombat crossings, reduced speed limits, narrowing of roadway. (*Public engagement on Gouger Street Concept Design, 2024*)

Improve crossing points to and between Park Lands. Improve safe crossing points, walking in and around the city squares, improve Park Lands trail without/with better crossings. (*APLMS 2022 engagement*)

Park Lands act as 'local' public open space for residents of adjoining suburbs so safe, easy access across the ring road is important (currently "Ring Road Barrier") (*APLMS 2022 engagement and also a consistent message, including from adjacent Councils and key partners*)

New (signalised) crossings suggested including Joslin St, Robe Tce, Mann Tce and near Britannia Roundabout, and better provision for people walking/wheeling and cycling at Prospect Rd and Robe Tce-Main North Road (busy, long distance, multiple stages of crossing). (*APLMS 2022 engagement*)

Intersections

Improved experience as an active transport user e.g. pedestrian priority at traffic lights (*City Plan Engagement 2024*)

Facilitating active transport through changes to traffic light sequencing (*Integrated Climate Strategy Consultation Summary 2024*)

Delays at crossings are an issue in terms of time delay but also and discomfort and exposure to harassment for women, girls and gender diverse people. (*Gender Lens Workshop 2024*)

Investment

Need for investment in public infrastructure for active transport and street trees for greening and shading (*Integrated Climate Strategy Consultation Summary 2024*)

Walking/Wheeling Comfort and Accessibility (and Quality Cycling Conditions)

Consider separate paths for cyclists and pedestrians, improve greening (for shaded paths), wayfinding, universal access, safety and night use. Better access and legibility of active travel routes around the Riverbank. (*APLMS 2022 Engagement*)

Concerns about e-scooters and pedestrian safety. (*E-Scooter Parking Trial Community Survey Feedback 2022, Transport Asset Management Plan Community Engagement 2023*)

Responding to Population Growth

Better active travel connections from Glenside and Beaumont Road and residential growth corridors including along Greenhill Rd and Fullarton Rd and in Kent Town, Bowden, Brompton and the West End Brewery site Thebarton. (*APLMS 2022 Engagement*)

Importance of the roles of greening, open space, social infrastructure, and main streets to support the future population, and 'city of neighbourhoods' (*City Plan Engagement 2024*)

Mode Shift/Impact of Motor Vehicles

Residents would like to see reduced traffic congestion (*CoA Resident Survey Summary Report 2021*)

Improved experience as an active transport user e.g. fewer cars and lower speed city speed limits. (*City Plan Engagement 2024*)

Reduce the sheer amount of carparking. (*Public engagement on Gouger Street Concept Design, 2024*)

[Impact on Park Lands] Remove car parking and encourage active transport options. (*APLMS 2022 engagement*)

Inclusive Places and Networks

Wider footpaths help to reduce congestion and the chance for altercations between city users at peak times. (*Gender & Safety Focus Groups Summary Report, 2023*)

Improving accessibility for all users, improving safety on paths (e.g. safer road crossings, reducing conflicts between users), increasing paths through various attractions (*APLMS Community Forum 2022 Access & Connectivity Summary*)

Crossing points need to provide **priority** for pedestrians so women aren't stuck waiting with people they don't want to wait with. (*Gender & Safety Focus Groups Summary Report, 2023*)

Shade is important to everyone but especially for people with disability. For example, people with disability may walk/wheel slower with greater time being exposed to the weather, and wheelchairs get too hot to touch and wheel. (*CoA Access & Inclusion Panel advice, 2024*)

Heat and Climate Resilient Places and Networks / Experience

Shared green spaces - community gardens, pocket parks and spaces for community to come together (*Almost 30 items of feedback relating to this – Strategic Plan 2024-2028 Engagement Feedback 2023*)

Street trees for shading and greening (around bus stops and active transport routes) and for improved biodiversity. (*Integrated Climate Strategy Consultation Summary 2024*)

Tree planting to create canopy over existing and new paths. (*Master Plan - Draft Victoria Park / Pakapakanthi (Park 16), 2023*)

Street Activity & Experience

Plants, benches, water fountains for refilling bottle, extend footpath depth to accommodate outdoor dining. (*Public engagement on Gouger Street Concept Design, 2024*)

Public transport

Advocacy for improved public transport and regulatory changes to prioritise active transport and for planning and development requirements. (*Integrated Climate Strategy Consultation Summary 2024*)

City Visitor Research

City of Adelaide visitor research suggests people value Adelaide's liveable, compact form, and its squares and Park Lands, "Adelaide has the **creature comforts and offerings** of a big city **in a small, easy to navigate, green and clean area**"³³ It is suggested that sustainability is becoming a "major differentiator for travellers [and] the impact of urban design can't be overstated... More cities are experimenting with closing popular thoroughfares to vehicle traffic, reducing congestion while bringing street life back."³⁴ Adelaide is also marketed to potential residents and investors as a 'city within a park'.

While survey respondents have offered 'cheaper or free parking' as a reason they would visit the city or a main street more often³⁵, when UParks recently offered this, the outcome was to change

³³ City of Adelaide (2018) Chinese Digital Audit-Customer Reviews

³⁴ [skift.com](https://www.skift.com)

³⁵ For example, City User Profile 2021.

patterns of car parking of existing visitors, rather than increase city visitation. Looking at how people are choosing to travel to visit the city, there is *not* a trend towards more people driving.

As well as the increased offering/quality of experience at cafes/restaurants, the CUP respondents called for more and a better variety of shops, with longer opening hours. There were mixed calls for more events within the city; on main street users did not generally say more events would increase visitation. People cite numerous comfort and attractiveness factors that contribute to walkability and place outcomes, including streetscape, atmosphere, cleanliness, quiet or quiet/calm (from car traffic).



City User Profile Questions: “Walking is (not) a good way to get around the city”

In 2022, new questions were incorporated into the City User Profile Survey to provide insights into walking in CoA. When city users were asked to what extent they agreed with the statement ‘Walking is a good way to get around the city’, 53% said they strongly agreed while another 28% said that they somewhat agreed. 16% of city users neither agreed nor disagreed with the statement and only 3% said that they disagreed.

When asked about why they thought walking was a good way to get around the city, approximately 1,500 city users (out of 2028 sampled) provided a response to this question. The most popular reasons cited were for health/fitness reasons (20%), that it was an easy way of getting around the city (19%), and that everything was close by (17%). Other reasons included that walking was a convenient way of getting around, it allowed city users to explore or sightsee, and that it was more convenient compared to driving or catching public transport. Interestingly, city users who were aged 55 and over were more likely to indicate that walking was a good way of getting around for health reasons and as an opportunity to explore the city.

When asked about why they thought walking was not a good way to get around the city, 64 responses were received. The main reasons cited were due to mobility issues, a general dislike for walking, and that the trams were a more convenient way to get around the city.

Walking Strategy Discussion Paper Reference Group 2022

A Project Reference Group workshop for the development of a Walking Strategy Discussion Paper³⁶ was held in June 2022. The group comprised staff from adjoining councils, state government representatives and CoA Council staff. Key issues and opportunities identified are in Table 4. The PRG suggested a set of principles for a walkable/wheelable Adelaide:

A public realm that is “connected, attractive, transformative”

Creating a “healthy and sustainable” community

An “inclusive and safe” environment for active travel

“Where walking is the natural choice”

Table 4 Walking/Wheeling PRG Issues & Opportunities

Issues	Opportunities
Difficulty crossing the ring road and busy streets with the City.	Link to boulevard plans and to Disability Action and Inclusion Plan. Partnerships with neighbouring councils
Lack of safe crossings to connect to Squares and to and between the Park Lands, and especially for the Park Lands Trail.	Plan priority for crossings of Park Lands roads
Transport contribution to CO ₂ and heat island effect: critical need for change.	Behaviour change – use existing programs. As the majority of public transport users are walking, enabling walking enables public transport use) Work with schools
Growth and potential for increasing car use, amplifying congestion.	Position city developments for liveability, car free living, increase use of car share
Perception of improvements to walking being detrimental to driving/car parking.	Victoria Health have messaging guidelines that are pro-walk, not anti car. A more walkable city is better for everyone.
Wayfinding, shade and shelter.	Chance to improve signage to include wayfinding and time to walk. Greening initiatives
Developments and construction impacting walking (footpath disruptions and detours).	Policies to better manage disruption of works and events.

³⁶ Presented to the Committee – Strategic Discussion Forum – Tuesday 16 August 2022. [Item 4.2 Walking Strategy Discussion Paper](#)

5. SUMMARY OF ISSUES, BARRIERS AND OPPORTUNITIES

Framework Theme	Issue/Barrier	Opportunity	Responsibility (State / CoA)	Opportunity Category ³⁷
Movement & Access				
Motorised Traffic Impacts and Mode Share	Volumes and speed of motorised vehicle traffic means streets are noisy and hostile for people walking and lack 'stickiness' as places for people to dwell. Lack of (space for) greening on many streets.	Manage car traffic , especially on key walking routes and optimise street space. Use landscaping and trees to create a buffer between the footpath (or cycle path/lane) and the carriageway.	CoA	Lead
Motorised Traffic Impacts and Mode Share	Motorised vehicle traffic makes walking less safe and enjoyable , with a vicious circle where people feel they have to drive . Car ownership: once people own a car, they are more likely to drive.	Reduce motor vehicle traffic through the City . Active travel and public transport network development, to make walking/wheeling the best choice for most trips. Increase and promote car sharing , so residents can choose to drive when they need to but do not feel they have to own a car.	CoA	Lead
Motorised Traffic Impacts and Mode Share	Support and culture: -Automobility is normalised and driving is a strong habit -Accountability and reporting on walking/wheeling outcomes is minimal.	Complement infrastructure improvements with behaviour change programs. Work with the community to re-imagine streets Detail responsibilities and reporting in the ITS	CoA and DIT (Way2Go) CoA	Partner Lead
Walking is Comfortable & Accessible	Many people are driving distances that could be walked. The Park Lands reduce the residential population within a walkable catchment of North Adelaide and the city. The River Torrens is highlighted as a 'major potential' by Gehl but there are limited river crossings , especially inviting ones for walking/wheeling.	Incentives for walking/wheeling and disincentives for driving. Promote use of shared micromobility and public transport for part of journeys, to enable walking for the rest of the journey. New bridges/modified bridge for better active travel outcomes.	CoA DIT and CoA CoA	Lead Partner Lead (but State funding needed)

³⁷ **Opportunity Category:** **Lead** – invest time and/or resources, **Partner** - actively seek partnership opportunities • **Facilitate** – utilise levers available to support implementation • **Advocate** – seek out support and/or partners to undertake state or nationally significant actions • **Regulate** – fulfil legislative roles and requirements.

Framework Theme	Issue/Barrier	Opportunity	Responsibility (State / CoA)	Opportunity Category ³⁷
		Extension of the free tram zone to Greenhill Road (and to the northern extend of Park Lands, if a tram were to extend to the northern suburbs e.g. Prospect Rd), so people have the opportunity to walk more (part of the longer trip) and also avoid the Park Lands if they are concerned about social safety.	State	Advocate
	Routes between destinations sometimes lack legibility . Wayfinding signs do not reference CCTV, dry zones and Home Zones- information which makes people feel safer.	Improve wayfinding at the edges of the Park Land and assist with legibility of main routes through consistent design features, such as lighting. Updates wayfinding signs to incorporate current information.	CoA	Lead
Public Transport	Poor accessibility connections and lack of crossing points to bus stops. Some bus stops do not have safe crossing points in proximity, and others lack sealed footpaths and kerb ramps on adjacent footpaths.	Work with DIT to create safe, DDA compliant and direct crossing points to existing public transport stops (and potentially relocate stops to improve outcomes).	CoA (and DIT for planning)	Lead
Experience & Place				
Population & Land Use Changes	Growing CoA residential and worker populations. Increased density and mixed use development	Integrated land use and transport planning, to create liveable, sustainable urban growth. Use of accessibility based mapping to inform planning and design.	CoA	Lead
Human Scale Built Form	Many streets are car dominated and some lack human scale.	Use the M&P assessment to determine and prioritise routes where higher quality outcomes are needed and use the Healthy Streets framework to achieve better street outcomes. Work with children to create playful, joyful opportunities on streets and paths.	CoA	Lead
Health & Sustainability				
Clean Air	Emissions from motor vehicles impact human health and walking/wheeling experience	Reduce speed limits and implement measures such as modal filters and a traffic circulation plan to reduce through vehicle traffic.	CoA	Lead
Access to Nature	Park Lands and Squares are valued but often not easy to walk/wheel to, especially for children and older people.	Create a network of green, active transport streets linking key destinations, the squares and Park Lands, to connect people to open space along enjoyable, comfortable and safe routes.	CoA	Lead
Climate Resilient Places and Networks	Lack of shade and protection from inclement weather. Particular issues for people with disability, including hot surfaces making wheelchairs too hot to use.	Increase tree canopy cover for cooling and shade: greener streets for active living. Building awnings. Measures to address wind issues on city streets.	CoA	Lead

Framework Theme	Issue/Barrier	Opportunity	Responsibility (State / CoA)	Opportunity Category ³⁷
Safety & Comfort				
Safer Roads	As identified in Gehl's studies, slip lanes and the number of footpath interruptions (with side street crossings and driveways) reduces the walking experience and present safety concerns. Delays are also due to long traffic signal cycle times and signal phasing and detection, and the limited number of priority pedestrian crossing points (zebra or wombat crossings).	Remove slip lanes on CoA roads. Reduce the number of interruptions and install continuous footpaths. Traffic signal review to inform improvements Path priority across roads without signals and a single lane in each direction: zebra or preferably wombat or raised path priority crossings. Signalised crossings with raised safety platforms on busier and wider roads. Investigate the potential to close some roads to better connect and increase functional Park Land use.	CoA	Lead
Safer Speeds (speed limits)	Speed limits are consistently reported in research and strategies as a significant barrier to walking. CoA has speed limits exceeding those for Safe System aligned outcomes.	Adopt safer speed limits (with Safe System alignment) via the Citywide Speed Limit Review	CoA State (approves)	Lead Advocate
Safer Roads	Severance e.g. ring road is a barrier to walking between CoA and adjacent municipalities.	Advocate for Safe System aligned crossings and work with DIT to investigate options for main crossings and slip lane crossings at the ring road.	State	Advocate
People feel comfortable on the street	Footpath quality and (clear) space for walking. Especially for people with disability and older pedestrians, inadequate space for walking and potential trip hazards can deter walking. Narrow ramps and absence of ramps in some locations.	Update standard details for kerb ramps and minimum footpath widths (based on classification and street typology). Renewal projects to improve LOS condition and to seek to implement improved designs and parameters.	CoA	Lead
Gender inclusive place and networks	Parental fear is a barrier to active school travel and children's independent mobility. Parents feel they need to accompany children to and from school, and when they are often driving to work, they trip chain and drive children to school. Women are significantly less likely to feel safe in the evening, and inadequate lighting of paths is a key issue	Prioritise pedestrians and design with child pedestrian safety in mind. Implement a network of safe, legible routes to schools, open space and community facilities that are used by children. Create the social environment to support AST and CIM, and make them the norm. Produce walking maps and behaviour change programs, including for children starting school. Explore opportunities for Open Streets and School Streets.	CoA State (Way2Go)	Lead Partner

6. WHAT ARE THE CURRENT ISSUES?

Young people are concerned about climate change and automobility no longer holds the attraction it once had. Better conditions are needed to support higher levels of walking/wheeling and to reduce car dependence. With new technologies and the sharing economy, a more mobile workforce and more potential to 'work from anywhere', Adelaide needs to reflect on how it will respond to become a globally competitive and attractive city. Improving walkability is key to Adelaide being a place where people want to live, work and play.

6.1 Mode Split and Difficulty Enabling Behaviour Change

Distances need to be feasible to be walked, within people's 'travel budget' or available time. Car parking surveys undertaken as part of Main Street projects, indicate that many people are driving distances that could be walked. This can relate to the relative proposition of driving versus walking. Often car parking is readily available and free or low-cost, making driving, especially when habitual, people's choice.

Better access with improved infrastructure or service is the most important intervention for people to change their travel behaviour. Therefore, if people face barriers to walking/wheeling because of fear of motor vehicles, these barriers must first be changed, before many people will consider changing to walking/wheeling. Infrastructure improvements can then be supplemented by behaviour change programs that help people with incentives or information until the new travel behaviour becomes habit.

Changing travel habits can be hard but life events and disruptions engender changes in behaviour and could be more effective than usual, incremental policy solutions, lead to innovations and "significant shifts in behaviour can be managed and are not as painful or problematic to travellers as is often feared"³⁸. With rising health impacts (and associated economic cost) from physical inactivity, climate change and liveability concerns and with the rising cost of living, it is a critical time for governments to create policies, plan for and invest in walking/wheeling, to support people make positive travel changes.

6.2 Safety

Directions from national guidance and State Government mean that we need to consider our risks and our responsibility as road managers, to adopt and implement the Safe System approach, including safer speeds. The crash statistics indicate that measures such as safer speed limits are essential if we are to achieve road safety targets and make people walking/wheeling safer. Perception of safety is also important and fear of motor vehicles, especially at higher volumes and speeds, is a key barrier to walking/wheeling, especially for children, older adults and people with disability.

6.2 Motorised Traffic: Noise, Emissions and Place Impacts

Vehicle noise and emissions have serious mental and physical health implications and when streets are too noisy or polluted, people are less likely to choose to walk/wheel or take those streets (which may in turn increase trip distance and/or limit the choice to walk/wheel certain trips). Vehicle traffic noise inhibits people's ability to socialise with friends, neighbours and others on streets, thereby reducing social cohesion and connection. The impacts of motorised vehicle traffic reduce the place value of streets and people's desire to stay on streets and enjoy these public spaces.

Current levels of motor vehicle traffic, especially when travelling up to 50km/h or 60km/h (in line with posted speed limits) can make walking/wheeling a poor experience and reduce

³⁸ Marsden, G. and Doherty, I. (2013). *Insights on disruptions as opportunities for transport policy change*. Transportation Research Part A: Policy and Practice, 51 p46-55.
<https://doi.org/10.1016/j.tra.2013.03.004>

willingness to walk/wheel, or make people feel restricted by only being able to choose certain routes that are more comfortable.

6.3 Comfort and Accessibility

Space for Walking

Space for walking/wheeling is often limited by the physical width of footpaths but also by the competing users and uses of space, including kerbside dining, A-frames and street furniture.

Without definitive walking/wheeling network classifications and associated guidance about elements such as walking/wheeling space (clear width), minimum Australian Standard widths or widths from Austroads Guide to Road Design Part 6A are used. While there have been some successful recent projects to improve walking/wheeling space, such as the changes to streets on the Riverbank to Market link, there is a need to apply guidance that better considers the comfort of people walking/wheeling and appropriate widths for different types of streets.



Figure 17: Congested footpath (lack of walking/wheeling space) on Pirie Street

Opportunities to Cross

In the mid-late 20th Century, the focus on city streets went towards unimpeded flow of motor vehicles, and there are now often significant distances between formal crossings (signalised intersections or pedestrian actuated crossings, zebras etc). Median islands or use of central medians to stage crossings may be acceptable to come people but especially for crossings of roads with higher vehicle volumes and speeds above 30km/h, they are not an inclusive crossing outcome, considered to be safe and comfortable for children or older adults and some people with disability.

6.4 Shade and Climate Resilient Places and Networks

Many footpaths lack adequate shade from trees. With climate change, this will become an increasing problem, especially to people who will have accessibility further reduced if it is too hot to walk/wheel comfortably. While CoA has strong strategic directions and the community are supportive of increased greening, current street space allocation, combined with constraints such as underground utilities, can limit the ability to increase tree planting on many streets. Maintaining large spaces for motor vehicles: lanes (usually with two-way traffic flow) and car parking can mean that as well as the inability to widen footpaths, there is no space for planting.

6.5 Accessibility and Gender Equity

Many footpaths lack width for people to be able to pass or walk side by side, and if there are obstructions such as A-frames or bins, people wheeling are restricted in their ability to move through the city. As noted above, it is often challenging to widen footpaths and 'something needs to give' if there is to be adequate space for comfortable space for walking and wheeling.

Parental fear is a barrier to AST and CIM, and it is associated with the built environment (and road safety concerns) and other social and legislative factors²⁷. Parents feel they need to accompany children to and from school, and when they are often driving to work, they trip chain and drive children to school.

As previously noted, research by the DIT Way2Go program and recent surveys of CoA school students (as part of the School Travel Safety Reviews) found that a significant number of children who are currently being driven would like to use active travel or public transport. Creating better – especially safer - streets that enable children to walk/wheel is key to creating a child friendly city: providing children with a right and ability to be active participants in public life. When parents/carers do not think that streets are safe, they limit their children's freedom and development. This impacts parent/carer time too, and as noted, it can tie women up more frequently and potentially limit their ability/time to work or study.

Women and gender diverse people can feel uncomfortable in certain streets and places, and in certain circumstances, such as when there are male sports events on in the city, and when they feel exposed and subject to harassment (such as when standing at intersections for long periods, waiting to cross streets. Women are significantly less likely to feel safe in the evening, and inadequate lighting of paths is a key issue³⁹. Less than half of residents say their local community is inclusive, and this has been trending down.

Lack of public toilets and infrequent places to rest can be barriers to older adults, people with disability and parents with young children or infants.

6.6 Strategic and Financial Considerations

Currently there is little funding available for walking/wheeling projects. While there is a State Cycling Fund (albeit providing relatively small amounts and with the need for matched funding from councils), there is no State Walking/Wheeling Fund. Footpaths may be seen to be a 'local government issue' and therefore walking/wheeling a local government issue to be funded, the reality is that widening footpaths can be a significant cost and that the new and improved crossings needed to achieve safe, inclusive walking/wheeling outcomes, cannot be delivered within existing council budget allocations. The AITPM²⁴ recommends that governments should allocate 10-30% of transport budgets to walking and cycling infrastructure, in line with international good practice. Under-investment in active travel is a critical issue in Australia, with most jurisdictions allocating only about 1% of their transport budget; the inevitable consequence of this is that active travel levels are suppressed.

The *Transport Asset Management Plan (TAMP)* outlines that the ITS will help identify level of service requirements for transport infrastructure, including specific needs for upgrades. The TAMP highlights that renewal programs do not address functionality deficiencies, and that upgrade funding will be needed (Table 5).

³⁹ City of Adelaide (2021). *Resident Survey Summary Report*

Table 5 Risks and Treatment Plans from the TAMP (Table 6.2)

Asset at Risk	What can Happen	Risk Rating	Risk Treatment Plan	Residual Risk	Treatment Cost
All Transport Assets	Renewal, maintenance, and operational budgets are not adopted as recommended in Asset Management Plan, resulting in increased asset risk, reduced levels of service and increased whole of life costs	High	Reduce levels of service, to better align asset management activities with financial constraints. This will result in renewal and maintenance activities being prioritised, with respect to available budgets.	Medium	Within existing resources / budgets
	Recommended road safety initiatives and/or infrastructure upgrade budgets are not approved to enable Safe System speeds and Safe System aligned layouts. This may result in failure to meet targets set in South Australia's Road Safety Strategy and deliver upon Council's Strategic Plan objectives to decarbonise transport and provide more inclusive, healthy streets.	High	Implement Safe System speed limits and treatments, pending Council and DIT approval of recommendations from the City Wide Speed Limit Review. Delivery of prioritised upgrade/new projects with Safe System aligned outcomes identified within the Transport Strategy to enhance road user safety. Monitor road related statistics to identify if additional prioritisation criteria and funding are needed	Medium	Upgrade/new projects are considered as part of the Annual Business Plan & Budget

7. WHAT ARE OTHER CITIES DOING?

City of Sydney Strategy and Action Plan



The City of Sydney has recently released an updated walking strategy and action plan⁴⁰. It has five strategies:

- A. A city where people can walk
- B. A city where people can walk safely
- C. A city where walking is comfortable
- D. A city where walking is fun
- E. A city that is a leader in walking.

Walking-related improvements are prioritised and highest priority programs include pedestrian safety improvement projects, landscaped and pedestrianised streets, shared zones, raised intersections, decluttering, greening, street furniture (including seating, toilets and water fountains), lighting, crossings (eg continuous footpath treatments, wombat: raised zebra crossings), ramp compliance and footpath widening and renewal. Selected case studies from the document are shown below. They demonstrate how City of Sydney is optimising street space to deliver better place outcomes.

Case study: George Street

The pedestrianisation of George Street is an example of the City and NSW governments working together to improve public space and walking outcomes. Where George Street was once a heavily congested, unpleasant street it is now the pedestrian spine of the city, providing space for people to enjoy. The initial project was so successful that it was extended south to Central station and a trial of a further closure between Hunter and Bridge Street started in late 2022.



Case study: Pitt Street

The Pitt Street cycleway and street upgrade between King Street and Reiby Place was made permanent in 2022. The project upgraded the public domain and reallocated traffic lanes to both walking and cycling space, narrowing the street to one traffic lane. The project has calmed traffic and made the street more pleasant to walk along, as well as enabled people to cross informally along its length.



Photo: Abril Felman / City of Sydney

⁴⁰ 'A City for Walking' strategy and action plan – continuing the vision - City of Sydney (nsw.gov.au)

Brunswick East Open Streets Pilot

In 2022, Bicycle Network in partnership with Moreland City Council and in collaboration with Brunswick East Primary School, did an Open Streets Pilot. The Open Streets Pilot is part of a wider 'Ride & Stride' behavioural change program with primary schools being undertaken by Moreland Council. The goal of the initiative was to create healthier and happier streets for all by encouraging walking, riding, scooting and skating to school. There was an emphasis on safety around the school zone at drop off and pick up times, with the street adjacent to the school 'open' to people travelling actively but closed to through car traffic.



Figure 18 Brunswick East Open Street Trial. Photo credit: Bicycle Network

The trial at Brunswick East Primary School ran for a week and on average, 75% of students travelled actively (a 20% increase) during this time. Feedback was positive with many parents, children and residents wanting regular Open Streets. 56% of families surveyed said Open Streets has encouraged them to use active school travel more.

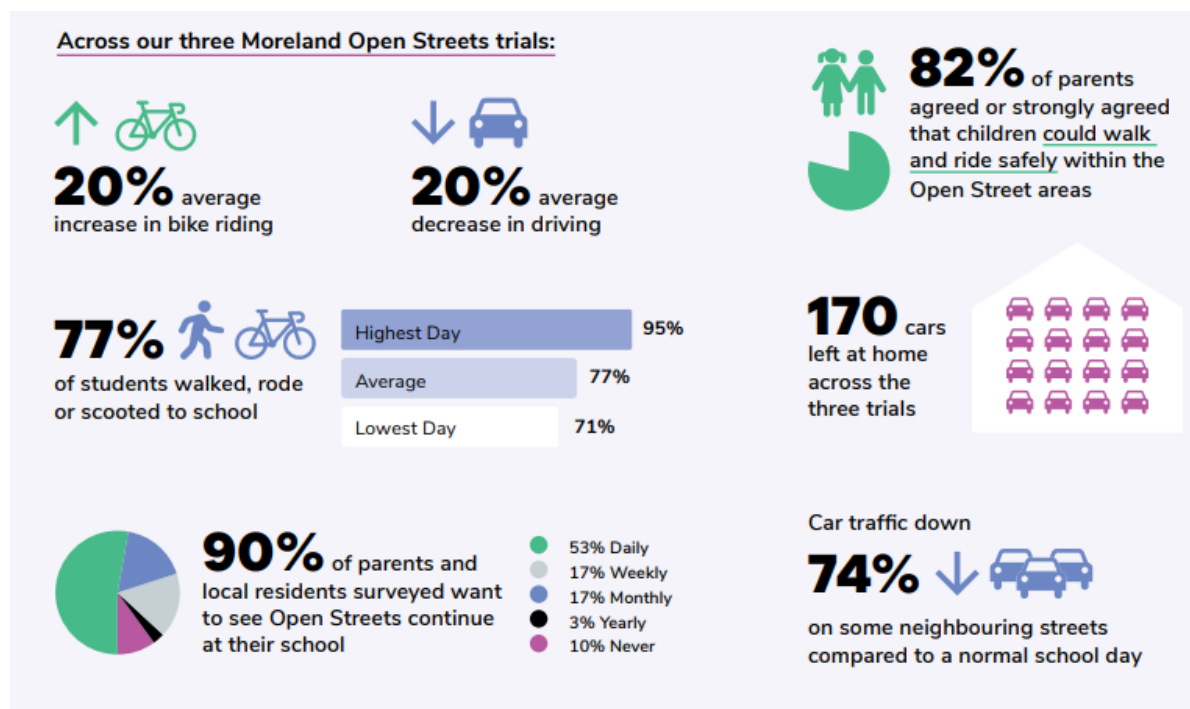


Figure 19 Key Project Outcomes (Ride & Stride Pilot Program Outcomes Report, Moreland Council, 2022)

School Streets⁴¹ are more permanent versions of Open Streets, which are being used in many places internationally. Streets adjacent to schools have permanent times at the start and end of the school day when motor vehicle traffic cannot use them or are permanently pedestrianised. This has been done in numerous places, including Paris (see example in Figure 20), to address the risk of motor vehicles to children's safety and physical and mental health, and create child-friendly public spaces.



Figure 20: Before and after of Parisian school street. Photo credit: Chris Bruntlett⁴²

Street Changes to Support Walkability: Examples and Community Views

Australian and international street projects suggest that change is rarely proposed without opposition. Good engagement and working with the community to visualise change scenarios can often only go so far. Leadership and commitment to deliver Council strategy and policy is needed. Ultimately - time and time again - despite pre-implementation opposition, project evaluation suggests positive outcomes and that people change their views once they see and realise the positive public realm, community and economic benefits.

Low Traffic Neighbourhoods, London

In London, low-traffic neighbourhoods (LTNs) have been implemented to encourage travel by active transport, including as a response to Covid related fears of public transport and increasing use of private cars. While the LTNs often faced resistance, local election outcomes suggest anti-LTN candidates were mostly unsuccessful in winning seats, and the LTN issue was reported as being, “the dog that didn’t bark” and that the media reporting and perception is based on a vocal minority; research found 47% of Londoners support LTN introduction while only 16% oppose it⁴³. The UK government has recently committed to a £2bn active travel fund to promote walking and cycling, to implement measures such as

⁴¹ <https://www.fiafoundation.org/media/hr3fmhin/school-streets-report-pages.pdf>

⁴² https://www.linkedin.com/posts/cbruntlett_paris-aims-to-have-300-school-streets-completed-activity-7176839531734695936-Lpaa?utm_source=share&utm_medium=member_desktop

⁴³ [Are low-traffic neighbourhoods good for our cities? | Financial Times \(ft.com\)](#)

LTNs, School Streets (permanent or temporary controls to preclude motor vehicle traffic on streets adjacent to schools) and cycle lanes.

Other Examples of City Leadership for Change

Berlin is introducing kiezblocks to protect local communities from through traffic, using bollards and one-way streets. As noted by Felix Weisbrich, Head of Roads and Green Spaces Friedrichshain-Kreuzberg district council and reported in the Financial Times⁴⁴, it takes three to six months for complaints to stop and there needs to be political commitment and leadership as people adjust, “If you change the system, you change the way they organise their mobility. And that takes time. Cities that are built for cars will be used by cars. If we build other infrastructure, it will be used.”

In Paris, there has been strong leadership to deliver changes to the transport network, including significant investment in cycling infrastructure and pedestrianisation of streets. Paris Deputy Mayor Grégoire asserts that city centres should focus on creating pedestrian friendly centres as attractions and to boost trade; he highlights that heavy vehicle traffic deters visitors and that there needs to be a focus on creating an inviting environment for pedestrians and for people to stay in the city ⁴⁵. Paris is implementing a project to manage motorised vehicle traffic that is travelling through the city, and Deputy Mayor Grégoire notes that it should be referred to as a “zone apaisée” (peaceful or calmed zone) rather than a “limited traffic zone” (*ibid*).

In Australia too, strong leadership has been needed to proceed with implementation. The City of Port Phillip, an inner Melbourne Council, worked with the then Public Transport Victoria (PTV, part of Victorian Department of Transport) to deliver a project to revitalise Acland St, St Kilda an activity street popular with tourists and locals. The activity street upgrade incorporated place-based urban design, with a pedestrian friendly streetscape and DDA compliant tram stops. There was vocal opposition from some parts of the community during design development and the City of Port Phillip realised they would not have trader support but that the project success and go ahead would *not* be based on this. The upgrade went ahead despite some ongoing resistance, and a 12-month post-construction evaluation found⁴⁶:

- Over 80% of survey respondents had clear support for the upgrade, with positive views on safety, accessibility and place outcomes.
- Increased economic growth in the Ackland Street Village Precinct relative to benchmarked regions. The street changes resulted in significant increases in on-street trading zone areas, catering for an 89% increase in patron capacity.
- Changes to pedestrian movement activity, with reduced morning activity but increased afternoon and evening plus weekend activity.
- Improved tram punctuality.

⁴⁴ Financial Times (20th of May 2022)

⁴⁵ «On ne renoncera pas à la zone à trafic limité» : Emmanuel Grégoire et David Belliard dévoilent le projet de Paris pour 2024 - Le Parisien accessed 22nd February 2022.

⁴⁶ Acland Street Upgrade | Have Your Say Port Phillip

8. OPPORTUNITIES

How can Adelaide benefit?

Improving walkability will make CoA a place that more people want to visit, live and work in. Increasing walkability will increase social cohesion and connection and make the city more accessible and inclusive. It will make our main streets healthier in terms of healthy places for people to dwell and dine on-street, and in terms of attracting more business.

Many people, especially children, older adults and people with disability, would like to be able to walk/wheel more around CoA. Many would choose to or be allowed to, if street design and operation enabled them to feel safer and more comfortable, and enjoy their walking/wheeling journey.

8.1 Creating Networks and Healthy Streets for Sustainable Growth

There are opportunities for more walking/wheeling for people to travel to and within the City (based on feasible distances). Mapping of walking/wheeling networks, updated to reflect City Plan, would help establish the importance of this mode and inform future street design and adjacent developments. Development of a suitable framework, incorporating the M&P, Healthy Streets and Safe System frameworks would enable CoA to develop suitable walking outcomes on the networks of streets and paths. As noted in other Discussion Papers, creating a hierarchy of uses and users (on different streets) and strategically aligned principles for allocating street space, will mean our street space can be optimised.

The spatial accessibility work developed in City Plan can be expanded to incorporate level of service requirements and show where improvements, such as safer crossings and increased tree canopy cover, are needed so people of all ages and abilities can walk/wheel with safety, comfort and attractiveness.

8.2 Improving Safety and Comfort for All

Reducing Impact of Motor Vehicles and Creating Space for People

Developing a traffic circulation plan, as discussed in the Motor Vehicles and Parking Discussion Paper, will present an important opportunity to limit through motor vehicles and reduce the impact of vehicles on place outcomes and people walking/wheeling or dwelling on streets. Smart Move suggested maintaining two-way motor vehicle traffic flow on streets but it is suggested that this position be changed. Making some streets one-way will create space for wider footpaths and other desirable elements such as greening.

Reviewing traffic circulation and where it will be beneficial to limit through motor vehicle traffic will help identify where modal filters can be implemented. Modal filters are localised controls on through motor vehicles. They reduce risk by reducing exposure to and speed of vehicles, can create more continuous footpaths and increase greening. An interstate and a local example of modal filters are shown in and Figure 21 and Figure 22 respectively.



Figure 21: Modal Filter Outside Fitzroy Primary School, Melbourne



Figure 22: Modal Filter on Porter Street, Unley

A specific type of modal filter or traffic control are the School Streets or Open Streets. CoA could develop an Open Street (temporary modal filter to create a safe and enjoyable street for children) program as part of a behaviour change program at suitable school locations and investigate opportunities for School Streets (with permanent healthier streets, with/without car traffic closures/restrictions for part or the whole of the day).

As outlined in the Street Space and Kerbside Management Discussion Paper, it is important that street space is optimised. The development of principles for prioritisation and use of street space, including comfortable walking/wheeling space and for greening, will help CoA plan, design and budget for better streets for people.

City Plan includes a priority for a greener and cooler city, and the creation of a Green Grid (Figure 23): tree lined streets to connect people to City Squares and Park Lands. This network will not just improve walkability but increase the City of Adelaide's uniqueness and appeal as a 'city within a park.'

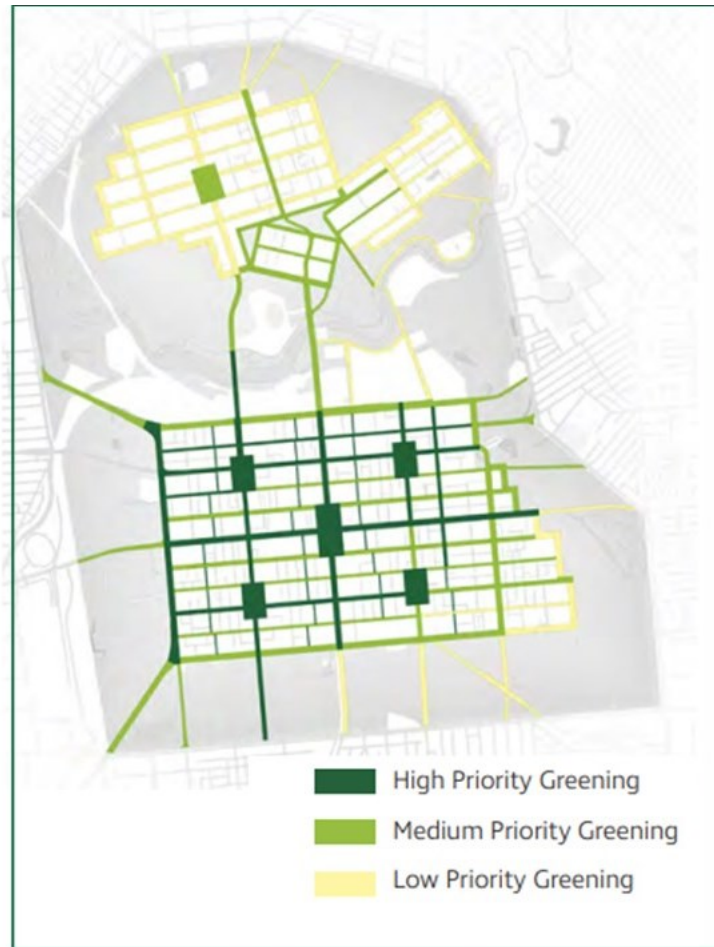


Figure 23: City Plan Green Grid

Safer Speeds and Safer Roads

If CoA wants to provide comfortable and safe conditions for people walking/wheeling it is important that streets have:

- More dedicated footpaths and space for people walking/wheeling
- Safer speed limits
- Safer crossings and intersections, with reduced delays.

It is vital that routes connect with safe crossings and intersections and that crossings spaced to provide adequate opportunities to cross and meet desire lines. CoA should seek primary Safe System outcomes, such as wombat crossings (Figure 24), which practically eliminate the risk of death and serious injury.



Figure 24 A Wombat (Raised Zebra) Crossing on War Memorial Drive at the Frome Road Roundabout

8.3 Supporting Travel Change to Walking/Wheeling

It is important to note that travel behaviours are habitual, which is a key challenge to improving walking and liveability outcomes (when people have strong driving habits). We know that there are key ‘change moments’: times in people’s lives when habits are interrupted and new ones established. These are times such as starting a new job, moving house, retirement, and children starting school. If we want to transform, it is important to capitalise on these opportunities:

- Children’s travel to school, especially as it is so critical for children’s development and long- term establishment of healthier travel habits.
- Tertiary student travel.
- New residents travel behaviour (which may involve promoting car share and encourage zero or reduced car ownership when moving).
- New employee travel behaviour.

While active school travel (AST) levels are higher at some schools within the City, they do not reflect the potential based on distance, which suggests we are not enabling children to use AST, ideally with Children’s Independent Mobility (CIM). With a multi-faceted approach, including addressing barriers and with support, there is the potential for significant change and increased AST and CIM.

8.4 Making the City a Place to Visit and Enjoy Living

A key question for city leadership is how we can transform the City so people *want* to spend time in the city. Changes in usage patterns (and at least to some extent, ongoing working from home) presents an opportunity for Council to reconsider how the public realm is used to cater for a broader range of users including residents and visitors, and in particular how road space and the footpath is used.

Further opportunities to promote walking/wheeling to experience the city, discover ‘hidden gems’, history and culture should be explored. Linking attractions by walking/wheeling routes, with an enhanced walking journey being part of the experience, could create complementary, larger experiences.

9. KEY STRATEGIC MOVES

Seven **key strategic moves** have been identified to support more people choosing to walk/wheel:



Optimise our streets to create more comfortable spaces for people walking/wheeling. Establish principles for prioritising the use of street space for different purposes, including walking, cycling, parking, greening, on-street dining, and shared micromobility parking.



Implement safer speed limits, seeking Safe System alignment to make streets more comfortable and enjoyable for people walking/wheeling as well as quieter with reduced vehicle emissions.



Establish walking/wheeling networks that outline associated infrastructure requirements (e.g. path widths), based on place value (informed by City Plan) and proximity to destinations such as schools, supermarkets and public transport.



Create healthier, child-friendly streets around schools and adjacent residential areas to support local walkability and active travel to school.



Develop travel behaviour change programs for schools and for new residents, to establish and maintain active travel habits.



Create safer pedestrian crossings which aim to slow down motor vehicles and reduce pedestrian wait times at new and existing sites.



Enhance and promote walking/wheeling routes to increase tourist and visitor potential and community enjoyment of our streets and places. Increase greening, wayfinding and points of interest/public art.

10. CONCLUSION

The CoA recognises the criticality of reducing carbon emissions by creating healthier streets so more people choose to walk/wheel rather than drive. There is an aim to double the number of residents who walk to work by 2031.

Achieving higher levels of walking and creating a walkable CoA is about more than physical, built attributes of the environment, and needs a focus on the built, natural and social properties of neighbourhoods, which highlight stronger links to not just physical activity outcomes but broader health, social connectedness, environmental and economic outcomes.

People's travel choices are often based on habits, which can be hard to change. Life events and disruptions provide key opportunities for change – for transformation rather than usual incremental changes. Increasing levels of walking/wheeling to school should be a key focus, with the potential to establish healthy travel habits and benefits children now and through their lives. With a significant increase in residential and worker populations in CoA, it is important that more walking is supported through both behaviour change programs and streets. It is important that the city environment is welcoming to people who walk/wheel by ensuring that there is a legible and comfortable walking/wheeling network, so walking/wheeling is the natural choice by all city users.