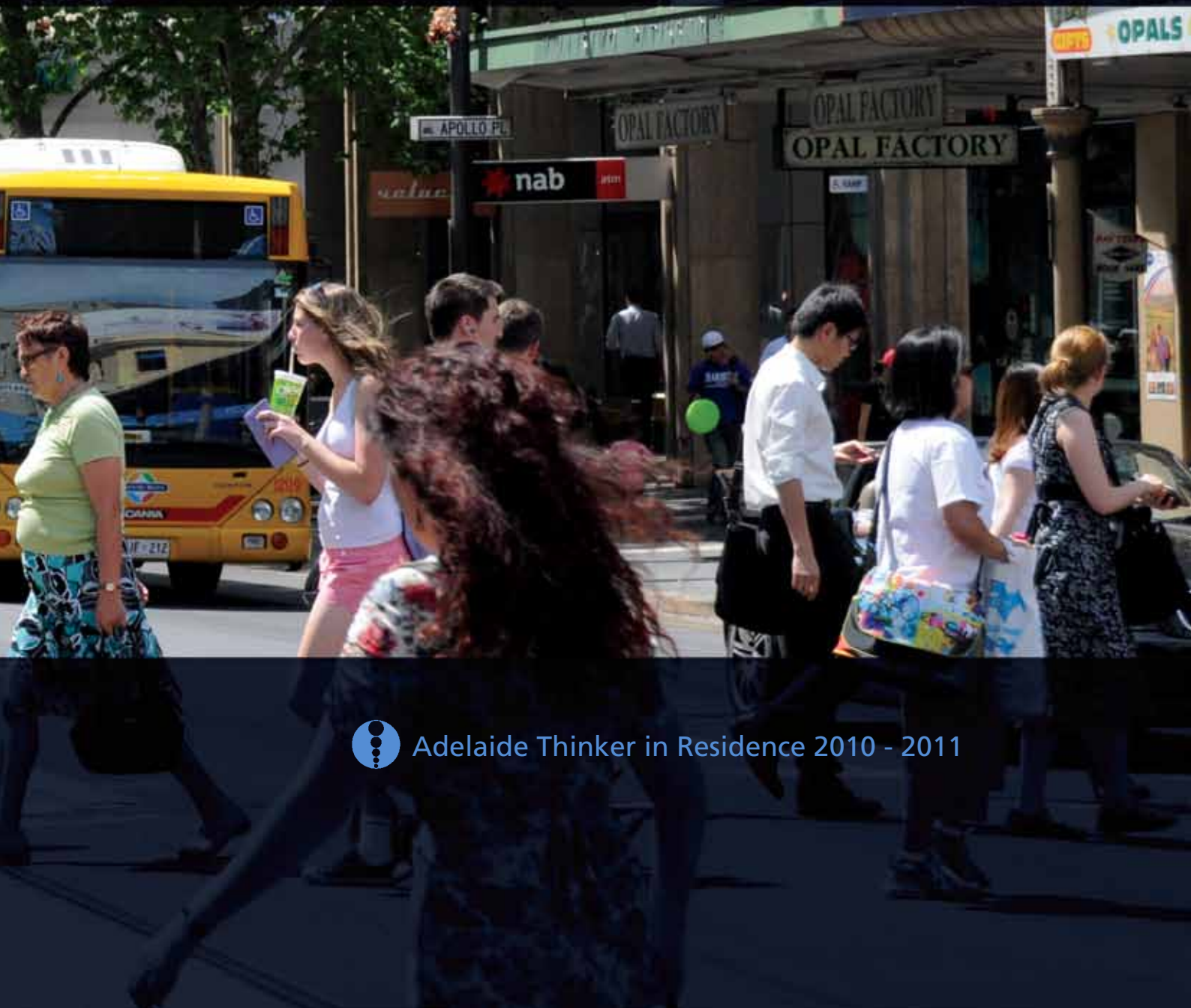


All On Board

Fred Hansen

Growing vibrant communities
through transport



Adelaide Thinker in Residence 2010 - 2011

All on board: Building vibrant communities through transport.

Prepared by Fred Hansen,
former General Manager of TriMet, Portland,
Oregon's Department of Transport

Adelaide Thinker in Residence 2010–2011



**Government of
South Australia**

Department of the Premier and Cabinet C/O PO Box 2343 Adelaide SA 5001
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Premier's Foreword Message from the Premier

Intelligent planning, coupled with optimal public transport, remain integral and inter-related features of the world's great cities.

Here in Adelaide, they will be vital elements in ensuring our city maintains its global reputation as liveable, sustainable and vibrant.

Excellence in planning stems from a well-defined understanding and vision of our community's changing needs, the recognition that we must protect our heritage and our environment, as well as the acknowledgement that we must also embrace innovation.

As such, Adelaide has reached a critical point in defining its future.

That's why we have developed a 30-Year Plan for Greater Adelaide and updated South Australia's Strategic Plan, to provide a comprehensive vision and structure as we chart our path forward.

In addition, our Integrated Design Strategy is being implemented to ensure that new plans and developments are considered in a holistic and sustainable way.

This Strategy will help to guide our unprecedented investment in new infrastructure, a program that includes a new central hospital and inner city stadium, and a landmark redevelopment of Adelaide's emblematic Riverbank precinct that will link to an enhanced arts and cultural boulevard.

Meanwhile, new developments beyond our CBD – such as the Bowden Urban Village and Tonsley Park sustainability precinct are being developed to ensure they deliver what Fred Hansen hails as a "20-minute neighbourhood".

A lifestyle that offers residents the majority of their essential services within a 20 minute walk, cycle or public transport ride from home.

During his term as an Adelaide Thinker in Residence, Fred Hansen has applied and adapted lessons learned from one of the world's most successful recent urban redevelopments – in his home city of Portland, Oregon.

In particular, Fred's experience as General Manager of Portland's public transport provider underpins his thinking on the transformative possibilities available through transit developments and integrated transportation planning.

In this report, Fred Hansen outlines a path to delivering healthier and more sustainable communities.

He details the growth opportunities that can stem from communities' ready accessibility to work and essential services, to quality open space, to greater safety features, and to more pedestrian and cycling-friendly infrastructure. He recommends putting the pedestrian and bicyclist at the centre of transportation.

Central to his overall message, Fred emphasises the need for clean, reliable and frequent public transport.

Indeed, he places transport at the heart of planning, and maintains it is an essential building block for any successful, sustainable new development, and a means of driving social, economic and creative regeneration in areas that are in need of re-investment.

Fred describes the institutional changes we need to embrace to ensure the success of our 30-Year Plan for Greater Adelaide, and the steps we should take to ensure that transport planning underpins our State's broader economic and social goals.

I want to thank Fred Hansen for the significant contribution he has made to South Australia through his residency, and I commend this report to you.

Mike Rann
Premier of South Australia





Fred Hansen

Fred Hansen was General Manager of TriMet, Portland, Oregon's Department of Transport from October 1998 until July 2010.

Fred Hansen is recognised as a leader in the transit world, having lectured and participated on panels throughout the US and around the world. He has carried the message that land use and transportation must be fully integrated if we are to address global climate change as well as the mobility needs of our communities. He founded and was the first chair of the Sustainability Committee for APTA (American Public Transportation Association) as well as appearing at many other venues dealing with public transportation.

While General Manager of TriMet, Fred Hansen embarked on an aggressive agenda to expand transit and transportation options in the greater Portland region. The light rail expansion, with the first train-to-plane service on the West Coast in 2001 (Red Line), the opening of the interstate line in 2004 (Yellow Line) and the Portland Mall –South Corridor line in September 2009 (Green Line), has resulted in dramatic increases in transit ridership. He also created 'Frequent Service Bus' lines. These high quality, frequent, seven-day-a-week lines carry the bulk of all transit bus riders while using fewer than half of TriMet's bus fleet.

In addition, Fred Hansen created the 'Total Transit System' as one of nine guiding principles covering all investments for TriMet. This included innovations such as online trip planning: real time bus and train arrival times accessible by mobile phone or computer. The Total Transit System also included expanding the number of bus shelters with solar lighting, better customer information at stops, more safe street-crossings to access transit stops and the construction of more footpaths to connect where people live and work.

Recognising that transit in the greater Portland region is as much about quality of life as it is moving people from point A to point B, Fred Hansen sees investments in transit as transformational infrastructure. This means that transit investments need to build new, or revitalise existing, neighbourhoods, making places where people want to live, work and play.

Before his appointment as General Manager, Fred Hansen served as Deputy Administrator of the US Environmental Protection Agency (the number two person appointed by the President charged with protecting the environment, 1994–1998). Previously, Fred Hansen directed the Oregon Department of Environmental Quality from 1984–1994. He also served as Oregon's Deputy State Treasurer, Executive Officer of the Peace Corps, and as Chief of Staff to a Member of Congress from Oregon.

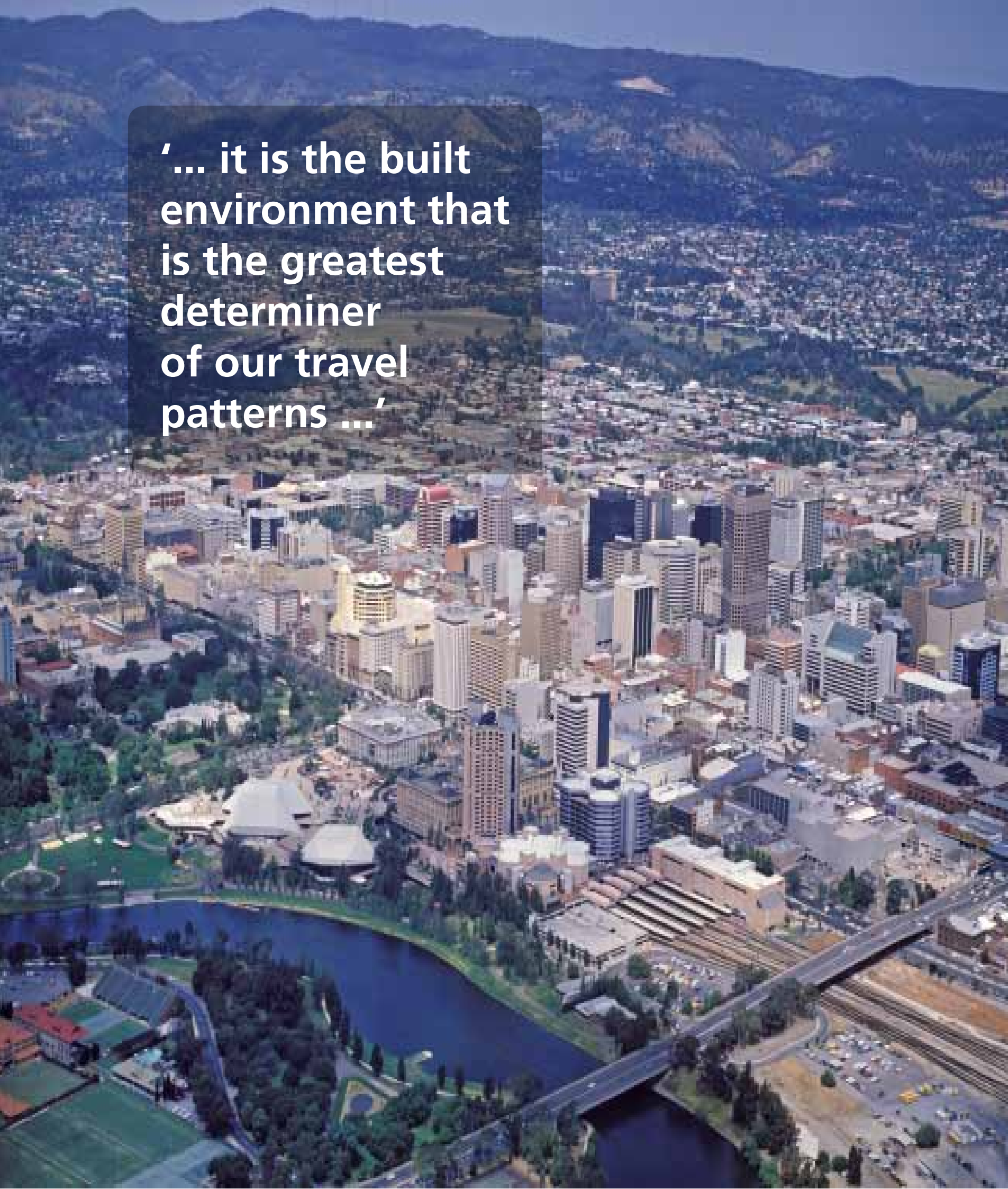
As an active member in his community and profession, Fred Hansen serves on numerous boards and task forces, including Providence Health System Governing Council – Portland Service Area (Chair), CALSTART (previous Chair) and in the past served on the Portland Workplace Diversity Task Force, Pioneer Courthouse Square Board, Portland Streetcar Board and the Eno Foundation Board of Advisors.

A native of Beaverton, Oregon, Fred Hansen attended Sunset High School, graduated Phi Beta Kappa from the University of Oregon, earned a master's degree from McMaster University and completed a year of doctoral work at the Johns Hopkins University.

Partners and Sponsors in Residency: Department of the Premier and Cabinet, Department of Planning and Local Government, Department for Transport, Energy and Infrastructure, Capital City Committee, Department of Education and Children's Services, Department of Trade and Economic Development, SA Health, Department for Families and Communities, Land Management Corporation, Adelaide City Council, Playford City Council, Local Government Consortium, Urban Development Institute of Australia, Integrated Design Commission, Property Council of Australia, Australian Institute of Architects, University of Adelaide.

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'... it is the built environment that is the greatest determiner of our travel patterns ...'

Summary of Recommendations

Introduction

The recommendations are organised in six broad categories.

1. Transformational infrastructure: Recognising and then acting on making all large government infrastructure investments transformational – helping to achieve *The 30-Year Plan for Greater Adelaide*¹ and making the region the most liveable and sustainable area in the world.
2. Increased investment in public transport: Greatly increasing the investment in all modes of public transport and the total transit experience.
3. Putting the pedestrian, with the bicycle close behind, at the centre of a new transportation master plan.
4. An Urban Development Authority: Fairly, consistently and predictably setting the framework for how and by whom the necessary infrastructure and the public realm will be financed.
5. Healthy communities: Recognising that making more walking and biking friendly neighbourhoods will bring a large benefit by encouraging healthier communities as well.
6. Community involvement: Developing a new approach to community involvement – one that involves the community in the key issues affecting them, and gives government a structure with which to consistently engage its people.

1. Transformational infrastructure

The Premier and the Minister for Transport should direct the development of a Transport Master Plan to guide all transportation infrastructure investments, incorporating the following six principles:

- It must be rigorous in its economic analysis.
- Transportation investments must take into account the full cost of travel.
- It must take into account the effect that transportation investments will have and be certain that those effects further the goals of *The 30-Year Plan for Greater Adelaide*.

¹ www.dplg.sa.gov.au/plan4adelaide/index.cfm

- Every transportation investment should be required to maximise the benefit of the project for bike and pedestrian movements.
- Citizen advisory committees, comprising representatives from all modes of transportation including public transport, bike and pedestrian, must be established to oversee the development and implementation of the Transportation Master Plan.
- A firm and non-porous Urban Growth Boundary should be established in law.

2. Increased investments in public transport for a total transit experience

- Extend the tram via a loop in the CBD, invigorating growth in the city.
- Increase investment in public transport to:
 - increase frequencies and reduce waiting times
 - improve connectivity, creating a 'network'
 - provide greater predictability and extend services to cover more of the day and week-ends.
- Improve accessibility for pedestrians and cyclists to public transport by:
 - providing safe and easy access to transit stations
 - ensuring that footpaths are wide, flat and with good signage
 - providing clear lines of sight and lighting, both natural and artificial
- increasing the amount of bike infrastructure, such as bike racks, particularly at train stations and interchanges.
- Replace the bus fleet with diesel-electric hybrid buses.
- Delete advertising on bus and tram windows.
- Establish a Grenfell Street Transit Mall, to be for the exclusive or near exclusive use of buses.
- Increase the level of priority for bus and tram services, especially in and near the CBD.
- Establish park'n'ride facilities adjacent to public transport services, though only at the ground level and not close to the CBD.
- Introduce a real-time information product for users to access online and via mobile.
- Make public transport a part of the Adelaide identity and the mode of choice.

3. Putting pedestrians and bicyclists at the centre of transportation planning

- Adopt recommendation by fellow Thinker in Residence 2010-11, Professor Fred Wegman in his Interim Report Driving down the road toll, who recommends that a hierarchy of roads be used to guide road safety strategy and transport planning.
- Ensure that appropriate safety infrastructure is incorporated into strategic planning to accommodate an increase in walking and cycling.

- Non-motorised transportation must be put at the centre of all transportation investments and it must become a guiding principle of a transportation master plan.
- The Premier and the Minister for Transport should require the incorporation of these recommendations into a new Transportation Master Plan recommended above.

Pedestrians

- Pedestrian crossing signals should be installed in as many places as practical.
- The timing allowed for a 'Walk' signal must be increased and should be a part of the normal traffic light sequences – not requiring activation to request a walk signal.
- The pedestrian must be given the right of way over a vehicle, not just in law but in practice.
- In wide streets, consisting of two or more lanes in each direction, pedestrian safe havens should be created.
- Careful consideration must be given to the provision of:
 - footpaths with adequate widths to enable comfortable passage, and non-slip surfaces where needed
 - ramps that provide smooth transition to roads
 - high quality street furniture
 - appropriate provision of public toilets
 - water-sensitive landscaping that contributes to the aesthetic value and adds shade where appropriate.

Bicycles

- A commitment must be made to continue to increase the kilometres of bike paths.
- No transportation infrastructure investment should be made without a corresponding investment in bike and pedestrian infrastructure in the same corridor or area.
- Current bike lanes should be retrofitted to make them wider – generally the international recommended width is no less than 1.5 metres of smooth ride, not including gutters.
- Obstacles in bike lanes, such as storm drains that can trap a bicycle wheel, need to be removed or modified to make them safe for bicycling.
- More bike boxes should be created to protect riders from vehicles turning across bike lanes.
- Under Australian Road Rules a driver may not be in a bike lane for more than 50 metres; the greater Adelaide region should change this requirement to 'the minimum distance to safely make the entry or exit'.
- Laws surrounding driving and parking in bike lanes need to be enforced.
- Trials should be initiated to adapt some of the best practices from around the globe to make bike travel a true transportation mode.

Crossing the Parklands

- Make crossings safer on ring roads around the Parklands to improve access.
- Install more plantings and artworks in barren sections of the Parklands.
- Pedestrian and bicycle infrastructure need to be designed using CPTED (Crime Prevention through Environmental Design) principles.
- Paths heavily used by pedestrians and cyclists should be made wider, and perhaps lanes marked, to avoid conflicts and possible accidents.

The City of Adelaide

- Activate the upper floors of Rundle Mall, providing work spaces and residences in order to encourage 24-hour activity, making the area safer and more inviting.
- Grenfell Street should become an exclusive, or near exclusive transit way or transit mall. Footpaths should be expanded by reclaiming at least one lane of road space to make them wider.
- Support the ongoing operations of Renew Adelaide, thus supporting Adelaide's creative entrepreneurs, and working with them to revitalise our urban environments.
- Purchase new diesel-electric hybrid buses, thereby reducing the diesel particulate pollution and associated noise from degrading the pedestrian environment.
- Footpaths must be expanded, safe biking corridors established, traffic calming devices adopted, more safe crossings built for pedestrians, narrower streets established and 'Walk' cycles lengthened at all signalised intersections.
- Improve footpaths with the planting of trees and other vegetation, as well as the addition of public art to make these areas where people want to live, to walk to work, walk to play and walk to shop.
- Complete a CBD tram loop to further improve the level of accessibility around the city, encourage more dense quality development and redevelopment, and make the city much more active and livelier, in turn improving the liveability of the city.
- Explore the establishment of a one-way street grid, allowing for much wider footpaths, to determine if it will assist in making the CBD more pedestrian friendly while aiding the flow of traffic.

Other communities throughout the greater Adelaide region

- Make every community throughout the greater Adelaide area more pedestrian and bike friendly
- Foster the provision of high-value employment opportunities nearby which are accessible by walking and biking.
- Encourage creation of retail activities in these communities allowing for shops to be accessed by foot and bike.

4. Planning for highest quality development

The Premier and Cabinet should create an Urban Development Authority to undertake at least five key tasks:

- Develop a policy framework in which:
 - the costs for public infrastructure and amenities are evaluated
 - a determination is made of which public investments are appropriate
 - a system is devised that fairly allocates costs across a complex set of possible investments and that provides the framework for how ongoing costs for that infrastructure will be allocated.
- Conduct ongoing monitoring of decisions surrounding investments in infrastructure and the public realm, with the authority to step in and alter agreements that are inconsistent with *The 30-Year Plan for Greater Adelaide*.
- Acquire and consolidate land holdings to permit the redevelopment of areas at a scale large enough to allow for the cost effective achievement of the goals of *The 30-Year Plan for Greater Adelaide*.
- Ensure that all developments or redevelopments are of the highest quality, having choices suitable for different lifestyles and life stages, including affordable housing for people on moderate to low incomes.
- Be able to stop, in extreme cases, a project that is about to proceed but is believed to frustrate the achievement of future opportunities.

5. Healthy communities

The 20-minute neighbourhood

- Promote the 20-minute neighbourhood – one in which residents can get to most of their essential services or activities within 20 minutes by walking, biking or taking public transport.
- Broad-based citizen advisory committees (CACs) should be established to determine what are the measures that should be included in what community members consider to be a walkable, bikeable, liveable, and sustainable neighbourhood.

6. Community involvement

- Sufficient resources must be devoted to the initial establishment of effective community involvement processes to make certain they are successful.
- Community involvement should be structured so it is predictable to both the community and government.
- Proposers of projects should be required to engage the community to resolve issues before they move into the formal government approval process.
- A rule of thumb is that it is never too early to begin conversations with communities about things that affect them.

‘When driving is the only option for travel then walking and biking are abandoned’

Introduction

Adelaide is a wonderful city in a special and unique region of Australia. The city and its greater metropolitan area are at the gateway to Australia’s premier wine country, the Outback, Kangaroo Island, the South Coast region and the extensive wildlife found throughout. And in the urbanised areas there are rich cultural, sporting and intellectual challenges. The attractiveness of the area is attested to by the commitment of the population to their way of life and to providing a sustainable and quality environment for their children and for future generations. While these attributes are striking and wonderful, Adelaide has neither fulfilled its potential nor fully met the new challenges facing it.

Quality of life

First and foremost, sprawling development patterns have threatened rich agricultural lands and sped up environmental degradation. Within its current boundaries the spread of the greater metropolitan area has ensured that many families have had to live far from their necessary destinations of jobs and shopping, and so have to regularly drive substantial distances. The result has been challenges to their budgets, the environment through motor vehicle pollution, and their family relationships by having to spend so much time in travel. These choices to spread out have been driven by affordability as well as a perception that this lifestyle produces a higher quality of life.

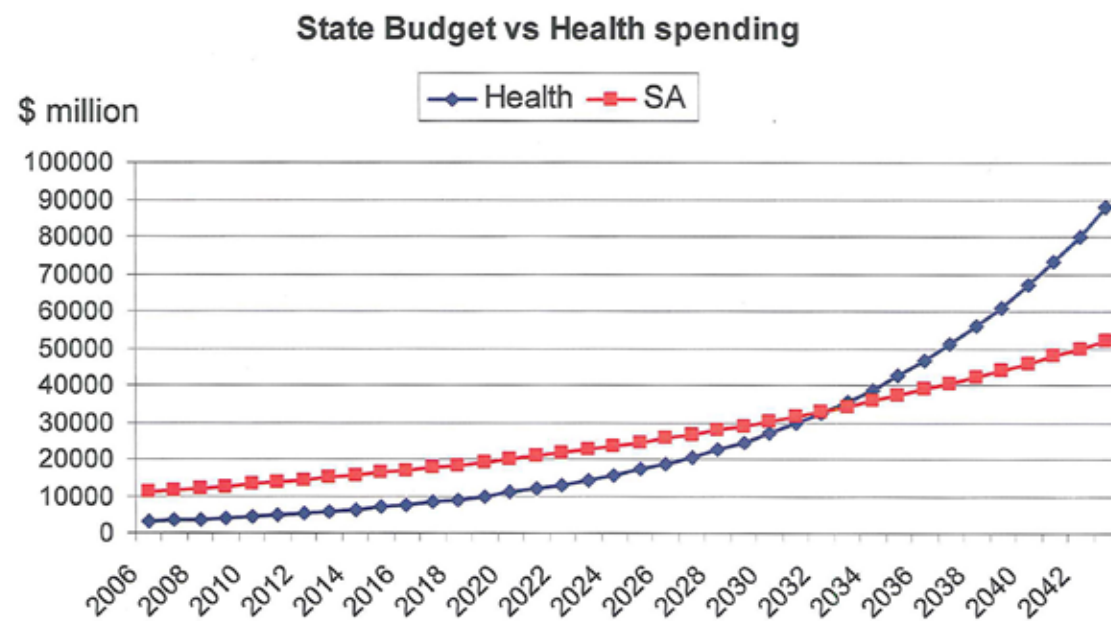
The questions facing Adelaide are not only how to ensure that the quality of life people enjoy today can be maintained, but also how that quality can be enhanced. The need to answer this vital question is urgent, particularly in the face of a projected population growth of 560,000 people by 2030. For as we all know, once created, the built environment is very difficult to alter or retrofit, and it is the built environment that is the greatest determinant of our travel patterns – patterns that over the past 70-odd years have meant that we drive further and further to activities and places when previous generations would walk or bike. The result has been a degradation of our quality of life, more pollution and more time away from family and friends.

Health effects

Recent research also shows another, and perhaps more critical by-product of this development pattern: record obesity rates. When driving is the only option for travel then walking and biking are abandoned. This has been particularly acute among school-aged children, where the spike in obesity rates has been most pronounced.

A US study in Portland², Oregon evaluating transit-friendly neighbourhoods (and thereby walk-friendly neighbourhoods, because every transit trip both begins and ends with a walking trip) found that residents weighed nearly 6 pounds (2.7 kilos) less than residents in non-transit-friendly neighbourhoods. And significantly, this extra weight translated directly into additional health costs – about US\$5500 per year per resident.

With the cost of health care skyrocketing in most places around the world, and the cost of providing health care here in South Australia threatening to consume greater and greater shares of the state's budget, these trends must be stopped and reversed.



A new and more attractive way

It is the responsibility of those guiding the future of the greater Adelaide area to demonstrate how a different development pattern – one that is denser around nodes, has mixed use activities, exciting and inviting open spaces, and substantial high value employment opportunities in addition to service jobs associated with expanding retail activity – will not only meet the current needs of our population but will also achieve a vision for Adelaide's future.

And these efforts must be focused not on a single pattern for what a new development must look like – it must embrace a variety of patterns that give people choices for how to meet their individual aspirations.

As this new style of development is built we will see individuals and families seeking them out, having grown weary of needing a car for even the simplest travel needs. As more residents arrive in these developments, businesses will also seek nearby locations to cater to them. Employers seeking to attract and retain good employees also understand the value of time, and that using that time for longer commuting trips is not attractive,

particularly among younger generations just entering the workforce. In turn, those employers will seek to be located closer to their existing and future workforce.

The advantages of living and working in these vibrant communities will also attract young and creative individuals who want to make their mark, start a business or launch a new venture. All of this will produce a spiralling force, making these communities become the future of Adelaide. In addition, these new communities can revitalise and stimulate economic activity in areas long neglected but with great potential.

People living in these areas will also benefit by not spending money on unnecessary travel. Likewise, with these developments becoming attractive places to live and work, property values will rise. For the vast majority of our population, the largest equity investment they have is their home. The rising value of the home increases the ability to achieve aspirations; everything from making the home into what they want and pursuing recreational opportunities to helping to send their children to university.

Infrastructure – a different approach

The key to making this work is the infrastructure that determines how neighbourhoods develop and evolve. If there are only roads and streets, then the only choice is to drive to one's destination. If there are footpaths, safe street crossings, safe and substantial bike lanes and paths, then people have choices about how they get to their destinations. And those destinations – the grocery store, the coffee shop, the restaurants, the school for their children, and hundreds of other shops, services and recreational activities – must be accessible by walking and biking.



² Presentation by Mel Rader of Upstream Public Health, to the Joint Policy Advisory Committee on Transportation, METRO, Portland, Oregon, USA (10 September 2009)

Co-operation between government and the private sector is needed to achieve the vision of a more walkable, bikeable, liveable and sustainable community.

- Government is the largest investor in public infrastructure and must make those investments in ways that enhance these values.
- Government also regulates the types of developments that occur and likewise must ensure that it doesn't thwart these goals, as it so often has done in the past through such tools as exclusionary zoning.
- Government provides many incentives and disincentives to individuals and businesses through the use of the tax code, and must ensure that the tax code is fully in alignment with these goals. Ways must be found to ensure that each project, each public investment, will encourage other investments from the private sector to get the maximum gain and achieve these ambitious goals. New tools, new incentives, must be put in place to make this possible.

Financing

An example used throughout the US is tax increment financing. This tool freezes property tax valuations in a set geographic area for 15 years. When new investments are made which increase property values, the tax collected on the increased value goes to pay for additional public investments in the same geographic area. The purpose is to encourage even more private investments. At the end of 15 years, this special dedication of tax revenue ends and the increased valuation of property is returned to the general tax rolls.

The logic behind this approach is that the governmental beneficiaries of the current tax revenue will see no increase if there are not new private investments that raise property values. Consequently, for the 15-year period they are not losing any tax revenue. By using the additional tax revenue from the 'increment', more private investments are attracted and the area is improved, allowing for even more public investments. At the end of the 15 years the existing government beneficiaries of the tax revenue have a major increase based on the higher property valuation, an increase which would not have occurred but for the improvements.

Community involvement

Government must ensure that the community is fully involved in all of its decisions, and that the processes used to reach those decisions are fully transparent. Government needs to provide the education and outreach necessary so that the community may know what ambitious plans are being undertaken and why – what will the result be at the end and how will this improve the well-being of the community.

More is needed than just general education. The planners and designers, the builders and engineers, the developers, the architects and a host of other professionals must also be educated (if they are not already) on how each of the hundreds of decisions they make in their own professions is connected to the community as a whole, and those decisions

must be made in a way that promotes the values, the goals and the sustainability of the greater Adelaide region. For if this is not done we will clearly have a 'tragedy of the commons'³.

Important as the role played by government is in achieving these goals, the private sector is a key partner. From the architects who can design exciting and inviting structures, to developers who can see their creations in a holistic and connected nature, to builders who can build to the highest standards; all must also share the values and be committed to the goals. The education effort noted in the previous paragraph is just one part of making this happen.

And at the top of the pyramid are the community members themselves. They must take an active and involved role in making certain that the future of Adelaide is every bit of their business – from where they want to live and work, how they want to get around, how they spend their time, and how they want an Adelaide of the future to look and function for their children and their children's children.

This report contains a series of recommendations and conclusions. It does not aim to transplant another city's or region's ideas to the greater Adelaide area, but to draw on the best that other communities have to offer and incorporate them in a way that is uniquely Adelaidean.

The recommendations are organised in six broad categories, described in full in the following chapters.



³ Garrett Hardin 'The Tragedy of the Commons'. Science 162 (1968) 1243-1248

A red Adelaide tram is shown traveling on a city street. The tram is moving towards the viewer, with its destination 'HINDMARSH' visible on the front display. The tram is positioned on a track that runs alongside a green median strip. In the background, there are city buildings and trees. A large text overlay is present on the left side of the image.

‘ The next public transport infrastructure investments should be for the tram to complete a loop around the CBD of Adelaide.’

1. Transformational infrastructure

Possibly the largest non-defence or entitlement expenditure made by government is transportation infrastructure. And historically, we have built that infrastructure in an attempt to meet a perceived need, not to shape how our communities function and serve the needs of their residents. In short, transportation infrastructure investments have been reactive rather than strategic.

The result has been a development pattern that requires more and more single occupancy driving, more and more sprawl, and fewer options for individuals and families to move around freely. We have given people no choice but to be tied to their automobiles. In an effort to make housing more affordable we have expanded into green fields, squandering valuable farm and forest resources, and we have held out fool's gold to the new residents – what they saved in reduced land costs in the final purchase price of a home, they now have to spend many times over on increased transportation costs.

The cost has not been just in terms of family budgets. The cost has been in wasted and inefficiently used land resources, much of which would have been far more valuable if used for other purposes, whether for high-value employment or farm and forest. We have also done great damage to our environment. In a carbon-constrained economy we cannot continue the current pattern of transportation investments.

One thing we know for certain: when we build roads in green fields, sprawl will follow, whether it be strip malls or residences. What we also know is that, if we make smart and strategic investments in transportation, we can alter how we grow, providing individuals and families with choices on how they want to live. And as more and more people choose to live in areas served by easy, safe and convenient pedestrian and bike facilities and public transport, even more people will follow suit. The result is a more liveable and healthy lifestyle, a more environmentally friendly development pattern, and a more efficient transportation infrastructure and urban landscape. Equally important in South Australia, this will stop the encroachment into the prized Barossa and McLaren Vale valleys and their critically important agricultural resources. To this end, a firm non-porous urban growth boundary should be established in statute.

All this will place additional demands on local governments. They will need to take this into consideration in their 'Asset Infrastructure Planning'. All stakeholders, including local governments and communities, must be involved in the integrated planning process as new infrastructure is built and the public realm is enhanced and increased.

The need for an urban growth boundary

An urban growth boundary would provide for and enable the redevelopment of lands within the current greater city footprint. As outlined in the state's 30-Year Plan for Greater Adelaide, such redevelopment would include the establishment of higher residential densities at centres and along transport corridors. Although some may say there is little to no appetite for such development in Adelaide, the recently completed Density Marketing Report⁴ commissioned by my residency suggests otherwise. That comprehensive report provides a wealth of information for many aspects of the implementation of the 30-Year Plan. For the purposes of the recommendations being made here, it is significant to note that nearly 30% of respondents indicated that they would be attracted to living in a higher density environment as long as it was of high quality and had many amenities nearby.

More importantly, the research found that people who had experienced this type of living elsewhere, be it in Sydney or Melbourne, or overseas, were much more interested than those who had not seen or experienced it. Since a more compact, walkable and liveable urban life style was never thought to be the exclusive lifestyle choice for all future development, this shows that a significant portion of the Adelaide population wants the lifestyle recommended here. Equally important, since interest is tied directly to experiencing such a lifestyle, as new denser high quality development is built more Adelaideans will see it first hand and be attracted to it.

Dealing with global changes

In truth, over the last 70 years throughout much of the Americas, Australia and New Zealand as well as other locations throughout the world, we have built a transportation system that has been based on an infinite supply of \$30-a-barrel oil. We need to build our future transportation system in a carbon-constrained world and on a finite supply of oil at a price per barrel of at least \$90, a price that many economists consider to be the absolute floor for future oil pricing.

This is not, however, just about constraints but also about how we become strategic in our transportation infrastructure investments. The mindset of the past has been to think of transportation as responding only to transportation needs. This must change: henceforth, transportation investments must be part of a strategic plan, with each investment aimed at furthering that plan. **No longer can investments be made just to fix a perceived problem. They must be made to realise the goals of the strategic plan.**

A strategic plan for infrastructure investments

The Premier and the Minister for Transport should direct the development of a Transportation Master Plan to guide all transportation infrastructure investments. The plan needs to be developed with broad public involvement so that its life will transcend political terms of office. It must be rigorous in its economic analysis. It must be based on least-cost planning concepts which ensure that the most cost-effective transportation investments are made. It is not just the cost of the initial construction of the transportation project that must be considered, but also its ongoing maintenance. In some cases this will mean that the best way to provide mobility will be with investments in public transportation, bike and

⁴ Fischer, Helen & Ayturk, Dr Gokhan 2011, Residential Density (Liveable Communities) Market Perceptions, report to the Land Management Corporation, Adelaide

pedestrian facilities. And just as power production companies have found in many instances that conservation can be a more cost-effective strategy than building new power plants, so will investment in pedestrian, bike and public transport be more cost effective in many instances than additional road construction.

Transportation investments must take into account the full cost of travel patterns – everything from climate change to the cost shift that occurs when development patterns require businesses, individuals and families to spend more of their budgets on unnecessary transportation. Transportation investments are an economic stimulus. This is obviously the case for the direct jobs created and the profit accrued for businesses building those projects. Such investments are also a major stimulus for other investments made by both the private and the public sectors. Just as the building on a major road interchange can be a huge attractor to investors in retail activities, likewise those investments have encouraged sprawl by providing access to previously undeveloped lands. The plan must take into account the effect that transportation investments will have and be certain that those effects further the goals of the plan.

Every transportation investment should be required to maximise the benefit of the project for bike and pedestrian movements. No longer can provisions for bikes and pedestrians be seen as add-ons to the otherwise prime focus of the transportation project. In its place we must put non-motorised transportation at the centre of all transportation investments and it must become the guiding principle of the plan (as outlined more fully in section 3). A good place to start would be to pilot this approach on a major transport infrastructure project.

Citizen advisory committees, comprising representatives from all modes of transportation including public transport, bike and pedestrian, must be established to oversee the development and implementation of the Transportation Master Plan. This is necessary not only in the name of transparency but also as a means to ensure that transportation investments are not tilted, as they have been for the past 70 years, toward the automobile. Citizen advisory committees should be established as a part of the Transportation Master Plan but under the auspices of the Department for Transport, Energy and Infrastructure (DTEI). The Department of the Premier and Cabinet will need to periodically monitor to ensure that the committees are independent and robust in their advocacy, and that their views are incorporated into DTEI's planning.

Recommendations

The Premier and the Minister for Transport should direct the development of a Transportation Master Plan to guide all transportation infrastructure investments, incorporating the following six principles:

- It must be rigorous in its economic analysis.
- Transportation investments must take into account the full cost of travel.
- It must take into account the effect that transportation investments will have and be certain that those effects further the goals of the plan.
- Every transportation investment should be required to maximise the benefit of the project for bike and pedestrian movements.
- Citizen advisory committees, comprising representatives from all modes of transportation including public transport, bike and pedestrian, must be established to oversee the development and implementation of the Transportation Master Plan.
- A firm and non-porous Urban Growth Boundary should be established in law.

'Buses and
trams must
be given signal
prioritisation ...'



2. Increased investments in public transport for a total transit experience

For public transport to build on its successes in Adelaide it must be dramatically increased and enhanced.

In 2008, the South Australian Government announced a \$2 billion ten-year program to improve Adelaide's public transport network, designed to provide faster, more frequent and better connected public transport services. In 2009, the Australian Government supported this State Government initiative, taking the public transport investment program to \$2.6 billion. Notwithstanding these recent investments, over previous decades investments have been heavily car based.

In addition, even with the upgrading of the metropolitan rail corridors under the State Government's rail revitalisation, continued investment is needed in metropolitan passenger rail. This will support the development of a more compact urban form around the corridors, and provide for further rail extensions to growth areas that are identified in *The 30-Year Plan for Greater Adelaide*.

Transformation

The next public transport infrastructure investments should be in the tram, with the first priority for a tram to complete a loop within the CBD of Adelaide. Such an extension would not only create a terrific urban circulator, it would also spur development and redevelopment, both residential and commercial.

Investments made by government in rail infrastructure such as a tram line give a higher level of certainty to the development community, and the community at large, in terms of permanency and the level of investment being made by government. Bus services, on the other hand, are flexible – they are unable to provide this sense of permanency as to a certain extent they are movable, or worse, removable.

As seen in my home of Portland, Oregon investments in light rail (called MAX) and an urban scaled tram (called streetcar) have been transformative. They have released the energy and excitement that became a catalyst for the creation of new neighbourhoods, characterised by vitality and vibrancy.



They have also attracted private development investments at unheard of levels. Within three blocks of both our light rail and streetcar line stations, we have seen more than \$10 billion of private investments. Similar investments in trams in Adelaide will see similar investments in development.

Attractiveness

Increased investment can provide a public transport system better able to fit a person's lifestyle and their choice of how to move around, by ensuring:

- greater frequencies, to reduce the average waiting time for people who want to catch a bus, train or tram. Waiting for a service is a significant detractor to public transport. Numerous studies show that the perceived passage of time is at least twice as long for an individual when they are waiting for their public transit vehicle than when they are actually riding in it. This point is further underscored by published research by the Transportation Research Board, an arm of the US National Academy of Science
- improved connectivity between services, effectively providing more services to more places. It would be inefficient and unaffordable to expect public transport to provide single seat service from any point A to any point B. However, connections between two services do make easy access to all areas of the region possible. What is needed are suitable locations for these improved connections to take place easily, conveniently and safely. This would be assisted by the increased frequencies, as more services reduce the waiting times between them

- greater predictability. People's travel needs are not confined to 9 am to 5 pm, Monday to Friday, and so public transport needs to provide greater spans of service to meet the public needs. In Portland, for many services there is little difference in the level of service provided on a weekday, a weekend or at night time. Frequencies are almost the same, with the only real difference being an increase in peak periods, when of course there is an increase in demand. Thus for Adelaide, the span of services must cover larger portions of all seven days, with increased service levels provided at night times and on weekends, including public holidays.

All new buses purchased should be diesel-electric hybrid buses. Not only are they environmentally cleaner, they are able to better integrate into active and dense streetscapes, such as Norwood's The Parade, Glenelg's Jetty Road, Henley Square, and the Grenfell Street Transit Mall, without smelly exhaust and particulates nor the typical roar of diesel-only buses.

No public transport vehicles - trains, trams or buses - should have advertising covering windows. Passengers should be able to see outside clearly whilst they are on their journey, and enjoy the pleasant scenery offered by many services, such as along the Torrens Linear Park when on an O-Bahn bus, the coastline when on the Noarlunga train, or the Parklands when on the Glenelg tram. Also, the community should be able to see into them, to help with boarding as well as to show how busy and well used the services are. Lastly, improved visibility enhances safety by providing more 'eyes on the street' as well as a sense of safety for riders.

Access

As discussed in greater detail in section 3, the linkages for pedestrian to transit stations are critical, as every transit trip begins and ends with a walking or biking trip. Important measures include:

- providing safe and easy access to transit stations
- ensuring that footpaths are wide enough, flat and with good signage
- providing clear lines of sight and lighting, both natural and artificial
- increasing the amount of bike infrastructure, such as bike racks, particularly at train stations and transfer points.

These are very important improvements to public transport service provision and will result in increasing patronage.

It also means that train, tram and bus station design should enhance accessibility, especially for people who have a disability. Accessibility elements should include universal signage, and amenities such as public toilets, drinking fountains and the like that are easy to find and use.

Priority

In most cases, public transport services have to compete with general traffic on congested roads in order to complete their journey. The result is slowed services which are not only unattractive for the users, but inefficient in the operation of the vehicles. This issue is amplified in the city, as many bus services and the tram are concentrated into a small number of streets, such as King William and Grenfell Streets. The creation of an exclusive or near exclusive Grenfell Street Transit Mall, with the removal of all other vehicles, would greatly improve the operation of bus services and provide a more enjoyable and efficient system. This issue is also discussed in further detail in section 3.

Other steps can be taken to further enhance the functionality of public transport. Buses and trams must be given signal prioritisation. When they are running behind schedule, buses can call for a green light a few seconds early, or hold a green light a few seconds longer, as a means of getting passengers to their destinations on time. Trams should be able to call for a green light, overriding the other vehicle traffic signal rotations to whisk them through intersections. This is particularly important in the CBD of Adelaide.

Real-time information

As individuals we all value time. Whether it is as we approach the multiple checkout lines at the supermarket or when making purchases on line, we all want to manage our time to our greatest benefit. In the world of public transportation we can do much to help people manage their time. Very simply, we can provide people with easily accessible and understandable information.

This can include the more traditional forms such as information boards at stops and stations, good and clear signage and, of course, timetables which are simple yet attractive and informative. But we should also provide more high-tech forms, such as real-time information on not only the expected arrival time for every bus, train and tram, but also the likely journey time to reach their intended destination.

Real-time information is so valuable. It is not focused on what the timetable says but on the actual countdown in minutes for when the vehicle will arrive at the designated stop. Real-time information empowers passengers so they can organise their movements to suit themselves, not a bus timetable.

This information can be accessed on-line through computers, but also using smart phones such as an iPhone, Android or Blackberry. Not only does this allow people to arrive at their transit stop with the least amount of time to waste, it also helps them in making connections and transfers, taking both the worry and guesswork out of whether they have just missed their connection or still have time to catch that next leg of their trip. Studies have found that when real-time information is made available, transit users believe that their service is more reliable, comes more often and provides a higher quality experience, even when no change has been made to the actual service provided.



Portland's TriMet website (www.trimet.org) showing their available real time information.

At TriMet, the public transit agency in Portland which I led for almost 12 years, we opened all of our data to the public. What we found was that our riding public developed their own ways to use this data. It all began from a conversation I had with one of our regular riders, who also was a very strong advocate for public transit. He had developed an application, using our data, which would display on his iPhone, the real time arrival in minutes in descending order for two bus routes and the streetcar, anyone of which he could use to go from his office to home.

From this conversation I realised that our agency's overworked IT staff could never develop all the applications that would be of interest to our riders. So we invited our riders to develop their own apps and to register them with the agency. The registration process was not an attempt to second guess the worth of the app but to be certain that it was supported. We would then list the apps on our web page, without endorsement and with the understanding that individuals who wanted to use an app would need to purchase it from the developer if it was not free.

The result in Portland has been the registration of well over 40 apps, everything from the one that first launched our effort (arrival times for multiple transit options to get to your destination) to one developed as an alarm system to alert the bus rider when his destination was near to prevent him from sleeping through his stop. This last application has also proved very helpful to anyone going to a destination they are not familiar with and therefore not sure when to leave the vehicle. It has also proven very helpful for the sight impaired. A good example of how apps developed for one purpose or demography can serve a larger audience or purpose.



Grenfell Street now ...
and below is how it could look as a Transit Mall ...



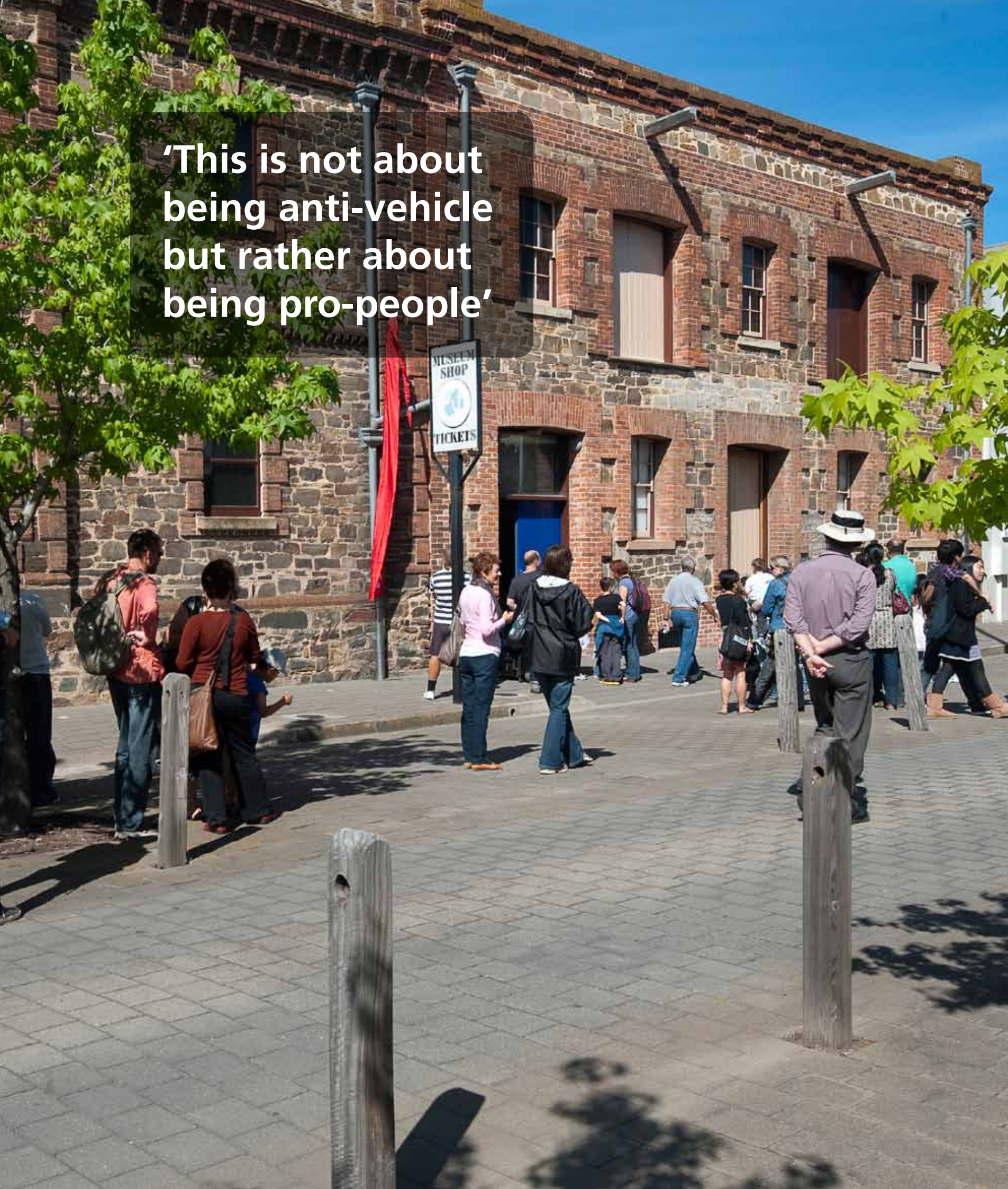
The Department of Transport Energy and Infrastructure are in the process of producing real-time information for all their buses, trams and trains, and are very close to making it available for users. For this they are to be commended, but as we did in Portland, they need to make all their underlying data available so that riders can develop their own apps that make public transit work for them. A simple registration system would ensure that any such apps are supported, but not regulated.

With these and other investments Adelaide can achieve – as my home of Portland, Oregon has – a public transport system that is a part of the signature of who and what Adelaide is. When travel magazines write about visiting Adelaide, for Fringe and Arts Festivals, the Clipsal 500, Wang Wang and Funi at the Adelaide Zoo, or the hundreds of other reasons, they should be singing the praises of the public transport system, as they do in Portland. And when Adelaideans plan for an outing, public transport options should be a part of what is considered, for its ease, accessibility and hassle-free travel.

From focus groups in Portland, we found that when people drive their car to an event – be it a concert, ballgame or festival – they believe that their time to enjoy the venue does not begin until they are walking from the car park to the event. When they go by light rail, streetcar or bus they consider the event begins when they board the vehicle and have time to relax and enjoy family and friends on their way to the venue. The same response is possible for the people of Adelaide.

Recommendations

- Extend the tram via a loop in the CBD, invigorating growth in the city.
- Increase investment in public transport to:
 - increase frequencies and reduce waiting times
 - improve connectivity, creating a 'network'
 - provide greater predictability and extend services to cover more of the day and week-ends.
- Improve accessibility for pedestrians and cyclists to public transport.
- Replace the bus fleet with diesel-electric hybrid buses.
- Delete advertising on bus and tram windows.
- Establish a Grenfell Street Transit Mall, to be for the exclusive or near exclusive use of buses.
- Increase the level of priority for bus and tram services, especially in and near the CBD.
- Establish park'n'ride facilities adjacent to public transport services, though only at the ground level and not close to the CBD.
- Introduce a real-time information product for users to access online and via mobile.
- Make public transport a part of the Adelaide identity and the mode of choice.



**‘This is not about
being anti-vehicle
but rather about
being pro-people’**

3. Putting pedestrians and bicyclists at the centre of transportation planning

Walking is an essential part of our daily lives. Traditionally we celebrate a child’s first step when learning to walk. We have historically walked to school; even our parents or grandparents took pride in their walking to and from school, in inclement weather and apparently defying the laws of physics – their routes were uphill in both directions! It keeps us active, healthy and allows us to get to where we want to be.

In the last 70 years the pattern of walking to and from most things has eroded. We now find ourselves all too often living in neighbourhoods without footpaths or safe street crossings. Most of the activities many of us have as a part of our daily lives – school, the grocery store, the coffee shop, the pharmacy, the restaurant, and the neighbourhood tavern – require an automobile trip.

As we build new neighbourhoods we follow this same pattern of not having convenient and safe pedestrian pathways. In our effort to limit residential neighbourhoods to just residences, using exclusionary zoning, we often prohibit locating retail activities in these areas, thereby continuing the vicious circle of providing no place to walk to even if footpaths exist, and further discouraging walking as a mode of transportation.

This must change. And the place to begin is to make certain that our transportation system is pedestrian and bicycle friendly.

These recommendations are made recognising that all roads are not the same. The excellent work done by Professor Fred Wegman, a fellow Thinker in Residence, recommends that a hierarchy of roads be used to guide road safety strategy and transport planning.

This will allow priorities to be established for high-speed environments to support freight, public transport and commuter traffic. In other areas and on other roads it will allow for lower speed environments to encourage more biking and walking as recommended here.

I also agree with Professor Wegman that appropriate safety infrastructure must be incorporated into strategic planning to accommodate an increase in walking and cycling. As discussed in section 1, it is important to incorporate walking and cycling into strategic planning and implementation processes, not simply be reactive or add it as an after-thought around other projects.



Pedestrians

The Premier and the Minister for Transport should direct that the Transportation Master Plan reverses our transportation planning hierarchy from placing the mobility of vehicles as its number one priority to one that focuses on the pedestrian as its number one priority.

We need to ensure that as we plan a new roadway, for example, we think first of how to make the corridor work best for pedestrians and cyclists. Once we have planned for the pedestrian experience we can design the roadway to accommodate vehicular mobility. All too often today we do the opposite. We plan for the vehicle and then, if budgets and space allow, we build the footpath, safe street crossings and a bike lane.

This is not about being anti-vehicle but rather about being pro-people. The results will be profound. In new neighbourhoods we will ensure that the ability to walk will not be compromised by the needs of the vehicle. We will ensure that in these neighbourhoods vital retail services will be within walking distance of residences. We will ensure that bicycling will also be highlighted, not as recreation but as a transportation mode.

Making the pedestrian and cyclist modes a priority in the transportation planning hierarchy is not reserved just for new projects. **Every time there is to be an investment in transportation infrastructure, from repaving a stretch of street to rebuilding a major intersection, the role of the pedestrian should be placed front and centre.** No project should be allowed to proceed if it has not done so. And each project that does proceed must dramatically enhance the pedestrian experience.

When this happens, it will also help in delivering efficient public transportation options. Efficient public transportation means that the catchment of potential riders is expanded by the pedestrian-friendly neighbourhood, resulting in more seats on the bus, train or tram being filled. The importance of this cannot be overstated.

It will also result in neighbourhoods where people want to live and raise their families, because they will be neighbourhoods where children can safely walk or bike to school, where the elderly can walk to the store or to see friends, and where our environmental impact will be lessened. You will create and build healthier and more sustainable neighbourhoods. It will mean that the use of vehicles will be reduced – not eliminated, but used only for those necessary trips where walking or bicycling is not an option.

In Portland, Oregon's newest neighbourhood, the Pearl District, the public transport outcomes have been startling. Citizens in this tiny neighbourhood are 11.5 times more likely to take transit, 4.5 times more likely to walk, and 2.4 times more likely to bike than citizens in the rest of the greater Portland region. They are also driving about half as much and own half as many vehicles as their counterparts in the region as a whole.

This same experience has been repeated each time communities have reinvented themselves to focus on the pedestrian and cyclist. Wonderful examples exist in Bilbao, Spain; Freiburg, Germany; Dublin, Ireland; and countless other locations around the globe.

A sense of community

Street activation is often thought of at street level, but is less often considered at height, and yet it is no less crucial to improved pedestrian amenity. Key to a safe and welcoming public domain is a sense of community, of shared experience, and of what is often called 'passive surveillance': eyes on the street. This should be delivered on the ground level where accessible and engaging shopfronts, lobbies and residential living spaces can enliven the footpath. More busy people transiting, transacting and interacting will generally result in a safer, more vibrant and desirable place. People are attracted to people.

But 'passive surveillance' can also be effective when higher level apartments and commercial uses are able to look over the street from balconies, or even zero setbacks, active roof terraces and the like to encourage a closer connection between occupants and pedestrians.

Car access onto properties must be carefully considered. Just as inactive garage frontages are a problem for streets, ramps and driveways into common carparks can produce unintended consequences if not well located, and well designed. Where practicable, entry to common carparks should be from laneways or service streets, not primary frontages. Across these entries, pedestrian footpaths should continue, and not be broken by kerbs, gutters, refuge islands and the like. Instead, cars should be reminded they are traversing

a pedestrian path. This can be reflected in materials and landscape treatment. The design of the intersection between people and cars must always reinforce that people come first, cars second.

Recommendations

The Transportation Master Plan will need to provide practical principles and processes to achieve this, everything from best practices for footpath and intersection treatment to lighting and other enhancements. Many areas throughout the world have done this and it will be relatively easy to identify models to learn from and adapt.

- Improvements must be made in how pedestrians interact with vehicles in day-to-day operations. Specifically, pedestrian crossing signals should be installed in as many places as practical.
- The timing allowed for a 'Walk' signal must be increased and should be a part of the normal traffic light sequences – not requiring activation to request a walk signal. It is not much of an overstatement to say that in the greater Adelaide area, if one is not paying attention for even a few seconds, one can miss a whole walk cycle.
- Current law states that the pedestrian must be given the right of way over a vehicle. Australian Road Rules identify that 'drivers must give way to pedestrians on the footpath when entering or leaving a driveway or other road-related area. If a driver is turning left or right, the driver must give way to any pedestrian at or near the intersection who is on the road or part of the road the driver is entering. Under the law, mobility scooters travelling under 10 km/h are pedestrians'⁵. This means that drivers have to slow and be ready to stop for pedestrians every time they turn or approach an intersection.

Certainly, pedestrians cannot expect to step out in front of a speeding vehicle and require it to give way. But when a pedestrian is attempting to cross a street and a vehicle is more than 75 metres away, the vehicle should be required to yield to the pedestrian. From my own observations and experience in walking in and around Adelaide, these requirements are honoured more in the breach. Consequently enforcement must become a priority.

In my home of Portland, a mayor several terms ago joined with the police in enforcement missions in which he would attempt to cross streets in a fully legal manner and, when vehicles would not yield, the police were there to issue tickets. This received widespread publicity and helped educate the driving public regarding the rights of pedestrians.

- In wide streets, consisting of two or more lanes in each direction, pedestrian safe havens should be created where pedestrians crossing the first set of lanes where traffic is going in one direction may safely wait in the middle of the street until it is safe and legal to continue to cross the remaining lanes of vehicles going in the opposite direction. This will also result in a more attractive 'boulevard effect' (not unlike what Paris is celebrated for), and it will help build connectivity between neighbourhoods, rather than roads becoming walls that separate.

⁵ <http://www.legislation.sa.gov.au/LZ/C/R/AUSTRALIAN20ROADRULES/CURRENT/1999.219.UN.PDF>

- To enhance the pedestrian experience and access, elements such as footpaths with adequate widths to enable comfortable passage, ramps that provide smooth transition to roads, high quality street furniture, appropriate provision of public toilets, water-sensitive landscaping that contributes to the aesthetic value and adds shade where appropriate, and even non-slip surfaces, all need to be carefully considered and provided. Importantly, all these elements need to contribute to the safety of pedestrians.

By these and other steps the greater Adelaide region can become an inviting and safe place for pedestrians and bicyclists.

Bicycles

Biking has often been thought of, for adults, as a recreational pastime. Clearly, professionals such as Lance Armstrong have made bike racing a major sport. For our children, biking has always been a mode of transportation, but even for children this use has declined as commuting distances to schools have increased and concerns by parents about road safety have grown.

In the last decade, however, for an increasing number of adults biking has moved from recreation to a mode of transport. This is particularly true in Adelaide, where bike commuting has jumped from 5000 to 7000 between 2003 and 2010, an increase of 40%. Some of the reasons biking has become so popular in the greater Adelaide region can be seen in the relatively flat terrain combined with weather very conducive to being outside. It is ironic that we see individuals stuck in traffic on their way to the gym to ride a stationary bicycle rather than using the bicycle to make the trip in the first place.

Bike infrastructure, in the form of bike paths and lanes, has not kept up with the growing demand. It is true that the kilometres of bike lanes in the greater Adelaide region have grown from 480 to 909 kilometres over the last decade, a huge increase of 89%. Many commuters and regular riders use bike paths for a part of their trip, but most still need to use the road network and to share that road network with vehicles many times their size and weight. Recent serious accidents and fatalities demonstrate the dangers of mixing bikes and vehicles in too close proximity to one another. And although I understand the rationale of having some bike lanes only for peak hours, it is by definition confusing and therefore presents a serious safety concern. Bike lanes, when established, should be for all hours of the day and night or not established at all.



As an occasional bike commuter and rider in the greater Adelaide area I can attest to the discomfort of biking on shared roadways, even when there are bike lanes. The bike lanes I have encountered have been too narrow to adequately accommodate a bike with space to ensure safe cycling. More critically the bike lanes I have experienced have been at the edge of multi-lane roads, roads that have been built with sloping sides from a centre hump to deal with storm water runoff. The result has been bike lanes that are nothing more than 'bike gutters'.

Also, as the density of living in Adelaide increases, community facilities such as shops, services and schools are going to be provided closer together. In many cases this will mean shorter journeys. These shorter journeys are perfectly suited for the bicycle, and need to be considered in planning.

Recommendations

My recommendations cover seven areas; the Premier and the Minister for Transport should require the incorporation of these recommendations into the new Transportation Master Plan recommended previously.

- A new commitment must be made to continue to increase the kilometres of bike paths.
- A requirement should be put in place (similar to what is recommended for pedestrian infrastructure previous) that no transportation infrastructure investment should be made without a corresponding investment in bike infrastructure in the same corridor or area.
- Current bike lanes should be retrofitted to make them wider – generally the international recommended width is no less than 1.5 metres of smooth ride, not including gutters.
- Obstacles in bike lanes need to be removed or modified to make them safe for bicycling. This is particularly true with such things as storm drains that can trap a bicycle tyre.
- Vehicles turning across bike lanes make for one of the most dangerous settings for bike riders. More bike boxes should be created, such as one recently installed at the west end of Rundle Street, adjacent to the Rundle Mall 'scramble' crossing.
- Australian Road Rules make it illegal to drive in an operating bike lane. As a driver you may, however, cross a bicycle lane to enter or leave the road. When doing so under Australian Road Rules a driver may not be in a bike lane for more than 50 metres. In my view this is allowing a vehicle to intrude into a bike lane for far too great a distance. The greater Adelaide region should change this requirement to 'the minimum distance to safely make the entry or exit'. It should be prohibited to drive in the bike lane merely to get around traffic congestion. And parking, even temporary or short term, should be prohibited outright. Similar to what faces pedestrians, even the best of requirements have little meaning if they are not aggressively enforced.

- Trials should be initiated to adapt some of the best practices from around the globe to make bike travel a true transportation mode. On the busiest of streets a trial bike lane protected from vehicle traffic by a parking lane would be an ideal place to begin. I am fully aware of what is perceived as a failure of such a lane on Sturt Street. What is important to recognise is that the idea was a good one but its lack of all stakeholder involvement as well as its premature finish is what doomed it, not the value of the concept.

Adelaide has the opportunity to become one of the most bike friendly areas in the world. But for the novice or beginning bike commuter, a safer environment must be created.

A fundamental axiom is that a pedestrian-friendly environment is a bike-friendly environment. As a result, with these recommendations along with the recommendations regarding pedestrians, the biking experience will greatly improve.

Crossing the Parklands

The Parklands are one of the most wonderful assets in the greater Adelaide region. And as denser development comes to the ring around Adelaide, the Parklands will become even more critical as there will be less private open space. The Parklands also serve as the venue for many wonderful festivals and numerous sporting events, and provide needed green space to residents. I will leave to others the best means of activating underutilised Parklands. My focus is how to improve the environment for pedestrians and bicyclists crossing the Parklands, either into the City of Adelaide or to outlying neighbourhoods.

First, crossing the ring roads from outside the Parklands to get to the City of Adelaide is a challenge. As addressed in other parts of this section, more needs to be done to make those crossings safe from vehicular conflicts. The 'Walk' cycles at intersections need to be longer. Turning traffic across a crosswalk when a 'Walk' signal is lighted should be prohibited by law. If distances between intersections are too great, other methods such as road underpasses and overpasses may also be considered; however, it is essential that safety and accessibility are not compromised.

Once across the ring road the Parklands can be beautiful to the pedestrian or bicyclist. I say 'can' be beautiful because some parts have many plantings and artworks whereas other areas are barren. All the Parklands need to be brought up to the same high standard present in the best sections. Let the Parklands become the 'jewel' for pedestrians and bicyclists that similar spaces have for other cities and regions around the globe. This will enhance access to the Parklands' playing and sporting fields as well.

Next is the issue of personal safety. The Parklands and its pedestrian and bicycle infrastructure need to be designed using CPTED (Crime Prevention through Environmental Design) principles. Areas that block views by passers-by or provide a place where perpetrators may hide should be avoided. Good lighting provides a safe environment. And of course the pedestrian and bike pathways need to be maintained in good condition to avoid obstacles (such as uneven pavement caused by tree roots) that may contribute to falls.



The most important deterrent to crime, or menacing and intimidating behaviour, is (areas activated by) abundant human presence. More needs to be done to ensure that the Parklands are used, used often and for large portions of the day and evening. We need not look any further than the Parklands to the south to recognise that very little goes on in these areas, or at least things which are legal, other than for commuter parking and generally daylight sporting events. This needs to change.

And lastly, those pathways which are heavily used by both pedestrians and cyclists should be made wider, and perhaps lanes marked, to avoid conflicts and possible accidents.

These measures will improve conditions for other recreational activities that promote – beyond commuting – a healthier lifestyle.

The City of Adelaide

The Central Business District of Adelaide has many exciting and inviting places for people. Rundle Mall, the Central Market, the Adelaide Zoo, Botanical Gardens, Parklands, the tram, wonderful restaurants and cafes, coffee shops, heritage buildings, art galleries – the list goes on and on. And yet for all its promise Adelaide has not achieved its full potential.

There are a number of obstacles. Look at Rundle Mall: it is alive during normal business hours (hours which have only recently been increased from 5 until 7 pm, Monday to Thursday) but beyond those times the area is nearly deserted. And the wonderful heritage buildings that house many of the shops on the mall have unoccupied upper floors. The upper floors would make exciting additional shops, galleries, living and working spaces. Currently access to these upper floors is blocked by the profitability of turning the spaces for elevators and/or stairs into ground floor retail.

Activating these upper floors would provide work spaces and residences which in turn would provide Rundle Mall with 24-hour activity, making the area safer and more inviting.

Another drawback in the CBD is very wide streets lined by relatively narrow footpaths. By expanding footpaths one provides a more comfortable pedestrian environment, as well as allowing restaurants and cafes to spill out with seating onto that expanded space, providing an even more inviting pedestrian area. The footpath space should be improved with the planting of trees and other vegetation, making the space more inviting by having something other than concrete. Public art would also enhance footpath space and provide an environment where people want to live, to walk to work, walk to play and walk to shop.

The expansion of footpaths will require taking space away from the road, either parking or travel lanes. And while each street will need to be evaluated individually to determine the best way to do this, **the widening of footpaths throughout the CBD should be a key strategy.**

Another obstacle is the high level of competition for road space between delivery vehicles, cars, pedestrians and buses. This is particularly an issue along Grenfell Street. Here is a wonderful street, lined with many heritage buildings. Yet the street is wide, two parking lanes and at least four travel lanes, with relatively narrow footpaths. At rush hour the footpaths are nearly blocked by people queuing up for their buses, and the street is dominated by buses pulling up to and away from the kerbs to pick up or discharge passengers.

As discussed previously in section 2, Grenfell Street should become an exclusive, or near exclusive transit way or transit mall. The removal of the private vehicle would enable a complete change in how the street operates. Footpaths should be expanded by reclaiming at least one lane of road space to make them wider. This in turn will produce a more pedestrian-friendly and inviting space for people and businesses.

When this is done a significant revitalisation can occur, jump-started with government assistance, such as making available storefronts for little or no charge to attract new and emerging businesses, and providing low cost loans or grants. Renew Adelaide is a small, non-government organisation that negotiates with landlords for free or low rent for disused space for creative entrepreneurs; it is a great program to build upon for this purpose. By supporting the ongoing operations of Renew Adelaide, the government will also support Adelaide's creative entrepreneurs, and to work with them to revitalise our urban environments.

To make Grenfell Street truly inviting for pedestrians, new, cleaner buses will be required. Existing technology allows new diesel-electric hybrid buses to operate in electric only mode for two to three kilometres. If this technology were in buses operating on Grenfell Street, they could run in electric mode, thereby stopping the diesel particulate pollution and associated noise from degrading the pedestrian environment.

The first tram extension on King William Street and North Terrace and the second extension to the Entertainment Centre have been huge successes. The growth in passenger numbers has been phenomenal. What is now needed is to extend the tram to circle the CBD as recommended in section 2. This will not only produce additional phenomenal growth in passenger numbers, it will also be a transformational infrastructure investment. It will prove an incentive to redevelop, and in turn will provide economic stimulus to attract private investment in residential living, retail and commercial space. And here the key strategy for new or re-development must be to go up to achieve higher



densities. Where there are heritage buildings the opportunity to re-purpose them will only add to the excitement and attractiveness of these neighbourhoods. Higher density in-fill will utilise air space to achieve that density.

As this redevelopment takes place, the pedestrian must be kept at the forefront of the planning as discussed previously. Footpaths must be expanded, safe biking corridors established, traffic calming devices adopted, more safe crossings built for pedestrians, narrower streets established and 'Walk' cycles lengthened at all signalised intersections.

A CBD tram loop will further improve the level of accessibility around the city, as seen with people accessing Victoria Square, the Central Markets, Rundle Mall and UniSA on North Terrace from the aforementioned extensions. This accessibility will make the city a much more active and livelier, in turn improving its liveability.

Lastly, the establishment of a one-way street grid, allowing for much wider footpaths, must be explored fully to determine if it will assist in making the CBD become more pedestrian friendly while aiding the flow of traffic.

Other communities throughout the greater Adelaide region

In existing communities throughout the greater Adelaide region one discovers historic central retail areas. These are often heritage buildings that are either boarded up or used for low-value retail or commercial activity. In limited places they are being restored and are housing services that are vital to neighbourhoods, be they new cafes or restaurants, coffee houses or the like.

The focus on the city of Adelaide, its CBD, or major new developments at such sites as Bowden or Woodville West, cannot overshadow the need to make every community throughout the greater Adelaide area more pedestrian and bike friendly. In-fill development must be up to the highest design standards, be denser but still be sensitive to the surrounding neighbourhood. A few shops – a butcher, deli, dry cleaner, cafes and coffee houses – can become a focal point for a neighbourhood, drawing residents to them and ensuring that the community is walkable, bikeable, liveable and sustainable.

It is critically important to ensure that there are high-value employment opportunities available nearby which are accessible by walking and biking. It is recognised that heavy industry and manufacturing will occur in areas so designated and, by definition, will require many employees to travel longer distances that cannot generally be undertaken by walking and biking. For these trips public transport should assist, but for many trips the private vehicle will be the mode of choice. But as more high-value jobs are created in the knowledge-based economy, these enterprises (which can generally locate almost anywhere) need to be near or in major residential areas where employees can walk or bike to their jobs.

Examples abound of fully integrated neighbourhoods, or areas that could easily be created, throughout the Adelaide region.



**‘People yearn
to have more
places to enjoy
in their city and
it’s surrounds’**

4. Planning for highest quality development

The tremendous work done by previous Thinker in Residence, Professor Laura Lee⁶, and the creation of the Integrated Design Commission (IDC) as she recommended, has moved the region on the path to achieving great urban spaces. The focus on the buildings themselves and all of their elements, from design to green building practices, will be of utmost importance – to see in an integrated and comprehensive manner how neighbourhoods function, how each individual part of the built environment fits in with all the other parts, how a neighbourhood is connected, both internally and to areas around it. For all these things and more the IDC has the potential to move the greater Adelaide area into a more sustainable, attractive and inviting area than it already is.

It is vital, however, that the IDC and the newly filled position of State Architect be focused on not just the buildings and other infrastructure but also on the spaces in between. The largest amount of land owned for a single purpose in the whole of the greater Adelaide region is the road network, and the road network must become a focus of the IDC, for developing new roads and/or for re-purposing the existing road network. In this, the IDC will need to work closely with DTEI on development projects. Responsibilities for road management, however, must remain within DTEI. The primary goal of this re-purposing is to take this huge asset and reclaim at least some of it for all citizens, not just those in a vehicle.

Reclaiming the streets

When one looks at the recent changes instituted in New York City one can see the power of reclaiming street space for pedestrian activities. The establishment of an urban oasis in Times Square, one of the busiest intersections in one of the busiest cities, shows what can be done. And the fact is that in New York this same approach has been applied in many other areas with the same results. People yearn to have more places to enjoy in their city and its surrounds. Although Adelaide is not on a New York City scale, the underlying approach of using this vast road network for pedestrians and bicyclists, not just vehicles, is not only do-able but is of critical importance.

⁶ An Integrated Design Strategy for South Australia - Building the Future, Professor Laura Lee, Adelaide Thinker in Residence, 2009-2010

Finally, great design can be sabotaged by poor execution and not paying attention to the small details of development. For those small details, when added together, are often a greater determinant of what a building, development or neighbourhood becomes than the original design.

Consequently, the IDC and the State Architect must devote sufficient time to reviewing details of development projects, the finishes of new buildings: are spaces turned inward making for an unfriendly pedestrian area or are they turned outward, drawing people to them?

An example of what could seem a minor issue but is not, is noise. As denser development takes place one of the greatest concerns of residents is the transfer of noise from one residence to theirs, either from next door or from above or below. And yet history has shown that when cost pressures force a developer to engineer out 'unnecessary' expenses, (value engineering) vital soundproofing is often one of the first things to go. This cannot be allowed to happen, nor can it be allowed to happen for other vital elements of construction that inevitably, if not provided, will compromise the living environment.

This same attention to detail must provide a pedestrian and bicycle-friendly environment not compromised by vehicles crossing from driveways and car parks. To do otherwise will defeat the very purpose of the new development. A trial should be initiated for street sharing, where pedestrians, bicycles and motor vehicles all share the space without designated lanes for each mode. Freiburg, Germany as well as the Netherlands provide many good examples of this approach. And on a larger scale, the proposed Bowden Urban Village is ripe for this treatment.

All of these elements and hundreds of others, when added together, will make for a compelling and great community or, in the negative if they are not done well, will defeat the very goal we all want to achieve.

Planning and Urban Development

The infrastructure attendant to major development and redevelopment is a source of constant debate and friction between those responsible for delivering that infrastructure and those being asked to pay for it. In this regard the attendant infrastructure covers things such as sewers, water, roads, street lights, enhanced intersections, open spaces, the public realm, streets and public art. All of these elements when working together are what makes a place interesting, attractive and inviting.

As essential as these things are, how they are paid for varies enormously across the greater Adelaide region. This lack of consistency frustrates governments on whom the burden to produce these items mostly falls, as well as the developer who has to negotiate each deal with little or no guide posts.

The burden falls particularly on State Government, for when State Government wants to pursue a broader public goal it is often caught in the cross-hairs between those who want more public amenities and those who want to pay as little as possible for those amenities. The result is that the State Government has to find the means to pay for desired public investments.



The debate surrounding who pays is not just around the capital cost of acquiring or building the public infrastructure in the first instance. Scant attention is paid to the ongoing operational and maintenance cost of that public infrastructure. Consequently we see open space that is poorly maintained, and local governments, who are often strapped for financial resources, being blamed for not doing a better job of maintaining these spaces and offering alternative uses.

A rational, consistent and predictable system is needed to replace what is all too often a 'one-off' agreement for each major investment. The new system needs to be fair in the allocation of the costs of the attendant infrastructure, and equally important, must be perceived to be fair to all parties – the public, local and state governments and the private sector, whether they be developers or other business interests. This system must also provide a consistent means to pay for the operational and maintenance costs of public infrastructure.

Tiffany Switzer's insights

The inspiration and insights brought to the development community and others in Adelaide by Tiffany Sweitzer, President of Hoyt Street Properties in Portland, Oregon, were critical. Ms Switzer was able to speak with credibility as a developer herself about what it took to create the world-recognised Pearl District. Her recommendations to both government and the private sector can serve as a roadmap on how to make everything from a Bowden to a small infill project be a success in Adelaide. She was also able to address the tremendous payback to the community for building new, sustainable and exciting neighbourhoods, and the role of public infrastructure investments in creating them. For all those interested in the details of how this happened please see a separate report on the Adelaide Thinkers in Residence webpage⁷.

One of the tools used to create new public investments, one which was used in the Pearl District and many other places, was System Development Charges (SDCs)⁸. This tool, which should be fully evaluated by the proposed Urban Development Authority, uses SDCs paid by the developer to cover the capital costs of new infrastructure, be it footpaths, street lighting, undergrounding of utilities, open spaces or playgrounds. For ongoing maintenance a dedicated source of tax money, such as a ¼% of sales tax revenue, is often used.

⁷ www.thinkers.sa.gov.au

⁸ The Bureau of Development Services, City of Portland, Oregon, June 2011
<http://www.portlandonline.com/bds/index.cfm?c=34186>

Creating an Urban Development Authority

I recommend that the Premier and Cabinet create an Urban Development Authority to undertake at least five key tasks:

- Develop a policy framework in which:
 - the costs for public infrastructure and amenities are evaluated
 - a determination is made of which public investments are appropriate
 - a system is devised that fairly allocates costs across a complex set of possible investments and that provides the framework for how ongoing costs for those investments will be allocated.
 - Conduct ongoing monitoring of decisions surrounding investments in infrastructure and the public realm, with the authority to step in and alter agreements that are inconsistent with its policy framework.
- Acquire and consolidate land holdings to permit the redevelopment of areas at a scale large enough to allow for the cost effective achievement of the goals of *The 30-Year Plan for Greater Adelaide*.
- Ensure that all developments or redevelopments are of the highest quality, having choices suitable for different lifestyles and life stages, including affordable housing for people on moderate to low incomes.
- The tasks of putting *The 30-Year Plan for Greater Adelaide* into a level of detail that will guide future development are monumental and will not happen overnight. In the interim, as the details of the plan are fleshed out, it is essential that new development or redevelopment not preclude the achievement of the goals of the 30-Year Plan.
- Be able to stop, in extreme cases, a project that is about to proceed but is believed to frustrate the achievement of future opportunities. Such authority should be rarely used, if ever, but its existence will no doubt have a curative effect in those instances where a common goal cannot be forged.

Collaboration and co-ordination

These tasks will not be achieved solely by the Authority, and will involve many challenges. The Authority will need to form collaborative partnerships with federal, state and local government agencies, non-government entities and the private sector. In this the Authority cannot be everywhere at once and should therefore focus on the State Strategic Areas in the 30-Year Plan, including transport corridors.


It will need to coordinate its work particularly with the Department of Planning and Local Government (DPLG), where responsibility rests for the implementation of the 30-Year Plan for Greater Adelaide, as well as with the IDC and the State Architect. The Authority will need to encourage high-level co-operation among all stakeholders; in the process it will be possible to forge more public/private partnerships and provide a new direction for the whole community to work toward common goals.



The Authority will need to work closely with local governments throughout the greater Adelaide area as well as private interests, for they will often be the ones asked to foot the bill for the attendant infrastructure and amenities. Advocates for specific types of public investments, such as pedestrian and bike infrastructure, public art, open space, environmental perspectives and residences, must also be included in the outreach by the Authority.

This type of Authority exists elsewhere and so there is much to draw upon from around the globe on how other regions, cities and countries have developed approaches to resolve similar issues. No one approach can be adopted by South Australia, but the successes and failures of other areas are needed to inform the choices to be made for the greater Adelaide region.

In this regard, the very high quality work on development and redevelopment being done by Housing SA can serve as a model, and the work of the Land Management Corporation (LMC) in the master planning for Bowden Urban Village has been very effective. It seems to me that the new Authority should work in concert with Housing SA and the LMC, coordinating the work both of these agencies as well as the goals of the 30-Year Plan. And this must all be done under the guidance set by the IDC.



**'... the last 70 years
of development has
not been pedestrian
friendly ... '**

5. Healthy communities

As noted in section 3, making neighbourhoods walkable has many benefits. In this section I will focus on one of the most critical of those benefits: how walkable neighbourhoods affect our health.

The fact that so much of our last 70 years of development has not been pedestrian friendly means that we do much less walking than previous generations. The lower level of walking shows up in our waistlines.

Record obesity rates in the developed world underscore not only the fats, high calories and the volume of what we eat, but also that we don't get enough exercise. The health effects also show up in greater incidences of heart disease, high blood pressure, high cholesterol, diabetes and other health problems.⁹

Here in Australia the statistics are sobering. In 2007 Australia registered the fourth highest obesity rates in the developed world, behind only the United States, Mexico and New Zealand. Some are predicting that in the four years since the 2007 statistics were compiled Australia has moved higher in the rankings. Of more particular concern is South Australia, where the number of people either obese or overweight (measured by BMI) is 61.6% compared to a national average of 54.9%. A part of the reason for that higher percentage can be seen when one looks at the sedentary behaviour: in South Australia 76.6% of the population reports having low levels of exercise, compared to 72% for Australia as a whole.

As our longevity increases we are finding that the debilitating effects of this sedentary lifestyle cause even higher levels of frustration in our senior populations as they are forced to live a more confined and less active life. Activities they use to consider routine are becoming more challenging. The places they live often do not allow them to get necessary physical activity. It is indeed a sad commentary that one of the places many seniors go to walk is shopping malls to which they must drive.

Excellent work has been done by the Heart Foundation of Australia, looking at all aspects of the healthy outcomes from more walking. Their position statement entitled 'The Built Environment and Walking' (2009)¹⁰ is a wonderful compendium of information on the reasons for

⁹ OECD Health Data 2009, Statistics and Indicators for 30 countries

¹⁰ The built environment and walking - position statement, The Heart Foundation's National Physical Activity Advisory Committee writing group, 2009

and various adverse health effects of inactivity. This publication also contains an extensive bibliography of reference materials covering the field.

An additional study recently completed by the OECD entitled 'Pedestrian Safety, Urban Space and Health'¹¹ is another excellent work emphasising how the built environment affects how we get around, and how the constraint of physical activity by that built environment frustrates our ability to achieve better health outcomes for our community.

Effects of transit-friendly neighbourhoods

In a recent study¹² in my home in Portland, Oregon, populations were grouped in two categories: those who lived in transit-friendly neighbourhoods and those who did not. And while the use of transport does not guarantee better health, what was found was that transit-friendly neighbourhoods had footpaths, safe street crossings and other amenities that made walking easy.

The study had clear results. Those living in transit-friendly – read pedestrian-friendly – neighbourhoods weighed almost 6 pounds (2.7 kilos) less than those living elsewhere. And their health reflected it as well. The cost of health care for these individuals was approximately US\$5500 less per year.

Although not a part of this study, other research concludes that physical activity improves mental health as well, providing a sense of greater well-being.

In a recent article entitled 'Your Commute is Killing You'¹³, Annie Lowrey looks at research in Sweden as well as across the United States. The conclusions are clear: long commuting distances are generally disliked strongly, and the spill-over effect of this unhappiness translates into many other aspects of our lives.

Ms. Lowrey notes that a survey conducted in 2010 for the Gallup-Healthways Well-Being Index¹⁴ found that 40% of employees who spend more than 90 minutes getting home from work 'experienced worry for much of the previous day', but that the

...number falls to 28% for those with negligible commutes of 10 minutes or less. Workers with very long commutes feel less rested and experience less enjoyment, as well.

Ms Lowrey also cites research from Thomas James Christian of Brown University in which he notes that 'each minute you commute is associated with a 0.0257 minute exercise time reduction, a 0.0387 minute food preparation time reduction, and a 0.02205 minute sleep time reduction'. It does not sound like much, but it adds up¹⁵. Long commuting times also tend to increase the chance that a worker will make 'non-grocery food purchases' – buying things like fast food – and will shift into 'lower intensity' exercise.

¹¹ Pedestrian Safety, Urban Space and Health, the Research Centre of the International Transport Forum at the Organisation for Economic Cooperation and Development (OECD), 2011

¹² Presentation by Mel Rader of Upstream Public Health, to the Joint Policy Advisory Committee on Transportation, METRO, Portland, Oregon, USA (10 September 2009)

¹³ <http://www.slate.com/id/2295603/26may2011>

¹⁴ <http://www.gallup.com/poll/142142/wellbeing-lower-among-workers-long-commutes.aspx>

¹⁵ http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1490117

In another part of her article Ms Lowrey cites research at the University of California–Los Angeles and Cal State–Long Beach that

*...looked at the relationship between obesity and a number of lifestyle factors, such as physical activity. Vehicle miles travelled had a stronger correlation with obesity than any other factor.*¹⁶

Ms Lowrey poses the question 'why do people suffer through' so much time in the car, and answers it by noting

...a phrase forced on us by real estate agents: 'Drive until you qualify'. Many of us work in towns or cities where houses are expensive. The further we move from work, the more house we can afford. Given the choice between a cramped two-bedroom apartment 10 minutes from work and a spacious four-bedroom house 45 minutes from it, we often elect the latter.

She concludes her article with the following:

But wait: Isn't the big house and the time to listen to the whole Dylan catalog worth something as well? Sure, researchers say, but not enough when it comes to the elusive metric of happiness. Given the choice between that cramped apartment and the big house, we focus on the tangible gains offered by the latter. We can see that extra bedroom. We want that extra bathtub. But we do not often use them. And we forget that additional time in the car is a constant, persistent, daily burden — if a relatively invisible one.

Clearly this and other similar research tell us the same thing. Living in non-pedestrian-friendly neighbourhoods combined with spending substantial time in the car to meet life's daily demands is not healthy. And as health care costs soar here in South Australia as well as around the world, and represent the fastest growing government cost, something must change before these costs bankrupt government.

Creating walkable, liveable and sustainable neighbourhoods at times seems more of an art than a science. We try to put all the things together which have made other areas into just what we want. In doing so we have seen great successes around the world, be they in some of our great cities such as Paris, London or New York, or in newer cities such as Portland, and the Pearl District, where we have created wonderful neighbourhoods out of low-value abandoned rail yards. Through the investment in tram infrastructure, in parks and other amenities, areas have been transformed to make them places where people want to live, work and play.

The 20-minute neighbourhood

Even if making exciting urban neighbourhoods is both science and art, there are more quantifiable approaches that are outcome based and can help tell us if we are successful. One approach that is gaining popularity around the world is the idea of the 20-minute neighbourhood.

¹⁶ <http://www.sciencedirect.com/science/article/pii/S1353829205000572>



A 20-minute neighbourhood is one in which residents can get to most of their essential services or activities within 20 minutes by walking, biking or taking public transport. And this is not just limited to public transport, but public transport that is of high quality, frequent, covering large portions of the day, and accessible.

This is not intended to include all services or activities. For example, ample research shows that health care outcomes are of higher quality when the associated medical procedure is performed often. One does not want brain surgery performed by a doctor who has not done such an operation in the past year. Consequently, tertiary hospitals are by design meant to be few, large and are located in central areas that would not fall within the 20-minute radius for many residents. Other services and activities should likewise not be included in the definition of what constitutes a 20-minute neighbourhood.

The 20-minute neighbourhood does not mean that vehicles are not needed – whether, for example, they are for a large shopping trip or to get out of town to the wine region in the Barossa or McLaren Vale. Rather the focus is on the day-to-day activities that we do for necessity or enjoyment. The list includes employment, groceries, a pharmacy, the coffee shop, cafes and restaurants, schools, a movie theatre, sports facilities and open space.

The 20-minute neighbourhood concept can become a measuring device, tracking the percentage of residents in the greater Adelaide region who live in a 20-minute neighbourhood.

Citizen advisory committee

I would recommend that a broad-based citizen advisory committee (CAC) be established to determine what are the measures that should be included in the list of what community members consider to be a walkable, bikeable, liveable, and sustainable neighbourhood in Adelaide. It would then be relatively simple, using geographic information systems, to establish what parts of the region meet the definition. Over time, again using GIS mapping, one can track objective progress toward this end.

Another source for information can be found at www.walkscore.com. This website allows anyone in the United States to enter their address and get a walk score, based on the amenities nearby. This site uses a list of amenities which may be a good starting point for Adelaide. I do point out one drawback to the walkscore index: the amenities ranked may be near 'as the crow flies' but may not be accessible by foot because of barriers such as an uncrossable roadway.

What the 20-minute neighbourhood, the walkscore and other similar approaches tell us is that people prefer walkable communities. A publication in the United States, written by real estate agent Rebecca Roberts (Rebecca Roberts at MSN Real Estate) quotes from her own experience.

When my husband and I bought our first home, we finally came to the conclusion that as caffeine addicts, we needed to be within walking distance of a coffee shop. That revelation crystallized what we were looking for, and we then almost instantly found a place that gave us a choice of a major chain with a green logo, a local place and the less ubiquitous smaller chain decorated in coffee-toned hues.¹⁷

She continues by referencing a National Association of Realtors' study which found that:

56% of those surveyed preferred smart growth communities, and nearly three out of five would choose a smaller home if they could have a commute of 20 minutes or less.

Another study she quotes from is the Community Preference Survey, which found:

...that what a community offers is more important than the size of the home. Buyers were concerned with the quality of the neighbourhood (88%) and schools (77%).¹⁸

A part of that quality is the walkability of the neighbourhood. She notes that this:

...has increasingly become a factor for buyers tired of long commutes and having to hop in the car just to get a gallon of milk.


Finally, she references a study by the non-profit group 'CEOs for Cities'¹⁹ 'which found that home values could go up by \$4,000 to \$34,000 if they were near shops, schools and restaurants.'

This and other information and research from around the world shows that Adelaide is on the right course to make all of its communities more pedestrian friendly.

¹⁷ <http://realestate.msn.com/blogs/listedblogpost.aspx?post=8b4cd076-4c44-405b-b552-c56273e6e3f3>

¹⁸ http://www.realtor.org/wps/wcm/connect/e4c52a00465fb72cbfbcfbce195c5fb4/smart_growth_comm_survey_q_2011.pdf?MOD=AJPERES&CACHEID=e4c52a00465fb72cbfbcfbce195c5fb4

¹⁹ http://www.ceosforcities.org/pagefiles/WalkingTheWalk_CEOsforCities.pdf



**'It is never too early
to involve citizens
in issues directly
affecting their
neighbourhoods ...'**

6. Community involvement

In the greater Adelaide area a basic conflict exists around how to make community involvement work while not allowing a few to derail projects for selfish reasons. Time and time again I hear from community members that they have not been involved in key projects or programs until well along in the development process. And likewise I hear from government, both local and state, that it is premature to begin discussions with the public when a project or program has not received the blessing to proceed from elected leadership and nothing may come of it.

As I have watched similar debates around the world, around the United States and certainly in my own community of Portland, Oregon, I believe there are ways to move forward, meeting the goals of all stakeholders. First and foremost, systems agreed to by stakeholders must be put in place that find common ground, not battle ground. And the most successful of these efforts have been, in my view, when there is a structure for people to become engaged through working with other people in their own communities.

The City of Portland provides one model of how to achieve effective community involvement, although there are many other models from around the world that Adelaide should evaluate to determine how best to structure a system that works.

Forming neighbourhood associations

The Portland model is based on government assisting the creation of local neighbourhood associations. These associations are formed through democratically elected neighbourhood officers. Their size is small enough to allow active and engaged community members to participate meaningfully. In Portland, on average, there is a neighbourhood association for each approximately 5000 residents. The boundaries of the association are defined by naturally occurring demarcations, such as topography, waterways, major roads, school districts or other items that mean there is a natural coherence and likeness of outlook for each neighbourhood.

There is also a requirement that government must engage the neighbourhood associations in decisions affecting that neighbourhood, whether it be a liquor licence application or a proposed major new development. The neighbourhood associations have standing to formally participate in the various reviews conducted by government approval bodies.

As is often the case with community-based organisations, individual residents are interested in some issues affecting their neighbourhood while other residents care about other issues. Through their individually elected Neighbourhood Officers these organisations develop an approach to both keeping their community members involved (the required government notification to all residents near a proposed action is the first step) and involving those interested residents in developing the formal position the association should take dealing with issues.

Neighbourhood associations have been most effective when they make constructive recommendations, not just oppose anything that is put forward. As a result of being constructive they are listened to even when they find it necessary to deliver an 'under no circumstances should this be allowed to move forward' recommendation.

Developers working with community

This is the formal structure. What is at least as important is how these neighbourhood associations have evolved informally in their relation to government actions. First and foremost, private proposers have learned that they cannot take their proposal to government and expect government to overrule the neighbourhood. More often than not the governing body, be that a state agency or local council, tells the proposer that they must work with the neighbourhood association to solve the areas of conflict. Over time, savvy proposers have learned to work with the neighbourhood association when their proposal is at the earliest stages of development. This has allowed proposals to be modified in a way that meets the interests of both the neighbourhood and the proposer.

Not all proposals are for construction of something. Many times they are for an activity, such as the location of a mental health facility or the opening of a sports bar. In these cases government will often require the neighbourhood associations and the proposer to enter into a good neighbour agreement – one that is negotiated between the parties. Such agreements typically spell out in great detail what is expected of the proposer and what happens if problems develop.

This formal structure of neighbourhood associations has not eliminated conflict in Portland. However, it has allowed for formal and informal processes to be developed to work through and resolve many of the conflicts – in short, to find common ground rather than battle ground. It has enabled community members to become involved in the decisions that affect them and to have very meaningful ways to influence those decisions.

It has also allowed government a formal mechanism to engage the community in its work. Over time, government has learned the benefit of engaging its community through these structures at earlier and earlier points in the consideration of an issue. All this has led to a community more involved in things affecting them. And from the standpoint of government action, government has been able to produce a better project or program than it would have had the neighbourhood not been involved.

When conflicts are not resolvable is the time to have elected officials step in and make decisions to the benefit of the whole community.



Using communication tools

In addition, as our means of communicating and interacting have fundamentally changed through the use of the internet and social media, government must embrace these changes and develop and use these alternative tools to be effective at community engagement.

As mentioned earlier, the Portland model is just one approach. Other cities and other countries have adopted other models. Whatever is adopted, it must contain at least three key principles.

- **It is never too early to involve the community in issues directly affecting their neighbourhoods (or as we like to say about voting in Chicago, 'early and often').**
- **When structures exist at the neighbourhood level it is the responsibility of the proposer of a development, program or activity to engage those neighbourhood structures to work through possible concerns. Elected governing bodies must be disciplined and not step in at early stages, putting themselves in the position of resolving conflicts when the proposer and the neighbourhood haven't worked through the issues. Governing bodies must be firm in letting the processes play out.**
- **Government must recognise and truly believe that the outcome of this process isn't just about getting neighbourhood acceptance (although it will do that) but that the process will actually produce a better proposal.**

To establish effective community involvement processes requires an investment of time and effort. Sufficient resources must be devoted to this initial establishment to make certain it is successful. In the long run, however, other communities that have developed effective community engagement processes have found it a less time-consuming and more cost-effective approach than what they had to begin with. This has all happened because these approaches have reduced the conflict that often led to paralysis.



Conclusion

The greater Adelaide region is to be congratulated on taking a firm and aggressive stand on determining its future. South Australia's Strategic Plan, *The 30-Year Plan for Greater Adelaide*, the Integrated Design Commission and a host of other initiatives set South Australia and the greater Adelaide region apart from most other areas of the world. The government of South Australia, its Premier and Cabinet are to be commended for being bold in shaping the future of the state and its capital city. Too often, areas allow outside forces – or worse, happenstance – to control how an area evolves and grows. By setting a clear direction, the state and the greater Adelaide region are well on a course to shaping their future in a way that will preserve what is essential to the identity of the area, while at the same time being clear on a different, and much more sustainable, development pattern and public transport system. This course will promote liveability and economic vitality in all neighbourhoods as well as the central urban core.

This report is aimed at speeding up this journey, at least in some areas. I am honoured to have been a Thinker in Residence and to have come to know and love the region. I hope my recommendations and insights will be helpful.

Abbreviations

APTA	American Public Transportation Association
CAC	Citizen advisory committee
CEPTD	Crime Prevention through Environmental Design
DPLG	Department of Planning and Local Government
DTEI	Department for Transport, Energy and Infrastructure
GIS	Geographic information system
IDC	Integrated Deign Commission
LMC	Land Management Corporation
OECD	Organisation for Economic Co-operation and Development
SDCs	system development charges

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David Homberg, Principal for Architecture and Interior Design at Hassel, and Co-Vice President of the Australian Institute of Architecture (SA Chapter), provided tremendous insights as well as producing the visual included in this report showing how a redesigned Grenfell Street as a transit way could look. Jeff Tate, representing local government, emphasised the need to ensure with new development that there is a focus on both high value employment centres and the burdens that often fall to local government. This same level of insight was provided by Ian Radbone on behalf of the City of Adelaide, and Lord Mayor Stephen Yarwood’s enthusiastic support of my recommendations was much welcomed.

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I’d like to make special mention of fellow Thinker Professor Laura Lee whose pioneering work around integrated design dovetails perfectly with my recommendations. The space between buildings, the places people traverse, are critically important to how communities function. And the work of Professor Fred Wegman - another Thinker, who focused on road safety - has provided very useful information and recommendations around walking and biking. In particular, his recommended categorisation of road types and improved pedestrian infrastructure is essential, recognising that traffic must be slowed on those roads not primarily being used for transport.

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