



## THE BICYCLE INSTITUTE OF SOUTH AUSTRALIA

c/- 111 Franklin Street, Adelaide 5000

chair@bisa.asn.au

*Cycling for the Environment, for Health, for Pleasure*

13 November 2017

Emily Kenchington  
Strategic Planner  
City of Holdfast Bay

Dear Emily

### **Jetty Road Glenelg Draft Masterplan**

The Bicycle Institute of SA has been representing the state's utility cyclists for over forty years. Our members have a keen interest in your deliberations, as cyclists and as users of other forms of transport.

Congratulations on the plan. We believe that if implemented it will achieve the goals of making the precinct more welcoming, safer and more popular.

Obviously in the constrained space available there must be some compromises between the various uses of the precinct. We think that the idea of a shared space with a 30km/h speed limit is a sensible compromise and one that has been proven overseas to increase safety and amenity.

Our suggestions for improvements to your plans are quite limited. Some of our detailed comments also suffer from having no dimensions marked on your plans.

#### *Stop 16*

The idea of allowing cyclists to use the loading space when the tram is not at the stop is a simple, sensible solution to a difficult situation. Our only suggestion for improvement here is to make the marked space for cycling slightly wider, so that the edge on the building side aligns with the kerb where parking is provided. Given the potentially dangerous drop-off on the road side, additional clearance is needed between the bike path and kerb face to ensure cyclist safety.

#### *Moseley Square*

The tram turning movement at the intersection of Jetty Road and Colley Terrace will of course introduce a possible hazard for cyclists if they have to cross the tracks. Design efforts should be made to enable them to avoid this where possible, and if not possible, to encourage crossing at as straight an angle as possible.

#### *Augusta Street*

We note that this is to be promoted as a cycling route. As such, it may provide a means of avoiding the tram hazard of Jetty Road for cyclists with skinny tyres.

We have yet to see any concept plans for Augusta Road and would be happy to help you with their design. At this stage we note that for the route to be an effective alternative to Jetty Road there would need to be a convenient crossing of Brighton Road at Augusta Street. Our preference would include a median refuge. A crossing that imposes significant delay compared to crossing Brighton Road at Jetty Road would not be used.

#### *Continuous footpath treatments*

The concept of continuous footpaths across the throat of side streets is a welcome feature of the Master Plan. However we note some inconsistency in the location of the ramp down for motorists and that in some cases the location of the ramp suggests that a continuous accessible path of travel (CAPT) would not be maintained across the footpath with adequate width and forming a straight travel line. If this were the case the footpaths would not comply with provisions under the Disability Discrimination Act.

In addition, overseas experience is that when a bicycle path is provided adjacent to continuous footpaths, vehicular crashes with cyclists at side streets are significantly reduced. (In one study, about a 280%

reduction compared to a 30% increase without the continuous footpath treatment). However, a continuous footpath treatment that is significantly set back from the edge of the cycling area – such as shown for Byron Street – is unlikely to realise the full safety value of the treatment as the location at which cars slow/ stop is past the conflict point with bicycles.

We recommend that the location of the ramp at Jetty Street be used as a model wherever possible. Cowper Street does not have the same treatment as other side streets, although it does appear that a ramp will be installed. This may perhaps be an oversight, or perhaps the plan is to maintain the existing situation. If so, this would be a sad oversight.

We note that the paving of the continuous footpaths treatments as they cross side streets is different from that of the rest of the footpath. This is poor practice as it starts to establish a situation where pedestrians interpret the crossing as being a form of footpath while drivers interpret it as a form of road. Since the yield requirements at roads and footpaths are diametric opposites, it is important that there be no ambiguity for either pedestrians or motorists (or, indeed, to police attending a crash) as to the type of treatment that is intended.

Further, under the Australian Road Rules, ambiguity of road user responsibilities is avoided at continuous footpath treatments because a footpath is a road-related area and in all road-related areas, vehicles must yield to pedestrians. Any design that highlights the treatment as not being a normal part of the footpath and starts to introduce ambiguity undermines the legal clarity of this situation.

We would be happy to show the design team examples of continuous footpath treatments that demonstrate the correct paving practice. (They're pretty boring as they just look like a continuation of the footpath, but with a crossover at the kerb.)

Yours faithfully,

A handwritten signature in black ink, appearing to read 'F Patterson', written in a cursive style.

Fay Patterson BE MAITPM  
Chair, Bicycle Institute of South Australia

## Planning for traffic

Poor planning and under-funding of cycling (and walking) is institutionalised in the traffic planning system through many mechanisms.

### 1) *Designing for congestion*

As mentioned, it is a truism of traffic engineering that you can't build your way out of congestion.

The Bicycle Institute recognises that the problem here is one of politics: people will demand the quick fix over changing their behaviour, and are late to see the benefits of the latter over the former. But given the health tsunami heading our way, this must be challenged.

The State Government has achieved stunning success with its [TravelSMART Households in the West](#) behavioural change program, with a 18% reduction in vehicle kilometres travelled compared with a 6% increase in the control group. This program provides an alternative to building ever-more roads and parking by reducing demand for single-occupant car travel. It is a very cost-effective means of addressing transport needs, and one that produces many other positive benefits for its participants apart from mobility.

There are many other ways of helping people live more healthily and happily by using active transport as an alternative to adding to congestion, such as:

- A park 'n' bike ride program focused around helping close-by residents access the City during "Mad March" and/or the V8 Supercars race
- Adopting a policy of 'differential release' at schools – where children who walk or cycle are released ten minutes before those being picked up by car, addressing safety issues of school traffic and also incentivising children to walk or cycle
- Banning kiss 'n' ride and parking within 500m of school frontages – this distributes the traffic/ parking demand, both improving safety and encouraging children to walk at least a minimum distance every day (in the UK, the parking ban is 1 mile = 1.6km)
- Removing the cost impost of carrying bicycles on trains in peak times – this charge discourages bike 'n' train and is particularly egregious when trains are under-utilised (e.g. counter-peak direction or early morning). It is also inequitable in its greater effect on residents of outer suburbs.
- And so on.

Avoiding the creation of unnecessary traffic should be part of traffic management and parking approaches, rather than designing congestion in through a predict-provide mentality.

### 2) *Designing for roads instead of streets*

How local streets are designed are very important to cyclists and pedestrians. Council decisions regarding local streets are governed by policies and guidelines created at higher levels – for good or for ill.

Under the Road Traffic Act, ultimate legal authority for street design is vested in the Minister for Transport. He normally delegates that authority to officials of the Department of Planning, Transport and Infrastructure (DPTI) for arterial roads, and to local authorities for local roads.

Councils in turn delegate their authority to council staff, provided that this authority is exercised in accordance with DPTI's technical requirements, which usually reference guidelines and standards created by Austroads and/or Standards Australia. The standards are created by a long process of intergovernmental cooperation among officials of various state and territorial governments. A few operational guidelines are also issued by DPTI, but there is a very low priority for developing such guidelines and they typically relate to arterial roads (for example, installation of Brifen wire rope barrier).

Any measures that are not covered by such technical requirements must be approved by DPTI.

However, the DPTI staff tasked with this typically have no experience in working with local streets. Those who do – council staff, consultants and other DPTI staff – are supplicants. The opinions of specialists in the walking/ cycling fields, road safety experts, or experienced and knowledgeable members of the profession are not part of the process.

The result of this is that South Australia in particular has fallen far behind other states – let alone international peers – in adopting new ways to cater for cyclists. Hardly any council engineers are willing to innovate unless as part of state government projects, as they risk project delays or outright rejection. Green pavement in bike lanes was allowed after DPTI's CEO over-rode his own staff's prior rejection. In other cases, sensible guidance – such as cyclist ramps being angled to the kerb line, to help cyclists move to/ from off-road paths without swinging out into traffic – is over-ridden, despite safety concerns of ignoring the guidance and with no way to challenge the 'ruling'.

The Heart Foundation has sought to remedy this situation by creating a coalition supporting active living that included planners and bike planners (rather than road engineers) from DPTI. Amongst other things, this developed *Streets for People*, a guide for the design of local streets. While endorsed by DPTI, it has had little influence.

*We need some sort of mechanism to promote innovation: a panel to identify innovations in place elsewhere, design the trialling of them in South Australia and to disseminate the results of the trials; and a body of appeal for projects rejected for delegated approval by DPTI.*

If created as an 'expert centre', this could enhance South Australia's exposure to the education market. Currently, no Australian universities are positioned in this space, despite the growing interest in cycling Australia-wide. (The University of Adelaide is undertaking research in this area, which could form a basis for claiming the space.) This body could also provide badly needed training of planning and engineering professionals.

### 3) Insufficient understanding of cyclist cost-benefits

Experience in other jurisdictions points to bicycle routes built in isolation to cycle networks having a benefit-cost ratio (BCR) averaging 3.5:1. Major road projects, on the other hand, typically struggle to achieve a minimum BCR of 1.2:1. The long-term negative impact on our community that results is profound.

For example, the initial Darlington project had an estimated cost of \$620 million, of which some \$10 million was budgeted for cycling and walking facilities. Assuming a BCR of 1.2:1, the project might be considered to produce monetised benefit of \$744 million. No value is known to have been given to the active transport component. If the average BCR of 3.5:1 were used, the \$10 million would have produced a monetised benefit of \$35 million as part of a total project value of \$767 million.

However, significant additional value could have been realised through developing the local cycling network – by investing \$1 million into a share scheme with pedal-assisted bikes to be run by Flinders University, providing cycle routes in ARTC land through Eden Hills to Belair, constructing a shared use bridge over South Road on the eastern side of the Tonsley site, better connection to Sturt Creek Linear Path and improving the Marino Bikeway.

Post-implementation, overseas assessment of strategic routes that significantly improve cycling conditions has found BCRs of up to 25:1 (with some projects reaching 40:1). At a more moderate (and typical) BCR of 12.5:1, a \$50 million investment in cycling would have a monetised benefit of \$625 million – some 85% of the benefit brought by the traffic component of the Darlington project.

If this seems extraordinary, so are the cost implications of overweight/ obesity. Additionally, the network would have had a tourism value, capitalising on the state's investment in the Tour Down Under.

Currently, walking and cycling facilities are the first to suffer when budget constraints hit any roads projects. We understand that the facilities planned for Darlington will now be delivered in a compromised form. A similar result has occurred with the Torrens-to-Torrens project.

When critical links in the network are not provided, or not provided well, local councils cannot possibly address the severance and network constraints to cyclists and pedestrians that result. But these councils are often the ones that must cope with the traffic and parking demands induced.

### 4) Legislated nonfeasance

Prior to 2001, Australian road authorities received significant protection from road-related civil liability claims through the 'highway rule', which held that road authorities could only be held liable under

misfeasance (i.e. effecting a maintenance action at a location, but doing it negligently) and not for any failure to act (a concept known as nonfeasance).

This provided no incentive for road authorities to act to identify and mitigate emerging risks. A purely reactive approach was perpetuated, and a “I don’t want to know” culture. Increasing concern about this situation led to two cases, Brodie and Ghantous, being taken to the High Court. Judgements handed down on 31 May 2001 overturned the ‘highway rule’. This development of civil liability and negligence jurisprudence effectively indicated that the ‘highway rule’ was not in keeping with community interest.

However, this opened a can of worms for road authorities. Many state and territory governments acted to limit the impact on councils. To sum up:

1. New South Wales, followed by a number of other states, introduced a ‘special protection’ for road authorities – but this does not restore the ‘highway rule’ and its blanket immunity
2. Victoria temporarily restored the ‘highway rule’ until the development and introduction of its Road Management Act 2004 (amended on 1 January 2010), which details a number of statutory duties for road authorities in that state
3. South Australia enacted Section 42 of the Civil Liability Act 1936 on 1 April 2004, under which “A road authority is not liable in tort for a failure— (a) to maintain, repair or renew a road; or (b) to take other action to avoid or reduce the risk of harm that results from a failure to maintain, repair or renew a road.”

South Australia is the only state or territory in Australia to restore the ‘highway rule’ indefinitely.

While the Bicycle Institute appreciates the costs and stresses the overturning of the ‘highway rule’ brought, we are also aware that since the enacting of section 42 of the Civil Liability Act 1936, many if not most councils in South Australia appear to have greatly curtailed asset management activities related to identifying safety hazards. Indeed, a Bicycle Institute committee member who pointed out that changes to ARR’s mean that Adelaide City Council’s continuous footpath design is now ambiguous as to whether a pedestrian or driver must give way, and that she had witnessed a driver almost run into a pedestrian, was told “Don’t tell me, I don’t want to know” by a member of ACC’s staff. (The design has not been amended.)

The Bicycle Institute strongly advocates a change of legislation away from the blanket immunity of the ‘highway rule’ towards the NSW or (preferably) Victoria approach, providing protection to road authorities but also encouraging councils to understand and take seriously their duty of care towards road users.

##### 5) *Contribution Plans*

When major development occurs, councils are naturally concerned about the traffic that may result and the costs of infrastructure required to cope with this. The only means of obtaining developer funding for such infrastructure is through Contribution Plans, and councils use ‘conservative’ traffic estimates to ensure that potential infrastructure is not under-funded. There are problems with this approach:

- The infrastructure isn’t delivered until all development has occurred. So infrastructure isn’t present when it’s needed, or it’s built now with future capacity in mind. The former approach is inconvenient; the latter induces traffic.
- Even if demand for infrastructure doesn’t later arrive, council is committed to building infrastructure for which it has accepted funds.
- Traffic generation rates can be used to identify future traffic needs, but not walking or cycling demand. So councils rarely fund active transport infrastructure through Contribution Plans, much less alternatives to ‘unconstrained’ traffic and parking demand i.e. options that could provide more sustainable results.

We would like to propose a change to the legislation around Contribution Plans to incorporate a method to allow councils to use these funds earlier, if spent on infrastructure that address traffic generation through travel demand management. This would include bike lanes and footpaths with a strategic function over and above catering to normal demand. Under this proposal, the amount used by councils for this purpose would be offset by a financial obligation to fund the specified infrastructure in the future, to meet demand at the time. If traffic generation meets projections, a cost-swapping has occurred and the infrastructure is still

built. If strategic active transport infrastructure is effective, traffic generation should be less than projections and lower traffic and parking demand results.

Obviously, the exact workings of this proposal need to be further developed and refined, however this should help to reduce congestion and parking needs from the outset of development and into the longer term.

### **Traffic management**

Contrary to most people's understanding, traffic is elastic – there is not a certain number of car trips that must be accommodated. Traffic vanishes when roads are closed and is induced when roads are constructed or widened. Traffic can be managed, or congestion designed into the transport system by coupling poor car management with disincentives to use alternatives to the car – such as cycling.

#### *6) Legitimacy and priority for active transport*

The 30 Year Plan for Greater Adelaide, as well as many other Federal, state and local government policies, prioritise active transport modes over single-occupancy vehicle traffic. In practice, the opposite is the case.

The Bicycle Institute spends much of its time commenting on design proposed by DPTI and Councils, often having to try to safeguard existing conditions for pedestrians and cyclists against 'safety works' or 'upgrades' that improve the situation for cars at the expense of others. Signalised pedestrian and cycle crossings are often far slower to respond to demand than recommended in relevant guidance.

Theoretically, all new works should be complemented by a Traffic Impact Assessment (TIA) that covers all road users. This is virtually never undertaken. At least a dot-point summary form of TIA should be made available for every project councils put to public consultation, to transparently demonstrate how active transport modes have been considered. This would force traffic engineers to at least consider how these modes are affected and what might be done to mitigate impacts.

Building problems into new works that then have to be addressed is inefficient. It wastes limited funding and only causes more congestion and delay from remedial road works. Better design quality achieved by considering walking and cycling needs would also help to promote their uptake.

#### *7) Safe practices*

The Bicycle Institute has an ongoing issue with council administrations that are ignorant, hostile or unresponsive to safety hazards affecting cyclists. Bollards are a good example. The Bicycle Institute has been pursuing this as a safety issue for more than 20 years, yet most bollards in SA do not meet the requirements of standards in place since 1996. Last year, a cyclist died after hitting a bollard.

(Re: the Civil Liability Act 1936, this is not a nonfeasance issue but a malfeasance one as standards exist but are being ignored. Other information is also ignored. For example, Adelaide City Council has already conducted two Road Safety Audits, both of which identified non-compliant bollards as a problem. We are not aware of a single compliant bollard in their council area.)

We do not have the funds to proceed to the next step, namely suing councils, and to do so would affect our working relationship with councils.

DPTI has the power to require councils to address non-compliance with technical standards, including issuing a (small) fine and a direction to remediate. We would like a method for reporting non-compliance to DPTI with an expectation that this trigger a process of exploration and mediation as a precursor to a non-compliance notification (which might be issued after review of the 'expert panel' mentioned earlier.) This will help councils to understand their duty of care and take negligence issues seriously – neither of which they are currently doing, at least for cyclists and arguably not for pedestrians.

#### *8) Events management.*

Councils promote off-road paths as major cycle routes but treat them as low-priority footpaths. This year saw the main cycling commuter route into the City, the River Torrens Linear Path, closed on both sides of the

river for over a month, with no consultation and the imposition of circuitous detours. Similar issues occurred during WOMADelaide.

The number of cyclists who use this path in peak hour is equivalent to a lane of traffic. At a time when City traffic is affected by other event closures, cycling could relieve pressure on public transport services (for example, the O-bahn services are so full during the V8 Supercars event that buses will not pick up morning commuters waiting at Klemzig Interchange), reduce congestion and alleviate parking demand.

We strongly advocate for state government to identify important cyclist routes (the River Torrens Linear Path, Greenways and similar) and to require these to be covered by the same provisions regarding event road closures as public streets. This mainly involves advertising closures before they occur. While this would not necessarily ensure that cycle routes are treated with the same respect as streets, this would send a message to event organizers that cyclists are traffic and at minimum must be advised about closures in advance of the event. A quick and easy way to achieve this would be to incorporate such provisions into the technical requirements with which councils must comply under their delegated authority. A reporting mechanism as mentioned above must then be present for this to be taken seriously.

### 9) Speed

- a) *Local streets.* Speed affects safety, but also amenity. The Bicycle Institute would like to see 40km/h (or preferably 30 km/h) speed limits on residential streets, especially in the inner area. In particular, we are advocating for low-speed streets that are both a transport corridor and a public green space for residents. Such multi-use spaces are common in other countries and assist in ensuring cities remain liveable given higher densities in inner urban locations. Low-speed environments also present a practical alternative to a large-scale roll-out of cyclist infrastructure, with attendant costs and impacts.

We are aware that speed is a political issue: most drivers vastly over-rate the impact of speed zones on their trip times (our experiments found 1 second impact for a 40km/h, 12 seconds for 30km/h in Norwood) and fail to understand that this would only affect the 'final kilometre' of their trip. Norwood Payneham St Peters gives an example of how not to implement a 40km/h zone, electing to give no reasons for such a change to its residents before polling them. Indeed, when the Bicycle Institute pasted a few flyers on poles explaining what such a change might give rise to, these were removed within a few days (unlike advertising for events and lost dogs!). Despite its reticence, NPSP actually had bowed to resident pressure and earlier implemented a 40km/h speed limit in one area. The Bicycle Institute would like to see the issue of lower residential speed zones tested in a citizen's jury, where the reasons and impacts can be properly put and discussed.

- b) *Urban arterials.* It is well known in traffic engineering that higher speeds do not translate into higher capacity due to the greater stopping distances, etc, required and the 'shock wave' impacts of stop/start traffic. Variable speed limits can improve congestion by smoothing traffic flow. However, many cyclists and pedestrians could also speak of the frustration of waiting to cross a major arterial and finding cars continuing to move at low speed along the arterial road rather than stop. We feel that there should be some opportunities for synergy, for example by implementing traffic management approaches suited to low-speed environments when lower speed variable speed zones are implemented.
- c) *Destination streets.* Many streets are compromised for walking and cycling by prioritising for traffic with no local destination. These rat-runners often travel at inappropriately high speeds. This is most clearly the case in Adelaide City Council, as this is an obvious destination, but also occurs in other council areas. The Bicycle Institute would like to see low speed, shared street design – as used in Europe and Auckland – in streets such as (say) Rundle Street, Adelaide. This design permits access to local land uses, including car parking, but does not prioritise through movement over destination uses. We would also like to see greater use of street closures, as exist in Unley.

### 10) Contra-flow cycling

Research commissioned by Adelaide City Council has revealed that allowing cyclists to travel the wrong way down local one-way streets improves safety by allowing cyclists to use routes that would not otherwise be available to them, and which are alternatives to major roads. For example, around Central Market, the alternative to using a street with less than 1,000 vehicles/day travelling at low speed might be to use King William Street, with exposure to heavy vehicles, buses and trams, parking and unparking manoeuvres and higher traffic speeds.

As with overseas jurisdictions, clear-cut evidence has not led to significant change. Although few crashes occur at intersections and separate facilities at this point do not improve safety, despite which ACC continues to construct such facilities, limiting contra-flow cycling to the roll-out of designated routes. In other councils, the situation is typically less progressive.

The Bicycle Institute would like to see the same approach adopted in South Australia as in jurisdictions such as Belgium, which is to reverse traffic engineering practice to match safety evidence: contra-flow cycling must be allowed in one-way streets with traffic volumes less than a few thousand vehicles a day in all council areas, except where councils identify site-specific conditions that point to unsafe conditions. A council's case against allowing contra-flow in the specific situation would then need to be agreed to by DPTI for a ban against contra-flow cycling to be allowed.

#### *11) Shared bike schemes and mandatory helmet legislation (MHL)*

The Bicycle Institute's position on MHL is that it is a divisive issue and we have other priorities. However, we are sympathetic to councils that feel that MHL complicates the efficiency and efficacy of shared bicycle schemes, given the evidence that users of shared bicycle schemes have fewer crashes than other cyclists. We note that the Northern Territory's approach to MHL excludes off-road paths, has not resulted in higher injury rates than elsewhere in Australia and is associated with the highest cycling rates in the country.

### **On-Street Parking**

#### *12) Parking at street corners*

On 1 January 2000, new uniform Australian Road Rules (ARRs) came into effect in South Australia. These included a change in stopping distances where vehicles are not permitted to park in various locations such as near intersections, bus stops, crests, curves, railway crossings and children's crossings.

The previous standard of most states revolving around 6m on the approach/ 9m on the departure, as measured from the building line, was changed to 10m and 20m, measured from the kerb line.

This change was adopted as a safety measure as parked cars obstruct the view of motorists (and others) at critical locations. (Cyclists might add that they force motorists to pull out from side streets and stand over the bike lane so they can see on-coming traffic.)

Due to the work involved in changing signage and line-marking, the state government flagged that it would not immediately enforce compliance with the new ARRs. However, the stopping distances relating to intersections have, in many councils, never been changed. Cars are allowed to park closer than 10m, even on busy locations such as Greenhill Road at Unley, and some councils have specifically decided not to comply with 'new' ARR distances.

The Bicycle Institute does not believe that road user safety should be compromised for the sake of a few metres of on-street parking.

Councils should be told that they've had long enough to adjust and be given a finite date – we suggest 1 January 2018 – in which to comply with the regulations, after which DPTI starts fining councils whose parking is in contravention with this rule.

Here, NSW provides a good template. In 2009, the (then) NSW RTA advised councils that from 1 January 2010 they would expect compliance with the 10m requirement. When councils protested at the hardship of adjusting parking restrictions throughout the council area, the RTA pointed out that they'd had 10 years in which to do so. Surely 18 years is long enough for South Australian councils!

#### *13) Parking compliance and enforcement*



Compliance with on-street parking regulations affects cyclists with respect to our lamentably commonplace peak hour cycle facilities. Pressure from demand for on-street parking affects the ability of councils to reallocate kerbside space to other purposes. Competition between councils to attract business undermines pricing parking to encourage effective policing and turnover.

These factors point to councils increasingly turning to high-tech systems to improve parking management.

- a) *A common platform.* It would be undesirable for each council to require users to have to sign up multiple times and cope with different payment systems, etc, because of councils using different parking system providers. It is equally undesirable to create a natural monopoly by all councils signing up to a particular solution provider. Instead, councils should adopt a common platform that all suppliers use.
- b) *Parking over driveways.* With numberplate recognition technologies, it should be possible for residents to nominate a numberplate so that a homeowner can park over their own driveway.
- c) *Priority for car-share.* Car share cars provide greater utilisation of kerb space because a single car is used for multiple trips during the day. On-street parking policies should prioritise for car share. As new entrants to the car share market emerge, a policy for allocating space will need to be developed.
- d) *Dockless bike share.* Dockless bike share systems that are being rolled out around the world with amazing rapidity have both positives and negatives associated with them. One risk is that footpaths may become cluttered with share bikes. We would advocate that all new bike share entrants be required to sign up to a common operational platform, which would include minimum quality standards for bikes, funding of a single maintenance provider, privacy and IT data controls, passing on bike location data to allow rebalancing of the system as required, and common docks being provided in the City to control bike share parking. (In suburban areas, such control would only be required at attractive locations and the bike share would generally operate without docks).

#### 14) Clearways

The Bicycle Institute supports the state government's extension of clearway hours. Clearways are typically on arterial roads with parking available in side streets and often in off-street parking. In many cases – such as Portrush Road – it is hard to see how allowing parking adjacent to narrow traffic lanes used by heavy vehicles, where drivers and driver-side passengers enter/ exit cars from the traffic lane, can be safe. (In comparison, riding along such roads is parallel to traffic movement, with a reduced speed differential to traffic due to the bike's movement, and requires only 1.5m compared to 2.3m for car parking.)

In addition, however, the parking that is allowed in non-clearway times should be reviewed on a regular basis with respect to local conditions. In many locations, the combination of no stopping zones and other restrictions means that the parking allowed in clearways is minimal and its removal would enable bicycle lanes to operate full-time. In others, the assumption that clearways are needed on weekdays but not on weekends is incorrect: as much traffic is now present on many streets on a Saturday at midday as in weekday peak periods and some cycling routes are more highly used on weekends than weekdays.

For example, a single car parking space exists on the north side of Magill Road east of the driveway to Magill Village's off-street car park. The off-street car park is hardly ever full, but the on-street space is used by people who find it easier to park here and nip across the road than having to walk an additional few metres from the off-street car park. As a result, cyclists must veer out to pass a parked car at the same location where the painted median in Magill Road becomes a right turn into Magill Village, leaving little room for bikes and cars to safely share Magill Road. This stressful and hazardous situation, which occurs on weekends as well as weekdays, could be remedied by the removal of the single on-street car park with no noticeable impact on local traders.

In many cases, the creation of full-time bike lanes would allow a segregating treatment to be installed (e.g. armadillos), making bike facilities better suited to a larger cross-section of the community. This is particularly near pedestrian-only signals, which provide arterial road crossings mid-block rather than at intersections and hence create a dogleg or detour for cyclists using local streets on either side of the arterial road. In the absence of a short section of protected bike lane, cyclists are forced to choose between using often narrow footpaths heavily used by pedestrians or veering past a parked car into arterial road traffic –

with school kids instead getting a lift from Mum or Dad. Here, it is worth noting that the reduction in car traffic we all welcome during school holidays is actually only about 10%. Reducing the prevalence of “Mum’s taxi” trips by less than one a week would deliver these conditions all year round.

Cycling near schools is not always in the peak commuter direction. For local school children, travel patterns may be away from the City in the morning and towards the City in the afternoon; or at midday, to reach local facilities in lunchtimes. At these times, peak hour bike lanes facilitated by clearways do not operate. The broader roles and impacts of clearways on cycle traffic should be included in the assessment of clearway need and times of operation.

#### *15) On-street bike parking*

Councils typically fail to provide sufficient bike parking and also complain about cyclists locking to street furniture. Bikes locked to poles are vulnerable to falling and blocking access to both footpaths and for people getting into/ out of parked cars. Although the State government’s State Bike Fund (or its current incarnation) offers 50% funding for bicycle infrastructure, this has not led to increases in on-street bike parking provision at anything approaching demand levels anywhere in the state.

We would like to see some mechanism that complements the ineffective carrot with a more effective stick. This might take the form of a phased-in requirement for councils to provide on-street bike parking in line with bicycle parking guidance. It might be a clause that a council cannot collect developer contributions for car parking while it provides inadequate on-street bicycle parking.

In practice, this bike parking requirement could cheaply and easily be achieved in most locations by adding locking loops to street poles, installing tree guards, etc.

### **Off-Street Parking**

Research has demonstrated that the availability of cheap parking is the single biggest determinant of whether or not to drive. Parking management can help to reduce traffic demand.

#### *16) Mandatory parking rates*

The parking rates contained in Development Plans generally reflect an outmoded predict-provide approach to parking demand. For example, Eastwood in Unley has some of the lowest car ownership rates outside of the City and the highest walking and cycling rates. Across Fullarton Road from Eastwood, the Glenside development is better located to a supermarket – but its recent development included mandatory parking rates that provide for far more parking than Eastwood would need. Similarly, the Lochiel Park demonstration ‘green’ development had the same parking requirements as the rest of Campbelltown.

These represent wasted opportunities. Typically a third or more of multi-storey development is given to cars. This could instead accommodate people, increasing density; or be used to provide open space.

Glenside could have been a low-car development, instead of which State government has flagged a million dollar spend on providing an additional right turn lane at Greenhill Road to cope with the traffic that will be generated by Glenside – making walking or cycling across this intersection even less attractive.

Future inner-urban sites such as Norwood’s Caroma site should be zoned for low-car (or so-called “car-free”) development, with the provision of travel demand management techniques to assist in achieving low-car mobility. Further, all multi-storey development in the inner-rim council areas should be subject to parking maximums. People who buy residences in such locations effectively self-select to reduce their car use, which is more feasible in these locations compared to housing located further from the City. Councils should be encouraging this change rather than forcing new residents to buy parking that will then encourage them to own and use a car.

There are many methods by which demand (and hence developer requirements) for car parking can be reduced. Those not considered in the 2001 Planning SA Bulletin *Parking Provisions for Selected Land Uses (Suburban Metropolitan Adelaide)* or the South Australian Planning Policy Library are more interventional than locational:

1. Implementing car share – in Adelaide City Council, access to GoGet cars has led to a reduction in car ownership (mainly second cars). This in turn reduces parking requirements, but also car use and hence traffic.  
Car share could be encouraged by providing car share spaces, including a year's membership in a car share scheme to new home buyers and guaranteeing a minimum membership for the car share operator in the first few years. Car share parking should be located in streets rather than garages, so that neighbours can also use the scheme.
2. Providing a bicycle share scheme, including power-assist and cargo bikes.
3. Providing parking in a garage instead of at the residence and selling/leasing this separately – this enables less than one car park per unit to be constructed, reducing over-provision of car parking. Selling parking spaces provides a transparent method of indicating to residents the actual cost of parking, which is otherwise usually bundled into the purchase price for a house. And one or two car housing structures have associated with them only one or two driveways, instead of a road and driveway for each residential building (paved areas can be used to accommodate vehicle standing, for example for furniture removals, but otherwise exist as open space.)
4. Developing a Green Travel Plan for new residents to assist them to identify and use non-car mobility options e.g. by providing a MetroCard with 6 months' value on it to all new households.

It might also be desirable to institute a 'local improvement funds' where councils collect a charge from sales of low-car development and hypothecate (or ring-fence) this for travel demand management provisions in the local area. This is an alternative funding model to Parking Contribution Plans, which collect funds related to a short-fall in parking for future parking needs. Parking Contribution Plans require developers to hand over funds at the time of construction, when cash flow is at its tightest. A local improvement fund is more transparent (the benefit is more obviously tied to the area), allows activities to be undertaken as soon as funds are available (Contribution Plan car parks can take 20 years to fully fund) and by distributing costs more evenly, reduce the impact on financial feasibility of low-car development. This proposal would need further consideration and development.

#### *17) Design of car parking*

With the possibility that driverless cars will significantly change travel patterns, new parking garages should be required to have a height that will enable these to be repurposed in the future, if desired. Car parking typically has a minimum head height of 2.1m, which is too low to allow parking to be converted into habitable rooms in the future.

Off-street car parking also has an impact on on-street parking, with wide driveways reducing kerb space. As developers provide more off-street car parking, the supply available to others reduces. Nor is there an incentive for property owners to remove and reinstate disused driveways. To some extent, allowing owner to park over their own driveways would reduce this impact (already mentioned.) Another alternative is to incentivise minimum driveways widths and hence kerb take by relating this to a direct cost. In Spain, council rates are related to the amount of driveway width of a property. This could form a model for at least inner urban councils in South Australia, where kerb space is most highly valued, by instituting a system where council rates include a small levy per metre of driveway exceeding (say) 3.5m in width.

#### *18) Pricing*

*a) On versus off-street parking.* In economic theory, the most valuable goods should attract higher prices. However, valuable on-street parking is typically priced at lower costs (including free) compared to off-street parking as the latter is priced on a user-pays basis for the infrastructure.

This distortion encourages all day parking on-street, including in mixed use and mainstreet areas, where traders then complain about a lack of parking. This also encourages congestion as drivers cruise streets looking for free parking opportunities.

We would like to see council pricing of on and off-street parking to reflect the value of parking and discourage cruising, i.e. with higher on-street charges at locations of high demand and lower off-street parking fees.

b) *Charging for ancillary parking.* Under the Development Act, ancillary parking supply that either exceeds or fails to meet a land use's needs will lead to inefficient use of parking.

For example, in Norwood, the Hoyts cinema complex has under-utilised parking: patrons access the cinema more efficiently than envisaged. Meanwhile, some of the older buildings in the area lack adequate on-site parking.

As ancillary parking must be provided free of charge, those with a lack of parking cannot lease empty parking spaces from the cinema owner. Norwood therefore has both an over and under-supply of off-street parking at the same time, with no mechanism to allow these to be equalised.

The converse is the case at Repromed in Burnside, where patients are given with on-site parking while undergoing treatment, leading to an under-supply of worker parking as the on-site parking was not based on this demand. If Repromed charged staff for on-site parking, some workers would be encouraged to find alternatives to driving and those who elected not to contribute to the parking demand would be financially rewarded. However, this is not possible.

### 19) Parking alternatives for workers

The Bicycle Institute would like to see better governance and coordination provided by councils in offering Green Travel Planning to major land uses. Buy-in from these land uses is required for the Green Travel Plan to be implemented.

For example, many years ago, then Transport SA identified that it was more cost and time efficient to run a mini-bus between its Walkerville and City offices than to pay for its staff to catch taxis. Non-Transport SA staff who needed to visit the Walkerville office could also use this free service.

There is good potential for Green Transport Plans to reduce both traffic and parking demands. In current conditions, community buses (including patient transport vehicles associated with medical facilities) could in many cases be coordinated and better used, enabling commuters to a specific land use to travel in ways not offered by public transport route services. OH&S concerns may prevent a company from encouraging employees to walk or cycle, and staff might need assistance through cycle refresher courses before they feel confident to cycle.

Future conditions include driverless cars and buses, power-assist bikes and integrated mobility management.

### **Summary/ concluding note**

This submission from the Bicycle Institute envisages an approach to managing traffic and parking that is greater than a predict-provide attitude to cars, and sees active transport and public transport as legitimate components of the state's traffic system.

There are huge benefits to this approach.

- The infrastructure required to transport people by foot or bike is vastly cheaper than that required for cars and their parking, has a smaller land use impact, and supports both positive communities and tourism.
- Ageing populations depend on mobility for quality of life, but are decreasingly able to operate in a motorised transport system. An approach based on maintaining personal mobility not only assists this population to achieve full participation in our society, but also others marginalised by a system based on personal car ownership: the young, impoverished, people with disabilities, and others.
- At current projections 80% of the Australian population is expected to be overweight or obese by 2025 – only 8 years from now – with massive implications on health costs, worker productivity and absenteeism, and flow-on effects throughout the economy. Active transport is a proven way of reducing this cost burden.
- With disruptive technologies such as driverless cars part of our foreseeable transport mix, it is important to future-proof decisions by thinking cleverly and building resilience into our transport and land use.

We look forward to a committee report that steps outside the business-as-usual paradigm to provide a better framework for local government's regulation of parking and traffic movement in South Australia.

**What we want to see in a state bicycle strategy... in brief****A target for increasing the amount of cycling**

- Doubling the percentage of South Australians who cycled in the previous month from 2015 to 2025.

**A commitment to spending more money on cycling**

- 2% of the transport budget and 5% of any major project budget should be spent on cycling

**Safer roads**

- 40kph speed limits for residential streets and main street zones within the outer ring route.
- 50kph speed limit on arterial roads within the outer ring route
- 40kph posted speed limit in the CBD
- Variable speed signs to lower speed limits when roads are congested.

**Transport infrastructure that caters for cyclists**

- Strong bike lanes on all arterial roads
- Progressive replacement of part time bike lanes with permanent bike lanes.
- Enforcement of regulations requirement parking to be at least 10m from intersections
- Better maintenance of facilities, not accepting the excuse of nonfeasance for roadways.
- Bike lanes that reach intersections
- Safe road crossings of arterial roads on all bike direct routes

**A bigger bike network**

- The Greenways program completed by 2020
- The bicycle boulevard concept extended by creating 12 evenly-spaced radial bike boulevards within the outer ring route to access the city.
- Safe cycling routes within 5km of all “super” high schools.

**Cycling integrated with public transport**

- more conveniently located bicycle parking at train, tram and Obahn stops
- free carriage of bicycles on trains in peak periods in the contra-flow direction
- trialling of bicycles on buses, via racks or luggage trailer, with priority routes being to the Interchanges and to the Adelaide Hills

**Improved driver behaviour**

- Better training for learner drivers

**Better decision-making**

- a joint local/ state body to promote innovation in the provision of bicycle infrastructure

**Better promotion of cycling**

- a fully-funded signage/wayfinding strategy for all cycle ways (bike boulevards, veloways and shared use paths)

**Better land use planning**

- A state government guide to promote sustainable transport, including templates that can be easily dropped into council development plans

- Developers encouraged to provide/ upgrade residential streets that welcome pedestrians, cyclists and children at play