



John Devney
Senior Principal Transportation Planner
Stantec
john.devney@stantec.com

31 Mar 2023

Submission to the Town of Walkerville Transport Strategy

Bike Adelaide has focussed on providing comment on the Town of Walkerville's integration with surrounding suburbs and identifying opportunities for improvement. This is in recognition of the size of the Town and its potential benefits of better integration with its surroundings. This report is not intended to be exhaustive and Bike Adelaide recongises that many of the suggested improvements will require cooperation in planning and funding with the Department of Infrastructure and Transport.

Upon inspecting the Town of Walkerville's boundaries with neighbouring council areas, we have assessed the Town to have poor walking and cycling connections with its neighbours. Locating and evaluating the frequency, quality and amenity of pedestrian and cyclist crossings, it is apparent that much of the Town's boundaries afford very low connectivity and permeability. This is reflected in Figure 1.



Figure 1: Town of Walkerville boundaries colour-coded by cycling and walking permeability.

The coloured boundaries in Figure 1 indicate the subjective ease of access for pedestrians and cyclists. Orange indicates a significant barrier such as heavy traffic, high vehicle speeds, multi-lane roads, inadequate or no crossing facilities. We consider this to be an impermeable boundary.

Yellow indicates moderate access and is typified by large road intersections with traffic lights and signalised crossings. The often include slip lanes to cross, narrow or poorly maintained paths and requirements to take indirect paths to cross roads with long wait times and high exposure to heavy traffic. We consider this moderate permeability but inconvenient to use and often feeling unsafe.

Green indicates good access, typified by separated shared-use path such as the Torrens Linear Trail or by quiet, low-traffic streets where it is safe to cross at most points on the street. We assess these areas to have high permeability due to the greater safety offered to pedestrians and cyclists of different ages and abilities, and the greater opportunity for direct access without stopping or waiting extended periods.

The Torrens Linear Trail (TLT) forms the southern boundary to the Town of Walkerville and may prove to be one of its most important transport assets. Currently, it appears to be underutilised and inadequately integrated into the Town's road and path network. This likely contributes significantly to the low walk and cycle to work statistics found by Council.

The Town's boundaries are assessed separately in the following sections. Dark green lines indicate theoretical walking and cycling routes a resident could reasonably be expected to take. These demonstrate some direct routes but also the indirectness of routes using existing infrastructure. Blue crossing symbols indicate a crossing where pedestrians have priority at a signalised crossing (PAC), zebra or wombat crossing. Red crossing symbols indicate a crossing that offer no priority or would be considered inconvenient, unsafe or offer no priority where motorists will unlikely allow a pedestrian to cross, such as at slip lanes, refuge islands between multiple lanes of traffic or at roundabouts.



Figure 2: Town of Walkerville northern boundary colour-coded by cycling and walking permeability with crossing facilities and example walking and cycling routes.

Northern boundary: In the north of the Town, Walkerville has very good permeability for walking and cycling with Klemzig Ward (City of Port Adelaide-Enfield), where movements are well served by and footpaths quiet residential streets (Figure 2). However, there is a lack of facilities for pedestrians and cyclists to cross Ascot Ave for this permeability adequately serve the Town west of Ascot Rd. Crossings at Harris Rd and the Torrens Linear Trail provide the only direct routes across Ascot Rd.

The location of the PAC directly in front of Vale Park Primary School has limited use outside of peak school times,

due to its placement on an exceptionally long midblock between McArthur St and Clisby St.

Council with DIT should investigate:

- improving crossing facilities at Ascot/North East Rd including the removal of slip lanes and lengthening pedestrian crossing signal times.
- installing a PAC linking York St and Clisby St for improved east-west connection and access to Vale Park Primary School.
- opportunities to collaborate with City of Port Adelaide-Enfield to improve wayfinding and access between the council areas.



Figure 3: Town of Walkerville western boundary (suburb of Medindie) colour-coded by cycling and walking permeability with crossing facilities and example walking and cycling routes.

Western boundary: The suburb Medindie is functionally isolated from the rest of the Town and also from the Cities of Prospect and Adelaide (Figure 3). The connectivity is subsequently incredibly poor. This is a result of progressively increasing traffic volumes and road widenings of Nottage Tce, Robe Tce and Main North Rd, with Northcote Tce forming a congested feeder to NorthEast Rd. This creates a remarkably isolated suburb with very few safe or convenient walking or cycling connections to neighbouring suburbs. This serves to ensure residents and visitors must perform almost all journeys by car due to the limited opportunities to safely cross the boundary roads.

Crossings of major roads occur almost exclusively at main intersections except for one PAC mid-block on Northcote Tce and two unsignalised refuges on Robe Tce. However, it is incredibly difficult for pedestrians and cyclists to safely cross Robe Tce given the 60kph motor vehicle speed limit and heavy traffic volumes through most of the day. The PAC again has limited use for non-school related east-west movements but does meet well with Edwin Tce and Buckingham St, connecting the Wilderness School with Stephen Tce and Walkerville Tce. There are no dedicated crossing facilities at the Edwin/Buckingham/Northcote intersection ensuring safe access to the crossing. Subsequently, pedestrians and cyclists moving east-west must make several dog-leg and double-back routes to reach crossings and continue their journey.

Slip lanes, convoluted crossing patterns and long waiting times at large intersections additionally serve to discourage walking into and out of Medindie.

Council with DIT should investigate:

- creating an east-west cycling link along Dutton Tce connecting Walkerville and Prospect via Carter St and James St (in collaboration with City of Prospect).
- installing a PAC for pedestrians and cyclists on Main North Rd at Carter St/Dutton Tce.
- establish a clear pedestrian and cycling link and crossing connecting Dutton Tce to the Prospect Neighbourhood Bikeway via Da Costa Ave, the southern footpath on Nottage Tce and Victoria Ave.

- implementing traffic calming along Hawkes Rd to create a north-south community connection for Medindie with the Wilderness School, Collinswood and the Park Lands. This should include a PAC at Robe Tce to replace the median crossing OR an upgrade of crossing facilities and priority at the Robe/Northcote/Walkerville/Mann/Park Tce intersection.
- traffic-calming along Robe Tce access road to ensure cyclists travelling east-west are better protected from motorists entering at speed.
- long-term plans to remove of slip lanes at Main North Rd/Robe Tce, Nottage/Northcote Tce, Northcote/Walkerville Tce to improve pedestrian and cyclist safety and priority at crossings.



Figure 4: Town of Walkerville northwest and southeast boundaries colour-coded by cycling and walking permeability with crossing facilities and example walking and cycling routes.

Northwest and Southeast boundary: The Town of Walkerville's northwestern boundary with East Ward (City of Prospect) and southwith eastern boundary Torrens Ward (City of Norwood, Payneham & St Peters) offer very different levels of connectivity and permeability (Figure 4).

The north-eastern boundary is characterised by North East Rd, a 60kph main road with three lanes of motor traffic in each direction. This stretch is punctuated by very few pedestrian or cyclist

crossings, creating a near continuous stretch of impassable road. This functionally isolates the south and north sides of North East Rd from each other. The few crossings that exist are typified by heavy traffic volumes, waiting very close to fast-moving traffic, long wait times and low compliance by motorists with give-way requirements at slip lanes.

There are few continuous routes across North East Rd, namely Burlington St/Galway Ave and Smith St/Cassie St. These provide limited connectivity northwards into City of Prospect but are generally underserved with sub-standard on-road facilities once across North East Rd. The Smith St and Burlington St corridors do, however, form direct links to the Torrens Linear Trail, connecting Walkerville with the City of Adelaide and City of Campbelltown. Notwithstanding, these routes feature unprotected bike lanes between parked cars and moving traffic, which is not conducive to a feeling of safety, and creates additional conflict at the many roundabouts.

The Landsdowne Tce and Angas Ave corridors similarly provide good north-south access to the Torrens Linear Trail. However, walking connections across North East Rd are very poor and provided very unsafe access to existing public transport services. Walkerville residents can certainly easily access city-bound services on North East Rd but have no way of crossing North East Rd from the northern side after alighting a bus. Considering most people using the bus service would likely be travelling during peak times when North East Rd is at it's most congested, the traffic volumes and six lanes of

traffic to cross provide an impasse to bus users returning home. This discourages use of the bus and contributes to low rates of public transport use in Walkerville.

Council with DIT should investigate:

- continuing the development of Landsdowne Tce, Angas Ave and Burlington St as cycling corridors, providing a full connection across the Town to the TLT providing wayfinding signage, road markings and priority through crossings.
- Installing a signalised pedestrian and cyclist crossing at North East Rd/ St Andrews St to allow bus users to safely access services and return home.

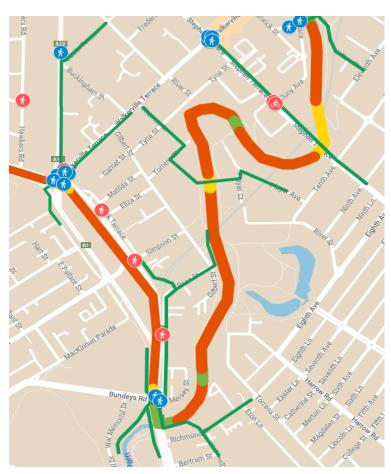


Figure 5: Town of Walkerville southern boundaries colour-coded by cycling and walking permeability with crossing facilities and example walking and cycling routes.

Southern Boundary: The Town's southern-most boundaries with the Cities of Adelaide and Norwood, Payneham & St Peters are typified by low amenity road crossings and high amenity shared-use paths.

Connections from Gilberton into North Adelaide are disappointingly poor, relying on two unsignalised crossings on Park Tce over two and three lanes of 60kph traffic, into the Park Lands and across two and four lanes of 60kph traffic at Mann St (Figure 5). These crossing are poorly used due the swiftness of traffic and near constant flow. It also provides a distinctly poor connection for bus users attempting to access the bus stops on Park Tce.

Gilberton residents have access into the City of Adelaide via signalised crossing at Bundeys Rd (Figure 6) which includes several slip lanes in 60 and 50kph zones. The asymmetry of crossing facilities at this

intersection ensures a convoluted walking route, where a pedestrian walking from Gilberton into Adelaide would need to cross three roads and a slip lane as show by the green line. This increases the exposure of pedestrians to traffic hazards and considerably increases the time cost for making a walking journey.

Similarly, walking from Gilberton towards North Adelaide requires crossing two signalised crossings and a slip lane. This acts to disincentivise walking between the two areas, where a pedestrian turning left from Park Tce (east) over hackney Rd to move southwards would take three signal cycles, compared to a motorist completing the manoeuvre in one signal cycle. The slip lanes especially pose a danger to crossing pedestrians due to generally low motorist compliance with giveway requirements and the generally high approach speeds moving between the 50 and 60kph areas.



Figure 7: Crossing facilities at Park Tce/Bundeys Rd with walkina routes shown.

Figure 6: Crossing facilities at Park Tce/Mann Rd/Walkerville Tce with walking routes shown.

Crossing From Walkerville or Northcote Tce into North Adelaide by foot or bicycle takes a lengthy series of crossings at Park/Walkerville Tce where pedestrians from Walkerville Tce moving towards Kingston Tce are required to wait to cross at least five different crossings including slip lanes in 50 and 60kph zones (Figure 7). The indirectness and constant delays disincentivise walking and cycling in this space and increase the feeling on unsafety felt due to the exposure to fast-moving traffic close by. Especially during summer or hot weather, the exposure to sun and heat amplifies the feeling of unsafety and vulnerability to the hostile surroundings, where pedestrians can be held in place on concrete median refuges for minutes at a time.

Conversely, Gilberton has some good walking and cycling links into neighbouring St Peters via the TLT which do not require crossing main roads. However, southern Gilberton residents may only access the TLT via Rose and Gilbert St in the north of the suburb, meaning that a safe, separated route requires a significant detour to reach.

Council with DIT should investigate:

- introducing a signalised crossing connecting Melbourne St and Simpson St as a vital walking and cycling link into the Melbourne St precinct and connect with the existing PAC at Melbourne/Mann St intersection.
- removing slip lanes at Bundeys Rd to create a safer approach for pedestrians and cyclists and ensure small groups of cyclists or pedestrians with prams, children etc have space to wait safe from fast-moving vehicles.
- consider converting pedestrian crossings at slip lanes to wombat crossings to promote pedestrian and cycling priority across Bundeys Rd (if slip lanes cannot be removed in the short-term).
- install signalised pedestrian crossing connecting Bundeys Rd and Park Tce to provide a single crossing movement for pedestrians moving east-west. This would likely require realigning the path and kerb at Park Tce/Mersey St, and possible removal on the left turn lane from Park Tce onto Hackney Rd.
- develop a connection to the TLT east of Hackney Rd from Mersey St to allow pedestrians to bypass the Park Tce/Bundey Rd intersection and more easily connect with Adelaide.
- identify opportunities for greening and shading at the intersection of Walkerville/Northcote/Park/Robe Tce.