City of Ballarat Integrated Transport Plan Walking Discussion Paper

Feedback from the Public Transport Users Association

Introduction

The PTUA welcomes the broad strategic vision to decrease car trips and increase the numbers of people walking as a mode of transport to get around Ballarat. As the report notes, this has huge benefits for the health, wealth and wellbeing of the Ballarat community. We do emphasise that while walking is hugely important on its own, particularly for shorter trips, walking is also hugely important as a way of "feeding" public transport - and while public transport will take up a large share of longer trips, those public transport trips require good walkability at either end. If a person cannot easily walk from their home to the nearest bus stop, or from the bus stop to their destination, they will likely drive - so it's hugely important for walking and public transport to work together.

One aspect of walkability which is not discussed in depth in this paper is the high-level urban form of Ballarat. The measures listed here are excellent ones, but they are chiefly answering the question "how do we make what we've got more walkable?" That is, it considers how the City of Ballarat can add new footpaths, wombat crossings, etc to our existing streetscapes, but does not directly consider how new streetscapes should be formed. While this may traditionally be seen more as part of land use policy than the Integrated Transport Plan, this is a prime example of why land use and transport must be considered together, because the geometry of streetscapes has a huge impact on transport.

If we look at many older areas of Ballarat, like Soldiers Hill and Ballarat Central, we see a simple rectilinear grid of relatively small blocks; these are ideal for walkability, as they ensure that people walking to or from anywhere in this grid can have a relatively direct path. This kind of grid also allows for fast, efficient, direct public transport routes along key corridors - and easy walkability to get to the bus stops. Lastly, this kind of grid tends to spread car traffic out, so that you have many streets with small amounts of traffic (rather than one huge traffic sewer carrying all the traffic), which makes crossing streets on foot quicker, safer and more pleasant.

By contrast, if we look at many newer developments on Ballarat's western fringe, we see a maze of squiggly and indirect streets, often terminating in cul-de-sacs. These kinds of streetscape designs are inherently unwalkable, and very difficult to serve by public transport; and while the City of Ballarat should make every effort to supply these areas with footpaths and other pedestrian improvements, their geometry has fixed their destiny - they will never be as walkable as the simple grids of Soldiers Hill and Ballarat Central.

A key way to ensure that newly developed neighbourhoods are walkable, then, is to control the geometry of their streetscapes. The gold standard here is the simple small-blocked grid we see in older areas - if it is possible, City of Ballarat should enforce this kind of geometry in new suburbs. If it is not possible to exert this level of control over the individual streets within new developments, the City of Ballarat may be able to achieve a similar effect by controlling the size of "superblocks" that are carved up and sold to developers.

If we look at Hoppers Crossing and Tarneit in Melbourne's west, we can see a supergrid of large square blocks, with a more squiggly development pattern within those squares. The supergrid is however slightly too large to be effective - it is approximately 1600m between Hogans Rd and Heaths Rd, 1600m between Tarneit Rd and Derrimut Rd, etc. This means that even if you ran direct, fast, frequent buses along all these major roads, a person living in the middle of one of these blocks would be at least 800m from the nearest bus stop - much more, if they have to follow an indirect streetscape to get to the major road. On the principle that the average person will only walk about 400m to access a bus, we can expect that a large proportion of the people who live in the centre of these blocks do not and would never use the buses on the main roads, even if they were fast and frequent.

Looking at Wendouree, we see a broadly similar system - a grid of superblocks formed by Gillies, Forest, Dowling, Howitt, Norman and Grevillea; within these superblocks the local roads are mostly rectilinear, but the rectangular blocks fit together oddly in a series of T-intersections, so there is no continuity. The major roads in this case are much closer together than in Hoppers Crossing and Tarnet; they range between 600m-

800m apart. This means that almost everybody is within 400m of a major road that could theoretically carry a direct bus. This has been borne out in reality; this part of Wendouree is relatively well-served by our bus network, and if this grid pattern repeated over a larger area, it could potentially be even better, with a grid of direct bus routes along all these major roads.

As such, when considering opening up new land for development, and especially when parcelling out pieces of this new land to developers, the City of Ballarat should closely consider the overall superblock sizes, and ensure they are conducive to walking and public transport access. The evidence suggests that a grid of major roads around 800m apart (and never more than 1000m apart) would provide sufficiently direct access to public transport for the majority of those living within each block.

Targets for Future Investments

The PTUA notes that it is proposed for the City of Ballarat to develop a Principal Pedestrian Network for Ballarat as a way of prioritising investment, and cites the City of Darebin as an example of where this approach has been used for a prioritisation matrix. While the Principal Pedestrian Network model does have merit, it does have limitations - most pertinent to the City of Ballarat is the fact that it is designed to be used to improve walkability to a single destination, such as a train station. This methodology can work reasonably well in the small LGAs of Melbourne, which may be centred around a single central precinct, but the contiguous built-up area of Ballarat is substantially larger than Melburnian LGAs, and has many key focal points spread throughout it.

This suggests that - at the very least - the PPN model would need to be substantially adapted to work within Ballarat's context. We note that the City of Port Phillip has attempted a version of the PPN with multiple destinations, but given that Port Phillip is approximately 21km^2 and the CBUA of Ballarat is in the order of 115km^2, even this may not be applicable to Ballarat's context.

As such, the PTUA would like to propose a prioritisation framework based on accessibility to public transport. With very few exceptions, other key destinations such as shopping precincts, education facilities, health facilities, etc are accessible by public transport, and in many cases they are accessed by people who live too far away to access them solely by walking. A model that prioritises public transport - and within that, prioritises the individual bus/rail stops near those key destinations - should provide a seamless journey both for those who live within walking distance, and those who need to take a walking -> public transport -> walking multi-mode journey.

The general rules of thumb for walking to public transport planning are:

- The average person will walk up to 1km to a train station
- The average person will walk up to 400m to a bus stop

The PTUA therefore proposes that the City of Ballarat sets a service standard that guarantees, within a given number of years, that all places within 1km of a train station, and all places within 400m of a bus stop, will be walkable. This would at minimum include footpaths on both sides of the road, and could include other pedestrianisation improvements (wombat crossings etc) where required.

In order to prioritise which streets receive these walkability treatments first, City of Ballarat should develop a matrix based on the below criteria:

- Train stations can be prioritised over bus stops
- Bus routes along the "Designated Areas of Convenience Living" corridors identified in the Ballarat Strategy can be prioritised over other bus routes
- Individual bus stops near key community destinations (shopping, education, health, etc) could be prioritised over other bus stops

The walking paper proposes that targets could be set for 100% of urban street kms to have a footpath on at

least one side of the road, and for 90% to have footpaths on both sides of the road, by 2022. This is an appropriately ambitious - but achievable - target for the City of Ballarat to set, and the PTUA would strongly support such a target. The above prioritisation matrix could help ensure that areas close to public transport network are part of the 90%; and furthermore, that these areas are prioritised for completion in 2020 or 2021, towards the start of this period rather than the end.

Growing new precincts

The PTUA is supportive of measures to use improved pedestrianisation to stimulate precincts throughout Ballarat, as opposed to just in the CBD. However, the specific example of Creek Street in Miners Rest does seem an odd choice based on current urban form and topography. A good pedestrian space that fosters retail spending should encourage people to enter on foot from multiple directions - it should allow people to enter at either end of the precinct, and (depending on the length) ideally have entry points around the middle. This model not only makes the core pedestrian zone more viable, it helps the benefits of increased foot traffic to extend beyond the core zone and improve retail/hospitality business on surrounding streets.

The western end of Creek Street abuts the eponymous creek, which acts as a natural barrier to pedestrian movement, meaning that pedestrians will likely only enter from Howe Street. The City of Ballarat should therefore investigate whether a more open-ended site such as Market Street would be a better place for this pedestrian mall.

Streetscape Designs

On pages 13-14, the paper notes well the issues with inconsistent, incomplete and/or flawed footpath treatments in various parts of Ballarat. In addition to the examples provided, the PTUA notes issues in some parts of Wendouree (eg the corner of Eton and Cambridge Streets) where footpaths curve around blocks, as shown in the below screenshot from Google Street View.

These footpaths are essentially geared for people to take a leisurely stroll around the block, rather than to walk along the street and cross the roads, using walking as a mode of transport. At some corners (eg along Dowling Street) City of Ballarat has already added kerb cuts and extended footpaths in order to attempt to address this, but these have proven somewhat awkward and indirect; the mistakes of the past have made it very difficult for CoB to retrofit them. It is therefore crucial that these mistakes not be repeated in new developments.

Accessibility and Street Furniture

The PTUA is very supportive of all initiatives mentioned to improve compliance with the Disability Discrimination Act. Particularly central to the PTUA's remit is the question of bus stops. As with measures to increase walkability to bus stops, it is important that seats and shelters are provided at all bus stops in Ballarat as soon as possible - not only to comply with DDA requirements, but to help encourage mode shift to public transport. Having to stand in the rain and mud, or in direct sunlight on a hot day, can act as a deterrent to using public transport that we should eliminate wherever possible.

To prioritise which stops receive bus shelters and seats first, a similar prioritisation framework to the walkability framework mentioned above could be implemented - not least because the bus stops near key activity centres are likely to be "areas of high pedestrian traffic" as per DDA requirements.

On the topic of street furniture, it is worth cautioning against the use of so-called "hostile architecture", such as seats with intermediate railings to prevent homeless people from lying down on them at night. This kind of hostile architecture is profoundly unethical and actively harms vulnerable members of the community the City of Ballarat should be protecting.

The paper suggests "Making 'interesting' places to walk through by encouraging elements of curiosity and exploration." This is an idea that may have some merit, but caution should be used; there are many examples of where this has been tried inexpertly, and resulted in worse outcomes than if the attempt had not been made.

As an example, there is quite a high-quality off-road walking path in the reserve along Scott Parade. While the path does sometimes legitimately need to curve to avoid trees and other obstacles, this path has been built with many unnecessary curves, seemingly in an attempt to make the path more "interesting" for walkers. However, curves like this do not actually make a walk any more interesting; all they do is make the walk longer than a direct path, which discourages it from being used as a transport option by walkers.

A path that takes walkers through green space, perhaps near historical monuments or other pieces of public art, can be very interesting, and can be successful in increasing walking's share of the transport task - but only if the path is a direct way to get to the walker's destination.

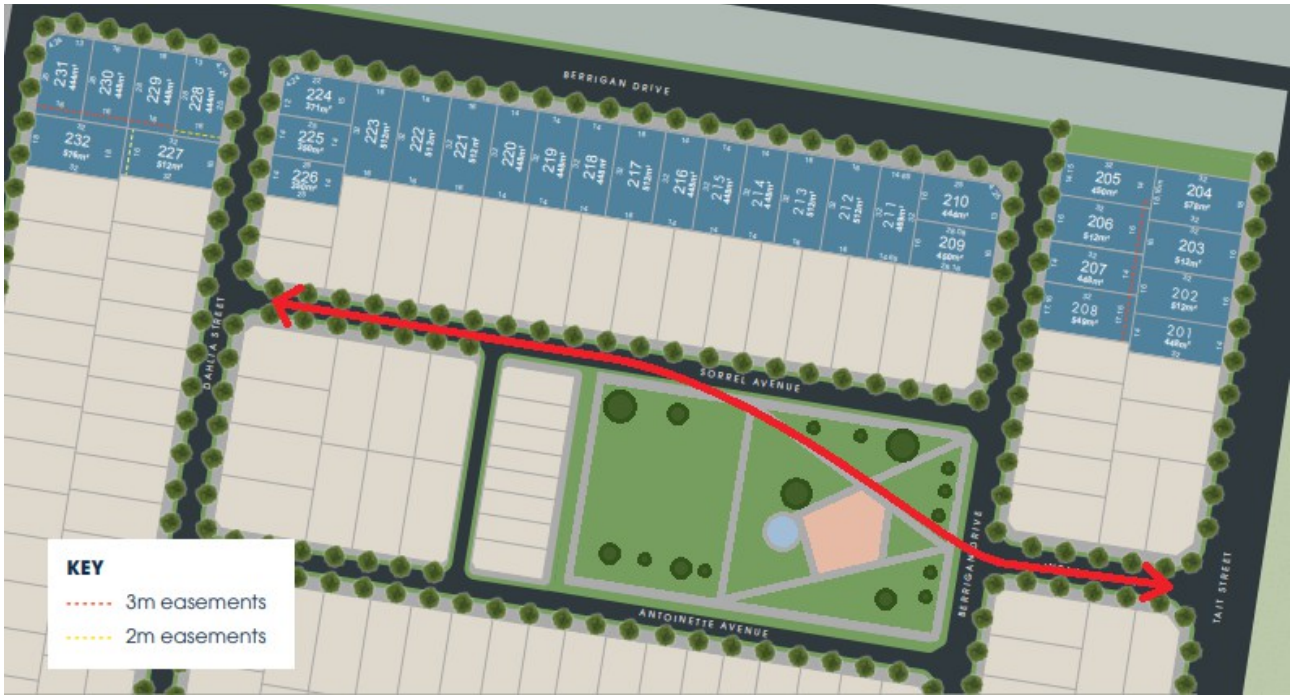
Similarly, new housing estates always have parks in them, but the locations selected for parks are often tucked away towards the back of the estate, and the footpaths built into the parks tend to lead from nowhere to nowhere. This means that people who live in these estates have a less pleasant walk, and that the parks have less passive surveillance from people passing through.

A well-placed and well-designed park should not require people to "go to the park" - it should encourage people to take a shortcut through the park, on their way to something else. For example, someone who lives towards the rear of a housing estate should be able to cut through the park to get to the bus stop more quickly, or to the local shops more quickly. Some people such as children and their carers, or people wanting to let their dog run about, will want to "go to the park" - and these people always will, regardless of the geometry. But encouraging people to use the park as a part of their normal walking activities requires much better placement and design of parks than tends to happen at the moment.

As an example, the below “central park” is relatively well-located within the estate, but the footpath design is fairly nonsensical - the paths carve up the space for the playground and mini-basketball area, but do not really allow walkers to go to or from anywhere of note.

Using exactly the same amount of space and providing the same playground/mini-basketball facilities, this park could have been designed with paths that point at Indigo Street, the entrance to the development and the likely access point for any bus stop that may be built on Tait Street in the future.

This would provide a shortcut for people west of the park to walk to the bus stop, which would be both shorter and provide a more pleasant walk, and provide passive surveillance for the park as they moved through.



Our understanding is that the main reason property developers currently build these parks into their estates is because the City of Ballarat requires them to. There is therefore an opportunity to strengthen these guidelines to ensure not only that the parks exist, but that they are located and designed to encourage walkability.

Increasing shade and amenity

The PTUA supports initiatives to increase the amount of tree canopy coverage around Ballarat's streets. Street trees have many benefits, including reducing the urban heat island effect, and in many cases becalming traffic and increasing pedestrian safety. They can provide shade, and significant reductions in temperature on hot days; however they are not without limitations. In wet weather, trees provide minimal protection from rain (especially deciduous trees, being bare during winter). Solid awnings attached to the fronts of buildings - usually shops and restaurants - provide both shade in summer and protection from rain in winter. Retail precincts with continuous coverage of awnings are much more pleasant to walk along in weather extremes of either kind, and this pleasant environment encourages more people to walk. As such, in addition to measures to increase tree coverage, City of Ballarat should consider measures to encourage the retention and expansion of awning coverage.

Improving Pedestrian Priority

The paper notes at various points opportunities for improving pedestrian priority at signalled intersections, including changing phases to reduce delays to pedestrians, and potentially auto-on pedestrian phases. The PTUA is very supportive of these initiatives; in the hierarchy of the streets, pedestrians should be prioritised over all other modes of transport, but in many ways our streets have these priorities backwards, with cars being given absolute supremacy and pedestrians treated as an afterthought. While often these changes can be made with minimal impact to drivers, City of Ballarat should not be afraid to inconvenience drivers when required.

While the CBD seems to be the focus of these initiatives, all signalled intersections around Ballarat should

be reviewed and considered for these kinds of priority measures. For example, the mid-block signalled pedestrian crossing on Howitt Street, out the front of the Wendouree Centre for the Performing Arts, is very unresponsive to pedestrians pressing the beg-button - even at 10:30pm when traffic is minimal, pedestrians must wait a very long time for a light to cross to the central median, and then press a second button and wait another long time to complete crossing.