



City of Ballarat Integrated Transport Plan Draft combined plan

Feedback from the Public Transport Users Association

Overview/Summary

The PTUA thanks the City of Ballarat for taking such an active role in planning for the city's transport future, and welcomes the opportunity to provide feedback on the draft plan.

With a few notable exceptions, the PTUA applauds the City's vision for Ballarat's future - one where urban sprawl is curtailed, where people have more choice of how to travel rather than being forced into car-dependency, and where more sustainable modes of transport play a larger role than they do today.

While we understand the intent of the Integrated Transport Plan is not to re-litigate issues already settled in the Ballarat Strategy or the Cycling Action Plan, there are a few aspects of these documents which should ideally be updated to reflect the transport needs identified in this document.

We do note that the document is very high-level, and that there are few concrete commitments or targets in the plan. Many aspects of the strategy, such as the bus network, are highly contingent on other levels of government and therefore not in the City's control, and it may be reasonable not to set targets for the City in these areas; but many aspects, such as walking and cycling infrastructure, largely are within the City's control. We would encourage the City to set itself some ambitious and time-specific targets for increases to walking and cycling mode share in the Integrated Transport Plan, and then ensure it follows through to achieve these targets.

Six Immediate Priorities

The PTUA is strongly supportive of the six immediate priorities listed, and of the headline actions. Ballarat must have a fully integrated, reliable and sustainable transport system, which puts people - not cars - first, and is accessible to all. Partnerships with others in the region, and advocacy with higher levels of government, will be crucial to the success of the plan.

1 - Understand User Needs

The PTUA supports the goal of pursuing more accurate data and feedback from the community in order to guide policy.

However, we note the old saying in transport planning circles - "you can't judge the need for a bridge by the number of people swimming across the river." Any data that shows what people are currently doing - and even a large amount of the qualitative feedback people will give on what they *would* do - is shaped by the current environment.

For example, if a person knows they will not be driving - whether by choice or not - they will exclude car-dependent parts of Ballarat from their search, when looking to rent or buy a house, and will only choose parts of town where they can survive walking and using public transport - so if one suburb uses public transport a lot and another doesn't, that will in large part be shaped by the provision of PT that already exists, not necessarily the inherent characteristics of the neighbourhood or the people who live there, and certainly not the characteristics of the people who might move there if the PT were better.

To take another example, there has been a huge spike in cycling during the COVID-19 pandemic - but if you'd asked those new cyclists six months ago whether they'd be likely to get on their bikes, they probably would have said "no".

Transport is very much supply-led, rather than demand-led - to use another saying, “build it and they will come”. So while it is important to have a good understanding of current behaviour and attitudes, we should not underestimate how much those could change if only we gave people a better option.

2 - Build and Manage Places for People

The PTUA is very supportive of the actions to improve pedestrianisation, and disability access. Please refer to our prior feedback on the Walking paper for detailed comments.

Looking at action 2.6, while we have no specific objection to alternative funding mechanisms for pedestrian infrastructure, we do wish to emphasise that it is both very important and relatively cheap, compared to car infrastructure. The City of Ballarat should not rely too much on finding alternative funding mechanisms for these projects - the City’s budget is a reflection of its priorities, so there is a need to “put your money where your mouth is”, so to speak. Walking infrastructure has excellent “bang for buck”, so even small increases in spending will be well worthwhile.

Action 2.8 talks about investigating minimum standards, but does not indicate what these standards might be. The Walking background paper floated the idea of a target of 100% of urban street kilometres 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. The PTUA would strongly support this target, or a similarly concrete (and ambitious) target, being enshrined in the Integrated Transport Plan - rather than the more general commitment to identify standards and then commit to them.

3 - Safety for all

The PTUA strongly supports the commitment to safety, both in the sense of minimising the risk of harm from traffic accidents, and in the sense of minimising the risk of harm from deliberate harassment or violence. We note that in both cases, urban design plays a huge role and welcome the City of Ballarat’s commitment to improving these.

Experience with the reduced 40km/h speed limits on Sturt Street has demonstrated that merely putting up a sign with a lower speed limit does not always result in drivers slowing down. As long as the road environment signals to drivers that it is a high-speed road, they will continue to travel at high speeds, so the traffic calming measures in action 3.2 will be crucial to the success of action 3.1 - and indeed, if the driving environment “tells” drivers not to go above 30km/h then actually signposting this may be unnecessary.

4 - Compact City

The PTUA supports the principles behind the Compact City concept, and is particularly supportive of action 4.4, and the provision of Transit Oriented Design wherever practical.

5 - Better Utilise Existing Network Capacity

The PTUA is supportive of efforts to better use existing network capacity, including improving the public transport network to make it more attractive, and helping to create cultural change in attitudes to public transport use.

We note that one potential solution noted is to encourage “new opportunities for ride-sharing, such as Uber.” It is worth stating for the record that the “ride-sharing” nomenclature comes from an imagined future for Uber that never materialised - a kind of dynamic carpooling service, whereby a person who was going to drive somewhere for their own purposes could seek out a paying

passenger who happened to be travelling from a similar origin to a similar destination at around the same time. The idea was that this would reduce congestion, because the second person would not need to drive their own car, or call a taxi. However what has actually happened is that Uber turned into a taxi service of its own, where drivers take trips solely at the behest of customers, not giving them a lift as part of their own journeys. While taxi services (including but not limited to Uber) play an important role in Ballarat's transport ecosystem, we must remain clear-eyed about who they are and what they do; what problems they might have the capacity to solve, and what is just hype.

While it is not specifically mentioned here, we would also caution against the hype around on-demand or "flexible" buses, including driverless ones. While these services may have a role in some very low-patronage contexts, where it is infeasible to provide a fixed-route public transport service and so it's very much a "this or nothing" scenario, they do not scale and will not be an appropriate replacement for fixed-route and regularly-timetabled public transport in most contexts.

6 - Transit Nodes Servicing Renewal Sites

The PTUA is broadly supportive of having a number of transit nodes supporting urban renewal, and of Transit Oriented Development more broadly. However, the merits of all the sites mentioned are not necessarily clear from the information provided.

Victoria Park/Latrobe Street Saleyards

It is unclear what the City of Ballarat's long-term plans are for the saleyards and for the surrounding streets, and it is therefore unclear what precisely is proposed for this site. However, if it is being considered as a potential park-and-ride interchange, we would caution against this; please see section 10 below for more details.

Eureka Stadium Precinct

As per our feedback to the Rail paper, the PTUA is broadly supportive of an extra infill station being built in the vicinity of Eureka Stadium. However, it is our view that any such station must be useful for everyday traffic - not just major events - and that the station should be on the Ararat line rather than the Maryborough line, in order to avoid problems with splitting commuter services along the two branches.

Delacombe Town Centre

It is inferred that this would be a bus interchange without any rail component. We would be very supportive of such a thing, particularly as further growth occurs to the southwest.

Northern Growth Area

As noted in our response to the Urban Transit paper, the PTUA would be supportive of Transit Oriented Development in the Mount Rowan area, initially centred around a bus interchange on land reserved for a future railway station.

As noted in our response to the Rail paper, such a site would be on the Maryborough railway line and would therefore be subject to the same "splitting" problems as placing the Eureka Stadium station on the Maryborough line. The difference, essentially, is one of timing; we would anticipate the Eureka Stadium station coming many years before the Mount Rowan station, and would anticipate train frequencies to be much higher by the time a Mount Rowan station was seriously considered. It could function well for many years with high-quality bus services until then.

Warrenheip

As noted in our response to the Rail paper, the PTUA remains sceptical of the value of a large station at Warrenheip for the purposes of park-and-ride. We are also led to believe that Warrenheip is not a particularly suitable site for intensive urban development, due to ground and hydrological conditions, and that this is why it has lost out to the various western/southwestern sites in recent years. If however we are mistaken in this belief, and the Warrenheip site could and will be developed into a medium-density Transit Oriented Development, with bus connections to other places in central Ballarat as well as Federation University, then this would be very different. The suitability of the Warrenheip site for a station will depend greatly on what can happen around it.

We would note that while we are extremely supportive of the return of trains between Ballarat and Geelong, and while any such train could call at a future Warrenheip Station, the return of Ballarat-Geelong trains would not be in any way contingent on the construction of a station at Warrenheip.

BWEZ

This is marked as “freight only”. While it is probably reasonable not to seek a passenger railway station at this site, we do note that - as a major job centre - this site should be well-served by buses, even if it is by a through-route and there is no interchange for routes to terminate at.

Additional transit nodes not mentioned

As mentioned in our response to the Rail paper, we would recommend advocating for the construction of a Ballarat East/Brown Hill infill station immediately to the west of the Water Street bridge. This would align with the eastern Convenience Living corridor (whether as currently indicated or changed as per our recommendation) and could therefore act as a transit node. Given the proximity to the Woodmans Hill school bus interchange, older and more independent school kids coming from Bacchus Marsh or Ballan could take the train to this station, then change to a bus for their school.

7 - Frequent and Direct Cross-City Transit

The PTUA is strongly supportive of the measures indicated here. We particularly note action 7.3, as we understand a well-defined Principal Public Transport Network will strengthen the planning framework for TOD along these corridors, and may make the case for improved services more compelling to the State government.

Please refer to our response to the Urban Transit paper for more detailed comments.

8 - Universal Accessibility

The PTUA is extremely supportive of the actions outlined here to improve accessibility around Ballarat.

We would draw particular attention to the need for the urban form (including footpaths etc) around public transport infrastructure to support accessibility. Ballarat city buses are exclusively low-floor buses with fold-out ramps, which people in wheelchairs and other mobility aids can use - but if that person cannot get to their bus stop because there's no footpath or because inclines are too steep, then they are effectively cut off from using that accessible public transport.

We would also draw attention to the lack of an acceptable, accessible means of crossing from Ballarat Station's Platform 1 to Platform 2. This is a symbolic issue in Ballarat's accessibility, and one that is long overdue for resolution; we would strongly encourage the City of Ballarat to take an active role in advocating for this with the State government.

9 - Embrace New Technology

While the PTUA is supportive of embracing new technology and understands that there will, in some ways, be a need to adapt and change to the circumstances, we again urge caution in resisting hype.

We have noted that the proponents of autonomous vehicles have shifted their rhetoric from a stance in which AVs could fit seamlessly into the existing urban environment, to one where they are suggesting that pedestrians should only ever cross at designated crossing points if they want to avoid being hit by an AV. This is eerily similar to the rhetoric pushed by car-makers a century ago, which led to the first jaywalking laws, as well as many of the road design principles that we are now trying to undo. The City of Ballarat should therefore make sure that AVs and other new technologies are made to conform to the “complete streets” vision, and not the other way around.

We note that this should be possible in many cases. New technologies around bikesharing and electric scooters have caused problems in many cities, but these problems are felt most acutely where the balance between cars and active transport is already the most askew. If we can, for example, provide the kind of robust cycling network the ITP envisages, this will provide a place for people riding electric scooters to ride amongst cyclists of comparable speed and weight, rather than being a hazard to pedestrians or at the mercy of cars.

Turning to the prospect of low-emissions transport, this is something the PTUA strongly supports. To quote Stephanie Pollack, Secretary of the Massachusetts Department of Transport, "There is no mathematically possible way to get to the levels of carbon emissions that the scientists tell us we need, without transforming the transportation sector." The need to decarbonise Ballarat's transport system - through mode shift to less-harmful modes like walking, cycling and public transport, and through decarbonising the vehicles used, such as electric buses, electric trains, and electric cars and trucks - should be a central part of the City of Ballarat's strategic direction.

While hydrogen-powered buses would align with the proposal to establish Ballarat as a “hydrogen city”, the technology for battery electric buses is also quite mature; whichever technology it is with, the time has come to phase out diesel buses with zero-emissions technologies of one kind or another. We would strongly encourage the City of Ballarat to incorporate the push to eliminate diesel buses in its advocacy to State Government on improvements to Ballarat's bus network.

On the rail front, we have noted with interest developments around hydrogen-powered trains in Europe on small branch lines. Rules of thumb from Europe suggest that any railway line with more than 6 trains per hour, or where trains run faster than 160km/h, will clearly be economically viable for electrification with overhead wires; lines that are less frequent and/or slower may also be viable, but in those cases more work is needed to calculate viability. This means that in the next step-change for the Ballarat line - when the next generation of regional trains is procured, hopefully with speeds in the 200-250km/h range - the main Ballarat-Melbourne line should definitely be electrified. However, what might be called “branch line” services to Ararat and Maryborough (and potentially Geelong and Mildura one day) are likely to be much less frequent, and probably slower, for the foreseeable future, so these are unlikely to be viable for electrification. In the UK, train operating companies have had great success with bi-mode trains on their network - trains that have a pantograph to run on overhead wires on the electrified mainlines, and also a diesel motor to run on the branch lines that have not yet been electrified, switching mid-journey. Separate to this, hydrogen trains have recently begun running on small branch lines in Germany. There is therefore potential in the relatively near future for these technologies to be combined into bi-mode hydrogen trains, and these trains could form the basis of a zero-emissions railway system in Victoria - with

trains using overhead wires from Southern Cross to Wendouree, then hydrogen from Wendouree to Ararat. If Ballarat did become a “hydrogen city” and large producer of green hydrogen, and it retained its current standing as a hub for the manufacture and maintenance of Victoria’s trains, it would make sense for these technologies to be pioneered on the railway lines that converge on Ballarat.

10 - Diversify Service Offerings

The draft plan notes the case study of the Launceston Tiger Bus. This service operates as a park-and-ride shuttle in the morning and afternoon peaks, and as a slightly longer tourist service in between the peaks. It operates 7 days per week during warmer months, and 5 days per week for the rest of the year, resulting in approximately 300 service days per year.

A press release from the City of Launceston indicates that the Tiger Bus services attract an average of 60,000 passengers per year (1). This equates to 200 boardings per day, and assuming that each trip consists of both an inbound and outbound component, means 100 unique passengers per day. It is not possible to determine from publicly-available information how many commuters use the shuttle versus how many tourists use the longer routes, and therefore not possible to precisely quantify how effective it is at reducing the need for city-centre car parking - but regardless these are low numbers. Assuming that 75% of the service’s patronage is commuters, this means just 75 car park spaces are freed up by the shuttle; by comparison, the newly-built multistorey carpark at Ballarat Station has 405 spaces (2), the Central Square carpark has 634 spaces (3), and the new Creswick Road carpark has 300 spaces - which people needed to be actively incentivised to use (4). To make another comparison, 200 daily boardings would put this route on par with Ballarat’s Route 14, the slow, indirect bus to Black Hill which ranks fourth-worst for patronage.

To examine the Launceston case a bit more qualitatively, the bus takes about 5 minutes to get from the Inveresk carpark to the CBD dropoff point, but it is just a 1km/13 minute walk to the same spot; many CBD destinations will be even closer. The bus also runs to a 15 minute frequency, which over the very short distances we’re talking about here, means that if you just miss it, it’ll be quicker to walk than to wait for the next one. These time/distance figures would be comparable to a shuttle bus operating between the Creswick Road carpark and the bus stop opposite Town Hall. The Venn diagram of people who will be willing to park so far from their destination; are unwilling to walk this distance (and therefore require a bus); and who would not be willing to simply walk to a bus stop in their suburb and take the bus for the whole trip; has very little overlap. Prior to the opening of the Creswick Road carpark, City of Ballarat’s own trial of the City Circle bus seemed to present similar conclusions - the service was least popular in the 8-9am and 5-6pm brackets, being much more popular from 9-5, which suggests few peak commuters were using it, and it was mostly used by people running errands up and down Sturt Street.

To examine the broader dynamics of park-and-ride services, the time and convenience penalty of parking one’s car and changing to another vehicle means that they tend to only work when the “ride” portion is significantly cheaper or more convenient than solely driving; and when the total journey time is longer, meaning the fixed time and inconvenience penalty of the change is a smaller proportion of the total. For journeys to the centre of Melbourne, the high levels of peak traffic make for an inconvenient trip, and the cost of parking in the CBD is usually onerous; this makes it practical for many people to take the train to Melbourne rather than drive. (The fares are also comparable, when taking CBD parking into account, so neither mode has a big advantage on that metric). And given the length of the journey time, the impossibility of taking a train from one’s doorstep, and the relatively poor quality of bus services right now, it’s no surprise that the “drive and train”

combination is so popular in Ballarat. A park-and-ride bus service can work fairly well under similar circumstances - in Melbourne, the Doncaster area has no rail service, but does have a relatively quick park-and-ride bus service. The service is not without its issues, but because Doncaster-CBD commuters face similar pressures with traffic and parking costs to Ballarat-CBD commuters, it attracts strong patronage.

By comparison, Ballarat simply does not face the same pressures with traffic or parking that Melbourne does. The background papers note that we are unlikely to see widespread problems with traffic congestion for the foreseeable future, and there is no indication that anyone - City of Ballarat or private operators - has an appetite to charge the kinds of prices for CBD parking that would act as sufficient incentive to encourage people to park further away. And of course, by "further away" we're not talking about the 60+ minute trip to Melbourne or the 30-minute Doncaster commute, we're talking about a 5-minute trip from the Creswick Road site or at most a 10-minute trip from any other likely location within Ballarat, so the transfer penalty is simply going to be too big a proportion of the total journey time to make it a convenient option. By all indications, once Ballaratians are in their cars, they are going to want to stay in those cars until they can park out the front of whatever destination they have within Ballarat. To the limited extent that they are forced to park further away, it will be much simpler and quicker for them to walk than to catch a bus (even a fairly frequent one as exists in Launceston).

The idea of providing large carparks with park-and-ride bus services, and the idea of providing large-scale parking facilities at (new or existing) railway stations, also conflicts with the dominant approach of the strategy - to shift Ballarat to a less car-dependent city, where people have more choice, and active and public transport play a larger role. If we invest money into this kind of park-and-ride service, to whatever extent people use it, it will only reinforce the city's car dependence. It really doesn't matter whether people are driving 99% of the way to their destination or 100% - they still need to own a car, they still need to pay to register and fuel and insure it, they still need to make sure their house has space to store it, and almost all roads around Ballarat would be under pressure to cater to it. This is a recipe for car dependence.

City of Ballarat should completely abandon the idea of park-and-ride bus shuttles, and should neither advocate to State or Federal government, nor provide their own funding, for such ventures. Ballarat and Wendouree railway stations will need to retain ample parking for the foreseeable future, and any new greenfields or infill stations will need a reasonable amount of parking to be provided as well; but City of Ballarat should also abandon the idea of creating large new park-and-ride-focused railway stations, such as at Warrenheip.

To truly diversify the service offerings, the focus and the funding must be on improving the bus network, so that people can leave the car at home - or not own one in the first place - and to have the true freedom that a fast, frequent, direct bus network would allow.

1. <https://www.launceston.tas.gov.au/News-Media/FREE-Tiger-Bus-to-stop-at-Cataract-Gorge>
2. <https://www.thecourier.com.au/story/5900999/ballarat-station-park-set-to-open-very-soon/>
3. <https://www.parkme.com/en-au/lot/175964/central-square-car-park-ballarat-australia>
4. <https://www.thecourier.com.au/story/6504767/creswick-road-car-park-goes-free/>

12 - Cycling city

The PTUA is strongly supportive of efforts to improve cycling in the City of Ballarat, and is therefore supportive of actions 12.1-3. We are particularly supportive of a "complete streets" approach

whereby cycling, walking, public transport and other amenity measures are given greater weight in road design.

Looking at action 12.4, the PTUA is supportive of bike racks being installed on buses. However, we do note that the use case for them is relatively narrow.

There is a fairly similar dynamic to that of park-and-ride, whereby the time and convenience advantages of taking your bike on the bus need to outweigh the time and convenience penalties of the transfer. This seems unlikely to happen for a large number of trips around Ballarat, given its relatively compact size and relatively infrequent and slow buses. For keen cyclists, most of Ballarat will be within cycling distance; for longer trips that are impractical to cycle, and that the bus makes substantially easier, it's almost certainly going to be less hassle to simply leave the bike at home and walk to the bus stop - no need to lift a heavy bike onto the rack and then take it down again at the other end.

We also note that each rack can generally only fit a limited number of bikes, which means that this solution does not scale very well. Given that there are only a limited number of use cases, this is fine and proportional, and we reiterate that we are supportive of the installation of bike racks - but we feel it is important to note that the City of Ballarat should not rely on this measure to drive large-scale change in people's travel behaviour. The other actions - providing safe cycling infrastructure - will do the heavy lifting here.

13 - Strong Regional Advocacy

The PTUA is strongly supportive of the City of Ballarat pursuing a greater role in advocating for Ballarat as a transport hub, and acknowledging the importance of freight and passenger links to places other than Melbourne. We note in particular the importance of things like reliability and frequency as well as speed, and the importance of the Murray Basin Rail upgrade as a critically important freight project.

14 - Regional Rail Links

The PTUA is of course very supportive of action 14.1 to improve rail connectivity in all directions.

Looking at action 14.2, we note that a train service that runs infrequently between distantly-spaced stations in a regional centre cannot truly be called a "metro", despite the State government's attempts to do this in Bendigo - such a service will always be dramatically less useful for travel within a regional city than a frequent bus service. Please refer to our previous response to the Rail discussion paper for more discussion on this point.

We also note that action 14.2 will be to support both government and privately-led passenger rail initiatives. While the PTUA has no formal stance against privately-led proposals, we do believe they require close scrutiny to ensure that they would provide all the benefits they claim, without any downsides they may be hiding.

In particular, the recent proposal for a privately-funded tunnel between Sunshine and Melbourne's CBD, which would form part of the Melbourne Airport Rail Link but might also be used for regional trains to Ballarat, presents few advantages for Ballarat consumers in terms of travel time - but could lead to substantial fare increases. In order to recoup their investment, the private consortium would charge access fees for trains passing through the tunnel - fees which would either need to be passed onto passengers in the form of increased ticket prices, or absorbed by the government as an

increased subsidy per passenger. This increased burden on Treasury could make further improvements to the rail system - whether in terms of infrastructure or services - harder to achieve.

The City of Ballarat should therefore treat privately-led passenger rail initiatives with appropriate caution, and should closely scrutinise each one before agreeing to support it. A blanket statement in the strategic document stating that they should be supported is, therefore, inappropriate.

15 - Efficient Movement of Freight

The PTUA is supportive of improvements to freight infrastructure as noted elsewhere.

With regard to action 15.3, we note that High Productivity Freight Vehicles are designed to increase capacity on very high-volume corridors, where a substantial amount of containerised freight is travelling between two relatively fixed destinations, along a very limited road network. These vehicles generally cannot travel on the wider road network, and therefore do not have the same flexibility that makes trucks advantageous in other contexts. They are, in short, performing a task that is ideally suited to freight rail. The PTUA would therefore not recommend further investment or legal concessions to allow HPFVs to travel around Victoria's road network, and would instead advocate for those funds to be invested in the freight rail network.

16 - Regional Aviation Hub

It is the PTUA's broad policy position that public investment and policy should be geared towards reducing carbon emissions, rather than increasing them. Aviation policy falls outside the PTUA's core remit and area of expertise, but given the very high emissions associated with aviation (per tonne of freight or per passenger-kilometre) the PTUA views plans for the expansion of Ballarat Airport with great scepticism.

Part B - Technical Reference

2.1 Getting to and from Ballarat

The report makes the good point that lots of workers, shoppers, and students come from outside Ballarat, and that services to many of these towns are very limited. Improving these services should form part of the City of Ballarat's advocacy.

3.1 Getting around Ballarat: driving

As noted in the detailed response to the Urban Transit Future paper, Figure 4 is slightly misleading about the true nature of Ballarat's bus network. Please see that response for detailed comments.

We strongly agree that "Alternative (more space efficient) transport modes need to be provided for" and that "When considering active transport in particular, trips must be useful, safe, comfortable and enjoyable."

3.2 Living close to work, services, and public transport options

We note that the Integrated Transport Plan draws its strategic corridors of "convenience living", which should have access to high-quality public and active transport, from the Ballarat Strategy 2040, drawn up in 2015. For the most part, these corridors make a lot of sense, in terms of both the existing urban form and potential future urban form. However, one corridor does not quite fit these criteria for its whole length.

The corridor furthest to the east appears to travel along Victoria Street, and continue as it turns into Ballarat-Burrumbeet Road until it meets the Western Freeway at Woodmans Hill. Victoria Street is ideally suited to being a priority corridor; the street itself, as well as the backstreets within a short walk from it, are relatively dense (by Ballarat standards) housing, with a number of other uses (including some small businesses and several schools) incorporated as well; the streets are very walkable and cyclable; the existing road corridor is sufficiently wide to allow for use as a transport corridor; and there is potential for future infill developments, including medium-density housing, hospitality, retail, or even offices.

However, Ballarat-Burrumbeet Road has a very different character. It is a high-speed, high-throughput feeder for the freeway, with minimal extant housing. The bridge over the railway line, and the extreme changes in elevation from north to south (which require what are essentially offramps to make a right turn), combine with the road's width and speed to make for an environment that is completely hostile to pedestrians, cyclists and human life in general. It is, to put it bluntly, a traffic sewer; and would require substantial investment to reconfigure it to anything even remotely compatible with "convenience living". It would also present operational difficulties from a public transport perspective; if the government wished to run a bus to serve this corridor, it would only lead onto the highway and would not have any logical terminus or place to turn around.

By contrast, Water Street presents a very similar aspect to Victoria Street, if perhaps with a shift more towards the "potential" than the "current". There is already considerable housing, but several opportunities for infill development within walking distance. There are already some small remnants of local retail and hospitality. There is a wide road reserve, which would allow plenty of space for dedicated public transport lanes - for example, bus lanes or segregated tram tracks - at the point they became required, yet it has avoided the "traffic sewer" aspect that Ballarat-Burrumbeet road has. We would therefore suggest that this corridor be reoriented onto Water Street.

We also note that the Ballarat's Urban Transit Future paper recommended adding a new Convenience Living corridor from Wendouree south through Alfredton to Delacombe; we would agree with this recommendation.

3.3 Getting around Ballarat: Active transport

The map centres on Ballarat Station, showing the 20 minute bicycle catchment from there (presumably noting that this approximates the catchment of the jobs and retail in the CBD). However, there is no similar 20 minute catchment shown from Wendouree Station, despite the fact that this represents an important catchment both for rail access and for jobs and retail (on Howitt Street and at Stockland). The report notes that Delacombe and Lucas are beyond the 20 minute catchment of Ballarat Station, but it is crucial to note that both of these areas are just within 20 minutes of Wendouree Station - as are the new developments in Miners Rest. The cycle network should be multifocal, and point to many destinations if it is to allow for free and easy "to everywhere, from everywhere" connectivity and capture significant mode share.

Referring back to the completed Cycling Action Plan, it does largely do this, but one of the more significant gaps is the lack of a direct north-south connection between Whitelaw Road and Winter Street. Filling this gap will be important for connecting residents of Delacombe with leisure and sporting facilities, schools, the rail network, and shopping and jobs, along the Gillies Street corridor; and of course connecting residents of western/northwestern suburbs with Delacombe Town Centre.

It is good to see that the City of Ballarat predicts that, with continued investment, there will be a decent mode shift away from cars to active transport over the various distances, but disappointing

to see that PT's mode share is not predicted to change at all. Active transport investment, particularly in walking improvements, can and should have at least some effect on PT mode share, by making it easier and more pleasant to walk to bus stops; if people have continuous footpaths from their home to their bus stop, and do not have to negotiate crossing busy roads to get there, they will be more likely to access PT. Clearly more investment by the State government in the quality of PT service itself (frequency, span of hours, speed) will be necessary to fully realise the benefits of this, but it should nonetheless be a consideration for active transport investment.

3.4 Getting around Ballarat: Public transport

The PTUA concurs with the point made about trimming excess fat from the timetables to allow for a faster service that is more time-competitive with driving. We also concur that the savings that would arise from these revisions should be reinvested into service improvements within the Ballarat system, such as higher frequencies and/or new routes; we would also add that extending the span of hours, particularly into the evenings, should be considered.

Please refer to our response to the Ballarat's Urban Transit Future background paper for more detailed feedback on the topic of intra-Ballarat public transport.

4.0 Freight: Moving goods in and out of Ballarat

The PTUA is strongly supportive of measures to shift freight's mode share away from roads and onto rail. Rail freight takes traffic off our roads, reduces carbon emissions, and - for the tasks it is suited to - is considerably more economically efficient than road freight. We are accordingly very supportive of the Ballarat Intermodal Freight Hub, and of the full completion of the Murray Basin Rail Project.

We would note that the long-term success of any strategy to increase the proportion of Ballarat's freight task handled by rail will depend on tracks in the area being compatible with Standard Gauge freight trains - whether through outright Standardisation, the provision of Dual Gauge track, or some combination of the two. The Intermodal Freight Hub at BWEZ, for example, will have much greater utility if it is connected to the national Standard Gauge network rather than the ever-shrinking Victorian Broad Gauge network. City of Ballarat is no doubt aware of the Rail Futures Institute's proposal to make Ballarat the hub of a Standard Gauge passenger rail network, which could include trains to Horsham, Adelaide, Hamilton, Mildura and Geelong. The Standardisation question is a complex one, both due to the interaction of freight and passenger trains and the need to stage conversions in the right order, and deserves a policy document of its own. Suffice to say it is in City of Ballarat's best interests to join with other municipalities in western Victoria to engage in this conversation, and do the research required to come to a strong and united policy position.

We also reiterate the point from Part A, questioning the wisdom of expanding Ballarat Airport in light of climate change.