



Presentation to the Planning Panel on the Armstrong Creek Urban Growth Plan

Geelong Branch of the Public Transport Users Association

Introduction

The Public Transport Users Association is the recognised consumer organisation for public transport users in Victoria. It is a voluntary, non-party political group that lobbies for improved public transport and contributes to a range of policy debate on ecologically sustainable transport issues.

These comments expand on the principal concerns the Geelong Branch raised in our original submission to the City of Greater Geelong following the release of the Armstrong Creek Urban Growth Plan.

We are concerned that there is a great deal of uncertainty about whether, when, and in what form a future railway line to Torquay will be built. This is likely to mean that the proposed sub-regional centre will not be served by rail except in the very long term. This has major ramifications for the structure of Armstrong Creek's public transport network as well as for the location of its activity centres.

We also believe that additional public transport routes should be added to the plan, as the current network is too coarse to provide services within an acceptable walking distance.

Furthermore, we ask that the planning panel review the need for the east-west arterial road running parallel to the railway line, particularly the section to the east of the Surf Coast Highway.

Uncertainty over the Torquay Rail Line

We certainly support the reservation of a rail corridor to Torquay so that the option for a rail line is not precluded by a barrier of urban development. We would be delighted if the rail line was built early in the Armstrong Creek development, but we are concerned that the location of the largest activity centre is being planned around a railway line for which not even a pre-feasibility study has been conducted.

From informal discussions we have held with City planners and some developer representatives, there seems to be wide agreement that a rail line to Torquay is only considered a "long term" option. This is probably a sensible assumption based on the history of transport projects over the last several decades where, despite plans and promises, new railway lines are rarely built (although rail services are often extended along existing lines). We point to the failure to construct rail lines to longstanding principal activity centres like Doncaster and Knox City.

While we do not ask the Panel to consider the merits of the approach of successive state governments to rail expansion, we do argue that the most strategic approach to dealing with uncertainty over the line to Torquay is to locate the sub-regional centre in a position that is not dependent on the line being built in the near future.

The Relationship between Public Transport and Large Activity Centres

The Armstrong Creek sub-regional centre could of course go ahead without any connections to high quality public transport, but given that that sustainability is a key goal of the Armstrong Creek Urban Growth Plan, if the area is to be designed to encourage public transport use and minimise unnecessary car use, its subregional centre (as a major travel destination) must be well served by efficient public transport.

Transport and land use planners who aim to encourage public transport use usually recommend that railway stations and major activity centres should be located together for two main reasons. The first is that it brings the activity centre within easy walking distance of fast, high-quality and high-capacity rail services that can connect the centre to the wider region. The second is that it provides a single focus for the local public transport system, by allowing buses to take passengers to their activity centre and to the station at the same time. This makes the public transport network much simpler and easier for passengers to understand (and for planners to design), and also makes it more efficient.

Public Transport Problems with the Proposed Sub-Regional Centre Site

There are clear benefits to locating the station and the sub-regional activity centre together. Yet under the proposed plan, if the Torquay branch line and the associated station are not built in the near future, none of those benefits will be realised.

In fact, most buses would still need to serve the area's two main destinations in addition to serving residential areas, except that the destinations would now be far apart and in opposite directions; Marshall station in the north-east and the sub-regional centre in the south. Many routes would need to be split, leading to inefficient duplication and poor service quality (see *Figure 1*).

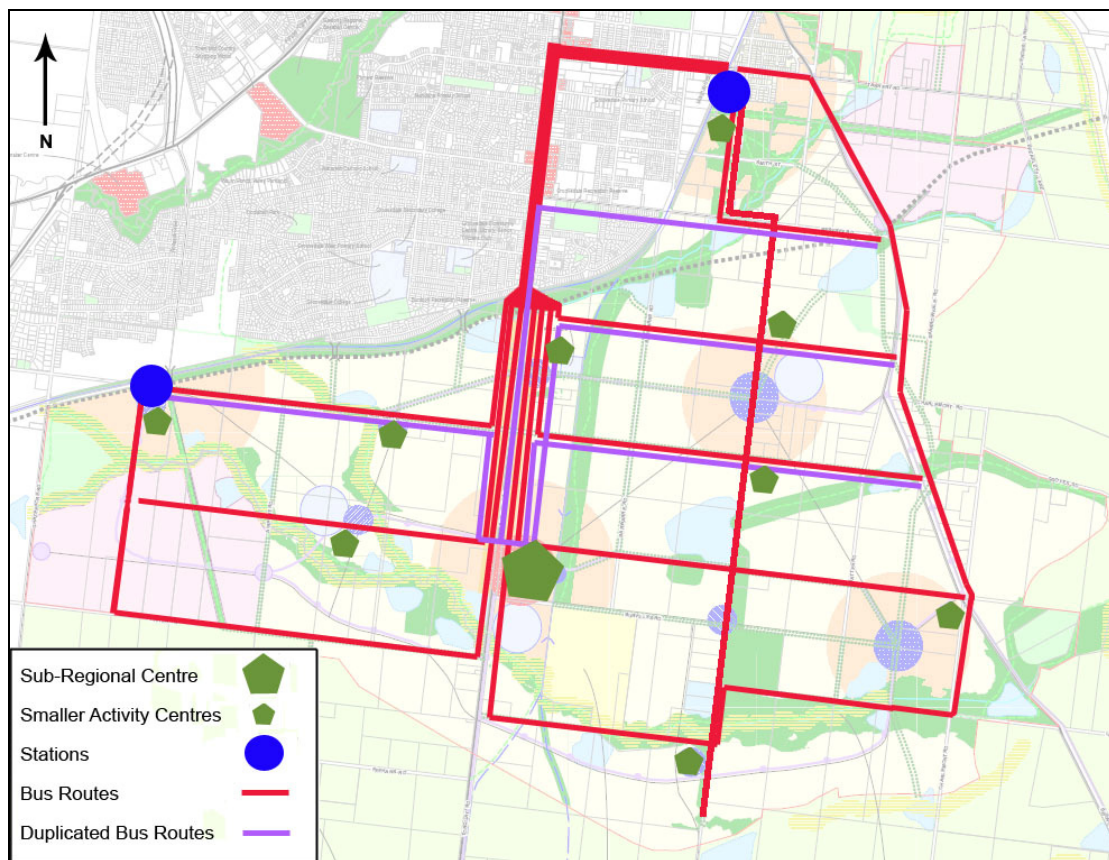


Figure 1: Duplicated bus routes required to serve the Sub-Regional Centre site.

A Sub-Regional Centre on the Surf Coast Highway

We therefore suggest that the sub-regional centre (with provision for a new railway station) should be established at a site next to the existing level crossing on the Surf Coast Highway.

Locating the sub-regional centre at that site will place the area's largest activity centre in an excellent location for convenient access by existing fast, high capacity rail services, without requiring the building of a new railway line. It will also ensure that there is one focal point for the local bus system, allowing buses to serve local travel to the activity centre, the railway station and to the existing urban area north of the line at the same time (see *Figure 2*).

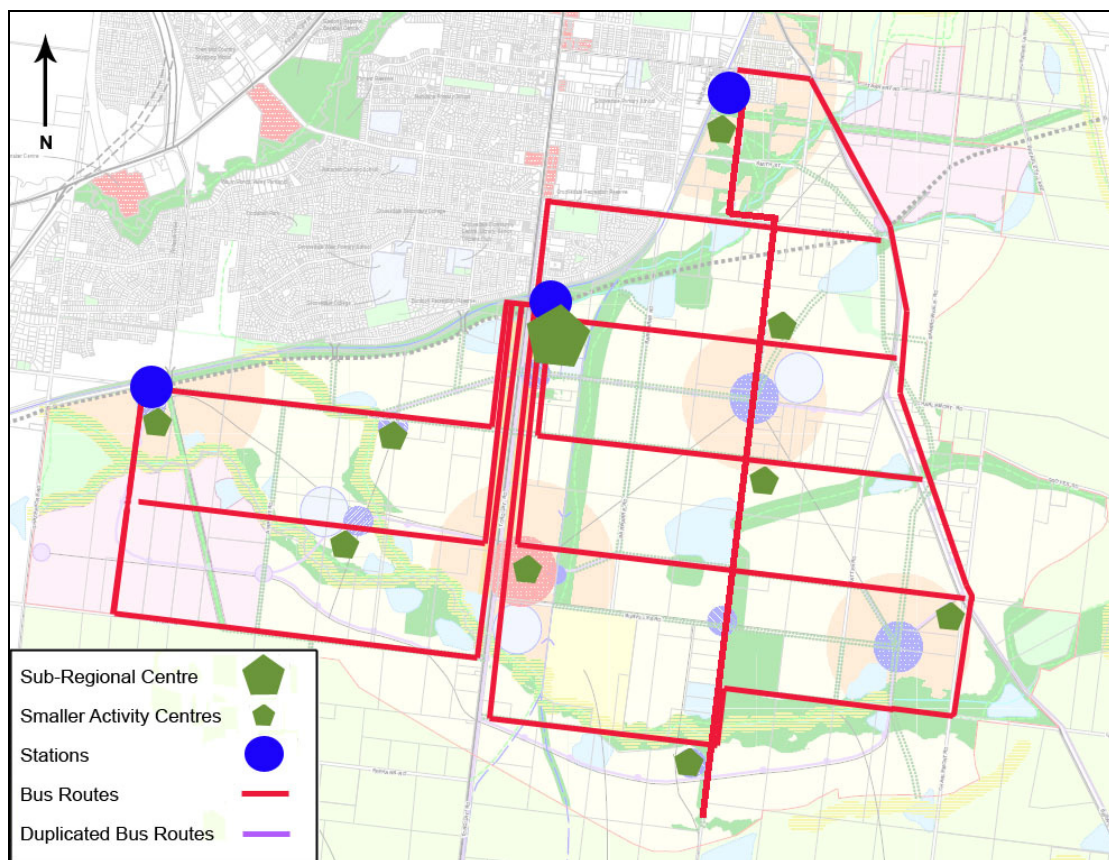


Figure 2: A more efficient public transport network with the Sub-Regional Centre next to a station on the existing railway line.

Even before a Surf Coast Hwy station is built, most bus services could still travel past the shopping centre and continue on in the same direction to connect with trains at the existing Marshall station (see *Figure 3*). With a station at the Surf Coast Highway however, bus routes will be shorter and more efficient.

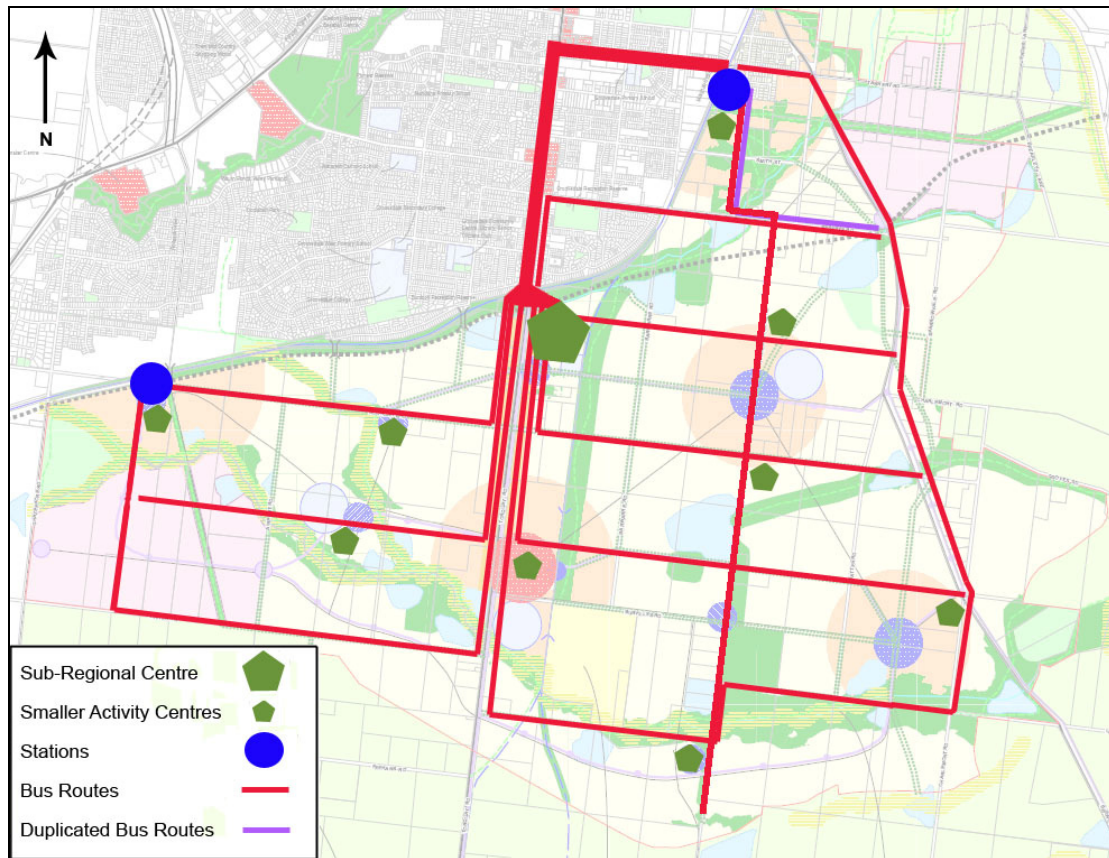


Figure 3: Bus routes serving the preferred Sub-Regional Centre site before the construction of a station on the existing railway line.

In either case, bus services will also provide a good service along the “mixed use” corridor envisioned along the Surf Coast Highway (which is clearly identified as the Armstrong Creek area’s ‘main’ road).

A centre built on the eastern side of the Highway, between the main road and the Torquay line reservation, will also have easy access from the proposed Torquay line, whenever it might be built. Therefore, the new site will be at the best possible location for public transport services, in line with the Urban Growth Plan’s stated priority for public transport. However, it will also have other land use planning advantages.

As the site is located on the northern side of most of the development area, it will be convenient for residents who regularly travel by car or public transport to the rest of Geelong and beyond. With additional passing traffic, the site will also be more commercially viable. All parts of the Armstrong Creek area will still have quick and easy access to the centre by car as well as by public transport, and the centre could still be accessible by a dedicated bicycle path along the Torquay rail reservation. Furthermore, having the main shopping centre to the north can be used to focus the area’s initial development at the northern end of the Plan area, and avoid leaving a

large gap between islands of development stretched along the Highway. As currently proposed, it will be a significant planning challenge to stop inappropriate development and provide services in any gap, particularly if large-scale residential development does not proceed as quickly as anticipated.

Smaller local activity centres, including at the station site on the proposed Torquay line, can of course still be planned to provide local shops in more distant residential areas.

Rail Planning Considerations for a Surf Coast Highway Station

We have proposed that a railway station be placed at our proposed site for the sub-regional centre. However, we understand (arising from a summary in a briefing to Geelong councillors) that the Department of Infrastructure has advised City planners that a station on the Surf Coast Highway would be too close to Marshall station, and that as a result, any activity centre built at the Highway would not be served by a new station.

However, the Department's advice is likely to have been based on a number of assumptions, and the City's summary may well have omitted any qualifications on the advice for the sake of brevity.

Firstly, a station on the Surf Coast Highway will still be two kilometres from Marshall station to the north-east, and almost three kilometres from the proposed Rossack Drive station to the west. These distances compare favourably with spacing between Geelong and South Geelong stations, two busy commuter stations on the same line which are less than two kilometres apart.

It is probably true that a station spacing of two kilometres would be closer than the ideal for most country train services. This spacing is usually set so that trains can reach higher speeds on long-distance commuter services, especially those running through sparsely settled areas.

However, stations serving Armstrong Creek will be used for urban travel within Geelong, and not just for trips to and from Melbourne. In fact, the trains will have to serve local travel if the Plan area is to achieve high rates of public transport use. With connecting bus services and more frequent trains, the increased population in Geelong's more distant southern suburbs will find it convenient to use trains for trips within Geelong. In order to serve this urban travel, it is highly likely that a more frequent, suburban-style rail service will be introduced in the medium term.

With this in mind, the gap of two kilometres between Marshall and the Surf Coast Highway stations will be a longer spacing than that between many suburban stations in metropolitan Melbourne, which serve suburban development of similar or even lower density. For example, on one stretch in Melbourne's middle-outer eastern suburbs, Nunawading and Mitcham stations are only 1.4 km apart, Mitcham and Heatherdale 1.8 km apart, and Heatherdale and Ringwood just 1.5 km apart. These in

turn are significantly further apart from stations in areas like Brunswick, which can be as close as 800 metres apart.

Station spacing of two kilometres in urban areas is by no means considered outdated. The transport planning 'bible' by Vuchic states that for urban rail services, "station spacings exceeding approximately 1.5km (or 1 mile) bypass many areas that could benefit from better access to rail service and generate many additional passengers"¹. He goes on to say that "construction of relatively few stations dependent on motor vehicle access creates the need for additional automobile-based travel – often with negative environmental impacts on areas surrounding each station."

In any case, given the Surf Coast Highway's strategic position in the bus network, its status as the main road through the new development, and the fact that it is the most central crossing point of the railway line, the case for a station should be sufficiently compelling to re-interpret any general departmental guideline on station spacing.

Building the development's two new stations on the same railway line (to Warrnambool) will also simplify train service patterns, and is more likely to mean that better services will be provided to the proposed station on Rossack Drive. If a line to Torquay is built in the short term, services through Marshall may need to be split between those to the Rossack Drive station and those to Torquay. It is hard to envisage a simple method of resolving this servicing problem, particularly given that no study has yet been undertaken on a Torquay line.

The Need for Additional East-West Roads for Local Public Transport

We welcome the Plan's provision of an approximate grid of major roads that will be suitable for street-based public transport routes. However we note that the proposed plan provides a very coarse grid of designated public transport routes, in some cases spaced as far apart as 1.2km by 3.6 km. This will not bring all residents within the industry standard of 400 metres radius of a bus route, which should leave gaps of 800 metres between parallel routes. This standard usually results in a maximum walk of up to 500m (or approximately 5 minutes walk at 6 km/h), presuming the street design is reasonably permeable.

Therefore, the east-west roads designated for public transport must be more finely spaced, to ensure convenient travel to major destinations accessed from the Surf Coast Highway or Barwon Heads Road. Many of these roads can be provided along existing property lines. For example, in the Plan area between the Surf Coast Highway and Barwon Heads Road, 800 metre spacing will require a new road halfway between Reserve and Boundary Roads (along the existing property line), a public transport route along Boundary Road, the retention of the proposed new road/public transport route along the next property line, and a route roughly in line with Lakes Road (even

¹ Vuchic, Vukan, *Urban Transit: Operations, Planning and Economics*, John Wiley & Sons, USA, 2005, p 287.

if it has to detour around the crematorium), plus perhaps one additional southernmost route.

Once the road locations have been finalised, the location of smaller local activity centres should be adjusted to line up with the new routes.

A Review of the East-West Arterial Road Parallel to the Railway Line

The Urban Growth Plan has included a reservation for a major east-west arterial road that is intended to connect the Geelong Bypass in the west to the Bellarine Highway and Portarlington Road (far to the east of the Plan area). We presume the road was included as an alternative link to the Bellarine Hwy for through traffic to northern Geelong and Melbourne.

The proposed road will make it a greater challenge to ensure that links to the stations are both convenient and aesthetically pleasing, and that surrounding development is as dense and as 'transit-oriented' as the Plan suggests. Due to its far greater width than the existing rail reserve, the road will also create further divide the Armstrong Creek area from the rest of urban Geelong.

We have seen no evidence that a significant amount of traffic from the Bellarine Highway at Moolap Station road is likely to divert to the alternative route. It is (almost exactly) double the distance of the existing route through Geelong between Moolap Station Road and the Corio Railway Overpass. Therefore, if the route is to be competitive with travel time on the existing route, vehicles will need to travel at twice the average speed of the current route. This could only ever be achieved in very congested conditions within Geelong, and vehicles making the approximately 15 kilometre longer detour will also use significantly more fuel, at a cost to the both the motorist and to the environment.

Instead, we suggest that the road east of the Surf Coast Highway be replaced by plans for an additional link across the Barwon River that connects to Barwon Heads Road and the rest of the existing arterial road system. This will probably be adequate to provide for the relatively local and low volume travel between urban areas on either side of the river, and will be in addition to the upgraded Breakwater Road link.

To connect the Geelong Bypass to the Surf Coast Highway without significantly disrupting the Plan area, a reservation for a new road, which we understand is already being planned, can skirt around the south-western edge of the Plan's urban area until it joins the Surf Coast Highway. This road will bypass the urban area (and mark a clear western boundary) and can still provide for access from the major east-west roads through the estate and from the Surf Coast Highway. The northern reservation along the railway line (between Ghazeeopore Road and the Surf Coast Highway) can be retained as a fallback option in case an insufficient number of car trips are shifted to public transport and the basic road system needs to be expanded.

Conclusion and Recommendations

Positioning Armstrong Creek's largest activity centre next to a proposed station and railway line, for which no feasibility study has yet been conducted, brings the significant risk that the sub-regional centre will not be served by high quality public transport within the foreseeable future.

Moving the proposed sub-regional centre to a new location next to the existing Surf Coast Highway level crossing will give the Armstrong Creek area an urban form more conducive to the provision of good public transport, while still providing convenient access by car. It will make local public transport routes simpler and more efficient by allowing routes to serve a single major destination. It will also allow a station to be built relatively cheaply and easily on the existing railway line to Warrnambool, independent of the construction of a future line to Torquay.

Additional roads should also be provided for street-based public transport so that they are at regular 800 metre intervals from the north of the study area to the south, to ensure that all residential areas are within acceptable walking distance of an east-west public transport route.

We therefore ask the Panel to consider making recommendations that the Plan be altered by:

- Moving the site for the Sub-Regional Centre to a location immediately to the south (preferably the south-east) of the existing Surf Coast Highway level crossing; and
- Allowing space at the site for a railway station; and
- Specifying additional east-west roads for public transport routes, so that they are separated by 800 metres (north-south).

We also ask the Panel to review the need for the east-west arterial road running parallel to the railway line, particularly the section to the east of the Surf Coast Highway, and to consider alternative options.

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