

Technical Note

Subject:	Huntingfield Terminus Park and Ride Planning		
Project:	Greater Hobart Park and Ride Investigation		
Our file:	030	Date:	20 November 2019
Status:	Final	Prepared by:	s 36

1. Purpose

As part of an investigation into the provision of Park and Ride facilities in the Greater Hobart regions, this Technical Note presents preliminary findings regarding the planning of a Park and Ride at the Huntingfield Terminus.

2. Site details

Location and description

The Huntingfield Terminus site is located at the intersection of Huntingfield Avenue, Channel Highway, Algona Road and Southern Outlet.

Located fully within the Channel Highway road reserve, it is large, slightly sloping and bounded by roads. The site consists of two parts, the first a triangular piece of land north of the existing Huntingfield Terminus bus stop, while the second is formed by the loop road area immediately south.

This site is zoned as Utilities and is owned by the Crown.

Figure 1: Huntingfield Terminus Aerial Photograph



Informal park and ride activity is already occurring at this site, and it may also be being used for parking by employees of the local businesses to the east of the site.

Figure 2: Huntingfield Terminus. Existing conditions



Figure 3: Huntingfield Terminus. Possible expansion area



A single bus stop is provided that serves both northbound and southbound buses. The stop is supported by two shelters and timetable signage. Bike lockers (4) are provided but no casual bike racks.

Figure 4: Huntingfield Terminus. Existing bus stop and bike lockers



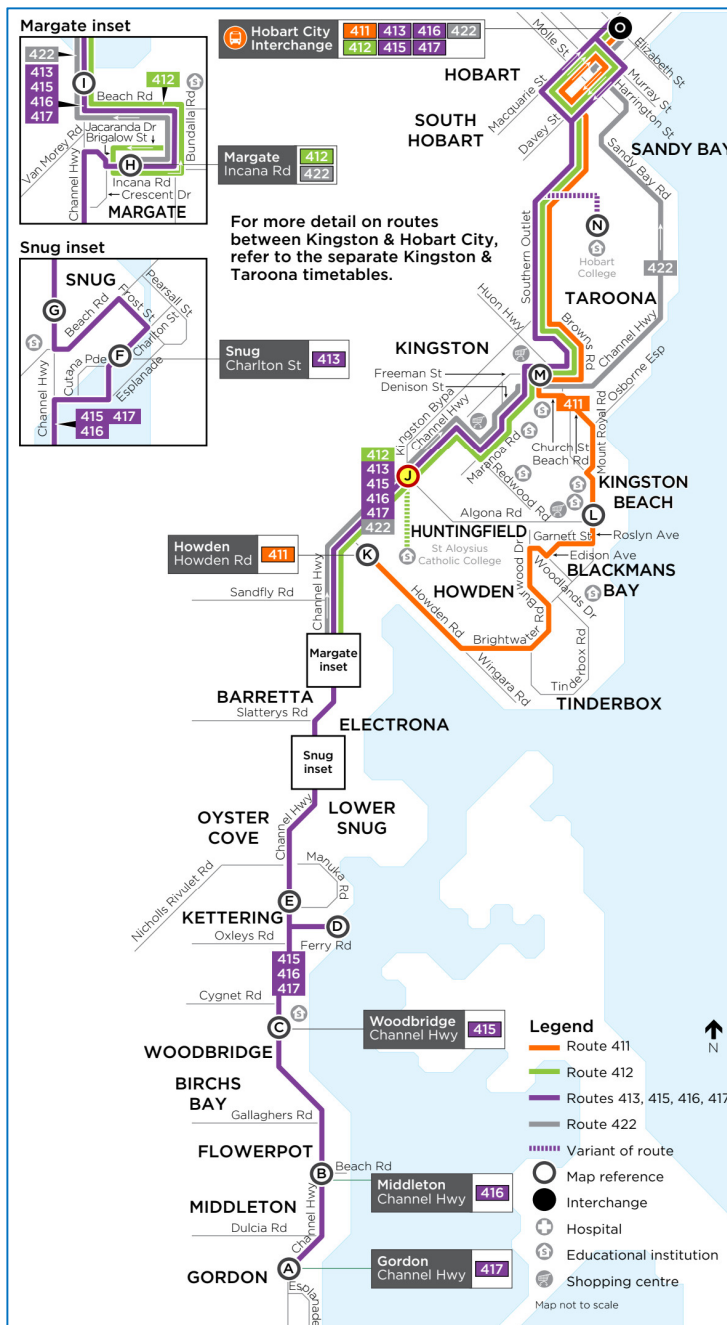
3. Bus services

3.1. Routes

Huntingfield Terminus is denoted as Stop 4379 by Metro Tasmania who operate six urban bus routes which stop there as an intermediate stop on services travelling to/from locations further south. Although named as a 'Terminus', no urban bus routes use it for this purpose.

- 412 Margate to Hobart City
- 413 Snug to Hobart City
- 415 Woodbridge to Hobart City
- 416 Middleton to Hobart City
- 417 Gordon to Hobart City
- 422 Margate to Hobart City (weekends only)

Figure 5: Metro Tasmania Route Map



3.2. Timetable

Table 1 shows the scheduled departures on a typical weekday (May 2019).

In the AM peak period (0700 to 0830):

- Seven buses depart to the Hobart CBD, with an average travel time to Hobart CBD of 30 minutes.
- Two of these do not operate in school holidays.
- On school days, one of these plus another two services deviate into Hobart College. This adds approximately 6 to 8 minutes of additional journey time.

Table 1: Weekday departures at Huntingfield Terminus (May 2019)

Northbound Departures					Southbound Departures			
Departs	Route	Destination	Minutes to Hobart City	Notes	Departs	Route	Destination	Notes
06:31	412	Hobart City	24		07:13	413	Snug	
07:08	416	Hobart City	28	School Days Only	07:56	412	Margate	
07:27	415	Hobart City	28		09:00	415	Woodbridge	
07:52	413	Hobart City	31		10:02	413	Snug	
07:59	412	Hobart City	33		11:02	412	Margate	
08:07	415	Hobart City	28	School Days Only	12:02	412	Margate	
08:14	417	Hobart City	38		13:02	412	Margate	
08:18	412	Hobart City	32		14:02	412	Margate	
09:21	412	Hobart City	25		14:53	415	Woodbridge	
10:21	415	Hobart City	25		15:23	413	Snug	
11:21	413	Hobart City	25		16:23	415	Woodbridge	School Days Only
12:23	412	Kingston			16:33	416	Middleton	
13:23	412	Kingston			16:51	412	Margate	
14:23	412	Kingston			17:12	417	Gordon	School Days Only
15:32	412	Kingston			17:26	412	Margate	
16:12	415	Hobart City	27		17:42	413	Snug	
17:31	413	Hobart City	23		18:10	415	Woodbridge	
18:57	412	Hobart City	20		18:38	412	Margate	
19:45	412	Hobart City	20		19:26	412	Margate	
20:45	412	Hobart City	20		20:26	412	Margate	
21:45	412	Hobart City	20		21:26	412	Margate	

Note: Data sourced from Metro Tasmania's GTFS dataset. <https://www.metrotas.com.au/community/gtfs/>

3.3. Service improvements

3.3.1. Current loadings

Data provided by Metro Tasmania for March 2019 suggests that Southern Outlet bus services in the AM peak period typically have spare capacity, with services departing Huntingfield Terminus between 0720 and 0800 being the most heavily loaded. This correlates with data for the wider Hobart network, where services arriving in the CBD between 0800 and 0830 show the highest demand.

Across the three services departing Huntingfield Terminus between 0720 and 0800, there is an average total of approximately 70 persons spare capacity, although daily variability is likely to show less spare capacity on the busiest days. Consequently, it is recommended that additional bus services be provided if a Park and Ride facility any larger than 50 spaces is to be considered. More detailed assessment of this is recommended.

3.3.2. Options for additional services

For services to be attractive to users of a Park and Ride, they need to provide a fast journey time to the Hobart CBD, to achieve competitiveness with driving. Consequently, any services added need to take the fastest possible route to the CBD and should not be allowed to deviate into Hobart College.

Additionally, some existing services appear to be timed to meet the needs of school students rather than commuters, arriving in the Hobart CBD after 0830. Adding services designed to meet the needs of commuters that arrive in the CBD earlier may also be attractive.

Four options are available here.

Dedicated shuttles

Ideally, a new route path would be defined that travels express from the Huntingfield Terminus to the Hobart CBD via the Southern Outlet, which could cut the journey time to approximately 24 minutes and should be attractive to customers. However, the viability of doing this hinges on whether such a route could generate enough additional patronage to be considered heavily loaded enough to justify its express operation.

Typically, an average of a full seated load (around 41 customers) would achieve this justification, and although a bus could typically accommodate another 20 persons standing, customers may have a low tolerance for standing for journeys of this duration if the bus is more heavily loaded.

The challenge with a dedicated shuttle is that it needs to attract its load of customers at a single point in time, when demand to travel is spread across the AM peak period. Customers would need to plan their arrival at the Park and Ride a few minutes before the bus departs, and this can create local traffic issues with 40 cars all trying to access the Park and Ride in a short period. Multiple shuttle departures will assist in spreading the demand profile, as will customer awareness of the other bus routes which provide additional travel options.

If a dedicated shuttle is provided, it is recommended to depart Huntingfield Terminus around 0745, within the 25 minute gap between services that exists in the current timetable. If two shuttle departures were operated, departures around 0740 and 0750 are recommended.

In the PM peak, customer departure times from the CBD are spread across a wider time period which makes it more difficult to plan the timing of a shuttle departure. Additionally, outbound services have lower average loads, partly due to school students having travelled earlier in the afternoon. As a result, it may not be necessary to operate an outbound shuttle service, and the provision of additional services on existing routes could yield benefits to more customers.

Additional services on existing routes

By adding departures to existing routes, additional frequency and capacity would be created at Huntingfield Terminus. Bus would travel via Channel Highway into Kingston town centre before heading to the Hobart CBD, and travel time to the CBD would be around 28 minutes if the route bypasses Hobart College.

The advantage of this approach is that it yields benefits to a wider group of customers along the route. Advice is needed from Metro Tasmania as to which routes would benefit the most from additional services.

As with the dedicated shuttle option, departure timings from Huntingfield Terminus are recommended to fill gaps in the current timetable between 0727 and 0752.

For outbound services in the PM peak, departures timed to fill the gap between 1715 and 1745 are recommended, along with changing the 'School Days Only' departure of Route 417 at 1645 to all weekdays.

Additional services in off-peak periods are also recommended, to improve the existing hourly frequency.

Express variant of existing route

Combining the potential benefits of the previous two options, it may be viable to create a version of an existing route that would operate as normal south of Huntingfield Terminus, but travel express from there to the Hobart CBD.

The main concern with this approach is that it may be too attractive to customers travelling from further south, resulting in some customers boarding at the Park and Ride being unable to gain a seat, or not being able to board at all.

This option may be a viable interim approach until demand at the Park and Ride proves to be sufficient to add direct shuttles.

New route with express running

It is noted that a major residential development of over 500 dwellings is planned at Huntingfield, approximately 1.2km south of Huntingfield Terminus. This will add to an existing 170 dwellings nearby and create a total population of up to 1,700 people in an area that is not currently served by buses.

There is an option to create a new route that starts in this new community, travels via Huntingfield Avenue to the Park and Ride, and then runs express to the CBD. The self-contained nature of the route in the new community would be easier to manage, with little risk of ongoing demand increases once build-out occurs. The service frequency could then be adjusted as necessary to ensure that adequate capacity is provided at the Park and Ride.

Released under PPI

4. Park and Ride Design

4.1. Preliminary layout sketch

A preliminary layout sketch, presented on the following page, has been prepared to determine the potential size and capacity of a Park and Ride facility at Huntingfield Terminus. Although prepared to scale, the layout is indicative only and a thorough engineering design process is required to determine the feasibility of the proposal.

The site has the potential to be developed in two stages, with an initial stage to the north of the existing bus stop, and a second stage immediately to the south within the road loop. It is estimated that:

- Stage 1 may be able to accommodate up to 106 parking spaces, including 2 disabled spaces, along with a secure bicycle cage and casual bicycle racks.
- Stage 2 may be able to accommodate up to 77 parking spaces.

Additional parking spaces may be possible if the site was consolidated, allowing relocation of the bus stops and the conversion of the road loop to a cul de sac with bus turnaround at its western end to utilise less area for road space.

4.2. Further expansion

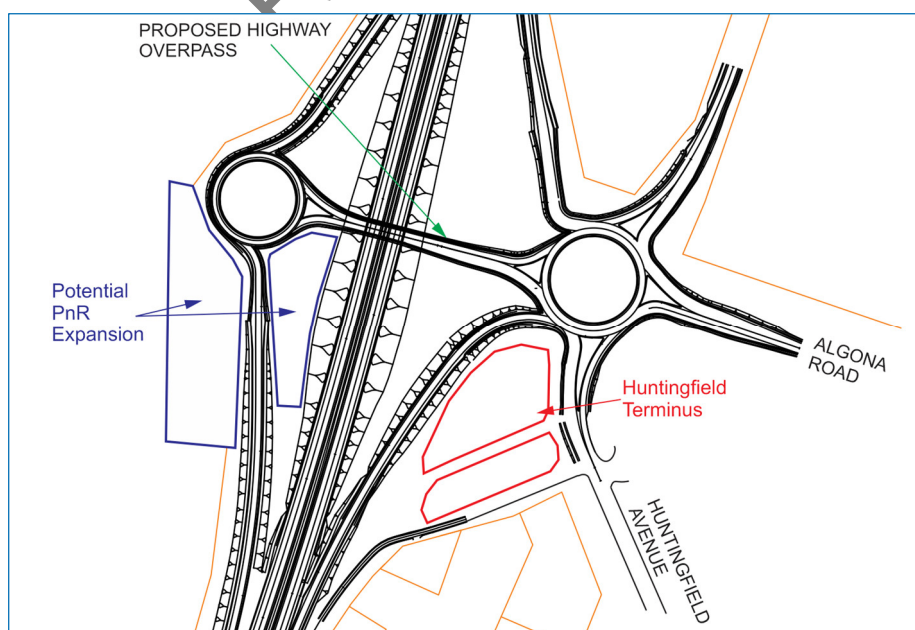
During stakeholder consultation, a suggestion was made to consider a site on the western side of the Southern Outlet to provide additional capacity or in lieu of the Huntingfield Terminus site.

A facility in this location could be developed in conjunction with planned upgrade works of the Southern Outlet which include the duplication of existing roundabout to form a dumbbell interchange.

The primary advantage of using the western side of corridor is that both cars and buses could access this location without needing to traverse the road interchange. This would be more attractive to Park and Ride customers approaching from the south, and more efficient for bus services assuming they would travel express from this location towards Hobart and not travel via Huntingfield Terminus. It is noted that no existing bus services travel express in this manner, and thus the viability of a Park and Ride on the western side of the Southern Outlet is dependent on new or modified bus services.

The construction of this facility in conjunction with the planned upgrade of the Southern Outlet may provide a lower cost of construction. However, a new pedestrian bridge across the Southern Outlet may be required to allow access for customers returning on southbound bus services, which would add a substantial cost to the project.

Figure 6: Potential western expansion



Huntingfield Terminus Park and Ride: Preliminary Layout Sketch

Stage 1:
106 spaces (incl. 2 disabled)
Bike cage + casual bike racks

Stage 2:
77 spaces (incl. street edge)

