

S U B M I S S I O N

Review of bus services in the cities of Banyule and Nillumbik

seven day service

modern operating hours

direct & legible routes

high frequency

harmonised headways

serves major trip generators

better connections

area & corridor planning

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Introduction

The recently-announced area reviews of metropolitan bus services are welcome. They potentially present a 'once in a generation' opportunity to make public transport a mode of choice for the sixty per cent of Melburnians beyond walking distance of fixed rail services.

The review for Banyule and Nillumbik is the fifth to be undertaken. Many themes are common across all reviews and general recommendations are similar to those made elsewhere. A summary of the approach taken appears in Appendix One while Appendix Two provide background information about the area.

Local transport issues

The following local transport issues have been identified and drive the recommendations in this paper.

Route coverage

- There is limited coverage in parts of Watsonia, Viewbank, Eltham (Ryans Rd), Eltham North and Diamond Creek.

Network design

- The area has some confusing and excessively long routes. An example is Route 566 backtracks west of Greensborough and would be better off split. Similarly 513 has two main variations nowhere near one which again require separate route numbers.
- Given the large number of trips that are either local or to adjoining municipalities, there is a need for more direct routes to areas such as Epping.
- A need for increased service in Apollo Parkways due to its civic and educational facilities.
- Consistent service patterns. Some bus routes have deviations which confuse passengers. The need for each should be critically appraised with a view to simplification.

Operating hours, frequency and co-ordination

- It is recommended that the operating hours of major bus routes be similar to trains. Currently none of one of the routes in this review meet these standards so upgrades to more major routes (similar to SmartBus in other suburbs) are recommended. Local routes vary greatly and extension of 'minimum standards' to them is supported.
- While trains in the study area run every 20 minutes during the day (30 minutes night) bus routes often do not reflect this. Hence they do not always provide efficient, repeatable connections. Most of the routes studied ran at intervals such as 25, 35 or 50 minutes instead of 20 or 40 minutes. A key recommendation is to harmonise headways and co-ordinate timetables for better connections and faster travel. Instances where the revision of routes allows headway-harmonised services without additional buses being required present a real opportunity and should be implemented quickly.

Specific recommendations

The following are some suggested amended and altered routes. The main thrust has been to provide more direct and frequent services between major centres, extend service to currently under-served areas and rationalise routes where these are considered too close.

Route	Purpose/role	Recommendations
281	Major cross-suburban link	Increase service frequency and operating hours to equal trains.
293	Major cross-suburban link	Increase service frequency and operating hours to equal trains.
513	Redefine as the northern suburbs' most important east-west link (via Bell Street between Pascoe Vale and Heidelberg).	Route to run westwards from Burgundy Street Heidelberg for improved reliability and better train connections. Eastern portion to run as two local routes (514 and 515) as below. Increase service frequency and operating hours to equal trains and assure predictable connections. Terminate western end of route at Pascoe Vale Station to provide a direct link across the northern suburbs.
514 RENUMBERED	Defined as Heidelberg – Eltham local route via Watsonia	Replaces deleted portion of existing 513 meeting every second train and running to minimum hours. (see above)
515 RENUMBERED	Defined as Heidelberg – Eltham local route via Yallambie	Replaces deleted portion of existing 513 meeting every second train and running to minimum hours. (see above)
516 RENUMBERED	Defined as Northland – Greensborough local route	Replaces Greensborough – Watsonia – Northland part of existing 566 Review need for Macorna St deviation.
517	Defined as local route	Examine scope for straightening and extension to Diamond Creek. Remove service variations.
518	Defined as local route	Examine scope for straightening and extension to Diamond Creek or Eltham.
519 PROPOSED	New local route linking Greensborough, St Helena Marketplace SC and Eltham	Suggested local route serving the following: Greensborough Station – Diamond Creek Rd – Aqueduct Rd – St Helena Marketplace SC – Wallowa Rd - Ryans Rd – Progress Rd – Wattletree Rd – Main Rd – Eltham Station.

Route	Purpose/role	Recommendations
520	Redefine as local service for Doreen residential area (while retaining a less frequent Yan Yean service)	<p>Alter route to serve Flaxen Hills Rd, Doreen.</p> <p>Extend span from weekday peak only to 7 day minimum hours connecting with every second train at least as far as the built up areas of Doreen.</p> <p>Route through Apollo Parkways to provide a frequent service along with the proposed 571.</p> <p>Except where required for school runs, remove Macleod and Yallambie portions of route.</p> <p>Re-number to a more suitable route number (576 suggested).</p>
560	Major cross-suburban link.	<p>Reroute along Settlement Rd between High St and Dalton St Thomastown to better serve major retail development and light industry – see Whittlesea submission for map.</p> <p>Increase service frequency and operating hours to equal trains.</p>
561	Defined as local route	Route is outside study area, but is a candidate for extension if improved coverage in Watsonia (eg Yallambie Rd or Elder St) is required.
562	Defined as direct Plenty Rd service, connecting with trams with Greensborough link as secondary role.	
563	Redefined as local Epping – Plenty Rd service.	<p>It is proposed that this route will no longer operate in Banyule/Nilumbik.</p> <p>Services in this area will be replaced by an extended Route 571 between Epping and Greensborough (see below).</p>
566	Redefine as major cross-suburban route between Epping and Greensborough.	<p>Existing route is confusing with different entrances to Greensborough from the west.</p> <p>In addition it (poorly) combines major cross-suburban and local access functions. Hence its splitting into two is recommended.</p> <p>Re-number Greensborough – Northland portion to 516 and run as local route, meeting every second train.</p> <p>Operate 566 from Epping (instead of Lalor) to provide better link between major centres. A proposed map is contained in the Whittlesea submission.</p> <p>Increase 566 service frequency and operating hours to equal trains.</p>

Route	Purpose/role	Recommendations
571	<p>Redefined as new major northern route from Epping to Greensborough</p> <p>(Similar function to existing 563 while adding an extra link to Epping).</p>	<p>Straighten route in Apollo Parkways area. Eg Greensborough Stn – Plenty River Drive – Civic Drive – Brentwick Drive – Plenty River Drive – Diamond Creek Road.</p> <p>Operate service as Route 571 from Epping, following existing 563 route except for above.</p> <p>Operate service in excess of minimum hours with connections with every train at most times.</p> <p>Make use of proposed extended Route 576 (existing 520) to provide frequent Greensborough – Apollo Parkways service to link civic centre and TAFE.</p>
576 RENUMBERED	Defined as local service for Doreen.	See notes for Route 520 above
578	Local route (semi-rural)	Schedule in conjunction with 579 and 581 to provide frequent combined service to Research.
579	Local route (semi-rural)	Schedule in conjunction with 578 and 581 to provide frequent combined service to Research.
580	Local route	Harmonise headway with trains and upgrade to minimum hours.
581	Local route (semi-rural)	Schedule in conjunction with 578 and 579 to provide frequent combined service to Research.
582	Local route	Operate in both directions throughout the day. Suggested departures every 40 minutes (each direction offset by 20 minutes) to provide every train connection.

Conclusion

Described is an approach with suggested changes that would go a long way to improving public transport service quality and thus patronage in the cities of Banyule and Nillumbik. It advocates an integrated network of frequent routes between major trip generators and timetables that mesh with trains. Special attention has been paid in responding to modern travel patterns, such as freer trading hours, the growth of trip generators away from the fixed rail network and local suburban as well as CBD travel.

Appendix One: A general approach to bus route planning

This submission supports a key performance indicator for public transport service provision along the lines of the following:

- 80 percent of residents are within fifteen minutes walk of a public transport service that operates at least every fifteen minutes seven days per week.

Given widespread 20 minute running of trains in the study area, a fifteen minute target requires more than just bus reform. However achieving a looser twenty minute frequency target is much easier and could be an aim of this review.

As well as good frequency and operating hours, bus routes must be direct and serve major trip generators. This is both for the benefit of passengers (in reduced travel time) and the Department (in operating economies). From our current network (which includes many circuitous routes) it may be possible to extract an 'efficiency dividend' which can be used to provide more frequent services for more hours of the day over more days of the week.

Other planning principles include the desirability of providing access to nearby railway stations and regional shopping centres. Ideally routes should have trip generators at either end so that it can attract patronage in both directions. For example, a local route serving St Helena might run between Greensborough and Diamond Creek.

Except to augment capacity on major corridors or provide short-distance travel in suburban activity centres, route duplications should generally be kept to a minimum. However where they exist there are major opportunities to exploit overlaps to provide a more frequent combined service.

An example would be staggering the timing of two 40 minute routes to provide an even 20 minute service over the combined section. If the combined section is near a railway station, this would result in buses meeting every train, thus strengthening their 'rail feeder' function. If connections are poor, this can be overcome by bringing all services forward or back by ten minutes or so.

Headway harmonisation has similar benefits. If all buses in the area are either every 20 or 40 minutes this provides consistent connections that are not possible with a mix of 25, 40 and 60 minute services (which exists at the moment). Any excessive dwell time could be modified by shortening or lengthening the bus route.

Harmonised headways are no cure; unless all services are frequent some connections may be poor. However this would be a lower risk for connections with major routes (due to their frequency) and at least it would be consistent. In addition there is the possibility of remedy if the connection is deemed important enough. Opportunities for bus to bus connections potentially exist at any point where two routes intersect, but are greatest at railway stations and near major shopping centres.

The following steps are advocated:

1. Identify key regional trip generators, interchanges and corridors
2. Identify the community's transport needs and undeveloped patronage opportunities.
3. Assess the strengths and weaknesses of the current network in relation to needs.
4. Design a network of 'primary' routes between major nodes, providing fast and frequent links from early morning to late at night.
5. Design a local network of well-connected 'secondary' routes catering for trips outside the primary network
6. Examine means to provide superior service. Possibilities include exploiting overlapping routes (ie timing two less frequent routes to provide a more frequent combined service), introducing a harmonised headway hierarchy, designing and exploiting connection opportunities, making routes more direct and extending service to a nearby interchange.

The role of various routes is shown in the table below:

Route type	Role	Days & Span	Frequency
Primary	<p>Links key railway stations, major activity centres, regional shopping centres and large education campuses.</p> <p>Also a feeder for major suburban areas remote from railway stations.</p> <p>Fast and direct along main roads.</p>	<p>Early morning until midnight seven days per week.</p> <p>NightRider services may overlap some primary routes, providing later services.</p>	<p>Peak: 10 or 15 min Day: 15 or 20 min Night: 20 or 30 min</p> <p>Services are train frequency or better at all times.</p>
Secondary	<p>Links residential suburbs to local railway stations and shopping areas.</p> <p>As direct as possible between and within suburbs.</p>	<p>Early morning until 9pm seven days per week.</p>	<p>Peak: 20 min Day: 20 (or 40) min Night: 30 or 60 min</p> <p>Consistent connections with every train or every second train.</p> <p>Headway harmonised.</p>
Tertiary	<p>Serve localities or destinations that are poorly served by primary and secondary routes.</p> <p>Circular, loop and/or unidirectional routes allowed.</p>	<p>Five or six days per week.</p> <p>Normally between morning and afternoon peak periods only</p>	<p>Every 40, 60 or 120 minutes.</p> <p>Between 2 and 10 services per day.</p> <p>Connections with selected trains only.</p>

Appendix Two: Historical, social and transport overview of Banyule and Nillumbik

The municipalities of Banyule and Nillumbik are located about 20km north-east of Melbourne.

Localities range from working-class suburbs such as Watsonia, Hillier and greener middle-class areas such as Eltham to homes on large 'lifestyle' blocks on the northern and eastern fringes. Residents jealously guard their leafy lifestyle and there is a strong preservationist ethos.

Compared to the rest of Melbourne the area contains more middle-income earners and fewer lower income earners. Families with children and married couples are the dominant household type and car ownership is above-average in most areas. Housing is predominantly detached and the area is more ethnically homogeneous than other parts of Melbourne.

Unlike Whittlesea, Banyule and Nillumbik are not considered major population growth areas. The area is primarily residential and lacks many large-scale educational and industrial facilities seen in other suburbs.

Greensborough is the area's main shopping centre, with smaller centres near most railway stations. There are also car-based centres, for instance at Watsonia. In addition there is significant traffic outside the area to Northland.

The public transport spine of both municipalities is the Hurstbridge line. A full suburban service operates until Eltham, with every second train extending to Hurstbridge. Important bus interchanges are located Heidelberg and Greensborough, with interchange opportunities also provided at other stations.