

SUBMISSION

Review of bus services in Casey & Greater Dandenong

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

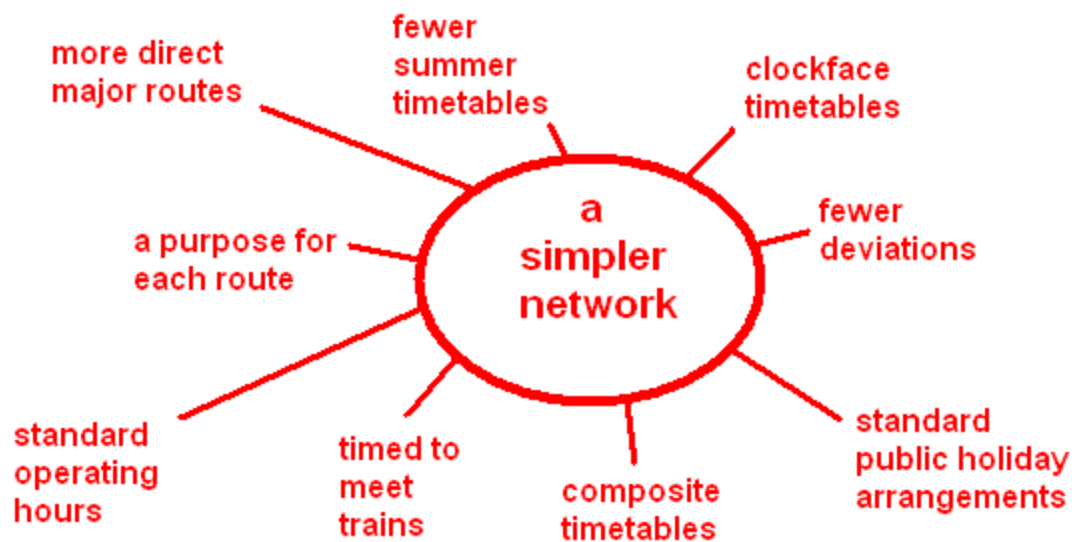
The recently-announced area reviews of metropolitan bus services are welcome. They potentially present a 'once in a generation' opportunity to make public transport a mode of choice for the sixty per cent of Melburnians beyond walking distance of fixed rail services.

This submission makes several recommendations to make buses in Cardinia and Casey simpler, more convenient and better connected.

The general recommendations advocate a network of major and local routes with a purpose and status for each. I advocate a simpler network with fewer variations in service levels and public holiday arrangements. Connections and frequencies are improved through headway harmonisation with trains and co-scheduling related routes along combined corridors.

This submission recommends improved access through local route changes which are listed in detail later. The biggest improvements are recommended to a dozen or so existing major non-SmartBus routes as increased services on these will be the major driver of future patronage growth.

Contained in the appendices is an introduction to the area, an approach to service planning, and a list of major trip generators.



General recommendations

The following six recommendations apply across the study area:

1. All timetables in the study area were reviewed. We found that the existing network is too complex and discourages passengers. The major sources of this were (i) indirect routes and (ii) occasional deviations or variations on a route. Some routes are not conducive to legibility and we recommend splitting them for clarity and better connections with trains. We found cases where removing deviations and modifying adjacent routes to make them more direct could make a simpler network without sacrificing coverage and provide examples later.

Recommendation 1: Untangle the existing bus network by straightening routes and reducing the number of route deviations.

2. Routes appear to have grown organically and their rationale for existence may have been lost or obscured by later alterations. Routes may also have multiple purposes incompatible with each other making it hard to provide a legible network or set an appropriate service level. A major part of this review should be to assign a function or purpose for each route (eg local service for suburb A connecting with B and C).

Recommendation 2: Each route has a purpose

3. At the moment there is no consistency between operating days, hours and service frequencies across routes. For example, one route might have service until late on weeknights but nothing on a Sunday, while another might run 7-days but not evenings. This confuses passengers and makes concise service information hard to provide. It also means that bus services are perceived as uniformly low quality when that is not the case.

We accept varying service levels as not all routes are equal. For example, a direct main-road route to a university or large shopping centre justifies more service than one serving a small residential pocket or semi-rural area. However the number of service variations needs to be cut from dozens to about three to simplify the network. We propose that the more important routes be designated 'primary' status. Most of the others would be labelled 'secondary'. A few routes that serve special needs (eg peak-only or serve an isolated pocket) would be 'tertiary' with a lower service level.

Recommendation 3: Each route has a status: primary, secondary or tertiary

3. Once we know a route's purpose and status, we can then determine its service level, choosing from a small menu of spans and frequencies compatible with trains. As a general rule more direct routes and/or those serving major trip generators or corridors would have a higher status than local routes. Primary routes could be at train service frequencies to provide reliable connections while secondary routes could mesh with every second train as per the table below:

Suggested service frequency menu of bus routes by status

Route	M-F day	M-F even	Sat day	Sat even	Sun day	Sun even
Train	15	30	20	30	20	30-40
Primary	15	30	20	30	20	30-40
Secondary	30 or 60	60	40 or 60	60	40 or 60	40 or 60
Tertiary	varies	-	-	-	-	-

Spans: Primary: finishes midnight approx, Secondary: finishes 9pm (ie MOTC), Tertiary: varies

4. This submission recommends that spans would be broadly similar within each status group. The only exception would be for secondary routes that serve a major area that is very remote from trains or other primary routes; in this case some after 9pm services are recommended. There could be more flexibility with frequencies but they would almost always be from the above menu to properly connect with trains. For example, a popular secondary route serving a major shopping centre might run every 20 minutes on the weekends. Conversely two closely related secondary routes in low-density areas could each operate every 60 minutes, providing a combined 30 minute service in most areas. Service on the small number of tertiary routes would vary according to need.

Recommendation 4: Introduce consistent operating hours across primary and secondary routes with frequencies set to harmonise with trains. Operate primary routes to meet every off-peak train and secondary routes to meet every second off-peak train Monday to Sunday.

5. As part of this study, staffed suburban railway stations were audited for bus timetable availability. Across Melbourne, we found that 'in-stock' rates varied from 0% (Cranbourne), 40% (Box Hill), 60% (Broadmeadows) to 80% (Frankston). These results demonstrate that passengers would probably not be able to obtain a desired timetable. In addition the latest timetable was not always stocked. These statistics fall short of best-practice as seen in Perth where near 100% availability was observed during a transport study there in 2007.

Recommendation 5: A proper bus timetable distribution system backed by regular in-stock and currency audits be instituted at all premium and host railway stations.

6. Paper timetables examined were in either pocket or DL size. Pocket timetables pose considerable problems in storage and display for railway stations, and so are often concealed from passengers. Similarly brochure racks at community facilities almost invariably support DL-format but not any other size.

Recommendation 6: DL-format be adopted as the Melbourne-wide standard for all bus timetables, with all to be in that size from 2009.

Recommendations by aim

Aim of change	Achieved by
GREATER DANDENONG	
Simplify Cheltenham – Dandenong route numbering to have one major route per main road	<p>A single route number for Dandenong – Hampton (827 suggested)</p> <p>A single route number for Dandenong – Brighton (812 suggested)</p>
Full-time operation in Clayton South industrial area.	Achieved by replacing infrequent service along Fairbank Rd with a secondary service via a revised Route 811 linking it with Clayton, Springvale and Noble Park.
A fast north-south service along Clayton and Boundary Rds.	Achieved by operating Route 705 as a north-south service between Mordialloc and Clayton via Boundary Rd.
Better access to Monash Univesity from the Mordialloc area.	Service to Springvale is retained by changing other routes (see above).
Improved service to industrial areas and provides a beach bus for Clayton area.	
A major direct link between Clayton Station and Waverley Gardens.	<p>Extend Route 824 to Waverley Gardens. This provides a fast route to Clayton and Moorabbin.</p> <p>Clayton – Keysborough is served by an extended Route 704.</p>
Provide fast north-south link from Dandenong/Waverley Gardens to Glen Waverley	<p>Extend 814 from Waverley Gardens direct to Glen Waverley via Jells Rd and Waverley Rd.</p> <p>(The existence of this route allows limited stop operation of 754 via Jells Rd and Waverley Rd during peak hour if desired)</p>
Provide coverage to transport-starved Noble Park North.	Extend Route 815 to Waverley Gardens via Dunblane Rd.
Provide a missing north-south link between Noble Park/Keysborough and Waverley Gardens.	
Straighten routes in the Keysborough area by providing direct services via Corrigan, Bloomfield and Chandler Rds.	Route 813 to become direct route for Corrigan, 815 for Bloomfield and 812 for Chandler Rds.
Taking advantage of Waverley Gardens as a convenient transport interchange.	<p>Extend various routes to Waverley Gardens (discussed elsewhere).</p> <p>Provide a direct link to Clayton (824 proposal discussed elsewhere).</p> <p>Provide clearer links to Monash University. Remove 691 peak extension (which had a stopping restriction so couldn't be boarded from Waverley Gardens anyway). If demand warrants, add additional 631 services.</p>
Improving train connections by splitting routes	827/828 to operate as independent routes. 827 Hampton – Dandenong. 828 Dandenong – Fountain Gate (and Pakenham if joined with 926).

Aim of change	Achieved by
<p>Improve access to quality services for residents of Endeavour Hills, Narre Warren and Cranbourne</p> <p>Provide Endeavour Hills – Fountain Gate Shopping Centre link.</p> <p>Provide 'every train' feeder between Narre Warren Station and Fountain Gate.</p> <p>Improve late night services.</p>	<p>Provide enhanced Route 841 operating Dandenong – Endeavour Hills – Fountain Gate – Narre Warren Station with every second service extending to Cranbourne.</p> <p>Achieve this by straightening 841 (deviation swapped with 834/835, amalgamating 841 and 842).</p> <p>Operate proposed enhanced 841 until last two trains on Friday and Saturday nights to provide partial substitute for NightRider (which currently terminates at Dandenong).</p>
CASEY	
<p>Provide high quality link between Cranbourne and Frankston</p>	<p>Operate 789/790/791 as combined group at train service frequencies, connecting with trains at Frankston and Cranbourne.</p>
<p>Provide high quality train feeder service between Cranbourne and Centro Cranbourne Shopping Centre.</p>	<p>Remove Cranbourne west extensions of these routes – make local route.</p>
<p>Increased directness on a major route.</p>	<p>Swap Fleetwood Dr deviation of 841 and 834/835.</p>
<p>Improved legibility</p>	<p>Scrap circular 896 TrainLink service and replace with linear routes.</p>
ALL AREAS	
<p>Create a grid of high frequency routes within 30 minutes walk of most residents by upgrading selected main road routes.</p>	<p>Upgrade service levels on major non-SmartBus routes to primary level. Routes recommended for upgrade are identified as 'P' in the next section.</p> <p>Where no suitable primary routes are nearby, make use of two or more secondary routes to provide the required frequency and add some after 9pm services to the most important of these routes.</p>

Service co-ordination: The Werribee model

It's not necessary to travel to overseas or interstate to find good train/bus co-ordination as there are some examples closer to home.

In Melbourne, Werribee/Hoppers Crossing is an effective model of a properly headway harmonised and co-ordinated intermodal network*.

Buses connect with every second train at either Werribee and Hoppers Crossing interchange. Buses arrive, exchange passengers with the train and then leave. Since this is rare in Melbourne, this needs to be explained so that the meticulous scheduling of the current Werribee/Hoppers Crossing bus network is preserved.

The first requirement is that services are headway harmonised, ie if trains are every 20 minutes, buses are either every 20 or 40 minutes. 60 minute buses can qualify but they do not reliably connect if some routes run every 40 minutes. Also two co-scheduled 60 minutes services would provide a combined 30 minute service – undesirable where trains run every 20 minutes. Hence 20 or 40 minute frequencies are the only harmonised choices except at night where 30 and 60 minute frequencies are preferable.

The second requirement is the actual times of buses compared with trains. Headway harmonisation is of little use if the bus leaves a minute before the train arrives.

Thirdly consideration needs to be given whether the same bus can be used for connections in multiple directions. This is easier at intermediate stations where up and down trains cross and termini where the bus and train can exchange passengers.

Fourthly, where buses serve two or more railway stations, trip lengths may need to be adjusted to provide good connections at both stations.

Inspection of timetables indicates that great care has been given to planning trip lengths. For example, short routes, eg 441 and 443, are timed to return to the terminus within 20 minutes of departure. This allows a potential service frequency of 20 minutes (meeting every train), though 40 minutes (every second train) is chosen to allow the bus to run another route (also co-ordinated with alternate trains).

Longer routes (eg 436, 437) serving both Hoppers Crossing and Werribee have run times of a little under 40 minutes. In conjunction with the standard 40 minute frequency this allows good fleet utilisation. It might not be an accident but it also happens that train/bus connections at both Werribee and Hoppers Crossing are consistently good – a rare achievement where routes serve two or more stations.

While the focus here has been on bus-train transfers, a timed transfer network as currently exists is also helpful for bus-bus transfers. While connection times may not be as consistently good between all routes at other interchange points (eg Werribee Plaza), headway harmonisation ensures that there are sufficient good and consistently occurring connections to for it also to form a useful interchange point.

The author supports its adoption for Casey/Greater Dandenong, which has many similarities to Werribee. The only change required is that weekday services should operate to a 15/30/60 minute headway hierarchy due to different train timetables.

(*) Comments above mostly apply to Monday to Saturday daytime services. Sunday and evening services (where operated) are typically hourly and, despite headway harmonisation, good connections are less assured.

Recommendations by route

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. See Appendix Four for a map.

Route	Purpose	Status	Recommendations
631	Defined as Waverley Gardens – Monash – Clayton – Southland local route.	S	No change.
691	Redefine as Bayswater/Boronia – Waverley Gardens local route	S	Simplify route by removing the Waverley Gardens - Monash University peak extension. This function is provided by Route 900 from the Knox area and 631 from Waverley Gardens.
705	Redefine as Mordialloc – Clayton north-south local route	S	Swap destinations with Route 821 as follows: Operate to Clayton instead of Springvale to provide strong N-S route via Boundary Rd. Fairbank Rd service to Springvale is provided by revised Route 811. This allow 821 to be abolished as it duplicates other routes.
800	Defined as Chadstone – Dandenong Princes Hwy local route.	S	
802	Defined as local Dandenong – Chadstone route as part of 804 and 862 group.	S	Operate at 45 min frequency weekdays and 60 min frequency weekends to provide 'every train' connection for combined group at Oakleigh and Dandenong.
804	Defined as local Dandenong – Chadstone route as part of 802 and 862 group.	S	Reroute in Wheelers Hill area (Garnett & Marykirk Dr) to compensate for the removal of 754. Operate at 45 min frequency weekdays and 60 min frequency weekends to provide 'every train' connection for combined group at Oakleigh and Dandenong.
811	Redefined as Clayton – Springvale Noble Park – Dandenong local route	S	Operates from Clayton Station – Clayton Rd – Fairbank Rd – Windsor Av – Springvale – Noble Park then as per existing route to Dandenong.
812	Redefined as primary route between Brighton and Dandenong	P	Operate as one route number to reduce confusion.
813	Redefined as local route between Waverley Gardens and	S	Reroute to operate to southern end of Corrigan Rd.

Route	Purpose	Status	Recommendations
	Parkmore Keysborough via Springvale		<p>This replaces rerouted 812 and provides a more direct service.</p> <p>Schedule to connect with trains at Springvale.</p>
814	Define as local route	S	<p>Delete portion of route via Police Rd to Springvale as this duplicates proposed extended 811 and 824.</p> <p>Extend to Glen Waverley Station via Jells Rd – this would provide a new N-S connection, allow interchange with 900 at Wellington Rd and permit limited stop operation on the revised 754.</p>
815	Redefine as Waveley Gardens – Noble Park – Parkmore Keysborough local route	S	<p>Reroute in Noble Park: operate via Bloomfield Rd (instead of Buckley St) south of Modemere St to replace rerouted 812.</p> <p>Provide north-south link to Noble Park North and Waverley Gardens by extending via Dunblane Rd.</p>
821	Delete	-	Current route duplicates 631 and 705 (which is recommended for improvement).
824	Redefine as major east west route from Moorabbin to Waverley Gardens	P	<p>Extend from Clayton to Waverley Gardens via Centre Rd (or via Rosebank Av to avoid level crossing).</p> <p>Operate existing Clayton – Keysborough portion of 824 as Route 704 service, extending from Oakleigh.</p>
827	Redefine as major Hampton to Dandenong route	P	Split existing route at Dandenong. Western portion is labelled 827.
828	Redefine as local Dandenong to Narre Warren/Pakenham route.	S	<p>Split existing route at Dandenong.</p> <p>Eastern portion is labelled 828 and amalgamated with 926 to provide a Dandenong – Pakenham route paralleling Princes Hwy.</p> <p>Saffron Dr portion could operate as Route 829.</p>
841 (outside review area)	Redefine as a Dandenong – Endeavour Hills – Fountain Gate – Narre Warren – Cranbourne SmartBus operating along a direct route to bring quality transport to a large area without it.	P	<p>Make super route Dandenong – Endeavour Hills – Fountain Gate – Cranbourne. Run at train frequency between Dandenong and Fountain Gate (15 min weekdays, 20 min weekends) to meet every train at Dandenong and extend every second service to Cranbourne.</p> <p>Operating span would be superior to</p>

Route	Purpose	Status	Recommendations
			'minimum hours' with the last departure from Dandenong no earlier than 11pm.
843	Define as local route	S	
844	Define as local route	S	
845	Define as local route	S	
848	Redefine as local route between Dandenong and Glen Waverley	S	Extend to Glen Waverley via Lum Rd & Gallaghers Rd. (Brandon Park remains served by extended 850).
849	Define as local route	S	
850	Redefined as direct Waverley Gardens – Glen Waverley local route	S	Re route from Brandon Park to Glen Waverley via Fraser St & Myrtle St area of Glen Waverley.
857	Defined as Chelsea – Dandenong local route	S	
861	Define as local route	S	Renumber as 846 for legibility.
862	Defined as local Dandenong – Chadstone route as part of 802 and 804 group.	S	Renumber route to 803 to show this route as part of a combined group. Operate at 45 min frequency weekdays and 60 min frequency weekends to provide 'every train' connection for combined group at Oakleigh and Dandenong.
885	Defined as local route Springvale – Glen Waverley	S	
888	Defined as primary Nunawading – Springvale – Chelsea route via Springvale Rd.	P	Increase service to train frequency 7 days per week. Use a single route number down Springvale Rd for legibility. Implement bus priority along Springvale Rd.
889	Redefined as local Chelsea – Edithvale route.	S	Consider occasional extension to Mordialloc to replace 700 Chelsea extension.
892	Define as local route	S	
893	Define as local route	S	
901	Defined as Ringwood – Dandenong – Frankston primary route.	P	Increase weekend services to 20 minutes (train frequency) to provide reliable connections. Implement common evening timetable (currently Monday – Friday and Saturday departure times are different).

(*) Status key: P = primary, S = secondary, T = tertiary. Where routes are in a group the overall service status recommended generally relates the the entire group rather than each constituent route.

Other matters

Although this review concerns bus routes and services, several external matters impinge on bus service delivery and potential patronage. These include:

- Pedestrian access to bus stops. Due to road planning that favoured roundabouts over traffic lights, major roads have become a continual stream of cars, reducing access to many bus stops. Attention needs to be given to making every single bus stop quickly and safely accessible on foot at any time of day. A program to eliminate or modify roundabouts to improve pedestrian access to bus stops in both new and established areas is recommended. Use could be made of traffic islands, zebra crossings at roundabout entrances or lights with an emphasis on low cost and fast installation as hundreds of sites could be involved. The importance of this only increases if the review recommends more direct bus routes along major roads.
- Safety, amenity and efficiency. Especially in Casey, the most suitable roads for direct bus routes can be unsafe, inaccessible and uninviting because of the trend to build these as controlled access highways faced only by walls. Local street layouts in post-1960s estates do not always allow efficient transit routing or pedestrian access. Redevelopment of older areas and the revision of urban design rules to prevent this occurring in new estates is recommended.
- Extend Dandenong NightRider to at least Berwick and add extra services where required by capacity.
- Improved passenger information at interchanges. Metlink signage has given most bus stops a uniform 'look'. The next stage is local area transport information, particularly at interchanges.

Conclusion

Described is an approach with suggested changes that would go a long way to improving public transport service quality and thus patronage in Casey and Greater Dandenong. 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, serving local corridors and providing direct feeder services.

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.

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 might operate between Dandenong, Endeavour Hills and continue to Fountain Gate.

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 30 minute routes to provide an even 15 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 15, 30 or 60 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 co-scheduling 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 Casey and Greater Dandenong

Casey is located on Melbourne's south-eastern outskirts about 40 kilometres from the CBD. It is a designated growth area and regularly features in the list of Australia's fastest growing local government areas. Settlement has spread from Berwick and Cranbourne to most areas in between. Retail is dominated by Fountain Gate Shopping Centre supplemented by smaller centres at Endeavour Hills, Cranbourne, Cranbourne North and Narre Warren South. 'Main street' shopping is weaker than in inner suburbs but exists at Cranbourne, Narre Warren and Berwick. Casey has more younger families, more affordable housing, more first homebuyers and more cars per household compared to the Melbourne average.

Transport in Casey is provided by the Cranbourne and Pakenham rail lines (trains every 30 – 60 min) supplemented by local buses. Major hubs are Berwick, Narre Warren, Cranbourne and Fountain Gate. Cranbourne is one of two areas with a TrainLink bus, meeting every train.

Greater Dandenong is about 30 kilometres south-east of the Melbourne CBD. Unlike Casey it is largely older established housing. Formerly an agricultural settlement, Dandenong industrialised rapidly in the 1950s, predominantly around the motor industry. Main shopping areas are Dandenong CBD, Springvale, Keysborough and Noble Park.

Dandenong lost prestige in the last 30 years as blue collar employment declined and Fountain Gate took business away from its shopping strip. Its rail junction role became less significant as more transport was handled by cars and trucks. Compared to Casey, Greater Dandenong is more ethnically diverse, has lower incomes and more households without cars. Along with the Braybrook-Sunshine-St Albans axis, Greater Dandenong has one of the two largest concentrations of socio-economic disadvantage in Melbourne. Even cash-strapped first homebuyers have tended to overlook Greater Dandenong suburbs such as Noble Park in favour of newer parts of Casey. Successive governments have tried to revive central Dandenong (such as the current 'Transit City' plans) but like all urban regeneration efforts it will only have a lasting impact if backed by jobs and private-sector investment.

Greater Dandenong's main public transport hub is the railway station and bus interchange. This is located near but not in the main part of the Dandenong CBD. All Cranbourne, Pakenham and country Latrobe Valley/Gippsland trains stop at Dandenong Station. Buses to all parts of Greater Dandenong operate from the bus interchange, with services to Frankston, Knox and Ringwood being provided by the new Route 901 SmartBus.

Other major interchanges are Springvale (trains, local buses and 888/9 SmartBus), Noble Park (trains, buses), Keysborough (buses) and Endeavour Hills (buses). Typical bus routes ran hourly until 7pm, though recent upgrades have seen many operate until 9pm seven days per week.

Appendix Three: Key trip generators in and near Casey/Greater Dandenong

The following table shows current transport provision to key trip generators and transport nodes within and adjoining the review area.

	Train	SmartBus	Min hours bus (9pm finish Mon - Sun)	Limited bus (<9pm finish)
Berwick Marketplace	< 1km			✓
Casey Central SC				✓
Casey Hospital	< 1km			✓
Centro Cranbourne				✓
Dandenong CBD	✓	✓		✓
Dandenong TAFE		✓		✓
Dandenong Hosp		✓	✓	✓
Dandenong Plaza	< 1km	✓		✓
Endeavour Hills SC				✓
Fountain Gate SC				✓
Haileybury College		✓		✓
Monash Berwick	✓		✓	✓
Parkmore SC			✓	✓
Springvale	✓	✓	✓	✓

This submission supports seven day service and increased frequency to improve links between these key trip generators.

Appendix Four: Map

The map below shows suggested altered routes in the Springvale/Dandenong area. Routes not shown are not proposed for change.

