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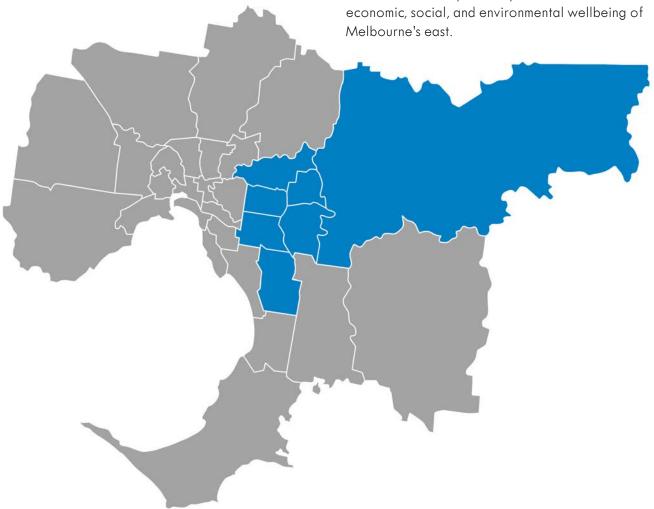
## **Our Vision for Melbourne's East**

Eastern Melbourne comprises the cities of Greater Dandenong, Knox, Manningham, Maroondah, Monash, Whitehorse, and the Yarra Ranges shire.

We want Melbourne's east to be Australia's most liveable urban region where people build the best future for themselves, their families, and their businesses.

To realise our vision Melbourne's East needs better public transport so our communities and businesses are connected by world class transport connections that protect liveability, ensure sustainability, and promote economic growth.

That's why we formed the Eastern Transport
Coalition (ETC) to advocate for sustainable
and integrated transport services that reduce
the level of car dependency and secure the
economic, social, and environmental wellbeing of





## **The Transport Challenge**

Like most urban areas in Australia Melbourne's East is facing compounding major challenges, including the need to accommodate a growing population and an ageing community.

Population growth is forecast to bring the region's population to well over 1.2 million by 2031, just eight years away. This will see an increase to the region's existing 400,000 jobs and \$36.3 billion of expenditure on goods and services sourced within the region today.

Our economy is vibrant and delivers approximately \$106 billion in total sales, \$23 billion in exports and \$2.6 billion in tourist revenue with over four million visitors per annum.

To preserve the region's economic promise, Melbourne's east needs improvements in our transport network that can handle the expected increase in both freight and commuter movement. Without investment that recognises the changing patterns of commuting within and to our region, our communities and businesses will become increasingly isolated by an outdated and disjointed public and private transport network.

Securing better transport connectivity is an investment in the productivity and efficiency of an economy that is thriving, diverse and competitive.

## The work of the Eastern Transport Coalition

The Eastern Transport Coalition is keen to work in partnership with the State and Federal governments to ensure the future sustainability of Melbourne's eastern region, preserve the region's economic promise and ensure the wellbeing of our residents.

The ETC transport plan is informed by member councils' Integrated Transport Strategies, the recommendations of Infrastructure Victoria's 30-year infrastructure strategy and the Victorian Government's Plan Melbourne together with other locally identified needs and solutions.



## **Focus of Priorities**

The projects in our transport plan improve the connectivity, liveability, productivity and sustainability of Melbourne's east. These projects have community, stakeholder and Council support and now need investment from the State Government.

### Liveability

Melbourne's population growth is not being matched by investment and enhancement of our public transport system. To maintain Melbourne's liveability, our rail, tram, and rapid bus services must be provided to the many areas that have developed without good public transport. We also need to maximise walking and cycling opportunities. Easier access transport modes other than cars improve travel times and make Melbourne a safer community and are crucial to realising Plan Melbourne's concept of 20-minute neighbourhoods.

### **Connectivity**

Connectivity in transport improves mobility, provides better and easier access to trade, social services, employment, and opportunities for the community. Improved connectivity delivers better productivity, while families enjoy shorter, more reliable travel times.

Many suburban centres are not properly serviced by the broader public transport network and the lack of convenient and regular connections remains one of the greatest barriers to using public transport, especially in the commute to work. Commuters who wish to 'park and ride' are often unable to do so with limited parking at stations.

### **Productivity and Efficiency**

Congestion is one of the biggest issues facing Melbourne and our region. Solutions that increase capacity and improve operational productivity on the road and rail networks will increase the efficiency of the entire transport system.

### **Sustainability**

With Melbourne's population forecast to double in the next 30 years, and acknowledging that doubling our road network is not possible, we need urgent and substantial investment to provide our residents and visitors with alternative forms of mass transit. Melbourne needs forward-thinking transport policies for a sustainable city. Melbourne's transport system is at risk of failure if solutions are not put in place to solve our large (and small) transport infrastructure challenges. These decisions should be based on long-term planning to ensure the efficient movement of people and products and that our transport system is safe and sustainable (economically and environmentally).





## **Our Transport Priorities**

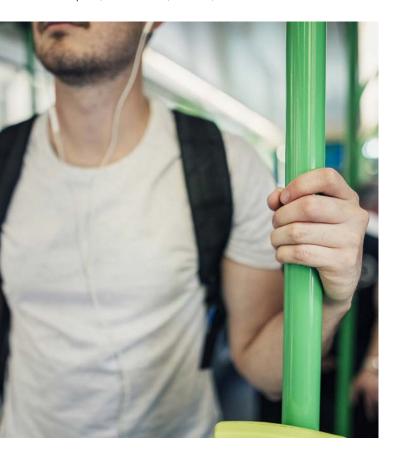
### **Rail and Tram**

### **Snapshot**

Demand continues to grow, placing strain on our trains. Reliability is reduced by a shortage of rolling stock and the regular cancellation of services during peak periods due to signal failure.

Tram lines stop short of the outer suburbs, limiting connectivity between modes of transport, and making public transport less attractive. As an increasing population fills up our roads with private vehicles, slowing up the trams that share these roads, creates a vicious cycle.

The following projects fill important gaps, extend existing transport system, and improve access to jobs, education, health, and other services.



## **Caulfield - Rowville Trackless Rapid Transit (TRT)**

We strongly believe that a business case is urgently needed for the Caulfield-Rowville Trackless Rapid Transit (TRT), an innovative transport solution for Melbourne's south-east, jointly proposed by Monash University and Vicinity Centres. The project would improve access to jobs and services by providing a cost-effective transport link between Caulfield and Rowville. In addition, it would complement the proposed Suburban Rail Loop perfectly in and around the Monash Employment and Innovation Cluster by providing critical east-west transport links.

High capacity electric TRT vehicles could move up to 1,800 passengers per hour in each direction using dedicated lanes along a 19km route from Caulfield to Rowville via Chadstone and Monash University Clayton. The TRT would travel along Dandenong Road, Ferntree Gully Road and Blackburn Road between Caulfield and Monash Clayton (via Chadstone), and then via Wellington Road to Rowville.

Thirteen new stations are proposed, including at Carnegie, Oakleigh, Mount Waverley, Clayton, Mulgrave, and Wheelers Hill, as well as at Chadstone and Monash University. Most of these stations will interchange with existing public transport services on the bus and train network, making it easier for people in the south-east to connect with jobs, services, amenities, and each other.

Caulfield-Rowville TRT is a genuine alternative to trains and trams: cheaper, faster to deliver and just as effective but more importantly can be delivered in a much quicker timeframe to address the critical transport needs of one of Melbourne's largest education, health and employment precinct.



### **Duplication of the Lilydale Rail Line**

Duplicate the line from Mooroolbark Train Station to Lilydale is urgently required to enable more services to operate and improve performance on the overall network as trains would not be delayed while waiting for the track to become available.

Passengers that board the train from Lilydale Station come from across the Yarra Valley<sup>1</sup>. In the morning peak the frequency of scheduled outbound services which arrive at Lilydale Station is up to 34 minutes. This is often not appealing for users who could use the train for work or study.

The final 4.4km section is a single track and is operating at its maximum capacity during weekday peak periods. To maximise services beyond Ringwood, three AM peak services and one PM peak service every day turn back at Mooroolbark. Reliability is also further reduced as some Lilydale bound trains are forced to terminate at Mooroolbark which also means delays for passengers wanting to access the service from Lilydale.

It is also our understanding that the PTV plan is to house new rolling stock at Coldstream which would further necessitate the duplication. It would also benefit the wider network when the proposed Cavehill Train Station is introduced as it would facilitate the movement of trains in both directions without delays caused by waiting trains.

## Route 75 Tram Extension along Burwood Hwy and Mountain Hwy

Fund a feasibility and economic impact study to either extend Route 75 from the Vermont South tram stop to Upper Ferntree Gully Station via Burwood Hwy and Bayswater Business Precinct via Mountain Hwy², or create a dedicated Trackless Tram offering

When connected to Upper Ferntree Gully Station via Burwood Hwy, the new route would be able to service the Burwood Hwy Employment Cluster, Knox Westfield Shopping Centre, and Swinburne University. Importantly, it would also connect tens of thousands of potential passengers to the heavy rail network at Upper Ferntree Gully.

The Mountain Hwy extension would improve connection to the Bayswater Business Precinct, the Wantirna Health Precinct, Knox Private Hospital, Wantirna Mall, Bayswater Activity Centre, and Mountain High Shopping Centre.



<sup>&</sup>lt;sup>1</sup> A survey of cars parked in the vicinity of Lilydale Train Station in August 2019 identified that passengers who drove accessed the station from various townships across the Yarra Valley including Wandin/ Seville/ Worri Yallock (14%), Warburton (5%), Healesville (10%), Yarra Glen (4%), Coldstream (4%) in addition to drivers from Lilydale (24%) and Chirnside Park (6%). While this does not include passengers who arrive by other means (e.g., walk, bike, taxi bus or dropped off), it identifies the wide area which this station services.

<sup>&</sup>lt;sup>2</sup> Tram Route 75 was to be extended into Knox as part of the proposed Stage 2 Masterplan. With a growing population in Knox, it is proposed that Route 75 now be extended along both Burwood Hwy and Mountain Hwy.



### **Buses**

### **Snapshot**

Bus services are infrequent, particularly at weekends. Poor planning around bus routes and safety around bus stops in peak hour traffic and at night make bus services less attractive. The resulting underuse of buses compared to private vehicles increases traffic congestion, vehicle costs and emissions. The easiest way to ease congestion and to improve patronage on the public transport more generally is to allow passengers to leave their car at home by providing frequent, direct routes than run until late and night and on weekends.

The following projects would improve patronage, make better use of existing resources, better connect existing services, improve access to jobs, education and services and support a significant growth in tourism.



### **On-Demand/FlexiRide Services**

### Manningham

Fund a 12-month pilot program to trial an On-Demand/FlexiRide bus service for the Manningham Mover, routes 280 and 282. These bus routes connect residents to areas beyond a regular bus service and to Manningham's local activity centres but are running at a significantly low patronage. An upgrade to an On-Demand/FlexiRide model could grow patronage and improve efficiency.

### Whitehorse

Fund a 12-month pilot program to trial a FlexiRide Service in Whitehorse for routes 735 and 765. These services connect residents to nearby activity centres but carry a low-medium level of patronage. An upgrade to a FlexiRide model could grow patronage and improve efficiency.

### **City of Greater Dandenong**

Fund a 12-month trial of a Dandenong South Demand Responsive Bus Service for the Dandenong South National Employment and Innovation Cluster (NEIC), one of Australia's largest manufacturing areas which employs more than 66,300 people.

Both the Pakenham and Cranbourne rail lines pass through Dandenong South but there are no passenger stations which means public transport access to Dandenong South is limited to four bus routes (857, 890, 892 and 901). As a result, more employees in the Dandenong NEIC need to drive to work.

A Demand Responsive Bus Service could improve catchment-reach and access to work for employees, reduce traffic congestion (particularly for freight) as well as increase the availability of workers to employers.



### Yarra Ranges - Mount Dandenong

Fund a 12-month pilot program to trial a Mount Dandenong On-Demand/FlexiRide bus services for Belgrave, Tecoma, Upwey, and Belgrave South communities and across Mt Dandenong. This would involve reallocating existing Routes 694, 696, 697 and 699 and providing additional services. The service would run between 6:00am and 9:00pm on weekdays and 8.00am and 6:00pm on weekends to service the community and provide connections to other services across the wider network.

Routes 697 and 699 service the Belgrave, Tecoma, Upwey and Belgrave South communities and Routes 969 and 694 are off-peak services across the southern side of Mt Dandenong. These routes currently have low patronage. Routes 694, 697 and 699 currently only operate on weekdays and Saturdays and Route 696 only operates on weekdays.

The proposed FlexiRide service would complement the existing Routes 663 and 688 which run around and across Mount Dandenong. It would serve both residents within the smaller communities and visitors to the various townships and the upcoming Ridgewalk Network, a network of 40km of trails and paths connecting townships across Mount Dandenong which is expected to have over one million visitors per year. Weekend 696 services will enable visitors to access the service from Belgrave instead of driving and parking in townships and National Parks which have limited parking facilities.

On-Demand/FlexiRide services would also have flow-on benefits including reduced dependency on car travel, less congested roads and parking areas and have a significant impact on the young, elderly, tourists, and other people who are unable to drive.

### Yarra Ranges – Healesville and Chum Creek

Fund a 12-month pilot program to trial an On-Demand/FlexiRide bus service for Route 687 from Healesville and Chum Creek. While there is local interest in the service there is low patronage because of a limited timetable.

A review of bus routes in the Upper Yarra Region by the Department of Transport includes a proposal to remove Route 687 and realignment of some services along Maroondah Highway. This would greatly reduce the proportion of the community that is able to access a bus service within 400 metres.

Alternatively, an On-Demand/FlexiRide service to cover the Healesville and Chum Creek would greatly increase the service area available for the community including the area in the vicinity of Maroondah Highway between Healesville-Koo Wee Rup Road and Healesville-Kinglake Road and north of Maroondah Highway. In addition, major developments occurring along Maroondah Highway as well as aged care residences between Healesville – Koo Wee Rup Road and the town centre would benefit from greater access to bus services. The service would run every day between 5:30am and 9:00pm to service the community and provide connections to other connecting services across the wider network.

The service would also have flow-on benefits by reducing dependency on car travel, making streets within the area safer and less congested and have a significant impact on the young, elderly, and other people who are unable to drive.



### **Knox - Baysie Shuttle**

Fund a 12 Month pilot program to trial an On-Demand/FlexiRide electric Baysie Shuttle bus service commencing at Bayswater Station to improve connections to the Bayswater Business Precinct and the local residential area. The service would allow an estimated 10,500+ employees and residents to travel between businesses and services. The service would run between 5:30am and 9:00pm to cater for varying worker shifts with a peak period frequency of 10 minutes to be able to compete with the equivalent car travel time.

About 33% of employees within the Bayswater Business Precinct live within the same or adjacent suburb. Based on a transport survey completed in 2019, the lack of available public transport within the Bayswater Business Precinct deters younger employees. The new On-Demand/FlexiRide service will provide a reliable last-kilometre public transport service.

The Baysie Shuttle is expected to have flow-on benefits by reducing car parking demands in the area, making streets within the area safer and less congested.





### **Buses - New Services**

### Manningham – Templestowe Road Bus Service

Fund a new regular and direct bus route along the Templestowe Road corridor between The Pines Shopping Centre and Heidelberg railway station to connect to the Heidelberg Activity Centre, the Latrobe National Employment and Innovation Cluster (including LaTrobe University) and Heide Museum.

This should be a premium bus route well integrated with the Heidelberg Station Train timetable (Hurstbridge Line) that offers a weekday frequency of 10-15 mins; a weekend frequency of 20 mins; a weekday service span from 5:00am to 12:45am (to integrate with Hurstbridge Timetable), and a 24/7 weekend service span (to integrate with Hurstbridge Timetable).





### Whitehorse – Canterbury Road Bus Service

Fund a feasibility study and business case for a new bus route along the Canterbury Road corridor between Box Hill and Heathmont.

Canterbury Road is a major east-west corridor with several activity centres and employment areas. It has the potential to provide a trunk bus service that connects to other high frequency north-south bus routes, which would help to create an intuitive grid network of public transport services.

Canterbury Road currently has very limited bus services, except for some localised portions of specific routes. It also lies between the key public transport services of the Belgrave-Lilydale train line and Tram 75 on Burwood Highway. There is potential to re-direct bus route 732 along this route as this route duplicates the services provided by Tram 75. There is also potential to join this proposed route with bus route 679 to continue further along Canterbury Road to the Bayswater Business Precinct.



### Maroondah - Ringwood Circuit Bus

Fund a feasibility study and business case to pilot a new circuit bus route to connect Ringwood's intensifying residential areas to the railway station, schools, community centres, arts, and sports venues.

Although buses move through Ringwood, the radial route alignments are unsuited for simple and quick access by residents to important Ringwood destinations. Several Ringwood destinations are located beyond a short walk (400 metres) from the nearest bus stop. Consequently, a high proportion of vehicles parked at Ringwood Station and major venues are Ringwood residents. The car parks are full at Ringwood Station by 7:00am and at Aquanation between 8:30 and 10:30am and 3:00 and 6:30pm.

A new circuit bus route should offer a weekday frequency of 15 mins, a weekend frequency of 30 mins, a weekday service span from 5:00am - 9:00pm (to integrate with Ringwood Station Timetable) and a 24/7 weekend service span (to integrate with Ringwood Station Timetable).





### City of Greater Dandenong – Monash University to Narre Warren

Fund a feasibility study and business case to establish a new bus route between Monash University and Narre Warren via Dandenong South to better connect Keysborough and Hampton Park to jobs and education.

The new bus service from Monash University to Narre Warren via Dandenong South and residential areas in Springvale, Noble Park, Keysborough South, Hampton Park, and Hampton Park will connect two National Employment and Innovation Clusters (Monash and Dandenong), improving access to jobs and education in the region and linking key employee catchments.

Costs could also be reduced by considering realigning the current 885 bus route which travels between Glen Waverley and Springvale, via Wanda Street.

Since SmartBus Route 902 already connects to Glen Waverley Shopping Precinct via Springvale Road, most of the Bus Route 885 is already covered by frequent routes. This presents an opportunity to better use existing resources.



### **Knox - Stud Park to Bayswater Station**

Fund a feasibility study and business case to establish a new bus route between Bayswater Station and Stud Park via Henderson Road to improve access throughout Knox. A version of this route was initially proposed as part of the state government's Bus Service Review in 2010. With the completion of the Henderson Road Bridge, the route will connect Bayswater Train Station to Stud Park Shopping Centre via Scoresby Road, Ferntree Gully Road, Henderson Road, Kelletts Road and Stud Road.

This route would address the public transport service gap along Scoresby Road for over 23,000 employees and over 25,000 residents. The proposed service is an 11km route that would operate between 5:30am to 9:00pm with a peak service internal of 15 minutes and off-peak of 25 minutes.

In Stage 2 and Stage 3 the proposed route could be extended into Croydon and Dandenong South to improve connections between residential and employment precincts.



### Buses - Route Re-alignment/ Extensions

### Maroondah – Route 688 Mt Dandenong Road Extension

Fund a feasibility study and business case to extend the bus route 688 along the Mt Dandenong Road to Ringwood Station to provide quick and direct access to Maroondah Medical Precinct and Ringwood Private Hospital for employees, patients and visitors to the hospitals and allied medical services. Buses would run every 20-minutes, seven-day-aweek and cover the opening hours of the hospitals. The hospitals are major jobs and service centres that attract a significant number of visits. Maroondah hospitals and allied services alone has 9,962 employees, 790 volunteers and approximately 50,000 individual patient presentations.

The extension would service the entire Mt Dandenong corridor between Ringwood and Croydon Stations and better connect the important activity and medical precincts, Swinburne TAFE, and local shops.

### Maroondah - Route 664 realignment

Implement a minor route deviation along The Range Boulevard into The Range Estate and instal signals and new bus stops at Dorset Road and The Range Boulevard to bring the bus service closer to the front doors of more households and make access convenient. The proposed route has been tested with the Department of Transport and the intersection signalisation and new bus stops will permit route diversion.

The Range Estate contains 400 households and a population of 1,120 people. The residents living at the rear of the estate have a 15-minute walk to the nearest bus stop on Dorset Road. The long walk is a deterrent to catching the bus.



## City of Greater Dandenong – Linking services through CBD

Combine existing routes to provide a continuous service via Dandenong CBD. There are currently 22 bus services which stop at Dandenong train station bus interchange, with 20 of these terminating. Only two services continue beyond Dandenong. There is opportunity to combine some of these routes to provide better service by reducing the need for bus users to change between buses.

### City of Greater Dandenong – Springvale Junction to Monash University

Review bus route 814 and extend it from Springvale Junction to Monash University and reinvest the savings into Springvale South services. The existing 814 route is an indirect and convoluted route connecting Springvale to Dandenong via Waverley Gardens. Many other routes and the rail line already cater for this connection. Extending the 814 from Springvale Junction to Monash University/Monash NEIC will provide a better connection to education and jobs. Whilst this will reduce services to Springvale South, savings could be reinvested to other services through this area such as bus route 811.



## Knox – Realign Route 75 (A, B, C, D) and conversion to On-Demand/FlexiRide

Fund a feasibility study and business case to redesign route 745 and convert it into a FlexiRide route to address the complicated daily route variations. Currently the bus route has four variant routes which provide only one service every day, Monday to Friday with no set timetable. The lack of services and the variation of routes is not reliable and does not service the commuting needs for the Bayswater residential precinct. The conversion of all the 745 routes into one set route and into a FlexiRide would increase use of the bus service to the train station or the Westfield Knox bus interchange.

## Knox – Route 757 realignment and conversion to On-Demand/FlexiRide

Fund a feasibility study and business case to redesign route 757 and convert it into a FlexiRide. Route 757 is the key public transport service providing access into the Wantirna and Scoresby residential estates. The current service is unreliable and unattractive for commuters. The timetable is inconsistent between 7:45am -5:45pm. Waiting can vary from 43 minutes to 1,156 minutes with an average waiting time of 82 minutes between services. Realigning the route to make it less circuitous and converting it to FlexiRide could make travel times more efficient and improve connection between Knox Central and key destinations like the Caribbean Business Park and the expected new estates off High Street Road which will have approximately 2,125 new households.



## **Bus Priority Infrastructure Improvements**

### Manningham

### **Doncaster Road Corridor Bus Rapid**

**Transit** — The Doncaster Road corridor should be upgraded to provide a Bus Rapid Transit (BRT) network between Mitcham Station and the Eastern Freeway Entrance, which will link with the future Eastern Freeway Busway (as part of the North East Link Project). The BRT upgrade should consist of:

- Separated right-of-way bus lanes with exclusive priority operating 24 hours a day, seven days a week.
- Bus priority treatments at intersections (signal phasing, bus jump lanes).
- Implementation of Bus "Stations"
- Rationalising of bus stops/stations with improved passenger facilities at each station such as bus shelters, seating, lighting, real-time information, footpath access and accessibility and off-board ticketing facilities.

### Maroondah

Mt Dandenong Rd Corridor — Identify appropriate bus priority treatments at key intersections including Dorset Road, Colchester Road and Liverpool Road.

Canterbury Road (Great Ryrie to Liverpool Road) — Identify appropriate intersection bus priority treatments, such as bus jump signalisation, ingress and egress to bus stops and real-time monitoring of bus services along Canterbury Road (from Great Ryrie Street to Liverpool Road) to allow buses to run freely of traffic and not be delayed at intersections.



Wantirna Road – Peak Only Bus Lanes for the 901 SmartBus – Identify bus priority treatments, including intersection prioritisation, bus stop improvements and real-time monitoring along Wantirna Road to allow buses to avoid delays and run reliably.

### Whitehorse

# **Upgrade of Box Hill Transit Interchange** – In the short term, several improvements could be made at relatively low cost, such as:

- Having Protective Services Officers patrol the transit interchange as part of their duties at the train station.
- Widen the footpath/waiting areas.
- Make the transit interchange a 'ticketed area' by installing myki card readers at the entry points to the transit interchange.
- Remove some bus services from entering the transit interchange, by installing street level bus stops along Station Street and Whitehorse Road

For the major upgrades, planning work needs to commence urgently so that they are coordinated with future works for the area, such as the Mont Albert/Surrey Hills LXR Project and the Suburban Rail Loop Project.



### **Safer Neighbourhoods**

The ability for all pedestrians, including those using mobility equipment as well as parents with prams, to safely cross the road to access their broader neighbourhood as well as transport and other services is fundamental to liveability.

The following upgrades to safer pedestrianoperated crossing points will improve pedestrian safety, reduce injury and accidents, increase the natural catchment areas for public transport and improve traffic flow.

### **Greater Dandenong**

Pedestrian-Operated-Signal (POS) design and installation — Stud Road, Dandenong North at McFees Road (Dandenong Basketball Stadium, 270 Stud Road). Bus Routes 862 and 901.

Pedestrian-Operated-Signal design and installation — Springvale Road, Springvale South, near Elisabeth Avenue. Bus routes 813 and 902.





### Knox

Pedestrian-Operated-Signal design and installation — Scoresby Road, Knoxfield, near Camden Park Parade. Bus Routes 735 and 755.

Pedestrian-Operated-Signal design and installation — Stud Road, Scoresby, near Rosa Street. Bus routes 681, 682, 745 and 901.

### Manningham

Pedestrian-Operated-Signal design and installation — Victoria Street between Ruffey Lake Park and Rieschiecks Reserve. This POS will also provide a safe connection to highly utilised bus stops that are serviced by the 295, 279 and 318 bus routes.

Pedestrian-Operated-Signal design and installation — Reynolds Road, Templestowe at Smiths Road. Bus Routes 309 and 901.



### Maroondah

Pedestrian-Operated-Signal design and installation — Eastfield Shopping Centre Access Improvements, Bayswater Road between Eastfield Road, and Lucille Avenue. Signalised intersection with crosswalks, wombat crossings on all slip lanes at Bayswater Road/Eastfield Road, relocated bus stops and shelter and re-defined road alignments.

Pedestrian-Operated-Signal design and installation — Ringwood Street, Ringwood-between Ringwood Bypass and Loughnan Road. Bus Route 370.

### Monash

Pedestrian-Operated-Signal design and installation – North Road, Clayton, near Flora Road. Bus routes 601, 630 and 900.

Pedestrian-Operated-Signal design and installation — Waverley Road, Glen Waverley, near or at Watsons Road. Bus routes 736, 753 and 754.

### Whitehorse

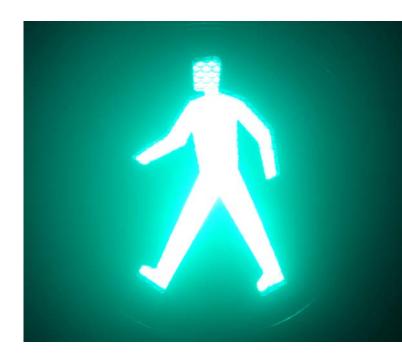
Pedestrian-Operated-Signal design and installation – Whitehorse Road, Nunawading, near Goodwin Street. Bus routes 901 and 271.

Pedestrian-Operated-Signal design and installation — Springvale Road, Forest Hill, near Pilita Street Bus route 902

### **Yarra Ranges**

Pedestrian-Operated-Signal design and installation — Warburton Highway, Wandin, where the Warburton Rail Trail crosses the highway, between Edmond Crescent and Alfred Street. Bus Route 683.

Pedestrian-Operated-Signal design and installation — Warburton Highway, Yarra Junction, where the Warburton Rail Trail crosses the highway, approximately 110m north-west of the eastern end of Barack Drive. Bus route 683.





### **Walking and Cycling**

### **Snapshot**

Research shows that around 60 per cent of the general population is interested in cycling but has safety concerns that impede their willingness to participate. The construction of safe and convenient off-road shared use paths provides significant opportunities for all community members, including those using mobility devices, pushing prams and walking dogs. The health and wellbeing outcomes from the paths are supported by social, environmental, economic and safety benefits.

Melbourne's eastern trail network supports local and regional economic development, local connections, sustainability, and improved safety.

The following priorities were identified in the Eastern Region Trails Strategy. These vital pieces of Melbourne's Bicycle Network are ready to deliver in partnership with the State Government.



- **Box Hill Rail Trail:** Construct a shared pathway along the rail corridor from Mont Albert to Box Hill to facilitate safe access and movement for pedestrians and bike riders between activity centres.
- Main Yarra Trail: Extend the Main Yarra Trail east by 3.7km to Warrandyte Township.
- Ringwood to Croydon Rail Trail:

  Complete the Eastern Rail Trail from the
  CBD to Warburton. With 6.5km of missing
  shared pathways, with some exclusive
  sections along the rail corridor and
  O'Shannassy Pipe Track.
- Waverley Rail Trail Connect Carmel Avenue (Mount Waverley Station) to Huntingdale Road (Jordanville Station) with a shared pathway to close the last gap and form a continuous 6.5km trail connecting the Holmesglen and Glen Waverley activity centres.
- Yarra Valley Trail Connect Yarra
  Glen to Healesville (Stage 2) with a shared path. When all three stages are complete the Yarra Valley Trail will be 60km of continuous trail with southern and northern Yarra Glen loops offering recreation and tourism opportunities.
- Ferny Creek Trail Connect Acacia Road to Glenfern Valley Bushland Reserve in Yarra Ranges.



### Roads

### **Snapshot**

Population growth is outpacing infrastructure development. Traffic congestion and the poor condition of roads impact not only private motor vehicles, but severely limit the efficiency of trams and buses. Moving people and goods around efficiently and increasing productivity needs a road network that can accommodate buses and trams as well as trucks and cars. Managing the use of road space and reducing delays to buses and trams is therefore central to better overall transport system. An integrated and balanced approach is needed to address the transport needs in the region, requiring improvements to both road and public transport infrastructure.

The following road projects will reduce congestion and constraints on our roads, improve freight efficiency and assist buses.



## Knox – Burwood Hwy and Cathies Lane Intersection Upgrade

Install traffic signals at the intersection of Burwood Hwy with Cathies Lane to improve safety of vehicles entering Burwood Hwy at the crest whilst improving bus priority and bike connection and install a bus jump queue on Burwood Hwy to improve bus priority and a bike lantern to improve access for cyclists connecting between the northern and southern estates bounding Burwood Hwy.

This intersection has experienced several accidents. Although the site was improved, an upgrade to a signalised intersection would improve pedestrian movement across the intersection and provide a safe crossing point for commuters to the bus stops.

## Knox – High Street Road and Mowbray Drive intersection, Wantirna South

Instal a new signalised intersection with bike lanterns and traffic queue jumps to improve safety of vehicles turning into High Street and the movement of pedestrians and cyclists through the intersection.

The Mowbray intersection is a key collector road for Wantirna South and Scoresby estates. The intersection has had several accidents involving vehicles entering and exiting Mowbray Drive. A signalised intersection would improve pedestrian and cycling access between the northern and southern estates and connect the greater Wantirna Cycling Link. Provision of a jump queue for buses would improve priority for public transport.



### Manningham - Templestowe Rd upgrade

Upgrade Templestowe Road (as part of the North East Link) through duplication, shared path, traffic improvements and bus infrastructure.

This would include a high frequency bus route to run along the Templestowe Road corridor from the Pines Secondary College to the Heidelberg Train Station and the La Trobe National Employment and Innovation Cluster (La Trobe NEIC) and a shared user path to link key bicycle networks with the future Banksia Park walking and cycling bridge across the Yarra River. This will also provide a direct connection to the Heidelberg Activity Centre and Station.

## Greater Dandenong – Dandenong Bypass extension

Extend Dandenong Bypass to South Gippsland Fwy including an associated cycle path. The Dandenong/Dingley Bypass has progressively been delivered over the last decade. The extension of the bypass between the South Gippsland Highway and the South Gippsland Freeway is the last section of this arterial road link to be constructed.

Key benefits of this extension include:

- An alternative route to the Monash Freeway for some trips, helping relieve traffic congestion in the region
- Improved traffic flows on the congested South Gippsland Highway
- Improved access to and within Dandenong South by encouraging through traffic to use the bypass instead of local roads
- An alternative route to the Port of Melbourne when combined with other anticipated network upgrades.



This active transport link would benefit Dandenong, Noble Park, and Springvale activity centres by reducing traffic through them. New bus routes could be created along Princes Hwy.

## Monash – Westall Rd to Monash Freeway extension

Extend Westall Rd to provide a direct route to Monash Freeway for better freight movement through and beyond the region and avoid the disjointed connection via Dandenong Road and either Springvale or Blackburn Roads.

The diversion of traffic from nearby roads that are overloaded such as Blackburn Road, Clayton Road and Springvale Road will ease congestion, improve road safety, and provide opportunities to enhance active transport routes and public transport access on these roads.

Delivery of the extension should also coincide with the dedicated bus lane along Blackburn Road to prioritise north-south passenger movement through the university and Monash Employment and Innovation cluster — the largest employer outside the CBD. The Westall Road extension may also provide new opportunities for active transport along its length.



## Yarra Ranges — Warburton Highway/Douthie Road, Seville East intersection upgrade

Upgrade and formalise turning lanes for side roads in each direction to increase traffic safety and improve traffic flow. Bus stop improvements to exit and re-enter the traffic flow could also be incorporated.

This section of road is currently a single lane in each direction and improving traffic flow along this section will also reduce delays to bus services and improve reliability.

### Yarra Ranges — Maroondah Highway, Coldstream duplication

Complete duplication works along Maroondah Highway between Warburton Highway and Melba Highway.

### Yarra Ranges – Maroondah Highway, Chirnside Park Road widening

Widen the road to enable three westbound lanes between Mooroolbark Road and Old Melbourne Road. The westbound road varies between two and three formal lanes which causes bus delays. A third lane for the full length of road will reduce bus delays by being able to directly exit the bus stop onto the road and increase usable road capacity for freight and private vehicles. Upgrades to Maroondah Highway will also improve connectivity between the activity centres of Croydon, Chirnside Park, and Lilydale and beyond to the regional Yarra Valley tourist area.

### Maroondah – Canterbury Road, Waterloo Street and Great Ryrie Street Intersection upgrade

Instal signals at the intersection of Waterloo Street and Canterbury Road to provide a fully controlled alternative for motorists seeking to



enter Canterbury Road. The existing indented bay would be modified and extended to be used as an additional bus stop and a bus jump lane providing a more accessible and prioritised bus services.

### Maroondah – Maroondah Highway and Yarra Road Intersection upgrade

Construct high quality pedestrian and cycling facilities between Ringwood, Ringwood East, and Croydon to complete the strategically important route for the Metropolitan Bike Network, Eastern Regional Trail Network and create the spine for the Maroondah Bicycle Network.

The intersection of Maroondah Highway and Yarra Road serves the Plymouth Road school district. The project would improve a range of safety issues including poor pedestrian connectivity, poor sight distance at crossings located on high angle slip lanes, a lack of footpaths and difficulties for drivers using the northeast merge lane.

















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