







Commuters Count

Eastern Transport
Coalition

Transport priorities



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What is the Eastern Transport Coalition?

The Eastern Transport Coalition (ETC) consists of Melbourne's seven eastern metropolitan councils, City of Greater Dandenong, City of Knox, City of Manningham, City of Maroondah, City of Monash, City of Whitehorse and Shire of Yarra Ranges. The ETC advocates for sustainable and integrated transport services to reduce the level of car dependency so as to secure the economic, social and environmental wellbeing of Melbourne's east. We aim to work in partnership with Federal and State Governments to ensure the future sustainability of Melbourne's eastern region.

Combined, the ETC represents a population of more than one million people with above average state and national levels of personal and household income underpinning the regional economy.

The ETC region has forecast growth that will drive an increasing demand for a wide range of goods and services, growing the region's bustling economic centres.

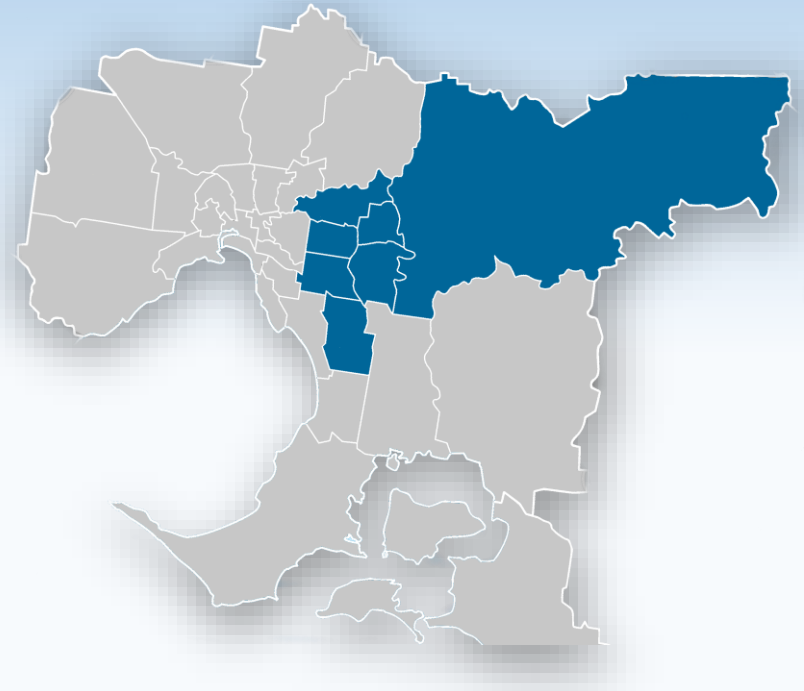
In order to preserve the region's economic promise and ensure the wellbeing of its residents, it is crucial that we work to promote better transport options.

Vision for the East

The ETC aims for Melbourne's east to become Australia's most liveable urban region connected by world class transport linkages, ensuring the sustainability and economic growth of Melbourne.

With better transport solutions, Melbourne's east will stay the region where people build the best future for themselves, their families, and their businesses.

The Eastern Transport Coalition has put together a suite of projects and priorities to promote connectivity, liveability, sustainability, productivity and efficiency throughout Melbourne's eastern region. The ETC is now advocating for the adoption and implementation by the Federal and State Government of each of the transport priorities proposed in this document.



Investing in the East is investing in Victoria

The Eastern Transport Coalition (ETC) consists of Melbourne's seven eastern metropolitan councils. As with most urban areas in Australia, the ETC region is facing several major, compounding challenges.

The eastern region will have to accommodate both a burgeoning population and an ageing community that will become increasingly isolated with a public and private transport network largely built to enable commuter movement to and from the CBD, now at odds with the pattern of commuting within the region.

Population growth is forecast to bring the region's population to well over 1.2 million by 2031. 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.*

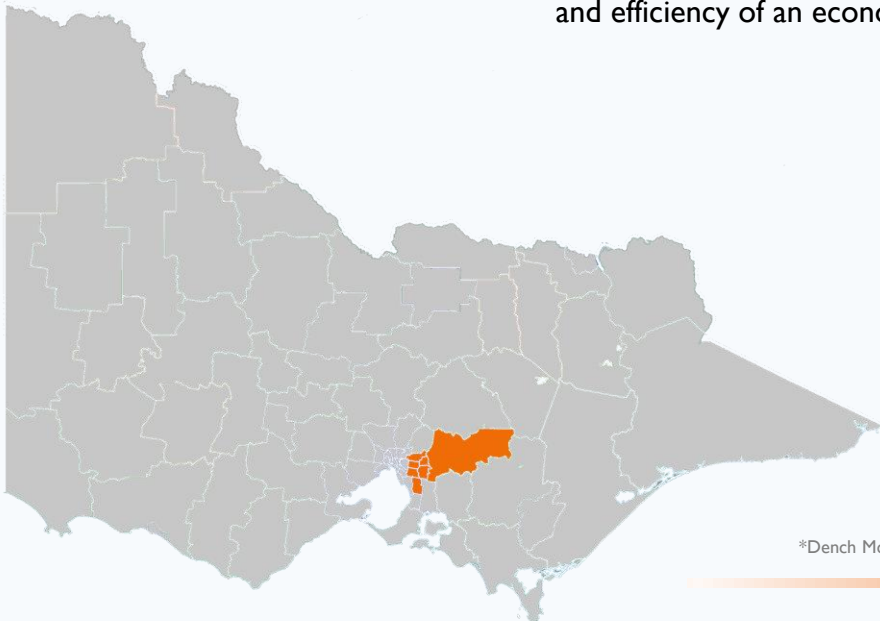
The east of Melbourne's vibrant economy is currently buoyed by approximately \$106 billion in total sales, \$23 billion in exports and over four million visitors to the region per annum resulting in \$2.6 billion in tourist revenue.* To ensure the region's economic promise is preserved, Melbourne's east needs a transport network that can handle the expected increase in both freight and commuter movement.

Investing in better transport connectivity in Melbourne's east is an investment in the productivity and efficiency of an economy that is thriving, diverse and competitive.

This document builds on many of the recommendations in Infrastructure Victoria's 30-year infrastructure strategy together with other locally identified needs and solutions.

Each of the projects put forward in this document will directly go to improving the connectivity, liveability, sustainability, productivity and efficiency in Melbourne's east. These projects have community, stakeholder and Council support and now require cooperation and investment from the State and Federal Government.

*Dench McClean Carlson. (2015). *Melbourne East Investment Attraction Strategy*. Melbourne: Regional Development Australia Eastern Melbourne.



Priorities

Transport underpins the pillars of Connectivity, Liveability, Productivity and Efficiency as well as the Sustainability of Melbourne as a city. The Eastern Transport Coalition has listed our transport priorities under these four pillars.

Connectivity

Connectivity in transport improves mobility, provides better and easier access to trade, social services, employment and opportunities for the community.

Melbourne's transport system currently lacks interconnectivity between many suburban centres and the broader public transport network. One of the greatest barriers to using public transport to commute to work is lack of convenient and regular connections for travellers. Similarly, commuters who wish to 'park and ride' are often unable to do so with limited parking at stations. Improved connectivity will result in better productivity and more business opportunities while families will enjoy shorter, more reliable travel times.

Productivity and Efficiency

Melbourne needs a transport system that provides people with viable options. Congestion is one of the biggest issues in Melbourne affecting economic efficiency on several different levels of society. Funding sustainable alternatives and improving rail and road use will maximise opportunities for individuals, businesses and government to increase income and asset value.

Implementing solutions that increase capacity and improve operational productivity on the road and rail networks will assist in improving the efficiency of the transport system itself.

Liveability

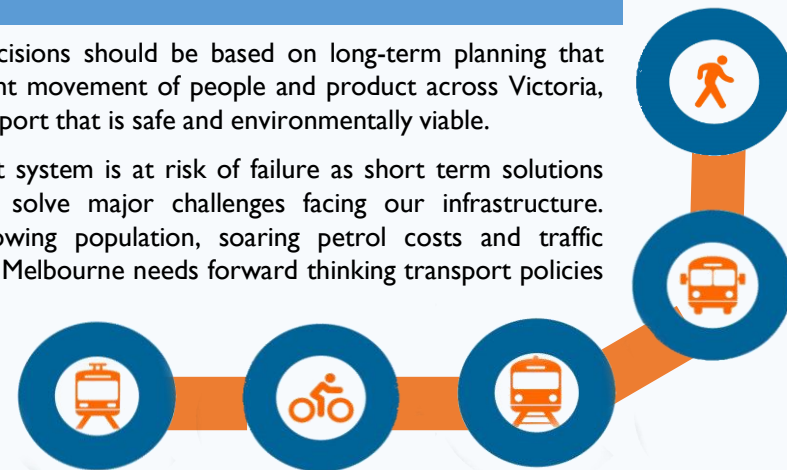
Melbourne's population growth is not being matched by growth in the public transport system. In order to maintain Melbourne's liveability status our rail, tram and rapid bus services must be provided to the many areas of the city that have developed without good public transport, as well as maximising walking and cycling opportunities.

Better transport improves the wellbeing of our community, ensuring that Melbourne is a place where people want to live now and in the future. This must include initiatives that assist in making Melbourne a safer community where residents can easily use transport modes other than private motor vehicles. Improving travel times and making it easier for people to access public transport can assist with improving the liveability of the ETC region.

Sustainability

Transport funding decisions should be based on long-term planning that will ensure the efficient movement of people and product across Victoria, using sustainable transport that is safe and environmentally viable.

Melbourne's transport system is at risk of failure as short term solutions are put in place to solve major challenges facing our infrastructure. Pressure from a growing population, soaring petrol costs and traffic congestion mean that Melbourne needs forward thinking transport policies for a sustainable city.



TRANSPORT MODES

TRAIN AND TRAM



BUS



ROADS



WALKING AND CYCLING



TRAIN AND TRAM

In the ETC region, rail patronage continues to grow, placing strain on our trains and trams. At the same time, there are significant issues that impact the reliability of services, such as a shortage of rolling stock and the regular cancellation of services during peak periods due to signal failure.

As an increasing population fills up our roads with private vehicles, the congestion severely affects the trams sharing these roads. As Melbourne expands, another issue has become apparent in the tram lines that stop short of the outer suburbs, exacerbating connectivity issues between modes of transport and making public transport less attractive for residents in Melbourne's east.

The ETC's proposed train and tram projects will go a long way to decrease congestion and travel times in the east.



TRAIN AND TRAM – PROJECTS THAT DELIVER OUR PRINCIPLES

	Network extensions	Level crossings	Operational efficiency	Better access
CONNECTIVITY	<ul style="list-style-type: none"> • Rowville Rail line construction • Doncaster Rail construction • Tram route 75 extension from Vermont to Knox • Tram route 48 extension to Doncaster Hill 			
LIVEABILITY	<ul style="list-style-type: none"> • Croydon Station upgrade and level crossing removal • Increased commuter parking at rail stations • Upgrade of the Box Hill public transport interchange 			
PRODUCTIVITY & EFFICIENCY	<ul style="list-style-type: none"> • Doncaster Rail Study – undertake a detailed technical feasibility study • Burnley Rail group upgrades • Regional south eastern corridor dedicated rail track 	<ul style="list-style-type: none"> • Removal of 24 level crossings in the ETC region • Removal of the level crossing at Surrey Hills, Ringwood line 	<ul style="list-style-type: none"> • Improved train signalling • Improved frequency of trains 	<ul style="list-style-type: none"> • Rollout ICT infrastructure • Rail fleet upgrades
SUSTAINABILITY	<ul style="list-style-type: none"> • Preserve Rowville Rail reservation • Preserve Eastern Freeway median strip for public transport • Belgrave/Lilydale rail capacity creation 			

Projects in detail: Train and Tram

Network extensions

Rowville Rail line construction

The eastern region of Monash and the southern region of Knox municipality are significantly car-dependent, due in part to limited public transport options including poor frequency and indirect bus services. While the Wellington Road SmartBus has assisted in providing an interim solution, these services are hampered by road congestion and bus capacity. A longer term solution is now required.

Construction of the Rowville Rail line would improve transport choices and accessibility, enabling residents across Melbourne's outer east to access employment (including the National Employment Cluster at Monash), education (Monash University) and other job clusters, services and activities, thereby improving community capacity and minimising social isolation.

Doncaster Rail Study: Undertake a detailed technical feasibility study

The first phase of the Doncaster Rail Study was released in late 2014 and determined that a Doncaster Rail line is feasible, with prospective patronage of 56,000 journeys per day. However, the study was not formally completed, delaying potential delivery of the rail line.

The importance of constructing the Doncaster Rail cannot be overstated. Traffic congestion will increase without a mode shift to public transport, as the number of residents and commercial businesses in areas surrounding the proposed line is predicted to rise.

The development of the Doncaster Rail line from the CBD to Doncaster Hill will address current heavy reliance on private transport modes, reduce car dependence and improve intermodal connectivity as well as increase cross-city travel.

Once the detailed technical feasibility study is completed in its entirety, the best course of action and further alignment can be established to ensure project delivery by 2029.



Doncaster Rail: image courtesy of The Age

Projects in detail: Train and Tram

Network extensions cont.

Tram route 75 extension from Vermont to Knox

Knox Central, incorporating Westfield Knox Shopping Centre, is a Principal Activity Centre as identified by the Victorian Government. The centre plays an important role as a focus for community activity, services and investment.

Knox Central is currently serviced only by buses with a frequent SmartBus operating north/south on Stud Rd. While there is a 'transit link' bus service in the east/west, connecting the existing tram terminus on Burwood Highway in Vermont South to Westfield Knox, this is not well understood or considered a reliable service by commuters.

The extension of tram route 75 from Vermont South to Knox Central would provide a seamless connection between the Knox Central Principal Activity Centre and important regional services and employment nodes in the City of Whitehorse and beyond, including Deakin University, Burwood One and Vermont South shopping centres and new mixed use development clusters and student accommodation along Burwood Highway.

Tram route 48 extension to Doncaster Hill

There is growing demand for public transport to support the future growth of Doncaster Hill. As part of an integrated public transport network, an extension of the route 48 tram line from Balwyn North to Doncaster Hill – a distance of four kilometres – should be considered.

This service will benefit the transport network by providing a link to the Doncaster Park & Ride and new Tullamore residential estate, as well as a local service connection between Doncaster Hill and Kew Junction.

Burnley Rail group upgrades

The Melbourne railway is struggling to cope with the number of passengers using the rail network. An upgrade to the Burnley rail group is needed to support the development of a metro rail system. This would include the rationalisation of Burnley junction, duplication of the line between Mooroolbark and Lilydale to facilitate additional services and improve the reliability of the Ringwood corridor, as well as a quadruplication of the line between Burnley and Camberwell station. This will particularly assist in meeting the growing demand for access to economic activity in central Melbourne.



Route 48 tram © [Marcus Wong](#)

Projects in detail: Train and Tram

Network extensions cont.

Provide a regional south eastern corridor dedicated rail track

The Dandenong line is one of Melbourne's most congested lines. Its two tracks are shared by Metro's Pakenham and Cranbourne trains, V/Line's Gippsland services and freight trains. The result is peak-hour overcrowding that is consistently worse than most other lines.

Dedicated regional rail tracks on the south eastern corridor will separate regional passengers and freight from metropolitan trains, easing congestion and reducing travel time. This will also encourage more people to use the train service instead of private transport.

Preserve median strips for public transport

The increasing demand to expand Melbourne's freeway networks threatens designation of median strips for public transport purposes.

The median strip of the Eastern Freeway (which was originally designed and planned for a heavy rail line) may be lost to accommodate additional traffic lanes on the Eastern Freeway, forever relinquishing this corridor for a possible public transport purpose. Similarly, the median strip where the potential Rowville rail will be built is yet to be formally reserved for this purpose.

These median strips must be reserved as public transport corridors as part of planning to determine future public transport corridors in Melbourne. This will benefit public transport users as the corridors will be preserved for future improvements of the bus or rail network. It will also reduce reliance on cars, with the attendant congestion, emissions, energy and safety benefits.



Morning traffic on the Eastern Freeway

Projects in detail: Train and Tram

Level crossings

Croydon Station upgrade and level crossing removal

A railway line currently bisects the Croydon town centre, causing poor integration and interface between the major retail precincts of Croydon Market and Main Street. The antiquated station and bus interchange has also resulted in substandard amenity, limited parking availability, safety and security at the station.

Grade separation of Coolstore Road level crossing provides an excellent opportunity to deliver a modern public transport interchange due to the stations close proximity to the level crossing. The project can maximise the transit network capacity, urban design, amenity, walkability, local economy and community benefits by collaborative planning with the planned Croydon Town Square.

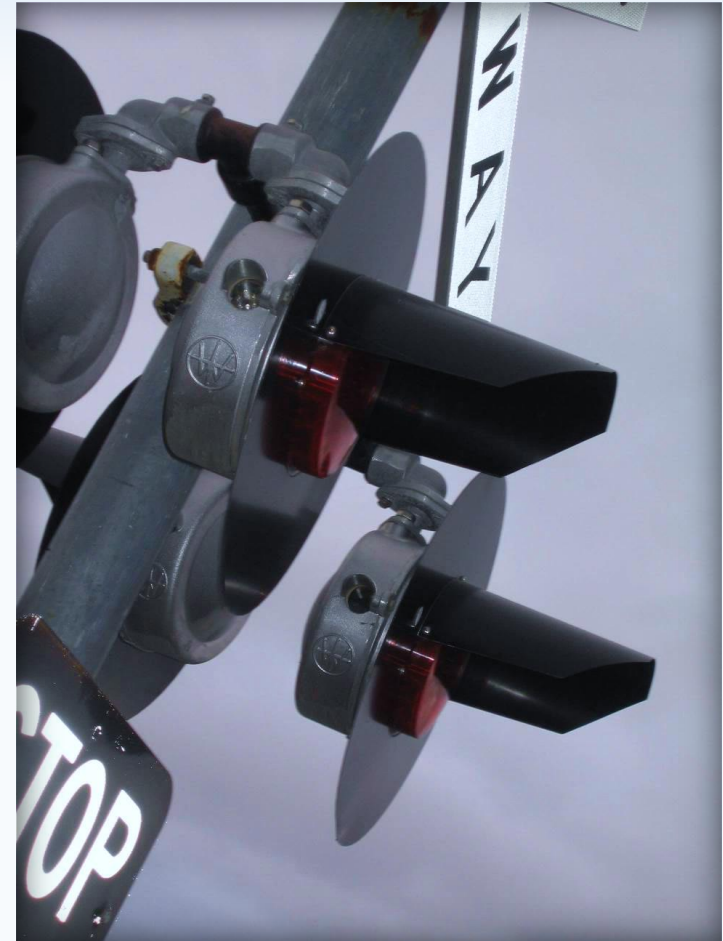
Removal of 24 level crossings in the ETC region

There are 24 level crossings within the ETC municipalities. Fourteen of these locations are being removed by the State Government over the coming years. The remaining 10 sites still represent conflicting points between trains and road traffic, including cars, buses, cyclists and pedestrians. With average crossing closing times well in excess of one minute, these conflicts represent a constraint to road capacity and exacerbate traffic congestion in the region, with significant wider impacts to the on-road public transport network.

Additional to the ten level crossing within the ETC region there is one other level crossing left to be listed for removal by the State Government on the Ringwood line, at Surrey Hills. Although Surrey Hills is outside the ETC region it still affects the flow-on traffic, and to make the Ringwood line fully segregated it will be of utmost importance that it is removed as well.

Removing level crossings is vital to achieving efficiencies across the rail network. Once these are removed along a rail corridor, more efficient signalling technologies can be introduced along with more intelligent train management, therefore increasing capacity for rail services across the network. This will not only ease congestion and provide opportunity for an increase in train frequency, but also improve response time for emergency services.

A commitment from the State Government to remove the 10 level crossings within the ETC region, as well as the additional one in Surrey Hills, is required.



Level crossing © [Marcus Wong](#)

Projects in detail: Train and Tram

Operational efficiency

Improved train signalling

Train operations are limited by the existing signalling systems available across Melbourne's rail network, which typically result in longer gap requirements between trains across the network. The system has now reached its natural capacity based on the current signalling system.

Train signal upgrades to incorporate moving block technology have commenced, with trials of the new system implemented across key lines. However, to achieve metropolitan-wide benefits through increased train frequency and overall capacity enhancements, the rollout of signalling upgrades must be accelerated.

Improved frequency of trains

There is a pressing need for service improvements along Melbourne's rail network. Although frequency of services is adequate during peak hour traffic, the poor frequency of off-peak trains affects overall viability as an alternative transport mode.

Frequent services are critical to encourage public transport use. Timetable changes on the metropolitan train network are required to deliver the peak period service uplifts needed. This will not only encourage more people to choose public transport instead of private motor vehicles but also increase capacity on overcrowded lines in Melbourne's eastern region.



Train signalling © [Marcus Wong](#)

Belgrave/Lilydale capacity creation

Population and economic growth along the Belgrave and Lilydale line corridor has led to escalating rail patronage growth. However, the quality and reliability of rail service is declining as it struggles to cater for the escalating patronage.

Overcrowding of peak services is an indicator that the system is under strain and rapidly reaching capacity. The opportunity to provide additional service capacity and reliability is limited by level crossings, ageing signalling systems and sections of single tracks.

A progressive program of level crossing removals, installation of modern high capacity signalling technology and rail expansion works will deliver a metro-style system along the Belgrave and Lilydale line. Duplicating the Mooroolbark to Lilydale section would be highly beneficial, as this project is supported by PTV's Network Development Plan and it will maximise the number of trains that can operate on the line and prevent service disruptions from cascading.

Accelerated completion of the project will benefit residents and workers along the Belgrave and Lilydale corridor through improved journey times, reliable services and a higher quality experience.

Projects in detail: Train and Tram

Better access

Increased commuter parking

Car parking and overcrowding are among the issues that most concern Melbourne rail commuters.

Establishing new or expanding existing rail station car parks to increase capacity and introducing more Park & Ride facilities will ease this strain. It will also help manage the current 'overflow' parking in residential streets and shopping precincts surrounding rail stations.

Upgrade of the Box Hill public transport interchange

The Box Hill public transport interchange is in urgent need of infrastructure improvements. The current facilities are dysfunctional and disconnected, causing safety, connectivity and accessibility issues for train, tram, bus and taxi users as well as pedestrians and cyclists. The facilities also have limitations in handling ongoing ridership growth and changing passenger expectations.

There are practical and compliance issues relating to disability access, ease of navigation, bicycle parking, capacity and priority for public and active transport modes over car-based modes. Wayfinding, signal priority, upgrade of passenger amenities and improvements to bus access and egress are some of the crucial works needed. Improving the Box Hill Transport Interchange will address significant safety and accessibility issues. It will also unlock and facilitate regionally significant economic, social and environmental outcomes for Melbourne's east as well as respond to and leverage off the current substantial private investment and population growth.

Rollout of ICT infrastructure

The current lack of effective technology management is causing trams and buses to languish in heavy traffic when they need to be given priority passage to prevent gridlock. Public transport vehicle tracking systems are obsolete and the lack of effective interfaces with road traffic systems result in inefficient tram and bus priority. The quality and reliability of bus and ICT system communications and interfaces must be improved to increase user benefit of public transport.

There is also a need to centralise transport network information. Rolling out ICT infrastructure that provides centralised real-time information across the transport network will enable both private and public transport commuters to better make real-time multi-modal decisions about their journey. This will assist in managing demand.

Rail fleet upgrades

Rapid increases in train patronage have resulted in a train shortage and overcrowded services. This does not provide passengers with the reliable, frequent and readily available service that they need, making public transport significantly less competitive compared to private vehicles.

Train and tram capacity must be improved, including modifying existing train and tram fleets by reducing seating. New high capacity trains, prioritising comfort, safety and capability are needed. This will relieve current overcrowding and provide additional services to continue supporting growing patronage, as well as ensuring that passengers are provided with a reliable and frequent service.



High Capacity Metro Trains courtesy of [Urban Melbourne](#)

BUS

Infrequent bus services, particularly at weekends, have resulted in underutilisation of buses compared to private vehicles despite increasing traffic congestion, impact from petrol prices, and concerns about emissions.

Issues such as poor planning around bus routes and safety around bus stops at night and in peak hour traffic also reduce the likelihood of people using the service.

The ETC has identified some key bus projects that will improve accessibility, increase patronage and decrease congestion.



BUS – PROJECTS THAT DELIVER OUR PRINCIPLES

	Servicing and frequency	Safety and access	Fit for purpose	Transitioning for growth
CONNECTIVITY	<ul style="list-style-type: none"> Improved bus service coverage and frequency 	<ul style="list-style-type: none"> Safer access to bus stops 	<ul style="list-style-type: none"> Provide bus routes to key employment areas 	
LIVEABILITY	<ul style="list-style-type: none"> Increased SmartBus service provision 	<ul style="list-style-type: none"> Upgrade bus stops with refuge area, lighting and links to pedestrian paths Bus interchange upgrades at Box Hill, Glen Waverley & Oakleigh rail stations 		
PRODUCTIVITY & EFFICIENCY	<ul style="list-style-type: none"> Doncaster bus improvement (DART) 		<ul style="list-style-type: none"> Bus priority at traffic signals and on-road bus lanes 	<ul style="list-style-type: none"> ITS use for trip reliability
SUSTAINABILITY	<ul style="list-style-type: none"> Bus Rapid Transit (BRT) service Eastern Freeway 			

Projects in detail: Bus

Servicing and frequency

Improved bus service and frequency

Improving bus service coverage and frequency will assist in reducing journey times and improve connectivity between services. Many areas across the ETC region have very poor coverage and/or frequency of services that do not meet the minimum service requirements. As a result, the local community has been forced to rely on private vehicles to meet their transport needs.

The ETC welcomes a review of bus services throughout metropolitan Melbourne, building on the approach taken in Brimbank in 2013. This review featured more direct and frequent services and longer hours of operation. The changes resulted in patronage growth and better connections to other transport modes.

In the short term, all bus routes must be upgraded to a minimum service level in terms of frequency and hours of operation.

Increased SmartBus provision

For many residents in Melbourne's east, buses are the only public transport available within a reasonable distance of their homes. However, lack of coordination between services, inadequate frequency, insufficient coverage and already congested roads means that the existing bus network is not competitive with car travel.

The existing SmartBus premium network must be expanded to promote bus patronage. This can be done by connecting SmartBus services between employment centres and more residential catchments. A higher frequency of the SmartBuses will also increase the percentage of Melbourne residents who can access non-central employment centres within 30 minutes, supporting cross-town travel and making public transport a more viable option.

Doncaster bus improvement (DART)

The Doncaster Area Rapid Transit (DART) network is experiencing constant overcrowding issues on peak service buses, increasing demand and instances of 'bus bunching' on key roads (where an influx of buses result in delays to one another). Commuters report regularly watching buses drive past while waiting for one with capacity.

Between 2009 and 2012, weekday patronage of DART services increased by 47%, Saturday patronage increased by 212% and Sunday patronage by 149%, with the four DART routes now carrying in excess of 3 million passengers per year. These figures illustrate the demand for reliable and efficient public transport services in the region, and the need to enhance the bus service with increasing service capacity, frequency and priority for buses on the road network along the entire routes of each of the four DART services.

By allowing prioritisation of public transport along the DART corridor, particularly along Hoddle Street between the Eastern Freeway and Victoria Parade, the 12,000 daily users of DART will be able to commute without the current issues. It will also promote the service to people currently using their car.

Bus Rapid Transit (BRT) service Eastern Freeway

Manningham requires a mass-transit solution to its public transport problems, and until heavy rail can be delivered, an interim solution is required. The present bus transit system to and from the CBD compromises travel time by having to compete with other road-based transport along its route, and in particular, at the entry and exit points along the Eastern Freeway leg of the commute and along Hoddle Street and Lonsdale Street in the CBD.

A key step will be consideration of an upgrade of DART to a full Bus Rapid Transit (BRT) network between the Doncaster area and Melbourne CBD, with dedicated priority and reliable, high-frequency and accessible bus services. This will require an extensive upgrade of DART route 907, with the provision of a dedicated busway along the Eastern Freeway and adjoining roads, including Hoddle Street, Alexandra Parade, Lonsdale Street and Doncaster Road. This will provide uniform improvements to bus priority on the existing road network, as was recently implemented by PTV and VicRoads along Victoria Parade.

A dedicated BRT network can provide significantly improved transport capability to the region, with short headways between buses, very frequent services, and priority treatment to reduce delays and provide a reliable level of service. A BRT network can also be delivered at a far lower cost (to implement and operate) than heavy rail, and provide for a suitable dedicated public transport service between the CBD and Manningham in the interim, as a short to medium-term solution to the future provision of heavy rail. BRT will also enable the preservation of the Eastern Freeway median west of Bulleen Road for a public transport purpose, as well as the creation of a new dedicated reservation east of Bulleen Road.

Projects in detail: Bus

Safety and access

Safer access to bus stops

The ability for pedestrians to safely cross roads to access bus services and reach their destinations is a concern, particularly at mid-block locations between intersections where higher frequency services (SmartBuses) are typically located on busy arterial roads. These mid-block bus-stops are particularly problematic for the mobility impaired, including those using mobility equipment and parents with prams. Mid-block pedestrian accidents for the elderly account for 20% of all pedestrian accidents.

The provision of dedicated safe crossing points along major bus routes will improve pedestrian safety and reduce the incidence of accidents, while also increasing the natural catchment areas for bus patrons.

Upgrade bus stops

A lack of adequate bus stops with refuge areas, lighting and links to pedestrian paths for the local community, tourists and visitors has resulted in unpleasant, and at times dangerous, situations for pedestrians.

Providing bus stops with necessary refuge areas, lighting and links to pedestrian paths will encourage greater use of public transport, reducing dependency on private vehicles. This would also assist in making public transport options a safer and more pleasant experience for pedestrians. It should also be noted that the State Government has an obligation to upgrade PT infrastructure to meet the objectives of the *Disability and Discrimination Act 1992*, to make all PT infrastructure DDA compliant by 2022.



DDA compliant bus

Bus interchange upgrades at Glen Waverley, Oakleigh and Box Hill rail stations

Upgrades to the bus interchanges at Glen Waverley, Oakleigh and Box Hill rail stations are needed to provide full accessibility and improve amenity and shelter for pedestrians, as well as benefits to thousands of regular public transport users travelling to and from the Glen Waverley, Oakleigh and Box Hill rail stations each day.

These upgrades will also provide a seamless interchange between bus and rail and create a safer, more accessible and attractive place for people to live, work and visit.

Projects in detail: Bus

Fit for purpose

Provide bus routes to key commercial/industrial employment areas

The Monash Employment Cluster is Melbourne's largest established employment cluster, with a unique mix of education, research and industry participants. The cluster supports 58,500 jobs and has the largest concentration of employment outside Melbourne CBD. However, due to congestion on the roads around the area, the reliability of transport access to the Monash employment centre has become jeopardised. By providing bus routes into key commercial and industrial employment areas, such as the Monash employment centre, private vehicle use in the eastern region of Melbourne can be reduced, as well as congestion.

Bus priority at traffic signals and on-road bus lanes

A large proportion of public transport options in the ETC region are delivered through the bus network, leaving the region hampered by road congestion. This can lead to delays in services and an inability to compete with car travel in journey times.

The efficiency and reliability of buses can be improved by providing bus priority at traffic signals, real-time and intelligent transport solutions, and dedicated priority bus lanes. This will increase the attractiveness of public transport when compared with private vehicle travel and further increase ridership while reducing congestion.

For example, bus priority improvements are needed through Doncaster Hill. There is currently a 600-metre gap of bus lane through the Hill along Doncaster Road, impacting travel times in times of congestion.

Another example where a bus lane is needed is in Bulleen where a 500 metre bus lane (inbound) and bus priority improvements on Thompson Road at the Bulleen Road/Eastern Freeway intersection would reduce congestion and travel times.

Transitioning for growth

Intelligent Transport System (ITS) for trip reliability

The installation of an intelligent transport system (ITS) that is able to link, monitor and control all the intersections in an entire precinct will provide real time travel demand response capabilities. Greater network management control will allow for effective bus prioritisation in and out of the centre to increase bus service reliability and integration with trains. Congestion will be relieved by better traffic flow and connectivity. Pedestrians will also benefit from improved safety and walkability throughout the entire precinct.

For example, transport analysis of the Ringwood Metropolitan Activity Centre has demonstrated that traffic circulation through the heart of Ringwood is increasingly congested. Centre access, transport integration and amenity is affected by inefficient traffic circulation on Wantirna Road, Warrandyte Road, Maroondah Highway and around the station and bus interchange. This experience is similar across activity centres within the region.



Monash Employment Cluster courtesy of [Urban Melbourne](#)

ROADS

As population growth outpaces infrastructure development, the ETC region continues to face numerous transport challenges with pressure to keep pace with much-needed road and public transport improvements. An integrated and balanced approach to improving our transport network is needed to address the transport needs in the ETC region, and this requires improvements to both road and public transport infrastructure.

The ETC has identified road projects that will assist in reducing congestion and constraints on our current roads, improving freight efficiency and assisting trams and buses.



Why roads?

Roads and public transport aren't mutually exclusive

With Melbourne's trams and buses relying on a functional road network, the ETC group recognises roads as a key feature of a working public transport system. Increasing productivity and moving people and goods efficiently will only be a reality if we have an adequate road network that can accommodate buses and trams, as well as trucks and cars. Managing the use of road space is therefore central to an efficient eastern region.

Traffic congestion and the poor condition of roads impact not only private motor vehicles, but severely limit the efficiency of public transport options such as trams and buses. To maximise the value of public transport to the community greater attention must be paid to identifying and resolving causes of delay to buses and trams. This includes ensuring better roads.

The ETC advocates for sustainable and integrated transport services to reduce the level of car dependency, however the group recognises that this has to be done by facilitating sustainable transport outcomes, encouraging reallocation of road space, getting the right traffic on the right roads and linking key places to each other.

The road projects that the ETC advocates for have all been assessed against eight indicators, ensuring that the projects put forward meet some or all of the following objectives:

- Link key trip attractors
- Create quality urban places/community spaces
- Provide access to jobs and facilitates economic growth, and;
- Provide sustainable transport outcomes

The eight indicators:

1. Supports connectivity between key activity centres.
2. Aligns with VicRoads priority traffic route designation.
3. Reduces vehicle traffic through activity centres to support improved public realm.
4. Supports balanced land use and transport provision.
5. Improves access to job clusters.
6. Supports enhancement of designated freight routes.
7. Enables sustainable transport projects.
8. Transport link protects natural environment by reducing transport related emissions.



ROADS – PROJECTS THAT DELIVER OUR PRINCIPLES

	Link key trip attractors	Provide access to jobs	Provide sustainable transport options
CONNECTIVITY	<ul style="list-style-type: none"> Westall Road extension Dorset Road extension 		
LIVEABILITY			
PRODUCTIVITY & EFFICIENCY	<ul style="list-style-type: none"> Glasscocks Road land acquisition and construction Dandenong south east west access (central precinct) Improve road infrastructure in Yarra Ranges 		
SUSTAINABILITY	<ul style="list-style-type: none"> Road space allocation changes 		

Projects in detail: Roads

Link key trip attractors

Westall Road extension (completion)

Westall Road forms part of a planned arterial road network link from Monash Freeway, Mulgrave to the Dandenong and Dingley Bypasses, which provides connections to major arterials through to the South Gippsland Highway, Dandenong South and to Warrigal Road. Now that the Dingley Bypass has been constructed, the network will be completed with an extension of Westall Road from Princes Highway to Monash Freeway/Ferntree Gully Road, including an intersection with Wellington Road.

The Westall Road extension will have a major impact in diverting traffic from nearby roads that are overloaded such as Blackburn Road, Clayton Road and Springvale Road, significantly easing congestion and provide opportunities to enhance public transport on these roads. It may even become a principal public transport route. The road extension will also improve access to the Monash Employment Cluster, and provide for better freight movement throughout and beyond the region.

Dorset Road extension

A missing north-south connection within the southern part of the Knox municipality is an extension of Dorset Road from Burwood Highway through to Napoleon Road and ultimately to Lysterfield Road. This lack of connectivity to the south of Burwood Highway to the residential areas of Rowville and Lysterfield and to rapidly developing municipalities such as the City of Casey is causing an increasing strain on Council's local roads network and existing arterial roads in the area.

The Dorset Road extension would provide opportunities to improve bus services between Rowville and Boronia station to the north as well as freight movements between the industrial area in Bayswater and destinations to the south of Knox.

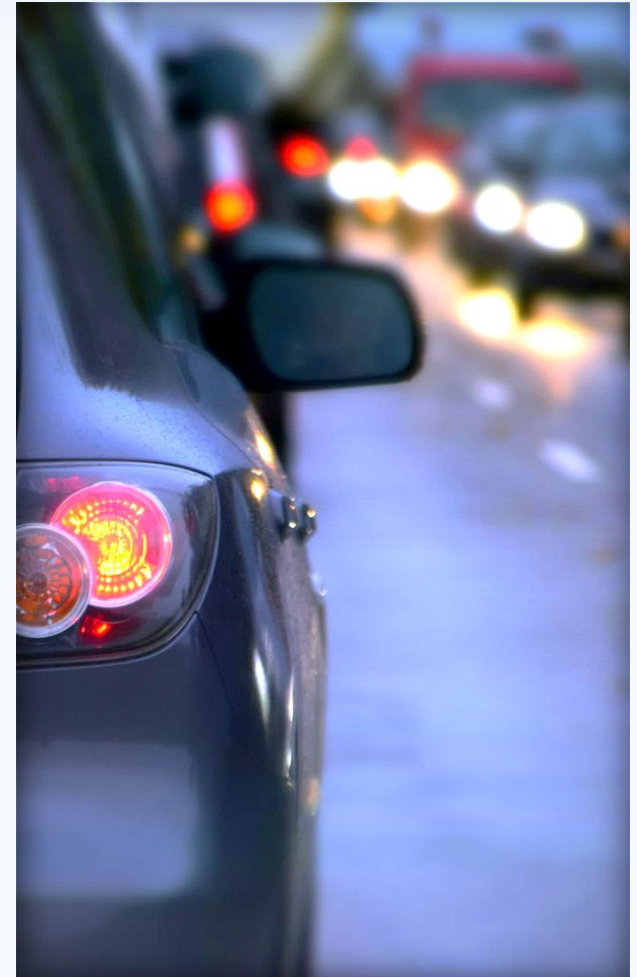
Provide access to jobs

Glasscocks Road land acquisition and construction

Glasscocks Road is planned as a six-lane arterial road serving as another east-west regional link and as access to the adjoining industrial area. However in its current state it is a gravel road of poor quality that is frequently used to bypass other congested roads in Dandenong South.

While its initial construction as a two-lane collector road is planned to be funded as part of the C87 Lyndhurst Development Contribution Plan, early funding by the State Government would accelerate its construction timeline.

Importantly, it would encourage further development within the National Employment Cluster and significantly improve regional east-west access.



Projects in detail: Roads

Provide sustainable transport options

Dandenong south east west access (central precinct)

Dandenong South National Employment Cluster has limited east-west road connectivity, making existing east-west roads heavily congested in peak periods. Accordingly, commuters and freight are subject to travel time delays and congestion reducing productivity and acting as a disincentive to investment.

A future east-west arterial road is proposed linking existing and planned road infrastructure through the central precinct of Dandenong South. Several substantial infrastructure projects are required to be delivered including:

- A bridge over Eumemmerring Creek including the construction of part of Bangholme Road
- On/Off Ramps to EastLink at Bangholme Road and
- A bridge over the Cranbourne Rail line between Remington Drive and Pound Road West

The delivery of these projects would improve travel times for commuters and freight, improve business efficiency and productivity, and vastly improve access to the Dandenong South National Employment Cluster.

Improve road infrastructure in Yarra Ranges

Infrastructure deficiencies in the Yarra Ranges road network have resulted in reduced levels of transport service for all road users, particularly freight. Improvements to road infrastructure of Canterbury Road, Kilsyth (Dorset Road to Mount Dandenong Road) is required to create an additional third lane in both directions to improve access and safety for traffic and to address current service level deficiencies.

Road space allocation changes

Trams and buses are hampered by road congestion, excessively low speed and traffic management policies that prioritise cars over public transport. These issues diminish user benefit and inflate operating costs, discouraging use of trams and buses.

To use the road network more efficiently, we must expand the prioritisation of public transport on the road network into the central city and employment centres. This is relevant for all routes on the Principal Public Transport Network, not just those accessing the city or employment centres.

Improving tram right-of-way and priority, including re-allocation of existing road space with a focus on key location, will increase speed and reliability and improve tram utilisation. The current situation results in delays for all road users, proving an inefficient system of competing modes sharing limited road space. Road space allocation changes will allow trams to play a vital role in the city's transport system, particularly in the linking of the inner and middle suburbs to employment, educational, medical and other activity clusters in Melbourne's CBD and surrounds, and in providing local access to inner suburban strip shopping centres.



WALKING AND CYCLING

Walking and cycling are key modes of both transport and recreation and are encouraged by governments to promote environmental sustainability, health and wellbeing, and reduce road congestion. Research has shown that around 60 per cent of the general population falls within the category of being interested in cycling but have safety concerns that lessens 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.

The ETC has identified a suite of projects that improve the safety and connectivity of sustainable transport options like walking and cycling.



WALKING AND CYCLING – PROJECTS THAT DELIVER OUR PRINCIPLES

	Main routes	Missing links	Wayfinding	Access
CONNECTIVITY	<ul style="list-style-type: none"> • Maroondah Hwy bicycle lane • Improve & upgrade bicycle infrastructure • Construction of off-road shared use paths 	<ul style="list-style-type: none"> • Completion of missing links in trail network & PBN and upgrade standards • Ringwood to Croydon connection • Completion of Pedestrian Path Network (PPN) 		<ul style="list-style-type: none"> • Path surfaces • Bridge across the Yarra River at Banksia Park • Pedestrian operated signals
LIVEABILITY		<ul style="list-style-type: none"> • Burwood Highway shared path – Eastlink shared path bridge (at Mountain Highway) to Morack Road 	<ul style="list-style-type: none"> • Wayfinding signage roll-out 	<ul style="list-style-type: none"> • Shared path lighting
SUSTAINABILITY				<ul style="list-style-type: none"> • Long term bicycle parking at railway stations • Travel behaviour change programs

Projects in detail: Walking and Cycling

Main routes

Maroondah Highway bicycle lane

Maroondah Highway is the spine of the Maroondah Bicycle Network. Capacity to link existing cycling routes and trails is dependent on the provision of dedicated bicycle lanes on Maroondah Highway. Without the improvement to safety, connectivity and convenience offered by the bicycle lanes, the appeal of cycling on Maroondah highway will remain limited to experienced road cyclists.

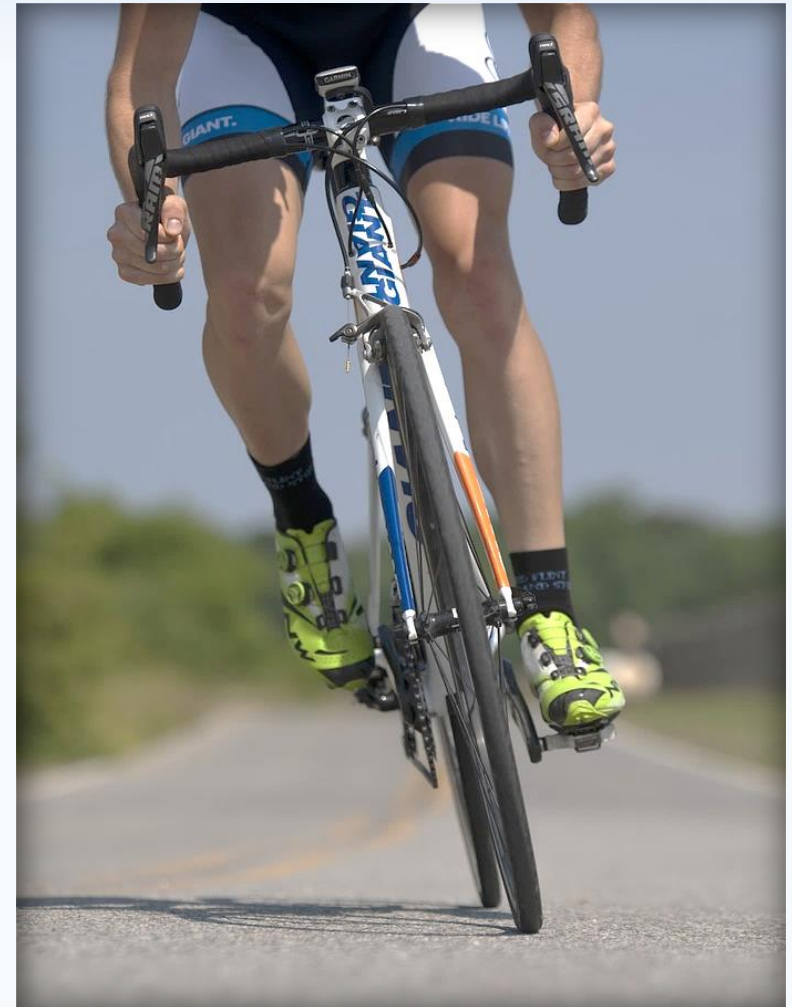
Installation of bicycle lanes within the service lanes along the Maroondah Highway will provide direct bicycle priority connectivity between the Ringwood, Croydon and Chirnside Park activity centres – the regional significance of these centres is confirmed by inclusion in the Chirnside Park to Mordialloc Strategic Cycling Corridor. Construction of these lanes will provide safe and appealing cycling in Melbourne's east and help reduce road congestion.

Improve and upgrade bicycle infrastructure

Cycling infrastructure along arterial roads across the region do not cater for the needs of cyclists. Improving road and trail networks to better meet the needs of cyclists will also improve road network safety, encouraging increased use of cycling as a mode of transport and reducing dependency on motorised transport.

Cycling infrastructure improvements are required in locations such as:

- Monbulk Road (Belgrave to Kallista)
- Mt Dandenong Tourist Road
- Mountain Highway (The Basin to Sassafras)
- Swansea Road (Montrose to Lilydale)
- Mount Dandenong Road and Canterbury Road (Montrose to Ringwood)
- Melba Highway (Lilydale to Yarra Glen) and Healesville (Yarra Glen to Healesville)
- Healesville – Koo Wee Rupp Road (Healesville to the Warburton Rail Trail)



Projects in detail: Walking and Cycling

Main routes cont.

Construction of off-road shared use paths

The construction of 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. Three priority projects in the ETC region are:

- **Melbourne Water pipe track:**

Construction of a 3-metre wide path along the Melbourne Water pipe track from Syndal to Mitcham is a key segment of the 'Chirnside Park to Mordialloc Strategic Cycling Corridor,' identified by VicRoads as a regionally significant cycling and walking route. Detailed design for the section of the path within the City of Whitehorse are complete and a construction and maintenance agreement for this project is in place with Melbourne Water, making this section of the project 'shovel ready'. Planning is underway for the section of the path within the City of Monash and government funding is sought for this vital project that when completed will provide safe and accessible walking and cycling infrastructure across the eastern region of Melbourne.

- **Former Healesville Freeway Reservation:**

The Victorian Government has committed to construct an east-west shared use path linking Dandenong Creek, Vermont to Springvale Road, Forest Hill. The path will be of regional significance. The ETC strongly suggests that the government complete the master planning for the path and undertake its construction as a high priority, noting that this path has also been included as a VicRoads Strategic Cycling Corridor.

- **The Brushy Creek Trail:**

The Brushy Creek trail in Mooroolbark provides the community with safe access to local destinations. To provide further access to urban centres for local residents and tourists, it is now requested that the Brushy Creek is extended to Mooroolbark Township (off-road 2km).

Missing links

Completion of missing links on trail network and PBN

The trail network and the PBN are currently missing sections and some routes are not continuous, making cycling unsafe and inconvenient at times.

There is an underlying demand for continuous safe bicycle facilities that provide links between destinations. Completing the missing links on the trail network and the PBN will encourage cycling throughout the ETC region.

Positioning cycling as a sustainable mode of transport is integral to improving the health of our communities, improving safety, minimising congestion and achieving environmental benefits.

Completing the links in the shared path network will provide cyclists with a safer off-road avenue to commute to the CBD and other centres in the region.



Projects in detail: Walking and Cycling

Missing links cont.

Ringwood to Croydon connection

There is currently no dedicated off-road cycling connection between the Ringwood Metropolitan Activity Centre and the Croydon Major Activity Centre. The transit orientated, 20-minute neighbourhood and transit network planning objectives of both activity centres strongly encourage cycling as a priority mode for local work, school and recreational journeys.

A dedicated cycling route along the rail corridor alignment will increase the appeal of cycling along the corridor by providing a safer, convenient and more attractive option.

The connection is also regionally significant with the inclusion in the Ringwood to Dandenong and CBD to Croydon Strategic Cycling Corridors. Its completion will create a major east-west metropolitan cycling transit corridor, extending from central Melbourne out beyond the Yarra Ranges and Dandenong. Together these significant cycling corridors have the potential to boost tourism, work and education opportunities in the region.

Completion of Pedestrian Path Network (PPN)

Current infrastructure does not adequately cater for the needs of pedestrians, resulting in underutilisation of many paths. Improvements to PPN will meet the needs of pedestrians, improve access and increase safety, encouraging pedestrian access and reducing dependency on motorised transport.

Burwood Highway shared path – Eastlink shared path bridge (at Mountain Highway) to Morack Road

Currently pedestrians and cyclists are forced to use a narrow boggy 'goat track' beside Burwood Highway between the Eastlink shared path bridge (in the City of Knox) and Morack Road (in the City of Whitehorse) as there are no footpaths or shared paths on either side of the road.

This section of Burwood Highway would be one of a very limited number of sites in the metropolitan area where no provision has been made for pedestrians or cyclists along the side of a State Highway.

A shared path connection along Burwood Highway is of regional significance as it will provide a safe and viable link for

- recreational and commuter cyclists travelling along Burwood Highway and/or the Dandenong Creek Trail, and
- residents of Vermont South to walk or ride to Knox City Shopping Centre and the EastLink Trail.

It will also provide an invaluable link between the adjoining residential communities of Vermont South and Wantirna. VicRoads identifies the need for this section of path along Burwood Highway on its Principal Bicycle Network.



Projects in detail: Walking and Cycling

Wayfinding

Wayfinding signage

Lack of clarity around location and the direction, distance and time to different destinations is a major barrier to use of the shared path network, particularly the regional trail networks.

Implementing a standard wayfinding system across the shared path network will improve information for pedestrians and cyclists, encouraging greater use of the network.

Infrastructure needed on the PPN includes:

- Wayfinding signage roll-out across 41 townships, including PPN mapping for sign locations, project promotion and detail sign design and installation.

Access

Path surfaces

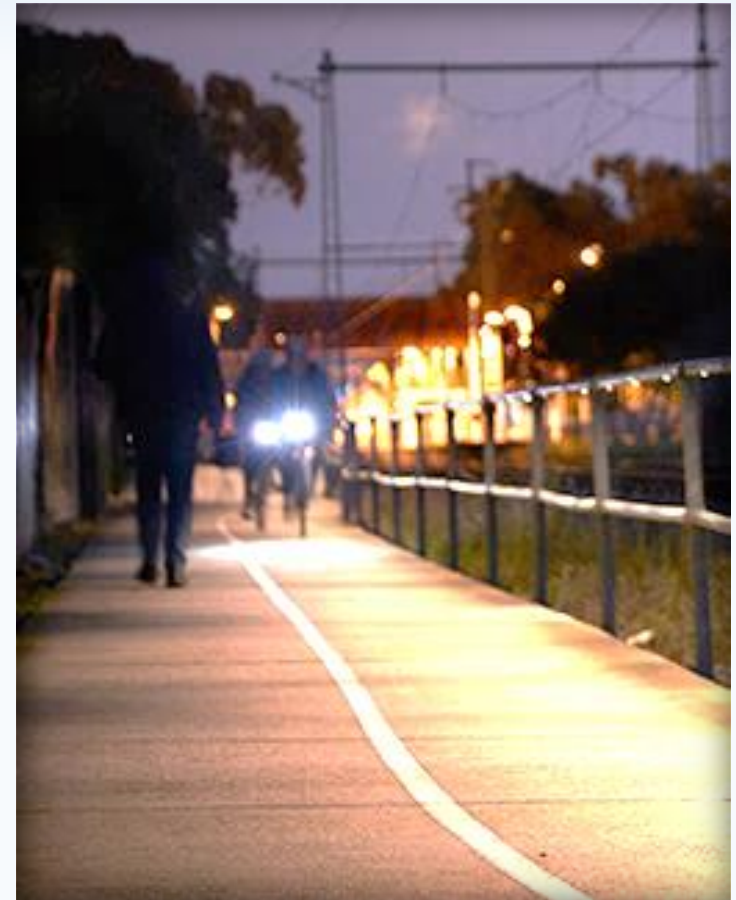
There are existing shared paths within the PBN where path surfaces do not meet the needs of the local communities. Several paths within the PBN network are required to be upgrade to a sealed surface to ensure a smooth riding surface and encourage greater utilisation of the PBN.

For example, the Dandenong Creek Trail is primarily surfaced as concrete. However, the 7km section of gravel path between Greens Road, Dandenong South and the Mornington Peninsula Freeway, Carrum needs upgrading to concrete as it is unfavourable for cyclists and inconsistent with the rest of the trail.

Bridge across the Yarra River at Banksia Park

There is currently no connection from the main Yarra trail to other local cycling and pedestrian networks in the area. Constructing a dedicated pedestrian/ cycling bridge across the Yarra River between Bulleen and Heidelberg will connect the Main Yarra trail to other local cycling and pedestrian networks in the area. It will also create an alternative river crossing to the constrained and unsafe footpath along the Manningham Road bridge in Bulleen.

The connection will be a crucial link between the Cities of Manningham and Banyule, and complement associated public transport and road improvements along Templestowe Road. This will encourage people to walk or cycle rather than depend on private vehicles.



Shared path lighting courtesy of [Klik Systems](#)

Projects in detail: Walking and Cycling

Access cont.

Pedestrian operated signals

Improved access and safe connections across arterial roads to bicycle paths and bus stops is a key factor in encouraging greater use of sustainable forms of transport.

Pedestrian operated signals will increase safety and encourage further use at sites such as:

- Wellington Road near Haverbrack Drive (Mulgrave)
- Warburton Rail Trail in Wandin and Seville
- Highbury Road, Burwood East at Melbourne Water Pipe Track

Shared path lighting

The majority of the shared paths throughout the region do not have any lighting, which is a significant barrier to the use of active transport (walking and cycling) for trips outside of daylight hours, such as the journey to and from work.

Without lights, paths can only be safely accessed in daylight, severely limiting use by cyclists and pedestrians.

Providing lighting on shared paths will assist in supporting and encouraging people to walk or cycle rather than depend on private vehicles.

Long-term bicycle parking at railway stations

Ability to cycle to train stations is diminished by limited access to secure long term bicycle parking available at stations without Parkiteers. Waiting lists for the limited bicycle lockers delays access and forces people to travel to the station by car.

There are benefits to preventative health, parking demand management and amenity in encouraging residents to cycle to the station. A simple, inexpensive and effective strategy to increase the appeal of cycling to the station is to provide Parkiteers at the following stations:

Laburnum, Blackburn, Heatherdale, Ringwood East, Heathmont, Mooroolbark, Upper Ferntree Gully, Upwey, Tecoma, Belgrave, Jordanville, Mount Waverley, Syndal, Clayton, Sandown Park, and Yarraman.

The improved access, quality and security of the Parkiteer will bolster the appeal of cycling to the station for local residents and assist to reduce the strain on station car parking.



Parkiteer bike parking

Travel behaviour change programs

There is currently no organisation able to assist local councils in delivering travel behaviour programs. Funding opportunities for these types of programs are therefore limited, despite the benefits to the future sustainability of our communities.

Victorian Government support for councils to deliver travel behaviour programs would assist in educating our residents, schools and businesses about the travel options available to them, and encourage greater use of sustainable transport.

What's next?

We must act now for the ETC to make sustainable and integrated transport services in Melbourne's east part of the state and federal government agenda.

What we're doing

Not only will we engage with policy makers, we will also work to ensure that our communities understand and support our work.

State and federal policy makers must realise that these issues are of high importance to their residents.

The ETC will continue to:

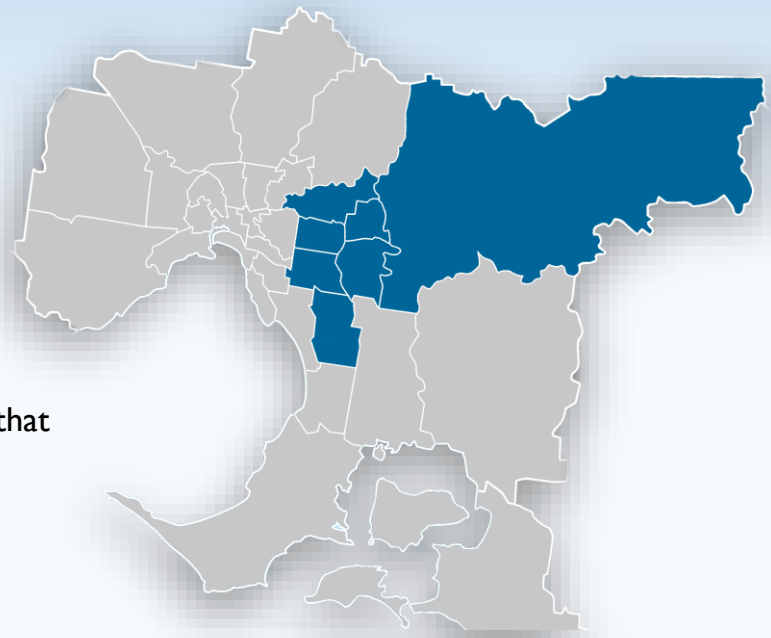
- Invite residents and stakeholder groups to forums where we discuss our initiatives, seek feedback and further ideas. We will also seek comment and input from experts and other organisations and community groups;
- Engage with the public through traditional media outlets and on social media; and
- Build coalitions with like-minded community groups.

We'll keep you updated on our website, Twitter and Facebook page:

www.etc.org.au

 [@CommutersCount](https://twitter.com/CommutersCount)

 Facebook.com/CommutersCount



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