

INTEGRATED TRANSPORT STRATEGY 2018-2031







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INTRODUCTION

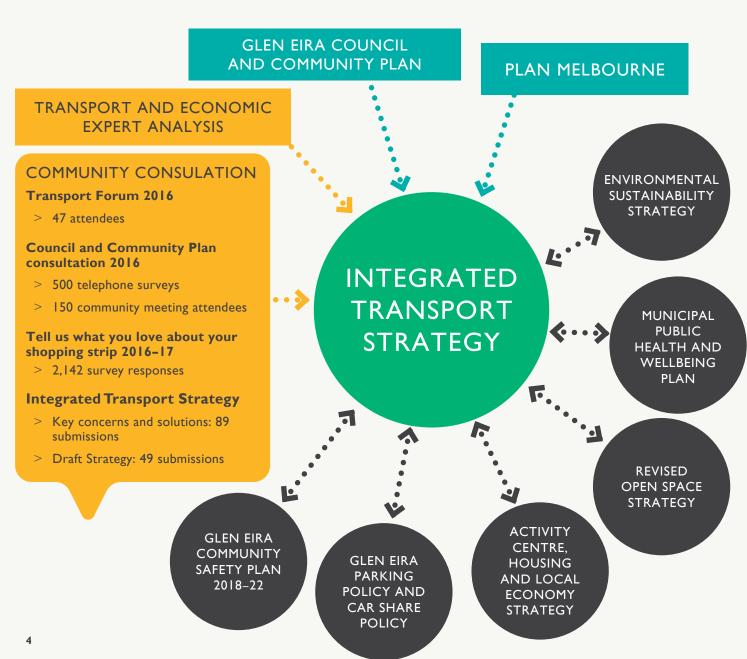
WHAT IS THE PURPOSE OF THIS STRATEGY?

Glen Eira is forecast to grow by 22,000 people, 9,000 dwellings and 9,500 jobs over the next 15 years. This *Integrated Transport Strategy* aims to set our priorities for transport, aligned with our 15-year vision for the future of transport in Glen Eira.

This Strategy intends to:

> provide the strategic context to update Council's Municipal Strategic Statement;

- > provide a planning policy link between the Glen Eira Council and Community Plan 2017–2021 and State Government's Plan Melbourne:
- > guide strategic context for future structure plans;
- > provide clear policy direction for the municipality;
- replace existing Council strategies (Sustainable Transport Strategy, Walking Strategy and Cycling Strategy); and
- > provide direction for upcoming strategies (see diagram below).



Transport will be central to achieving Council's broader policy direction as outlined in Council's *Glen Eira Council and Community Plan*:

I. Liveable and well designed

We are committed to Glen Eira being a well designed City that is safe, attractive and vibrant for our residents and businesses.

2. Accessible and well connected

Aspire to create neighbourhoods where people can access the goods and services they need, within 20 minutes of where they live, travelling by foot, bicycle or public transport.

3. Safe, healthy and inclusive

We are committed to being a community that is safe, healthy and inclusive. Our aim is to help people feel socially included, with access to quality support services. We will build a social environment that encourages participation, where people feel safe in their homes and around our streets.

To enable us to make better use of our existing infrastructure, we need to support a range of travel options for each journey.

Encouraging and facilitating active travel and public transport options will be the key to reducing unnecessary car trips. The benefits of this are:

- freeing up road space and parking for those who need to use it;
- reduced congestion and improved safety for children, particularly around schools and activity centres;
- increased productivity with less time spent in traffic; and
- improved health and wellbeing through active travel modes.

HOW WAS THIS STRATEGY DEVELOPED?

This Strategy has been informed by expert analysis, community and key stakeholder feedback, as well as a review of trends occurring across metropolitan Melbourne.

We have incorporated feedback received through various community consultations (refer to diagram on page 4).

To inform this *Strategy*, background papers have been prepared, including:

- Integrated Transport Strategy Background Data Report;
- > Integrated Transport Strategy Case Study Report;
- Integrated Transport Strategy Transport Corridor Analysis; and
- Integrated Transport Strategy Round One Community Engagement Summary Report.

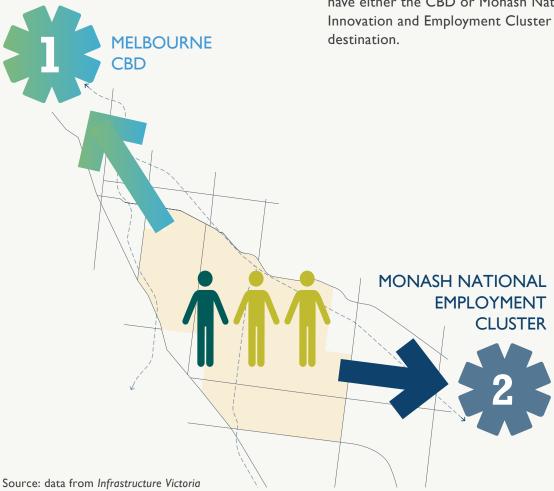
These documents can be found at www.gleneira.gov.vic.au

BACKGROUND

In recent times, Melbourne has experienced widespread growth in population, which has seen an increase of cars on our roads, overcrowded trains and a heightened community concern regarding the ability for our transport system to cope.

Glen Eira like many inner city areas, is fast approaching a critical tipping point, where the existing road network can no longer provide an easy run for vehicles that have historically made driving attractive. It is predicted that:

- > There will be an estimated 3.5 million extra trips daily across Melbourne's transport network in 2030.
- > By 2030, time spent on congested roads across Melbourne will increase by 20 per cent.
- More than a third of morning peak trips have either the CBD or Monash National Innovation and Employment Cluster as their destination



We know that for many people, driving is the only option, with this in mind we aim to make alternative transport modes more attractive to those who can travel in other ways.

This Strategy seeks to strive for a 50:50 mode share of car and non-car trips by 2031 this will be achieved by:

Increase walking, cycling and public transport trips

Increase the use of non-car alternatives where appropriate (walking, cycling, public transport and working from home) by making these options as safe, convenient, fast and attractive as possible.

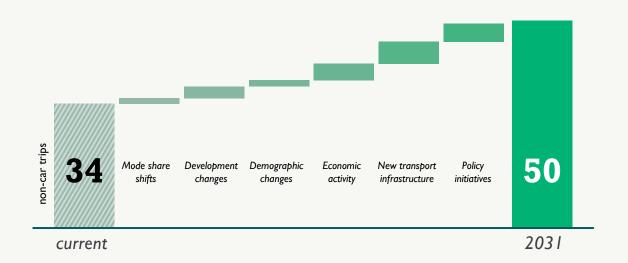
Increase efficiency on key driving routes

Improve traffic flow on key routes in order to move our car commuters around our City as smoothly as possible and facilitate prioritisation of public transport on alternate routes.



OUR GOAL:

STRIVE FOR A 50:50 MODE SHARE OF CAR AND NON-CAR TRIPS BY 2031







PRINCIPLES

VISION — Integrated Transport Strategy 2018–2031

Glen Eira will be a City of child friendly neighbourhoods that are connected to a network of vibrant and well designed walkable activity centres. The community will have a range of travel options to service their daily needs. This *Strategy* aims to reduce car use to 50 per cent of all trips.



Transport is for people — a range of options is needed to suit our busy lives

Individual travel decisions are influenced by a range of economic, physical, social and psychological factors and these decisions can change daily.



Parking will continue to play an important role and complement our transport system

The provision of parking is required as motor vehicles, in particular private motor vehicles, will remain for the foreseeable future as the predominant means by which people access goods, services, employment and recreation.



The majority of the community currently relies on the car to undertake their daily activities

The car plays an important role in the way in which the majority of the Glen Eira community travels on a daily basis. The 2016 ABS Census reports 61.1 per cent of the Glen Eira community travels to work by car as a driver or passenger (an increase of 2.3 per cent from 2011).



Not all residents within Glen Eira experience the same access to transport

Glen Eira is a diverse municipality and across the City residents have significantly different levels of transport accessibility.



Continued growth of car use will contribute to further traffic congestion and parking concerns

This growth is unsustainable and as Glen Eira is a middle/inner ring municipality with limited opportunity to increase road capacity, continuing along the trend of increasing car numbers will ultimately lead to a critical tipping point where car travel is no longer an efficient travel choice.



Peak hour travel movements should be as efficient and fast as possible

Council owns and maintains all non-arterial roads within the municipality. These roads provide an opportunity for Council to prioritise and plan for the most appropriate and desired road user outcomes.



Our streets are the defining feature of our neighbourhoods

Our local streets make up a significant portion of our public spaces and the look and feel defines our neighbourhoods. Streets and routes are and should be treated as important public spaces. We should ensure that these spaces enable safe access for all users.



Car alternatives can improve our health and the environment

By encouraging residents and visitors to choose more sustainable methods of travels such as walking, cycling, carpooling and taking public transport, we aim to reduce congestion, improve air quality, improve our health and save money.



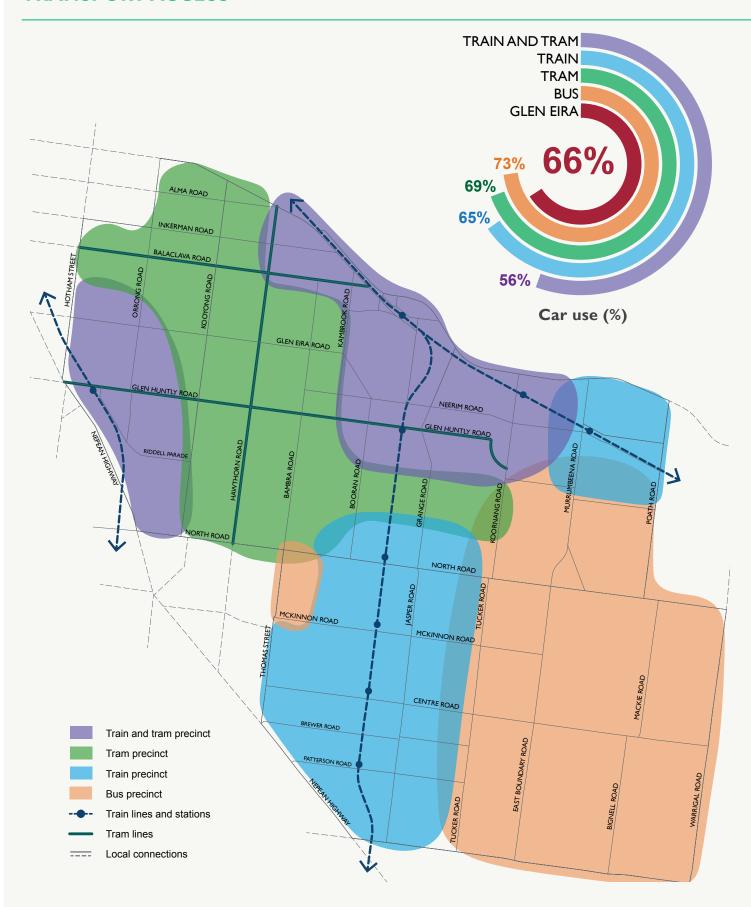
The future presents significant changes and opportunities to reimagine how we move around

The near future will likely see another once-in-acentury paradigm shift where the transport system will realign with a strong user-first focus; need to be more flexible; and adapt to a fast changing technological environment.





TRANSPORT ACCESS



By analysing the City of Glen Eira and relevant transport ABS data, it is apparent that we have a City with diverse levels of public transport accessibility. If we look at the City in relation to walking distances to public transport, we can see a clear distinction of four precincts.

TRAIN AND TRAM PRECINCT

The neighbourhoods located within the northern half of Glen Eira experience excellent access to public transport with access to all three tiers (train, tram and bus). The suburbs include Elsternwick, Ripponlea, Gardenvale, St Kilda East, Glen Huntly and around Caulfield Station.

TRAM PRECINCT

The neighbourhoods located within the northern half of Glen Eira experience good access to public transport but are not located within walking distances to a train station. The suburbs include Caulfield South and around Caulfield Park.

TRAIN PRECINCT

The neighbourhoods are located within walking distance to the train network (Frankston Line and Cranbourne Dandenong Line). The suburbs include: Ormond, McKinnon, Bentleigh, Carnegie and Murrumbeena.

BUS PRECINCT

The neighbourhoods located within the southeastern quarter of Glen Eira experience relatively poor access to public transport, with access to a limited bus network only. The suburbs include Bentleigh East, East Village and the southern parts of Carnegie and Murrumbeena.

The 2016 ABS Census data below shows that residents living close to greater public transport options are less likely to use and own a car. This data shows that aligning key Council policies on development and parking within these four precincts can assist in reducing car use and meeting the 50 per cent car trip target.

Car ownership rates					
Glen Eira	1.6 cars per dwelling				
	Train and tram	Train	Tram	Bus	
Precinct	1.3	1.5	1.6	1.7	
House	1.8	1.9	2.0	2.0	
Semi-detached house	1.3	1.3	1.5	1.6	
Apartment	1.0	1.0	1.1	1.4	

Car ownership calculations are based on the 2016 ABS data — for further information, refer to Council's Integrated Transport Strategy Background Data Report.

INTEGRATED TRANSPORT STRATEGY FRAMEWORK

Council owns and manages the majority of the street network within the municipality with the exception of arterial roads, which are owned and maintained by VicRoads.

The allocation of road space within these streets is the responsibility of Local Government.

The current approach to street design attempts to balance the needs of all users on all streets, this regularly leads to ineffective outcomes.

Council should set the future direction and preferred uses for these streets. By taking a range of external factors into account (including road widths; local area destinations; and existing connection and function) to determine the best and highest use for the limited road space within the municipality.

The following four premium transit corridors have been developed:

- > efficient driving routes;
- > express public transport routes;
- > safe cycling streets; and
- > great walking and shopping streets.

Each of these mode-based street types detailed on pages 18–21 have a purpose; set of conditions for success and possible improvements; and an individual network map based on the transport corridor assessment. For further information, refer to Council's *Transport Corridors Analysis Background Report*.

EFFICIENT DRIVING ROUTES

An efficient driving route is a road or street that aims to ensure the movement of vehicle traffic is as effective as possible.



KEY ROUTES

- > Nepean Highway
- > Dandenong Road
- > South Road
- > North Road
- > Warrigal Road
- > Murrumbeena Road
- > Kooyong Road
- > Glen Eira Road
- > Poath Road
- > East Boundary Road
- > Neerim Road
- > Grange Road
- > Jasper Road
- > Hotham Street

POTENTIAL IMPROVEMENTS

To increase the efficiency of our driving routes, possible improvements may include:

- > creating clearways to enable multiple trafficable lanes in peak hours;
- > removal of level crossings;
- > banning or reducing right hand turns;
- > consistent sign posted speed limits;
- > creation of turning-only lanes; and
- > better phased traffic signals for free flow of traffic.

EXPRESS PUBLIC TRANSPORT ROUTES

An express public transport route is a road or street that aims to prioritise the movement of trams or buses. These modes are the most efficient at moving large amounts of people quickly within limited road space.



KEY ROUTES

- > Dandenong Road
- > Nepean Highway
- > Balaclava Road
- > Hawthorn Road
- > North Road
- > East Boundary Road
- > Murrumbeena Road
- > South Road

POTENTIAL IMPROVEMENTS

To increase the effectiveness of our public transport routes, possible improvements may include:

- > separating the service for example, a bus-only lane or removal of cars from the tram lane;
- > prioritising the service for example, creation of clearways in peak hours;
- > programming of traffic signals to prioritise bus movements through intersections;
- > construction of accessible tram stops with high quality shelters and signage;
- > improving connections between train stations and interchange facilities; and/or
- > exploring the reinstatement of lost street parking where appropriate.

SAFE CYCLING STREETS

A safe cycling street is a road or street that aims to enable cycling as a legitimate transport mode choice. These streets foster a safe environment for people of all abilities to cycle safely between destinations.



KEY ROUTES

- > Inkerman Road
- > Orrong Road
- > Bambra Road
- > Koornang Road
- > Tucker Road
- > Nepean Highway
- > Riddell Parade
- > McKinnon Road
- > Thomas Street
- > Mackie Road
- > Bignell Road
- > Deakin Street
- > Crosbie Road
- > South Drive
- > Rosstown Rail Trail

POTENTIAL IMPROVEMENTS

To increase the safety of our cycling streets, possible improvements may include:

- > construction of separated, safe bike paths;
- > continuation of all bike lanes through intersections;
- > minimising car movements across bike lanes at traffic signals;
- > consistently reduce vehicle speeds along roads;
- > ensuring lighting is of a high standard along full length of the streets; and/or
- > exploring the reinstatement of lost street parking where appropriate.

GREAT WALKING AND SHOPPING STREETS

A great walking and shopping street is a road or street that aims to enable the movement of people for the purpose of walking, shopping and experiencing our activity centres and public places.



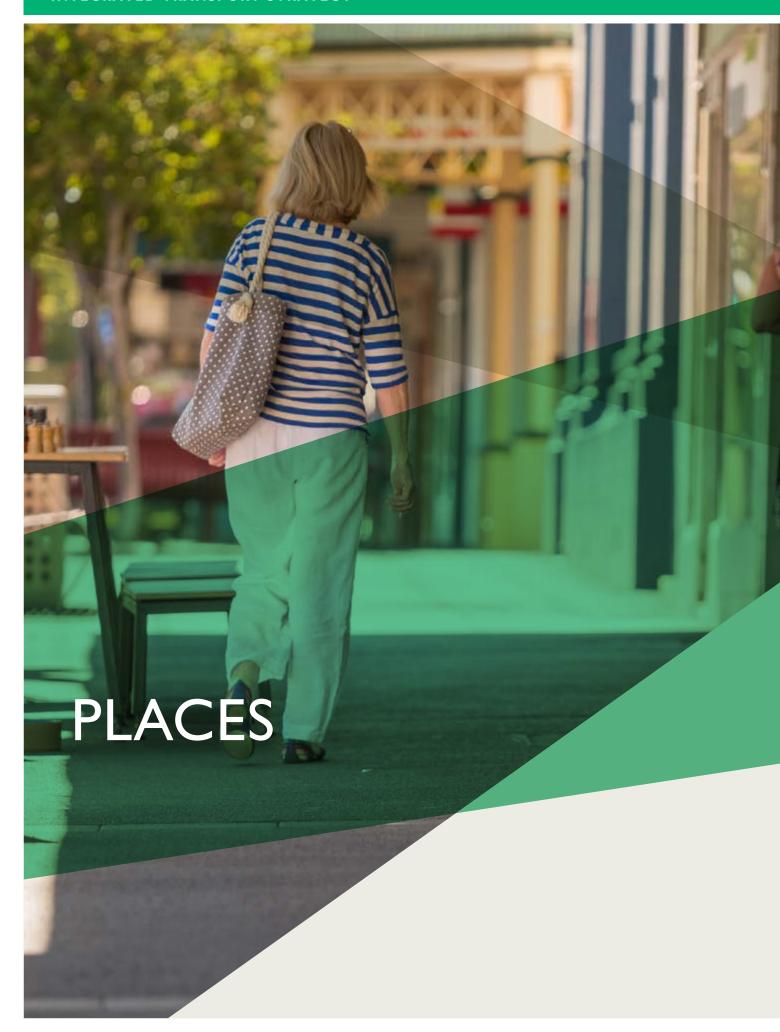
KEY STREETS

- > Centre Road
- > Glenhuntly Road
- > McKinnon Road
- > Patterson Road
- > Neerim Road
- > Balaclava Road
- > Hawthorn Road
- > Koornang Road
- > North Drive

POTENTIAL IMPROVEMENTS

To improve the experience of our walking and shopping streets, possible improvements may include:

- > pedestrian priority at all side street intersections;
- > investigate road closures and shared zones in key locations to improve the pedestrian network;
- > planting high quality canopy trees along roads;
- > ensuring high quality lighting along length of the roads;
- > improving traffic signals to prioritise pedestrians; and/or
- > developing destinational, high value public spaces.





The areas between the transport corridors are our neighbourhoods and local streets. These are the areas where our residents live, shop and recreate.

Our local streets make up a significant portion of our public spaces and are significant places in their own right. The look and feel of these streets defines how our neighbourhoods and local activity centres function.

The following three place types have been developed:

- > child friendly neighbourhoods;
- > safe school zones; and
- > walkable activity centres.



CHILD FRIENDLY NEIGHBOURHOOD

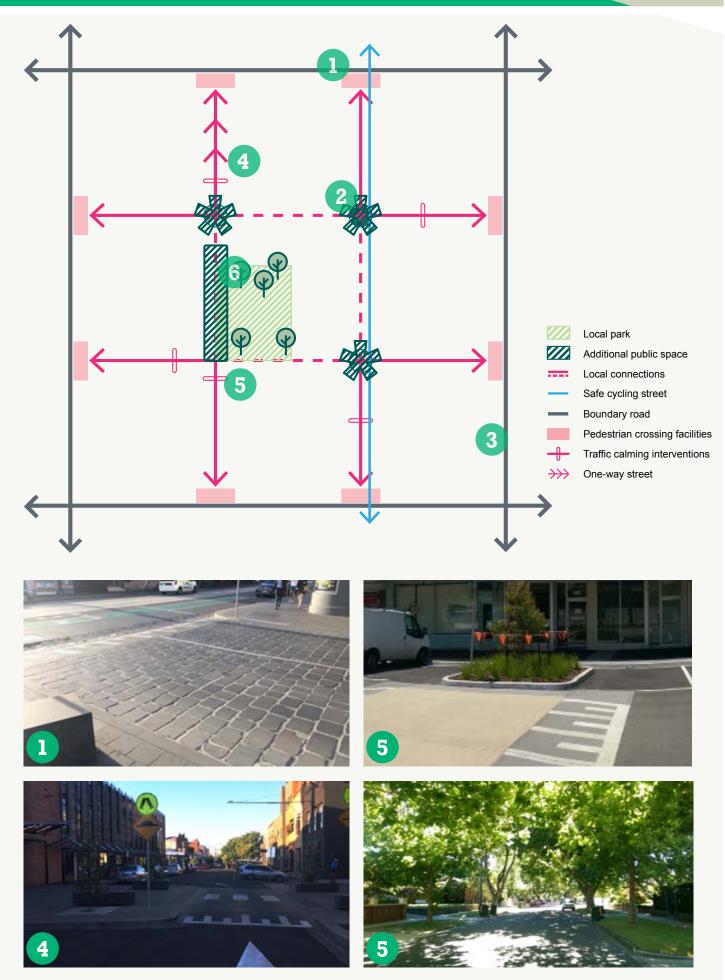
Child friendly residential streets should provide opportunities for diverse experiences and encourage people to spend time engaging in social and recreational activities. All streets should be fundamentally safe for everyone.

KEY OBJECTIVES

- > Create safe residential streets that encourage walking and social interaction.
- Design streets where pedestrians, cyclists and vehicles can co-exist safely.
- Reduce unnecessary 'rat running' within local streets.

KEY ELEMENTS

- Introduce pedestrian crossing facilities at each boundary road.
- Explore altering the local traffic network to create additional public spaces.
- Create safe local connections with regional safe cycling streets.
- 4 Explore the potential for one-way streets.
- Implement internal traffic calming and additional tree planting.
- 6 Improve lighting.
- Reduce speed limits to a maximum of 40km/h within all child friendly neighbourhoods.





SAFE SCHOOL ZONES

Safe school zones have a strong focus on accessibility and safety for all users. These zones should provide for a range of safe travel options while not impacting on the amenity of nearby residents.

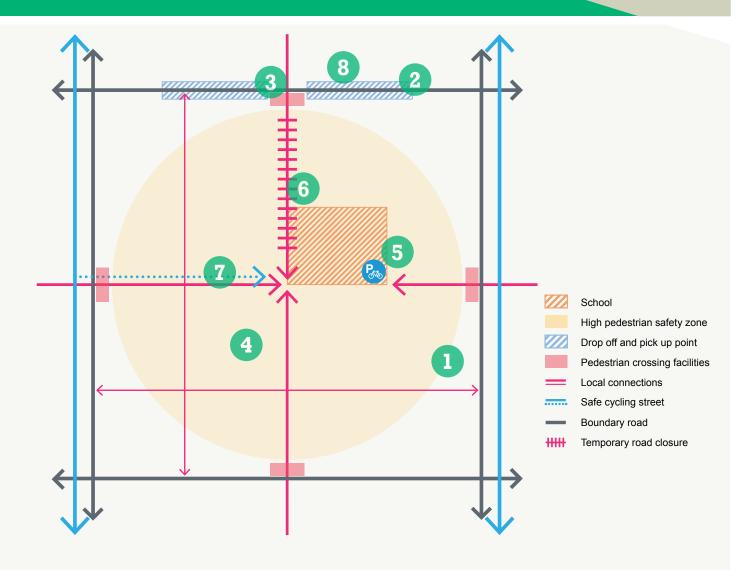
KEY OBJECTIVES

- > Provide an environment that encourages active and independent travel.
- > Ensure existing and future amenity of the area when designing movement around a school zone is protected and enhanced.

KEY ELEMENTS

- Create high pedestrian safety zones around the school with wide footpaths and raised pedestrian crossings and high quality lighting to ensure slow vehicle speeds.
- Provide vehicle drop-off areas in locations that do not affect safety of school users or residential amenity.
- Explore altering the traffic network and temporary road closures to create safe and inviting forecourts into schools.

- Reduce speed limits within pedestrian safety zones.
- Provide high quality bike parking within school zones.
- 6 Create high quality walking streets linking vehicle drop-off areas with school entrances.
- Create safe local connections with regional safe cycling streets.
- Provide protected zones for school children during pick-up and drop-off.













WALKABLE ACTIVITY CENTRE

A walkable activity centre is an attractive and exciting destination that encourages residents and visitors to visit, shop and stay within these precincts, rather than driving to a regional shopping centre. These streets should be designed to balance the needs of the diverse users in order to create an environment that ensures access, safety, comfort and enjoyment for everyone.

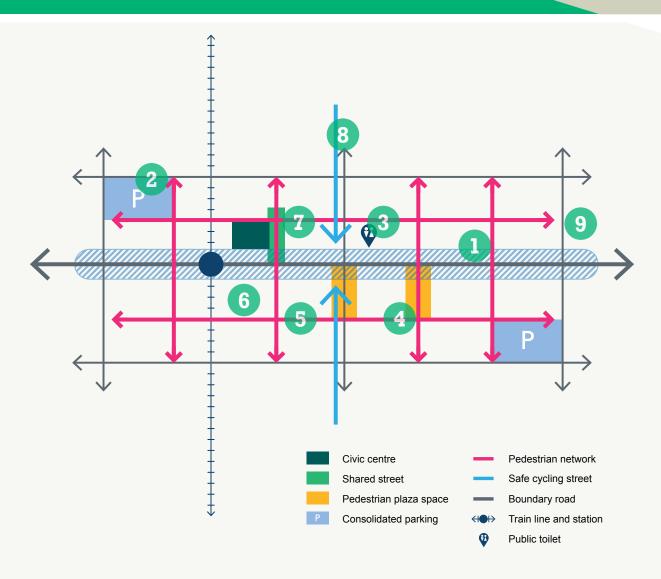
KEY OBJECTIVES

Ensure appropriate parking is provided in suitable locations to support the economic vitality of the shopping strip.

KEY ELEMENTS

- Widen footpaths to encourage street trading activities.
- Provide consolidated parking close to key driving routes and interactive wayfinding signage.
- Provide adequate public facilities, such as toilets, seats and drinking fountains.
- Explore opportunities to implement shared zones and road closures to create high quality civic spaces.

- Provide a safe and comfortable walking environment during the day and night and create attractive places that people want to visit and linger longer.
- 5 Create high quality pedestrian networks.
- Provide safe, high quality connections between key destinations and public transport nodes.
- Provide needs-based and short-term parking spread throughout the centre.
- 8 Create safe local connections with regional safe cycling streets.
- 9 Explore the reinstatement of lost street parking where required.



















As Melbourne's population has grown so has our car usage and our community has clearly expressed that traffic congestion and parking are real problems in our City. Like many inner city areas, we have now reached a critical tipping point, where the existing road network can no longer provide an easy, smooth run for vehicles.

To achieve this 50:50 mode split by 2031 in Glen Eira, this *Strategy* aims to reduce car use by transitioning approximately 980 car commuters to other modes every year for the next 13 years (accounting for the projected population growth).

This Strategy sets out a range of policies, pilot programs and projects that will enhance livability for all residents and ensure we move towards a better transport system that will reduce traffic congestion and parking issues.

1.0 PLACES

The continued growth of our City presents the opportunity to change how we plan for this growth in our neighbourhoods, as well as the look and feel by making them more sustainable and peoplecentered places.

Our streets make up a significant portion of our public spaces and can become significant places in their own right. The look and feel of these streets defines how our neighbourhoods function.

Refer to the *Places* section (see pages 23–29) of this *Strategy* for details on the three key types of places that make up our City.

POLICY I.I

Support and promote increased dwelling density at key transport hubs

Transit-Oriented Development refers to a development that is located on or adjacent to a high quality public transport node. The residents of these developments experience high quality public transport access, good walkability and mixed land uses.

Transit-Oriented Development is a key direction to realising the 20-minute-city concept adopted by direction 5.1 in the State Government's *Plan Melbourne* strategy.

EVIDENCE

Council's Activity Centre, Housing and Local Economy Strategy identifies where the major focus for scale and density of housing should occur within the municipality.

POLICY 1.2

Focus employment and office development within major activity centres and strategic sites

The residential density of Glen Eira is relatively high by metropolitan standards and increasing, however the corresponding number of local jobs is low.

Employment opportunities should be focused in areas of existing retail and commercial activity with access to transport modes and links.

Opportunities to address this and create employment clusters need to be factored into any consideration of underutilised sites.

EVIDENCE

- > The number of local job opportunities within Glen Eira is low when compared with other municipalities.
- Only 21.3 per cent of working residents are employed within the municipality, making Glen Eira the fifth lowest council across Melbourne to locally employ its own residents.
- > Comparable councils such as Bayside and Boroondara have rates in the range of 26.2 to 26.4 per cent.

PILOT I.I

Design neighbourhood streets that balance the needs of diverse users in order to create an environment that ensures access, safety, comfort and enjoyment for everyone

Council will plan, design and implement a pilot concept design for a Glen Eira neighbourhood with the goal of creating safe and comfortable local community spaces.

PILOT 1.2

Work with a school to develop new ways to encourage behavioural changes and reduce the reliance on car-based transport

Work with a local school and neighbourhood to implement a pilot safe school zone, as identified in the *Places* section of this *Strategy*.

Implementing a safe school zone will promote accessibility and safety for all users and drive behavioural change within the school community, towards making riding and walking to school normal for all children once again.

PROJECT 1.1 Develop Street Design Guidelines

Street Design Guidelines offer a set of principles and aspirations to help guide and support the appropriate development of current and future streets within the municipality.

A focus of the *Guidelines* is to design for safety and mobility while treating streets as public spaces.

CASE STUDIES

Perth City Link — Transit Oriented Development

Perth City Link is an urban renewal project managed by the Metropolitan Redevelopment Authority with the aim of reconnecting the Perth CBD with the northern neighbourhood of Northbridge. By sinking the railway line and Wellington Street bus station, the project aims to create a 13.5 hectare space for residential and commercial uses.

It is expected the area will be transformed with quality designed buildings, inviting public spaces, improved connections across the city and creating homes for 3,000 new residents.

Barcelona superblocks

In 2015, selected neighbourhoods in Barcelona, Spain were converted to a superblock to test and pilot a new urban design initiative to encourage walking, cycling and neighbourhood safety.

In order to create a superblock, select streets were cut off to through-traffic and four new public squares of 2,000m² each were created.

The concept works by limiting the number of roads that cars can use to cross the city. Through traffic is permitted only on roads around the perimeter of each superblock, where new bus lines are installed. The streets within the block have a low speed limit and allow access only for local residents, delivery vehicles and emergency services.

Once this system is in place, the less car-encumbered streets are redesigned, extending pedestrian space and allowing for amenities, such as playgrounds and cycling links.

2.0 PEOPLE

Transport is fundamental for people, therefore a range of transport options is needed to suit our busy lives.

Individual travel decisions are influenced by a range of economic, physical, social and psychological factors and these decisions can change daily.

Initial community consultation has demonstrated that our community members have differing needs and wants when it comes to how they travel now and into the future. They want the freedom to choose from a range of options to meet their daily travel needs.

POLICY 2.1

Ensure meaningful engagement with the community and involve the community and stakeholders in all transport projects

Ensure all transport projects include best practice community and stakeholder engagement during the project scoping and inception stages.

Community feedback received throughout the development of this *Strategy* and other work completed by Council has made it clear that our residents are engaged and informed.

As such it is important to ensure all transport projects include significant and meaningful community and stakeholder engagement.

POLICY 2.2

Plan for all members of the community and ensure universal design principles are embedded into all projects, policies and programs

Universal design is the design of products and environments for use by all people in an equal manner. All projects, policies and programs should be designed to ensure universal design principles are embedded within the early stages.

Many Australians will experience a form of disability at some stage of their lives as a part of the normal human life cycle. Physical and non-physical barriers within the built environment can have a substantial impact on freedom of movement and access.

Council should work towards achieving a fully accessible and inclusive municipality where all residents have equitable access to goods and services.

POLICY 2.3

Collaborate with neighbouring councils to achieve high quality transport outcomes

Undertake an audit of all existing bicycle parking facilities across the municipality, including at all Council facilities, parks and key destinations. This will direct where Council should install more bicycle parking and end-of-trip facilities, such as storage and change facilities.

Additionally, Council should advocate for bicycle parking and end-of-trip facilities at train stations and other non-Council locations as identified.

BIKE RIDER





















CASE STUDIES

Neighbourhood Project — CoDesign Studio

The Neighbourhood Project aims to help communities bring different projects to life as well as working with Local Government to help embed lasting changes that support active and inclusive neighbourhoods. The aim is to also build capacity in the community.

The first round of projects involved three councils: Hobsons Bay City Council, City of Whitehorse and Cardinia Shire Council. A variety of community-led projects have emerged from the program allowing the community to take ownership of the plan and direction of their neighbourhood projects.

Originally developed as temporary projects, many are now being implemented permanently due to their success.

Yarra Trams Accessibility Action Plan

Yarra Trams has led the way in developing an Accessibility Action Plan to adapt and improve the service delivery for all users of the network.

Yarra Trams has a vision to transform Melbourne's tram network into a modern light rail system offering world-class services to all passengers. An important part of this vision is providing a network that is accessible to everyone and a positive customer experience for people with a disability or mobility restriction and older people.

Plans include an accessible-only low floor tram fleet and increased accessible tram stops at all major destinations.

3.0 MOVEMENT

Glen Eira is a diverse municipality and across the City residents have significantly different levels of transport accessibility.

The northern half (built before the car) is well placed with a range of transport options (including train, tram and bus) and the CBD is within comfortable cycling distance.

The southern half has been built with a heavy reliance on cars. Train stations are further apart, there are no trams and cycling into the CBD is not a comfortable option.

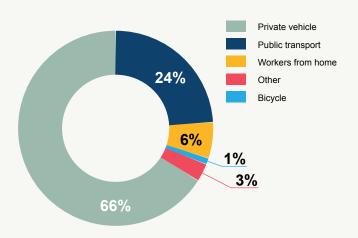
The 2016 ABS Census revealed that 61 per cent of Glen Eira residents travel to work each day by car. This has increased from 58 per cent in the 2011 ABS Census.

Identified within the *Framework* section (see page 14) of this *Strategy* are four mode-based route types:

- > efficient driving routes;
- > express public transport routes;
- > safe cycling streets; and
- > great walking and shopping streets.

The prioritisation of these routes will become increasingly important as the Glen Eira population increases and with it the demand for limited road space.

Efficient, accessible and safe movement is essential to developing a great transport system.



Source: Glen Eira Transport Data Review: SGS – mode share for work trips of residents 2016

POLICY 3.1

Provide high quality facilities at all stops along key public transport routes

Premium public transport corridors (as identified on page 19) should be equipped to provide the highest quality of passenger experience. This includes the provision of high quality passenger amenities, such as shelters, seats and other key elements to ensure the user experience is as enjoyable and easy as possible.

Council will work with relevant State Government authorities to ensure the provision of these amenities are prioritised, located in the right places and designed to suit the needs of our residents.

PILOT 3.1

Improve efficiency of existing road network on key driving routes

It is important to recognise that the car plays an important role within the Glen Eira community and will continue for the immediate future. Council will seek to improve car-based travel on select roads by implementing some of the improvements suggested in the efficient driving routes analysis.

PILOT 3.2

Plan and design a pilot cycle corridor improvement project with a protected cycleway to encourage an increase in cycling

While cycling and walking may not be a viable option for commuting for many Glen Eira residents, there are opportunities for short car trips to be swapped for walking and cycling options. It is important to provide a safe and inviting environment for cyclists of all ages and abilities to ensure active transport is an easy and convenient part of our daily lives.

PROJECT 3.1

Reduce the speed limit within all child friendly neighbourhoods to a maximum of 40km/h

Studies have proven that reducing speed limits reduces the chance of serious injury to all road users. In addition to safety benefits of reducing speed limits it is also expected that our streets will experience a range of benefits, including:

- > increased quality of street life;
- > reduced noise levels;
- > increased cycling and walking; and
- > minimal effect on travel time.

As such Council will work with select neighbourhoods to reduce the speed limit to a maximum of 40km/h.

PROJECT 3.2Review bus service provision

Undertake an extensive and detailed review of existing bus service provision within Glen Eira to identify needs and locations for improvement.

While the existing bus network does provide good overall coverage of the municipality, there are opportunities in scheduling improvements, route servicing and reliability. Investment in the bus system can be a relatively cost effective way to improve the public transport system. A complete review of the bus network within Glen Eira and the surrounding Inner South Eastern Region is required.

PILOT 3.3

Design and implement a public transport corridor improvement project

High quality public transport services are associated with high usage rates and are able to move more people than private vehicles. Any transport infrastructure improvement projects should be based on their ability to significantly improve journey times and ease of use.

CASE STUDIES

Punt Road Clearways

In August 2016, VicRoads implemented 24/7 clearways along Punt Road in order to improve traffic flow along one of Melbourne's most congested roads. It was identified that parked cars contributed to high levels of congestion and were an opportunity to create an additional traffic lane.

VicRoads identified the following benefits from implementing the 24/7 clearways:

- > improved safety along Punt Road;
- relieved congestion and got traffic flowing again outside of peak periods and on weekends; and
- > provided more reliable journeys for people commuting by bus and tram.

Waltham Forest — Mini-Holland Program

The Mini-Holland program, as part of the Mayor of London's Healthy Streets agenda, aims to make boroughs as cycle friendly as their Dutch equivalents — where more than half of all journeys are via cycling. All road users will benefit from these improvements to the streets and better facilities for pedestrians. Changes include:

- slowing down vehicles on residential streets, discouraging non-local traffic from cutting through the area and prioritising pedestrians at junctions; and
- proposing changes such as protected separate spaces for people to cycle in, new facilities for public transport users and new crossing points for pedestrians and cyclists.

Provisional results reveal an overall traffic reduction of 16 per cent, no reported collisions and an increase in cycle participation in adults and children.

4.0 PARKING

Parking is an ongoing issue across many parts of Glen Eira, including activity centres, local streets and around places of interest.

Throughout the development of this *Strategy*, a common concern received from both traders and the community was the desire for increased activity centre-based parking.

The provision of public parking is required to support daytime shopping within our retail centres, as vehicles will remain (for the foreseeable future) as the predominant means by which our residents access goods, services, employment and recreation.

PROJECT 4.1 Develop a bicycle parking action plan

Undertake an audit of all existing bicycle parking facilities across the municipality, including at all Council facilities, parks and key destinations. This will direct where Council should install more bicycle parking and end-of-trip facilities, such as storage and change facilities.

POLICY 4.1

Develop a municipal Parking Policy that emphasises equitable access to public parking

Parking in residential streets has long been a polarising issue for our communities. Our approach to residential parking will be evidence-based and designed to maximise the use of existing spaces.

Responsible and consistent provision, permit, restriction and enforcement systems will increase equity as well as certainty for residents, visitors, businesses and developers. Integrated planning will also provide opportunities to use the *Parking Policy* to encourage mode shift and promote preferred land uses.

POLICY 4.2

Develop and implement parking overlays to contribute to the development of public parking within our centres

Our major activity centres experience near capacity public parking occupancies. This is due to a range of factors, including the rapid rate of development and land use change; and our centres becoming highly destinational attracting a significant number of trips from outside the local area and the municipality.

Where appropriate, parking overlays will be developed and implemented to allow for financial contributions (or 'cash-in-lieu' payments) to be paid in place of providing car parking spaces. These financial contributions will then form a fund used to construct additional public parking within our centres.

POLICY 4.3

Incentivise and encourage office and employment development in major activity centres by exploring the review of statutory parking requirements

Council's Activity Centre, Housing and Local Economy Strategy identifies that employment opportunities should be focused in areas within strategic sites within major activity centres and along high quality transport corridors.

Where it is demonstrated that office parking usage is lower than the planning scheme requirements, explore a reduction in the statutory parking requirements for office use.

When determining appropriate parking rates, the site specific conditions of the development and the corresponding ability for the centre to adapt to an increased mode share of sustainable travel will be taken into account.

POLICY 4.4

Incentivise and encourage preferred land uses that provide night-time activity within activity centres by exploring the review of statutory parking requirements

The Activity Centre, Housing and Local Economy Strategy identified that vibrant night-time and weekend activity is a priority.

Where there is a demonstrated public parking availability that is underutilised during the evenings, explore a reduction in the statutory parking requirements for these commercial uses.

When determining appropriate parking rates, the site-specific conditions of the development and the corresponding parking utilisation of the centre should be taken into account.

PILOT 4.1

Encourage efficient use and innovative management approaches to commercial parking within new developments

By encouraging an innovative approach to activity centre-based commercial car parking, there are opportunities to provide additional public parking in areas where it is most needed.

Shared parking is a concept that takes advantage of the fact that most private parking spaces are only used part-time by a particular motorist or group. Many parking facilities have a significant portion of unused spaces, with utilisation patterns that follow predictable daily, weekly and annual cycles.

By exploring and trialling a shared parking pilot within one of Glen Eira's major activity centres, we hope to enable these parking facilities to be used more efficiently by allowing these commercial parking spaces to be shared by multiple users.

CASE STUDIES

Auckland Council car park

The most common form of shared parking is publicly accessible parking buildings, as provided in many CBD environments. These buildings allow parking spaces to be shared between multiple users. They may be either publicly or privately owned but operate most effectively with some form of public sector governance.

Within suburban contexts, the multi-storey public car parking building in New Lynn, Auckland is an example of a shared parking facility, managed by a public authority within a private development.

The project was instigated by government investment in trenching a surface railway, freeing up land previously used as a bus interchange and surface car parking. A mixed-use development was delivered by private developers incorporating a four-storey 300 space public car park and 7,000m² of retail and commercial space, including a health centre and a residential tower with 110 apartments.

Atkinson Street — multi-deck car park

The City of Monash recognised the need for extra car parks within the Oakleigh activity centre (a highly desirable retail and hospitality location), especially during peak periods when existing car parks are 100 per cent occupied.

In August 2016, the City of Monash started construction of the new multi-deck car park in Atkinson Street, Oakleigh. This \$7.5 million extension of an existing ground floor car park created a 274 space car park in the centre of Oakleigh, boosting parking in Oakleigh by 195 spaces.

5.0 TECHNOLOGY

Transport technologies are changing at a faster rate each year — delivering a range of opportunities and obstacles for Council to overcome.

When it comes to transport technology, Glen Eira has the opportunity to become a smart city. With the ability to utilise these new technologies and big data to increase planning performance and residents' wellbeing, we can increase our ability to respond to local, national and global challenges.

POLICY 5.1

Quickly respond to changing transport technologies

In the future we will see another once-in-ageneration paradigm shift where the transport system will:

- > realign with a stronger user-first focus;
- > need to be more flexible; and
- > quickly transform and adapt to an ever-changing technological environment.

To ensure we take advantage of these opportunities, we must respond efficiently. Council needs to proactively access new and emerging transport technologies and assess their benefits against the Glen Eira Council and Community Plan objectives in order to determine policy positions.

PROIECT 5.1

Explore implementing and supporting carpooling programs

Single occupant cars make up a significant amount of on-road traffic within Melbourne. Carpooling is the sharing of car journeys so that more than one person travels within a car and prevents the need for others to have to drive to the same location themselves. Council will explore options to trial and promote carpooling within key activity centres and Council facilities.

PROJECT 5.2

Develop a transport data action plan to equip Council to better measure, collect and analyse transport data to guide decision-making in the future

Good quality transport data is critical to planning and managing transport within our cities. It is important to document transport activity that is taking place in support of economic and social development.

As new transportation technologies emerge, innovative companies are collecting detailed, street-level data in real time on everything from traffic speeds to transit use. Most cities around the world are not equipped to measure, collect and importantly analyse this data.

The potential benefits of big data for transport planning are improved knowledge, high standards of customer service and high quality planning.

PILOT 5.1 Support and encourage electric cars

Council will support electric cars within the municipality. The benefits of transitioning to electric cars include:

- > zero emissions:
- > reduction in noise; and
- > low maintenance.

Council will explore opportunities to take the lead on electric cars. This could include:

- > piloting electric cars as part of the Council fleet; and
- > providing charging stations at Council offices.

CASE STUDIES

Strava Metro

Strava is a GPS-based activity tracking app that lets users track their travels, workouts, bike commutes and steps. It also has a division called Strava Metro that gathers the anonymous data from millions of bike rides and uses it to find patterns on how, when and where people ride.

It is now sharing that data with transportation departments in cities around the world, with the goal of improving street infrastructure.

Strava Metro data enables deep analysis of cyclist and pedestrian activity, including popular or avoided routes, peak commute times, intersection wait times and origin/ destination zones. Metro processes this data for compatibility with geographic information system (GIS) environments.

Key features include:

- > street activity counts across the entire network:
- > origin and destination surveys; and
- > activity counts and wait times at intersections.

Dockless bike share

Dockless bike share is a new business model that allows people to access a fleet of bikes through a smartphone app. Bikes can be used for return or one-way trips and don't have to be returned to a docking station.

Mobility as a service

Mobility as a service describes a shift away from personally owned modes of transportation and towards mobility solutions that are consumed as a service.

This is enabled by combining transportation services from public and private transportation providers through a unified gateway that creates and manages the trip, which users can pay for with a single account.

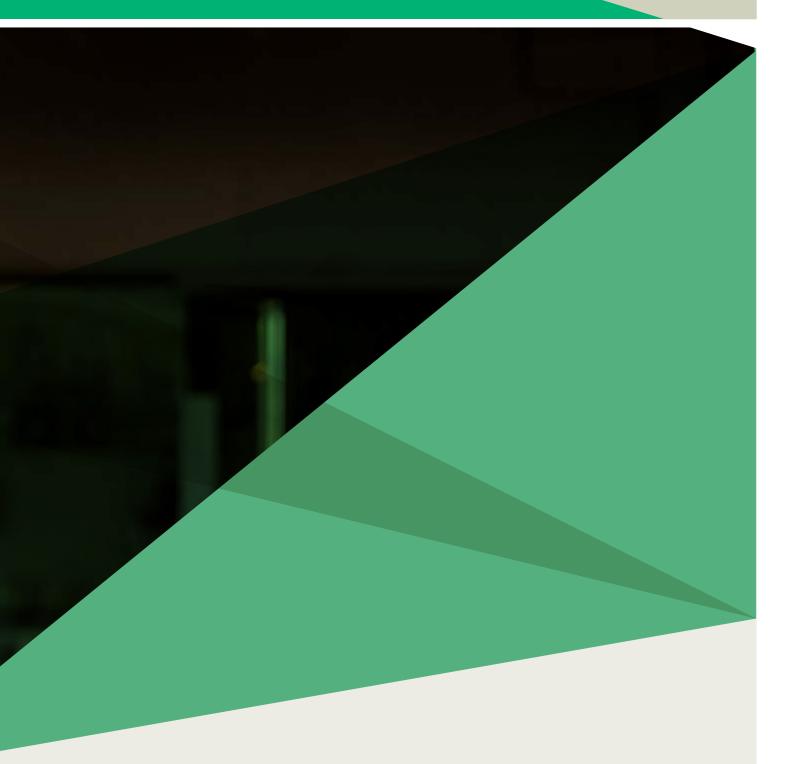
SharedStreets

SharedStreets is a collaboration between National Association of City Transportation Officials (NACTO), the World Resources Institute and the Organisation for Economic Co-operation and Development's International Transport Forum. Together they are developing a digital commons for streets — a universal language for communicating information about city streets and a launching pad for public-private collaboration and data exchange.

This will include:

- > road safety data;
- real time parking and congestion data; and
- > integrated public transport scheduling.





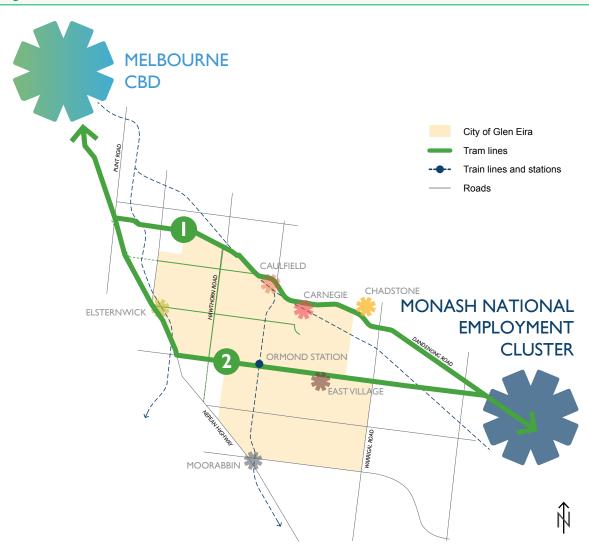
Across metropolitan Melbourne, transport infrastructure provision is struggling to keep pace with population growth, resulting in increased congestion — and Glen Eira is no different.

Glen Eira's situation is compounded by a comparatively larger percentage of workers leaving the municipality each day to travel to work. Increased car use, in part, reflects a public transport system that is not a sufficiently attractive alternative. The ability to create additional road capacity and increased road use efficiency in a built-up urban areas is limited.

Car use will only decline when alternatives, including public transport, cycling and walking options, become more attractive. It is the responsibility of governments at all levels to provide and promote those alternatives.

The Glen Eira Council and Community Plan outlines a vision for a 'City that is easy to move around, full of safe travel options and walkable neighbourhoods'. Council will advocate to all levels of government and other key stakeholders to better enable this vision.

PROJECTS



PROJECT 5.1 Advocate for new light rail services

Council will seek investment from the State Government to undertake planning and feasibility studies for additional light rail services throughout Melbourne and Glen Eira.

By expanding the current tram network and upgrading to an efficient and frequent light rail service we will expect to see large increases in patronage due to the provision of a high quality public transport service for our community. This will ultimately reduce unnecessary congestion, result in travel time savings and increased transport accessibility for our residents.

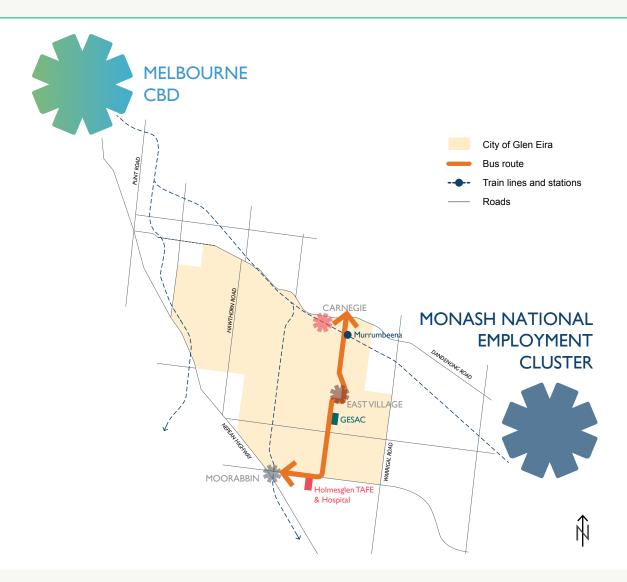
It is suggested that two new routes be explored:

I. Caulfield-Rowville

This new service would connect the Caulfield Station precinct and Monash University with the Carnegie urban renewal area, Chadstone Shopping Centre and the Monash National Employment Cluster.

2. Elsternwick-Clayton

Providing a high quality service from Elsternwick to Clayton-along North Road-will ensure Glen Eira's largest urban renewal area East Village is connected to a major train station (Ormond) and the Monash National Employment Cluster.

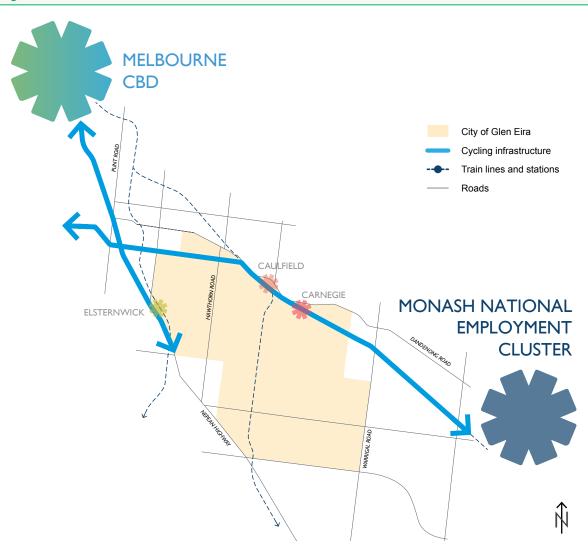


PROJECT 5.2 Advocate for new premium bus service in East Bentleigh

In line with the *Frameworks* section of this *Strategy*, Council will advocate to the State Government for increased public transport provisions and service quality across the municipality with a focus on premium bus services particularly along East Boundary Road and North Road that better connects the East Village urban renewal precinct and the Glen Eira Sports and Aquatic Centre (GESAC) with major activity centres and train stations.

Council seeks to work in partnership with the State Government to ensure residents in the new East Village Precinct and surrounding areas have increased opportunities for alternative modes of transport, including public transport services, cycling and walking.

PROJECTS

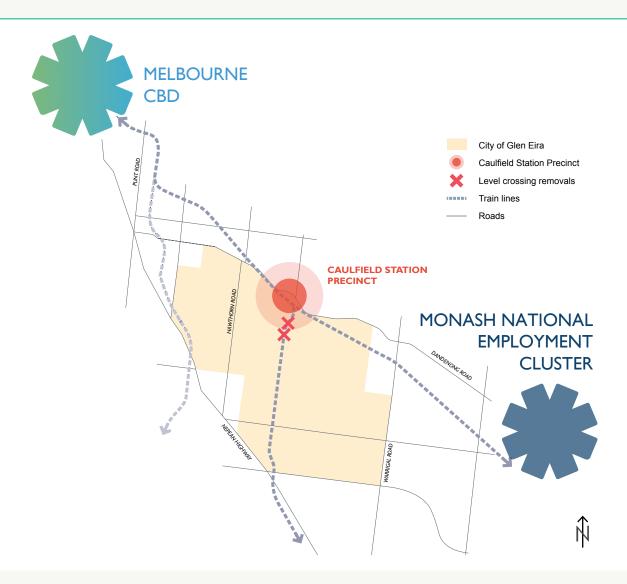


PROJECT 5.3 Advocate for premium cycling infrastructure along key arterial roads

More people cycling will ease congestion on public transport and reduce the dependency on private vehicles. This will provide economic and environmental benefits for individuals and the community.

The addition of high quality cycling infrastructure, such as cycleways and cycle paths will minimise potential conflict and increase the safety of cycling for all users. As identified within the *Victorian Cycling Strategy 2018-2028*, this corridor is of state significance and should be prioritised to provide a

safe, low stress and direct connection for Glen Eira residents. Additionally, Council would welcome the opportunity to work with the State Government to explore the implementation of additional strategic cycling corridors within Glen Eira.



PROJECT 5.4 Advocate for significant upgrade to Caulfield Station and its wider precinct with the removal of remaining level crossings

With the development of the Metro Tunnel and expansion of services from Caulfield Station, Council will advocate for State Government investment to significantly upgrade the Caulfield Station to improve pedestrian access between the Monash and Caulfield Racecourse precincts, improve local traffic management and provide a range of sustainable transport options.

Within the wider precinct, road and rail crossings present major physical barriers to creating an efficient and safe transport network. In close proximity to Caulfield, the removal of crossings at Glenhuntly Road and Neerim Road provides opportunities to increase the road efficiency and also enhance the local areas with placemaking and urban renewal.





EVALUATION

The following tables evaluate the actions described within this *Strategy* with respect to their level of impact in achieving the vision of a 50:50 mode share of car and non-car trips by 2031.

The impact assessment for policies, pilots, projects and advocacies have been rated on a scale of:



POLICY		IMPACT
1.1	Support and promote increased dwelling density at key transport hubs	VVV
1.2	Focus employment and office development within major activity centres and strategic sites	///
2.3	Collaborate with neighbouring councils to achieve high quality transport outcomes	~
3.1	Provide high quality facilities at all stops along key public transport routes	//
2.1	Ensure meaningful engagement with the community and involve the community and stakeholders in all transport projects	~
2.2	Plan for all members of the community and ensure universal design principles are embedded into all projects, policies and programs	✓
4.1	Develop a municipal Parking Policy that emphasises equitable access to public parking	~
4.2	Develop and implement parking overlays to contribute to the development of public parking within our centres	~
4.3	Incentivise and encourage office and employment development in major activity centres by exploring the review of statutory parking requirements	~
4.4	Incentivise and encourage preferred land uses that provide night-time activity within activity centres by exploring the review of statutory parking requirements	~
5.1	Quickly respond to changing transport technologies	_

PILOT		IMPACT
3.3	Design and implement a public transport corridor improvement project	///
3.1	Improve efficiency of existing road network on key driving routes	//
3.2	Plan and design a pilot cycle corridor improvement project with a protected cycleway to encourage an increase in cycling	//
1.1	Design neighbourhood streets that balance the needs of diverse users in order to create an environment that ensures access, safety, comfort and enjoyment for everyone	~
1.2	Work with a school to develop new ways to encourage behavioural changes and reduce the reliance on car-based transport	~
4. l	Encourage efficient use and innovative management approaches to commercial parking within new developments	~
5.1	Support and encourage electric cars	_

PRO	PROJECT		
3.2	Review bus service provision	~	
4.1	Develop a bicycle parking action plan	//	
5.2	Develop a transport data action plan to equip Council to better measure, collect and analyse transport data to guide decision-making in the future	//	
5.1	Explore implementing and supporting carpooling programs	~	
1.1	Develop Street Design Guidelines	✓	
3.1	Reduce the speed limit across all child friendly neighbourhood streets to a maximum of 40km/h	~	
ADV	OCACY	IMPACT	
5.1	Advocate for new light rail services	VVV	
5.2	Advocate for new premium bus service in East Bentleigh	VVV	
5.3	Advocate for premium cycling infrastructure along key arterial roads	VVV	
5.4	Advocate for significant upgrade to Caulfield Station and its wider precinct with the removal of remaining level crossings	///	

FIVE-YEAR ACTION PLAN

As detailed within this *Strategy*, Council will implement a range of policies and undertake a set of projects and pilots to better integrate transport and land use to achieve the vision of a 50:50 mode share of car and non-car trips by 2031.

This action plan will be reviewed every five years to ensure policies and projects remain relevant as well as ensuring we are moving towards achieving the *Strategy*'s vision. This will allow for the identification of any new actions that may be required to address emerging transport technologies and provide an opportunity to incorporate any new actions and objectives arising from future Council Plans.

The following timeline outlines a five-year action plan of upcoming projects and pilot programs:

2018

Adopt Integrated Transport Strategy

PILOT Child Friendly Neighbourhood

Develop Parking Policy

Develop Street Design Guidelines

Advocate and collaborate with State Government on feasability studies for:

- new light rail connections from Caulfield to Monash; and
- > a new premium bus service to/within East Bentleigh

2019

PILOT Safe Cycling Street

PILOT Safe School Zone

2020

Develop Transport Data Implementation Plan

2021

PILOT Transport Corridor Improvement

Evaluate and Review Integrated Transport Strategy

Develop New Five-Year Transport Action Plan 2023–28

2022

