

# CHAPTER 06

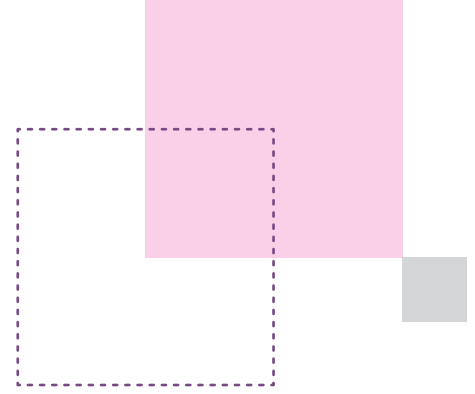
## INTEGRATED TRANSPORT



**Plan Melbourne Outcome 3:**  
Melbourne has an integrated transport system that connects people to jobs and services and goods to market.

As the Inner Metro Region grows, it will require better integration of land use and transport planning, better use of existing roads, and increased investment in public transport, walking and cycling. Making better use of transport infrastructure, complemented by good precinct design, can improve connections without necessarily the expense and disruption of delivering new infrastructure. Land use decisions, as well as mode shift opportunities, can significantly improve access and reduce transport-generated emissions.





The Inner Metro Region has strong transport connections to all metropolitan regions, regional Victoria and national and international gateways through road and public transport networks that radiate from the CBD. There is a strong sustainable transport culture in comparison to other regions, with cycling and walking undertaken in high numbers for short trips. The way the Inner Metro Region manages and supports sustainable transport access will influence the way people move through surrounding areas and impact the broader transport network.

Home to the Port of Melbourne, freight is an important aspect of transport for the Inner Metro Region. The Metro Tunnel, Melbourne Airport Rail, West Gate Tunnel and other rail upgrades will improve access to and through the region as well as to other regions.

## State of play

Map 4 outlines the current state of play for transport in the Inner Metro Region.

### Road network

The Inner Metro Region's road network is set within a radial transport network that provides:

- Efficient access from across metropolitan Melbourne
- A relatively flat topography suitable for walking and cycling paths
- The world's largest tram network, which adds character to many inner-city streets.

Key east-west roads that converge on the Inner Metro Region include the City Link (Southern Link), Monash Freeway, the Eastern Freeway, and the West Gate Freeway (and West Gate Bridge). The Domain and Burnley tunnels that transect the heart of the region, connect northern and western suburbs to south-eastern suburbs. Major north-south roads include City Link (and the Bolte Bridge) to the west of the CBD, Western Link – Tullamarine Freeway to the north, and Hoddle Street and Punt Road to the east.

Given the central location of the Inner Metro Region, the road network experiences significant pressure from traffic originating outside the region and from through traffic. This is an ongoing issue for the

management of the road-based transport network by local councils and impacts on the amenity of the region and the ability to achieve greater levels of active and sustainable transport by residents and visitors to the region. By 2031, traffic volumes in the Inner Metro Region are expected to increase by 7.3 per cent from 2015 (KPMG & ARUP, 2017).

### Public transport network





The region is well serviced by all modes of public transport (train, tram and bus), although orbital connections are limited and primarily serviced by bus. All metropolitan rail lines and Victoria's regional train lines terminate in the Inner Metro Region. Major transport interchanges such as Flinders Street and Southern Cross stations, and Richmond Station, are key gateways for workers and visitors to the city as well as City Loop stations around the CBD. Water-based transport exists on the Yarra River but is largely underdeveloped and for tourism purposes.

Most of Melbourne's tram network also runs through the Inner Metro Region and some of Melbourne's most patronised buses, including the Doncaster Area Rapid Transit (DART), also terminate in the Inner Metro Region.












Due to the high provision of public transport options, all Inner Metro Region LGAs have a higher average number of hourly services than metropolitan Melbourne. Melbourne LGA has the highest average of hourly public transport services, reflecting its position as the transport hub of metropolitan Melbourne and Victoria. Figure 14 shows the accessibility to public transport for people who live within the region based on how far they need to walk to access train, tram and bus services. Although there is high public transport accessibility across the region, particularly in the CBD and the St Kilda Road transport corridor, there are gaps in public transport accessibility in Fishermans Bend, the Port of Melbourne, Port Phillip Bay coastline and in Alphington in the north corner of the region.

**MAP 4. Inner Metro Region integrated transport state of play**




**Precincts and Activity Centres**

-  National employment & innovation cluster (NEIC)\*
-  Major activity centre
-  Regionally-significant industrial precinct - existing
-  Central Business District

**Transport**

-  Transport Gateway - Seaport
-  State-significant road corridor
-  Road network
-  Train station
-  Rail network
-  Interstate rail network
-  Regional rail network
-  Tram network
-  Bus network
-  High frequency bus network
-  Strategic Cycling Corridor



**Principal Freight Network**

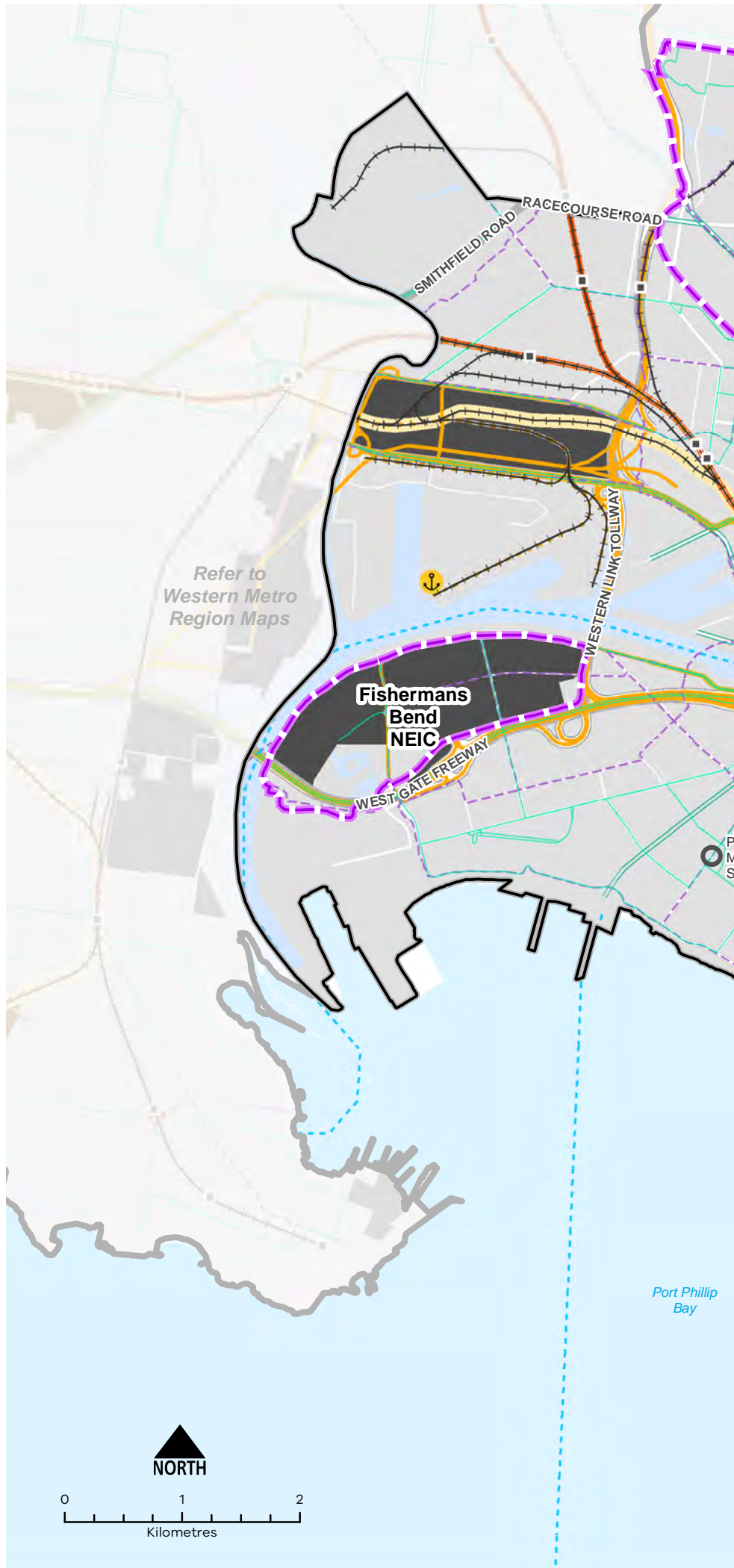
-  PFN road
-  PFN rail
-  Ferry route

**Environment**

-  Waterbody

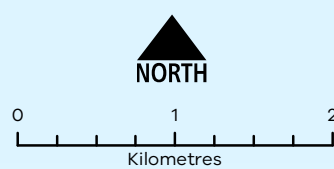
**Land use/Administration**

-  Regional boundary
-  Urban area



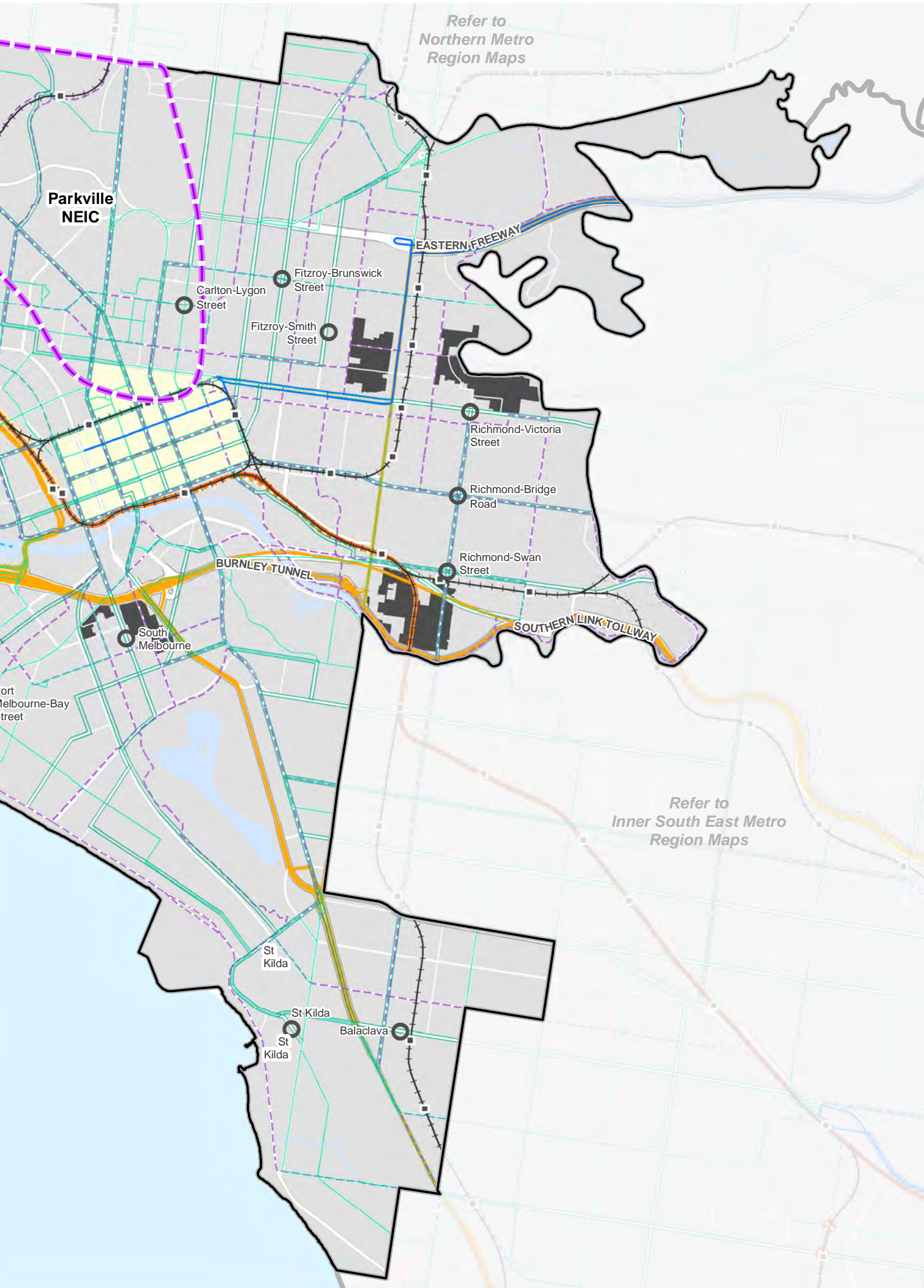
\*NEIC boundary is indicative only and subject to detailed planning.

**Note:** The Principal Freight Network reflects the version published in 2013 (Victoria the Freight State - the Victorian Freight and Logistics Plan, August 2013) in addition to Mordialloc Highway and West Gate Tunnel. East West Link has been removed. The Department of Transport is currently undertaking a review of the Principal Freight Network.



Port Phillip Bay





Refer to  
Northern Metro  
Region Maps

**Parkville  
NEIC**

EASTERN FREEWAY

Carlton-Lygon Street  
Fitzroy-Smith Street  
Fitzroy-Brunswick Street

Richmond-Victoria Street  
Richmond-Bridge Road  
Richmond-Swan Street

BURNLEY TUNNEL

SOUTHERN LINK TOLLWAY

South Melbourne

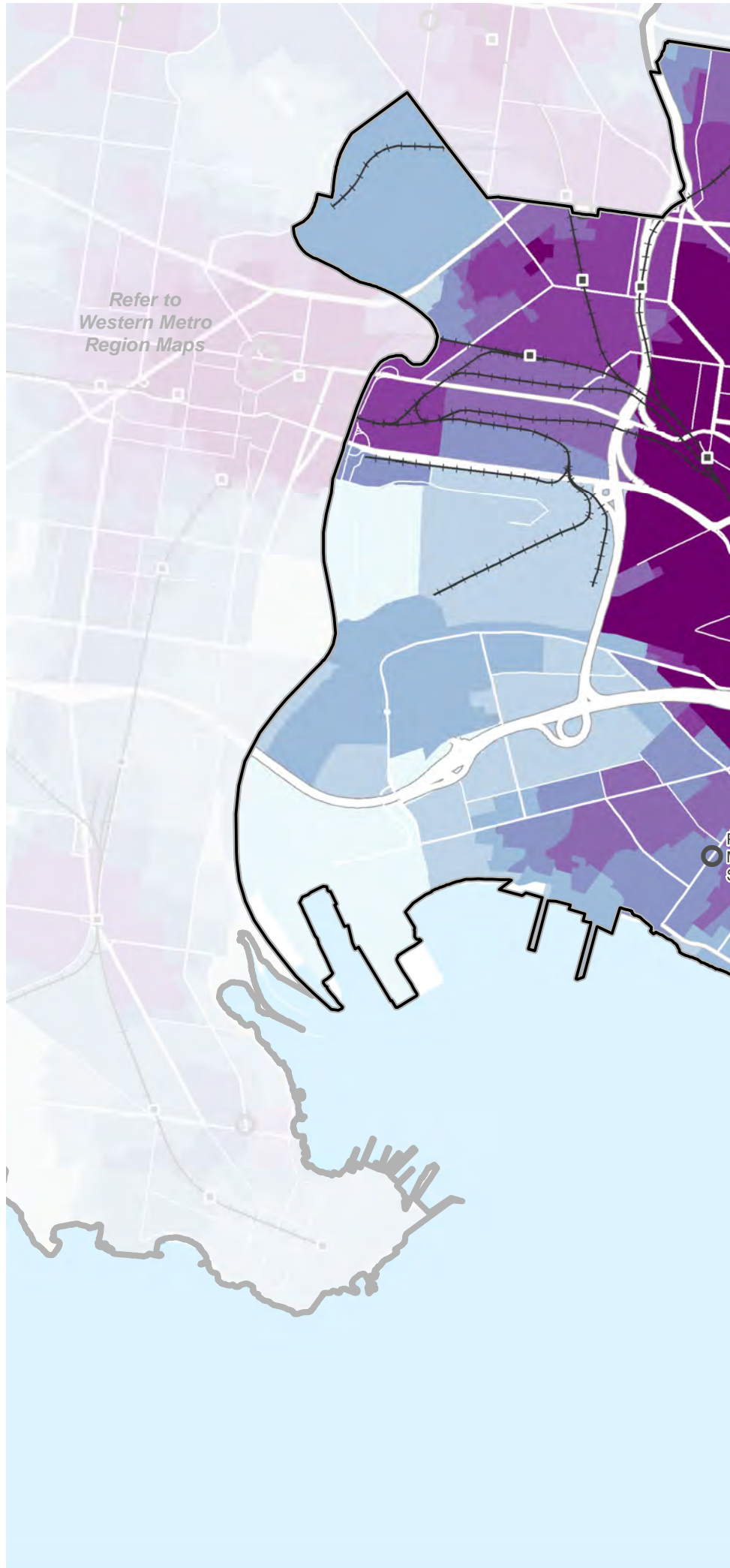
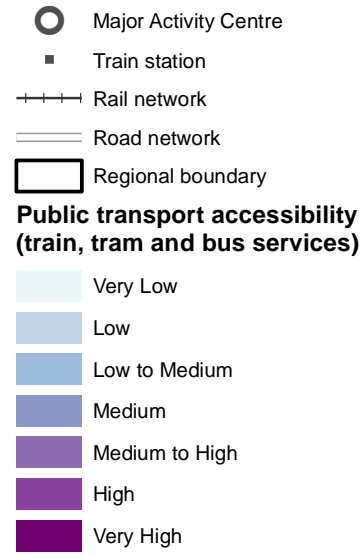
Refer to  
Inner South East Metro  
Region Maps

St Kilda

St Kilda  
St Kilda

Balaclava

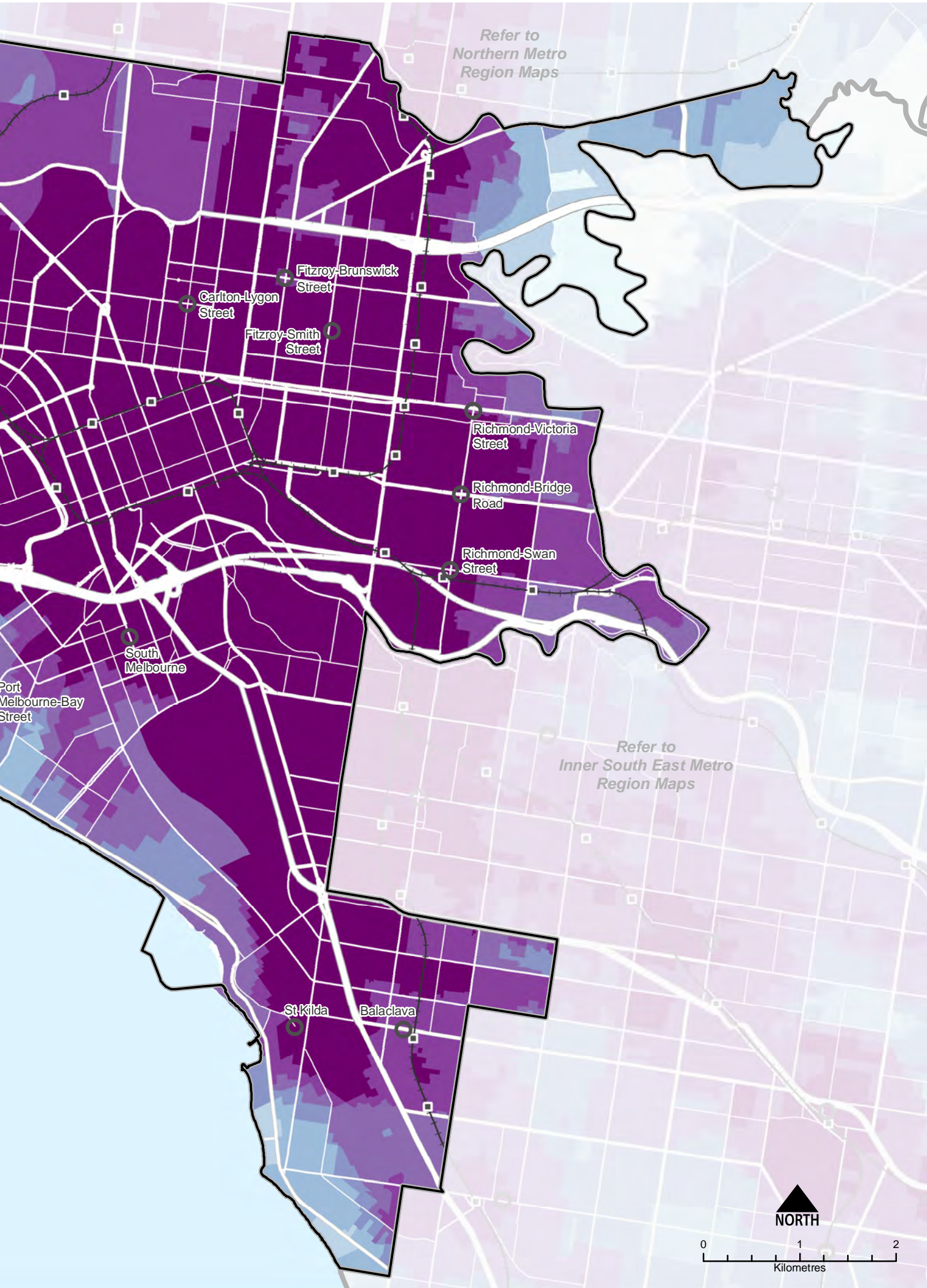
**FIGURE 14. Public transport accessibility in the Inner Metro Region**



Map derived from train, tram and bus services across the metropolitan area for the public transport timetables for the AM peak period (0700 – 0859) in October 2020







Refer to  
Northern Metro  
Region Maps

Carlton-Lygon  
Street

Fitzroy-Brunswick  
Street

Fitzroy-Smith  
Street

Richmond-Victoria  
Street

Richmond-Bridge  
Road

Richmond-Swan  
Street

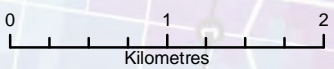
South  
Melbourne

Port  
Melbourne-Bay  
Street

Refer to  
Inner South East Metro  
Region Maps

St. Kilda

Balaclava







### Active transport network

Public and active transport are the most common way to get to work for residents of all Inner Metro Region LGAs. Strategic Cycling Corridors in this area include St Kilda Road and the Capital City Trail. In 2016, 16 per cent of residents walked to work in the Inner Metro Region. This compares to 3 per cent for metropolitan Melbourne. Six per cent of residents cycled to work, which compares to 1 per cent for metropolitan Melbourne. Most households in Yarra and Port Phillip LGAs own one car, while most households in Melbourne LGA do not have a car.

### Freight movement

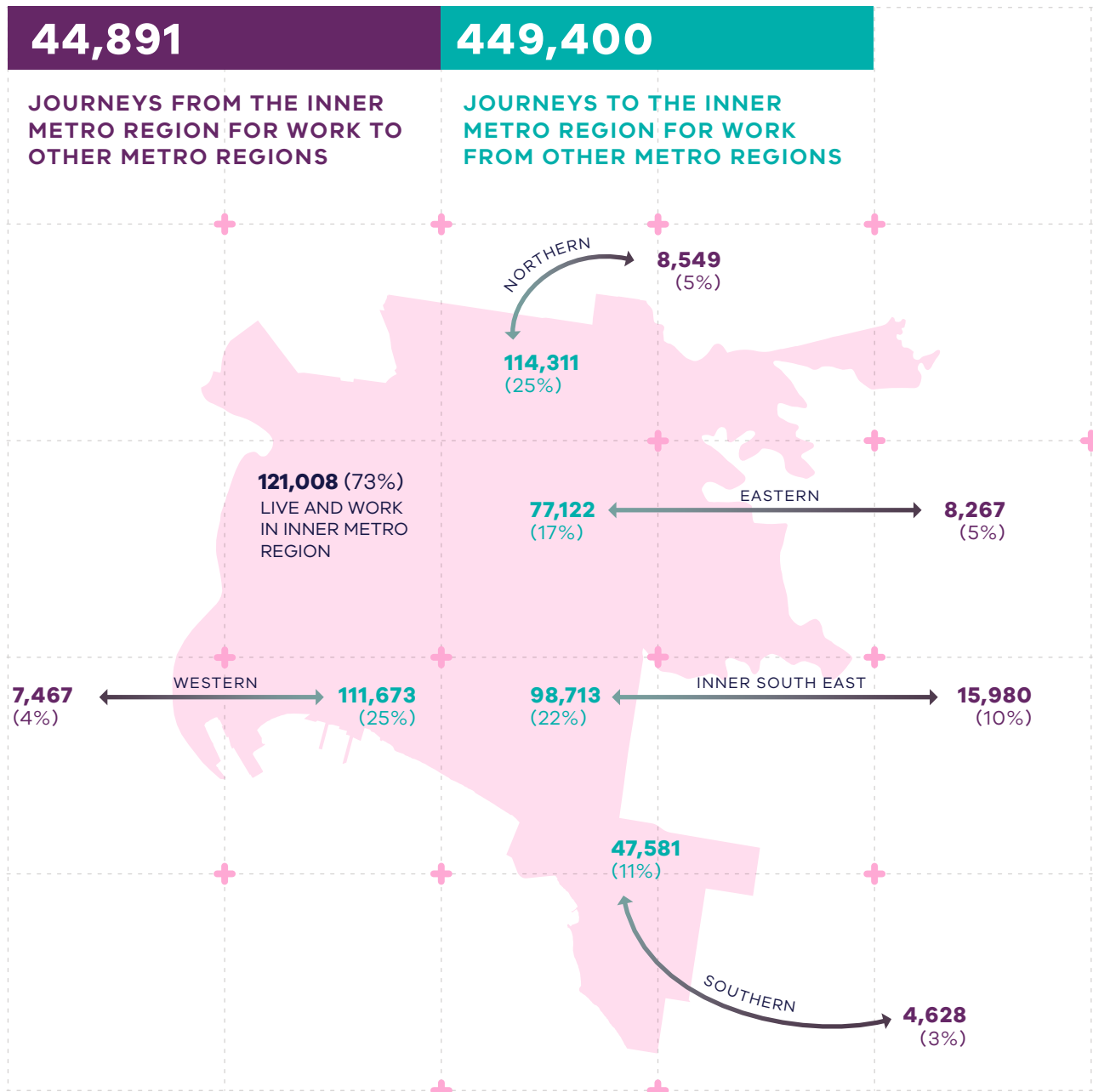
The Inner Metro Region is a critical component of Victoria's freight network, both in terms of the significant freight distribution assets in the region but also as a key destination for urban deliveries. The Port of Melbourne is essential to Victoria, providing a gateway to international markets and contributing to the economy as Australia's largest container and general cargo port.

### Regional access and movement

In 2016, 73 per cent of Inner Metro Region residents lived and worked in the region. This is the highest level of self-containment – that is, where people both live and work in the same region – of all of the metropolitan regions. Most residents work in Melbourne LGA followed by Yarra and Port Phillip LGAs (SGS, 2019a).

Figure 15 shows journeys to work in and out of the Inner Metro Region. Few residents from the Inner Metro Region travel outside the region to work. The most common destination for journeying to work after the region itself is the Inner South East Metro Region, where 10 per cent of residents travel for work, namely Stonnington and Boroondara LGAs (SGS, 2019a). The most common origins of workers were from the Northern and Western Metro Regions, followed by the Inner South East Metro Region. LGAs with the most journeys to work in the Inner Metro Region were those located close to the region, namely Moreland, Boroondara and Darebin LGAs (SGS, 2019a).

FIGURE 15. Journey to work in and out of the Inner Metro Region



Source: Australian Bureau of Statistics (2016) *Census of Population and Housing*, Commonwealth of Australia, Canberra, Australia.



## Regional strengths

- The Inner Metro Region benefits from a strong freeway, arterial road and freight network.
- The Port of Melbourne is a major transport gateway for metropolitan Melbourne and the state.
- There are strong public transport and active transport networks in comparison to other regions.
- Planned major transport investments will see significant improvements to road, public transport and active transport options throughout the region, and strengthen connections to all other metro regions.

## Regional challenges

- The growing number of trips within, to and around the region, and the demand for road and footpath space, will require people to use more space-efficient forms of transport.
- Congestion on arterial roads and demand for on-street parking will worsen without intervention.
- Connections between established areas and urban renewal precincts are essential to encourage people to move away from private vehicle use.
- The frequency, connectivity, reliability and capacity of the public transport system requires ongoing improvement.
- There is a need for early investment in public transport routes to connect urban renewal precincts to the rest of the Inner Metro Region and beyond.
- Larger volumes of freight transported by smaller vehicles create additional traffic and congestion in urban areas.
- Improvements are required to pedestrian and cycling safety and make better use of road space, especially around transport hubs.

## Directions and strategies

The directions identified to achieve the 2050 vision for the Inner Metro Region in terms of integrated transport and Outcome 3 of Plan Melbourne are:

<b>Direction 11</b>	Improve transport connections to support the region's competitive advantage as the economic, cultural and services hub of metropolitan Melbourne and Victoria
<b>Direction 12</b>	Improve public and active transport access for the Parkville and Fishermans Bend NEICs and major urban renewal precincts
<b>Direction 13</b>	Improve active and public transport options to promote mode shift and support 20-minute neighbourhoods
<b>Direction 14</b>	Plan for transport interchanges as destinations and places for movement
<b>Direction 15</b>	Improve freight efficiency and increase capacity of gateways while managing impacts on urban amenity

Each direction is implemented through regionally-specific strategies identified in this land use framework plan.

Map 5 shows how integrated transport will be enhanced across the Inner Metro Region by 2050 as a result of these directions and strategies, together with Plan Melbourne and other strategies and initiatives as outlined in **Appendix 01**.



Photo credit: Tim Bell Studio









**MAP 5. Inner Metro Region integrated transport 2050**







**Precincts and Activity Centres**

-  National employment & innovation cluster (NEIC)\*
-  Regionally-significant commercial land\*
-  Regionally-significant industrial precinct - existing
-  Central Business District
-  Major urban renewal precinct - priority
-  Major urban renewal precinct - other

**Transport**

-  Transport Gateway - Seaport
-  State-significant road corridor
-  Road network
-  Train station
-  Rail network
-  Regional rail network

**Principal Public Transport Network**

-  PPTN station
-  PPTN interchange
-  Bus
-  Tram
-  Strategic Cycling Corridor
-  Investigation area - light rail and heavy rail



**Principal Freight Network**

-  PFN road
-  PFN rail

**Transport projects - committed**

-  Rail improvements - Sunbury to Cranbourne
-  Melbourne Airport Rail
-  Metro Tunnel (Rail)
-  Metro Train Stations
-  West Gate Tunnel

**Land use/Administration**

-  Regional boundary
-  Urban area

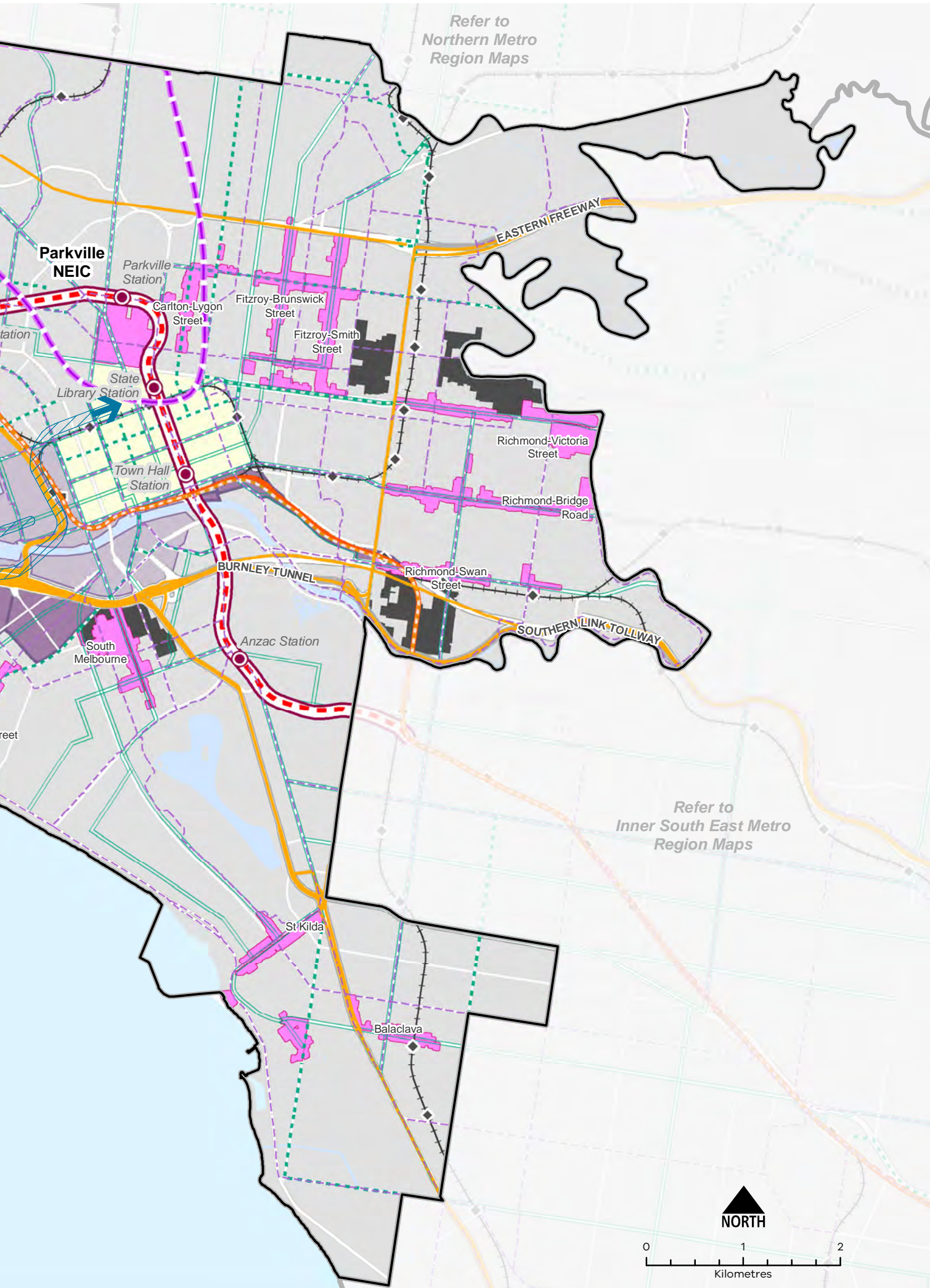


**Location Map**

\*NEIC boundary is indicative only and subject to detailed planning. These layers are based on the state- and regionally-significant commercial land identified in MICALUP, 2019. The activity centre boundaries identified in local council planning schemes may differ.

**Note:** The Principal Freight Network reflects the version published in 2013 (Victoria the Freight State - the Victorian Freight and Logistics Plan, August 2013) in addition to Mordialloc Highway and West Gate Tunnel. East West Link has been removed. The Department of Transport is currently undertaking a review of the Principal Freight Network.

Refer to  
Northern Metro  
Region Maps



**Parkville  
NEIC**

Parkville  
Station

Carlton-Lygon  
Street

Fitzroy-Brunswick  
Street

Fitzroy-Smith  
Street

EASTERN FREEWAY

State  
Library Station

Town Hall  
Station

Richmond-Victoria  
Street

Richmond-Bridge  
Road

BURNLEY TUNNEL

Richmond-Swan  
Street

SOUTHERN LINK TOLLWAY

South  
Melbourne

Anzac Station

Refer to  
Inner South East Metro  
Region Maps

St Kilda

Balaclava

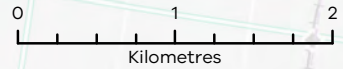






Photo credit: Department of Jobs Precincts and Regions/ Lynton Crabb Photography

## DIRECTION 11.

### Improve transport connections to support the region's competitive advantage as the economic, cultural and services hub of metropolitan Melbourne and Victoria

The Inner Metro Region is the heart of the city for workers, residents, visitors from across Melbourne, regional Victoria and beyond, requiring a diversity of responses to create city-wide efficient transport connections.

As well as a vast array of economic and cultural infrastructure, the transport network plays a key role in supporting the daily functions, opportunities and experiences in the Inner Metro Region. Businesses need access to a broad and deep labour pool, and derive benefits from the knowledge transfer, innovation and productivity gains that come from dense, vibrant and high amenity locations in the CBD and inner suburbs. If there is not sufficient transport capacity to provide access for these businesses, many would locate in other cities, rather than alternative metropolitan locations.

As Melbourne's population grows, additional access to the Inner Metro Region will be required. Major transport and infrastructure investments include the construction of the Metro Tunnel, a transformative rail project that will allow greater cross movement and enable 39,000 more passengers to use the rail system during each peak period and create five new stations.

Melbourne Airport Rail and the West Gate Tunnel will provide greater capacity and better connectivity for more people and businesses outside the region. Future road projects should be complemented by investment in public and active transport along these corridors. The Geelong Fast Rail Project will improve linkages to Werribee NEIC and Geelong.

Greater capacity creates the catalyst for more integrated planning for transport giving people more options to travel to the city including public transport, cycling and walking and increasing the influence of sustainable options in the Inner Metro Region's multi-modal transport network. Greater capacity can also be achieved by reducing the number of multi-leg (in-and-out) indirect trips through the CBD through better connections and behaviour change.

However, there are still connections that need to be improved for the region. Key regional linkages are shown in **Figure 16**. Decisions regarding appropriate modes for these links should consider the capacity

of existing infrastructure, ongoing sustainability and providing travel choices over a longer time period including evening and late-night travel.

Greater focus needs to be placed on improving transport connections in the outer areas of the region – as the transport infrastructure moves radially out from the CBD. Connections across suburbs, north-south and east-west as well as across the Yarra River should be considered. Future priority access linkages include from Melbourne's inner west to the CBD and Fishermans Bend.

The Inner Metro Region contains orbital movement corridors that are used by a mix of cars, buses, freight vehicles and bicycles. Key movement corridors in the region include Victoria Parade, Alexandra Parade, Johnston/Elgin Street to Grattan Street running east-west and Hoddle Street running north to south. These movement corridors require further planning and investigation in terms of their role as orbital connectors across the region. The St Kilda Road corridor is a transport corridor with many tram routes that has a gateway function from the southern suburbs to the CBD.

Strategic Cycling Corridors will connect state-significant locations and activity centres. Priority active transport projects will promote increased safe use of the region's cycling and walking network (Figure 17).

Primary routes provide a core network of Strategic Cycling Corridors that connect places of state significance – the Central City, metropolitan activity centres and NEICs within metropolitan Melbourne. Main routes are Strategic Cycling Corridors that provide additional connections to state-significant destinations as well as connections to major activity centres and key railway stations across metropolitan Melbourne.

Strategic Cycling Corridors will provide continuous and protected bike lanes to ensure the safety and convenience of the network for all ages and abilities. Key missing links need to be addressed particularly those that provide access into the CBD and key employment nodes such as the St Kilda Road bicycle lanes and a high-quality, all ages cycle corridor from Princes Hill to St Kilda. End-of-trip facilities should be planned, particularly as part of major commercial developments.

**STRATEGY 43.** Ensure major road and rail projects include public and active transport improvements and connections.

**STRATEGY 44.** Improve public and active transport connections to, from and through the Inner Metro Region for work, education and leisure.

**STRATEGY 45.** Improve public and active transport connections from the inner west of Melbourne to the CBD and Fishermans Bend.

**STRATEGY 46.** Improve public and active transport connections across the Yarra River, orbitally within the region and between major activity centres and regionally-significant places.

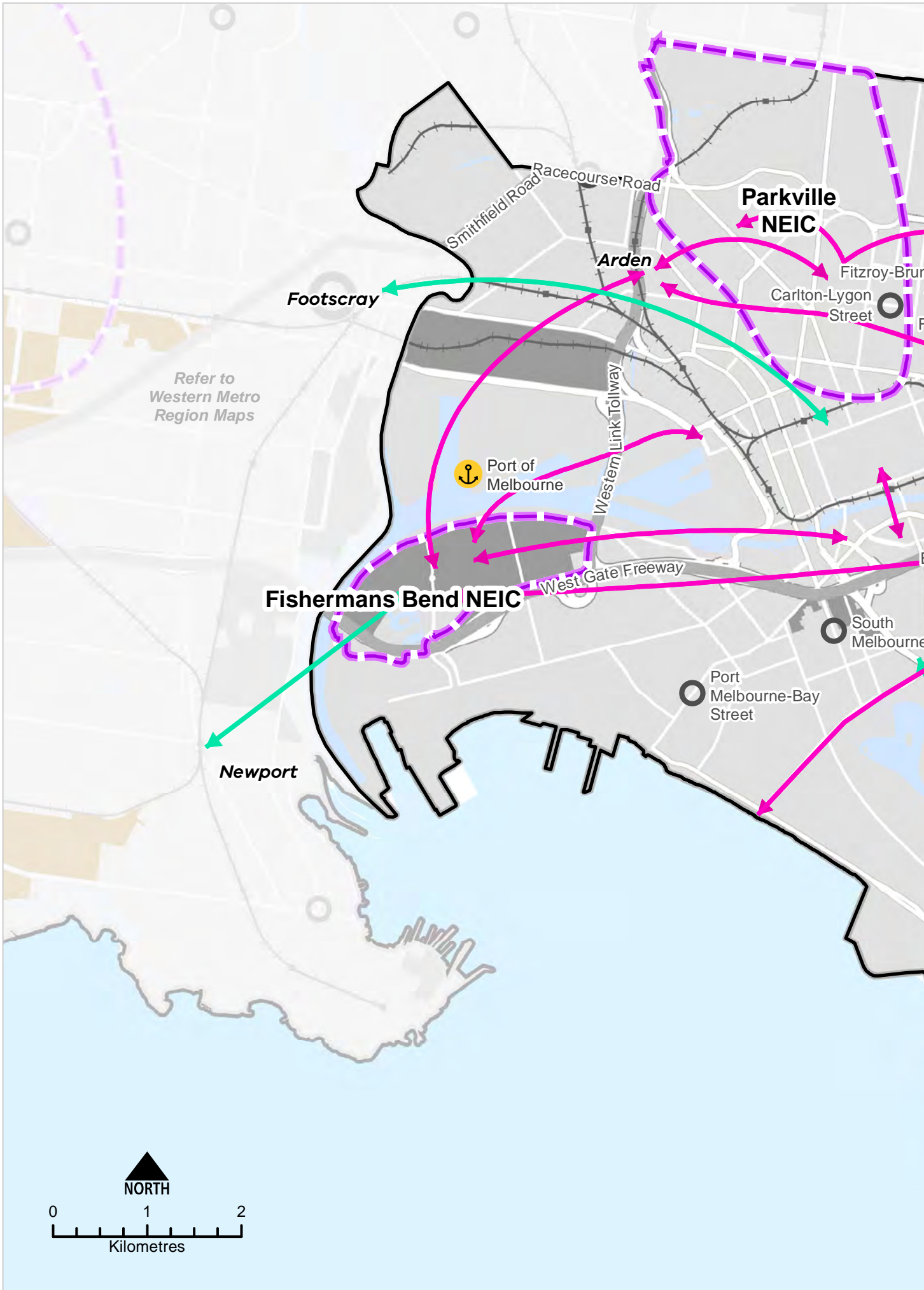
**STRATEGY 47.** Improve orbital movement corridors across the region.

**STRATEGY 48.** Support cycling for transport through the development of Strategic Cycling Corridors in the Inner Metro Region.

**STRATEGY 49.** Facilitate land use change to respond to access improvement delivered by major public transport projects.

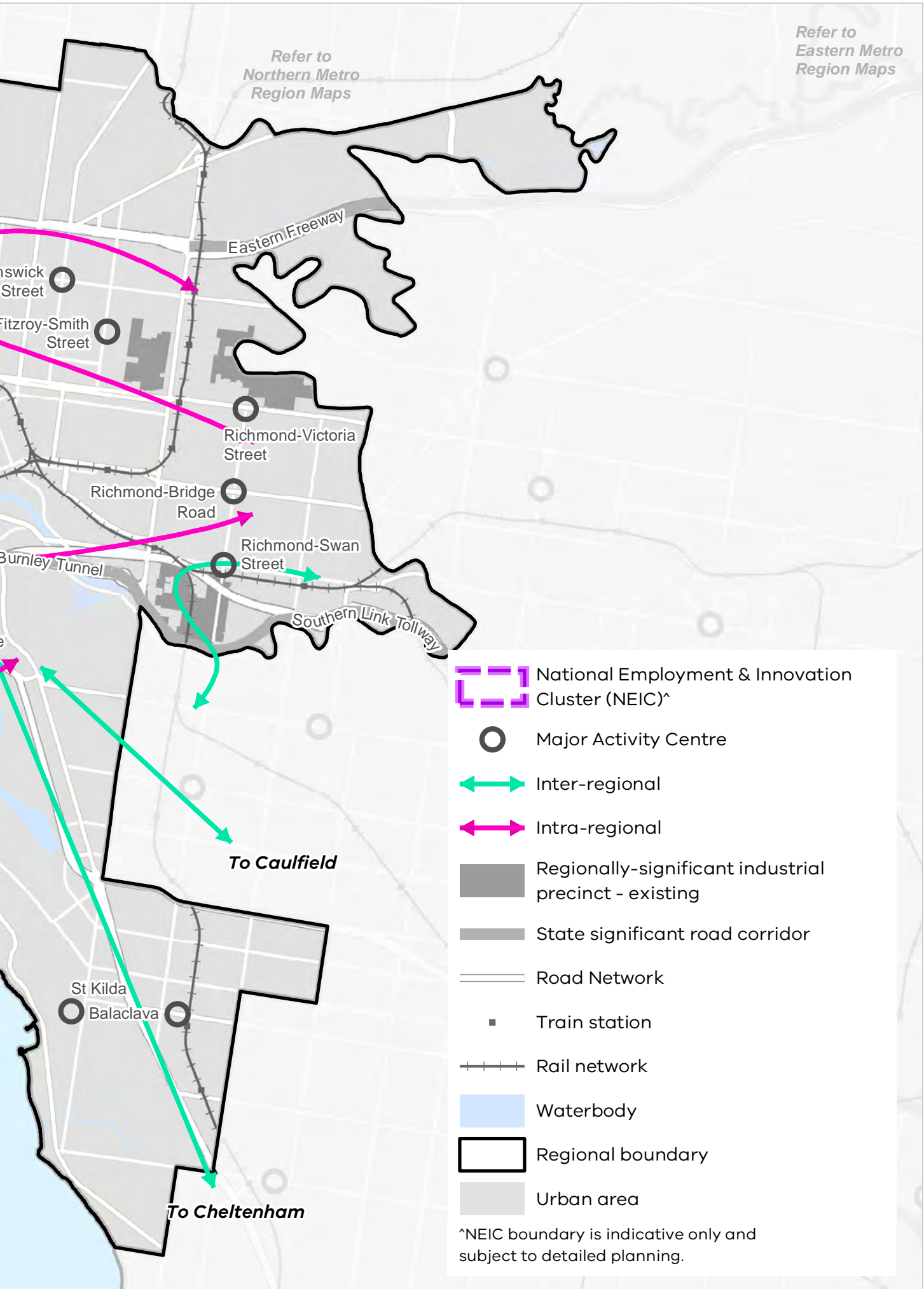


FIGURE 16. Key regional linkages – Inner Metro Region



Refer to  
Eastern Metro  
Region Maps

Refer to  
Northern Metro  
Region Maps
















- National Employment & Innovation Cluster (NEIC)^
- Major Activity Centre
- Inter-regional
- Intra-regional
- Regionally-significant industrial precinct - existing
- State significant road corridor
- Road Network
- Train station
- Rail network
- Waterbody
- Regional boundary
- Urban area

^NEIC boundary is indicative only and subject to detailed planning.



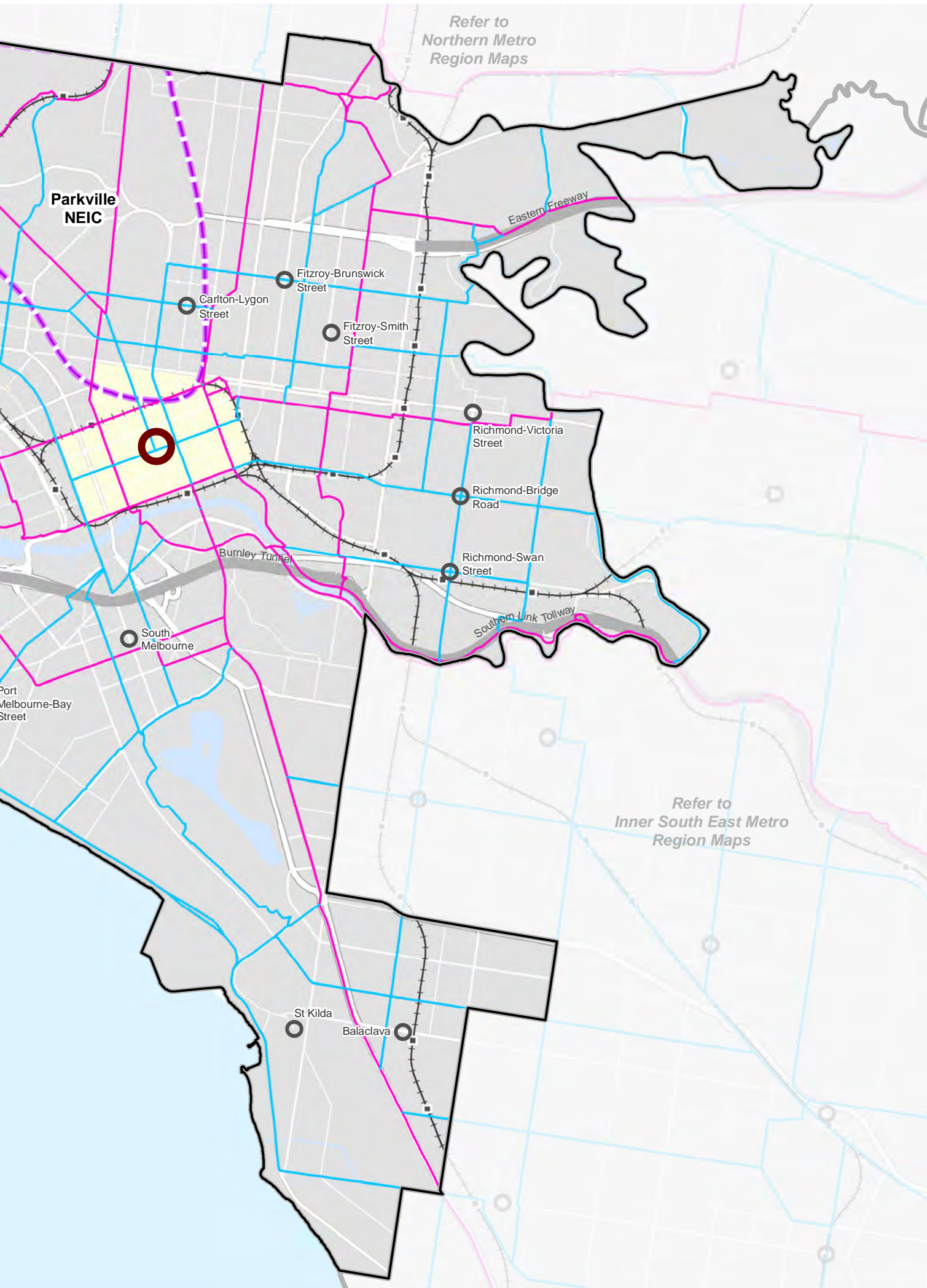
**FIGURE 17. Strategic Cycling Corridor network – Inner Metro Region**

-  Central city
  -  Major activity centre
  -  Transport Gateway - Seaport
  -  State Significant Road Corridor
  -  Road network
  -  Train station
  -  Rail network
  -  Regional boundary
  -  Urban area
  -  Central business district
  -  Waterbody
- Strategic Cycling Corridors**
-  Primary route (C1)
  -  Main route (C2)



\*NEIC boundary is indicative only and subject to detailed planning.





Refer to  
Northern Metro  
Region Maps

**Parkville  
NEIC**

Eastern Freeway

Fitzroy-Brunswick  
Street

Carlton-Lygon  
Street

Fitzroy-Smith  
Street

Richmond-Victoria  
Street

Richmond-Bridge  
Road

Richmond-Swan  
Street

Burnley Tunnel

South  
Melbourne

Southern Link Tollway

Port  
Melbourne-Bay  
Street

Refer to  
Inner South East Metro  
Region Maps

St Kilda

Balaclava



## **DIRECTION 12.** **Improve public and active transport access for the Parkville and Fishermans Bend NEICs and major urban renewal precincts**

NEICs, major urban renewal precincts and major activity centres in the Inner Metro Region need improved public and active transport access. This will be critical to improve the amenity of these centres and make them more attractive for business investment and local residents. Improved access plays a major role in supporting urban renewal, connecting precincts to the urban fabric of the inner city, allowing people to access the precinct, and catalysing other major investments to improve local amenity and infrastructure. Improving accessibility reduces transaction costs for businesses through increased opportunities to interact with suppliers and customers face-to-face and, crucially, increases access to a skilled labour force.

For Fishermans Bend to realise the ambition of accommodating 40,000 jobs, significant transport improvements will be necessary. The limited public transport, active transport and a generally poor pedestrian environment that currently may constrain economic development.

The transformation of the industrial area in Arden is also centred on major access improvements being realised as part of the Metro Tunnel, supported by significant public realm and other infrastructure investments. Linking precincts such as Arden to the Parkville NEIC, the CBD and Sunbury and Cranbourne/Pakenham open these precincts up to a larger workforce and make them attractive locations for business and investment.

Facilitating walking and cycling as key modes for local trips within NEICs and to major urban renewal precincts, such as Arden, is also important. These modes often represent the first and last legs of public transport trips. The focus needs to be on creating safe, attractive environments that prioritise walking, cycling and surface transit in these locations.

To realise the ambition of accommodating jobs in the NEICs and major urban renewal precincts, early transport investment is needed to 'knit' emerging precincts into the broader fabric of the Inner Metro Region. This will provide links to the CBD and other parts of the region and metropolitan Melbourne and encourage urban form that prioritises sustainable transport modes and a sustainable transport culture.

**STRATEGY 50.** Design major urban renewal precincts with an urban form that prioritises sustainable transport use.

**STRATEGY 51.** Support NEICs and major urban renewal precincts with early public transport investment.

**STRATEGY 52.** Improve public and active transport connections to employment and enterprise precincts.

**STRATEGY 53.** Provide high-quality public and active transport to job-rich areas including Parkville and Fishermans Bend NEICs, major urban renewal precincts and the major activity centres.

**DIRECTION 13.****Improve active and public transport options to promote mode shift and support 20-minute neighbourhoods**

Improvements to local transport options, including bus, cycling and pedestrian access, are needed to support the delivery of 20-minute neighbourhoods across the Inner Metro Region. More sustainable transport options and choices will make it easier for people to move within the region.

Fifteen per cent of people in the Inner Metro Region use a car when making a short trip under 5 kilometres in the region whereas 54 per cent of people walked, and only 4 per cent cycled for short trips (DELWP, 2021). To reduce dependence on private vehicles, public transport, cycling and walking need to be more accessible. This means significant upgrades to public transport access, and improvements to pedestrian and cycling accessibility, better linking neighbourhoods to employment, and social and community services.

A world-class public transport network supports population and economic growth, further strengthening the region's competitive advantages. Investment should focus on improving existing services, prioritising trams and buses on roads to increase reliability and exploring options to extend the coverage and reach of public transport. To become a global city, frequencies need to move from a peak hour commuter network, and into an all day, every day network for all types of trips. Improvements to the performance of on-road public transport, new public transport connections and better cycling and walking facilities will provide better access to many of these centres and help them thrive.

A review of the bus network should consider additional bus routes, providing more frequency for existing services as well as using buses to fill public transport gaps. Physical improvements to on-road bus priority, active transport and streetscapes are also required.

Planning for safe and efficient pedestrian movement at a regional level, such as between key destinations, for example the CBD to Fishermans Bend, will be an increasingly important consideration. This includes identifying and addressing 'dead zones' between key destinations across the region, which provide barriers to walkability such as major arterial roads, elevated rail and roads, and natural barriers. Reducing conflict with shared pedestrian areas and ensuring the safe movement of all users should be a design priority to encourage walking as well as cycling. A key feature of the Inner Metro Region is its walkable neighbourhoods. Safe and attractive pedestrian connections should be prioritised.

While challenging to deliver, there are also water-based transport opportunities that could be investigated as an alternative form of transport to connect key locations along the Yarra and in Port Phillip Bay.

- STRATEGY 54.** Enhance public transport coverage, frequency and capacity, improving access to destinations across the network.
- STRATEGY 55.** Deliver a convenient, safe and attractive pedestrian network connecting key destinations, and linking regionally-significant places and key cultural and sporting destinations.
- STRATEGY 56.** Improve walking and cycling access to train stations to support medium- and higher-density housing outcomes.
- STRATEGY 57.** Provide walking and cycling routes and drop-off zones to health and community services, and recreation facilities.
- STRATEGY 58.** Plan for place in transport connector improvements.





#### **DIRECTION 14.**

### **Plan for transport interchanges as destinations and places for movement**

Transport interchanges and corridors are destinations in their own right as well as key parts of the transport network. In the Inner Metro Region, Federation Square is both a destination and a key part of the transport network, facilitating movements between the river's edge, tram network and Flinders Street Station.

Richmond Station is another regionally-significant transport interchange for train lines, tram corridor and bus routes as well as facilitating movements to the Sports Precinct. Planning new transport interchanges and upgrading existing ones should consider and appropriately respond to their context and create destinations across the region for residents and visitors that are easy for pedestrians to transition between modes.

The Metro Tunnel will deliver major improvements to the transport network and the new stations of Arden, Parkville, State Library, Town Hall and ANZAC will become transport interchanges. Long-term objectives for each transport interchange, and the corridor it is located within, need to be identified by state and local government, and the design of infrastructure and places should meet these objectives. The Movement and Place Framework can support the redefinition of streets in key locations to support this process.

**STRATEGY 59.** Ensure the design of transport interchanges and corridors improves active travel, public areas and their functions, and contributes to a sense of place.

**STRATEGY 60.** Balance movement and place when designing and upgrading the region's road network.

**STRATEGY 61.** Design streets that provide for sustainable transport modes and improve the public realm.

**DIRECTION 15.****Improve freight efficiency and increase capacity of gateways while managing impacts on urban amenity**

As population growth and changing consumer patterns continue to develop, effective land use and transport planning will be an important part of proactively planning for resilient, adaptable and sustainable growth in the Inner Metro Region's freight sector.

The significant growth in the volume of freight means planning for the Port of Melbourne and associated infrastructure needs to provide protection from encroachment by incompatible uses. Combined with the intensification of other activities in central Melbourne, the impact of freight movements on other significant uses also needs to be mitigated.

Planning and development of urban renewal precincts and development intensification in established areas near freight routes such as in Fishermans Bend and Port Melbourne, require planning protections, such as buffers, to balance and protect strategic freight corridors from competing amenity and environmental considerations.

The Principal Freight Network (PFN) supports this, by providing transparency to local government and the community regarding the primary way goods are moved throughout the region. This allows government to consider freight needs during the planning process to protect end-to-end freight journeys from conflicting land uses or use tools to mitigate environmental or amenity risk.

The under-construction Port Rail Shuttle Network is indicative of the opportunity to change how freight moves around Melbourne by supporting an increasing shift to rail freight. Supported by under-construction intermodal terminals such as Somerton and Altona, these projects will reduce truck numbers and alleviate congestion. Upgrades to the Dynon Terminal, Webb Dock and on-dock rail terminals will also facilitate the Port's sustainable growth. Other projects include West Gate Tunnel and Monash Freeway Upgrade, which will better link existing freeways and relieve key bottlenecks.

The growing urban freight delivery task is also a significant consideration in the Inner Metro Region, requiring coordinated state and local government planning to support more efficient use of the network. By 2050, it is predicted Victoria will observe an aggregate freight demand of almost 900 million tonnes in line with consumption growth, representing a 250 per cent increase from 2014 volumes and a doubling of metropolitan freight

demand. International best practice examples, such as urban consolidation centres and the use of cargo bikes, should be trialled as a means of reducing inner-city freight congestion, making better use of the network and delivering more environmentally sustainable solutions.

Population growth, economic growth and other trends mean the number of small-scale deliveries will increase, and last kilometre freight deliveries will need to be more effectively planned for.

**STRATEGY 62.** Support innovative approaches to urban deliveries, such as consolidation centres, cargo bike trials and out of hours deliveries, to reduce congestion and improve environmental outcomes.

**STRATEGY 63.** Ensure major land use and transport infrastructure projects appropriately consider the impacts of last kilometre freight movements while seeking to implement measures to improve the efficiency of urban freight deliveries.

**ACTIONS – Integrated transport**

**ACTION 6.** Apply the Movement and Place Framework to the Inner Metro Region's arterial road network and allocate priorities for transport connector improvements such as improving road space allocation for public and active transport, identify priority streets for walking and cycling, and road management and use arrangements. This should include a focus on transport interchanges and transport corridors.