Integrated Transport Plan

Background Paper

HOBSONS BAY CITY COUNCIL

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This background paper was compiled by Hobsons Bay City Council. For further information contact Council on 9932 1000 or at www.hobsonsbay.vic.gov.au

Council acknowledges all language groups of the Kulin Nation as the traditional owners of these municipal lands. We recognise the first people's relationship to this land and offer our respect to their elders past and present. Council also acknowledges the legal responsibility to comply with the *Charter of Human Rights and Responsibilities Act 2006* and the *Equal Opportunity Act 2010*.

Executive summary

The purpose of this background paper is to present an evidence base to inform future integrated transport planning in Hobsons Bay.

Background

Council released the Hobsons Bay Integrated Transport Strategy in 2006. More recently, consultation has identified 'access to transport' as an ongoing issue, particularly in neighbourhoods with limited transport options and high car dependency. In response to these concerns, Council committed to commence the development of an Integrated Transport Plan in 2014, with the first step being to develop a background paper.

This background paper reinforces the need for long term strategic planning to coordinate Hobsons Bay's interrelated transport modes into an integrated system. This 'network approach' is underpinned by a sustainable transport hierarchy that prioritises active, public and freight transport, while encouraging reduced private car use.

Integrated transport planning can support Hobsons Bay to achieve a range of objectives such as:

- **social** - improved transport access for vulnerable groups; increased perceived and actual safety; healthier communities through the promotion of walking and cycling
- **economic** - economic development through improved freight access; efficiency and productivity due to lower road congestion; cost savings from avoided health care expenses
- **environmental** - reduced transport emissions; improved residential and community amenity; more walkable and socially engaging public places

Council's influence over the local transport system varies considerably, with its highest influence over walking, cycling, land use planning, parking provision and local road management. It has less influence over public transport, freight and arterial roads, working with state government transport agencies, transport providers and other organisations to seek positive outcomes in these areas.

Hobsons Bay profile

Hobsons Bay's geography and history directly influence local transport planning and provision. The municipality is essentially 'landlocked' by surrounding major roads and water and its neighbourhoods are separated by long stretches of open space and industrial land. However, the flat topography and rambling coastline provide favourable conditions for walking and cycling.

Key regional attractors include employment, tourism and sporting and recreational activities. Proximity to the Port of Melbourne and intermodal freight terminals also contribute to freight traffic, while future population growth within Hobsons Bay and neighbouring municipalities is expected to generate additional transport activity.

Changing demographics will influence transport demand in the years ahead. An ageing population will increase demand for accessible public transport and community transport, while more children and young people will place additional demand on the journey to education, and public transport

trips for social, health and employment purposes. Hobsons Bay currently also has relatively low housing density which tends to reinforce car dependency and create barriers to attracting public transport investment. However, density is slowly increasing around activity centres and this will encourage alternatives to car use in the future.

Health and wellbeing is influenced by transport in various ways. Increased active and public transport activity may help residents to address various physical health issues, including obesity (particularly for males), type 2 diabetes and heart disease. Limited mental health services cause some residents (particularly young people) to travel long distances to access services, and there is a lack of walkable local health services in some neighbourhoods. Some local residents also feel unsafe at night travelling on or waiting for public transport, which creates barriers to walking, cycling and using buses and trains. Finally, changing alignment between local jobs and the resident workforce mean that more people are travelling in and out of Hobsons Bay for work.

Strategic context

Each level of government plays a role in setting the strategic context for transport planning and provision. The Australian Government plays a key role in prioritising and progressing nationally significant infrastructure. It also administers funding programs (such as Roads to Recovery and Black Spot Programmes) that can support implementation of local integrated transport planning.

The Victorian Government has legislative and management responsibilities for many aspects of the transport system. It is supported by a wide range of statutory bodies that guide decision making on public transport, arterial roads, land use planning policy and major transport projects. A key focus for local integrated transport planning will be to strengthen alliances with Victorian transport agencies to attract funding and advocate more effectively. The *Transport Integration Act 2010*, as well as the recent establishment of Infrastructure Victoria and Transport for Victoria, further shape the planning and provision of transport services and infrastructure in Victoria.

LeadWest and the Western Transport Alliance provide a regional focus for transport planning and advocacy. The Western Transport Strategy 2012-30 and integrated transport planning within neighbouring municipalities provides a platform for local governments to work together to improve transport outcomes in Melbourne's west.

Local policy frameworks broadly inform integrated transport planning in Hobsons Bay, including the Community Health and Wellbeing Plan 2013-17, forthcoming Hobsons Bay 2030, Advocacy Strategy 2014-18 and Climate Change Policy 2013. More specific plans (such as the Road Management Plan 2014 and Strategic Bicycle Plan 2013-17) also shape implementation, while Council's advisory groups can play an important role identifying and responding to local transport issues.

Consultation

In October 2015, Council conducted a dedicated consultation program ('Connecting the Bay') to inform future integrated transport planning. The program consisted of three community forums and three community and stakeholder workshops. It highlighted a range of issues with the local transport system (such as public transport service levels, road congestion, cycling infrastructure

gaps, lack of modal integration and potential impacts of major transport projects), as well as many suggested actions to address these concerns. Ultimately, fairness, equity and social cohesion (Inclusive Hobsons Bay) and bustling neighbourhood centres with a strong sense of community (Neighbourhood Hobsons Bay) emerged as key priorities.

A number of other consultation activities have taken place since the Connecting the Bay series where transport has been raised, either as the core topic or as part of a broader engagement process. Consultation on Council's interim position on the Western Distributor project revealed local concerns about noise and air pollution, loss of open space and increased freight activity. Hobsons Bay 2030 consultation showed strong support for improved transport options, as well as concerns with increased development and density. Finally, consultation on the Nelson Place Free Parking Trial showed that access to car parking is important for visitors but other factors (such as streetscape upgrades and business improvements) can also help create a more vibrant and appealing destination.

Land use and transport integration

Land use and transport integration helps to achieve transport planning objectives using land use planning tools such as statutory planning, land zoning and car parking provisions. The Victorian Government sets the legislative and policy context for land use planning in Victoria, including through the State Planning Policy Framework and Metropolitan Planning Strategy (Plan Melbourne). These frameworks provide strong support for land use and transport integration to reduce the need to travel, and to expand and improve access to sustainable transport options. Hobsons Bay's Local Planning Policy Framework (including the Municipal Strategic Statement) complements this approach, while also aiming to preserve neighbourhood character from inappropriate development.

Car parking provides a practical example of land use and transport integration. Hobsons Bay has a strong supply of primarily free car parking that was meeting demand when studies were last undertaken between 2009 and 2012. Conventional approaches to car parking (increasing supply, reducing or eliminating cost) tend to reinforce car use and can contribute to unattractive and inefficient land use. Future integrated transport planning may consider alternate approaches to more efficiently use some parking spaces, promote more sustainable transport options, and contribute to more community-focused urban environments.

Car parking challenges include responding to community and stakeholder feedback and updating the local evidence base. Opportunities include developing an integrated approach to car parking which incorporates planning scheme requirements, parking permits, community and stakeholder expectations, and innovative use of existing car parking spaces. Integrated transport planning should address a range of other challenges and opportunities to achieve closer land use and transport integration, including appropriate location of residential and commercial development, attracting state government investment in local transport services and infrastructure, and facilitating future employment precincts (particularly white collar) located close to local public transport hubs.

Transport in Hobsons Bay

Walking is ideal for short trips, linking to other modes and has important health benefits. Just two per cent of Hobsons Bay's resident workforce walk to work[1], and less than one in five primary school students walk to school (compared to more than 70% who are driven). Challenges include addressing physical barriers (e.g. infrastructure gaps, footpath condition, distances to destinations), while opportunities include improving the walkability of Hobsons Bay neighbourhoods through strategic land use planning and localised pedestrian access planning.

Cycling is well-suited for short to medium distance commuter trips, linking to other modes, exercise and recreation, and (like walking) has important health benefits. Less than two per cent of the resident workforce ride to work, with females and people living in the western part of the municipality being particularly underrepresented. Challenges include identifying and responding to infrastructure gaps, attracting additional funding, and responding to safety concerns to help improve cycling activity. Opportunities include applying a network planning approach, maintaining advocacy toward state government agencies, and supporting behaviour change initiatives.

Public transport is a popular commuter mode and provides local connections for many residents, including people who are unable to drive. Spatial coverage is uneven in Hobsons Bay, with less than one-third of households located within walking distance of a train station or bus interchange. Service levels also vary considerably, with reduced bus frequency and service span reinforcing car use and limiting mobility options in some neighbourhoods. Nonetheless, public transport has above average mode share for the journey to work (18.4%) and is also used extensively for trips to secondary school and tertiary education. Challenges include improving service levels and infrastructure, improving perceptions of safety, and addressing overcrowded commuter parking. Opportunities include maintaining and extending advocacy, supporting improved intermodal integration, and urban design projects to improve the spaces around local public transport infrastructure.

Freight activity is considerable in Hobsons Bay due to its proximity to the Port of Melbourne, intermodal freight terminals and relatively large manufacturing, petrochemical and transport industries. Freight traffic is highest on the principal freight network but there remains considerable road and rail freight activity through residential areas. Challenges include reducing freight vehicles' contribution to road congestion and protecting local amenity, while opportunities include improving access to the local freight network, advocating to state government, and understanding and responding to local freight needs and impacts.

Private passenger vehicles occupy a predominant role within Hobsons Bay's transport system. Almost half (47%) of Hobsons Bay households own two or more cars and almost four in five (78%) people within the resident workforce drive to work. In fact, almost every trip type is dominated by private passenger vehicles, with rare exceptions being trips of less than one kilometer and trips to education. Challenges include reducing transport emissions and road congestion, while

[1] All journey to work data in this report is sourced from the 2011 Census of Population and Housing. The following responses have been excluded when calculating percentages: 'other', 'worked at home', 'did not go to work', and 'not stated'.

opportunities include supporting increased use of electric vehicles and shared mobility initiatives such as rideshare and carshare programs.

Roads are fundamental to Hobsons Bay's integrated transport system as every transport mode either uses them or crosses them. The Westgate Freeway and Point Cook Road experience high congestion at peak times, while congestion on arterial roads in the north of the municipality is expected to increase in coming years, particularly Millers, Melbourne and Blackshaws Roads. Challenges include managing congestion and improving safety, while opportunities include advocacy for funding, major projects, and local road planning and management.

There are a number of other transport modes that are relevant to integrated transport planning in Hobsons Bay. Challenges and opportunities for these modes include:

- **taxis** - availability, affordability and accessibility of services for vulnerable residents
- **community transport** – increased integration with other modes and investigation of additional service delivery models
- **water transport** – investigation of local viability and advocacy to state government
- **intelligent transport systems** – monitoring technological developments and understanding how they may be implemented and applied at the local level

Priority areas and recommendations

This background paper identifies a wide range of transport challenges and opportunities within Hobsons Bay. Understanding and responding to these challenges can support positive social, economic and environmental outcomes. The following broad recommendations should be considered in future integrated transport planning:

1. *develop an **Integrated Transport Plan** (ITP) for Hobsons Bay*
2. *undertake **targeted consultation** (as required) through the development of the ITP*
3. *review **available resources** to ensure the implementation plan is achievable*
4. *develop an **evaluation framework** to track progress of the plan*
5. *establish an **internal working group** to support development and implementation of the plan*

Additional recommendations have been developed to respond to specific transport challenges. These are summarised below under four priority areas: research and planning; services and infrastructure; engagement and behaviour change; and advocacy, partnerships and funding.

Research and planning

Research and planning helps to provide the evidence base and direction for future transport projects in Hobsons Bay. The following recommendations should be considered in relation to research and planning:

6. *monitor **best practice** transport research and practices*
7. *investigate Council's role with regards to **emerging sustainable transport options** such as electric vehicles and shared mobility*
8. *undertake planning to respond to local transport challenges and opportunities arising from **population growth** within Hobsons Bay and surrounding municipalities*

9. *further **integrate land use and transport planning** to facilitate appropriate residential and commercial activity, attract local transport investment, and support economic development close to public transport hubs*
10. *undertake local **pedestrian and cycling access planning***
11. *undertake local **freight planning***
12. *update the Hobsons Bay **Road Safety Plan***

Services and infrastructure

Services and infrastructure support the safe, equitable, efficient and sustainable movement of people and goods in Hobsons Bay. The following recommendations should be considered in relation to services and infrastructure:

13. *investigate additional **community transport** service delivery models*
14. *develop an integrated approach to **car parking** in the municipality*
15. *develop a coordinated **transport infrastructure capital works** program*
16. *undertake **strategic road infrastructure planning** to establish priority mode networks*
17. *establish a rolling program of **Local Area Traffic Management** studies*
18. *investigate innovative **urban design and place making projects** to complement local public transport infrastructure*

Engagement and behaviour change

Engagement and behaviour change seek to understand and influence the way the transport system is used in Hobsons Bay. The following recommendations should be considered in relation to engagement and behaviour change:

19. *deliver **targeted engagement activities** (as required) through the implementation of future integrated transport planning*
20. *review, update and/or develop **roads and traffic policies** to support consistent responses to community and stakeholder feedback*
21. *review the role of **Council's Advisory Groups** in relation to integrated transport planning*
22. *work with the community and stakeholders to support **transport behaviour change***
23. *investigate opportunities to further promote transport **behaviour change within Council***

Advocacy, partnerships and funding

Advocacy, partnerships and funding are important mechanisms to ensure that transport needs are addressed in Hobsons Bay. The following recommendations should be considered in relation to advocacy, partnerships and funding:

24. *develop a coordinated evidence-based **transport advocacy program***
25. *continue to monitor and advocate on current and future **major transport projects***
26. *prioritise a **partnership approach** to promote closer organisational integration*
27. *participate in **regional partnerships** to respond to regional transport issues*
28. *proactively seek **external funding opportunities** for transport projects*
29. *establish a **developer contribution policy** to support sustainable transport outcomes*

30. *update Council's **transport infrastructure policies** to provide increased flexibility to attract external funding*

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Acronyms

ABC	Australian Bicycle Council
ACS	Annual Community Survey
ALGA	Australian Local Government Association
ATV	Active Transport Victoria
BNV	Bicycle Network Victoria
CBD	Central Business District
CHWP	Community Health and Wellbeing Plan 2013-17
DCP	Development Contribution Plan
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DELWP	Department of Environment, Land, Water and Planning
DHHS	Department of Health and Human Services
DIRD	Department of Infrastructure and Regional Development
DOT	Department of Transport
DPCD	Department of Planning and Community Development
DTPLI	Department of Transport Planning and Local Infrastructure
EES	Environment Effects Statement
GIS	Geographic Information System
GRZ	General Residential Zone
HBCC	Hobsons Bay City Council
IA	Infrastructure Australia
ILMS	Industrial Land Management Strategy
ITP	Integrated Transport Plan
ITS	Intelligent Transport System
IV	Infrastructure Victoria
LATM	Local Area Traffic Management
LGA	Local Government Area
LPPF	Local Planning Policy Framework
LUTI	Land use and transport integration
LXRA	Level Crossing Removal Authority

MSS	Municipal Strategic Statement
NRZ	Neighbourhood Residential Zone
PoMC	Port of Melbourne Corporation
PPN	Principal Pedestrian Networks
PPV	Private passenger vehicle
PTV	Public Transport Victoria
RGZ	Residential Growth Zone
SPPF	State Planning Policy Framework
TAC	Traffic Accident Commission
TfV	Transport for Victoria
TIC	Transport and Infrastructure Council
TOD	Transit Oriented Development
VAGO	Victorian Auditor General Office
VISTA	Victorian Integrated Survey of Travel and Activity
VPA	Victorian Planning Authority
WeTal	Western Transport Alliance

01 Introduction

Integrated transport planning helps to build a more connected transport system and improve the way we use the land around us to create more effective linkages to the places people and businesses need to go.

This chapter describes:

- why this background paper was developed
- the purpose and structure of this background paper
- why integrated transport is important for Hobsons Bay
- Council's role in integrated transport

Background

In 2006, Hobsons Bay City Council ('Council') released the Hobsons Bay Integrated Transport Strategy. The strategy aimed to provide a framework for future transport development to enable residents and visitors to access destinations in a safe, equitable and efficient manner.[2] Further detail on the Integrated Transport Strategy is provided in chapter three, including an assessment of its strengths and weaknesses. More recently, access to transport has been identified as a key issue in several consultation activities, including those to inform the Community Health and Wellbeing Plan 2013-17, Council Plan 2013-17, Hobsons Bay Strategic Bicycle Plan 2013-17, Connecting the Bay Forums 2015 and Hobsons Bay 2030.

To respond to this renewed interest in transport, Council prepared a discussion paper in 2014 to commence the development of an Integrated Transport Plan (ITP).[3] It responded to changes in the regulatory, policy and strategic context for transport and land use planning since 2006, including the introduction of the *Transport Integration Act 2010* and Plan Melbourne.

The discussion paper also highlighted a number of benefits an ITP would deliver for Council, including an overarching 'umbrella' transport planning framework, links to bordering municipality's plans, a reference document for staff, and implementation plans for key transport and freight plans. More broadly, it highlighted that an ITP would introduce an integrated approach to transport and land use development across Hobsons Bay under a 'one network' approach to guide transport infrastructure, services and maintenance. The discussion paper concluded with a recommendation to endorse the development of an ITP, which was carried by Council on 11 February 2014.

[2] Hobsons Bay City Council (2006a) *Hobsons Bay Integrated Transport Strategy Final Report*, prepared by Parsons Brinckerhoff, p.3.
[3] HBCC (2014) *Integrated Transport Planning in Hobsons Bay: Discussion Paper*, adopted in February 2014.

Purpose and structure

The purpose of this background paper is to present evidence to inform future integrated transport planning in Hobsons Bay. More specifically, the background paper:

- explores how transport in Hobsons Bay is shaped by its location and regional attractors, as well as the people who visit, live and work in the municipality **(chapter 2)**
- reviews the overarching strategic context for integrated transport planning **(chapter 3)**
- presents findings from recent community and stakeholder consultation **(chapter 4)**
- examines the policy context and local challenges and opportunities for closer land use and transport integration **(chapter 5)**
- explores the key transport modes within Hobson Bay, including their role within an integrated transport system, their specific policy and legislative context, local infrastructure, services, usage, and a range of challenges and opportunities **(chapter 6)**
- proposes several broad priority areas and a series of recommendations for consideration in future integrated transport planning **(chapter 7)**

This background paper draws on a wide range of sources, including two in-depth reports that were specifically commissioned by Council to inform future integrated transport planning in the municipality: the 'Hobsons Bay Transport, Society and Economy Technical Report'[4] and the 'Literature Review Integrated Transport'.[5] These reports are referenced regularly through this background paper and may also be used to inform future implementation plans. Additionally, each chapter concludes with a summary that describes the key points for consideration in future integrated transport planning.

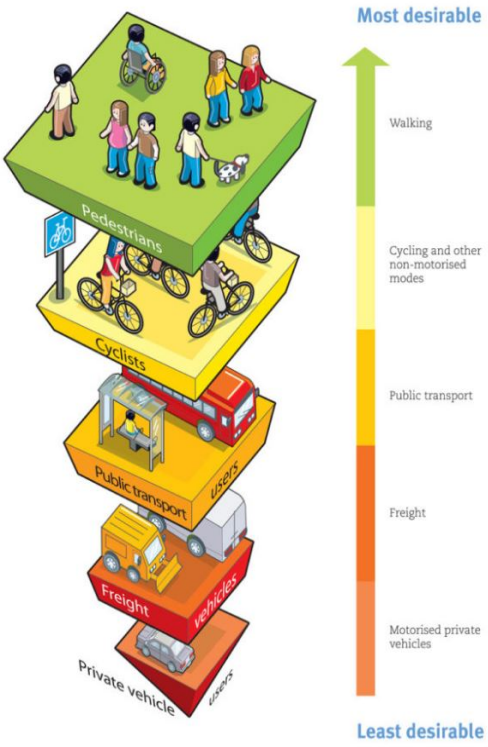

Figure 1: Sustainable transport hierarchy (Source: Institute for Transportation and Development Policy)

Why is integrated transport important for Hobsons Bay?

Integrated transport is based on a network approach that seeks to coordinate and align interrelated transport modes (walking, cycling, public transport, freight, roads, and private passenger vehicles) into an integrated system through long term strategic planning. This

[4] Hale Consulting (2016) *Hobsons Bay Transport, Society and Economy Technical Report*, unpublished report prepared for Hobsons Bay City Council.
[5] GAMUT (2016) *Literature Review Integrated Transport,* unpublished report prepared by Australasian Centre for the Governance and Management of Urban Transport, The University of Melbourne for Hobsons Bay City Council.

approach is underpinned by a 'sustainable transport hierarchy' (see figure 1) that aims to address the key transport challenges faced by Hobsons Bay, including the need to promote active walking and cycling, the lack of an integrated approach to public transport, increased freight and logistics activity and its impact on residential amenity and local roads, and the potential to provide for wider connectivity between shared trails and pedestrian networks. It is consistent with the 'one network' approach proposed in Council's Integrated Transport Planning in Hobsons Bay Discussion Paper.

From a practical perspective, integrated transport planning aims to achieve closer integration across various domains, including:

- **land use** – land use planning has direct transport implications, including through decisions affecting housing density, location of community facilities, industrial and business development, and redevelopment of former industrial sites
- **transport modes** – modal integration aims to achieve closer connections between different methods of travel, with the ultimate goal of achieving 'seamless' transport options for people and goods
- **organisations** – organisational integration aims to provide opportunities for increased collaboration and stronger alliances between stakeholders (such as governments, business and the community) with an interest in transport planning and provision
- **health and wellbeing** – access to reliable and accessible transport can improve health, both directly (e.g. through physical exercise from walking and cycling) and indirectly (e.g. by providing connections to employment, education and health services)

Over time, integrated transport planning can help Hobsons Bay to achieve a range of social, economic and environmental objectives, as described below.

Social

- **equity** – integrated transport planning can provide additional infrastructure, services and/or supports to improve access to transport and reduce 'mobility disadvantage' experienced by some vulnerable population groups, e.g. older people or people with a disability
- **social inclusion** – affordable, available and accessible transport services and infrastructure enable people to access services, education and employment, participate in community spaces, places and events, and establish and maintain connections with others
- **health and wellbeing** – good quality connected active and public transport infrastructure can help prevent key diseases and risk factors through the promotion of walking and cycling, as well as interactions with others, creating a sense of belonging and inclusion
- **safety** – infrastructure improvements, reduced travel speeds, innovative road design, and activation of public places can improve perceived and actual safety for all road users and pedestrians

Economic

- **economic development** – integrated transport infrastructure (particularly for freight vehicles) supports current and future economic activity and provides investment clarity for industry, businesses and the community

- **efficiency and productivity** – a well-planned integrated transport system can reduce congestion, allowing people and goods to reach their destination more quickly, thereby increasing efficiency and productivity
- **cost savings** - people and businesses can save money through reduced need to travel and increased feasibility of walking and cycling options, while increased levels of active transport can contribute to lower future health care costs by reducing certain disease rates

Environment

- **lower emissions** – higher active and public transport usage reduces greenhouse gas and air pollutant emissions arising from transport
- **amenity** – reduced noise, emissions and congestion (particularly from cars and freight vehicles) improves the liveability of the municipality, particularly more car dependent neighbourhoods and areas expected to experience future population growth
- **place making** – innovative urban design and more creative use of streets, car parking spaces, public transport infrastructure and other urban environments can help reduce car dependency and make places more walkable, vibrant, safe, sustainable and socially engaging

Council's role

Council has varying levels of influence over transport planning and provision. Areas where it has higher influence include walking, cycling, land use planning, parking provision, local road management and safety, and transport demand management measures. Areas where it has lower influence include public transport, arterial roads and freight routes.

More specifically, Council has a range of different (and sometimes overlapping and interchangeable) roles, including to:

- **listen and advocate** - listen to the community's wants and needs, and work with service providers, governments, not for profits and the private sector to respond, *e.g. work with the Victorian Government to improve public transport infrastructure and services*
- **plan** - prepare for current and future transport needs through research, policy development, community and stakeholder engagement, and participation in regional strategic planning, *e.g. develop an Integrated Transport Plan, prepare Local Area Traffic Management studies*
- **provide and conserve** - build and maintain community facilities, local infrastructure and natural spaces, *e.g. build and maintain footpaths, shared trails, roads and car parking spaces*
- **deliver –** provide accessible and culturally appropriate services that support community health and wellbeing, *e.g. deliver community transport service, enforce parking laws*
- **support and facilitate** – help people, businesses and organisations reach their potential through programs, partnerships, training, grants and other funding opportunities, *e.g. work with schools to improve walking to school rates*

02 Hobsons Bay profile

Hobsons Bay's transport planning, provision, activity and behaviour is shaped by its location and regional attractors, as well as the people who visit, play, work and live in the municipality.

This chapter describes:

- how Hobsons Bay's location shapes its transport challenges and opportunities
- the key regional attractors that generate local transport activity across, in and out of the municipality
- current and future demographic trends and how they influence transport planning, provision and behaviour
- transport-related health and wellbeing indicators and how they may be improved through integrated transport planning

Hobsons Bay's location, regional attractors, demographic trends, and health and wellbeing indicators must be considered in future integrated transport planning.

Location

This section examines how Hobsons Bay's geography and history shape its current and future transport challenges and opportunities.

Geography

The City of Hobsons Bay covers an area of 66 square kilometres, extending seven to 20 kilometres southwest of Melbourne's central business district (CBD). This proximity to the CBD provides favourable access to employment, education, and cultural and recreational activities.

Prior to European settlement, Hobsons Bay was occupied by the Yalukit Wilum clan. Today, it includes the neighbourhoods of Altona, Altona Meadows, Altona North, Brooklyn, Laverton, Newport, Seabrook, Seaholme, South Kingsville, Spotswood, Williamstown and Williamstown North (figure 2).

Hobsons Bay is situated on a volcanic plain that stretches to the Victoria-South Australia border. Its flat topography provides generally favourable conditions for walking and cycling, although a lack of substantial trees restricts the amount of shade and protection from onshore winds. The coastline extends for approximately 23 kilometres from Skeleton Creek (Altona Meadows) to the bank of the Yarra River (Spotswood) at the east of the municipality. The foreshore is highly valued by the community and supports current and future water transport opportunities.

The municipality is essentially 'landlocked' with major roads (Westgate Freeway, Princes Freeway, and Point Cook Road) to the north and west, the Yarra River to the east, and Port Phillip Bay to the south. Additionally, the national freight rail line effectively splits the municipality in half (running

from Newport to Laverton), and there are relatively few north-south connections within or out of the municipality. This can lead to a range of transport challenges such as traffic congestion during peak times and physical barriers to walking and cycling.

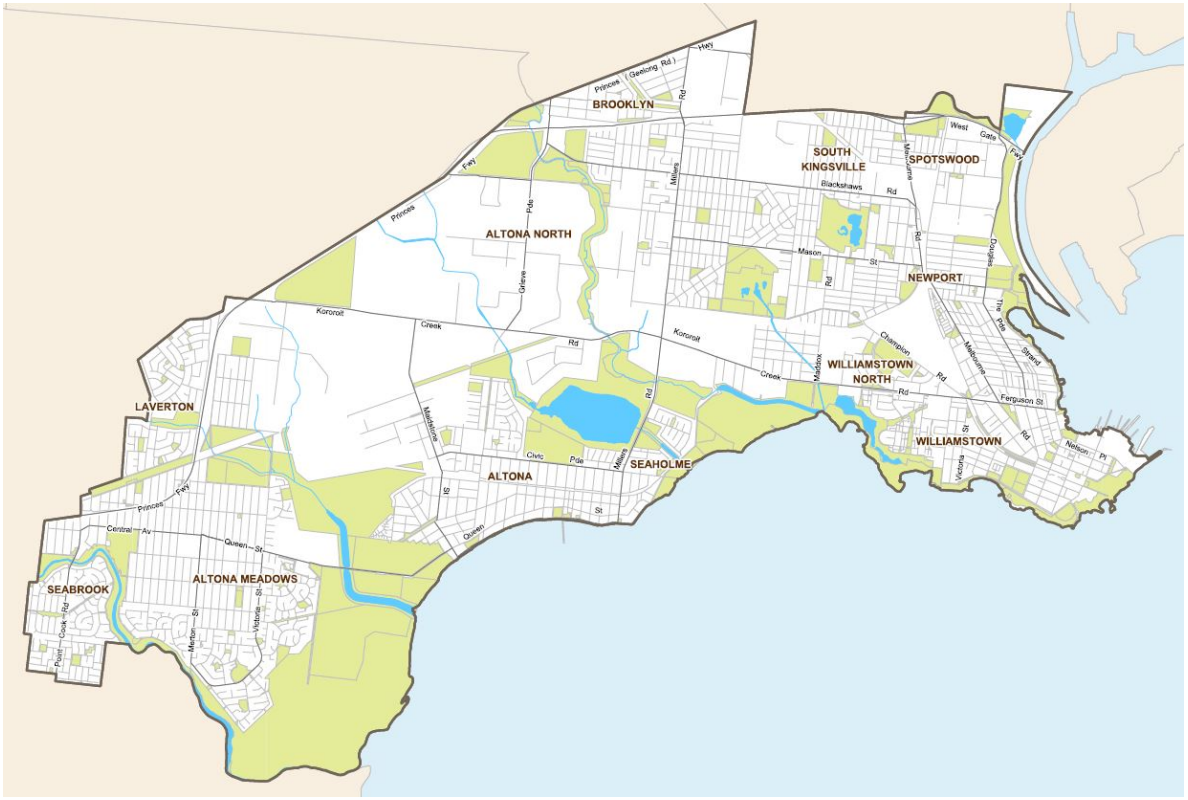

Figure 2: Map of Hobsons Bay

History

Hobsons Bay's industrial and residential history has shaped the character of the municipality, as well as its current and future transport needs. Various industries were established during the nineteenth and early twentieth centuries, including bluestone quarrying, coal mining, salt harvesting and dairy farming.[6] These industries occupied much of the land between the emerging residential settlements, which were originally linked by unsealed roads and recently laid rail lines.

Industrial development continued steadily in the eastern part of the municipality during the first half of the twentieth century through food production, wool stores, shipbuilding, railway workshops and manufacturing. This industrial development encouraged residential development to provide local accommodation for workers such as the Newport Railway Estate No. 2 (between Mason, Mills, Hansen Streets and Blackshaws Road), which was established in the mid-1920s.[7]

An important shift occurred in the mid twentieth century with power, petroleum and petrochemical industries establishing operations in the municipality (figure 3). These industries were attracted by its proximity to the Port of Melbourne and the Yarra River, as well as the wide open spaces

[6] For a detailed account of the economic development of Hobsons Bay, see HBCC (2006b) *Hobsons Bay Heritage Study 2006 Volume 2: Thematic Environmental History*, chapter four.
[7] Ibid., p.38.

previously used for farming and other early industries. While these industries provided an economic boost to the municipality, they have reinforced the dispersed nature of Hobsons Bay's neighbourhoods. These areas are now connected by long stretches of arterial road, which are practically unwalkable, often dangerous for cyclists, and largely underserviced by bus services.

Figure 3: Altona Refinery in the 1960s
(Source: State Library Victoria)

While there is some overlap, Hobsons Bay's residential development may be grouped into four broad phases:

1. **Williamstown, Williamstown North, Newport** – development commenced in the second half of the 1800s and was well established by the first quarter of the 1900s
2. **Altona, Seaholme, Laverton, Spotswood, South Kingsville** – initial development commenced in the late 1800s, but was not fully established until the 1950s and '60s
3. **Altona North, Brooklyn** – development occurred primarily in the 1950s and '60s
4. **Altona Meadows, Seabrook, Rifle Range Estate** – development occurred primarily in the 1970s, '80s and '90s

With the exception of South Kingsville, all of the neighbourhoods established during the first two phases have local train stations. Conversely, neighbourhoods developed during the latter two phases were generally planned around cars, as suggested by a lack of local train stations and larger lot sizes. Walking and cycling is also problematic in these areas due to busier roads, incomplete foot and bike path networks, wider spatial distribution of services, and car-focused 'big box' shopping centres. Council's Strategic Bicycle Plan and footpath infrastructure program has sought to address these issues in recent years.

Regional attractors

Hobsons Bay's key destinations and transport routes are not only used by the local community and industry. People and businesses based outside the municipality are attracted to Hobsons Bay for many activities such as employment, tourism, sport, recreation and education. Future residential and economic development, as well as population growth in neighbouring municipalities, will also generate additional transport activity in the years to come.

Industry and employment

Hobsons Bay's economy is heavily reliant on manufacturing, with more than half (54%) of its economic output generated by the sector. [8] The municipality also hosts the Altona Petrochemical Complex (major companies include ExxonMobil and Qenos), which is the largest concentration of

[8] Hale Consulting (2016), p.17.

chemical manufacturing in the southern hemisphere. These businesses and industries generate substantial freight activity, particularly given the proximity to the Port of Melbourne and other inland ports within the municipality.

Around 31,000 people work in Hobsons Bay across a range of industries, including manufacturing (26.2% of total workers), transport, postal and warehousing (13.5%), retail (9.1%), construction (8.4%) and health care and social assistance (7.2%). A large proportion of these workers are employed in the Western Industrial Precinct, which includes parts of Altona, Altona North, Brooklyn and Williamstown North (figure 4).

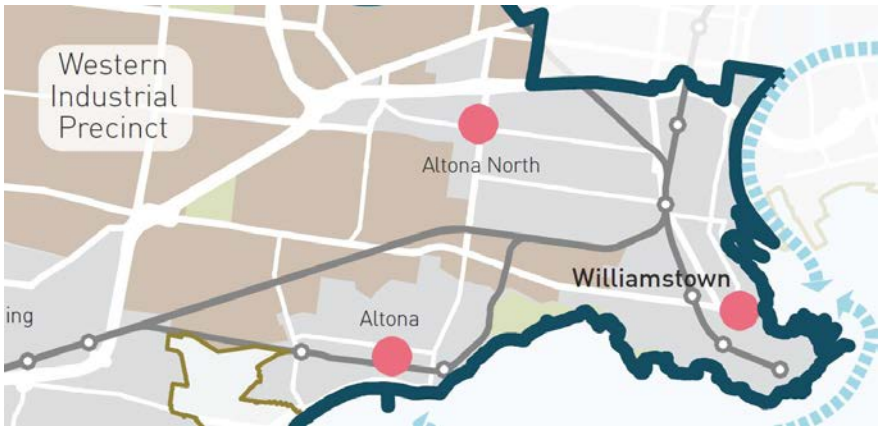

Figure 4: Western Industrial Precinct
(Source: Plan Melbourne)

Other employment opportunities are largely dispersed across the municipality through various activity and neighbourhood centres, with around 90 per cent of Hobsons Bay's 6,164 businesses employing less than five people.[9] Just 30 per cent of local jobs are filled by Hobsons Bay residents, which means around 22,000 people regularly travel into Hobsons Bay to work.[10] Further detail around the movement of workers in and out of the municipality is provided later in this chapter (see page 23).

Tourism and events

Hobsons Bay offers a range of tourism landmarks, events and recreational activities. Museum Victoria's Scienceworks (located in Spotswood) attracts over 450,000 visitors annually (figure 5), while destinations such as the Substation (Newport) and Seaworks (Williamstown) continue to grow in popularity.

Figure 5: Scienceworks, Spotswood

Almost 42,000 people visited the Hobsons Bay Visitor Centre in Williamstown during 2015-16. Many more people visit the area to enjoy its restaurants, heritage and foreshore location, as well as events such as the Macedonian Cultural Festival, Eid celebrations and New Year's Eve fireworks. Other cultural events and festivals are hosted across Hobsons Bay throughout the year,

[9] HBCC (2015a) *Economic Development Strategy 2015-20*, p.15.
[10] Ibid., p.14.

including the Newport Folk Festival, Williamstown Literary Festival, Australia Day in Altona, Children's Week Picnic, Diwali Festival of Lights, and the Laverton Festival.

Sport and recreation

Sporting activity generates substantial transport activity in Hobsons Bay. During 2015-16, there were 71 sporting clubs operating in the municipality across a range of sports, with more than 17,000 people formally participating.[11] Many of these people are local residents but it is likely that large numbers of people also regularly travel into the area to participate in local sporting activities.

Recreational activities are also popular and help to shape the role of public open space. For example, Hobsons Bay's beaches are popular in the summer months, with Williamstown and Altona both attracting large number of visitors. The municipality's open space is also used for a variety of other recreational purposes, including as parks, playgrounds, wetlands, grasslands, coastal foreshore and off-leash dog parks. Popular locations include Cherry Lake (Altona), Newport Lakes (Newport) and Commonwealth Reserve (Williamstown).

Additionally, Hobsons Bay has more than 50 kilometres of off-road shared trails, as well as walking activities such as the 100 Steps to Federation at Truganina Coastal Parklands (Altona Meadows). This infrastructure provides good connectivity across the municipality and informal opportunities to participate in walking and cycling.

Education

There are over 12,000 school aged children and young people in Hobsons Bay. A large proportion of this group attend schools within the municipality, particularly primary school students. Traffic congestion around schools continues to be an issue across many metropolitan municipalities, with large numbers of children being driven to school.

Hobsons Bay has 27 'mainstream' schools, including 21 primary schools, two combined schools (P-9, P-12) and four secondary schools spread across seven campuses. It also has three 'specialist' schools: two for children with autism (the Western Autistic School and the Jennings Street School in Laverton) and the recently established Sandridge School (currently for primary school students) in Williamstown. There is presently no tertiary education institution located within Hobsons Bay since the closure of the Victoria University's Newport campus in 2012. Journey to education data will be discussed in more detail in chapter six.

Activity centres

Activity centres are broadly defined as 'vibrant hubs where people shop, work, meet, relax and often live'.[12] People also visit activity centres to access services and education. Plan Melbourne (the Victorian Government's metropolitan planning strategy) designates three major activity centres within Hobsons Bay at Altona Gate (Altona North), Altona Beach (Altona) and Williamstown.

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[11] HBCC internal reporting.

[12] Department of Environment, Land, Water and Planning (2015) *Plan Melbourne Refresh Discussion Paper*, Melbourne, p.24.

Plan Melbourne also supports the intensification of housing in areas located in or close to major activity centres and at sites that offer good access to transport and services. As Hobsons Bay's activity centres develop in the coming years they will generate additional transport activity, although it is anticipated that Williamstown may not experience substantial growth due to existing density and heritage considerations.

Strategic redevelopment areas

Three of the strategic redevelopment areas identified in the Hobsons Bay Industrial Land Management Strategy (see page 61) are now progressing toward residential development, with a substantial increase in the number of dwellings and residents expected in the next twenty years. The largest of these (Precinct 15, the former Don's Smallgoods site in Altona North) is expected to eventually host 3,000 dwellings for 7,000 people, as well as opportunities for economic growth and employment. These large residential developments (with supporting community infrastructure such as childcare and open space) will generate substantial incoming and outgoing transport activity, both for local residents and others living outside the immediate area.

Through traffic

While not a destination in their own right, Hobsons Bay's arterial roads attract many vehicles as they pass through to locations in other municipalities. For example, many trucks pass through local freight corridors (such as Kororoit Creek Road and Grieve Parade) to access the Port of Melbourne.

Current population and projected growth within neighbouring municipalities also contributes to through traffic in Hobsons Bay. The forecast population in Wyndham is set to almost double in the next 20 years to 424,000 people.[13] More specifically, the combined population of the Point Cook-Hoppers Crossing neighbourhoods are expected to exceed Hobsons Bay's total population by 2021.

It is likely that some Point Cook and Hopper Crossing residents pass through Hobsons Bay (via Point Cook Road/Queen Street) to avoid peak congestion *en route* to the CBD, particularly if there is a traffic issue on the Westgate Freeway. Future integrated transport planning may investigate this issue further to clarify the volume of through traffic and propose recommendations given expected population increases in Wyndham.

People

This section provides an analysis of current and future demographic trends and their impact on transport planning, provision, activity and behaviour.[14] It pays specific attention to neighbourhoods, age, cultural and linguistic diversity, disability and need for assistance, household types, and housing.

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[13] Wyndham City Council, *Population forecast*, http://forecast.id.com.au/wyndham, accessed 3/1/17.

[14] All data in this section is sourced from the 2011 Census of Population and Housing. For several topics, forecast data is used to provide estimates for future years, sourced from id (2016) *Population forecast*, http://forecast.id.com.au/hobsons-bay - all forecast data is based from the 2011 Estimated Resident Population, including data provided for 2016. This report does not contain any data sourced from the 2016 Census of Population and Housing.

Neighbourhoods

In 2011, the Estimated Resident Population (ERP) of Hobsons Bay was 87,348.[15] By 2015, the ERP had grown to 92,761. Hobsons Bay's population is spread across 11 neighbourhoods. Altona Meadows (the neighbourhood with the largest land area) currently has the highest population (19,079 people), while Brooklyn has the smallest (1,825 people). Around half of Hobsons Bay residents (45,183 people) live in just three neighbourhoods: Altona Meadows, Altona-Seaholme and Altona North.

Hobsons Bay's population is forecast to grow by just over 18 per cent (around 17,000 people) in the next twenty years, an average annual growth rate of around one per cent. As noted, this growth rate is significantly less than neighbouring Wyndham.

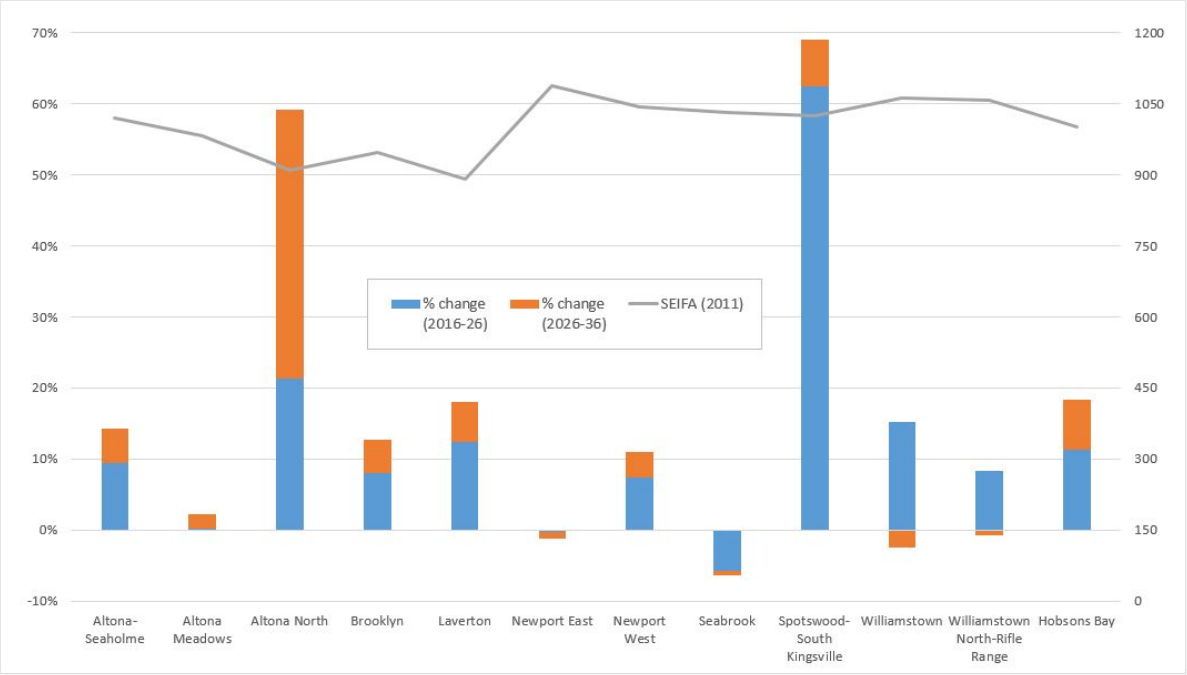

Figure 6: Population change (2016-36) and SEIFA disadvantage index (2011) by neighbourhood

This change in population will not be evenly spread across the municipality (figure 6). Spotswood-South Kingsville (69% increase or 3,200 people) and Altona North (59% increase or 7,500 people) will experience substantial population growth. Population growth in these areas will exert considerable pressure on roads and public transport, which is currently limited to buses in Altona North and South Kingsville. Most other neighbourhoods are forecast to experience modest (up to 20%) population growth, and some will have lower (or even negative) growth.

[15] The ERP is the Australian Bureau of Statistics' (ABS) official population of an area. It differs from (and is usually higher than) actual census counts as it factors in population missed by the census and people overseas on census night. It is generally considered a more accurate measure of population size than census counts.

Comparing the SEIFA disadvantage index[16] for respective neighbourhoods reveals that Newport East (1,087.4) experiences the least disadvantage in Hobsons Bay, while Laverton (891.3) experiences the most. Notably, of the municipality's four most disadvantaged neighbourhoods, just one (Laverton) has local access to train services.

Altona North has the second-highest level of disadvantage and relatively limited public transport options. Moreover, it is one of the two neighbourhoods forecast to experience substantial population growth, and has been identified by the Victorian Government as an activity centre. This combination of population growth, limited public transport and existing disadvantage presents complex challenges for transport planning in this part of the municipality.

Age

Hobsons Bay's age structure reveals a slightly older population than the Metropolitan Melbourne average. Forecast growth in each service group shows that Hobsons Bay's population is set to age further in the coming decades (figure 7). More specifically, 'seniors (70 and 84)' and 'elderly aged (85 and over)' are forecast to grow at the fastest rate, both almost doubling in size. In total, there will be more than 4,000 additional people aged 70 or above living in Hobsons Bay by 2036 (compared to 2016 figures).

[16] The social-economic index for areas (SEIFA) disadvantage index is produced by the ABS and is drawn from Census data. The disadvantage index takes into consideration factors such as low income, high unemployment, jobs in relatively unskilled occupations, and low educational attainment. These are weighted to provide a single score. The Australian average score is set at 1,002. Scores below that figure represent increased disadvantage and those above indicate less disadvantage.

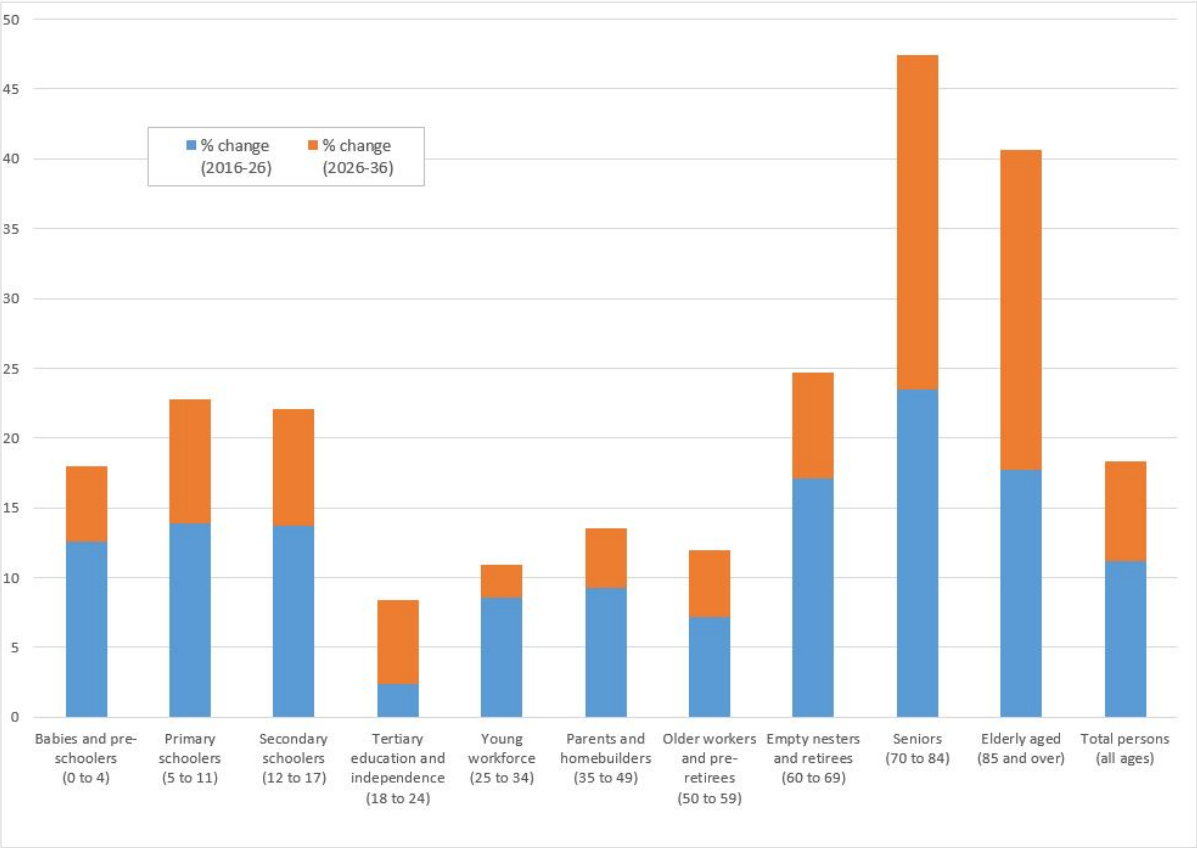

Figure 7: Forecast population change by service group (2016-26 and 2026-36)

Hobsons Bay's ageing population has clear transport implications. Generally, as people get older their mobility declines. As such, there is likely to be increased demand for accessible public transport and community transport services, particularly for health, shopping and social activity purposes. Many older people are also reliant on income support (e.g. the Aged Pension) and cannot afford to purchase, maintain and operate a car or to regularly access public transport. Additionally, some older people eventually lose the capacity the drive entirely which severely limits their mobility options, as well as anyone else (e.g. partner, friend) who previously relied on their capacity to drive.

Another cohort forecast to experience population growth is children and young people. More specifically 'primary schoolers (5 to 11)' and 'secondary schooler (12 to 17)' are set to grow steadily and at very similar rates, with almost 3,000 additional people in these age groups by 2036 (compared to 2016 figures). Around two-thirds of this growth is expected in the next ten years.

Aside from demand for schools and other infrastructure, growth in these groups will present transport challenges. If current journey to school trends continue, Hobsons Bay is set to experience increased congestion in and around local schools. Furthermore, additional demand will emerge for public transport services, particularly from 'secondary schoolers' who rely on buses and trains to travel independently to school, work, services, and social and recreational activities.

Cultural and linguistic diversity

Hobsons Bay is home to people from over 130 different countries. Around 31 per cent of the population (over 25,000 people) were born overseas, with a total of 23 per cent (over 19,000 people) born in a non-English speaking country. These proportions are slightly below the respective figures for Metropolitan Melbourne.

Around five per cent of the population (over 4,400 people) have low or no English proficiency, including people from a variety of language groups (see figure 8). Language barriers can reduce access to transport in various ways, including obtaining a driver's licence and the capacity to understand and effectively use public transport services.

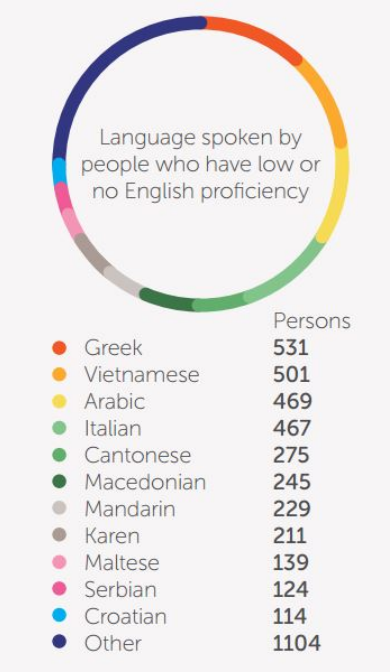

Figure 8: Language spoken by people with low or no English proficiency
(Source: HBCC, 2016c)

Disability and need for assistance

Around 17 per cent of Hobsons Bay residents (almost 15,000 people) have a disability, defined as 'any limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities'.[17] Additionally, more than five per cent of the Hobsons Bay population (over 4,300 people) require assistance in their daily lives.

As shown in figure nine, the need for assistance progressively increases with age, with high proportions of older people needing support. There is also a large group of younger people aged 20 to 59 (more than 1,000 residents) who need support with core activities, including mobility, self-care and communication.

[17] Australian Bureau of Statistics (2009) *Survey of Disability, Ageing and Carers*, Catalogue No. 4430.0.

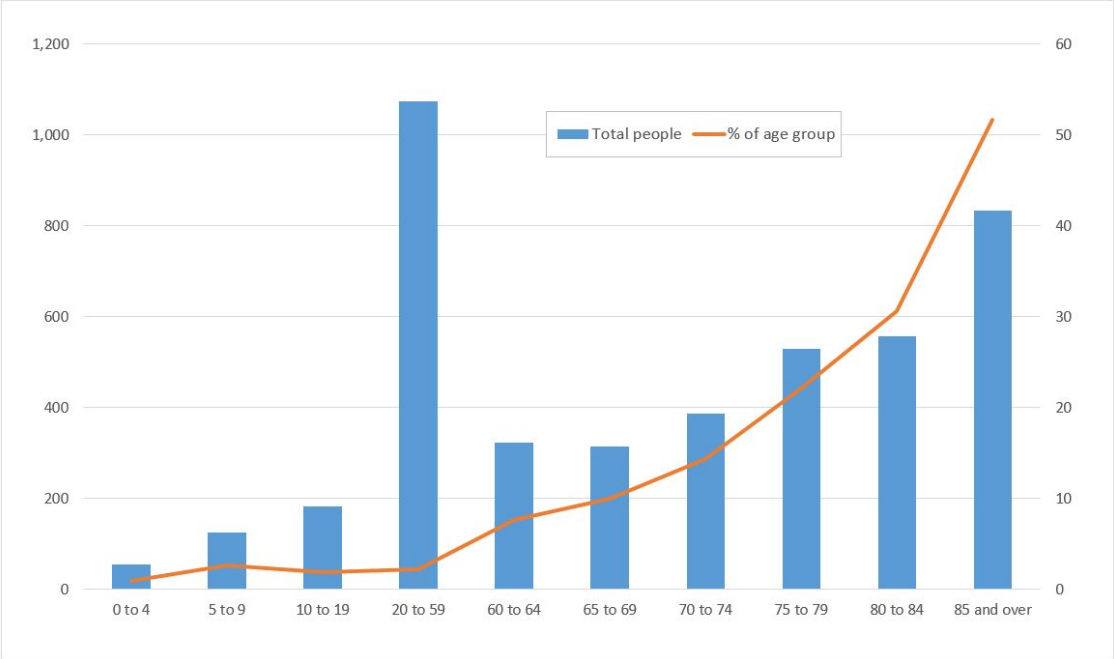

Figure 9: Need for assistance by total people and percentage of age group

The accessibility of all forms of transport has improved in recent years, especially since the introduction of the *Disability Discrimination Act 1992* and the *Disability Standards for Accessible Public Transport 2002*. However, affordability and availability factors restrict the capacity of people with a disability to move easily from place to place. For instance, many people with a disability are reliant on income support (such as the Disability Support Pension) or live in areas that are not well served by accessible public transport or suited to active transport (especially using a wheelchair).

Household types

There are currently around 35,400 households in Hobsons Bay, forecast to grow to approximately 39,500 in 2026 (11.8% increase) and around 42,300 in 2036 (further 7% increase). The average size of Hobsons Bay households is expected to decline marginally during this period from 2.54 to 2.51.

Most neighbourhoods will experience declining average household sizes, with the exception of Altona-Seaholme, Altona North, Laverton and Spotswood-South Kingsville.[18] Larger average household sizes in these areas is likely to increase both the total amount of transport activity and particular trip types. For example, trips to education are likely to grow in areas with growing proportions of children and young families such as Altona North, Spotswood and South Kingsville.

Hobsons Bay's household profile is broadly consistent with Metropolitan Melbourne. Couple families with dependents comprise around one-third of households, while couples without dependents and lone person households each make up around one-quarter. Lone person households will continue to grow in the next twenty years, along with couples without dependents (figure 10).

[18] HBCC (2016a) *Hobsons Bay Housing Strategy 2015-35 (volume one): Background Report*, p.41.

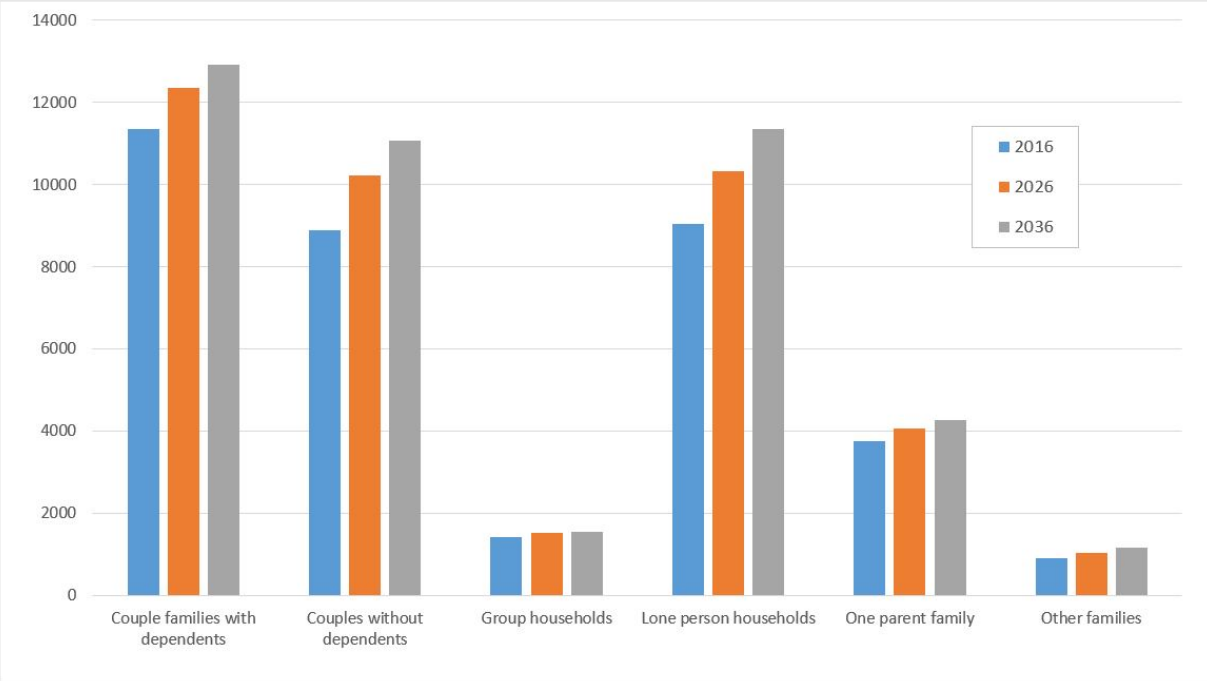

Figure 10: Forecast change in household types (2016-36)

Growth in these smaller household types has the potential to increase congestion and demand for car parking, particularly if each household member owns and regularly drives a car. However, it also presents an opportunity to support increased use of public and active transport, given their potential flexibility compared to households with dependent children. Growth in older lone person households also presents social inclusion and transport challenges, including reduced ability to drive, diminished capacity to walk or cycle, and (in some cases) physical barriers to using public transport.

Housing

There are currently around 37,000 dwellings in Hobsons Bay (figure 11), forecast to grow steadily to just over 44,600 by 2036. More than three quarters of housing stock is detached and more than half (53.8%) have three bedrooms, higher than the Metropolitan Melbourne rate (43.8%).

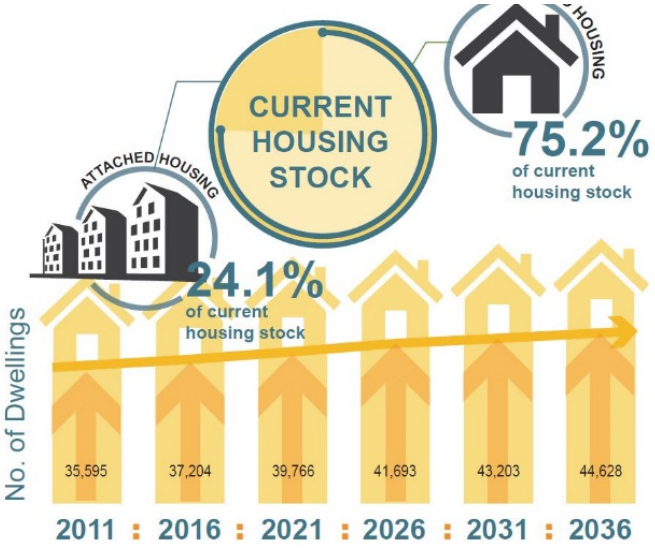

Figure 11: Forecast change in housing stock (2011-36)
(Source: Hale Consulting, 2016)

The average dwelling density in Hobsons Bay is around 16 dwellings per hectare. This is considered low density (less than 25 dwellings/hectare), although density levels vary across the municipality. Generally, housing density is higher in the eastern neighbourhoods (especially parts of Newport and Williamstown) and lower in the central and western neighbourhoods, although several medium density developments have emerged in recent years in Altona and Altona Meadows.

It is generally accepted that housing stock in Hobsons Bay currently lacks diversity.[19] As noted, just over three-quarters are detached houses, which is slightly higher than the rate for Metropolitan Melbourne (71%). Hobsons Bay also has a slightly higher percentage of medium density dwellings compared to Metropolitan Melbourne (23% vs. 21%), but much fewer high density dwellings (1% vs. 7%).

Two key points emerge from the relationship between housing and transport in Hobsons Bay. Firstly, while low housing density is well established and valued by the community, it tends to reinforce car dependency and make it difficult to attract additional public transport services. Secondly, future housing growth will be concentrated in newly established residential areas on former industrial land, including areas with currently limited public transport. These new dwellings will generate substantial transport activity, and require integrated transport planning and investment to ensure they are highly connected and liveable communities.

Health and wellbeing

This section provides a snapshot of health and wellbeing in Hobsons Bay, with particular emphasis on the topics that may be influenced by integrated transport planning.[20] It pays specific attention to physical health, mental health, healthy food, social inclusion, community safety, access to health services and access to employment.

Physical health

Hobsons Bay has a relatively high incidence of some illnesses, including type 2 diabetes (5.9%) and heart disease (8.1%), which are both higher than the Victorian average. Similarly, relatively large proportions of people report asthma (11.6%) and high blood pressure (25.9%). Above average rates of avoidable deaths due to circulatory system diseases (49.6 per 100,000 population aged 0 to 74 years) and respiratory system diseases (17.0 per 100,000 population aged 0 to 74 years) are likely to be related to these higher illness rates.[21]

Table 1: Overweight, obesity and physical activity guidelines rates in Hobsons Bay

	Overweight (25-30 Body Mass Index)		Obese (30+ Body Mass Index)		Do not meet physical activity guidelines	
	Hobsons Bay	*Victoria*	*Hobsons Bay*	*Victoria*	*Hobsons Bay*	*Victoria*
Male	37.6% (53rd)	40.6%	26.6% (9th)	17.4%	36.8% (11th)	30.4%
Female	29.0% (21st)	24.6%	13.8% (60th)	17.2%	38.6% (10th)	33.6%
Total	33.2% (41st)	32.5%	20.4% (28th)	17.3%	37.9% (7th)	32.1%

Some of the illnesses described above are partly caused by excess weight and/or lack of physical exercise (table 1). The obesity rate amongst Hobsons Bay men is particularly concerning, with more than one in four (26.6%) men in this group. The obesity rate for women in Hobsons Bay is

[19] Ibid., p.59.

[20] Unless otherwise indicated, data in this section is sourced from either VicHealth (2012) *VicHealth Indicators Survey 2011 Results: Hobsons Bay LGA Profile*, Melbourne or Department of Health (2014) *Victorian Population Health Survey 2011-12: Survey Findings*, Melbourne.

[21] Public Health Information Development Unit (2016) *Social Health Atlas of Victorian Local Government Areas 2009-13.*

substantially below the Victorian average, but there is a higher than average proportion of women in Hobsons Bay (29.0%) who are considered overweight.

Physical activity rates are also low in Hobsons Bay for both male and females, with the municipality ranked seventh in Victoria for people who do not meet physical activity guidelines. Additionally, a relatively large proportion of the population (40.7%) sit for at least six hours per day, slightly higher than the Victorian average (38.2%).[22]

This data suggests that the health of many Hobsons Bay residents may be improved by losing weight and participating in more physical activity. Increased levels of walking and cycling, incidental travel to public transport, and reduced reliance on car travel (particularly for short trips) can play a key role in addressing these physical health issues.

Mental health

Around one in eight Hobsons Bay residents (12.1%) report high or very high levels of psychological distress, slightly higher than the Victorian average (11.1%). A similar proportion (13%) have experienced a period of one to seven days where they were unable to work, study or manage day to day activities due to psychological distress.

Mental health is a particular issue for young people in Hobsons Bay, with a study undertaken by the Victorian Government in 2010 revealing significant concerns.[23] For example, one in five young people had experienced psychological distress, substantially higher than the rate reported across the western region (14%) and Victoria (13%). Additionally, the rate of psychological hospitalisations for 10 to 17 year olds was 11.2 per 1,000, almost double the rate for the western region.

Transport interacts most directly with mental health in the context of access to services. The coverage of private and public mental health services is uneven across the municipality (figure 12). Encouragingly, some of the areas experiencing greater disadvantage (such as Laverton, Altona North and Altona Meadows) have local access to public mental health services. However, a large proportion of services in other areas are private practices, which are largely unaffordable for many vulnerable groups.

For young people, low public transport service levels can lead to long trips to access public mental health services. The recent opening of the Newport Community Hub (in September 2016) will provide some relief in this regard, with the re-location of Council's youth mental health counselling service from Williamstown.

[22] Department of Health and Human Services (2016) *Victorian Population Health Survey 2014: Modifiable risk factors contributing to chronic disease in Victoria*, Melbourne, p.319

[23] Department of Education and Early Childhood Development (2010) *Adolescent Community Profile - City of Hobsons Bay*, Melbourne.

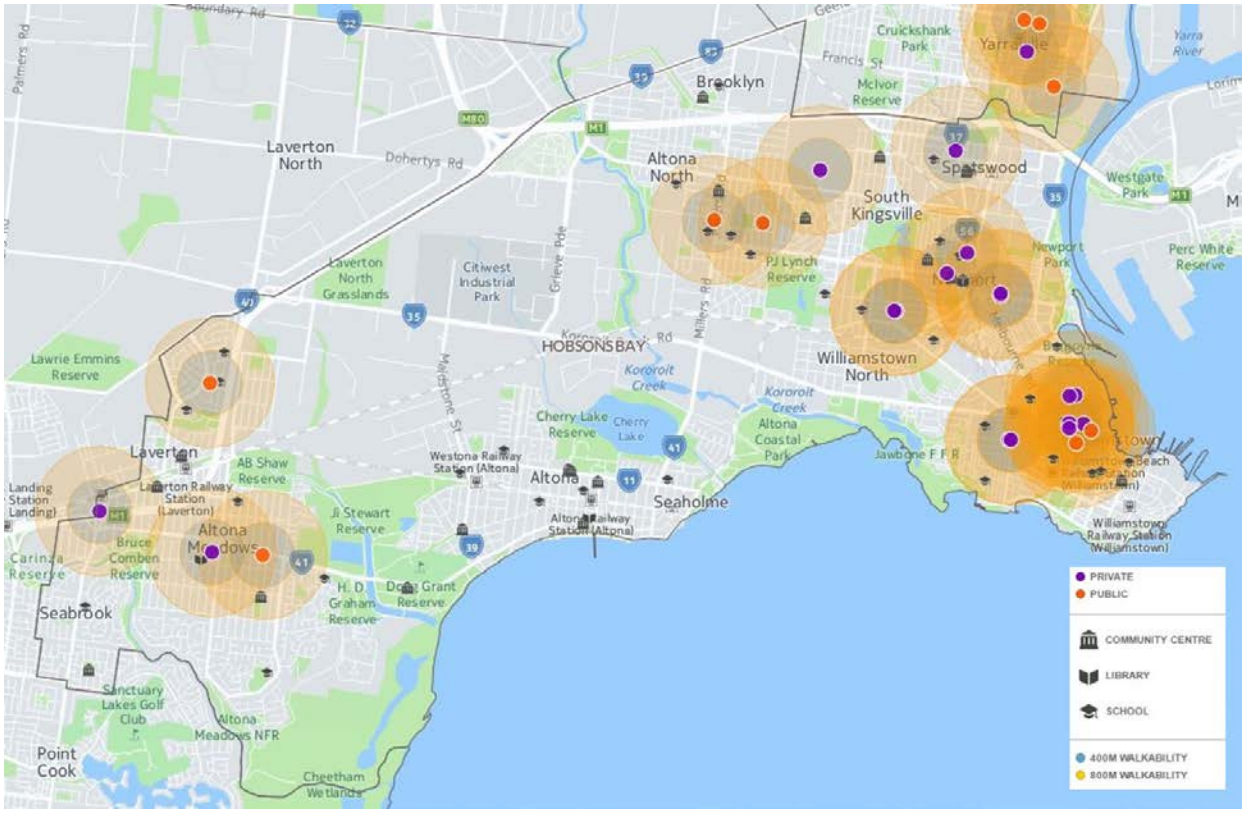

Figure 12: Walkability to mental health services
(Source: HBCC, unpublished)

Healthy food

More than half of Hobsons Bay residents (57.3%) do not meet fruit and vegetable dietary guidelines, considerably higher the Victorian average (51.1%). Notably, females are lower than males on this measure, with nearly 58 per cent not meeting dietary guidelines, significantly above the Victorian average (45.5%). On a more positive note, just 8.9 per cent of the adult population consume sugar-sweetened soft drinks on a daily basis, lower than the Victorian average (11.2%).[24]

Convenient access to fresh food is one factor that contributes to these outcomes, alongside a range of other influences such as affordability, education, time constraints and cultural background. Figure 13 shows the areas of Hobsons Bay with 'walkable' access (up to 800 metres) to fresh food and meat stores. People that do not live within this 800 metre catchment are considered to be living within a 'food desert' and at risk of food insecurity.

Large parts of Hobsons Bay fall within this walking catchment, although there are some notable gaps, including all of Seabrook, Seaholme and Brooklyn, large sections of Altona Meadows, and some areas within Laverton, Altona and Williamstown. Additionally, some older people and people with a disability are simply unable to travel these distances, which reduces overall coverage and further impacts on food security. Moreover, some of these stores are located on main roads or in

[24] DHHS (2016), p.170.

shopping centres which makes access much less appealing, especially for those using active transport options.[25]

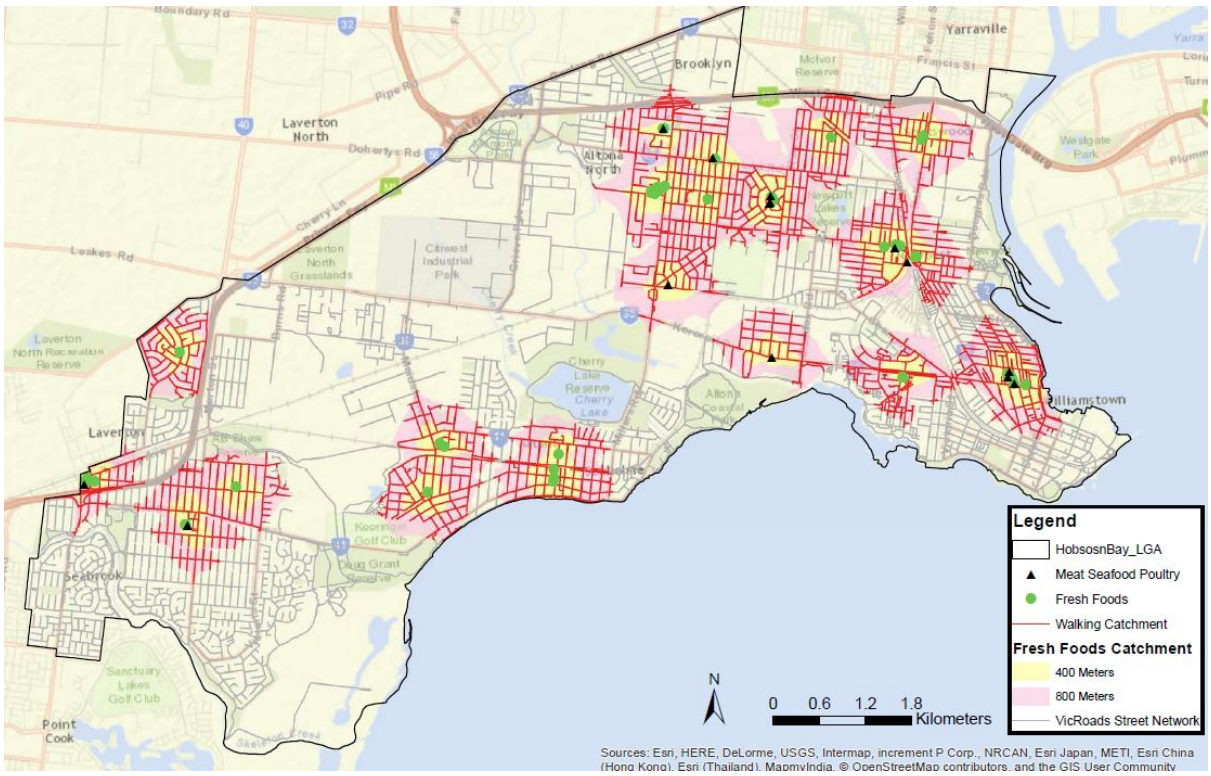

Figure 13: Fresh food and meat stores walking catchments
(Source: Hale Consulting, 2016)

Social inclusion

Social inclusion is about people being able to participate in society and creating conditions for equal opportunities for all.[26] Time spent with family and friends is one measure of social inclusion. Almost 19 per cent of Hobsons Bay residents lack time for friends and family, although this is substantially lower than the Victorian average of 27.4 per cent (table 2). Notably, a much higher proportion (37.7%) use social networking to organise time with family and friends, suggesting that technology can be used to overcome time constraints and, in some cases, long distances to promote social inclusion.

Table 2: Selected social inclusion measures

Activity	Hobsons Bay	Victoria
Lack time for friends/family	18.9%	27.4%
Used social networking to organise time with family/friends	37.7%	35.1%
Volunteering (at least once per month)	29.2%	34.3%
Attend arts activities or events (in the last 3 months)	64.7%	63.6%

[25] For further information in relation to food security in Hobsons Bay see HBCC (2016b) *Research Summary: Access to adequate and nutritious food in Hobsons Bay*
[26] Triggs, G. (2013) *Social Inclusion and Human Rights in Australia (speech)*, www.humanrights.gov.au/news/speeches/social-inclusion-and-human-rights-australia, accessed 3/11/16.

Transport is a critical component in supporting social inclusion. Simply put, if you cannot get there, you cannot participate. The role of transport in supporting social inclusion is confirmed by findings from consultation on Council's Multicultural Policy 2016-20, which found 'access to transport' to be among the top three most important issues to people from different cultures in Hobsons Bay.[27]

A large body of academic research attempts to understand the links between transport and social inclusion. The term 'mobility disadvantage' describes how limited mobility opportunities can contribute to (and worsen) socio-economic disadvantage, social exclusion and barriers to employment, education and health services.[28] The related concept of 'transport disadvantage' makes a direct link between historical car-focused urban planning and social exclusion experienced by some groups living in these communities.[29] People living in more recently established Hobsons Bay neighbourhoods (such as Brooklyn, Altona North, Altona Meadows, and Seabrook) are susceptible to transport disadvantage, particularly residents without access to a car.

Community safety

When people feel unsafe they can feel anxious about their personal security which affects how they think, act, and go about their daily lives. When people feel safe they are more likely to get involved in community life, which is critical for mental and physical wellbeing as well as community connectedness.

In relation to the perceptions of safety, almost all Hobsons Bay residents (94.9%) feel safe walking alone during the day, marginally higher than the Victorian average (92.5%).[30] While fewer people feel safe walking alone after dark (61.0%), this was also higher than the Victorian average (55.1%).

The 2016 Hobsons Bay Annual Community Survey revealed more subtle differences in perceptions of safety in public areas.[31] Female respondents indicated feeling less safe than male respondents at night (7.6 out of 10, compared to 7.05) and travelling on or waiting for public transport (7.9 vs. 7.53), but not during the day (8.77 vs. 8.74).

Figure 14 represents perceptions of safety across different precincts in different situations. The Altona Meadows-Seabrook-Laverton precinct (7.10) was identified as an area where people feel least safe walking at night, although it does attract a higher rating than Metropolitan Melbourne (6.93). Altona-Seaholme (7.59) and Williamstown-Williamstown North (7.64) are considered least safe when travelling on or waiting for public transport, although both are also substantially higher than the Metropolitan Melbourne average (6.93).

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[27] HBCC (2016c) *Multicultural Policy 2016-20*, p.14.
[28] For more information, see Victorian Council of Social Service (2011) *Free to Move: VCOSS Accessible Transport Transport Forum Summary Report*, Melbourne.
[29] For more information, see Dodson, J. (2007) 'Transport disadvantage and Australian urban planning in historical perspective' in Currie, G. et al (eds), *No Way to Go: Transport and Social Disadvantage in Australian Communities.*
[30] VicHealth (2016) *VicHealth Indicators Survey 2015 Results: Hobsons Bay LGA Profile*, Melbourne, p.3.
[31] See Metropolis Research (2016) *2016 Annual Community Survey Report*, unpublished report prepared for Hobsons Bay City Council, pp.35-43.

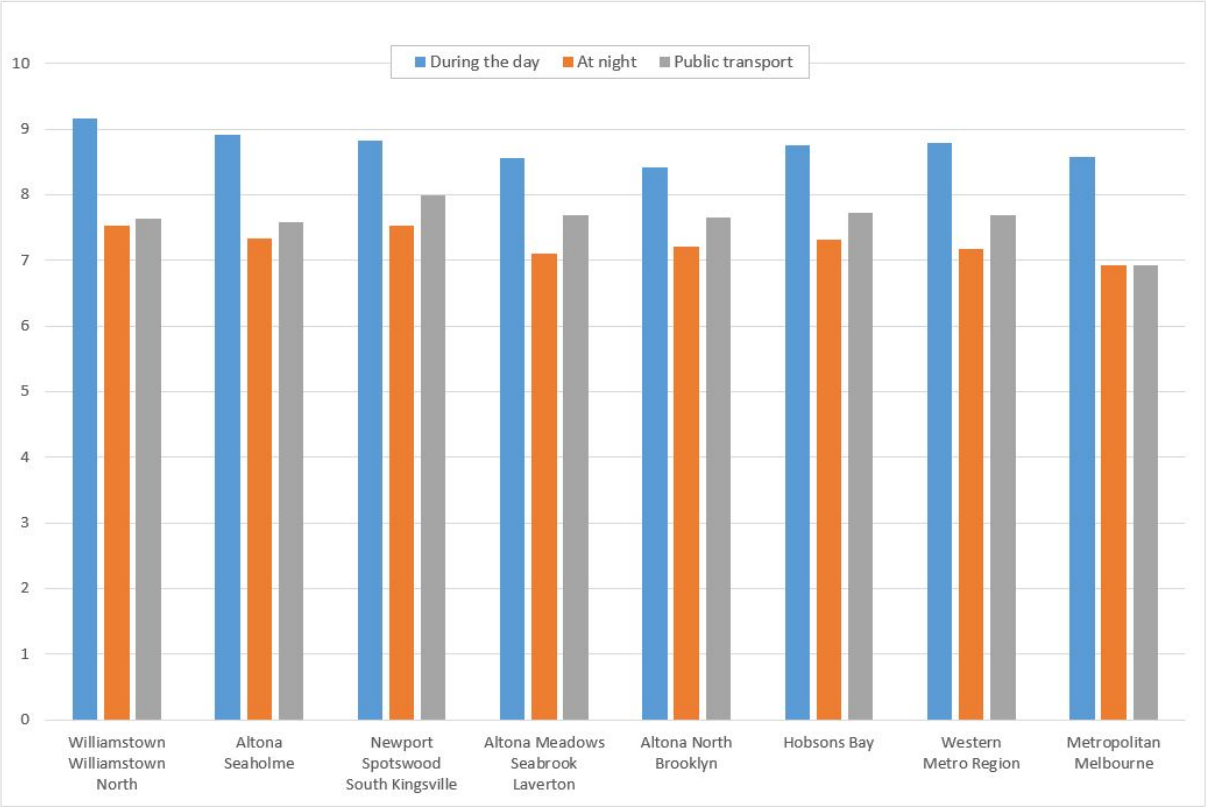

Figure 14: Perceptions of safety by precinct
(Source: Metropolis Research, 2016)

Reduced actual and perceived levels of safety are a critical barrier to increased public and active transport activity. Future measures to promote mode shift must address this issue, involving the whole community as well as all levels of government.[32] Road safety is another key issue for transport planning and provision and will be addressed in chapter six.

Access to health services

Health services are critical to the identification and treatment of health and wellbeing issues. Access to health services can be limited by affordability and availability factors, particularly for groups without access to a car.

Figure 15 shows the location of general health services in Hobsons Bay and their respective walking catchments (up to 800 metres). As with access to fresh food, large parts of the municipality fall within this walking catchment but there are some areas with little or no local services, including large parts of Seabrook, Altona Meadows, Brooklyn and Williamstown North. Notably, these are largely the neighbourhoods that experience the most disadvantage within Hobsons Bay. Limited access to local health services further reinforces car dependency and is likely to generate current and future demand for specialised mobility such as medical transport and community transport.

[32] For further information in relation to community safety in Hobsons Bay, see HBCC (2016d) *Research Summary: Community safety in Hobsons Bay.*

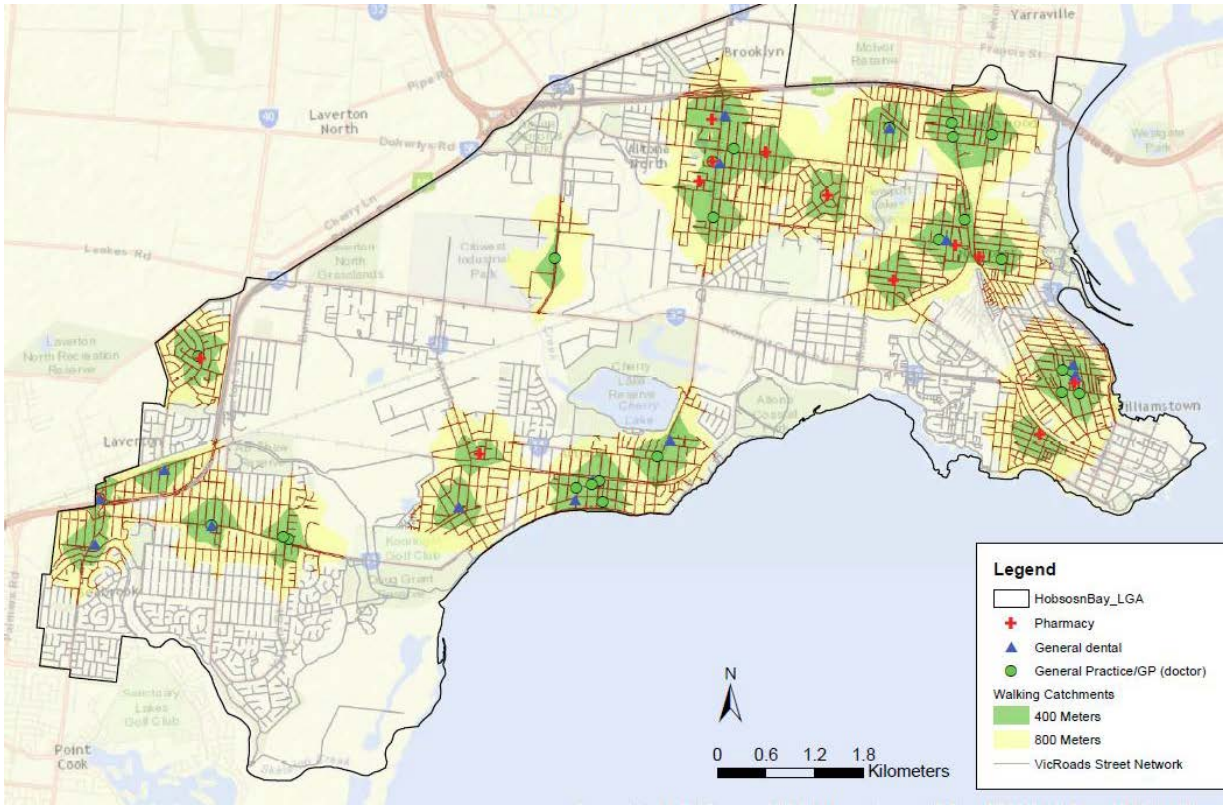

Figure 15: Walkability to health services
(Source: Hale Consulting, 2016)

Access to employment

Employment is a critical social determinant of health. It provides income, opportunities for social inclusion and (for many people) a sense of self and personal identity. However, employment can also have negative health and wellbeing outcomes, particularly if it creates stress, is too physically demanding or takes up too much time including the time it takes to get to and from work.[33]

Almost 62 per cent of employed Hobsons Bay residents have indicated that they have adequate work-life balance, notably higher than the Victorian average (53.1%). However, 14 per cent travel for more than two hours per day to get to work, slightly higher than the Victorian average (11.6%).

Work journeys *to* Hobsons Bay show that nearly two-thirds (64%) of people working in the municipality travel from a neighbouring local government area (LGA) or within Hobsons Bay itself (figure 16). Work journeys *from* Hobsons Bay show that more than half (56.9%) of the resident workforce travel to either the City of Melbourne, a non-neighbouring LGA or a regional location, while just under 22 per cent work within the municipality. Journey to work data will be discussed in more detail in chapter six in the context of different transport modes.

[33] Professor Sir Michael Marmot (2016) 'Living and working' in *Fair Australia: Social Justice and the Health Gap* (2016 Boyer Lecture series), broadcast on 17/9/16.

Generally, these results suggest that many Hobsons Bay residents travel long distances to find jobs matched to their skills, while the jobs available in the municipality are well matched to many workers in surrounding areas. This conclusion is supported by research used to inform Council's Economic Development Strategy 2015-20, which found an emerging mismatch between local jobs and the resident workforce.[34] While the white collar/blue collar split for local jobs is 55/43 per cent, the resident workforce is split 69/30. These trends highlight the need to create not only more local employment opportunities, but jobs that meet the needs and skills of the resident workforce.

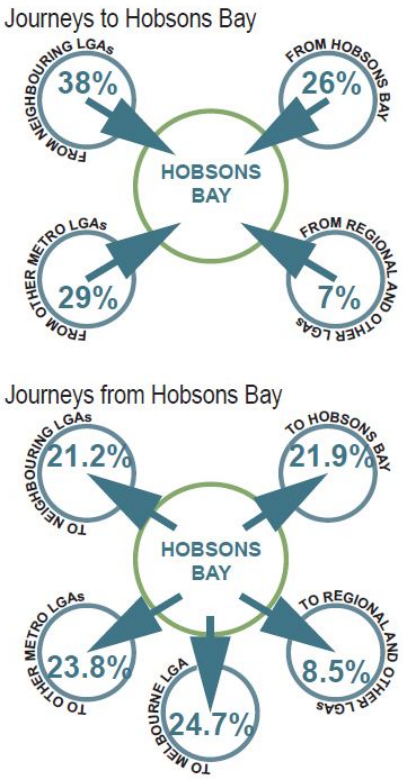

Figure 16: Journeys to and from Hobsons Bay for employment
(Source: Hale Consulting, 2016)

Just as employment influences health and wellbeing, so does unemployment, often in negative ways such as reliance on income support. Almost 3,000 Hobsons Bay residents were receiving NewStart Allowance in March 2016, while more than one-quarter (28.3%) of people aged 20 to 24 years were receiving Youth Allowance, above the rate for Metropolitan Melbourne (20.8%).[35] Additionally, the 2011 Census revealed that approximately six per cent of 15 to 19 year olds (285 people) and 14 per cent of 20 to 24 year olds (638 young people) were disengaged from paid work or education, placing Hobsons Bay fourth on this measure in Metropolitan Melbourne.[36] While these trends are complex, reduced access to transport (in the form of a private vehicle or frequent and reliable public transport) is a challenge to finding and maintaining employment.

Summary: considerations for integrated transport planning

The following is a summary of the key points from this chapter that may be considered in Hobsons Bay's integrated transport planning.

Location

- Hobsons Bay's geography provides a range of challenges (e.g. landlocked, split by the national freight rail, limited north-south connections) and opportunities (e.g. flat, coastal location) for integrated transport planning.
- Hobsons Bay's industrial and residential history contributes to spatial dispersion, with some neighbourhoods separated by long stretches of open space and industrial land.

[34] HBCC (2015a), p.15.
[35] City of Greater Dandenong, *Statistical Data for Victorian Communities,* www.greaterdandenong.com/document/18464/statistical-data-for-victorian-communities, accessed 4/11/16
[36] Ibid.

- Hobsons Bay's proximity to the Port of Melbourne attracts a range of industries and businesses and contributes to considerable transport activity along key freight routes.

Regional attractors

- A substantial volume of Hobsons Bay's transport activity is generated by people and goods travelling within the municipality, including for industry, employment, tourism, sport, recreation and education.
- The future development of activity centres and strategic redevelopment areas will generate substantial additional transport activity in some areas.
- Hobsons Bay attracts considerable 'through traffic' due to growing populations in surrounding municipalities.

People

- Neighbourhoods will grow at different rates at different times over the next twenty years, with growth 'hot spots' located in Spotswood, South Kingsville and Altona North.
- Higher proportions of older people will increase future demand for accessible public transport and community transport.
- Increasing numbers of school aged people will place additional demand on the journey to education, and public transport trips for social, health and employment purposes.
- Low levels of English proficiency within some culturally and linguistically diverse communities create barriers to obtaining a driver's license and accessing public transport.
- Many people with a disability experience affordability and availability barriers, as well as the more well-known accessibility issues when using transport services.
- Growth in couples without dependents and lone person households present behaviour change opportunities, as well as challenges to maintain mobility and social inclusion.
- Hobsons Bay's relatively low housing density tends to reinforce car dependency and make it difficult to attract public transport investment, while future residential development must respond to these constraints to support highly connected and liveable communities.

Health and wellbeing

- Increased levels of walking and cycling, incidental travel to public transport and reduced reliance on car travel can all help to address critical physical health issues in Hobsons Bay such as obesity (particularly for males), type 2 diabetes and heart disease.
- Access to mental health services is unevenly spread across the municipality, with some residents (often young people) required to undertake long trips to access services.
- Some areas of Hobsons Bay lack walkable access to fresh food, including some of the most disadvantaged and car dependent neighbourhoods.
- Some people experience 'mobility disadvantage' which can contribute to socio-economic disadvantage, reduce social inclusion and create barriers to employment, education and health services.

- Perceptions of safety (particularly at night, amongst women, and in and around public transport) need to be improved to achieve future mode shift away from cars.
- Some areas of Hobsons Bay lack walkable access to local health services, which reinforces car dependency and is likely to generate additional future demand for medical transport and community transport.
- Changing alignment between local jobs and Hobsons Bay's resident workforce mean that many people are travelling out of the municipality to access employment opportunities.

03 Strategic context

Transport planning, provision and investment in Hobsons Bay is influenced by legislation, policy frameworks and agencies at all levels of government.

This chapter describes:

- the roles of each level of government in transport planning, investment and provision
- the overarching strategic context for transport in Australia, including legislation, policy frameworks and government agencies

Transport planning and provision sits within the context of federal, state, regional and local frameworks. These frameworks variously aim to promote more sustainable transport options, reduce greenhouse gas emissions, integrate land use and transport, promote healthier and socially connected communities, and improve accessibility for people of all ages and abilities.

This chapter focuses on the overarching strategic context, including legislation, policy frameworks, and government agencies that shape the broad direction for transport planning, investment and provision in Australia (figure 17). Further detail on the specific strategic context within land use planning (chapter 5) and transport modes (chapter 6) is provided later in this background paper.

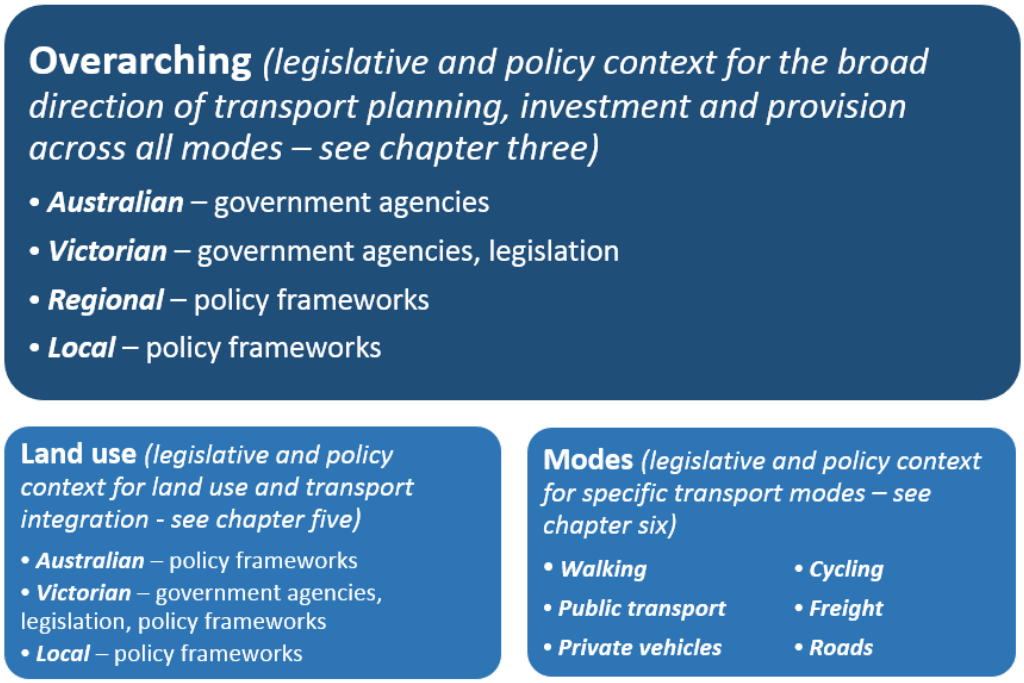

Figure 17: Strategic context for transport planning, investment and provision in Australia

Australian

While the Australian Government does not have responsibility for the management of transport networks, it has a role in prioritising and progressing nationally significant infrastructure.

Department of Infrastructure and Regional Development

The Department of Infrastructure and Regional Development (DIRD) supports the Australian Government to shape the framework underpinning road, rail, maritime and aviation transport in Australia.[37] It funds a number of infrastructure investment programs, including major projects (e.g. Investment Road and Rail Program, Bridges Renewal Program) and local roads projects (e.g. Black Spot Program, Roads to Recovery Program).

Under the National Partnership Agreement on Land Transport Infrastructure Projects, the Australian Government has contributed $27.2 million for rail access to the Altona Intermodal Terminal Access and re-allocated a further $3.5 million for rail access to the Western Intermodal Freight Terminal.[38] Hobsons Bay will also attract almost $1.8 million over the next three financial years to maintain local roads in the municipality under the Roads to Recovery Program.[39]

Infrastructure Australia

Infrastructure Australia (IA) is an independent statutory body established under the *Infrastructure Australia Act 2008*.[40] It provides research and advice to governments, investors and infrastructure owners on projects and reforms needed to fill national infrastructure gaps. In the past two years, IA has developed a number of legislatively required reports, including the Australian Infrastructure Audit (released in May 2015) and the Australian Infrastructure Plan (released in February 2016).

Infrastructure Australia is also responsible for developing a regular Infrastructure Priority List to determine nationally significant road, rail, public transport, freight and aviation projects. The current list (October 2016) includes the M80 Ring Road upgrade as a 'high priority project', while the Western Distributor and level crossing removal projects are listed at 'business case development' stage. Local governments are able to provide submissions to IA to nominate potential infrastructure solutions for inclusion on the list.

Austroads

Austroads is the peak organisation for Australasian road transport and traffic agencies.[41] Its members include DIRD, VicRoads and the Australian Local Government Association (ALGA). Austroads supports its members to deliver an improved road transport network for all users, including cars, bicycles and heavy vehicles. It is focused on a wide range of issues and trends that

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[37] Department of Infrastructure and Regional Development, *Transport*, https://infrastructure.gov.au/ transport, accessed 27/10/16.
[38] DIRD, *Investment Road and Rail Programme*, http://investment.infrastructure.gov.au/funding/projects, accessed 4/11/16.
[39] DIRD, *Roads to Recovery Programme*, http://investment.infrastructure.gov.au/funding/r2r, accessed 4/11/16.
[40] Infrastructure Australia, *Our Role*, http://infrastructureaustralia.gov.au/about/role.aspx, accessed 27/10/16.
[41] Austroads, *About Austroads*, http://www.austroads.com.au/about-austroads, accessed 27/10/16.

impact road transport and responds to these through national partnerships, strategic planning, research, programs and the development of practical guidance materials.

Victoria

The Victorian Government has legislative and management responsibilities for many aspects of the transport system. This is supported by a wide range of statutory bodies that guide decision making on the public transport system, arterial road network, and high level land use planning policy. The Victorian Government also partners with the Australian Government to deliver major transport infrastructure projects. Other responsibilities include transport safety accreditation and enforcement, freight planning, walking and cycling planning, parking regulations, and oversight of the taxi and hire car industries.

Department of Economic Development, Jobs, Transport and Resources

The Department of Economic Development, Jobs, Transport and Resources (DEDJTR) oversees Victoria's transport regulatory policy and legislation, delivers (with others) major transport projects, and supports integrated strategies to improve the efficiency of public and private transport, freight and ports.[42] The department is supported by a number of transport agencies to meet these responsibilities, variously formed around modes (e.g. Public Transport Victoria (PTV), VicRoads, and Taxi Services Commission), projects (e.g. Level Crossing Removal Authority (LXRA), Melbourne Metro Rail Authority), infrastructure (e.g. Port of Melbourne Corporation (PoMC)) and regulation/enforcement (e.g. Transport Safety Victoria).

The Victorian Government directs significant resources to the state's transport system, with over $10 billion committed to public transport and road projects in the 2016-17 Victorian Budget.[43] Transport subsidies are also provided to some population groups, e.g. people with a disability can access the Multipurpose Taxi Program and Public Transport Free Travel Passes. Additionally, a number of smaller funding grants are available to address specific transport issues such as cycling events and infrastructure and road safety.

Major transport projects

The Victorian Government is currently overseeing two major projects which will have potentially far reaching effects on Hobsons Bay: the Western Distributor and Level Crossing Removal projects. Council has closely monitored the development of both projects and provided input to the Victorian Government on several occasions. Neither project has reached final design stage at the time of writing, and further advocacy will be undertaken to get the best possible outcomes for Hobsons Bay.

Western Distributor Project

In December 2015, the Victorian Government announced its intention to partner with Transurban to build the Western Distributor. The key components of the project include the widening of the West

[42] Department of Economic Development, Jobs, Transport and Resources, *Transport and Infrastructure*, http://economicdevelopment.vic.gov.au/what-we-do/transport-and-infrastructure, accessed 28/10/16.
[43] Department of Treasury and Finance (2016) *Getting it done: Victorian Budget 16/17 Overview*, p.16.

Gate Freeway, a tunnel under Yarraville, and an elevated motorway that connects the West Gate Freeway with the Port of Melbourne, CityLink and the Melbourne CBD. Significantly, the project will provide an alternative river crossing to the West Gate Bridge.

The Western Distributor Authority is the project proponent. The Minister for Planning designated the Western Distributor as a 'public works' under Section 3 of the *Environment Effects Act 1978*, which requires the proponent to prepare an Environment Effects Statement (EES). Additionally, the Western Distributor is proposed to be managed by a Freeway Management System, together with ramp metering upgrades for the West Gate Freeway and Western Distributor. This Freeway Management System would involve the installation of a Lane Use Management System and supporting Intelligent Transport System (ITS) along the West Gate Freeway and Western Distributor.

While the project is expected to have benefits for the wider metropolitan road network, it may create negative impacts for Hobsons Bay, including increased car and truck traffic on local streets, loss of open space and vegetation, reduced amenity resulting from air, sound and light pollution, and direct impact on households living adjacent to the freeway. However, it also provides an opportunity to leverage improvements to transport infrastructure such as enhanced north-south connections, shared trail upgrades and additional bus lanes.

Council conducted community consultation on its interim position on the project during 2016 (see page 47). It subsequently developed a formal position built around six key principles.[44] In terms of integrated transport planning, Council's position emphasises the need to maintain and develop improved access and connectivity for all transport modes, and to mitigate against adverse impacts from toll avoidance and the introduction of truck bans in surrounding streets. Council will continue to provide feedback on the project, with the final design and alignment expected to be placed on public exhibition in 2017, and construction expected to start in 2018.

Level Crossing Removal Projects

The Victorian Government has identified three locations within Hobsons Bay for the removal of existing level (road/rail) crossings: Aviation Road, Laverton (Aircraft train station); Ferguson Street, Williamstown North (North Williamstown train station); and Kororoit Creek Road, Altona. Each of these projects is overseen by the Level Crossing Removal Authority (LXRA).

While these projects aim to reduce traffic congestion, they also have the potential to impact the natural environment, pedestrian and cycling connections, and access to services and amenities. However, they also provide an opportunity to leverage improvements for transport infrastructure, including local roads, cycling paths and sections of rail duplication (which has already occurred for the Altona Loop).

Council conducted community consultation on its draft Grade Separation Principles during 2016 (see page 50). It subsequently endorsed the principles, which aim to ensure level crossing removals are well integrated with the local area and that community amenity is protected.[45] Council recently

[44] HBCC (2016e) *Western Distributor Project: Adopted Position and Recommendations*, adopted August 2016.
[45] See HBCC (2016f) *Hobsons Bay Grade separation principles*, adopted March 2016.

provided feedback on revised plans for the Kororoit Creek Road project, has engaged in initial discussions on Ferguson Street, and will continue to monitor developments on the Aviation Road site, which is still in the planning stage. In the case of the Ferguson Street and Aviation Road projects, it will be particularly important to develop a detailed vision for the area (such as structure plans) in preparation for further advocacy.

Infrastructure Victoria

Infrastructure Victoria (IV) is an independent statutory authority (established under the *Infrastructure Victoria Act 2015*) which guides decision making on Victoria's infrastructure needs and priorities.[46] Its key roles include preparing a 30-year infrastructure strategy, providing advice to the Victorian Government, and publishing research in infrastructure matters. Infrastructure Victoria is not formally associated with Infrastructure Australia.

In December 2016, IV released its 30-year infrastructure strategy for Victoria. The strategy sets out 137 recommendations, including projects covering the full range of transport-related infrastructure. Notably, its top three priorities for the short to medium term include 'increasing densities in established areas to make better use of existing infrastructure' and 'introducing a comprehensive transport pricing regime to manage demands on the network'.[47]

Council's submission on the draft strategy supported an integrated approach to infrastructure planning and the provision of public transport that is accessible to all. The Victorian Government will have 12 months to respond to the finalised strategy and develop its own five year plan.

VicRoads

VicRoads plans, develops and manages the Victorian arterial road network.[48] While a substantial part of its focus is on private passenger vehicles (e.g. through vehicle registration and licensing services), its responsibilities extend into other parts of the transport system, including:

- **roads**, e.g. traffic research; planning and construction of major roads
- **cycling**, e.g. bicycle network planning; the Melbourne Bike Share program; bike path construction; innovative projects such as the Bikes on Buses trial
- **environmental issues**, e.g. emission reductions through road design; improvements for road-based public transport; advances toward carbon-neutral road construction
- **freight**, e.g. heavy vehicle network maps; access arrangements for high productivity freight vehicles
- **safety**, e.g. various programs addressing the needs of all road users, including pedestrians, cyclists, motorcyclists, car drivers, road workers and heavy vehicles

[46] Infrastructure Victoria, *About Us*, http://www.infrastructurevictoria.com.au/about-us, accessed 28/10/16.
[47] Infrastructure Victoria (2016a), *Victoria's 30-year Infrastructure Strategy*, Melbourne, p. 43.
[48] VicRoads, *About VicRoads*, https://www.vicroads.vic.gov.au/about-vicroads, accessed 28/10/16.

Transport for Victoria

Transport for Victoria (TfV) has been announced as the state's new overarching transport statutory body. It will bring together the planning, coordination and operation of Victoria's road and public transport system, as well as several key transport agencies including VicRoads and PTV. TfV will also provide a single source for information about the state's road, train, tram, bus, taxi and freight networks. Legislation was introduced into parliament in October 2016 to establish TfV, and it is expected to commence operations during 2017.

Transport Integration Act 2010

The *Transport Integration Act 2010* is Victoria's principle transport statute. The purpose of the Act is to 'create a new framework for the provision of an integrated and sustainable transport system in Victoria' (s.1).[49] It broadly seeks to bring together all elements of the transport system to ensure that transport and land use agencies work towards the common goal of an integrated and sustainable transport system.

The Act outlines six transport system objectives: social and economic inclusion; economic prosperity; environmental sustainability; integration of transport and land use; efficiency, coordination and reliability; and safety and health and wellbeing. It also provides seven decision making principles: integrated decision making; triple bottom line assessment; equity; transport system user perspective; the precautionary principle; stakeholder engagement and community participation; and transparency.

Local government is defined as an 'interface body' under the Act and must have regard to its objectives and decision making principles when exercising powers, performing functions or making decisions which are likely to have a significant impact on the transport system. Local government is able to determine the weight given to the Act's objectives and decision making principles, and future integrated planning may seek to establish this weighting. Additionally, local government must also consider the act when making decisions about planning scheme amendments, as required under the *Planning and Environment Act 1987* (which is also interface legislation with the *Transport Integration Act 2010*).

Local Government Act 1989

The *Local Government Act 1989* states that the primary objective of local government is to 'endeavour to achieve the best outcomes for the local community having regard to the long term and cumulative effects of decisions' (s.3A). It states further that the role of local government (s. 3D) includes 'providing leadership by establishing strategic objectives and monitoring their achievement' and 'advocating the interests of the local community to other communities and governments'. These roles provide a strong basis for local government's involvement in transport planning and advocacy.

The Act also outlines specific provisions relating to transport. Reflecting the purpose of the *Transport Integration Act 2010*, it states that a 'Council may develop and implement a transport plan which

[49] DEDJTR, *Transport Integration Act*, http://economicdevelopment.vic.gov.au/transport/legislation/transport-integration-act, accessed 27/10/16.

facilitates a sustainable transport system and provides for the effective integration of transport and land use' (s.203). It states further that local governments 'may procure, provide or enable transport services within the municipal district' (s.203A). Finally, the Act sets out detailed provisions for Council's responsibilities over road and traffic (s.204-207). These provisions provide further basis for Council's involvement in land use and transport planning, transport provision, and its central role in the care and management of the local road network.

Public Health and Wellbeing Act 2008

The *Public Health and Wellbeing Act 2008* requires local governments to 'seek to protect, improve and promote public health and wellbeing within the municipal district'. Its principles are consistent with the social determinants of health and recognise that health is influenced by multiple factors ranging from individual behaviour to the environment in which people live. The affordability, availability and accessibility of transport services, as well as the extent to which the built environment supports walking and cycling, are some of the ways in which these environmental factors can influence health and wellbeing.

Climate Change Act 2010

The *Climate Change Act 2010* provides a framework for responding to climate change in Victoria. It requires the Victorian Government to develop a Climate Change Adaption Plan every four years and to take climate change into account when making decisions under key legislation affecting local governments. The intentions of the Act are reflected in the *Transport Integration Act 2010*, which provides increased emphasis on how the transport system contributes to environmental sustainability, including by offsetting the harm of transport-related emissions, promoting cleaner transport technologies, and improving the environmental performance of all forms of transport.

Regional

LeadWest and the Western Transport Alliance (WeTal) provide a focal point for transport planning and advocacy in the western metropolitan region. Integrated transport planning provides an opportunity to strengthen these groups to promote increased regional collaboration and partnerships. This section describes the key regional policy framework, as well as the integrated transport plans developed by neighbouring local governments.

LeadWest

LeadWest is the regional advocacy organisation representing Melbourne's west.[50] Its membership includes all western region local governments, as well as major health services, education providers, businesses and sporting clubs. LeadWest aims to build on the region's existing social, economic and environmental capacity to support sustainable growth and development.

[50] LeadWest, *About LeadWest*, www.leadwest.com.au/LeadWest/About-LeadWest, accessed 28/10/16.

Western Transport Alliance

The WeTal is a coalition of local governments and other organisations with an interest in creating better transport networks in Melbourne's west.[51] It provides a forum to connect organisations that represent transport users, analyse current and future transport demand, advocate to government, and assist with the coordination of land use and transport planning. Member organisations include all seven western region local governments (Brimbank, Hobsons Bay, Maribyrnong, Melbourne, Melton, Moonee Valley and Wyndham), as well as LeadWest, PoMC, VicRoads, PTV, DEDJTR, Victoria University and major transport, stevedoring and logistics companies.

Western Transport Strategy

The Western Transport Strategy 2012-30 was developed by LeadWest, WeTal and local governments in Melbourne's west.[52] It identifies the region's transport challenges and outlines a vision and strategic objectives to respond. The strategy also assesses the performance of transport in the western metropolitan region against the objectives of the *Transport Integration Act 2010.* Overall, it determined that the region's transport system is a poor performer across most objectives, particularly social and economic inclusion (table 3).

Table 3: Western regional transport system and the Transport Integration Act 2010
(Source: Western Transport Strategy 2012-30)

Legend	Definition (the more symbols, the greater the impact)
×	Current conditions meet objectives poorly.
✓	Current conditions meet objectives well.
⚑	There are opportunities to improve.
—	The current trend is neutral.
↑	The current trend is moving in the right direction.

Assessment						
Transport Integration Act Objective	General road-based mobility		Freight movement		Public transport	
	Current	Trends	Current	Trends	Current	Trends
Social and Economic Inclusion	×	⚑	×	⚑	×	—
Economic Prosperity	×	⚑	✓	⚑	×	⚑
Environmental Sustainability	×	—	×	—	✓	—
Integration	✓	⚑	×	—	×	⚑
Efficiency, Coordination and Reliability	×	⚑	×	⚑	×	↑
Safety, health and wellbeing	×	—	×	—	✓	—

The strategic objectives of the Western Transport Strategy 2012-30 include economic development, competitive positioning, access to employment, impact reduction, resilient alternatives and freight. It also identifies a number of network-level projects that are suitable to innovative funding models (e.g. public-private partnerships, transit-oriented development) and is expected to deliver a more integrated transport and land use system. Several of these are directly relevant to Hobsons Bay, including formalising the region's Principal Freight Network, introducing a Westgate Freeway Bus

[51] Lead West, *Western Transport Alliance*, www.leadwest.com.au/Resources/Western-Agenda/Enabling-Infrastructure/Western-Transport-Alliance, accessed 28/10/16.
[52] LeadWest & Western Transport Alliance (2012) *Western Transport Strategy*, prepared by AECOM Australia.

Rapid Transit service, and using intelligent transport systems to optimise the performance and capacity of the Westgate Freeway.

Neighbouring municipalities

Hobsons Bay's integrated transport planning may seek to align (where consistent with local goals and objectives) with transport plans developed by neighbouring municipalities. These plans may also provide helpful insights into transport policy development and implementation.

Maribyrnong City Council

In 2012, Maribyrnong City Council adopted the Maribyrnong Integrated Transport Strategy (MITS).[53] The strategy considers all transport, parking, access and mobility elements that affect the municipality and outlines a series of priorities and future actions within nine key transport themes:

1. Land Use and Development
2. Walking
3. Cycling
4. Public Transport
5. Congestion Management
6. Parking
7. Freight
8. Major Projects
9. Behaviour Change

The Strategy includes a large number of actions, as well as an evaluation methodology to prioritise implementation. A total of 90 per cent of MITS year four projects were completed during 2015-16.[54] Additionally, transport is also one of six strategic objectives within the Maribyrnong Council Plan 2013-17: 'we will plan and advocate for a functional, sustainable and safe, bike and pedestrian friendly transport and traffic management system that meets the community's needs'.[55]

Wyndham City Council

In June 2016, Wyndham City Council adopted its first Integrated Transport Policy and Strategy.[56] The policy identifies the community's transport vision and goals, while the strategy provides the details on how these goals will be achieved. Both documents outline policy statements in relation to nine key areas:

1. Land Use and Transport Integration
2. Walking and Cycling
3. Public Transport
4. Freight
5. Road Network

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[53] Maribyrnong City Council (2012) *Maribyrnong Integrated Transport Strategy*, adopted April 2012.
[54] Maribyrnong City Council (2016) *Annual Report 2015/16*, p.59.
[55] Maribyrnong City Council (2013) *Council Plan 2013-17: incorporating Municipal Public Health and Wellbeing Plan*, p.16
[56] Wyndham City Council (2016a) *Wyndham Integrated Transport Policy*, adopted June 2016; Wyndham City Council (2016b) Wyndham Integrated Transport Strategy, adopted June 2016.

6. Road Safety
7. Other Transport Modes
8. Transport Demand Management
9. Education, Promotion and Communication

The Strategy provides measurable targets for each policy statement, e.g. *30 per cent of all motorised trips will be on public transport by 2040*. A number of short, medium and long term actions are proposed under each policy statement to help achieve these targets.

Local

This section describes local policy frameworks relevant to the development and implementation of integrated transport planning in Hobsons Bay.

Community Health and Wellbeing Plan 2013-17

The Community Health and Wellbeing Plan 2013-17 (CHWP) is Hobsons Bay City Council's key strategic plan. It set outs the community's vision, priorities and goals for improving residents' health and wellbeing over a four year period. It meets Council's obligation to prepare a municipal health and wellbeing plan, as required under the *Public Health and Wellbeing Act 2008.*

Transport is recognised as a social determinant of health in the plan. More specifically, a large number of the plan's objectives draw attention to the complex relationships between transport, health, wellbeing, environmental sustainability, community safety, and economic development:

- protect and promote public health and community safety (objective 1.3)
- support people to engage in healthy and active lifestyles (1.4)
- work with key stakeholders to attract and advocate for services needed in Hobsons Bay (1.6)
- contribute to creating an accessible, well connected city (2.1)
- encourage economic activity through local employment (2.3)
- plan for well-designed urban environment and public spaces (2.4)
- reduce Council's ecological footprint (2.5)
- build and maintain a clean, safe and beautiful city (3.2)
- provide and maintain roads, drainage and footpath networks (3.4)
- increase the use of integrated transport (3.5)

The CWHP is due to end in 2017. To update the plan, Council has worked with the community, who have drafted Hobsons Bay's community vision (Hobsons Bay 2030) to guide Council's work until 2030. Priority six of the draft community vision ('an accessible and connected community') seeks to improve the existing public transport system by building its capacity and making it more accessible, as well as exploring future water transport options. The finalised community vision (along with the Council Plan 2017-21) will constitute Hobsons Bay's integrated municipal public health and wellbeing plan. It is expected that integrated transport planning will play an important role in realising the community's vision.

Council Plan 2013-17

The Council Plan 2013-17 describes how Council will work to achieve the community's vision and priorities, as articulated in the CHWP. It drives the development of the budget and other strategies, as well as the organisational structure, departmental business plans, individual staff work plans and resource allocation. Every year, Council develops an Annual Action Plan which articulates what actions it will undertake in order to work towards achieving the goals and objectives in the Council Plan. A new Council Plan will be adopted in 2017.

Advocacy Strategy 2014-18

The Advocacy Strategy 2014-18 outlines how and where Council will focus its advocacy activities. The strategy is directed by the CHWP and reflects the limited legislative responsibility of local government in relation to several key issues. A total of 13 priority areas are identified in the strategy, including affordable housing, health services, mental health services for young people, employment and economic development, and integrated transport.

The strategy highlights rapid population and industrial growth, limited transport infrastructure, and fragmented and road-focused investment as significant transport challenges for Hobsons Bay. A fully integrated transport network is expected to help address these issues and generate a range of benefits, including environmental sustainability, economic vitality, physical activity, activation of space, perceptions of safety and social connectedness.

More specifically, the strategy directs Council's advocacy activities towards working with key partners to reduce car dependency; improve the accessibility, reliability, frequency and connectivity of public transport services; manage trucks on residential roads; improve walking and cycling networks; and increase perceptions of safety in and around public transport.

Climate Change Policy

Hobsons Bay's Climate Change Policy 2013 has been developed to respond to the projected implications of climate change on the municipality's social, environmental and economic sustainability. The policy is underpinned by six supporting strategies relating to most aspects of environmental management, with two of these having close links with transport.

Firstly, the Community Greenhouse Strategy 2013-30 aims to help reduce greenhouse gas emissions. The strategy recognises the role that transport plays in creating emissions, and proposes the development and implementation of an Integrated Transport Plan as a priority project. It also outlines a number of transport-related actions, including an active transport strategy, low carbon vehicle strategy, car share strategy, travel behaviour change programs, advocacy for major public transport improvements, and development of consolidated logistic centres.

Secondly, the Climate Change Adaptation Plan 2013-18 highlights the risks posed to Hobsons Bay from climate change. Coastal inundation is a critical risk and has the potential to impact a range of transport infrastructure, including roads, rail lines, and shared trails. The plan aims to prepare Council's infrastructure, programs, services and staff so they can manage the expected impacts of climate change.

Integrated Transport Strategy

In 2006, Hobsons Bay City Council released an Integrated Transport Strategy. The strategy aimed to provide a framework for future transport development to enable residents and visitors to access destinations in a safe, equitable and efficient manner. It was developed through a number of stages, including policy review, consultation, and action plan development.

The strategy presented a detailed vision for integrated transport in Hobsons Bay, emphasising network planning for all forms of transport, quality of life, sense of community, the needs of business, and minimising the impacts of heavy vehicles. It also included six action plans (covering planning and policy, travel behaviour, public transport, pedestrians and bicycles, arterial roads and traffic, and freight management), which proposed a large number of actions to help achieve the strategy's vision.

Detailed evaluation of the strategy is not possible, as progress reports were not produced and no formal monitoring system appears to have been established. It is also very difficult to determine a clear causal link between the strategy and transport outcomes, given a wide range of external factors such as Victorian Government decisions and 'grass roots' community advocacy. Nonetheless, it is possible to make some broad observations regarding the strategy's strengths and weaknesses.

Community and stakeholder consultation included a community forum and engagement with key stakeholders such as Victoria Police, VicRoads and Parks Victoria. A steering committee also met regularly, comprising industry representatives, traders associations, businesses, public transport operators, resident associations, schools and tourism operators. Although a relatively small number of activities were undertaken, consultation engaged a wide range of people and helped to establish ongoing relationships with members of the steering group.

The strategy was also successful in identifying a range of key issues that remain relevant to current integrated transport planning, including:

- **impacts of car dependency**, e.g. environmental concerns, road congestion, social and economic inequity
- **demographic trends**, e.g. ageing population, growing populations in neighbouring municipalities
- **public transport needs**, e.g. Altona Loop rail duplication, review of local bus routes
- **walking and cycling needs**, e.g. better planned routes, path maintenance, links to public transport
- **freight issues**, e.g. rail congestion, need for double stack containers, closer ties to industry

The action plans also provided a useful collection of transport initiatives. A sizeable proportion of these have been completed, including some with direct input from Council. Examples include Local Area Traffic Management (LATM) projects, pedestrian safety measures on arterial roads (e.g. Millers Road), additions to shared path network (e.g. Skeleton Creek crossing), behaviour change programs (e.g. Walking School Bus) and planning policy work to support future residential development on former industrial land.

Further actions have been completed with Council taking a more indirect advocacy role, including the introduction of low floor buses, provision of new Point Cook Railway Station, and commitment to partially duplicate the Altona Loop train line. Additionally, there are a large number of actions that have not been completed, but which remain relevant to current integrated transport planning, covering a range of topics such as road safety, freight management, and strategic planning and policy.

Resourcing (particularly human resources) appears to have been a weakness of the strategy's implementation. While it recommended that a full-time transport planner be employed by Council, this did not occur until 2014, following the endorsement of the Integrated Transport Plan Discussion Paper. The strategy also recommended that an ongoing Transport Advisory Group be established to support implementation and monitoring. This does not appear to be have occurred, despite the relationships that were developed through the steering group that supported the strategy's development.

Another weakness has been the relatively low consideration provided to the strategy in subsequent transport plans developed by Council. Both the Williamstown Activity Centre Parking Study (2009) and the Hobsons Bay Strategic Bicycle Plan 2013-17 make just very brief references. The Road Safety Strategy 2011-13 proposes integrating road safety to wider Council activities and suggests community integration to local schools to encourage safer walking to school, but does not specifically reference the strategy. The Road Management Plan 2013 does not reference it at all. Only the Altona Activity Centre Parking Study (2010) and Newport Activity Centre Parking Study (2012) provide some discussion of the strategy, including the identification of actions and outcomes with specific relevance to the study area considered in each report.

Overall, the Integrated Transport Strategy was a well-presented document. It was based on evidence and local consultation, and provided a competent understanding of the key issues and a detailed suite of action plans. However, implementation and monitoring was weak (primarily due to lack of resources) and it is ultimately impossible to specifically determine its impact on integrated transport in Hobsons Bay.

Other Hobsons Bay policies, plans and strategies

There are a range of other Council policies, plans and strategies which are broadly relevant to transport planning and provision, including the following:

- Activity Centre Strategy 2006 (currently under review)
- Affordable Housing Policy Statement 2016
- Ageing Well Strategy 2007-17
- Car Parking Strategies (Altona, Newport and Williamstown)
- Children and Young People's Plan 2014-18
- Disability Access and Inclusion Strategy 2013-17
- Food Security Policy Statement 2009
- Gender Equity Policy Statement 2014
- Industrial Land Management Strategy 2008

- Open Space Strategy (in development)
- Sport and Recreation Strategy 2014
- Tourism Strategy (in development)

Please note that transport mode-specific Council policies (such as the Strategic Bicycle Plan 2013-17 and Road Management Plan 2013) are discussed in chapter six.

Council advisory committees

Council's advisory committees create an important link between Council, stakeholders and the community, providing a channel for direct input into Council planning and decision making. Committees are regularly consulted in the development of Council policies. All advisory committees have an interest in transport and land use issues, but there are two that have particular relevance:

- **Strategic Advisory Group (SAG)** – the purpose of the SAG is to provide community input and advice in regard to high level strategic land use policy and strategy documents
- **Sustainability and Environmental Advisory Group (SEAG)** – the purpose of the SEAG is to advise Council on long term and strategic issues that affect community with respect to environmental sustainability

Hobsons Bay does not currently have an advisory committee focused specifically on transport.

Summary: considerations for integrated transport planning

The following is a summary of the key points from this chapter that may be considered in Hobsons Bay's integrated transport planning.

Australian

- Australian Government funding can support implementation of some elements of Hobsons Bay's integrated transport planning such as local road safety, e.g. Black Spot program, Roads to Recovery program.
- Projects funded through Infrastructure Australia should be monitored to inform strategic transport advocacy activities and future project submissions.

Victoria

- Council needs to build strong alliances with agencies across Victoria's large and complex transport bureaucracy to attract local funding and advocate on behalf of Hobsons Bay.
- Council should closely monitor transport service performance (e.g. public transport) and major transport projects (e.g. Western Distributor, level crossing removals) to effectively advocate for community needs.
- Council should closely monitor the implementation of Infrastructure Victoria's 30-year infrastructure strategy to identify and advance projects to benefit Hobsons Bay.
- The establishment of Transport for Victoria is likely to change the way transport agencies engage with local governments, and its implementation should be monitored closely.

- Council must consider the objectives and principles of the *Transport Integration Act 2010* when making decisions likely to impact the local transport system and planning scheme.
- The *Local Government Act 1989* establishes key roles for local governments in regards to transport, including advocacy, planning, service provision, and road and traffic management.

Regional

- Hobsons Bay's integrated transport planning provides an opportunity to strengthen the role of LeadWest and the Western Transport Alliance in achieving positive transport outcomes for the municipality and Melbourne's west.
- The Western Transport Strategy 2012-30 recognises that transport issues are not contained to specific municipalities, and provides a platform for local governments to work together to attract investments that benefit the entire western metropolitan region.
- Council's integrated transport planning should complement those within neighbouring municipalities to support better collaboration on transport issues of regional significance.

Local

- The Community Health and Wellbeing Plan 2013-17 (and forthcoming Hobsons Bay 2030 community vision) recognise transport as a social determinant of heath, reinforcing the need to establish health and wellbeing as a key priority within integrated transport planning.
- Many of the transport issues identified in Council's Advocacy Strategy 2014-18 remain significant and can help to inform further integrated transport planning.
- Council's Climate Change Policy 2013 reinforces the links between transport activity, greenhouse gas emissions and environmental sustainability, and integrated transport planning should complement these and contribute to Council's response to climate change.
- The Integrated Transport Strategy provided a competent understanding of the key issues and a detailed suite of action plans; however, implementation and monitoring were weak (primarily due to lack of resources), making it impossible to determine its impact on integrated transport in Hobsons Bay.
- Council's advisory committees play a key role in raising transport issues and helping to formulate policy and project responses; however, Council does not currently have an advisory committee focused specifically on transport.

04 Consultation

Consultation activities have recently taken place to understand and incorporate community and stakeholder perspectives into Hobsons Bay's integrated transport planning.

This chapter describes:

- the Connecting the Bay consultation program that was specifically delivered to develop an understanding of community and stakeholder perspectives on integrated transport
- other consultation activities recently undertaken by Council that have raised issues of relevance to integrated transport planning

The views of community members and stakeholders are critical to understand the key transport issues facing Hobsons Bay. They also provide helpful suggestions for how these can be addressed through integrated transport planning. Additionally, recent consultation on major projects (such as the Western Distributor and Grade Separation Principles) help to facilitate better understanding of key local issues and opportunities to improve local outcomes.

This chapter focusses on consultation activities delivered by Council. However, other agencies also seek local feedback from time to time, including the Port Liaison Group (PoMC) and level crossing community information sessions (LXRA). Council will continue to participate in these 'external' consultation activities to inform future integrated transport planning and seek the best outcomes for Hobsons Bay.

Connecting the Bay

A community and stakeholder consultation program called 'Connecting the Bay' was undertaken in October 2015, which aimed to:

- understand community needs and priorities for transport in Hobsons Bay
- ensure that the community's voice was included from the beginning of Council's integrated transport discussions
- build strong linkages with transport providers
- explore a network based model for integrated transport in Hobsons Bay

The engagement process consisted of two core components:

1. **community forums** – three community forums were held to build knowledge and awareness on the key challenges for integrated transport in Hobsons Bay
2. **community and stakeholder workshops** – three invite only network design workshops were held, targeting interested community members, Council's advisory committees, community groups, government agencies, and industry and business leaders

These activities were complemented by opportunities to contribute online, using Council's Participate Hobsons Bay website. The whole engagement process was promoted online (through Councils' website and social media), through Council's advisory committees, and using written materials distributed to various Council and community facilities.

Phase one: community forums

Three community forums were held in October 2015.[57] One session was held within each ward, including Cherry Lake (Hobsons Bay Civic Centre), Wetlands (Altona Meadows Library) and Strand (The Substation). The forums were well attended by the community, although most attendees were estimated to be aged 45 years or above.

The community forums were delivered in two sections. First, a capacity building exercise. This was achieved through a presentation that enabled attendees to learn about transport issues experienced in other locations and subsequent initiatives that have produced positive results. Second, an in-depth group discussion. This session focused on two key questions:

Figure 18: Connecting the Bay promotion

1. *As Hobsons Bay grows, develops, changes and improves in the future, what are the things that are so valuable and so quintessentially Hobsons Bay that we have to make sure we keep and not change them?*
2. *What opportunities are there in Hobsons Bay to make improvements to transport, considering all modes?*

Based on the contribution and feedback from participants, the following themes, challenges and community aspirations emerged across all three community forums:

- **train** – inconsistent levels of accessibility and limited availability in some neighbourhoods
- **modal integration** – train to bus integration is cumbersome and unreliable and there is an undersupply of bike parking facilities at train stations
- **congestion and density** – increased population is causing congestion but appropriately-located medium density may help to reduce car-based travel
- **activity centres** – revitalisation of neighbourhood shopping strips can help attract new business, reduce car trips to 'big box' retailers and promote 'neighbourhood and village feel'
- **walking to school** – a range of measures are needed to promote more walking to school such as education programs, reduced speed limits and school-initiated reward schemes
- **cycling infrastructure** – an off-street cycling network needs to be developed to provide safer and more appealing connections across the municipality and toward the CBD

[57] Information in this section is drawn from MRCagney Pty Ltd (2015a) *Connecting the Bay Phase One Workshops: Workshop Output Report*, unpublished report prepared for Hobsons Bay City Council.

- **walking** – barriers include busy roads, lack of interesting landmarks, and wide open spaces that can make some people feel exposed and unsafe

Phase two: community and stakeholder workshops

Three community and stakeholder workshops were held in October 2015.[58] The first two workshops catered primarily to community members, service providers and community groups. Both sessions were well attended and took place at the Hobsons Bay Civic Centre (Altona) and Williamstown Town Hall respectively. While most participants were aged 40 years or above, there was some representation from young people, including a group of English as a Second Language students. A third workshop was held at The Substation (Newport), which brought together a range of stakeholders such as business and industry groups, education providers, and government agencies.

The workshops were delivered in five sections. First, an introductory presentation was provided to inform attendees about the role transport plays in enabling active, vibrant and community focused places.

Figure 19: Connecting the Bay workshop participants

The second section involved groups working together to prioritise Council's seven key principles (derived from the CHWP) from a transport perspective. Results across all three workshops revealed a clear top three:

- work in partnerships with service providers and other levels of government to advocate for, and meet, community needs (34%)
- provide equitable access to services, infrastructure and economic opportunities (27%)
- be an organisation that is innovative, proactive, financially sound and strives to improve (19%)

These results provide an indication of how Council can best address issues arising from transport, mobility and liveability, in accordance with its key principles.

In the third section, groups applied their most important principle to a set of seven drivers (climate change, industry, technology, housing, demographics, health, and car ownership) to identify key transport actions. Figure 20 represents the key words extracted from this exercise. There is a clear focus on sustainable transport, with 'public-transport', 'cycling', 'walkability' and 'car-sharing' featuring prominently. Land use and housing issues were also mentioned regularly, e.g. 'density' and 'housing-mix'.

[58] Information in this section is drawn from MRCagney Pty Ltd (2015b) *Connecting the Bay Community Workshop: Phase Two Workshop Output Report*, unpublished report prepared for Hobsons Bay City Council.

Figure 20: Key transport actions word cloud from Connecting the Bay workshops
(Source: MRCagney Pty Ltd, 2015b)

The fourth (and most detailed) section was centred on a ten-stage decision tree activity.[59] The activity asked participants to negotiate within their groups to make critical decisions on how to manage and address concerns around ten key themes: transport, development, shopping, home, work, culture and leisure, economy, character growth, and public investment. Each group ultimately arrived at one of ten possible descriptions of Hobsons Bay's values, liveability, land use and transport future based on their previous negotiations and trade-offs. Each group then repeated the entire activity but from the perspective of a different demographic group such as 'tradies', 'millennials', elderly citizens', 'single mothers' or 'university students'.

The results of this activity are summarised in table four. They suggest that community participants and stakeholders prioritise fairness, equity and social cohesion (Inclusive Hobsons Bay, 18%) and bustling neighbourhood centres and a strong sense of community (Neighbourhood Hobsons Bay, 17.8%). However, there were some notable variations between different locations, participants and perspectives. For example, Urban Hobsons Bay (10% vs 5%) emerged more strongly in the Williamstown session, while Suburban Hobsons Bay (10% vs 6%) was found to be a greater priority in the Altona workshop.

Participants at the stakeholder session understandably placed a relatively higher value on Competitive Hobsons Bay, although they also expressed strong neighbourhood and inclusive sentiments. Finally, it was perhaps surprising that health and wellbeing (A Healthy Hobsons Bay) did not emerge as a stronger priority, clearly the least favourable with an average of 2.5 per cent across all sessions.

[59] A 'decision tree' is a tool that uses a tree-like graph or model of decisions aimed at finding an outcome from a set of competing options. It is a research methodology often used to identify a strategy most likely to reach a goal.

Table 4: Summary of results from Connecting the Bay decision tree activity

	Hobsons Bay Civic Centre		Williamstown Town Hall		Substation (stakeholders)		All sessions
Perspective	*Self (%)*	*Other (%)*	*Self (%)*	*Other (%)*	*Self (%)*	*Other (%)*	***Avg. (%)***
A Healthy Hobsons Bay	0	2	4	2	5	2	**2.5**
Competitive Hobsons Bay	7	7	8	14	12	9	**9.5**
Urban Hobsons Bay	5	18	10	18	10	11	**12.0**
Inclusive Hobsons Bay	23	15	18	14	20	18	**18.0**
Green Hobsons Bay	15	8	12	6	9	4	**9.0**
Suburban Hobsons Bay	10	7	6	8	7	10	**8.0**
Historical Hobsons Bay	8	17	8	4	5	14	**9.3**
Neighbourhood Hobsons Bay	18	13	24	12	25	15	**17.8**
Technology Hobsons Bay	7	10	2	14	4	8	**7.5**
Community Hobsons Bay	7	3	8	8	3	9	**6.3**

The final part of the workshop sought participants' suggestions on how best to retain and protect Hobsons Bay's neighbourhood feel, while improving active transport, advocating for public transport and providing equitable access. The following concerns and suggestions emerged from this discussion:

- **train** – reinstate Altona Loop services; reinstate station in Altona North; extend parking times at Newport Station
- **bus** – services to industrial precincts will reduce congestion; introduce an express bus route connecting Altona Gate, industrial areas, train stations and Pier Street
- **road congestion** - traffic around schools is a major issue; new housing developments will create congestion; advocate to VicRoads regarding congestion on Point Cook Road, Seabrook
- **cycling** – our commuter network is fragmented; need separated 'off road' cycling infrastructure; improve road safety, particularly at roundabouts; complete the Laverton Creek, Kororoit Creek and Federation trails; improve bike storage at railway stations
- **walking** – create quality landscapes and footpaths; introduce better way finding signage
- **freight** – more grade separations to support freight movement; advocate for improved capacity on Westgate Freeway to remove trucks from local roads
- **employment** – create employment hubs along Williamstown and Altona train corridors
- **planning** – combine land use and transport planning; demand better design for medium density development; increase density around existing railway stations and activity centres
- **major projects** – Williamstown North level crossing removal may increase through traffic; need to work with Transurban to mitigate impacts on Hyde Street from Western Distributor

- **neighbouring LGAs** – take a regional approach to ensure neighbouring growth areas have sufficient transport infrastructure and services to minimise negative impact on Hobsons Bay
- **other transport** – investigate water commuter transport options; advocate for light rail to meet future demand in Altona North; expand Council's community bus service

Online

The Connecting the Bay consultation program was also conducted through the Participate Hobsons Bay website. An interactive page was established to invite community feedback on two key questions:

1. *Identify the local places/characteristics that are key to the unique identity and character of your neighbourhood now and in the future?*
2. *What opportunities are there to make improvements to transport in Hobsons Bay, considering all modes of transport?*

Ten responses were received covering a range of topics. Most of these had been raised during other consultation activities, including roundabouts and cycling/pedestrian safety (two responses); advocacy on Altona loop train services (two responses); benefits of carpooling; benefits of cycling to school; concerns with frequency of buses on weekends; advocacy for improved bus services to schools; concerns with potential negative impact of level crossing removal in Williamstown North; and barriers to walking in Laverton.

Other recent consultation

Transport is consistently raised through Council's community and stakeholder consultations. This section provides an overview of recent consultation where transport has been raised, either as a core topic or as part of a broader engagement process.

Community Care Transport Service (October 2016)

Council recently conducted telephone surveys with clients who had participated in the Community Care Transport Service trial between November 2015 and October 2016. A total of 30 responses were received, with just over three-quarters of participants aged 65 years or above.

There was strong support for the trial, with almost all respondents (93.6%) indicating that they intend to continue using the service. Participants particularly valued its flexibility (66.7%) and the opportunities it provided for social interaction (63.3%), as well as the physical assistance to access the vehicle (46.7%) and destinations that met their needs (46.7%).

Medical appointments (77.4%) and shopping centres (64.5%) were identified as the key destinations within the municipality. While the trial did not include medical appointments, shopping (67.7%) was the most popular destination, suggesting that the trial met an important transport need for older residents. A majority of users also indicated that they use buses (68.2%) and trains (54.6%), although around a quarter of respondents stated they would not be able to visit key destinations if community transport was not available.

Finally, respondents highlighted the importance of connectivity, access and social inclusion in their assessment of the three most important factors in meeting their transport needs: travel to where I

want (51.6%), easy to get on and off (38.7%) and interaction with other users (32.7%). The Community Care Transport Service will continue to be delivered in 2017, consistent with the pilot program (see page 127 for further discussion of community transport in Hobsons Bay).

Western Distributor interim position (August 2016)

In July and August 2016, Council conducted community and stakeholder engagement in relation to its interim position on the Victorian Government's Western Distributor project. Council's position articulates its principles, objectives and performance measures for the project.

A total of 50 submissions were received through various channels, including email, telephone, and Council's Participate Hobsons Bay website. Targeted consultation was also conducted with key stakeholders, including industry representatives, sports clubs, residents and the local kindergarten committee.

Some participants gave support for the project, primarily due to its potential to provide an alternative river crossing to the Westgate Bridge. However, a number of specific concerns were raised that reflect broader community sentiment regarding key transport issues in Hobsons Bay, including:

- increased noise and air pollution emissions and the need to mitigate these for local residents and community groups
- loss of open space and recreational facilities, e.g. a section of the ninth hole on the Westgate Golf Course
- increased road congestion in Spotswood, South Kingsville and Altona North
- increased truck traffic in local streets as a result of toll avoidance
- reduced viability of local industry due to road congestion and access constraints, e.g. proposed intersection alignment, truck curfews
- limited and confusing information provided by the Victorian Government and Transurban

On a more positive note, some submissions noted opportunities to leverage the project to improve safety (particularly for cyclists and pedestrians), lighting, public transport and visual amenity.

Community and stakeholder feedback was considered in the finalisation of Council's updated position on the Western Distributor project, which was formally adopted by Council on 23 August 2016.[60] At the time of writing, Council is continuing to advocate on behalf of the community through the design process to ensure the best outcome is achieved for Hobsons Bay and its residents. Public exhibition of the EES and the release of final design provide critical opportunities for further engagement during 2017.

Walking and cycling to school workshops (June/August 2016)

In mid-2016, Council engaged with local primary schools to understand the challenges (and promote the benefits) of walking and cycling to school. A series of consultation activities were held, including

[60] See HBCC (2016e).

workshops with school principals and teachers (June 2016) and an interactive workshop with students as part of the Junior Council Program (August 2016).

The principal/teacher workshops began with an introductory presentation, followed by group discussion guided by three key questions. The main points from these discussions are as follows:

1. **What are good outcomes for walking and cycling to school?** reduced congestion; better health; increased social interaction; reduced carbon footprint; better road safety awareness; savings on fuel and vehicle costs; increased independence and self-confidence.
2. **What factors contribute to good outcomes?** safer routes; involving schools in planning; listening to children; better infrastructure, e.g. crossings, wider footpaths, bike racks; bike education; behaviour change programs; children's access to mobile phone in case of emergency; removal or mitigation of physical barriers, e.g. underpass, roundabouts; better location of cycling paths.
3. **How would you recognise a good outcome?** improved linkages; reduced risk and conflict between cars, cyclists and pedestrians; less cars on the road and in car parks; more social interaction; more families and children talking about walking and cycling to school.

The Junior Council session also began with an introductory presentation, followed by a series of interactive activities and discussion questions to engage students on the following topics:

1. *tell a story to your group about a time you walked or cycled to school and really enjoyed it*
2. *draw a picture of your journey to school if you were to ride or walk to school*
3. *what does an ideal future for walking and cycling to school look like?*
4. *what is the most important thing that stops you from walking/cycling to school?*
5. *what is the most important thing that your parents are concerned with you walking/cycling to school?*

Students identified a number of benefits to walking or cycling to school, including being healthier, breathing fresh air, socialising with friends and the sheer joy of being active. The 'milk bar' featured in many students' work as a welcoming and familiar place for children to meet, with the additional benefit of supporting local business (figure 21).

A large number of barriers to walking or cycling to school were identified by students, some of which may be reflections of parental attitudes. Examples include low perceptions of safety, poor lighting and signage, limited accessibility and connectivity, unpredictable weather, parents' work schedule, and long distances between school and home.

Students suggested many ideas for an ideal future for walking and cycling to school, including well defined spaces for pedestrians (figure 21), cyclists and cars; more exciting places to visit and see along the way; good paths and signage; better connections to and from school; more traffic calming; and improved safety for everyone. Additionally, urban planning can help to reduce students' and (more importantly) parents' anxieties about walking or cycling to school, leading to sustainable changes in perceptions, attitudes and behaviour.

The results from these consultation activities may be used to inform the development of walking and cycling to school action plans, as part of future integrated transport planning.

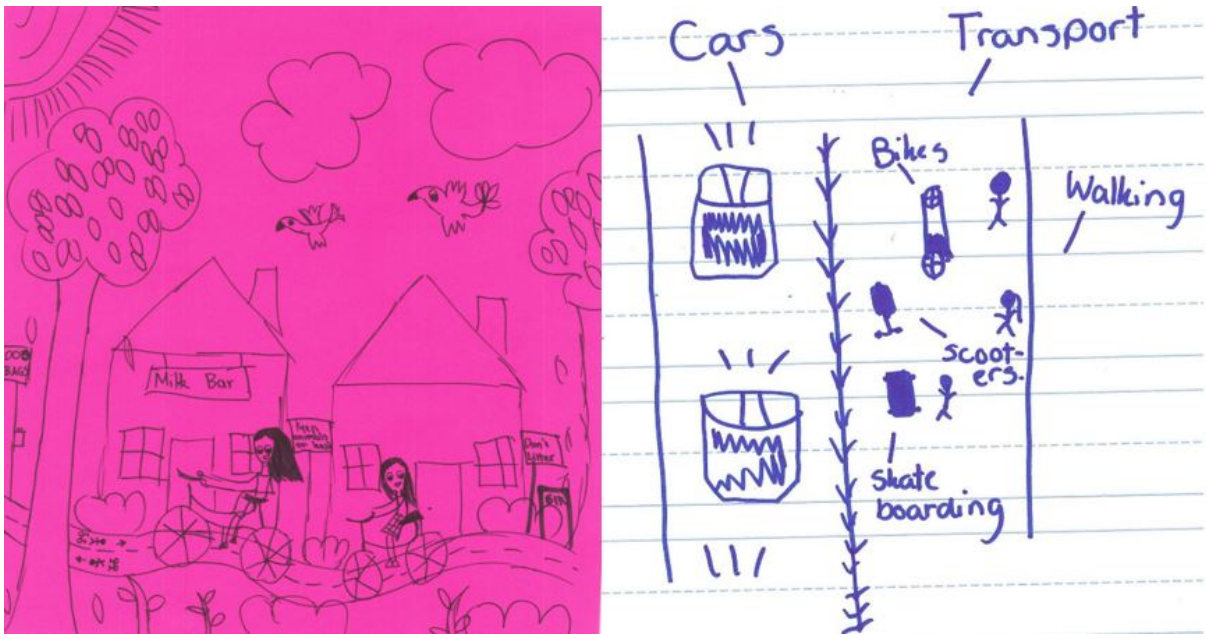

Figure 21: Student drawings from Junior Council Workshop

Hobsons Bay 2030 (June 2016)

Community consultation took place between February and June 2016 to inform Hobsons Bay 2030.[61] Consultation provided a range of opportunities for people to get involved, including a survey, community 'pop up'sessions and online content. More than 2,500 interactions were recorded.

The consultation process was built around three key questions:

1. *I like Hobsons Bay because …*
2. *By 2030, I hope Hobsons Bay will …*
3. *What needs to change for this to happen?*

Responses were ranked according to the number of 'mentions' provided by participants.

Transport does not figure highly in the reasons why people like Hobsons Bay. 'Access to public transport' (5.6% of mentions, ranked 13th) and 'walkable' (3.5%, 17th) were the only notable responses in relation to transport. On a related note, however, proximity to the CBD was raised as an important reason people like Hobsons Bay (15.4%, 3rd).

Figure 22: Hobsons Bay 2030 promotion

Transport emerged as a key factor in what respondents hope Hobsons Bay to be by 2030. In fact, 'improved transport options' (18.9%) was the top ranked response. Other related responses

[61] For more information, see HBCC (2016g) *Hobsons Bay 2030 Phase One Consultation Report*.

included ‘not be overdeveloped and overcrowded’ (10.3%, 4th), ‘cleaner and have less pollution’ (9.1%, 5th) and ‘enhance and protect the natural environment’ (8.3%, 6th). However, just a small number of participants hoped Hobsons Bay would be ‘more walkable’ (1.6%, 20th).

‘Improved public transport’ (17%) was suggested as the most important factor that needs to change, particularly in Wetlands Ward where it attracted 30 per cent of mentions. Change was also proposed in a number of related fields, including ‘all levels of government to work together’ (15.9%, 2nd) and ‘stricter controls on developments’ (13.2%, 3rd).

These results clearly demonstrate that transport is a key issue in Hobsons Bay and the community want to see substantial improvements in the years to come, especially in regards to public transport. However, there also appears to be concerns with increased development and density which, if well planned and linked to public transport, can help to address congestion issues. Finally, results indicate that the community values the local natural environment, which will be better protected through increased use of sustainable transport options such as walking and cycling.

Draft Grade Separation Principles (March 2016)

Between December 2015 and February 2016, Council conducted community consultation on its draft Grade Separation Principles report. The report outlines Council’s formal position on the Victorian Government’s three planned grade separation projects in Hobsons Bay.

A total of 63 submissions were received through Council’s website. Community members were generally supportive of Council’s grade separation principles, although there was specific feedback regarding the preferred outcomes at each site. Some of this feedback reflects wider community sentiment regarding transport issues in Hobsons Bay, including traffic congestion, road safety, public transport services, and barriers to walking and cycling.

The Aviation Road project received just two submissions. These supported the project and called for an ‘all of precinct’ planning approach to reduce traffic congestion, improve bus connections, enhance pedestrian and cycling connectivity, and introduce safer pedestrian crossing points.

The Ferguson Street project attracted 41 submissions. Half of these strongly objected to a rail overpass due to concerns about the loss of the area’s ‘village feel’ and heritage, as well as fears of increased traffic congestion. Some submissions even questioned the need for the project at all, suggesting a range of alternative approaches, including timetabling changes, signalling upgrades and the introduction of light rail services along the Williamstown line.

The Kororoit Creek Road project received 20 submissions (figure 23).

Figure 23: Proposed Kororoit Creek Road level crossing removal
(Source: Level Crossing Removal Authority)

Almost all called for duplication of the Altona Loop as part of the project, while concerns were also raised about planned disruption during construction. A number of other suggestions were made to improve public transport services in the area, including reinstating closed train stations between Newport and Laverton and adding a small section of additional track close to the grade separation site to allow for more efficient timetabling.

Community and stakeholder feedback was considered in the finalisation of Council's grade separation principles, which were formally adopted by Council on 22 March 2016.[62] Council is continuing to advocate on these projects to secure the best outcomes possible for Hobsons Bay, with a status report recently provided to Council in December 2016.

Annual Community Survey (March 2016)

Council conducts an Annual Community Survey (ACS) to measure community satisfaction with its services and facilities, as well as sentiment regarding various issues of concern within the municipality.[63] A representative sample of 800 households participate in the survey, ensuring that views are captured from residents of different genders, ages, cultural backgrounds and neighbourhoods.

In 2016, respondents rated the importance of access to public transport very highly, attracting a score of 9.32 (out of 10). This rating is comparable to the 2014 result (9.42). Respondents were generally satisfied with access to public transport with a rating of 7.94, up from 7.16 in 2014. Analysis of satisfaction levels by precinct reveals more subtle differences, with Newport/ Spotswood/South Kingsville (8.46) most satisfied and Altona/Seaholme (7.44) least satisfied.

The 2016 survey also included questions about what residents value about living in Hobsons Bay and what they would like to change. These questions are similar to those used in Hobsons Bay 2030 consultation but, in some cases, produced different results. For example, one in five respondents (19.7%, ranked 6th) included 'good public transport networks' in the top three things they value in Hobsons Bay. This rating was notably higher for people aged 19 to 25 years (27.1%) and residents of Newport/Spotswood/South Kingsville (25.3%).

Transport also featured highly in terms of what residents would like to change about where they live, including 'traffic management' (13.8%, 1st), 'road maintenance and repairs' (10.9%, 3rd) and 'public transport' (8.8%, 4th). The desire to make changes in these areas was felt more strongly by the following groups:

- **traffic management** – Newport/Spotswood/South Kingsville and Williamstown/ Williamstown North residents
- **road maintenance and repairs** – males and Williamstown/Williamstown North residents
- **public transport** – females, people from a non-English speaking background and Altona/Seaholme residents

[62] See HBCC (2016f).
[63] See Metropolis Research (2016).

These results demonstrate that Hobsons Bay residents are particularly interested in transport issues. Overall, there is a reasonably high level of satisfaction with infrastructure and services, although some groups face specific challenges. As such, targeted actions to address these issues will be more likely to achieve positive outcomes in future integrated transport planning.

Annual Community Survey results on safety in public areas (including when travelling on or waiting for public transport) are discussed in chapter two (see page 20).

Nelson Place Free Parking Trial (October 2015)

Community and stakeholder consultation was undertaken by Council during a three month free parking trial in Nelson Place, Williamstown (figure 24). Nelson Place is one of very few locations in Hobsons Bay with paid parking. The trial responded to concerns from local traders that paid parking had been deterring visitors during off-peak periods when demand for parking was reduced. The trial did not apply to Fridays, Saturdays and Sundays.

A community survey was conducted toward the end of the trial in October 2015. A total of 366 responses were received via an online survey and public intercept interviews in prominent locations. The sample size was quite large, although it was skewed by gender and age, with 80 per cent of respondents being female, and none aged 18 years or below. Almost all respondents lived in Hobsons Bay, including almost half in Williamstown.

Figure 24: Nelson Place, Williamstown

More than half of respondents (53%) indicated that they used a car to travel to Nelson Place and a further 32 per cent walk to the precinct. While car remains the dominant mode, it is encouraging that large numbers of people walk, including many people living in the surrounding neighbourhood. Notably, less than five per cent of respondents used public transport.

Respondents had a high awareness (85%) of Nelson Place free parking permits (available for Hobsons Bay residents) and a substantial proportion (63%) owned a permit. More generally, almost three-quarters of respondents (74%) indicated that the capacity to park in the precinct (free or paid) influences their decision to visit the area. While these results indicate that parking needs to be considered in future planning, the subsequently developed Nelson Place Action Plan (endorsed by Council in December 2015) also identified streetscape upgrades, business improvement activities and marketing as key themes to improve the vibrancy and appeal of the precinct all year round.[64]

[64] HBCC (2015b) *Nelson Place Action Plan*, adopted in December 2015.

Summary: considerations for integrated transport planning

The following is a summary of the key points from this chapter that may be considered in Hobsons Bay's integrated transport planning.

Connecting the Bay

- Transport issues raised by the community and stakeholders include the accessibility and availability of train services; road congestion (including around schools); a fragmented cycling network; road safety (including for cyclists at roundabouts); limited integration of transport modes; physical barriers to walking; and potential negative impacts of major projects such as the Western Distributor and level crossing removals.
- Transport actions suggested by the community and stakeholders include improvements to train services and facilities (e.g. Altona Loop services, end-of-trip bike facilities); greater reach and frequency of local bus services; improved walking environments; strategies to promote walking and cycling to school; improvements to the off-road cycling network; grade separations to support freight movement; increased housing density in strategic locations; revitalisation of neighbourhood shopping strips; and investigation of water transport options.
- Working in partnership to advocate on behalf of the community, and providing equitable access to services, infrastructure and economic opportunities emerged as key Council principles to address issues arising from transport, mobility and liveability.
- Fairness, equity and social cohesion (Inclusive Hobsons Bay), bustling neighbourhood centres and a strong sense of community (Neighbourhood Hobsons Bay) emerged as key priorities for the municipality's future values, liveability, land use and transport.

Other recent consultation

- Council's Community Care Transport service helps to meet transport demand for shopping trips amongst older residents, with users valuing its flexibility and social interaction opportunities; one quarter of users rely exclusively on the service to access key destinations.
- Residents and stakeholders are concerned about the local impacts of the Victorian Government's Western Distributor project (e.g. noise and air pollution, loss of open space, increased truck traffic), but note the opportunities it provides to leverage local transport improvements.
- Consultation with primary school principals, teachers and students highlighted the benefits of walking and cycling to school (improved health, reduced congestion, social interaction), as well as the barriers (safety, lighting, signage, connectivity, weather).
- Hobsons Bay 2030 consultation showed strong community support for improved transport options, as well as concerns with increased development and density.
- Feedback on Council's grade separation principles (developed in response to the Victorian Government's level crossing removal projects in Hobsons Bay) highlight different priorities across each proposed site, including the protection of the 'village feel' and heritage

(Ferguson Street) and opportunities to leverage infrastructure improvements (Kororoit Creek Road).

- Results from Council's Annual Community Survey show high levels of importance (and improving levels of satisfaction) with public transport, as well as a range of specific transport challenges for different groups and neighbourhoods that require targeted responses.
- Consultation on the Nelson Place Free Parking Trial showed that car parking is an important factor for visitors, although streetscape upgrades, business improvement activities and marketing are also required to make the precinct more vibrant and appealing.

05 Land use and transport integration

Land use and transport integration helps to reduce transport demand, create more connected communities, attract local jobs and services, and promote equitable and sustainable transport options

This chapter describes:

- the main features of land use and transport integration
- the legislative and policy context for land use and transport integration
- infrastructure, usage and local challenges and opportunities with respect to car parking
- challenges and opportunities for land use and transport integration in Hobsons Bay

Land use and transport are interrelated. Changes to transport services and infrastructure can alter the value and demand for different types of land use, while land use decisions can change transport demand and behaviour. Additionally, large amounts of land are used for transport purposes, with over 460 kilometres of local roads in Hobsons Bay, as well as shared trails, footpaths and public transport infrastructure.

Transport planning, investment and provision will always be critical to responding to mobility challenges. However, there is increasing recognition that these challenges can also be met through measures to reduce demand, including through land use planning. For example, locally situated employment opportunities, services and recreational facilities can reduce the need to travel.

This approach represents a shift away from post-war urban planning which generally assumed that private vehicle transport could meet most of the mobility demands of residents and businesses, with little consideration for environmental costs or social inequities. Recent legislation and policy frameworks (such as the *Transport Integration Act 2010* and Plan Melbourne) further reinforce the links between land use and transport. The transport implications of land use planning are especially significant for local government as this is an area where local government can exert direct influence, albeit within the confines of state legislation and policy frameworks.

What is land use and transport integration?

Land use and transport integration (LUTI) refers to the integration of land use and transport planning to produce urban environments that support specific economic, social and environmental goals.[65] These goals include reducing car dependency, congestion, emissions and transport costs, while improving energy efficiency, urban amenity, health and physical activity, perceived and actual safety, and the appeal of sustainable transport options. More specifically, LUTI provides a means to achieve transport planning objectives using land use planning tools such as statutory planning (e.g. land

[65] This description of land use and transport integration is adapted from GAMUT (2016), particularly section 2.1.

zoning), regulation (e.g. parking provision), pricing (e.g. cost of land), developer contributions (e.g. for sustainable transport infrastructure) and asset management (e.g. the development and location of community infrastructure).

Various organisations play a role in the development and implementation of LUTI, including government agencies, transport operators, service providers, property developers, local government, and community groups. Its principles may be applied at various urban scales such as city centres, activity centres, town centres, and neighbourhood centres.

Transit Oriented Development (TOD) is a specific form of land use and transport integration. In its simplest form, it is the clustering of a mix of land uses (often at higher densities than surrounding areas) in close proximity to public transport services. While TOD may deliver transport and mobility benefits, it must overcome considerable practical barriers to be successful, including high land and construction costs, inadequate existing transport service and infrastructure, and community concerns over increased density and gentrification.

Transit oriented development is a key element of the Queensland Government's South East Queensland Region Plan 2009-31. The Plan has provided support for Brisbane's first transit oriented development, which is currently under construction in the city's inner west (figure 25). In Victoria, the state government is currently planning a TOD project in Melbourne's south east to recover some of the costs of recent grade separation projects in the area.[66] Notably, the proposed 13-storey building (to be built above Ormond train station) is expected to have a reduced number of car parking places to encourage residents to use other forms of transport. Hobsons Bay's integrated transport planning may consider how transit oriented planning may be applied to local high use train stations to build the case for future rail infrastructure investment and service enhancement.

Figure 25: The Milton Residences, Brisbane
(Source: brisbanedevelopment.com/the-milton-construction-start)

Legislative and policy context

The Victorian Government sets the legislative and policy context for land use planning in Victoria, with the Australian and local governments playing supporting roles. Broadly speaking, there is strong support for increased land use and transport integration to reduce the need to travel and expand, diversify and improve access to more sustainable transport options. This section describes the key

[66] Carey, A. (2016a) 'Ormond 'sky tower': call to cut car parking from project to boost train use', *The Age*, 10 November 2016.

government agencies, legislation and policy frameworks, paying particular attention to their relationship to transport and mobility.

National urban policy

In May 2011, the Australian Government released its national urban policy: *Our Cities, Our Future*.[67] It was the first attempt by an Australian Government since the early 1970s to outline overarching goals for the nation's cities, and to play a role in making them more productive, sustainable and liveable. In April 2016, the Australian Government launched a new framework for national urban policy: the *Smart Cities Plan*.[68] The plan aims to increase housing supply near job opportunities and improve transport connections so that more people live closer to work, have better access to transport, and are more likely to use active transport to reach employment. The plan also explores the concept of the '30 minute city' whereby residents can access work, schools, shopping, services and recreational facilities within half an hour of home.

Victorian Planning Authority

The Victorian Planning Authority (VPA) – formerly the Growth Areas Authority (GAA) - is a Victorian Government statutory authority.[69] It reports to the Minister for Planning, and works closely with local government, government agencies and the community to facilitate integrated land use and infrastructure planning. Initially focused exclusively on Victoria's growth areas, the VPA now undertakes planning for urban renewal in inner and middle suburbs, designs new suburbs in outer growth areas, and supports planning work in regional cities and towns. It is currently working on a large number of projects (including Precinct 15 in Hobsons Bay) and will assist the implementation of the initiatives articulated in the updated Plan Melbourne.

Planning and Environment Act 1987

The *Planning and Environment Act 1987* establishes a framework for planning the use, development and protection of land in Victoria.[70] More specifically, it sets the objectives, rules and principles, and key planning procedures and statutory instruments of the Victorian planning system. The act also defines the key roles and responsibilities of the Minister, local government, government departments, community and other stakeholders. All planning schemes in Victoria must seek to achieve the objectives of planning in Victoria, which are set out in Section 4(1) of the act. The *Planning and Environment Act 1987* is interface legislation with the *Transport Integration Act 2010* and establishes planning authorities and the Growth Areas Authority (now the VPA) as transport interface bodies.

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[67] Australian Government (2011) *Our Cities, Our Future: A National Urban Policy for a productive, sustainable and liveable future*.
[68] Australian Government (2016) Smart Cities Plan.
[69] Victorian Planning Authority, *About*, https://vpa.vic.gov.au/about, accessed 8/11/16.
[70] Department of Transport, Planning and Local Infrastructure, *Planning legislation*, http://www.dtpli.vic.gov.au/planning/about-planning/legislation-and-regulations/planning-legislation, accessed 8/11/16.

State Planning Policy Framework

The State Planning Policy Framework (SPPF) sits within the Victorian Planning Provisions and is also included within the Hobsons Bay Planning Scheme.[71] Its goal is to ensure that Victoria's planning objectives (as set out in the *Planning and Environment Act 1987*) are 'fostered through appropriate land use and development planning policies and practices which integrate relevant environmental, social and economic factors in the interests of net community benefit and sustainable development' (clause 10.02). The framework is structured around nine key policies, and also requires planning authorities to consider and apply the principles and objectives of Plan Melbourne (see below).

The framework includes a transport policy (clause 18) which states that 'planning should ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, coordinates reliable movements of people and goods, and is safe'. This policy is complemented by a range of supporting objectives:

- **Land use and transport planning (18.01-1)** - to create a safe and sustainable transport system by integrating land use and transport
- **Transport system (18.01-2)** - to coordinate development of all transport modes to provide a comprehensive transport system
- **Sustainable personal transport (18.02-1)** - to promote the use of sustainable personal transport
- **Cycling (18.02-2)** – to integrate planning for cycling with land use and development planning and encourage as alternative modes of travel
- **Principal Public Transport Network (18.02-3)** - to upgrade and develop the Principal Public Transport Network and local public transport services in Metropolitan Melbourne to connect activity centres, link activities in employment corridors and link Melbourne to the regional cities
- **Management of the road system (18.02-4)** - to manage the road system to achieve integration, choice and balance by developing an efficient and safe network and making the most of existing infrastructure
- **Car parking (18.02-5)** - to ensure an adequate supply of car parking that is appropriately designed and located
- **Develop freight links (18.05-1)** – to further develop the key transport gateways and freight links and maintain Victoria's position as the nation's premier logistics centre

Additional objectives are provided in relation to ports (18.03) and airports (18.04).

The SPPF also includes several other policies that are relevant to land use and transport integration, including settlement (clause 11), built environment and heritage (clause 15), and housing (clause 16). When considered together, these policies and objectives strongly support land use and

[71] DELWP (2016) *Victorian Planning Provisions*, http://planningschemes.dpcd.vic.gov.au/schemes/vpps, accessed 8/11/16.

transport integration, and a range of related benefits such as community safety, environmental sustainability, physical health, employment, economic development, sustainable city planning and good quality urban design outcomes.

Plan Melbourne

In 2014, the Victorian Government released Plan Melbourne, its metropolitan planning strategy to guide Melbourne's growth and change over the next 40 years.[72] The plan identifies 11 Metropolitan Activity Centres, which it characterises as locations with good access to a range of major retail, community, government, entertainment, cultural and transport services. None of these are located within Hobsons Bay, although Sunshine (Brimbank) and Footscray (Maribyrnong) are within neighbouring municipalities.

Plan Melbourne's Metropolitan Melbourne Structure Plan (figure 26) also identifies the regional Western Industrial Precinct, as well as emerging National Employment Clusters in East Werribee (Wyndham) and Sunshine (Brimbank), and the Western Interstate Freight Terminal (Melton). Additionally, the plan designates three Activity Centres (formerly known as major activity centres) within Hobsons Bay: Altona Gate (Altona North), Altona Beach (Altona) and Williamstown. These centres are expected to play an increasingly significant role in accommodating urban growth and development, although there are some constraints on Williamstown given existing density levels, smaller lot sizes and heritage considerations. More generally, Plan Melbourne seeks to encourage infill development in areas located in or close to activity centres and at sites that offer good access to transport and services.

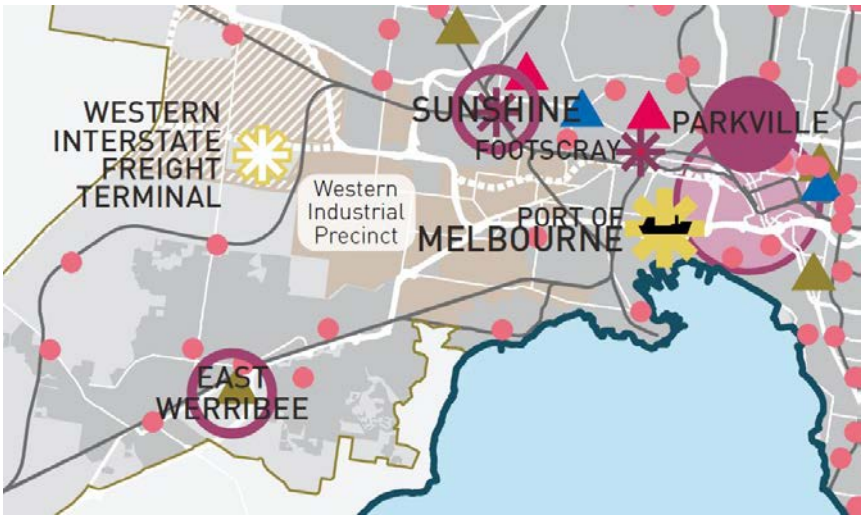

Figure 26: Metropolitan Melbourne Structure Plan
(Source: Plan Melbourne)

Plan Melbourne envisions Melbourne as a 'global city of opportunity and choice' and outlines seven objectives and outcomes to achieve this vision, including two with particular relevance to land use and transport integration. 'A more connected Melbourne' (objective three) forecasts a total of 24.9 million daily trips by 2050 (up from 14.2 million in 2014) which will necessitate the addition of critical network links and projects, improved efficiency from existing infrastructure, and increased reliance on public transport. This objective has been incorporated into the State Planning Policy Framework (clause 11.04-3).

[72] See DTPLI (2014) *Plan Melbourne: Metropolitan Planning Strategy*.

'Liveable communities and neighbourhoods' (objective four) establishes 'the 20 minute neighbourhood' (figure 27) as a key platform of Plan Melbourne: '20 minute neighbourhoods are places where you have access to local shops, schools, parks, jobs and a range of community services within a 20-minute trip from your front door'.[73] This objective will guide the future development of activity centres (e.g. through structure planning) and has also been incorporated into the State Planning Policy Framework (clause 11.04-4).

Figure 27: The 20 minute neighbourhood
(Source: Plan Melbourne)

In 2015, the Victorian Government announced an update to Plan Melbourne, known as Plan Melbourne Refresh.[74] The updated plan maintains the focus on transforming the transport system, increasing development intensity in strategic locations, and achieving a city of '20 minute neighbourhoods'. However, it also incorporates an updated suite of transport projects (including Melbourne Metro Rail and the Western Distributor project) and reflects progress in the plan's implementation such as the introduction of new residential zones and apartment standards. The latter were released by the Victorian Government in December 2016, with the Better Apartment Design Standards expected to improve the liveability and sustainability of apartments in Victoria.[75] Following an extensive community consultation process, it is anticipated that an updated Plan Melbourne will be released in 2017.

Local Planning Policy Framework (Municipal Strategic Statement)

The Local Planning Policy Framework (LPPF) sits within the Hobson Bay Planning Scheme, and comprises the Municipal Strategic Statement (MSS) and Local Planning Policies. The MSS is currently being reviewed so that it aligns with Council's new and updated strategic planning policies: the Housing Strategy, Activity Centre Strategy and Neighbourhood Character Study (see page 63).

[73] ibid., p.11
[74] DELWP (2015)
[75] DELWP (2016a) *Better Apartment Design Standards: New apartment design standards for Victoria*, Melbourne.

The MSS (Clause 21) articulates the vision, objectives and strategies for managing land use change and development in Hobsons Bay, and identifies how state policies apply in the local context. It supports high quality integrated public transport, cycle and pedestrian paths to enhance walkability and safety, while also promoting adequate parking in tourist precincts and activity centres. Together with the Community Health and Wellbeing Plan 2013-17 and the Council Plan 2013-17, the MSS is one of Council's three key strategic planning documents.

The MSS's objectives and strategies are set out under eight themes. Clause 21.09 provides the vision for 'transport and mobility' in the municipality: 'an integrated transport system that enables residents, commercial and industrial operators and visitors to access their destination in a safe, equitable and efficient manner'.[76] It also establishes three strategic objectives that seek to provide access to all modes of transport, reduce the adverse effects of vehicular traffic, and support increased use of public transport.

The MSS also provides guidance on the future development and growth of Hobsons Bay's activity centres (clause 21.03). Several other themes also include objectives related to transport and land use integration, including:

- **housing (21.07)** - to encourage and facilitate the provision of a range of dwelling types to suit the varying needs of the community in a high quality living environment
- **economic development (21.08)** - to stimulate and facilitate appropriate industrial activity and employment opportunities
- **infrastructure (21.10)** - to deliver necessary community infrastructure to enhance the liveability of Hobsons Bay residents

Finally, the MSS also plays a key role in protecting Hobsons Bay's character, particularly in terms of settlement and housing. More specifically, it identifies key issues in relation to protecting existing suburbs from the pressures of urban consolidation, and protecting heritage areas and the foreshore from inappropriate development (clause 21.02-3).

Industrial Land Management Strategy 2008

Released in 2008, the Industrial Land Management Strategy (ILMS) established future directions for the management and development of Hobsons Bay's industrial land. It reviewed 22 industrial precincts and concluded that nine were suitable (in whole or in part) for review for alternate land uses. These sites were classified in the strategy as Strategic Redevelopment Areas (SRAs). Six of these were subsequently identified as being potentially suitable for residential development: precincts 13, 15, 16, 17, 20 and 21 (figure 28).

[76] DELWP (2016b) Hobsons Bay Planning Scheme, http://planningschemes.delwp.vic.gov.au/schemes/hobsonsbay, accessed 9/11/16.

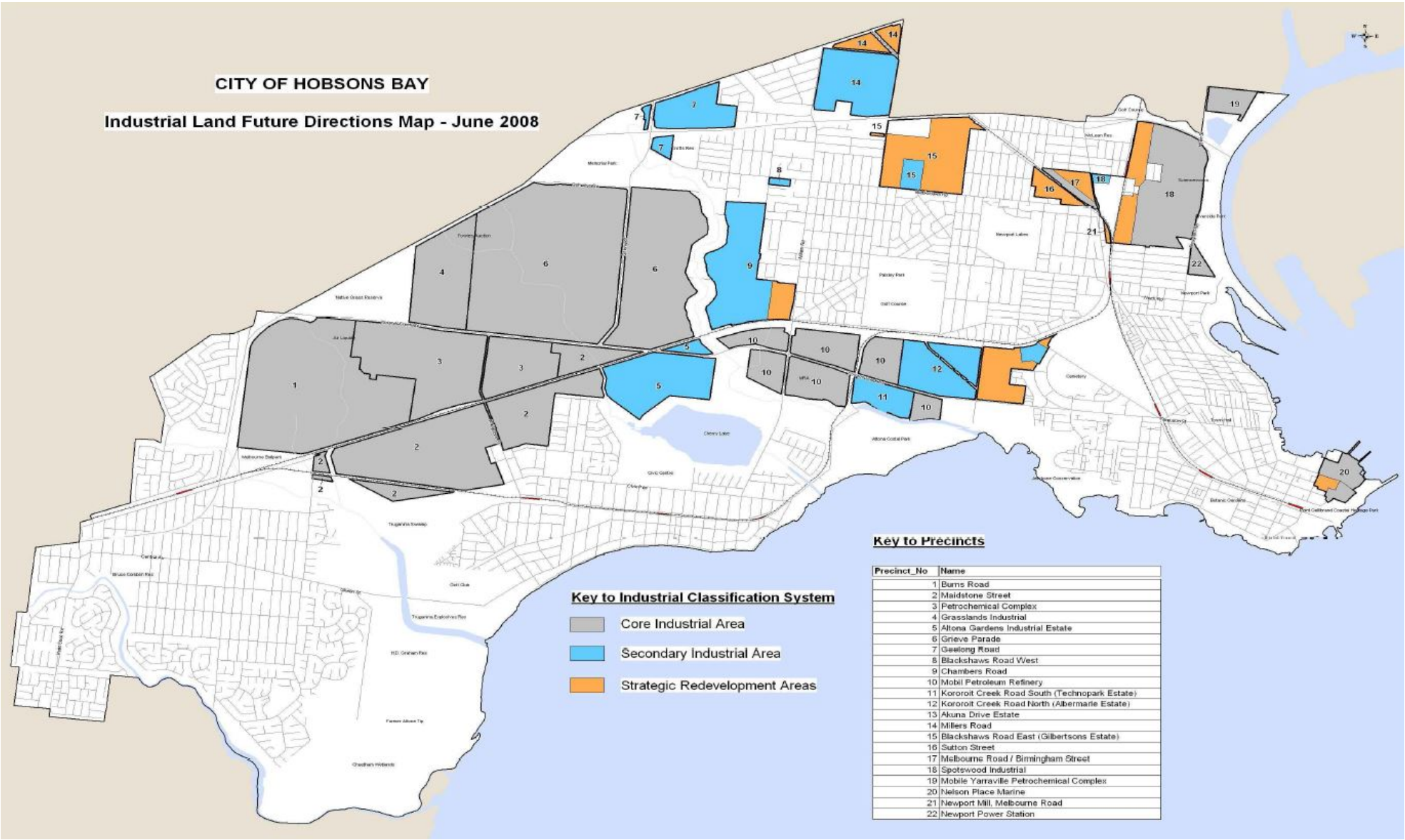

Figure 28: Industrial Land Future Directions Map
(Source: Industrial Land Management Strategy 2008)

Since the strategy was adopted, some of these sites have been rezoned, are undergoing rezoning, or have been identified as unsuitable for residential land use due to land use constraints. Strategic Redevelopment Areas are anticipated to be a major source of new housing in the municipality over the next twenty years, with Precinct 15 alone expected to provide around 3,000 new dwellings for 7,000 residents.

While the strategy seeks to improve the amenity, appearance and environmental performance of these former industrial areas, there are a number of challenges associated with providing integrated transport outcomes. Most notably, many are not located within existing activity centres and the largest site (Precinct 15) is not located in close to proximity to a train station. The ILMS will be reviewed in the coming years and updated to reflect changes to planning policy, current and future status of the SRAs, and Council's recently released Economic Development Strategy 2015-20.

Local strategic planning policies

In 2012, the Victorian Minister for Planning announced reforms to residential, commercial and industrial zones. The introduction of new zones provided an opportunity for Council to review, develop and update a suite of related strategic planning policies, including the Housing Strategy, Activity Centre Strategy and Neighbourhood Character Study.

Housing Strategy

In 2014, all residentially zoned land in Hobsons Bay transitioned to the General Residential Zone as an interim measure prior to the development and adoption of the Housing Strategy. Council's forthcoming Housing Strategy will manage housing growth and change in the municipality over the next 20 years and support the implementation of the new residential zones.

The strategy's background paper has identified a number of key housing needs and issues, including more housing diversity, housing in better locations, more affordable housing, as well as housing that supports ageing in place, neighbourhood character, good residential amenity, sustainable living, and improved energy efficiency. The background paper also proposes that the strategy develop objectives and actions around four key themes. The proposed theme two (housing location, diversity and density) will support land use and transport integration by directing housing growth and density to activity centres with increased pedestrian and public transport access. The Housing Strategy is expected to be adopted by Council in 2017.

Activity Centre Strategy

The introduction of new commercial zones and the release of Plan Melbourne provided impetus for Council to update its Activity Centre Strategy. It will provide an overarching policy framework to inform detailed strategic planning and decision making about Hobsons Bay's activity centres (figure 29).[77]

[77] Activity Centres have been defined previously in this background paper as 'vibrant hubs where people shop, work, meet, relax and often live' (see page 9).

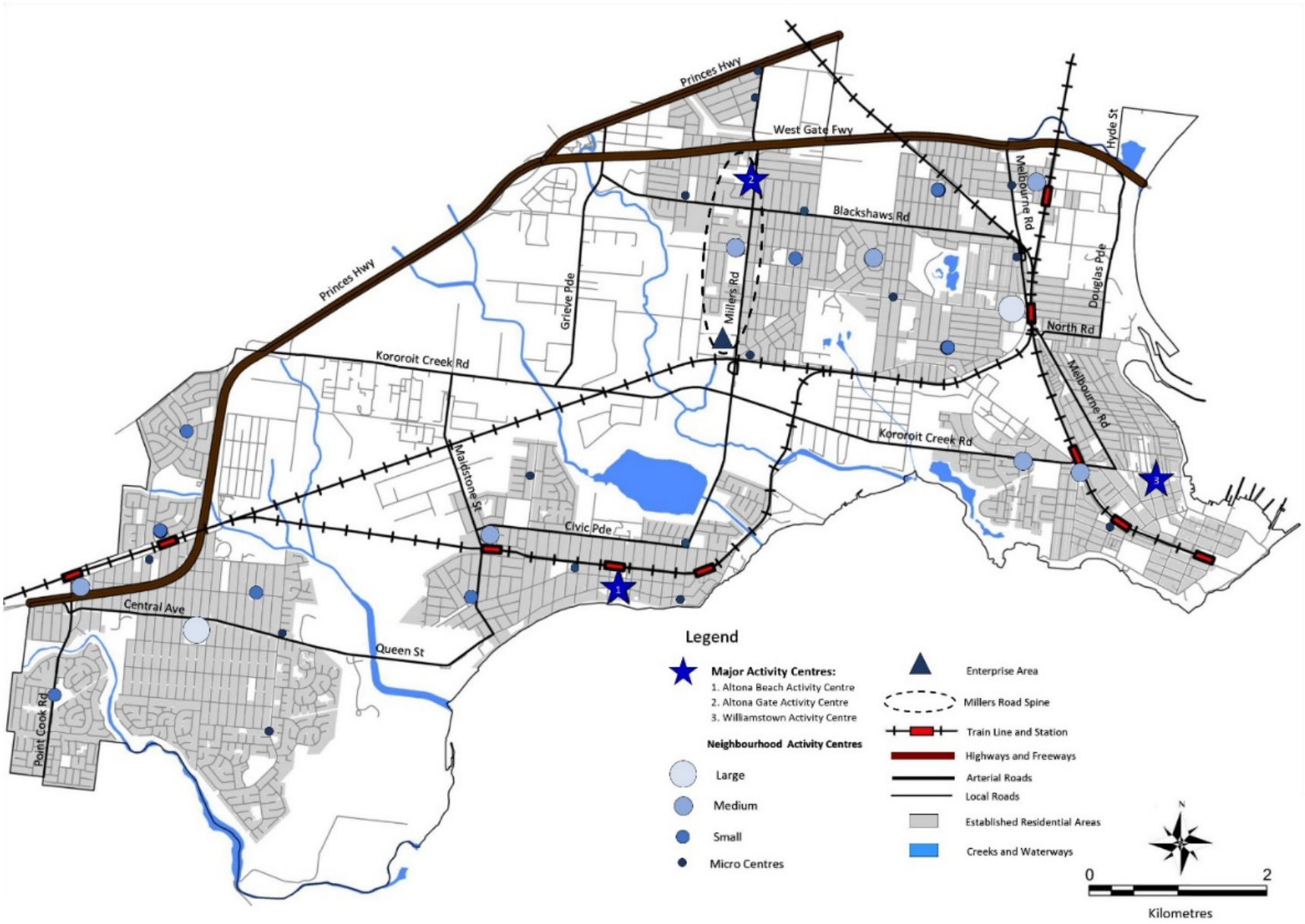

Figure 29: Hobsons Bay Activity Centres

The strategy recognises that strong transport networks are critical to the operation of effective activity centres. Urban design is also important to promote accessible, sustainable, pedestrian-focused urban environments that support the activation of public spaces. These principles and priorities can be implemented through relevant structure plans and urban design frameworks. The updated Activity Centre Strategy is expected to be adopted by Council in 2017 and will provide strategic support for the application of new residential zones.

Neighbourhood Character Study

Three new zones were introduced as part of reforms to Victorian residential zones, including (listed in order of increasing density) the Neighbourhood Residential Zone (NRZ), General Residential Zone (GRZ) and Residential Growth Zone (RGZ). Council's Neighbourhood Character Study is being updated to support the implementation of the new residential zones. Along with the Housing Strategy, Activity Centre Strategy and future integrated transport planning, it will inform the locations of the new residential zones, as well as help to preserve and enhance Hobsons Bay's unique neighbourhood character.

Neighbourhood character is shaped by building form, subdivision patterns, colours and materials, fencing, setbacks, topography, and landscaping and vegetation, both within the private and public domain. Many residents place a very high value on neighbourhood character and strongly oppose 'inappropriate development', with concerns primarily focused on height and density. This issue emerged strongly through community consultation to inform Hobsons Bay 2030 (see page 49).

Figure 30: Examples of neighbourhood character types: Garden Court (left) and Inner Urban (right)

Research informing the updated strategy has identified six main neighbourhood character types in Hobsons Bay: Garden Court; Garden Suburban; Inner Urban/Garden Suburban; Inner Urban; Urban Contemporary; Waterfront Suburban (figure 30). Various factors within these different neighbourhood types can influence transport outcomes, including housing density, street design, and footpath connectivity. The updated Neighbourhood Character Strategy is expected to be adopted by Council in 2017.

Car parking

Given the high use of private passenger vehicles (see page 113), car parking is a key element of an integrated transport system in Hobsons Bay. However, from a land use perspective, it can be an

inefficient use of (often highly valuable) land within activity centres. As such, future planning may examine how car parking policy and practices may be used to support sustainable transport outcomes, while balancing car-based access for people who prefer or need that method of travel.

Car parking in Hobsons Bay

Council has various roles with regards to car parking, including undertaking precinct-level planning, providing spaces on new and existing local roads, erecting and maintaining signage, issuing parking permits, responding to community feedback regarding parking issues, and enforcing parking laws across the municipality. Council also administers the Hobsons Bay Planning Scheme, which sets out parking requirements for a wide range of different land uses. Community satisfaction with parking facilities in Hobsons Bay has increased in recent years from a rating of 55 (out of 100) in 2012-13 to 69 in 2015-16.[78]

Council's most recent parking analysis focused on three activity centres (Williamstown, Altona and Newport), identifying more than 6,500 spaces.[79] These spaces alone occupy more than 90,000 square metres of land (or around 130 generously sized residential blocks). A conservative estimate would value this amount of land at around $40 million. Despite their value, almost all of these spaces provide free parking, with the exception of Nelson Place, Williamstown.

Table 5: Peak parking demand within Hobsons Bay activity and neighbourhood centres
(Source: TraffixGroup, 2009; TraffixGroup, 2010; TraffixGroup, 2012)

Activity Centre	Date/Time of observation	Parking spaces	Occupied Spaces	Occupancy rate
Williamstown	1pm, Friday 30 May 2008 8pm, Saturday 31 May 2008	2,857	1,810	63%
Altona	1pm, Friday 19 February 2010	1,591	826	52%
Newport	11am, Thursday 19 May 2011	2,115	1,197	57%

Occupancy rates ranged between 52 and 63 per cent within these activity centres (table 5), although these vary at particular times of the day, week or year. Overall, these studies found that supply was meeting demand in these locations when they were undertaken. However, recent changes (medium density developments in Pier Street, Altona; increasing patronage at Newport station) are likely to have increased demand, and other parts of the municipality also experience high parking demand such as the areas surrounding Laverton and Aircraft railway stations. Given the age and scope of these studies, future integrated transport planning should review, update and expand the local car parking evidence base.

[78] HBCC (2016h) *2015-16 Annual Report Hobsons Bay City Council*, p.79

[79] This data is drawn from the following sources: TraffixGroup (2009) *Williamstown Activity Centre Parking Study: Parking strategy and key initiatives report*, prepared for Hobsons Bay City Council; TraffixGroup (2010) *Altona Activity Centre Parking Study: Parking strategy and key initiatives report*, prepared for Hobsons Bay City Council; TraffixGroup (2012*) Newport Activity Centre Parking Study: Parking strategy and key initiatives report*, prepared for Hobsons Bay City Council.

There are a range of parking permits available in Hobsons Bay, including:

- **ticket machine permits** – available to all residents, providing free parking at paid ticket machines in Nelson Place and the Esplanade, Williamstown, although time restrictions still apply
- **residential parking permit** – available for residents who live in a street with timed parking restrictions; it provides an exemption to time restrictions within the resident's street or the next nearest street, although does not guarantee that a parking space will be available
- **visitor permit** – these operate in the same way as residential parking permits and are limited to one per household
- **disabled person's parking permit** – available to eligible residents with a physical impairment who require additional space to use a mobility aid or are unable to walk long distances; category one permits provide access to accessible parking spaces, while category two permits allow users to use any timed parking space for double the allotted time
- **other permits –** tradesperson's parking permits provide exemptions for people conducting works in residential or commercial zones, and temporary permits may be issued in special circumstances such as when someone is house sitting a property for a period of weeks

Community attitudes toward parking usually focus on supply and cost, although recent community consultation to inform Hobsons Bay 2030 did not reveal strong community views on car parking. The introduction of paid parking in nearby Yarraville (Maribyrnong City Council), however, did attract strong community opposition, particularly from traders. Consultation to inform the Williamstown parking study in 2008 also found that traders opposed additional paid parking fees and supported the introduction of a multi-level parking structure.

More recent consultation with traders (including during the Nelson Place free parking trial) revealed similar (although slightly more flexible) views. For example, some traders recognised paid parking as an asset that provided parking options for customers when surrounding free parking was at capacity. The introduction of 'Easy Park' – a smart phone application that provides an electronic payment option – has also been welcomed. The free parking trial also confirmed recurring issues with regards to parking signage, particularly the large number of signs and the confusing nature of the information presented (figure 31). Council's Nelson Place Action Plan includes several actions relating to parking signage and paid parking options to address some of these concerns. Similar signage issues have been identified in Harrington Square (Altona) and are likely to exist in other locations across the municipality.

Figure 31: Parking sign at Nelson Place, Williamstown

Approaches to car parking

Conventional approaches to car parking generally focus on increasing supply and are characterised by a preference for free parking, dedicated parking facilities, and locations, design, and management practices that aim to maximise user satisfaction and convenience. The Hobsons Bay Civic Centre provides an example. Completed in 1963, the building is surrounded by free car parking which provides a strong incentive for staff to drive to work (figure 32). Nearby public transport services and walking and cycling links provide viable alternatives, although lower service levels and increasing fares have reduced the competitiveness of public transport in recent years. The predominance of cars is reinforced by the fact that Council staff are currently able to enter into a 'salary sacrifice' arrangement for a motor vehicle, but do not have similar options with regards an annual public transport pass or electric bicycle.

Figure 32: Aerial view of Hobsons Bay Civic Centre

In recent years, alternative theories have emerged which seek to provide a more holistic understanding of the cost of free parking and the problems of simply increasing supply. In his 2011 critique of free car parking, Donald Shroup argues that the combination of free parking, increased supply, and minimum parking requirements effectively subsidises car ownership, inducing a higher level of demand for parking than if it had been more accurately priced. [80] This can lead to inefficient land use due to over allocation of spaces, and increased house prices due to more parking being provided than the market would ordinarily demand.

Renowned transport researcher Todd Litman has also argued for a 'parking management approach', which seeks to address parking issues from the perspective of reducing demand rather than increasing supply.[81] This 'new parking paradigm' is built on various methods, including applying a cost to the user, favouring high priority uses to encourage efficiency, encouraging innovation, and applying stricter enforcement. Benefits of this approach (many of which also support sustainable transport objectives) include reduced land consumption, improved walkability, mode shift away from private vehicles, additional revenue, increased equity, and more liveable communities. The

[80] Shroup, D. (2011) *The High Cost of Free Parking (2nd edition)*, Chicago, APA Planners Press.
[81] Litman, T. (2006) *Parking Management Best Practices*, Chicago, APA Planners Press; Litman, T. (2013) *Parking Management: Strategies, Evaluation and Planning*, Victoria Transport Policy Institute.

theories of Shroup and Litman provide useful alternatives to conventional supply-side approaches to car parking and should be considered in future integrated transport planning.

Challenges

Responding to community and stakeholder views on car parking is a critical challenge for integrated transport planning. Council receives regular community feedback on car parking, with 132 separate parking-related enquiries during 2016 (13 per cent of total enquiries directed to Council's Traffic and Amenity team). The most common feedback topics focused on insufficient on-street spaces, cars parked at the front of residents' properties, illegally parked cars, and overflow from train station car parks into surrounding streets. Feedback also suggests that car parking should always be provided free of charge, and that residents have the right to park on the street immediately adjacent to their property.

Any potential changes to current car parking arrangements should be supported by careful messaging, community and stakeholder consultation, and safeguards to protect vulnerable groups. For example, traders and the community may be involved in making decisions about how car parking spaces can be used for other activities (such as a pop up park) when demand is low. Similarly, exemptions may be provided to vulnerable groups (such as older people) to ensure they are not negatively affected by measures that reduce the supply or impose a cost on car parking. A community and stakeholder awareness campaign may also be undertaken to promote the benefits of alternative approaches and to help explain residents' and traders' rights and responsibilities.

Another challenge relates to commuter parking. A number of train stations in the municipality are key 'park and ride' destinations, including Laverton (65% of daily commuters drive to the station), Aircraft (64%) and Newport (45%). Moreover, it is likely that people living outside of the municipality also use these stations to access the CBD, particularly Newport (higher frequency services) and Laverton (more affordable service within Zone One). Commuter car parks at these stations are regularly filled to capacity during the week, with Council introducing parking restrictions in surrounding residential streets to manage overflow (figure 33). While parking restrictions are effective in these streets, they generally push the problem further outward to streets without restrictions. As such, a more coordinated precinct-level approach is required to respond to this issue.

Figure 33: Overflow from Laverton train station
(Source: Hobsons Bay Leader, 10 September 2014)

A further challenge for car parking in Hobsons Bay is the lack of local evidence to inform future planning and provision. Useful information is included within the parking strategies for Williamstown (2008), Altona (2010) and Newport (2012) but these are now becoming out of date and need to be updated. Additionally, there are critical gaps in the understanding of car parking usage and capacity

across the municipality, including within Altona North, Laverton and Altona Meadows. Hobsons Bay's future parking strategies should seek to incorporate the alternative approaches discussed previously and consider the full opportunity cost of land used for car parking, relative to other potential uses.

Opportunities

Council's integrated transport planning may attempt to identify opportunities to apply a parking management approach (see page 68) when responding to parking issues. As noted, increasing supply can have a range of negative effects (promoting car dependency, inefficient use of land), but it can also be costly for Council in terms of construction costs and ongoing maintenance.

The Nelson Place Action Plan takes some steps toward a parking management approach by seeking to introduce a small number of short stay (15 or 30 minutes) parking spaces strategically located throughout the precinct. Other measures that may be considered to implement this approach include:

- **pricing mechanisms**, e.g. introduction of paid parking
- **improving efficiency**, e.g. flexible parking restrictions depending on time of day, week or year
- **reducing parking supply**, e.g. removing parking spaces for alternate use
- **parking permits**, e.g. restricting use of spaces to particular users such as residents or traders

To cite one example, the Altona activity centre experiences increased parking demand on a Tuesday (due to the community market) and the foreshore experiences higher demand during the warmer months due to the popularity of the beach. The introduction of flexible parking restrictions at these times may help to promote increased availability of parking spaces, as well as encourage behaviour change toward other modes of transport. More broadly, the development of updated activity centre parking strategies (possibly underpinned by a municipal parking policy based on a parking management approach) will help to establish clear benchmarks, and promote efficient and consistent car parking planning and decisions.

Another opportunity may be to identify locations suitable to reduced parking supply to create additional pedestrian/customer zones. Changes to local road use (e.g. temporary road closures) can activate spaces, improve amenity, and support a better overall experience for pedestrians and customers. This approach recognises the high value of land within activity centres and attempts to use it more effectively to benefit traders and the local community.

Figure 34: Pop Up Park in Ballarat Street, Yarraville

The City of Maribyrnong recently used this approach to establish a 'pop up' (and subsequently

permanent) park on Ballarat Street, Yarraville (figure 34). A small number of parking spaces and section of the roadway were converted to a community space, with strong support from local traders. Future integrated transport planning may investigate options to trial a similar project (with direct and ongoing input from the community and traders) within one of Hobsons Bay's activity centres.

Another important opportunity relates to improving understanding of how local planning requirements may be used to promote active and public transport, while also providing sufficient car parking within residential and commercial developments. Examples include variations to parking requirements through the parking overlay process, and the links between higher density developments and residential parking permits.

The Hobsons Bay Planning Scheme sets out car parking requirements for residential dwellings, recreational facilities, businesses, schools, community buildings and many other uses (Clause 52.06). For example, one car space is required for each dwelling with one or two bedrooms, and two spaces are required for each dwelling with three or more bedrooms.

While these requirements are generally appropriate, local governments can respond to local car parking issues through the introduction of a parking overlay (Clause 45.09).[82] The primary function of a parking overlay is to introduce a strategic approach to car parking, rather than relying on *ad hoc* decisions which make it impossible to determine whether parking levels are in line with demand and local car ownership rates.

Parking overlays may be applied to a precinct (or even an entire municipality) and involve a substantial amount of planning, research and community consultation, before being formally adopted into the planning scheme. As such, the decision to introduce a parking overlay is not taken lightly, but they do have the potential to reduce reliance on motor vehicles and promote more sustainable transport options.

Some practical measures may include the waiving of parking requirements for office buildings located close to public transport hubs, and the reduction of parking requirements within residential developments. Some residential developments in other municipalities have sought to reduce parking (e.g. proposed Ormond railway station development) or remove it altogether (e.g. Nightingale, Brunswick), although it is unclear if that has been achieved through the application of a parking overlay. Future integrated transport planning may give consideration to the costs and benefits of implementing parking overlays.

Finally, there is an opportunity to review residential parking permit eligibility requirements for people living in higher density residential developments. There is an argument that issuing permits to these residents not only encourages increased car ownership, but also potentially limits on-street customer parking for commercial premises that are often located on the ground floor. Some

[82] Department of Planning and Community Development (2013a) *The Parking Overlay: Practice Note 57*, Melbourne.

municipalities (including neighbouring Maribyrnong) restrict the eligibility of residential parking permits in these circumstances and Hobsons Bay may consider following this in particular locations.

Other challenges and opportunities

Hobsons Bay's integrated transport planning should address a range of other challenges and opportunities to achieve closer land use and transport integration. These are discussed in more detail below in the context of precinct planning, density and funding.

Precinct planning

An ongoing challenge for land use and transport integration is to locate commercial and residential growth in appropriate locations. While state and local planning policy encourage development within activity centres, some of these (most notably Altona Gate) experience barriers to active and public transport. Advocacy activities and strategic investment may be employed to improve local transport services and infrastructure so that transit-focused development becomes more feasible.

Council also has a role to defend against 'out of centre development', i.e. residential, office or retail development in locations with limited access to public and active transport. More generally, it is critical that future commercial and residential development does not contribute to further car dependency within the municipality.

There are also related opportunities to improve access to local employment opportunities, particularly in activity centres well served by public transport. As noted, there are insufficient local white collar employment opportunities for the resident working population in Hobsons Bay. Newport (particularly the quadrant on the north-westerly side of the train station) has been identified as a potential location for a clustering of white collar businesses.[83] This would require long term planning (and local investment) to improve physical access and major barriers to east-west connectivity (e.g. pedestrian underpass, road overpass), particularly considering that Newport is not identified as an activity centre by the state government in Plan Melbourne.

Delivering higher levels of 'proximity' for residents and other users is a further opportunity. More specifically, increasing density and diversity of land use within a precinct helps to reduce the need to travel outside of the immediate area. With more activities reachable using active or public transport, this approach can reduce car dependency and promote a range of social, economic and environmental benefits.

Density

Increased density can create opportunities to attract community infrastructure and services. Larger numbers of people within an area can create enough demand to make additional infrastructure and services operationally viable. More specifically, PTV has previously advised local government that it will not support additional public transport infrastructure and services in areas zoned for low

[83] Hale Consulting (2016), p.64.

residential growth.[84] As such, there is a clear opportunity for local integrated transport planning to appropriately encourage density to attract services and complement other advocacy activities in relation to public transport.

Engaging the community regarding the benefits of increased density is a further opportunity. Historically, the community has concerns about density as suggested by the recent Hobsons Bay 2030 consultation, which revealed strong concerns with 'overdevelopment'. Integrated transport planning can help to state the case for appropriately located density, including the transport, social, environmental and economic benefits, as well as the vibrancy and diversity it brings to communities. It can also help to identify appropriate locations where existing and planned transport infrastructure may support future residential, commercial or industrial development.

Responding to pressure on existing infrastructure and services resulting from increased density is a challenge. Council currently undertakes extensive and detailed planning to understand and respond to these challenges across a range of sites, including Hobsons Bay's SRAs and activity centres. This planning extends to the expected transport outcomes which are dependent on a range of factors, including access to public transport services, existing road infrastructure, and co-location with business, retail and other services.

Another challenge is the presence of population density controls within large sections of Hobsons Bay's industrial zoned land. These controls contribute to large amounts of low density industrial development (e.g. warehousing, freight) and limit Council's capacity to direct higher density industrial development toward areas with better transport links. Future integrated transport planning may seek to better understand the impact of population density controls and identify opportunities to increase industrial density in safe and appropriate locations.

Funding

Value capture is a form of infrastructure funding that aligns the cost of infrastructure (and service improvements) more directly with those that benefit from government investment or planning decisions.[85] There are a wide range of practical applications, including direct user charges (e.g. tolls), transport operator charges (e.g. within service contracts), and several new mechanisms such as enhanced developer contributions, land betterment levies, major beneficiary contributions, and the expanded use of property development, asset sales or leases. Value capture is not a new concept and has been previously applied to Victorian transport infrastructure projects such as the City Loop and Southern Cross Station. It has also been applied by local governments to share costs with ratepayers for local transport infrastructure such as footpaths and road upgrades.

This approach is currently receiving growing support from the Australian and Victorian Governments. For example, Infrastructure Victoria has recently undertaken modelling of various value capture mechanisms that may be applied to fund a future Metro 2 rail project from Clifton Hill

[84] Public Transport Victoria (2013) *Reforming Planning Zones for Victoria: Integration with Public Transport Discussion Paper*, Melbourne.
[85] Infrastructure Victoria (2016b) *Value capture – options, challenges and opportunities for Victoria*, Melbourne, p.14.

to Newport, finding that it would capture 32 per cent of project costs and 39 per cent of estimated value uplift.[86] At the local level, recent analysis has estimated that the collective value of properties in Hobsons Bay would increase by $853 million if rail service frequency were doubled.[87] This research found that improvements to train services would allow more households to reach the CBD within one hour, thereby producing a value uplift of between five and 15 per cent for these properties.

A key challenge arising from value capture is to ensure that local residents and businesses are treated fairly in any future arrangements, including any levies or contributions sought and flow-on effects such as increased housing costs. This translates primarily to an advocacy role for Council, but may also extend to planning and working with local communities to respond to any inequities that may arise.

Value capture also presents an opportunity to be applied at a local level to achieve improvements to local transport services or infrastructure. While Council's contribution to the maintenance, renewal and construction of transport infrastructure is generally provided through its capital works program, there may be opportunities to investigate value capture funding models for more targeted transport projects, particularly where they are directly linked to a private development. These may be practically applied through Council's transport infrastructure policies (e.g. Footpath Construction and Maintenance Policy) which provide guidance on funding responsibilities.

Council's funding contribution to local transport infrastructure may also be complemented through direct financial contributions from developers. The Hobsons Bay Planning Scheme includes several provisions in relation to developer contributions, including responsibilities to establish a 'continuous network of bicycle paths and pedestrian facilities in new residential subdivisions' (21.09), as well as meeting 'the cost of new road and transport infrastructure' (21.10). In some cases, a Development Contribution Plan (DCP) is incorporated into the planning scheme before a planning permit is granted. For example, the DCP for Precinct 20 requires the developer to contribute to the cost of roads ($9,680, 1.9% of total cost) and the public realm ($131,120, 11.9% of total cost) over the period from 2015 to 2025.

It is important to note, however, that DCP contributions cover just a small proportion of infrastructure project costs, and Council must commit to additional funding through its capital work program or seek additional state or federal government funding, as well as meeting ongoing maintenance costs. Additionally, if projects partially funded through a DCP are not completed (for whatever reason) the contribution is refunded to developers. As such, DCPs should be carefully negotiated as they create financial obligations on Council. Nonetheless, they provide an opportunity for future funding and should be considered in future integrated transport planning, particularly for larger residential developments.

[86] ibid., pp.34-37.
[87] See Hale Consulting (2016), p.49-51 for a detailed explanation of methodology and assumptions.

Summary: considerations for integrated transport planning

The following is a summary of the key points from this chapter that may be considered in Hobsons Bay's integrated transport planning.

Land use and transport integration

- Land use and transport integration aims to achieve transport and mobility objectives (e.g. reduced car dependency, increased use of sustainable transport options) using land use planning tools (e.g. land zoning, parking provisions).
- Council is one of many stakeholders which influence the development and implementation of LUTI, alongside state government agencies, transport operators, service providers, property developers, community groups, and the broader community.
- Transit oriented development is a specific form of land use and transport integration which seeks to establish a cluster of mixed land uses close to public transport services.

Legislative and policy context

- After a long absence, the Australian Government has recently re-entered the urban policy landscape with the release of Our Cities, Our Future (2011) and the Smart Cities Plan (2016), which aims to improve general local employment opportunities and improve transport connections.
- Victoria's State Planning Policy Framework reinforces the state's planning objectives (as set out in the *Planning and Environment Act 1987*) and provides support for land use and transport integration through policies and objectives focussed on sustainable transport, cycling, public transport, management of the road system, car parking, and freight links.
- Plan Melbourne (Victoria's metropolitan planning strategy) provides further policy support for land use and transport integration, including through the concept of the '20 minute neighbourhood'; it also identifies three activity centres within Hobsons Bay (Altona Gate, Altona Beach, Williamstown), although Williamstown faces some constraints given existing density levels, smaller lot sizes, and heritage considerations.
- Hobsons Bay's Local Planning Policy Framework provides strong direction and support for closer land use and transport integration, while also serving to preserve neighbourhood character from the pressures of urban consolidation and inappropriate development.
- The new and updated Housing Strategy, Activity Centre Strategy and Neighbourhood Character Study will all support closer land use and transport integration, and provide direction on the location of increased density in the municipality. The Municipal Strategic Statement will subsequently be updated to align with these policies.

Car parking

- Hobsons Bay has a strong supply of (almost exclusively free) car parking which appeared to be meeting demand when studies were last undertaken. Given their age, these studies need to be updated to help determine future direction for car parking in the municipality.

- Future integrated transport planning may consider alternate approaches to car parking to make more efficient use of car parking spaces, promote more sustainable transport options, and contribute to more vibrant, community-focussed spaces and places.
- Car parking challenges include responding to community and stakeholder feedback, developing a more coordinated response to commuter parking, and updating the local evidence base.
- Key opportunities include updating activity centre parking strategies (underpinned by a more progressive parking management approach), identifying locations for alternate uses of car parking spaces, investigating the costs and benefits of implementing parking overlays, and reviewing the eligibility of residential parking permits for higher density developments.

Other challenges and opportunities

- Appropriately locating commercial and residential development and defending against 'out of centre' development are key precinct planning challenges, while there are related opportunities to support employment-generating development (particularly white collar businesses) around local public transport hubs.
- Increasing density creates opportunities to attract additional transport infrastructure and services, and engage the community and stakeholders on its potential benefits; density also presents challenges in terms of increased pressure on existing infrastructure and services.
- Increasing emphasis on 'value capture' funding models creates a challenge to ensure that local residents and businesses are not disadvantaged by future arrangements.
- Developer contributions provide an opportunity to attract funding for local transport infrastructure, although agreements must be carefully negotiated as they can create ongoing financial obligations for Council.

06 Transport in Hobsons Bay

Hobsons Bay residents and businesses use a range of transport options, each with specific local challenges and opportunities for future integrated transport planning.

This chapter describes:

- Hobsons Bay's walking, cycling, public transport, freight, private passenger vehicles, roads and other transport options, including:
    - their role within an integrated transport system
    - the role of Council
    - their specific policy and legislative context
    - local infrastructure, services and usage
    - challenges and opportunities for integrated transport planning

As a well-established middle suburban municipality, Hobsons Bay has a range of transport options available to residents and businesses. In some cases, these transport options work well together, providing relatively seamless connections. However, there are also some gaps in the public transport, cycling and walking networks, as well as 'conflicts' between some transport users, including on shared paths and across the local and arterial road network.

An integrated transport system acknowledges the importance of all transport options and recognises that residents and businesses will use some (or all) of these at different times and locations. As noted in chapter one, an integrated transport system is based on a 'network approach' which aims to establish closer integration between all transport modes, as well as encouraging increased use of sustainable transport options that have a range of social, economic and environmental benefits. Hobsons Bay has a range of interconnected and overlapping networks for cyclists, public transport, freight vehicles and private passenger vehicles (figure 35).

This chapter provides a detailed examination of transport in Hobsons Bay, paying particular attention to the challenges and opportunities for each mode within future integrated transport planning.

Walking

Walking is an important mode of transport within an integrated transport system. For the purposes of this background paper, it includes all forms of travel undertaken by pedestrians, including people on foot, pushing a bicycle or on wheeled devices such as skateboards, rollerblades, wheelchairs or motorised scooters.[88]

[88] See VicRoads, *Pedestrians*, https://www.vicroads.vic.gov.au/safety-and-road-rules/road-rules/a-to-z-of-road-rules/pedestrians, accessed 28/11/16.

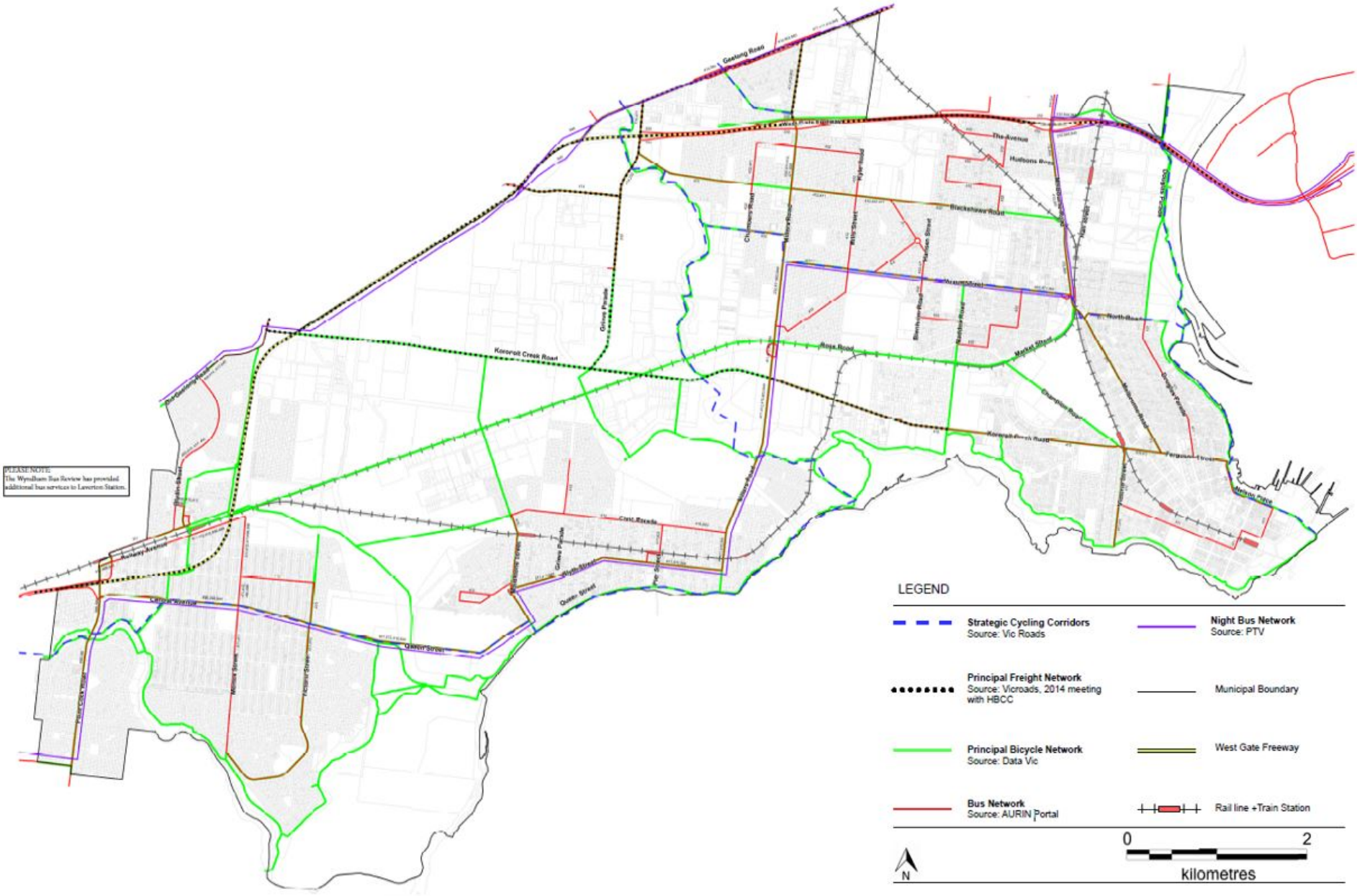

Figure 35: Hobsons Bay transport networks

Walking is ideal for short trips, does not produce emissions, and provides a range of physical and mental health benefits. Importantly, walking is free and inherently equitable, assuming a reasonable level of physical health, accessibility, proximity, availability, and connectivity of infrastructure. It is also a linking mode, as everyone is a pedestrian at some point in their journey, regardless of how else they travel.

Council's main role with regards to walking is the planning, provision, renewal and maintenance of walking infrastructure, including footpaths, street furniture, lighting, and shared trails. It may also play a supporting role to promote behaviour change and to assist residents to take up walking in greater numbers, particularly to key destinations such as schools and shopping.

Policy context

In 2013, the previous Australian Government released 'Walking, Riding and Access to Public Transport: Supporting Active Travel in Australian Communities Ministerial Statement'. This statement outlined a national approach for the Australian Government to work with other levels of government, the community and business to further support and encourage active travel.[89]

The Victorian Government does not have a current overarching walking policy, although it has been recently working with a number of Councils to develop guidelines for the development of Principal Pedestrian Networks (PPNs).[90] The PPNs are created through the process of mapping and planning for a higher quality walking environment on key routes to local activity centres such as shops, schools and transport hubs.

The Victorian Government's Active Transport Victoria (ATV) unit supports walking infrastructure planning and investment through the $100 million Safer Cyclists and Pedestrians Fund. VicRoads also plays an important role with regards to pedestrian safety, road rules, and footpath design and specifications. Additionally, VicHealth administers the Walking to School grant program, which provides funding of up to $10,000 for local governments to engage local primary schools and promote increased walking to school. Finally, Victoria Walks is the state's main walking health promotion organisation, undertaking research, strategic planning, demonstration projects and advocacy to fulfil its mission of more people walking every day.

Like many other local government areas, Hobsons Bay does not have a walking strategy. Indeed, dedicated walking strategies are quite rare in Victoria, with most local governments choosing to combine walking and cycling in their strategic planning, e.g. Moonee Valley Walking and Cycling Strategy 2012-22. However, there are some instances of dedicated walking plans usually supported by a sustainable transport officer (or team). For example, the City of Port Philip has a dedicated and comprehensive plan that focuses on various elements of walking, including network planning, way finding, place making, advocacy, coordination, promotion, and behaviour change.[91]

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[89] DIRD, *Active Transport – Walking and Cycling*, https://infrastructure.gov.au/infrastructure/pab/active_transport/index.aspx, accessed 28/11/16.
[90] DEDJTR, *Principal Pedestrian Networks*, http://economicdevelopment.vic.gov.au/transport/cycling-and-walking/walking/principal-pedestrian-networks, accessed 28/11/16.
[91] City of Port Phillip, *Walking*, http://www.portphillip.vic.gov.au/walks_port_phillip.htm, accessed 29/11/16.

Walking in Hobsons Bay

Council manages approximately 728 kilometers of concrete and asphalt footpaths located on the road reserve and also in parks and open space, with an estimated replacement value of $75.3 million. However, 50 kilometres of streets in Hobsons Bay are without a footpath (of which 17 kilometres are located in residential areas) and a further 120 kilometres have footpaths on just one side of the street. In October 2015, Council established a footpath program to prioritise works in areas without footpath access (see page 82).

The municipality also has over 50 kilometres of off-road shared trails, and most of Hobsons Bay's arterial roads are served by either a shared trail or footpath. Additionally, there is a network of Recharge Points across the municipality (located in libraries, community centres, cafes and other businesses) that provide a power point for people to recharge their electric wheelchair or mobility scooter battery.[92]

Council responds to community feedback on the condition of local paths using various methods such as the popular Snap Send Solve app. In 2015-16, it spent $670,000 on footpath upgrades and renewals, and community satisfaction on footpath maintenance and repairs has increased in recent years from a rating of 53 (out of 100) in 2012-13 to 68 in 2015-16.[93]

Hobsons Bay's walking mode share for the journey to work (figure 36) is two per cent (around 700 people), slightly higher than the western region (1.7%) but much lower than metropolitan Melbourne (3.6%).[94] Rates have remained steady over the past twenty years, and slightly more women than men walk to work in Hobsons Bay, with a ratio of approximately 1.15 to 1.

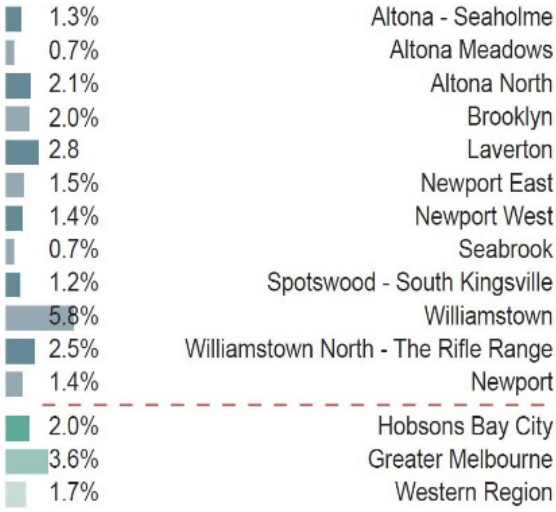

Figure 36: Walking to work mode share
(Source: Hale Consulting, 2016)

Recent data provides further insight into local walking patterns for other trip purposes. The 2014 Victorian Population Health Survey collected data on the extent to which respondents engaged in 'walking for transport' for a period of longer than 10 minutes. It found that just over 44 per cent of Hobsons Bay respondents had walked at least once in the preceding week, with most of this group having walked multiple times.[95] Overall, these results are similar to the rates for metropolitan Melbourne and the northwest metropolitan region. They suggest that walking is a much more

[92] HBCC, RECHARGE Scheme, http://www.hobsonsbay.vic.gov.au/Community/People_with_disability/RECHARGE_Scheme, accessed 4/1/17.
[93] HBCC (2016h), p.77-79.
[94] All journey to work data in this report is sourced from the 2011 Census of Population and Housing. The following responses have been excluded when calculating percentages: 'other', 'worked at home', 'did not go to work', and 'not stated'.
[95] DHHS (2016), p.365.

popular, viable and convenient option for non-work trips such as shopping, education and recreation.

Victorian Government data provides further insight into walking patterns in Hobsons Bay. The Victorian Integrated Survey of Travel and Activity (VISTA) collects personal travel information from randomly selected households.[96] The most recently available information at LGA level (combined data from 2007-08 and 2009-10) show that walking is the most popular mode of travel in Hobsons Bay for trips under one kilometre (53.7% compared to 44% by car). [97]

The balance shifts substantially for trips of one to two kilometres, with just 12 per cent completed by walking and over 80 per cent by car. This shift is reflected in trips to shopping, with just over 14 per cent completed by walking and nearly 80 per cent by car. While it is increasingly unlikely for people to walk longer distances, supporting increased walking for this intermediate distance (1-1.9 kilometres) and for shopping trips may be a priority for future integrated transport planning.

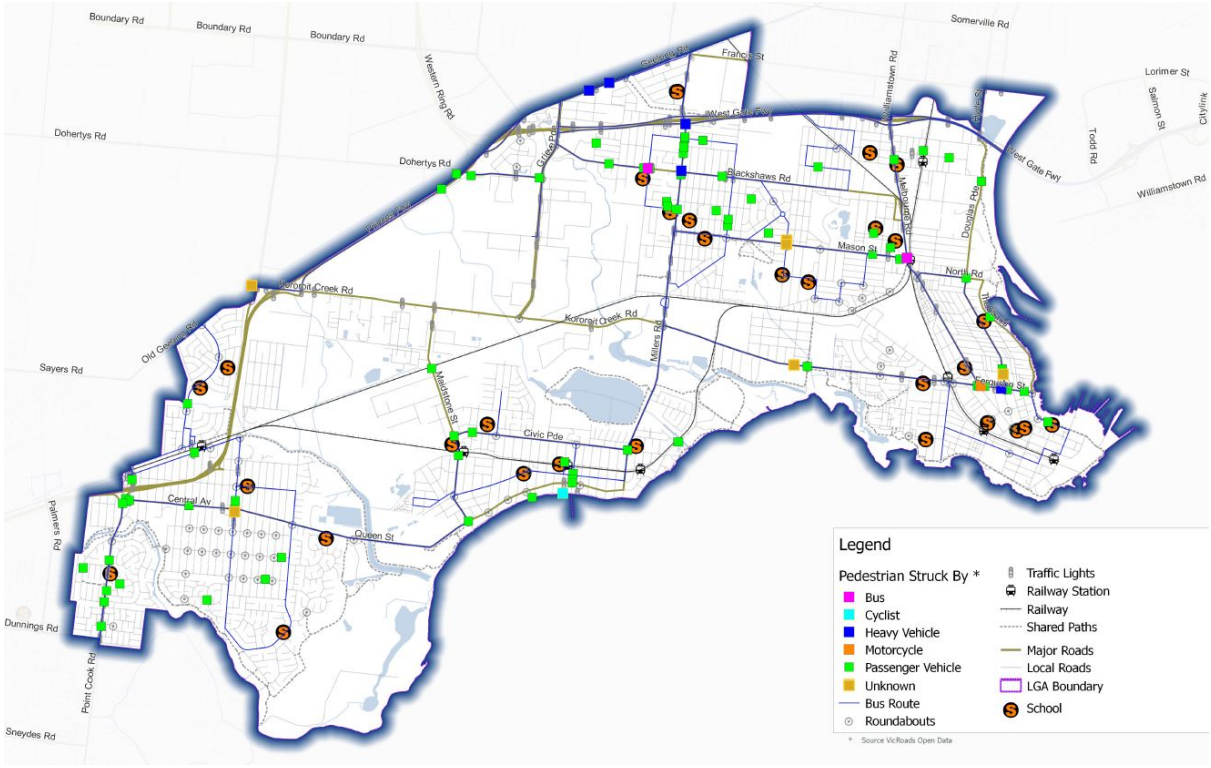

Figure 37: Pedestrian crash locations in Hobsons Bay (2010-15)

VISTA data also showed that around one in six primary school trips were completed by walking (16.5%), compared to more than 70 per cent by car. The rate of walking to school declined for secondary school trips (8.7%) but so did the proportion by car (39.8%), with public transport largely filling this gap, rising to almost half (48.2%) of secondary school trips.

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[96] DEDJTR, *Victorian Integrated Survey of Travel and Activity*, http://economicdevelopment.vic.gov.au/transport/research-and-data/vista, accessed 21/11/16.

[97] Due to relatively small sample sizes, some of the LGA level data collected through the VISTA have high relative standards errors (RSE). As such, this data provides an impression or indication of local travel behaviour, rather than a definitive description. The collection of additional local data would help to clarify these findings.

An analysis of pedestrian crashes in Hobsons Bay shows a majority of accidents involve a pedestrian being struck by a passenger vehicle (figure 37). While there is a relatively even spread across the municipality, some locations have experienced a higher number of incidents. These areas are generally activity centres, which attract higher levels of car and pedestrian traffic. Examples include Mason Street, Newport; Millers Road, Altona North; Pier Street, Altona; and Ferguson Street, Williamstown North. Point Cook Road, Seabrook (including the roundabout at Central Avenue) has also experienced a relatively large number accidents, possibly due to lack of pedestrian infrastructure and increasing road congestion.

There is also a concentration of accidents involving heavy vehicles in the north of the municipality on Millers Road, Altona North and Geelong Road, Brooklyn. Finally, very few incidents were reported involving cyclists and public transport, although unfortunately a pedestrian died after being hit by a bus on Melbourne Road, Williamstown North in early 2016.[98]

Challenges

Hobsons Bay faces challenges to encourage increased walking, including physical barriers and declining levels of walking to school.

Physical barriers

There are a number of physical barriers to walking in Hobsons Bay. Several were raised during community consultation, including busy roads and train lines, lack of interesting landmarks, connectivity to points of interest, lack of way finding signage, and wide open spaces that can reduce perceptions of safety. Additionally, residential subdivision developments in some neighbourhoods (such as Altona Meadows and Seabrook) are not well designed for pedestrians with dead end streets and no footpaths provided.

Council's footpath program is responding to some of these challenges by completing the outstanding footpaths in residential areas as a priority within three years from 2016-17 (at a cost of $550,000 per year) and the relevant non-residential areas in the following seven years (at a cost of approximately $500,000 a year). The priority for new footpaths is to improve connectivity to and from activity centres and destination attractions such as schools and childcare centres. Additionally, recent footpath defect hazard inspections have identified $7.5 million of backlog maintenance repair works across the municipality, with Altona, Altona Meadows, Altona North and Williamstown having the highest number of defects.

Improving conditions for walking also includes the provision of appropriate street furniture, shade, street trees, lighting and clear lines of sight. This is particularly important for older people and people with a disability, who may rely heavily on walking as their main mode of transport, and can be particularly susceptible to extreme weather events (such as heat waves) and related 'heat island' effects.

[98] Ham, L. & Gough, D. (2016) 'Pedestrian killed in Williamstown collision', *The Age*, 7 May 2016.

Walking to school

A more specific challenge for integrated transport planning is to support increased levels of walking to school. As noted, a clear majority of primary school students are driven to school in Hobsons Bay. An international study has found that parental concern over road traffic to be the dominant factor restricting children's independent mobility, ranking Australia 13th out of 16 studied nations.[99] Urban design also plays a critical role, with higher levels of activity linked to well-developed recreational and transport infrastructure, and lower levels associated with the number of roads to cross, traffic speed and density and local conditions such as crime and deprivation of the area.[100]

Recent local community consultation highlighted similar barriers, including safety concerns, poor lighting and signage, limited accessibility and connectivity, long distances, unpredictable weather and parents' busy work schedule (see page 47). Community consultation also suggested a range of measures to promote more walking to school such as education programs, reduced speed limits and school-initiated reward schemes.

Additionally, Council's Traffic and Amenity team receives regular community enquiries in relation to pedestrian infrastructure such as pedestrian crossings, school crossings and traffic islands (a total of 57 enquiries in 2016). Council may consider working with schools and other stakeholders to develop walking to school action plans (informed by infrastructure improvements and behaviour change initiatives), as well as seeking Victorian Government funding through VicHealth's Walking to School grants program.

Opportunities

Integrated transport planning in Hobsons Bay may examine various opportunities to improve the walkability of the municipality, including through strategic land use planning and localised pedestrian access planning. This helps to lay the foundations for behaviour change which can emerge naturally from improved walking conditions, as well as through structured behaviour change programs.

Strategic land use planning

Walkability refers to the extent to which a location facilitates walking and is influenced by many factors, including walking infrastructure, vehicle traffic, land uses, safety and security, connectivity, and access to destinations.[101] There are numerous benefits of walkable neighbourhoods including residents' improved physical and mental health, and economic and environmental benefits associated with lower reliance on private motorised vehicles.

A walkable catchment covers the area around a service or facility that is generally accepted as a reasonable distance to walk: 800 metres for a train station (10 minutes) and 400 metres (5 minutes) for an activity centre. In 2015, just over one-third (34%) of Hobsons Bay dwellings were located

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[99] Shaw et al (2015) *Children's Independent Mobility: An International Comparison and Recommendations for Action,* London, Policy Studies institute.

[100] Davison, K.K. and Lawson, C.T. (2006) 'Do attributes in the physical environment influence children's physical activity? A review of the literature', *International Journal of Behavioural Nutrition and Physical Activity,* Vol. 3.

[101] GAMUT (2016), p.114

within the activity centre catchment and further 2.8 per cent were located within an activity centre. However, of the new dwellings constructed between 2004 and 2014, just 26.5 per cent were located within an activity centre walking catchment (figure 38). As such, walkability across the municipality has actually declined in the past decade, a trend that should be addressed through future integrated transport planning in conjunction with Council's key strategic planning policy frameworks such as the Housing Strategy and Activity Centre Strategy.

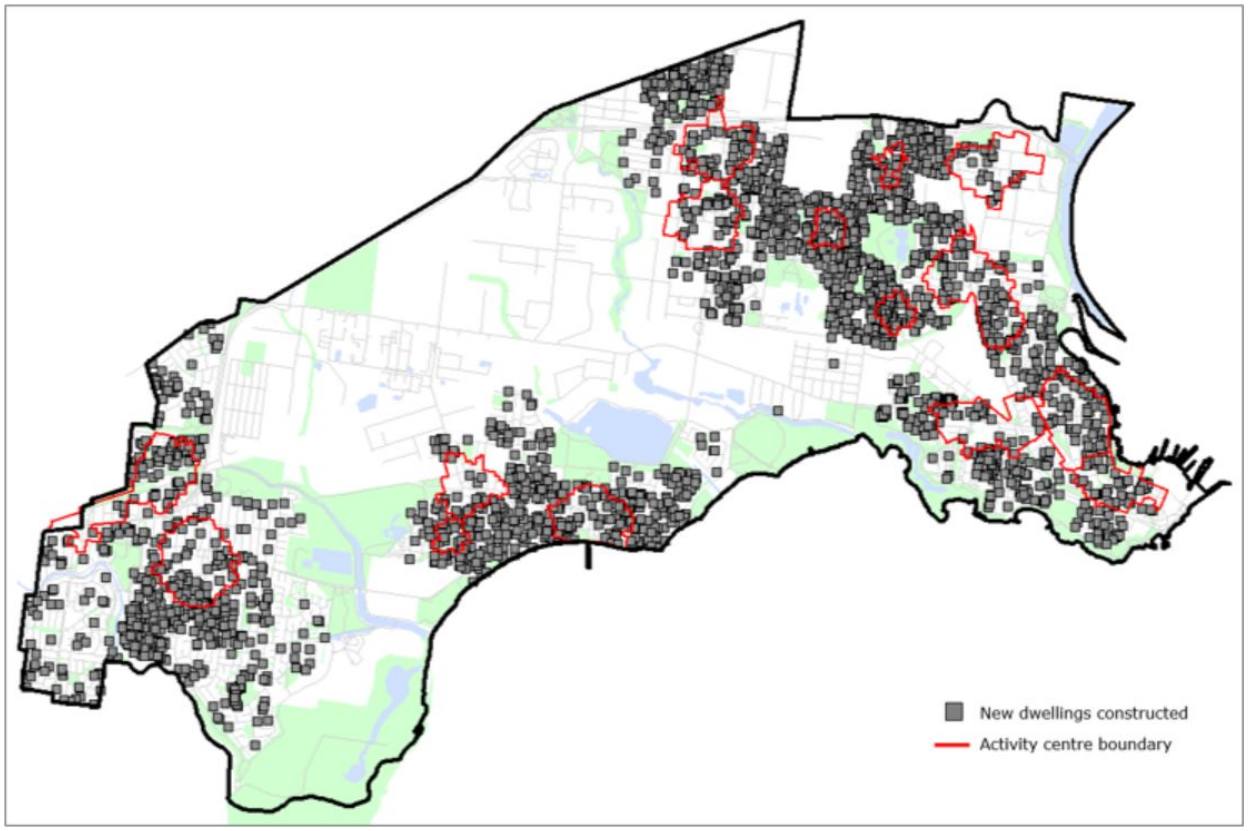

Figure 38: Location of new dwellings constructed in Hobsons Bay (2004-14)
(Source: HBCC, 2016a)

Local pedestrian access planning

Local pedestrian access planning provides a further opportunity to improve walkability. This may be achieved in various ways, including through connected walking routes, removal of obstructions and barriers, introduction of vegetation that provides shade and a barrier to motor vehicle traffic, accessible walking surfaces, improved way finding signage, and measures that increase perceived and actual safety. Council's new footpath implementation program (focused on Altona Meadows and Seabrook) is addressing some of these issues.

This approach may be employed to address issues identified within specific neighbourhoods, including:

- **Williamstown** – create clearer pedestrian routes with better way finding signage to overcome confusing and angular street layout
- **Newport** – address cross-corridor pedestrian and cycling access barriers caused by the rail line and Melbourne Road overpass

- **Altona Gate** – create safer crossing points on Millers Road to improve access to schools, community facilities and shops including the removal of the old underpass opposite Altona Gate shopping centre.

This approach has also been used in other municipalities to improve walkability. For example, the Camberwell Junction Principal Pedestrian Network Demonstration project recently delivered pedestrian infrastructure improvements and a behaviour change campaign that increased walking participation and reduced level car use.[102] The project was delivered by Boroondara City Council in partnership with the Department of Transport Planning and Local Infrastructure (DTPLI) and the Australian Government's Liveable Cities program.

The project was based on considerable research (including geographic information system (GIS) modelling, pedestrian counts, surveys and site observations) to identify two key walking corridors. Infrastructure initiatives were also guided by research that demonstrated increased walking participation, including the introduction of wider paths, tree planting and lighting (figure 39). The impact of the subsequent 'Try Walking' behaviour change program were initially modest, with improvements made through a greater focus on the health benefits of walking and the introduction of a new mobile phone application.

Figure 39: Camberwell Junction Principal Pedestrian Network Demonstration Project
(Source: Boroondara City Council)

Cycling

Cycling meets a range of needs within an integrated transport system. It is a 'door to door' commuter mode for people travelling short to medium distances to employment, education, shopping and other destinations. Like walking, cycling is also a linking mode (particularly to train services), as well as an increasingly popular recreational activity for people of all ages.

Council's main role is the development, renewal and maintenance of cycling infrastructure, including shared trails and local on-road bike lanes. Council also has complementary roles to plan for growing

[102] Boroondara City Council, *Award winning walking at Camberwell Junction*, www.boroondara.vic.gov.au/your_council/transport-and-parking/walking-at-camberwell-junction, accessed 30/11/16.

use within an integrated transport system, advocate for improved arterial road bike lanes, and support the community to cycle more safely and in greater numbers.

Policy context

Australia does not have a formal national coordinating body for active transport. The Australian Bicycle Council (ABC) meets this need to some extent and is comprised of representatives from Austroads, Australian Government departments, state transport agencies, ALGA, the bicycle industry and bicycle user groups.[103]

Released in 2010, the National Cycling Strategy 2011-16 has a vision to double the number of people cycling by 2016. The strategy recognises the individual and community benefits of cycling and outlines a coordinating framework to identify responsibilities for all levels of government, community and industry stakeholders. The ABC oversees and coordinates the implementation of the strategy, with implementation reports published each year to outline progress and key achievements.

Cycling into the Future 2013-23 is the Victorian Government's cycling strategy. It takes a holistic approach in considering the needs of all cyclists, as well as the range of infrastructure, attitudinal and safety barriers that can prevent the growth of cycling. Notably, however, no dedicated funding was allocated to the implementation of the strategy, resulting in potential funding gaps and greater expectation that local government may meet infrastructure costs.

Active Transport Victoria will work with a range of stakeholders (including local government, VicRoads and the Traffic Accident Commission (TAC)) to coordinate infrastructure planning and prioritise investment through the Safer Cyclists and Pedestrians Fund. VicRoads also plays a significant role with regards to cycling infrastructure planning, road law and regulation, bicycle safety, and information and advisory services.

Through VicRoads, the Victorian Government has developed a series of cycling strategic plans, which guide the planning, prioritisation and implementation of cycling facilities, including:

- **Principal Bicycle Network** - a network of proposed and existing bicycle routes that provide access to major destinations in the Melbourne metropolitan area (figure 35)
- **Bicycle Priority Routes** - subsets of the Principal Bicycle Network which have been identified as providing priority access to key destinations
- **Strategic Cycling Corridors** – further subsets of the Principal Bicycle Network which have been identified to improve cycling to and around national employment clusters and major activity centres (figure 35)
- **Metropolitan Trail Network** – a network or recreational and walking routes comprised mainly of off-road shared trails with short linking on-road sections

Bicycle Network Victoria (BNV) is a member-based organisation that aims to get more people cycling more often. It advocates on behalf of its members to all levels of government across a range of

[103] Australian Bicycle Council, *About Us*, http://www.bicyclecouncil.com.au/about/us, accessed 23/11/16.

agencies and authorities to improve cycling infrastructure, programs and services. It also coordinates events (e.g. Around the Bay), programs (e.g. Ride2School, Ride2Work), data collection (e.g. rider counts) and guidance material (e.g. good design guides). Its website also includes detailed information on cycling across many Victorian local government areas, including Hobsons Bay.[104]

Released in 2015, the Western Metropolitan Regional Trails Strategic Plan seeks to improve the quality and usage of regional trails over the next decade. Six local governments (Brimbank, Hobsons Bay, Maribyrnong, Melton, Moonee Valley and Wyndham) contributed to the plan's development, with funding support from the Victorian Government. The plan identifies 19 existing and proposed trails across the region (figure 40), including five in Hobsons Bay. Ultimately, it aims to complete a number of 'missing links' to create an integrated network that maximises connectivity between all municipalities.

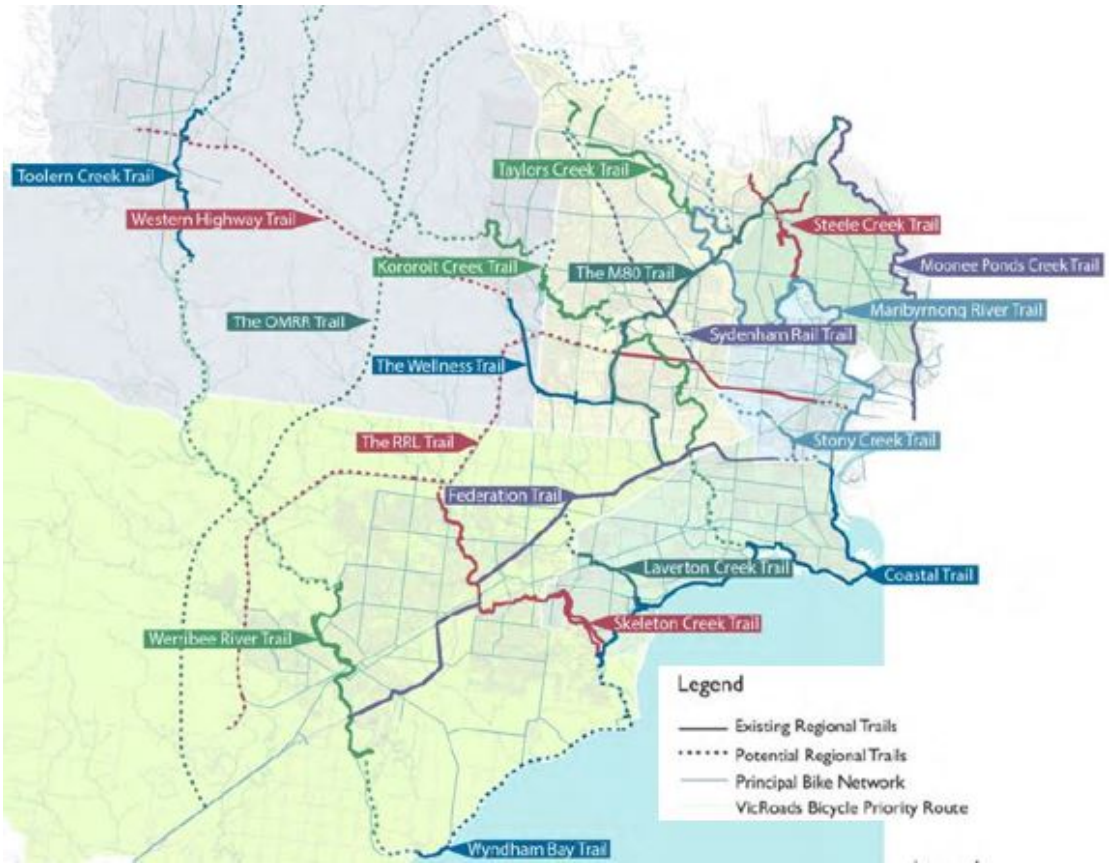

Figure 40: Existing and proposed western region trails
(Source: Western Metropolitan Region Trails Strategic Plan)

Finally, the Hobsons Bay Strategic Bicycle Plan 2013-17 aims to continue building a highly connected network of on-road and off-road bicycle routes, as well as a range of education, promotion and enforcement initiatives.[105] It reviewed Council's previous Strategic Bicycle Plan 2003 to identify a

[104] Bicycle Network Victoria (2016) *City of Hobsons Bay*, https://www.bicyclenetwork.com.au/general/policy-and-campaigns/2457, accessed 24/11/16.
[105] A draft version of the Plan was endorsed by Council for community consultation on 25 June 2013, although the subsequent report and recommendations were not adopted by Council. Nonetheless, this plan has played an important operational role in guiding cycling infrastructure works over the past four years.

number of key issues, including gaps in the existing network, declining levels of state government funding, lack of signage in some locations, increasing volume and types of cyclists (e.g. commuters, exercise, recreational) and increased risk of conflict between different users, particularly on shared trails.

The plan identified a number of high priority projects such as upgrading the Maddox Road/J.T. Gray Reserve section of the Coastal Trail, completing sections of the Laverton Creek and Skeleton Creek Trails, and completion of new on-road bicycle lanes on Blyth Street (Altona), Hall Street (Spotswood) and North Road (Newport). Future integrated planning may undertake a more detailed review of the plan to determine its future status and to what extent it may need to be updated.

Cycling in Hobsons Bay

Hobsons Bay's shared trail network caters to recreational, exercise and some commuter cyclists, as well as many different types of pedestrians such as dog walkers, parents with prams, walking groups, and joggers. Hobsons Bay has over 50 kilometres of off-road shared trails, including the Skeleton Creek Trail (6.5kms), Laverton Creek Trail (6.2kms), Kororoit Creek Trail (7.6kms), Cherry Lake Trail (3.5kms) and Coastal Trail (23kms).

The Coastal Trail also provides access to the Westgate Punt ferry service, which departs from Spotswood Jetty and links to the Yarra and Bay trails on the eastern bank of the Yarra River in Port Melbourne. Hobsons Bay also has around 30 kilometres of on-road bike lanes, both on local and arterial roads. In 2015-16 Council spent $690,000 on shared trail development and community satisfaction on Hobsons Bay's bike paths is quite high, registering 79 (out of 100) in 2015-16.[106]

Hobsons Bay's cycling mode share for the journey to work (figure 41) is 1.6 per cent (just over 500 people), in line with Metropolitan Melbourne (1.6%) and higher than the western region (1.1%). There is also strong gender bias within Hobsons Bay's cycling to work rates. The gender ratio equates to 4.6 to 1 (male to female), compared to much more even results in other municipalities such as Moreland (1.6 to 1) and Darebin (2 to 1). It is likely that safety concerns (particularly on Hobsons Bay arterial roads) reduce the appeal of commuter cycling for some females. More generally, overall mode share of just 1.6 per cent suggests other factors that may be limiting usage, including gaps in existing routes, physical barriers (busy roads, train lines), time constraints, lack of direct connections, and limited awareness of how to make the change to cycling to work. Additionally, research from the United States has found that better cycling infrastructure leads to higher cycling rates, and that various work-related

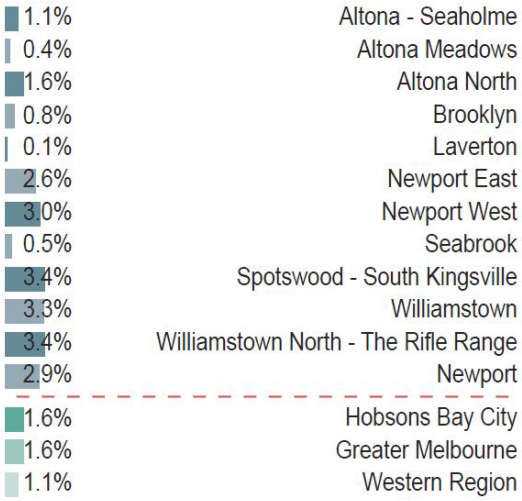

Figure 41: Cycling to work mode share
(Source: Hale Consulting, 2016)

[106] HBCC (2016h), p.77-9.

factors can influence the decision to ride to work, including the availability of bicycle parking, cyclist shower facilities and free car parking.[107]

Recent data provides further insight into local cycling patterns for other trip purposes. The 2014 Victorian Population Health Survey collected data on the extent to which respondents engaged in 'cycling for transport' for a period of longer than 10 minutes. It found that just under 15 per cent of Hobsons Bay respondents had cycled at least once in the preceding week, considerably higher than the rate for metropolitan Melbourne (6.5%) and the northwest metropolitan region (8.5%).[108]

Additionally, combined VISTA data from 2007-08 and 2009-10 showed that cycling was used for just 3.3 per cent of short trips (up to 5 kilometres) and 1.7 per cent of shopping trips. Cycling usage was also quite low to primary (4.9%) and secondary (3.2%) school, with cars (73.2%) and public transport (48.2%) most popular for primary and secondary school trips respectively. There were no recorded cycling trips to tertiary education in Hobsons Bay, due primarily to the lack of local tertiary educational facilities. By way of comparison, 3.6 per cent of metropolitan Melbourne tertiary trips were completed by cycling.

Council has participated in some data collection activities on its shared trails in recent years, although these are limited and subsequently do not provide comprehensive usage data. Council does not collect consistent cycle counts and has engaged BNV to undertake site specific counts at locations known to be popular with cyclists. For example, Super Tuesday cycle counts took place on Tuesday mornings (7-9am) in March 2010 (583 cyclists), 2011 (474) and 2012 (554) across five locations in Newport, Williamstown, Altona (x2) and Altona Meadows.

Table 6: Hobsons Bay Super Sunday Count (2012, 2014 and 2015)
(Source: Bicycle Network Victoria)

Location	11 Nov 2012 9am to 1pm		9 Nov 2014 9am to 1pm		8 Nov 2015 9am to 1pm	
	Bikes	Peds	Bikes	Peds	Bikes	Peds
The Punt, Newport	299	119	256	85	370	132
Ferguson Street & The Strand, Williamstown	283	778	535	679	864	2,970
Millers Road, Altona	404	353	404	343	554	549
Laverton Creek Trail, Altona	223	155	262	214	356	206
Skeleton Creek Trail, Altona Meadows	225	113	232	123	327	155

The Super Sunday Count records registered BNV member pedestrians and cyclists. It was conducted on Sundays (9am-1pm) in November 2012, 2014 and 2015 across five locations in Newport,

[107] Buehler, R. (2012) 'Determinants of bicycle commuting in the Washington, DC region: The role of bicycle parking, cyclist showers, and free car parking at work', *Transportation Research*, Vol. 17, pp.525-531.
[108] DHHS (2016), p.348. Please note that the results or Hobsons Bay have relative standard error (RSE) ratings of between 25 and 50 per cent and, therefore, should be interpreted with caution.

Williamstown, Altona (x2) and Altona Meadows (table 6). The 2013 count was not sufficiently resourced to provide comparable data.

While this data has limitations, it suggests that the numbers of cyclists has increased from year to year, both as a total and across each of the five count sites. Williamstown (Ferguson Street and The Strand) has shown the most significant increase. It was also the only site that consistently recorded large numbers of pedestrians, reflecting its status as a popular recreational and tourist destination. While the totals across the municipality are generally lower than the journey to work levels, this data reflects growing numbers of recreational and exercise cyclists using Hobsons Bay's shared trails on the weekends.

Challenges

Hobsons Bay faces a number of challenges to encourage increased cycling, including infrastructure gaps, funding, and concerns over safety.

Infrastructure gaps

Identifying and closing cycling infrastructure gaps is an ongoing challenge. The Hobsons Bay Strategic Bicycle Plan identified many gaps in the local on and off road cycling network. Substantial progress has been made to address these issues, with a range of important projects completed in recent years. Additionally, stages two and three of the Kororoit Creek Shared Trail (from Grieve Parade to Barnes Road, Altona North) are expected to be completed during 2017.

Integrated transport planning should continue to identify and respond to these cycling infrastructure gaps within the context of a network planning approach (see page 92). Additionally, major projects such as the Western Distributor project provide important opportunities to work with government agencies and business to maintain and expand existing cycling infrastructure.

Funding

Funding is a key challenge for cycling in Hobsons Bay. As noted, no dedicated funding was allocated to implement the Victorian Government's cycling strategy. A trend toward lower state government funding was noted in the Hobsons Bay Strategic Bicycle Plan, with clear direction provided for Council not to assume funding responsibility for projects previously supported by the Victorian Government.

The plan alternatively recommends pursuing funding opportunities from external agencies and working in partnership with other organisations and local governments to deliver specific projects. While this approach encourages cost sharing and economies of scale, future integrated transport planning should continue to source (albeit limited) Victorian Government funding, as well as seek funding through major projects. For example, the Western Distributor project could deliver the final stage of the Federation Trail, providing an important east-west link to the Bay Trail.

Safety

Improving actual and perceived safety is a critical challenge. As noted, safety concerns are a likely factor in the relatively low rates of commuter cycling among women in Hobsons Bay. More

generally, the proportion of cyclists across all Australian road fatalities increased from 2.5 to 3.9 per cent between 2005 and 2014.[109]

Improved safety can be achieved through wider and coloured cycle lanes on arterial roads, clear lines of sight, and the maintenance and extension of Council's lighting assets around shared trails and roadways. While improved planning and infrastructure will contribute to increased cycling safety, increasing the numbers of cyclists can also improve safety and decrease road trauma, as suggested by the 'safety in numbers' thesis.[110]

The increased volume and mix of users on the municipality's shared trails presents a further safety challenge in terms of minimising the negative effects of 'conflict' between users, particularly bad behaviour and injuries to users. Integrated transport planning may seek to further clarify usage and infrastructure needs to plan further actions toward the development of a safer and more functional shared trail network.

Finally, roundabouts (of which there are many in Hobsons Bay) present specific safety concerns for cyclists. While they are relatively safer for motorists, they result in a higher rate of crashes for cyclists. Moreover, research has found that bike lanes approaching and within roundabouts are associated with negative safety outcomes.[111] An alternative appraoch is to shift the balance away from cars by re-claiming a larger section of the road for cyclists. The (so-called) 'squareabout' achieves this objective using no signage and minimal road markings, improving safety through greater separation between cars, cyclists and pedestrians.[112] It has been successfully used at the busiest intersection of the Dutch town of Drachten (pop. 44,000) to provide a safer environment for all road users, while improving amenity and maintaining efficient movement of traffic (figure 42).

Figure 42: The 'squareabout' (Drachten, Netherlands)
(Source: ThinkBicycling Blog)

[109] Bureau of Transport, Infrastructure, and Regional Economics (2015) *Australian Cycling Safety: Information Sheet 71*, Canberra.
[110] Jacobsen, P. (2003) 'Safety in numbers: more walkers and bicyclists, safer walking and bicycling', *Injury Prevention*, Vol. 9, pp.205-209.
[111] Austroads (2014) *Assessment of the Effectiveness of On-road Bicycle Lanes at Roundabouts in Australia and New Zealand,* publication no. AP-R461-14.
[112] ThinkBicycling (2013) *Hans Monderman's People-Friendly Dutch 'squareabout'*, https://thinkbicyclingblog.wordpress.com/2013/06/13/hans-mondermans-people-friendly-dutch-squareabout, accessed 24/11/16.

Opportunities

Integrated transport planning in Hobsons Bay may examine various opportunities to improve cycling rates, including through a network planning approach, advocacy to Victorian Government transport agencies, and working with communities and stakeholders to promote behaviour change.

Network planning

There is an opportunity to examine how a network planning approach may be applied more broadly to cycling planning in Hobsons Bay. While commuter and recreational routes are reasonably well-established, recent research and community consultation has highlighted a need for improved local neighbourhood connections.[113] Increased mode share can be achieved through network planning that establishes a clear hierarchy of cycling routes (commuter/neighbourhood/recreational) to cater for a wider range of people, trip purposes and destinations. This approach may also help to improve the relative speed of cycling trips, which is a major barrier to increased usage. Future integrated transport planning may build on achievements of Council's Strategic Bicycle Strategy to examine how a network of neighbourhood routes may be incorporated into future cycling planning. Figure 43 provides an example of how this may look in Williamstown.

Figure 43: Cycling and pedestrian network concept (Williamstown)
(Source: Hale Consulting, 2016)

[113] Hale Consulting (2016), p.73-74

Advocacy

Maintaining advocacy toward government transport agencies is an important opportunity. Opportunities identified in the Strategic Bicycle Plan should be maintained, including the implementation of local major projects for the Principle Bicycle Network (on road) and the Metropolitan Trail Network (off road). Council may also work with VicRoads to improve bike lanes on arterial roads, as well meeting further infrastructure gaps (e.g. stages four and five of the Kororoit Creek Trail). Improved signage and end of trip facilities are also needed across Hobsons Bay's cycling network, including at train stations and other key destinations such as activity centres. Council should work with the relevant agencies (e.g. PTV) to determine how these may be delivered and maintained into the future.

Behaviour change

Promoting ongoing behaviour change towards cycling is a further opportunity for integrated transport planning in Hobsons Bay. Indeed, research has found that targeted behaviour change measures are generally more effective than publicity campaigns, engineering measures or alternative services.[114] Targeted programs within schools, local business or even entire neighbourhoods and residential developments (through the implementation of 'green travel plans') can help to promote the benefits of cycling and encourage people to use cycling more often to reach work, school, shops and other destinations.

Other success factors include cycling-specific infrastructure (e.g. bike paths and lanes, dedicated traffic signals, signage and directions, bicycle parking, and end-of-trip facilities); supportive street design and conditions; lower speed limits; traffic calming and street reclaiming measures; and incentives for increased uptake, e.g. events, marketing and skills training. Additionally, the growing popularity of electric bicycles provide further opportunities by making cycling possible for more people (e.g. older people) and potentially increasing the speed and distance of cycling trips.

Public Transport

Public transport options within Hobsons Bay include train and bus services, both of which have a crucial role within an integrated transport system. There is growing general commuter use in and out of Hobsons Bay, primarily via train services to the CBD and other inner city locations. Public transport is also used by large numbers of people without access to a car, including young people, people with a disability and older people. These groups use public transport for a wide range of purposes such as employment, education, shopping, health services and social activities. Public transport also encourages incidental walking and cycling and related health benefits for users.[115]

Local government's main role with regards to public transport is to listen to community and stakeholder views and advocate accordingly to government transport agencies. Council has

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[114] Ogilvie, D. et al. (2004) 'Promoting walking and cycling as an alternative to using cars: systematic review', *British Medical Journal*, vol. 329.

[115] Rissel, C. et al (2012) 'Physical activity associated with public transport use: A review and modelling of potential benefits', *International Journal of Environment Research and Public Health*, pp. 2454-2478

additional complementary roles to provide infrastructure (e.g. access footpaths leading to stations and stops) and to support the community to understand and effectively use public transport (e.g. through behaviour change, information or awareness programs).

Legislative and policy context

The legislative and policy context for public transport is set almost entirely by the Victorian Government. Public Transport Victoria is the central statutory authority that manages Victoria's train, tram and bus services, as well as providing a single information point for public transport services, fares, tickets and initiatives.[116] Transport operators deliver public transport services, including Metro Trains and three bus companies in Hobsons Bay (Transdev, CDC Melbourne and Sita Bus Lines).

There are a number of other state government transport agencies that administer different elements of the public transport system, including V/Line (regional public transport services), VicTrack (transport land, assets and infrastructure) and Transport Safety Victoria (safety regulation and enforcement). Project-specific agencies are also established to oversee major projects such as the Level Crossing Removal Authority and Melbourne Metro Rail Authority. Other key stakeholders include peak organisations (Bus Association of Victoria) and user groups (Public Transport Users Association, and the Altona Loop Group).

Several pieces of legislation guide public transport operations and safety. The *Bus Services Act 1995* establishes a system of service contracts for bus services and provides service standards for certain types of bus services. The *Rail Management Act 1996* establishes a regime for the management of Victoria's rail infrastructure, including provisions relating to the transfer of property and staff, and requirements on rail and tram operators. Victoria also has a number of public transport safety acts such as the *Rail Safety Act 2006* and *Bus Safety Act 2009*. Each of these pieces of legislation operate as interface legislation under the *Transport Integration Act 2010*.

The Victorian Government is also responsible for the development and implementation of key public transport policies. The 2012 Network Development Plan – Metropolitan Rail is designed to expand the capacity of

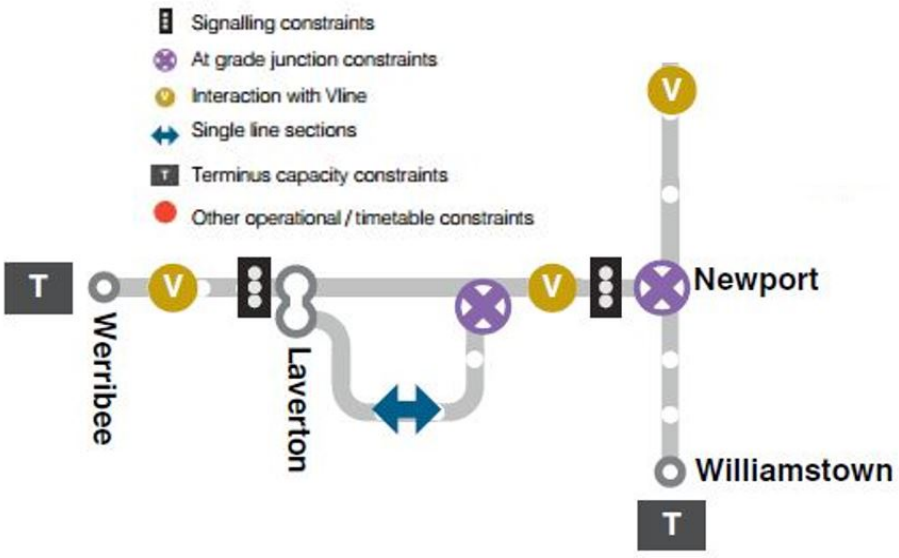

Figure 44: Key Network Constraints - Hobsons Bay
(Source: PTV, 2012)

[116] Public Transport Victoria, *About PTV*, https://www.ptv.vic.gov.au/about-ptv, accessed 21/11/16.

the existing rail network, redesign services for better coordination with buses and trams, and extend the network to areas not currently serviced by metropolitan rail services.[117] The plan identified a range of constraints on the train network within Hobsons Bay, including signalling, single line sections, at grade junctions (i.e. level crossings), terminus capacity and V/Line interactions (figure 44).

The plan also proposed a number of future projects to address these issues such as the Regional Rail Link (completed in 2015), increases in peak Werribee and Altona line services (from 2023), and upgrades to 10-minute services on the Werribee (2028) and Altona lines (2033 or beyond). It also identified track duplication and grade separation projects on the Altona Loop to be completed within 20 years. As noted previously, sections of track duplication on the Altona Loop are scheduled to be completed by 2019 as part of the Kororoit Creek Road level crossing removal.

Finally, the Accessible Public Transport Action Plan 2013-17 aims to deliver accessible public transport throughout Victoria.[118] Public Transport Victoria and public transport operators are largely responsible for implementing the plan, which covers customer service, community engagement, and access to services and facilities. The action plan responds to requirements within the federal *Disability Standards for Accessible Public Transport 2002*. The standards seek to remove disability discrimination from public transport services over a 30-year period, and outlines how the goals of the *Disability Discrimination Act 1992* are to be achieved in the provision of Victorian public transport services. Compliance against the standards is expected to be at 90 per cent in many areas (e.g. access paths, ramps, toilets, and signs, lighting and information at bus stops) by 2017.

Public transport in Hobsons Bay

Hobsons Bay has two train lines, 10 train stations, 13 metropolitan bus routes, one SmartBus service and two night bus services (figure 45). There are several key public transport hubs in Hobsons Bay, with close integration between train and bus services, including Laverton (8 bus + 1 train), Newport (3 bus + 1 train), Altona (2 bus + 1 train), as well as Altona North which has six bus routes passing through the area. Additionally, most stations have some end-of-trip bike facilities, although these vary considerably in style (bike hoops, bike lockers) and capacity.

Coverage

Access to public transport is unevenly spread across Hobsons Bay. Just under one third of all housing is located within a public transport walking catchment (800 metres to a train station or 400 metres to a bus interchange). While a lot more housing is located within the walking catchment of a bus stop, these services generally operate less frequently and lack the permanency of 'hard infrastructure' such as a train station or bus interchange. Importantly, the two most heavily populated neighbourhoods (Altona Meadows and Altona North) do not have a local train station.

[117] PTV (2012) *Network Development Plan – Metropolitan Rail: Overview*, Melbourne.
[118] Victorian Government (2013) *Accessible Public Transport in Victoria: Action Plan 2013-17*, Melbourne.

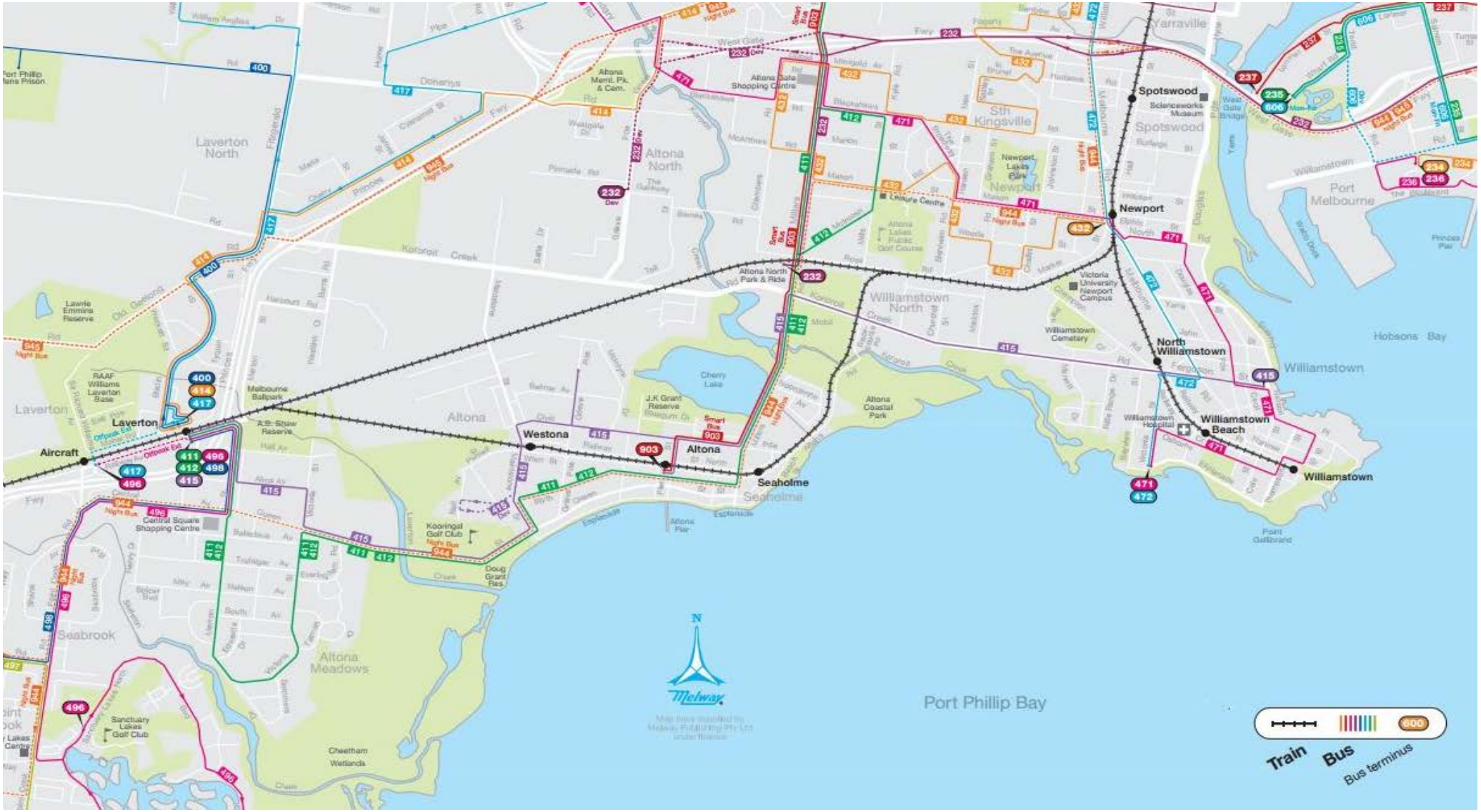

Figure 45: Public Transport in Hobsons Bay
(Source: Public Transport Victoria)

Despite these limitations, a large proportion of the municipality is able to reach the CBD within 60 minutes via walking and rail (figure 46). However, some neighbourhoods do not enjoy this level of access, including large parts of Seabrook, Altona Meadows, Altona North and all of Brooklyn. Notably, most of these neighbourhoods experience greater disadvantage, when comparing their SEIFA disadvantage index to the municipal average.

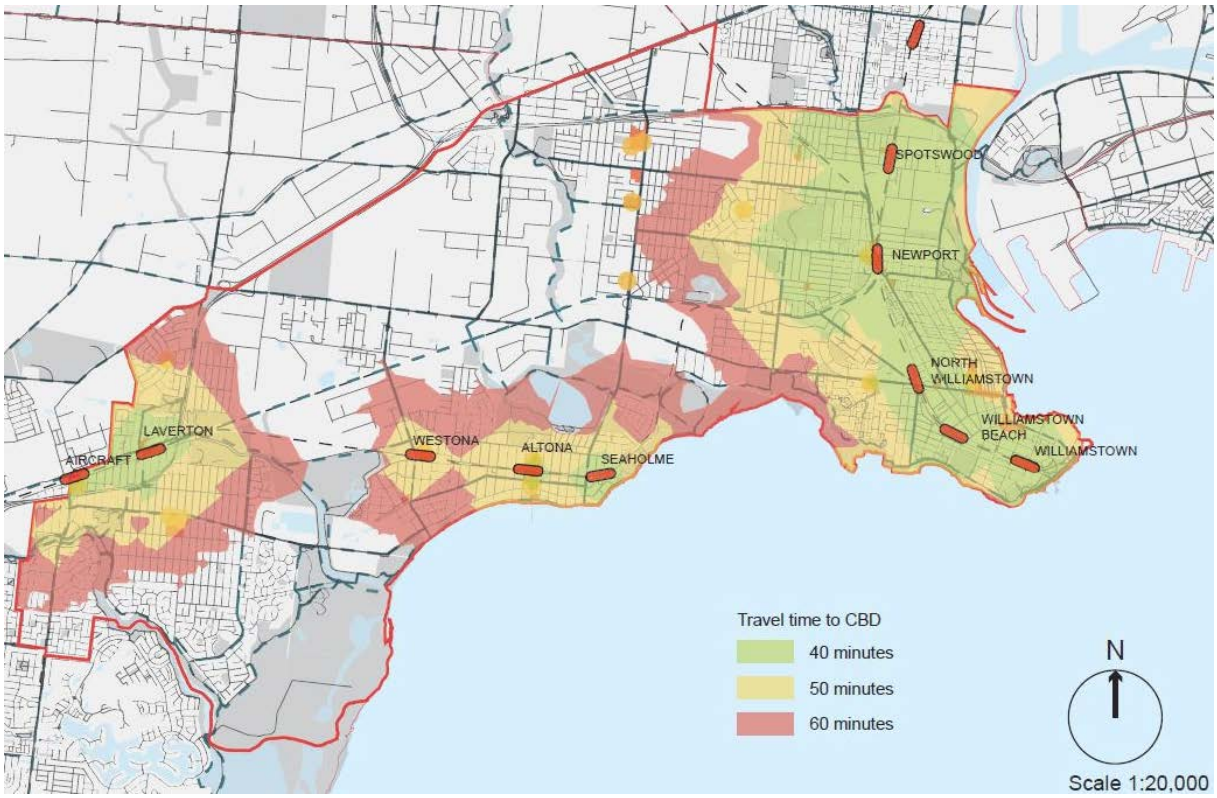

Figure 46: Connectivity to Melbourne CBD by walking and rail
(Source: Hale Consulting, 2016)

Connectivity

Newport and Laverton are clearly the most popular train stations in Hobsons Bay. Over 9,500 'daily movements' occur at these stations, far in excess of the other eight combined. This trend is forecast to continue over the next 20 years, with ridership expected to more than double at both stations by 2036. Passengers' method of access to train stations varies considerably across Hobsons Bay (figure 47). Walking is the primary access mode for seven stations, including those on the Williamstown line and Altona Loop. Car-based access is most popular at the remaining three stations.

This data demonstrates how various factors can influence travel behaviour, including modal integration, bus-rail connectivity, car parking, and the built environment. For example, bus access to train stations provides an indication of the effectiveness of bus-rail connectivity. However, this method of accessing train services is relatively low in Hobsons Bay, notable only at Laverton (19% of passengers access the station by bus), Aircraft (16%) and Altona (13.4%). Similarly, the built environment (nearby busy roads, reduced pedestrian access, ample car parking provision, limited connecting bus services in some locations) all play a role in promoting car access to train stations.

Figure 47: Mode of travel to Hobsons Bay train stations
(Source: Hale Consulting, 2016)

Service levels

Public transport service levels vary considerably in Hobsons Bay (table 7). The Werribee (via the Altona Loop) and Williamstown lines both offer 22 minute peak services, which places them at the lower end of frequency times compared to other metropolitan lines. On a positive note, the Werribee line (direct to Flinders Street bypassing the Altona Loop) offers 10 to 12 minute peak frequency, and the service span for train services is good (5am to 2am) and has improved further with the recent introduction of 24 hour weekend services.

Frequency of bus services is a particular concern in Hobsons Bay, especially as it is the main public transport option available in Altona Meadows and Altona North. Weekday peak frequencies on several routes (414, 415, 417, 496) is 40 to 45 minutes, and more than half of the 14 routes provide off peak frequencies of 40 or 60 minutes. The situation deteriorates considerably on weekends, when many services run at 60 to 80 minute intervals, while the 414 and 415 routes do not operate on Sundays and the 417 does not run at all on the weekend.

Table 7: Public transport service levels in Hobsons Bay
(Source: Public Transport Victoria)

Service	Operator	Major Stops	Weekday			Saturday		Sunday	
			Span*	Frequency (mins)		Span*	Freq.	Span*	Freq.
				Peak	Off peak				
Bus									
232 - Altona North - City (Queen Victoria Market)	Transdev	6	0600-2030	10-12	20	0800-1900	30	0800-1800	60
400 - Sunshine Station - Laverton Station via Robinsons Road	SITA	7	0600-1900 *(2130)*	20	40	0730-1800 *(2100)*	40	0800-1830	40
411 - Laverton Station - Footscray via Altona Meadows, Altona, Millers Rd	CDC Melb.	12	0600-1900 *(2100)*	25-35	40	0700-1900 *(2100)*	80	0800-1900 *(2100)*	80
411-412 combined - Laverton - Footscray via Altona Meadows, Altona, Altona Gate SC	CDC Melb.	11	0500-1900 *(2100)*	15	20	0700-2000 *(2100)*	40	0800-2000 *(2100)*	40
412 - Laverton Station - Footscray via Altona Meadows, Altona, Mills St	CDC Melb.	10	0530-2000	25-35	40	0730-2000	80	0900-2000	80
414 - Laverton Station - Footscray via Geelong Rd	CDC Melb.	7	0600-1900 *(2000)*	40	40	0700-1630	80	-	-
415 - Laverton Station - Williamstown via Altona	CDC Melb.	9	0600-1830 *(2000)*	40	40	0730-1800 *(1930)*	80	-	-
417 - Laverton Station - Laverton North	CDC Melb.	6	0600-1830	40	60	-	-	-	-
432 - Newport - Yarraville via Altona Gate Shopping Centre	SITA	5	0600-2100	15-20	20	0730-2100	45	0800-2100	45
471 - Williamstown - Sunshine Station via Newport & Altona Gate SC	SITA	4	0600-2130	20	20	0700-2100	40	0830-2100	40
472 - Williamstown - Moonee Ponds via Footscray	SITA	3	0600-2100	15	15	0730-2030	20	0900-2130	50
496 - Laverton Station - Sanctuary Lakes via Sanctuary Lakes SC	CDC Melb.	7	0530-1930 *(2030)*	45	60	0700-2000	60	0800-2000	60
498 - Laverton Station - Hoppers Crossing Station via Dunnings Rd	CDC Melb.	6	0600-2130	20-40	40	0730-2130	60	0900-2130	60
903 - Altona - Mordialloc (SMARTBUS Service)	Transdev	19	0500-0000	15	15	0600-0000	30	0700-2100	30
944 - Night Bus - City - Newport - Altona - Altona Meadows - Point Cook	Night Bus	14	-	-	-	0130-0400	30-60	0130-0500	30-60
945 - Night Bus - City - Geelong Rd - Tarneit - Hoppers Crossing - Werribee - Wyndham Vale	Night Bus	21	-	-	-	0200-0330	30-60	0200-0430	30-60
Train									
Werribee Line (direct to Flinders St)	Metro	14	0500-0200	10-12	20	24hrs	20-30	24hrs	20-40
Werribee Line (via Altona Loop)	Metro	17	0500-0200	22	20**	24hrs	20-30	24hrs	20-40
Williamstown	Metro	15	0500-0200***	22	20	24hrs***	20-30	24hrs***	20-40

Notes:
* services continue until time noted in brackets but at reduced frequency
** service terminatre at Newport
*** in bound services terminate at Newport after 7pm

Bus service span is also problematic. With the exception of the 903 SmartBus route, no bus service operates past 9.30pm, with many stopping or reducing frequency much earlier. Service span is slightly reduced on the weekends but not to the same extent as frequency. Again, these reduced service levels particularly impact areas without access to train services, as well as groups who may need to travel later at night such as shift workers, and young people returning home from employment or social activities. On a more positive note, some Hobsons Bay bus services operate at relatively high frequencies, including the 232, 411-412 combined, 432, 471 and 472 and 903 routes.

Usage

Hobsons Bay's public transport mode share for the journey to work is 18.4 per cent (figure 48), higher than both the metropolitan average (16.6%) and western region (16.4%).[119] Usage is increasing over time, rising through the censuses of 1996 (11%), 2001 (13%) and 2006 (14%).

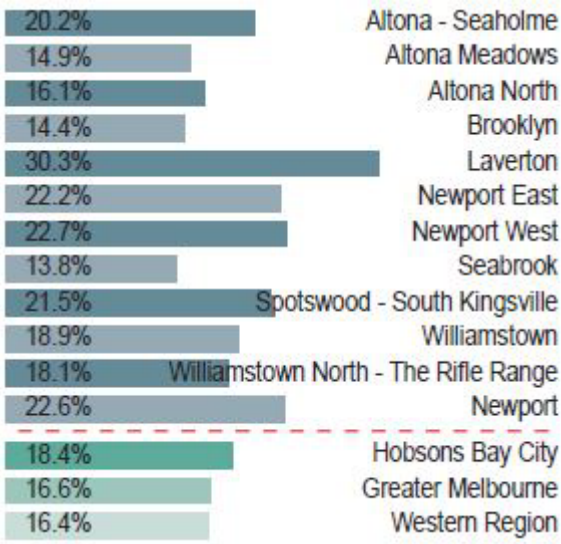

Figure 48: Public transport to work mode share (Source: Hale Consulting, 2016)

Public transport use follows a reasonably predictable pattern, with usage higher in neighbourhoods well served by rail services (Laverton, Newport, Spotswood-South Kingsville) and lower in areas without convenient access to a station (Seabrook, Brooklyn, Altona Meadows). Usage is particularly high in Laverton (30.3%), which may also be the result of residents' limited access to a car (particularly a second vehicle), integration with multiple bus services, extensive car parking facilities, and the availability of relatively quick express services to the CBD.

Combined VISTA data from 2007-08 and 2009-10 showed that public transport was used for just 1.9 per cent of short trips (up to 5 kilometres) and 4.8 per cent of shopping trips. Usage was much stronger for trips to secondary school, with nearly half (48.2%) using public transport, including train (21.3%), school bus (5.8%) and public bus (21.1%). This represents a substantial increase, when compared to public transport trips to primary school (5.4%). A majority of tertiary trips in Hobsons Bay are made by public transport (69%), although this is based on a relatively small sample size. Metropolitan Melbourne data suggest that public transport accounts for just over half (51%) of trips to tertiary education.

Challenges

Hobsons Bay faces a range of challenges with regards to public transport, including service levels, infrastructure, accessibility, commuter parking and perceptions of safety.

[119] For the purposes of this report, public transport mode share for the journey to work includes the following responses to the relevant Census question: 'train', 'bus', tram or ferry' and 'taxi'.

Service levels

Improving service levels for bus and train services is a key challenge. Not only do low service levels reduce the appeal of public transport (thereby reinforcing car use), they exert a disproportionate effect on people who are unable to drive, do not own a car or live in neighbourhoods without train access. As discussed previously, frequency and service span vary considerably across the municipality (see page 98). Reliability, overcrowding and bus route design further impact public transport service levels in Hobsons Bay. For example, the Werribee train line experienced below average reliability levels for most of 2014 and 2015 (figure 49).

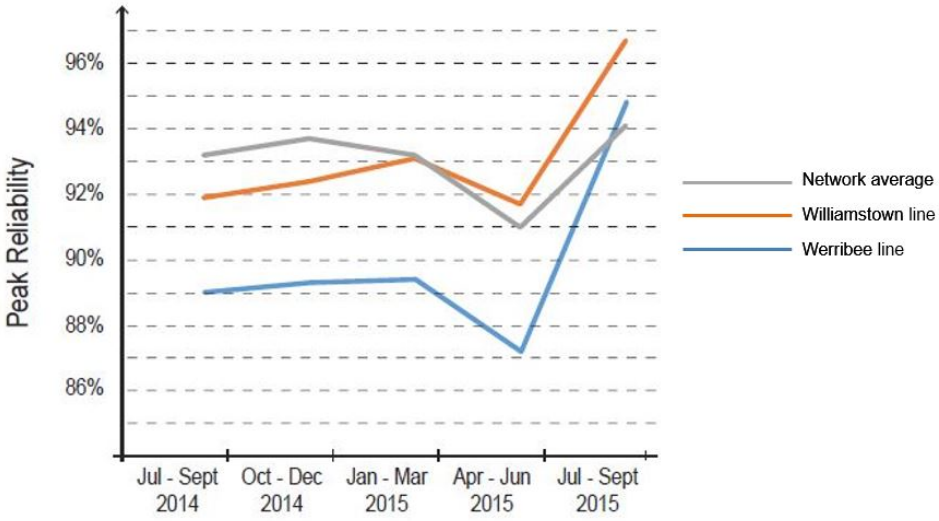

Figure 49: Reliability levels on Hobsons Bay's train lines during peak times
(Source: Public Transport Victoria)

However, the key issue for many residents is the reliability of the Altona Loop service, which is not isolated within PTV data. Anecdotally, there are considerable concerns about 'bypassing', i.e. trains previously scheduled to travel through the loop being directed to travel from Newport to Laverton to reach their final destination (usually Werribee) on time. This practice is generally not captured in statistics but remains a key issue for residents using the Seaholme, Altona and Westona stations. In a welcomed move, the Victorian Government recently announced that it will introduce stronger penalties for bypassing stations into the next train operator service agreement (due to commence in late 2017).[120]

Overcrowding on Werribee lines has also been reported, with 2015 PTV data showing that half of morning peak train loads were in excess of the standard train load of 798 passengers.[121] This is likely to remain an issue (and possibly get worse, if not addressed) as passenger volume increased by eight per cent over the previous year and the average train load on these lines (749 passengers) is almost at capacity.

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[120] Carey, A. (2016b) 'Metro Trains told to meet tougher targets or pay millions in fines', *The Age*, 20 December 2016.
[121] Carey, A. (2016c) '1200 people in a train is 50 per cent too many: rail overcrowding getting worse, *The Age*, 26 January 2016.

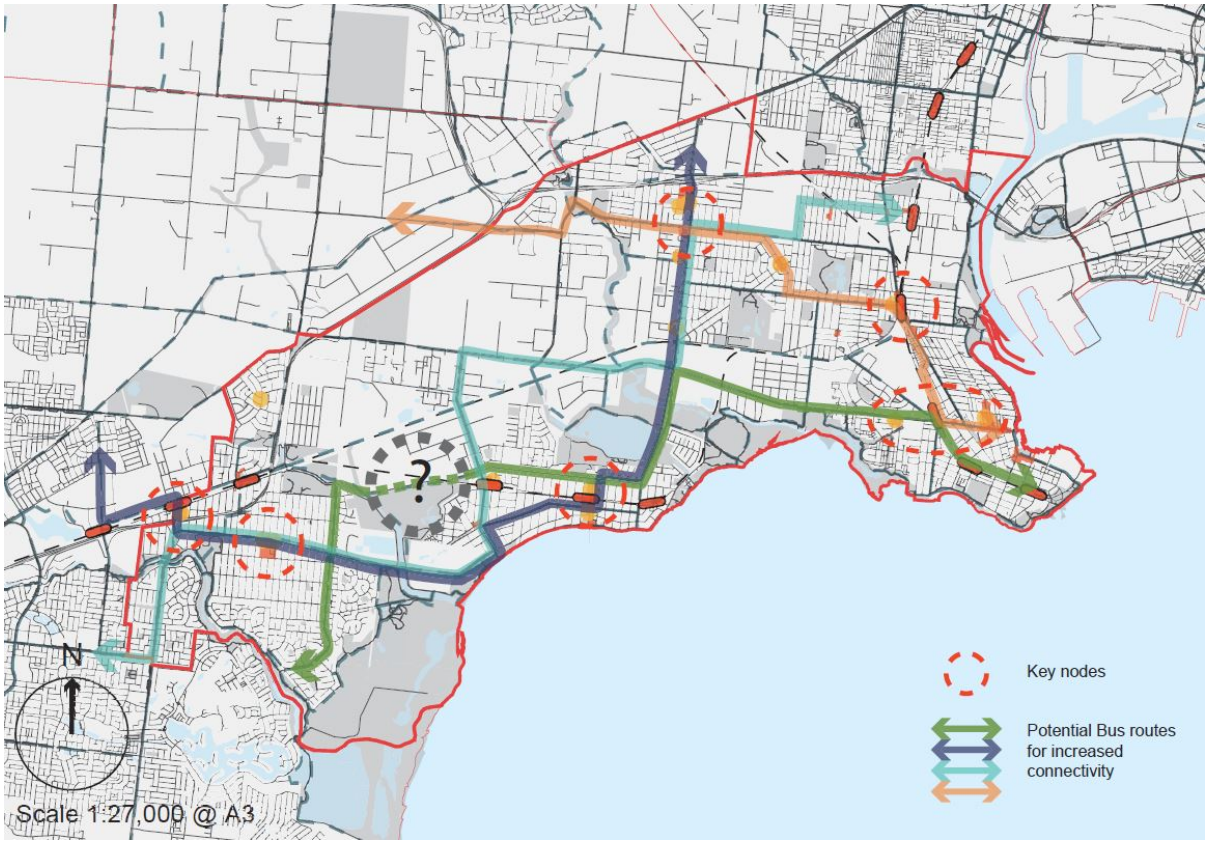

Figure 50: Concept design for potential Hobson Bay Rapid Bus Transit system
(Source: Hale Consulting, 2016)

Analysis of Hobsons Bay's bus network has concluded that current route structures appear largely incoherent and feature poor standards of service provision.[122] An alternative 'rapid bus' format, featuring a smaller number of better designed and serviced routes, may be explored through future integrated transport planning (figure 50). This model would provide further opportunities to develop the Altona Gate activity centre with an upgraded bus rapid transit node at the junction of Millers and Blackshaws Roads or within the Altona Gate Shopping Centre.

Finally, Altona Loop train services have been greatly affected since timetabling changes in 2011. The changes introduced 22 minute peak services and a weekday off-peak Laverton to Newport shuttle service, which requires Altona Loop passengers to use three trains to reach the City Loop. On a positive note, the Victorian Government recently announced that some weekday services will travel directly to and from Flinders Street from January 2017. While Council has welcomed this announcement, there is an ongoing opportunity to advocate to the Victorian Government to reinstate higher quality Altona Loop services.

Infrastructure

The condition of public transport infrastructure varies considerably in Hobsons Bay. The municipality has several heritage listed train stations along the Williamstown line, as well as the recently constructed Laverton station. However, a recent survey of almost 18,000 people found that two

[122] Hale Consulting (2016), p.66

Hobsons Bay stations (Aircraft, ranked 1st; Altona, ranked 8th) to be among the ten worst in Melbourne, based on factors such as safety, parking, ticketing, shelter, staffing, cleanliness, seating, lighting and toilets.[123] While recent works have taken place at Altona (shelter, additional access points), substantial ongoing investment is required to effectively address these concerns across the municipality.

Partial and full duplication of the Altona Loop rail line has also been discussed for many years and, while part of the line (800m) will be duplicated during the Kororoit Creek Road level crossing removal, full duplication has the potential to greatly improve service levels. Other infrastructure challenges include advocating to the Victorian Government for the re-opening of (one of more) previously closed train stations in Altona North. Based on surrounding population catchment, Paisley Station may provide the best value for the local community. Reviewing the role of the nearby Altona North 'park and ride' facility provides another challenge, given its unappealing presentation and low patronage. Finally, providing more consistent and higher quality cycling storage across the rail network is a challenge to facilitate more convenient bike-train integration.

Other challenges

Despite the ongoing implementation of the Accessible Public Transport Action Plan 2013-17, some local bus services remain inaccessible for wheelchair users, people with limited mobility and people using prams. Newport station has significant accessibility issues and the recently-built Laverton station does not have a ramp, making people with mobility limitations entirely reliant on the lifts to enter and leave the station (which have been found to be out of order on numerous occasions).

Perceptions of safety and commuter parking are further challenges for public transport in Hobsons Bay. As noted, Council's Annual Community Survey revealed reduced perceptions of safety on public transport (see page 20) and several stations continue to experience high demand for car parking. Future integrated transport planning should aim to create opportunities to work with PTV and transport operators to advocate on these issues.

Opportunities

Integrated transport planning in Hobsons Bay may examine various opportunities with respect to public transport, including further advocacy, improvements to intermodal integration, and transport-related urban design projects funded through private and public partnerships.

Advocacy

Maintaining and extending advocacy on public transport issues is a critical opportunity. Council has been active on a number of campaigns in recent years, including reinstatement of Altona Loop services and duplication of the rail infrastructure. Consideration may be given to formalising local advocacy priorities within a dedicated public transport action plan to address a range of key issues such as service levels and infrastructure needs. Council has opportunities to undertake more

[123] Balfour, C. & Miller, N. (2016) 'Leader and RACV On Track survey rates Melbourne's best and worst train stations', *Leader Community News*, 21 February 2016.

detailed research to build a local evidence base to promote long term and sustainable improvements to public transport.

Intermodal integration

Intermodal integration is a key feature of the best-performing public transport systems around the world. Despite strong legislative support through the *Transport Integration Act 2010*, a recent Victorian Auditor General Office (VAGO) report found that the level of intermodal integration within Melbourne's transport system is relatively low and considerably below international best practice standards.[124] Council can play an advocacy role to place the intermodal integration of Hobsons Bay's public transport services on the agenda of transport regulators and operators. It can also support more convenient transfer points by enhancing the built environment through urban design projects to improve safety, amenity, pedestrian, and cyclist connectivity.

Urban design

Urban design provides an opportunity to promote more sustainable transport behaviour, particularly around public transport hubs. For example, the Yarraville Station Plaza project employed urban design elements (pedestrian priority surface treatments, widened footpaths, bike hoops, narrower vehicle lanes) to better integrate bus and train stops, improve amenity and make the area safer for pedestrians and cyclists (figure 51).[125] The project was developed and delivered by Maribyrnong City Council, with input from a range of key stakeholders, including state government agencies, transport operators, businesses and the community. Local business have taken advantage of the new pedestrian-focused environment, with the introduction of outdoor seating at a café adjacent to the bus interchange and a large outdoor dining area serving two cafes on the opposite side of the railway line. Future integrated transport planning may investigate similar opportunities in Hobsons Bay.

Figure 51: Yarraville Station Plaza project

[124] Victorian Auditor-General's Office (2014) *Coordinating Public Transport,* Melbourne.
[125] Victorian Government (2012a) *Yarraville Station Plaza: Creating shared space at transport interchanges*, Melbourne.

Freight

Freight plays an important role within an integrated transport system. The efficient movement of goods and services supports economic development and helps to create local employment opportunities. This is particularly important for Hobson Bay due to its large industrial precinct, proximity to sea and inland ports, and growing transport and logistics sector. However, trucks and freight trains can also negatively impact residential wellbeing through additional congestion, pollution, noise, and safety risks. As such, integrated transport planning must consider the role of freight to balance these competing economic and social interests.

Local government has various roles with regards to freight. These include advocacy to government transport agencies to establish appropriate freight routes and truck bans, as well as to mitigate potentially negative local impacts on residential amenity. Council also has the role to issue planning permits for industrial buildings and support local economic development, as well as regulating the movement of heavy vehicles on local roads through road and intersection design, heavy vehicle operation permits and advocacy for truck curfews and bans.

Legislative and policy context

The Australian and Victorian Governments are the key players in establishing the legislative and policy context for freight in Australia. National freight policy and programs are developed through the Transport and Infrastructure Council (TIC), a sub-committee of the Council of Australian Governments. It includes transport, infrastructure and planning ministers from the federal, state and territory governments, as well as the New Zealand government and the ALGA.[126]

The TIC aims to achieve a coordinated and integrated national transport and infrastructure system that is efficient, safe, sustainable, accessible and competitive. Key issues to arise from its latest meeting (November 2016) include road and rail safety, heavy vehicle reform and regulation, and infrastructure reforms to help reduce congestion in major cities. The TIC also oversees numerous national freight policies and programs, including the National Rail Vision and Work Program (2016), National Policy Framework for Land Transport Technology (2016), Policy Framework for Intelligent Transport Systems in Australia (2012), and the National Land Freight Strategy (2012).[127]

The *National Land Transport Act 2014* supports national and regional economic and social development through the provision of federal funding aimed at improving the performance of land transport infrastructure.[128] Under the Act, the relevant Minister is required to work with parliament to develop a National Land Transport Network Determination, outlining the key road and rail connections across Australia. The 2014 determination includes the Westgate Freeway and the

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[126] See Transport and Infrastructure, http://transportinfrastructurecouncil.gov.au/

[127] Trials of driverless trucks have begun around the world (including by Rio Tinto in some of its iron ore mines) and have the potential to reshape freight services in the coming decades – see Solon, O. (2016) 'Self-driving trucks: what's the future for America's 3.5 million truckers?', *The Guardian*, 17 June 2016. Intelligent transport systems are discussed in further detail later in this chapter (see page 130).

[128] DIRD, *The National Land Transport Network*, http://investment.infrastructure.gov.au/whatis/network, accessed 27/10/16.

freight rail line running (via Newport and Laverton) through Hobsons Bay (figure 52). Additionally, the National Heavy Vehicle Regulator administers laws for heavy vehicles under the Heavy Vehicle National Law, delivering a comprehensive range of services under a consistent national regulatory framework.[129]

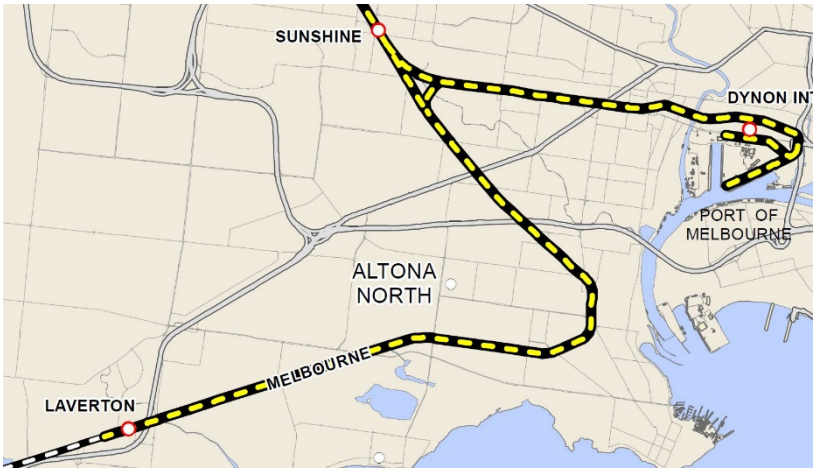

Figure 52: National Land Transport Rail Network
(Source: DIRD)

In 2013, the Victorian Government released the Victorian Freight and Logistics Plan (known as 'Victoria: The Freight State'). The plan set out a range of strategies and proposals such as the development of the Port of Hastings, extension of the High Productivity Freight Vehicle network, and increased use of the rail network for freight activity. While the plan has not been maintained by the current government, there is a continuing focus on rail freight through reform to the Victorian rail access regime (to provide greater access for freight trains across the rail network) and continuation of the Mode Shift Incentive Scheme.[130] Additionally, it appears that the Victorian Government's Port Development Plan 2006-35 also no longer appears to be current government policy.

The Port of Melbourne features Australia's largest international container (Swanson Dock) and automotive trade terminals (Webb Dock), and accounts for over one-third (35.1%) of Australia's total containerised trade. Since the 1990s, activity has grown steadily by an average of 5.9 per cent per annum,[131] and projections over the next twenty years indicate just a minor reduction (to 5% growth) due to slightly lower expected rates of economic growth.

The Victorian Government recently awarded a 50 year lease (worth $9.7 billion) to operate the Port of Melbourne. Proceeds are being directed toward a range of transport initiatives such as the Western Distributor and level crossing removals. Under the terms of the lease, the operators are entitled to compensation if a second port is established in the next 15 years.

Freight in Hobsons Bay

Due to its proximity to the Port of Melbourne, Hobsons Bay contains key freight routes for both trucks and trains. There are also three intermodal freight terminals located in the municipality at Altona (Aurizon), Spotswood (Sadleirs Logistics) and Laverton (Specialised Container Transport).

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[129] National Heavy Vehicle Regulator, *Law & Policies*, https://www.nhvr.gov.au/law-policies/heavy-vehicle-national-law-and-regulations, accessed 13/1/17.
[130] DEDJTR, *Freight*, http://economicdevelopment.vic.gov.au/transport/freight, accessed 12/12/16
[131] DIRD (2014) *Containerised and non-containerised trade through Australian ports to 2032-33*, Canberra.

Additionally, Hobsons Bay generates considerable freight activity, with relatively large manufacturing, petrochemical and transport industries based in the municipality. The Principal Freight Network passed through the municipality (figure 35) and an Over Dimensional Route (OD5) also runs along the Westgate Freeway.

Arterial roads in the central industrial part of the municipality attract a high proportion of trucks (figure 53). Grieve Parade is the most used truck route, along with Westgate Freeway, Dohertys Road and Kororoit Creek Road (west of Grieve Parade). This is the preferred route for road freight in the municipality as no housing is located nearby.

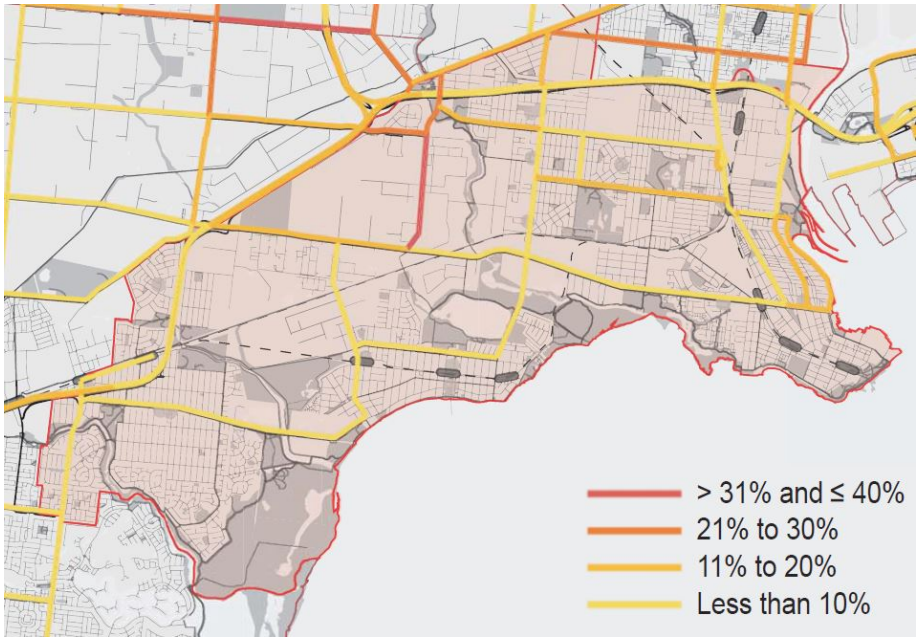

Figure 53: Percentage trucks in traffic volume on major Hobsons Bay roads (Source: Hale Consulting, 2016)

However, truck volumes are also relatively high on several roads within residential areas, including Blackshaws Road (west of Millers Rad), Mason Street and Geelong Road. Melbourne Road (south of the Westgate Freeway) in Spotswood has also experienced an increased volume of trucks in recent years (over 2,000 trucks in a 24 hour period in 2016; up from 1,750 in 2012).[132] Additionally, the freight rail line passes by housing in Newport and Altona North, and recent traffic modelling suggests that more trucks will be travelling on Millers Road and Melbourne Road as SRAs are developed in Altona North, Spotswood-South Kingsville, and Williamstown (see page 121).

Unsurprisingly, almost all road accidents involving heavy vehicles take place on roads with higher truck volumes, with the Westgate Freeway and Geelong Road figuring particularly highly (figure 54). Data from 2010 to 2015 show that the majority of these accidents involved passenger vehicles, although there is a cluster of pedestrian accidents in the northern part of the municipality. A small number of crashes also occurred away from main roads, usually in industrial estates. Just one heavy vehicle crash involved another heavy vehicle. Given the wide spread of heavy vehicle crash locations (and the potential for fatal or serious injury consequences for other road users), it is important that freight vehicles are considered strongly in Hobsons Bay's future road safety planning.

[132] VicRoads (2016a) *Inner West Truck Count Results August 2015 – August 2016*, Melbourne.

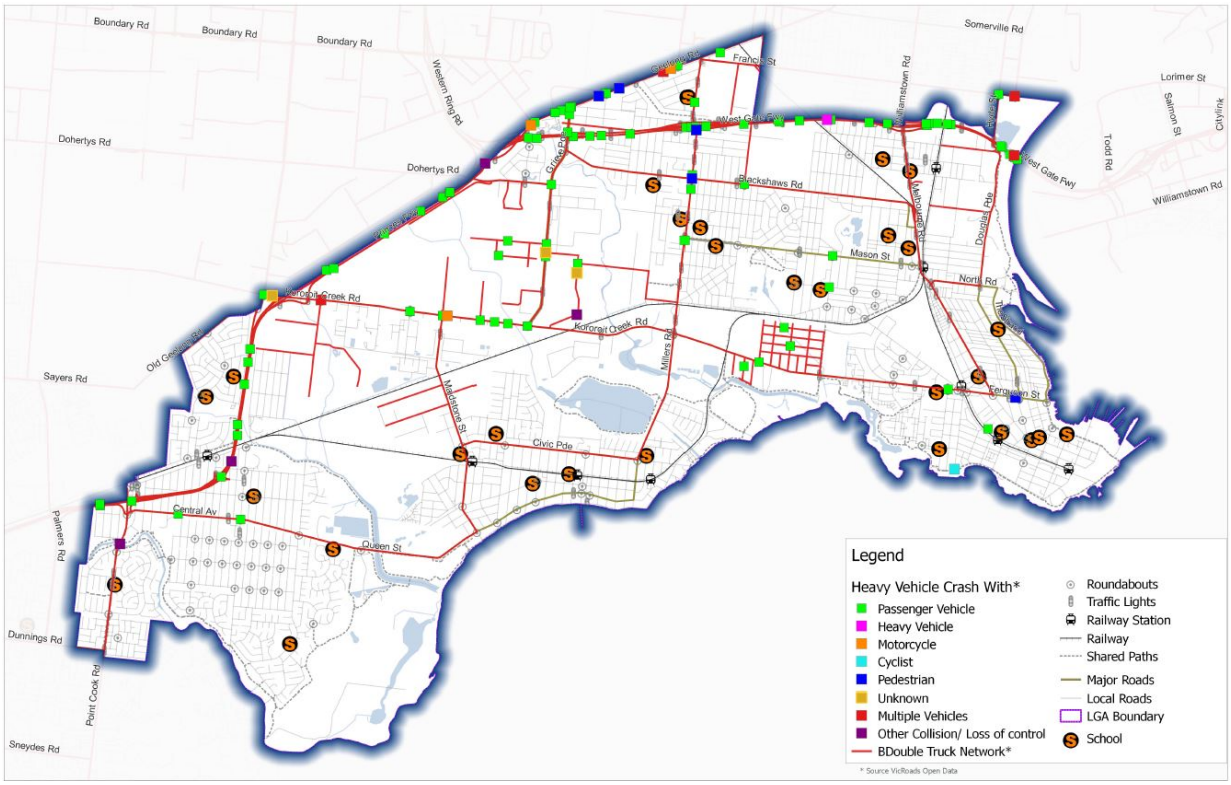

Figure 54: Heavy Vehicle Crash Locations in Hobsons Bay (2010-15)

Finally, greenhouse gas emissions resulting from freight activity in Hobsons Bay are forecast to remain steady (due to improved vehicle technology) in the coming years. From a 2006 baseline of 17 per cent, it is expected that freight emissions will comprise a similar proportion through to 2030, although higher than expected growth in freight activity may push this figure slightly higher.[133] Over the same period, residential travel is forecast to increase from 11 to 13 per cent of total emissions. Industrial emissions will remain the largest contributor, although they are expected to decline as a proportion of overall emissions from around 52 per cent to 40 per cent by 2030.

Challenges

Hobsons Bay faces a number of challenges with respect to freight, including increased congestion, protecting residential amenity, and the local impact of increased rail freight activity.

Congestion

A number of factors are set to increase the volume of trucks travelling on roads within Hobsons Bay, including the continuing growth of the Port of Melbourne and expected growth within the local transport and logistics sector. The Western Distributor may also increase truck volumes around key entry points (Millers Road, Hyde Street), as well as through truck bans on some roads and 'rat running' through local streets to avoid tolls. Other factors contributing to congestion include the use of bigger and longer trucks, 24 hour operations and the growth in online shopping which has increased the volume of trucks and vans on local roads. Additional freight vehicles will inevitably contribute to road congestion, thereby reducing the efficiency of road freight, increasing travel times

[133] HBCC (2013) *Community Greenhouse Strategy 2013-2030*, p.11.

for other on-road transport, and potentially encouraging smaller vehicles to engage in 'rat running' to avoid the trucks.

Protecting residential amenity

Increasing truck volumes can contribute to reduced residential amenity through air and noise pollution. A key challenge will be to protect some of Hobsons Bay's key arterial roads from additional freight activity, including Kororoit Creek Road (east of Millers Road), Millers Road, Melbourne Road and Blackshaws Road. Ongoing dialogue with Victorian Government transport agencies will be critical to consolidate a principal freight network in Hobsons Bay to maintain residential amenity. More generally, it is important that transport supply and logistic businesses maintain efficient access to the principal freight network while minimising the impacts on surrounding sensitive land uses.

Increasing numbers of trucks in Hobsons Bay will also contribute to more rapid deterioration of local roads (many of which are built on sandy foundations), resulting in lower quality infrastructure and higher maintenance costs. Additionally, Council faces additional challenges to build and maintain public infrastructure (such as cycling paths, shared trails and footpaths) that support active transport in locations with high freight activity.

Impact of rail freight

Shifting freight activity from road to rail has important benefits such as reduced emissions and road congestion, and increased efficiency and cost effectiveness. However, these benefits need to be considered against local challenges. For example, some freight trains are very long (up to 1.8 kilometres) resulting in extended periods of closed boom gates and additional road congestion. More freight trains will also contribute to congestion on local passenger train lines, as well as noise pollution when travelling through residential areas.

Opportunities

Integrated transport planning in Hobsons Bay may examine opportunities with respect to freight, including improving the local freight network, advocacy to transport agencies, and local freight planning and research.

Improving the local freight network

Improvements to the local freight network support economic development and growth. Hobsons Bay's proximity to the CBD, arterial road networks, the Port of Melbourne and other inland ports provide the conditions for a strong industrial growth. Many businesses rely on an efficient local freight network to connect to the market, and Council has an important opportunity to support existing and new businesses by working to improve the efficiency of the local freight network.

This work may include consolidating and promoting existing freight routes to minimise road congestion; working with key stakeholders to support the responsible expansion of intermodal freight terminals; promoting further clustering of related transport, warehousing and distribution businesses; and investigating the impact of population density controls within industrial zoned land (see page 73).

Advocacy

Council has further opportunities to advocate to state government transport agencies on freight-related issues, including the development of an Altona North Industrial Precinct Truck Access Improvement Plan and related infrastructure improvements such as additional freeway access points. Other examples include the development and implementation of a local SmartRoads approach that formally identifies key freight routes, encouragement for increased use of newer, quieter and less polluting trucks, and additional level crossing removal projects to reduce road congestion on key rail freight lines.

Council may also work with neighbouring local governments (as well as the Victorian Government) to introduce appropriately located truck bans and curfews, recognising that these may have regional impacts by displacing problems to other locations. Finally, advocacy regarding the port's pricing structure may help to encourage local innovative (rail-based) freight activity. For example, an Altona company was running 'cargo sprinters' (small freight trains) from an intermodal terminal until a few years ago but effectively could not compete with road transport due to high cost imposition at the port.

Planning and research

There are further opportunities to incorporate local freight planning and research into future economic development planning to support the development of local business and industry, and to better understand and respond to current and future freight needs. For example, research may be directed toward better understanding the freight needs of local industry and the impacts on residential areas, and the development of urban design guidelines for new residential developments to protect future amenity from increasing freight activity e.g. acoustic treatment requirements for new buildings. Consideration may also be given to developing a specific local freight action plan to guide Council's activities in the coming years.

Private passenger vehicles

Private passenger vehicles (PPVs) generally have one to nine seating positions, including the driver.[134] Typical examples include cars, motorcycles and scooters. Private passenger vehicles occupy a predominant role within an integrated transport system, as the most widely used mode of transport for almost every trip type (exceptions include very short trips and some trips to education). A broad objective of integrated transport planning is to provide alternatives to PPVs (particularly larger vehicles with only one passenger), as the current strong reliance on PPVs is widely accepted to have negative economic, social and environmental consequences.

Local government's main role with regards to PPVs is to plan, construct, renew and maintain roads and car parking spaces. It also has a role to promote behaviour change (usually away from PPVs), support the community to drive more safely, and advocate to state government transport agencies on various issues such as the condition and effectiveness of arterial roads. Local government also

[134] The *Bus Safety Act 2009* defines a bus as 'a motor vehicle that has been built with seating positions for 10 or more adults (including the driver)'.

plays an important role in regulating the movement of PPVs, including through traffic calming infrastructure, speed limits (in conjunction with VicRoads) and introduction of 'shared zones' with other forms of transport.

Private passenger vehicles can be costly to purchase, maintain and operate. It has been estimated that the annual cost of owning and operating a medium sized car is $10,000.[135] Additionally, there are costs attached to acquiring a driver's licence, including driving lessons, written materials, test fees and licence charges. The cost of PPVs becomes even more significant when households own two (or more) vehicles, which is the case for nearly half of Hobsons Bay households. It has been estimated that the potential lifetime saving per household from not having a second car is $141,300 and the total impost to the Hobsons Bay community is $2.16 billion.[136] These costs have clear equity implications as many households do not have sufficient financial resources to comfortably purchase and operate one (or more) PPVs.

Figure 55: Advertisement for Honda Jazz
(Source: www.prestigehonda.com.au)

Despite these costs, the Australian new vehicle market reached 1.155 million sales in 2015, an increase of 1.7 per cent over the previous record in 2013.[137] These figures highlight Australia's thoroughly entrenched 'car culture' which is partly attributable to the dispersed nature of many Australian cities and lack of viable alternative transport options. Persuasive advertising and marketing also plays a role, with the car often positioned as a reflection of the owner's lifestyle choices and social status (figure 55).

Private passenger vehicles in Hobsons Bay

Private passenger vehicle ownership and usage is high across Hobsons Bay, but there are some variations with regards to household and dwelling type, neighbourhood and trip destination.

Ownership

Within Hobsons Bay, 47 per cent of households own two or more vehicles, while less than 10 per cent do not own a vehicle. However, local vehicle ownership rates in Hobsons Bay are lower than those recorded across Metropolitan Melbourne (figure 56).

[135] Hale Consulting (2016), p.19.
[136] Ibid., p.19
[137] Federal Chamber of Automotive Industries, *Sales*, https://www.fcai.com.au/sales, accessed 15/12/16.

Motor vehicle ownership is also increasing in Hobsons Bay. Between 2006 and 2011, the rate of one, two and three or more vehicle households increased, particularly the latter which grew by more than 400. At the same time, the number of households without a vehicle declined by more than 150.

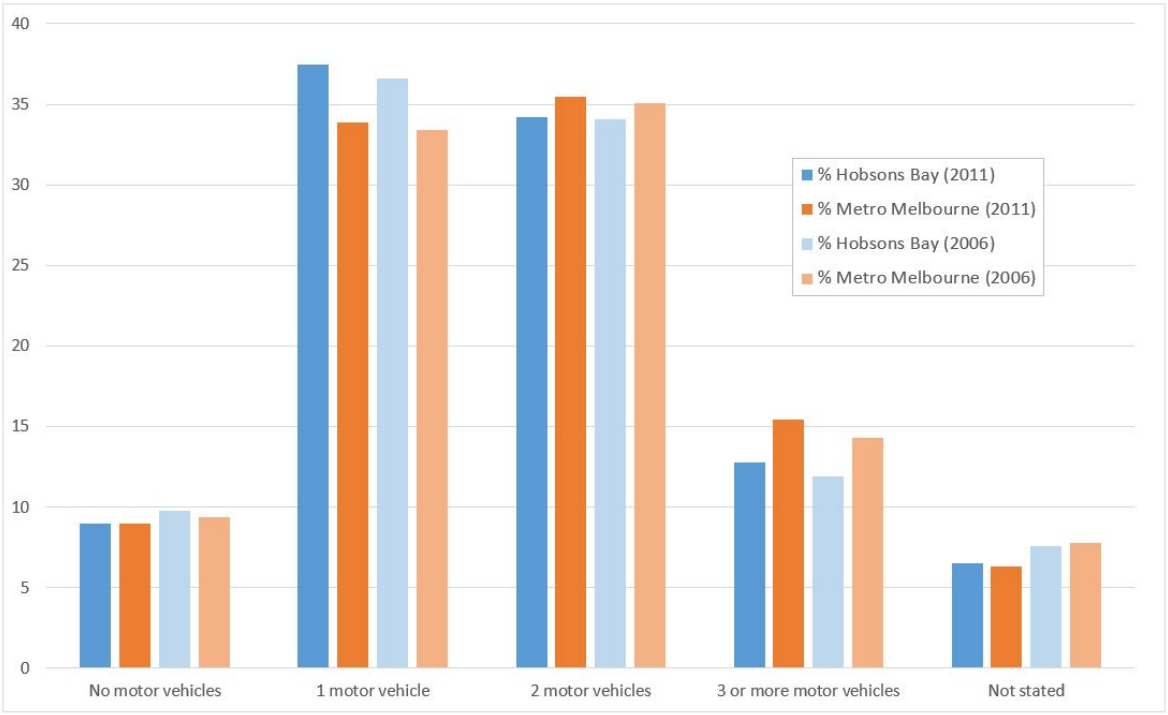

Figure 56: Motor vehicle ownership in Hobsons Bay and Metro Melbourne (2006 and 2011)
(Source: 2006 and 2011 Census of Population and Housing)

Vehicle ownership within different household and dwelling types follows a reasonably predictable pattern in Hobsons Bay (table 8). A majority of family (62.7%) and group households (54%) own two or more vehicles, while a majority of lone person households (61.6%) own one vehicle. These results are broadly consistent with the number of adults living within each household.

A majority of households (54.1%) living in separate houses own two or more vehicles, while one vehicle households are more common in semi-detached (44.4%) and apartment (55.5%) dwellings. Notably, over 20 per cent of households living in apartments do not own a vehicle, compared to just 7.4 per cent living in a separate house. While it is not possible to draw a direct causal link between household type, dwelling type and motor vehicle ownership, these results broadly suggest that more vehicles are present in larger households and within areas of lower housing density.

Ownership rates vary considerably across Hobson Bay's neighbourhoods (table 9). Neighbourhoods with the highest rate of multiple vehicle ownership include Seabrook (62.4%) and Williamstown North-The Rifle Range (53.8%), while neighbourhoods with the highest rate of no vehicle ownership include Brooklyn (12.2%) and Altona North (11.8%).

Table 8: Motor vehicle ownership by household type and dwelling type
(Source: 2011 Census of Population and Housing)

	Number of motor vehicles				
	0	1	2	3+	Not stated
Household					
Family	4.0%	31.1%	45.3%	17.4%	2.2%
Group	10.4%	30.7%	41.4%	12.6%	4.9%
Lone person	23.3%	61.6%	7.6%	2.0%	5.5%
Dwelling					
Separate house	7.4%	35.6%	38.4%	15.7%	2.9%
Semi-detached, terrace house, townhouse	9.3%	44.4%	35.6%	8.3%	2.4%
Flat, unit or apartment	20.5%	55.5%	16.4%	2.5%	5.1%
Other dwelling	24.3%	41.3%	21.8%	5.8%	6.8%

Limited public transport options and relative affluence appear to be key factors in promoting higher vehicle ownership, as both Seabrook and Williamstown North-The Rifle Range have reduced access to public transport services and a favourable SEIFA disadvantage index. Lower income levels and/or an ageing population may contribute to lower vehicle ownership rates in some neighbourhoods such as Altona North, Brooklyn and Laverton. However, it is important to note that this data is now quite old and there have been substantial local changes (increased in-fill development, closure of local caravan parks) that are likely to have increased car ownership in Altona North and Brooklyn.

Table 9: Motor vehicle ownership by neighbourhood
(Source: 2011 Census of Population and Housing)

Households with two or more vehicles	Households with no vehicles
1. Seabrook (62.4%)	1. Brooklyn (12.2%)
2. W'town North – The Rifle Range (53.8%)	2. Altona North (11.8%)
3. Newport East (52%)	3. Laverton (11.2%)
4. Altona Meadows (51.4%)	4. Altona-Seaholme (10.9%)
5. Williamstown (46.6%)	5. Williamstown (10.8%)

Usage

Given the relatively high ownership rates, motor vehicle use is understandably widespread in Hobsons Bay. Car mode share for the journey to work (figure 57) is 78 per cent, on par with metropolitan Melbourne (78.2%) and slightly lower than the western region (80.8%).[138] Usage has slightly dropped over time, declining through the censuses of 1996 (82%), 2001 (82%) and 2006 (80%).

[138] For the purposes of this report, car mode share for the journey to work includes the following responses to the relevant Census question: 'car – as driver', 'car – as passenger', 'truck' and 'motorbike'.

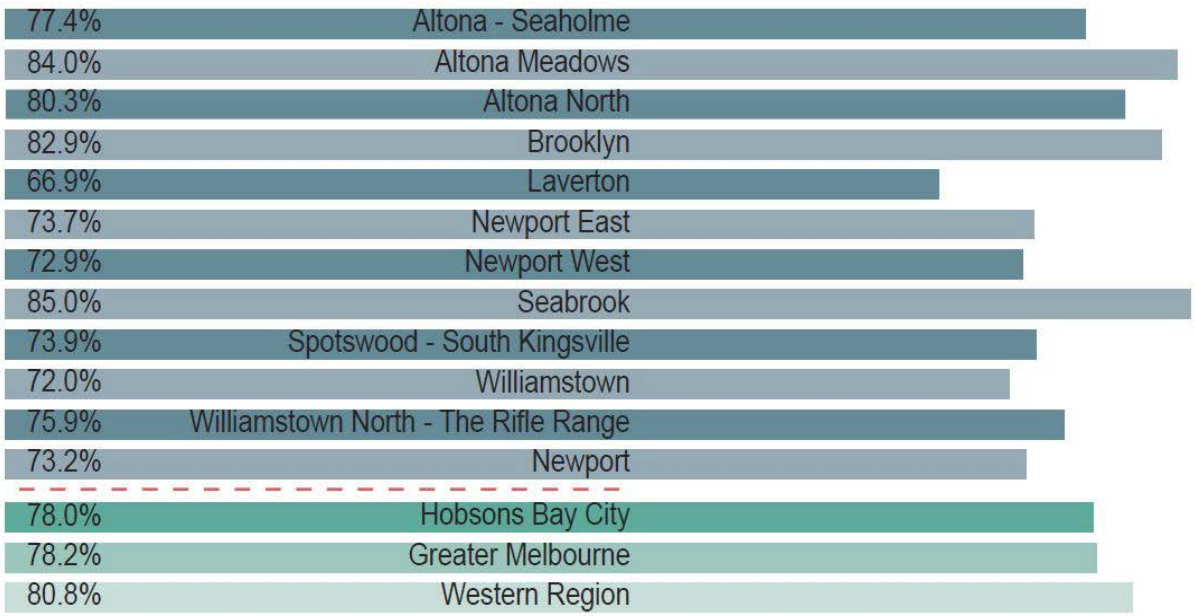

Figure 57: Car to work mode share
(Source: Hale Consulting, 2016)

Notably, the proportion who travel to work as a car passenger has declined during this time from eight per cent in 1996 to five per cent in 2011. This finding is supported by data suggesting that Victorian weekday car occupancy rates have been on a downward trend for the past decade, with 2013 data showing an average rate of just 1.2 occupants per vehicle.[139]

Predictably, car use is highest in the neighbourhoods with low access to public transport (particularly train services) and includes Seabrook (85%), Altona Meadows (84%) and Brooklyn (82.9%) and Altona North (80.3%). Laverton (66.9%) has the lowest car mode share, along with other neighbourhoods well served by public transport, including Williamstown (72%) and Newport (73.2%).

VISTA data shows that car travel accounts for less than half (44.1%) of trips of less than one kilometre. However, the share of car travel increases to more than 80 per cent for trips of one kilometre or more, and is used for 78.9 per cent of shopping trips. As noted previously, almost three-quarters (73.2%) of primary school trips are by car, while this drops substantially to 39.8 per cent for secondary school trips.

Finally, car travel accounts for just over 30 per cent of trips to tertiary education in Hobsons Bay, and around 40 per cent across metropolitan Melbourne. Interestingly, these figures increase substantially for part time students (100% and 62% respectively), suggesting that these students may use their cars to travel on to other destinations such as employment.

[139] VicRoads (2015) *Traffic Monitor 2012-13*, Melbourne.

Challenges

Like almost every city around the world, Hobsons Bay faces a number of challenges with respect to private passenger vehicles, including their contribution to vehicle emissions and road congestion.

Emissions

Reducing transport emissions is a key challenge facing all levels of government. Australian transport emissions increased by around 50 per cent between 1990 and 2013, with light vehicles (passenger vehicles, sports utility vehicles (SUVs) and light commercial vehicles) now accounting for almost two-thirds (64%) of transport-related emissions.[140]

In 2014, the average combined carbon dioxide (CO_2) emissions for a new light vehicle sold in Australia was 188 grams per kilometres (g/km).[141] Additionally, motor vehicles emit air pollutant emissions such as carbon monoxide. Smaller private passenger vehicles usually have below average emissions (e.g. the Toyota Corolla's CO_2 emissions range between 96 and 162g/km), while larger vehicles (especially SUVs and light commercial vehicles) generally exceed the average. Several electric vehicles have zero CO_2 emissions, including the BMW i3, Renault Kangoo, Nissan Leaf and Telsa Model S.[142] Increasing the use of green transport technologies (e.g. electric cars, car sharing), and reducing the use of private passenger vehicles are obvious (albeit difficult to achieve) methods to reduce vehicle emissions.

Congestion

Private passenger vehicles are the major contributor to congestion in Hobsons Bay. Daily traffic volume on arterial roads within each of Hobsons Bay's wards show a clear dominance of private passenger vehicles (e.g. cars and vans), when compared to commercial vehicles (e.g. cars towing caravans, trucks of all sizes):

- Millers Road (Altona, Altona North, Brooklyn) – 91.0% vs. 9.0%
- Melbourne Road (Williamstown, Newport, Spotswood) – 92.9% vs 7.1%
- Pt Cook Road/Central Avenue/Queen Street (Altona Meadows) – 96.1% vs. 3.9%

Private passenger vehicles also comprise the majority of daily traffic volume on Hobsons Bay's busiest freight route (Grieve Parade between Kororoit Creek Road and Geelong Road), registering 75 per cent compared to 25 per cent for commercial vehicles.[143]

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[140] Australian Government (2015) *State and Territory Inventories 2013: Australia's National Greenhouse Accounts*, Canberra.

[141] Australian Government, *Green Vehicle Guide - Vehicle emissions*, http://www.greenvehicleguide.gov.au/pages/Information/VehicleEmissions, accessed 5/1/17.

[142] Australian Government, *Green Vehicle Guide – User Guide,* http://www.greenvehicleguide.gov.au/pages/Help/HowTo, accessed 5/1/17.

[143] All daily traffic volume data is sourced from VicRoads (2016b) *Traffic Volume Data for Victoria*, Melbourne.

Opportunities

Integrated transport planning in Hobsons Bay may examine various opportunities with respect to private passenger vehicles, including electric vehicles and support for shared mobility initiatives such as rideshare and carshare programs.

Electric vehicles

Electric vehicles are now commercially available through a number of the major car manufacturers, although sales have been modest to date. They are fundamentally different to conventional cars in a number of ways, including range and running costs (figure 58). Barriers to greater uptake include consumer uncertainty about performance, availability, higher overall cost, uncertainty regarding future costs, infrastructure requirements, and a lack of standards for recharging equipment.

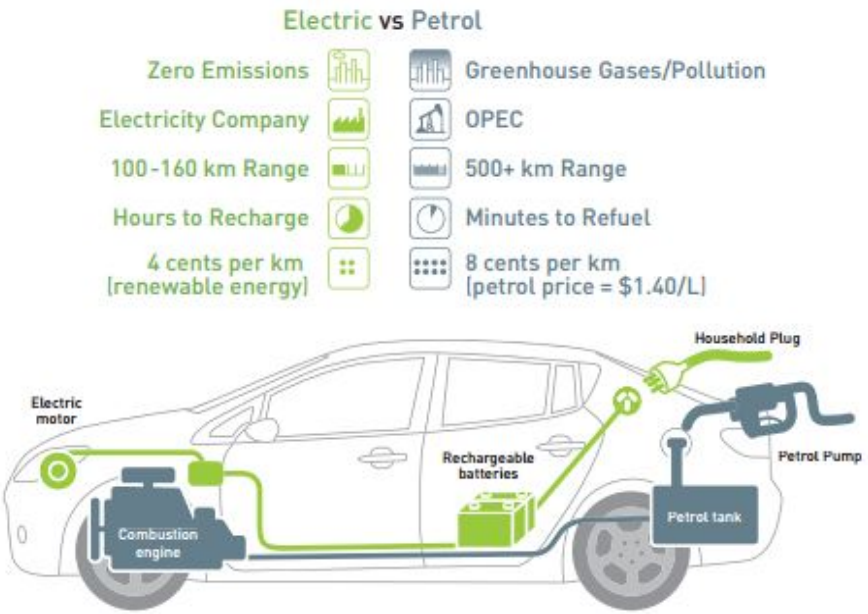

Figure 58: Differences between electric and conventional petrol vehicles (Source: DOT, 2013)

Between 2010 and 2014, the Victorian Government conducted an electric vehicle trial. The mid-term report found that electric vehicles are likely to be an important part of Victoria's transport future, particularly from 2020 when the operating cost advantage is expected to outweigh the higher purchase price.[144] Of particular relevance to local government, the trial also proposes space be allocated within greenfield public parking for electric vehicle charging equipment (of which there is currently none in Hobsons Bay) and designated car parking for electric vehicles.[145] Council's integrated transport planning should investigate these options further, as well as preparing to take advantage of future financial savings by adding more electric vehicles to its corporate fleet.

Shared mobility initiatives

Shared mobility is a high profile and rapidly growing travel option based on the use of vehicles, rather than ownership. 'Ridesharing' (using available seating in vehicles owned by others) and

[144] Department of Transport (2013) *Creating a Market: Victoria Electric Vehicle Trial Mid-Trial Report, Melbourne*, p.2-3

[145] DOT (2012) *Guidance on Land-use planning for Electric Vehicle Parking and Charging: The Victorian Electric Vehicle Trial*, Melbourne.

'carsharing' (using shared vehicles) are two prominent examples. Uber (perhaps the best known ridesharing company) was legalised in Victoria during 2016, having experienced rapid and continuous growth since commencing operations in 2012.

Car sharing systems offer vehicles for hire to members on a time or distance basis. Independently verified usage data is not currently available in Australia, but some estimates are as high as 50,000 members nationally.[146] Most carshare trips are quite short, and use is concentrated in locations with high populations, plentiful employment options, limited or expensive car parking, popular destinations, well developed public transport, and good supply of carshare vehicles. Notably, most Hobsons Bay activity centres exhibit some (or all) of these characteristics. To date, no formal car sharing service has been established within Hobsons Bay, although residents make their vehicles available (for a modest fee) through websites such as www.carnextdoor.com.au.

Research has found that carshare users typically drive less, use public and active transport more often, and financially benefit by deferring (or even eliminating) the need to purchase a vehicle.[147] Wider benefits include increased public and active transport use, less demand for car parking, and increased equity as people can access a motor vehicle when they need one, even if they are not able to afford to purchase and maintain their own private vehicle.

Local governments can support carshare schemes by providing dedicated on-street car parking for carshare vehicles, encouraging car sharing in development projects, reviewing local car parking regulations, and promoting the benefits to the community. Council's integrated transport planning should investigate Council's role in supporting carshare, as well as considering how car sharing schemes may be used by staff when travelling for work purposes.

Roads

Roads are fundamental to any integrated transport system. Every mode of transport either uses (cars, motorbikes, trucks, buses, cyclists, taxis) or crosses (trains, pedestrians) roads. Additionally, roads take up substantial amounts of land within cities, often between 20 and 40 per cent. Public roads in Victoria are split into two broad categories: arterial roads (administered by the Victorian Government) and local roads (administered by local government).

Local government has various roles with regards to roads. Council is responsible for the renewal, resurfacing and rehabilitation of local roads within Hobsons Bay, committing over $5 million to this task during 2015-16.[148] It also receives regular feedback in relation to roads and related infrastructure such as signs and lighting. Local government also has a number of complementary roles, including to plan for future road use, advocate to government transport agencies, and support the community to be safer when travelling on or near roads.

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[146] GAMUT (2016), p.121
[147] Eliot et al. (2010) *Carsharing's Impact on Household Vehicle Holdings: Results from a North American Shared-Use Vehicle Survey*, Institute of Transport Studies, UC Davis.
Studies, UC Davis.
[148] HBCC (2016h), p.77

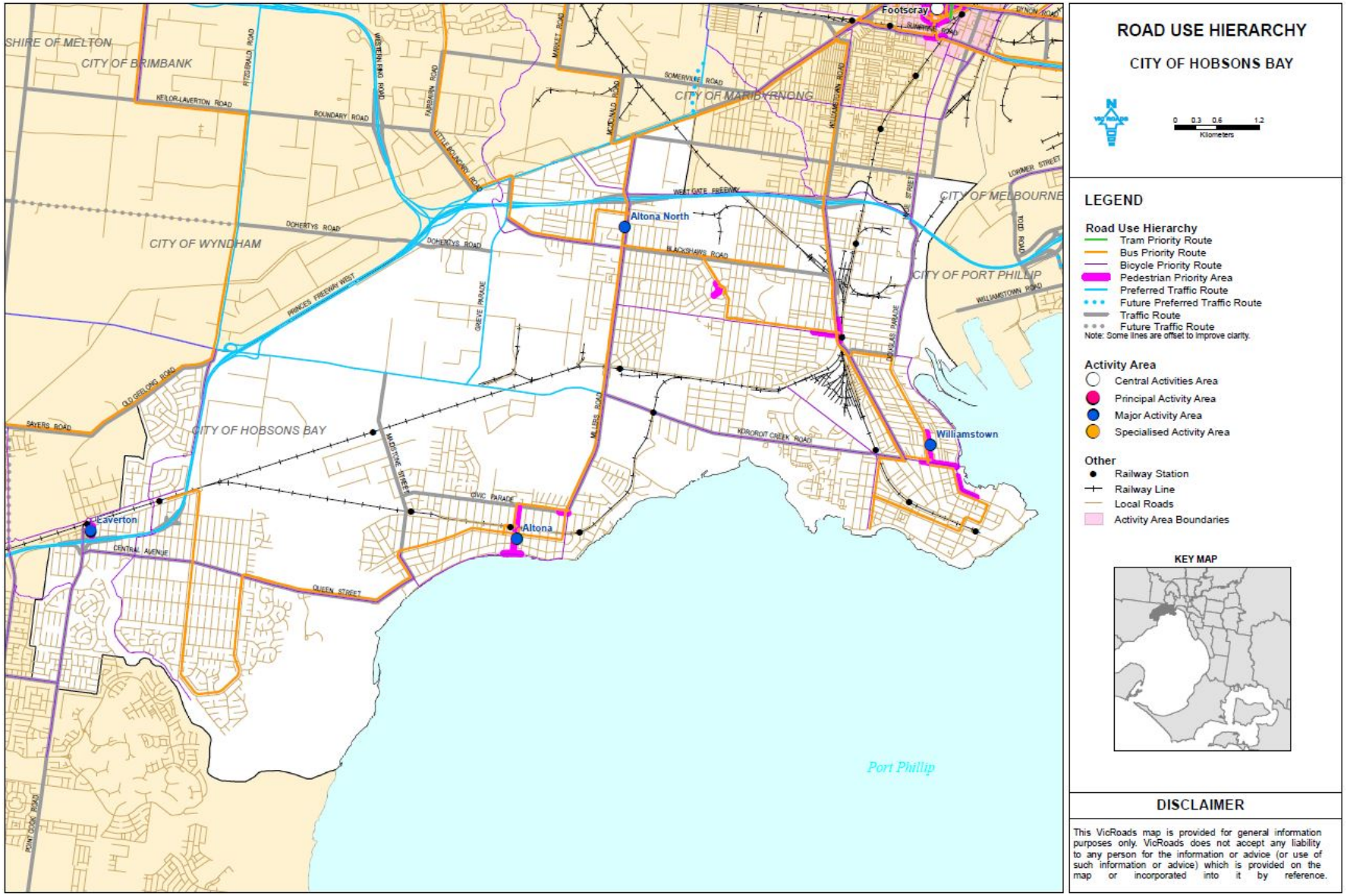

Figure 59: Road use hierarchy map - Hobsons Bay
(Source: VicRoads)

Legislative and policy context

Each level of government has a role in setting the legislative and policy context for roads in Australia. The Australian Government funds major and local road projects and has passed legislation in recent years to establish Infrastructure Australia and the National Land Transport Network Determination. Additionally, the National Road Safety Strategy 2011–20 outlines a set of national goals, objectives and action priorities to reduce fatal and serious injury crashes on Australian roads.[149] The 2015 implementation status report shows improvements over baseline figures (2008-10) on a range of high level outcome measures (e.g. road crash deaths) and safety performance indicators (e.g. fatalities involving single vehicle crashes).

The *Road Management Act 2004* is Victoria's key roads legislation. It establishes a coordinated management system to promote the safe and efficient use of the state's public roads. Of particular relevance to local government, the act outlines the roles, functions and powers of a road authority. It also requires local governments to establish a Register of Public Roads, and provides guidance on the development of road management plans. VicRoads administers the act and the Minister for Roads and Roads Safety is responsible for its implementation. The *Road Management Act 2004* is interface legislation with the *Transport Integration Act 2010*.

VicRoads plans, develops and manages the Victorian arterial road network, including through traffic research, road management, and the planning and construction of major roads. In recent years, VicRoads has introduced SmartRoads, an approach that aims to manage competing interests for road space by giving priority to different transport modes at particular times of the day.[150]

To support the implementation of SmartRoads, VicRoads has developed Network Operating Plans (in conjunction with local governments) to determine which transport modes have priority at different times of the day, including priority levels at specific intersections (figure 59). Future integrated planning may seek to update Council's Local Area Traffic Management (LATM) schemes to complement the broader Network Operating Plans, which establish priority mode networks across the local road system, while encouraging safe and effective interaction between all road users.

Two key Victorian roads policies have also been recently released. VicRoads' Sustainability and Climate Change Strategy 2015-20 sets out priorities to reduce the environmental and climate change impacts of the state's road network.[151] Towards Zero 2016–20 is Victoria's road safety strategy, which aims to reduce road deaths in Victoria to below 200 by 2020, as well as reducing serious injuries by 15 per cent. It will address known crash black spots, increase roadside drug and alcohol testing, and provide additional support to help make young drivers safer.[152]

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[149] Australian Government, *National Road Safety Strategy*, http://roadsafety.gov.au, accessed 12/12/16.
[150] VicRoads, *SmartRoads*, https://www.vicroads.vic.gov.au/traffic-and-road-use/traffic-management/smartroads, accessed 12/12/16.
[151] VicRoads, *Sustainability and climate change strategy*, https://www.vicroads.vic.gov.au/about-vicroads/our-strategy/sustainability-and-climate-change, accessed 13/12/16.
[152] VicRoads, *Towards Zero 2016-2020*, https://www.vicroads.vic.gov.au/about-vicroads/our-strategy/road-safety-strategy, accessed 13/12/16.

Council's Road Management Plan was reviewed and adopted in 2013. In accordance with the *Road Management Act 2004*, its purpose is to establish a road management system, specify relevant standards, and detail the systems Council uses to inspect, maintain and repair local roads. It also describes a road and footpath hierarchy, levels of service, standards of maintenance, an asset management strategy, and programmed inspection requirements for roadways, car parks, footpaths, school crossings and other road assets.

The Hobsons Bay Road Safety Strategy 2011-13 aimed to reduce the number of road deaths and injuries, and improve road safety for all road users in the municipality. It proposed a range of key actions targeted at school children, older drivers, high risk drivers, pedestrians in shopping or community precincts, and people who drive under the influence of drugs or alcohol.

Roads in Hobsons Bay

Hobsons Bay's local road network comprises 428 kilometres of sealed roads and 38 kilometres of unsealed roads. Additionally, there are numerous arterial roads throughout the municipality. Community satisfaction with road maintenance registered 69 (out of 100) in 2015-16 (up from 53 in 2012-13) and community satisfaction with road repairs reached 70 (up from 53 in 2012-13).[153]

Usage

Daily road traffic volumes vary across the municipality (figure 60). The Westgate Freeway clearly carries the highest volume of road traffic in the municipality. Several arterial roads also attract relatively high volumes, including Millers Road, Melbourne Road, Kororoit Creek Road (east of Grieve Parade) and Grieve Parade (north of Dohertys Road). The latter two roads also attract a large number of freight vehicles.

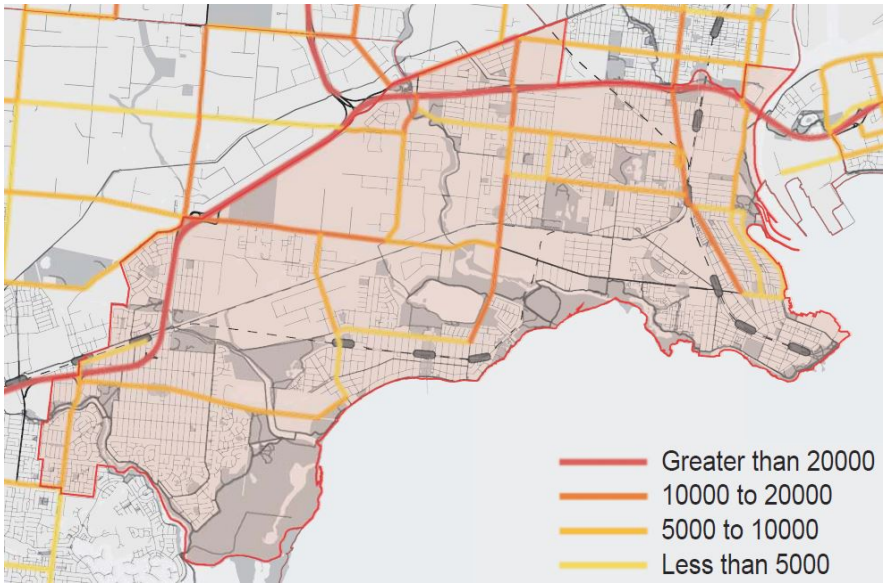

Figure 60: Average daily road traffic volume on major Hobsons Bay roads (Source: Hale Consulting, 2016)

Additionally, Point Cook Road in Seabrook is consistently rated one of the most congested roads in Melbourne, ranked at number seven in the 2016 RACV Redspot Survey and also featuring prominently in the 2014 (2nd) and 2012 (3rd) polls.[154] Hobsons Bay also has limited north-south

[153] HBCC (2016h), p.79.
[154] Royal Automobile Club of Victoria, Redspot Survey, http://www.redspotsurvey.com.au, accessed 13/12/16.

connectivity, with options limited to Millers Road, Melbourne Road, Grieve Parade/Maidstone Street, Point Cook Road, and (to a lesser extent) Douglas Parade. All must cross the Westgate Freeway to exit the municipality to the north, resulting in significant road congestion during peak times or when the freeway is affected by an accident or other disruption.

Council recently commissioned traffic modelling to estimate future road traffic growth on Hobsons Bay's main corridors and associated road networks.[155] The study reviewed a number of scenarios, including full, half and no development of three SRAs: Precinct 15 (the Don's site, Altona North), Precinct 16 (the former Caltex Terminal, South Kingsville) and Precinct 20 (the former Port Phillip Woollen Mills, Williamstown).

Under a full development scenario, by 2031 the number of vehicles during the 7am to 9am peak is expected to increase by:

- 800 vehicles northbound on Millers Road south of the Westgate Freeway
- 500 vehicles northbound on Melbourne Road south of the Westgate Freeway
- 700 vehicles eastbound on Blackshaws Road west of New Street

Modelling also predicts that Millers Road (south of the freeway) will remain congested under all scenarios, while several roads may become congested with full development, including Melbourne Road (south of the freeway and south of Ferguson Street) and Blackshaws Road (west of Mills Street and near the junction with Melbourne Road). Despite increased congestion in these areas, the model forecasts minimal impact on other parts of the local road network.

Initial traffic modelling on the future impact of the Western Distributor project also shows increased demand on a number of Hobsons Bay's arterial roads, including Grieve Parade, Maidstone Street, Blackshaws Road, and Melbourne Road. It also shows a corresponding reduction in demand on several arterial roads within Maribyrnong such as Francis Street and Somerville Road.

Given these findings, Council may consider advocating for truck bans on several arterial roads (including Blackshaws Road, Hudsons Road, Mason Street and Kororoit Creek Road east of Millers Road) to reduce the instance of toll avoidance from the Western Distributor project.[156]

Road safety

VicRoads' road safety data indicates an increasing number of accidents within Hobsons Bay between 2011 and 2015 (figure 61), with the total number of fatal and injury causing accidents growing from 156 to 208.[157] On a more positive note, the majority of this increase was the result of non-serious accidents, with the combined serious injury and fatal accidents falling from 65 to 50. While there was a corresponding decline in the number of people seriously injured in road accidents (from 76 to

[155] GHD (2016) *Transport Modelling and Analysis: Final Transport Modelling Report*, unpublished report prepared for Hobsons Bay City Council.
[156] HBCC (2016e).
[157] See VicRoads, *Crash statistics*, https://www.vicroads.vic.gov.au/safety-and-road-rules/safety-statistics/crash-statistics, accessed 13/12/16.

55), the combined total of people suffering minor injuries or no injury from road accidents increased substantially from 327 to 487.

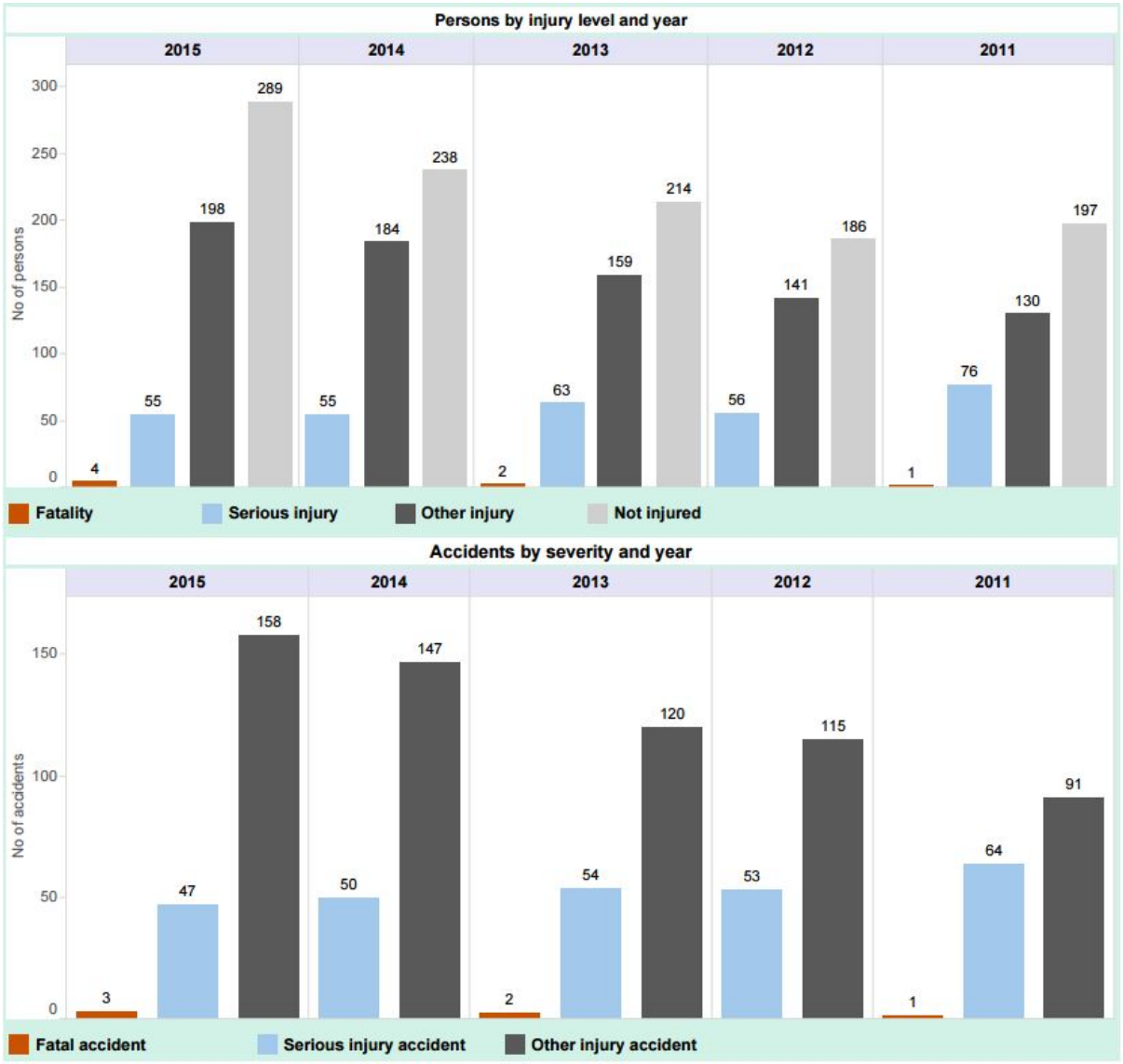

Figure 61: Persons by injury level and accidents by severity (2011-15)
(Source: VicRoads)

Road accidents causing injury or death are more likely to occur on arterial roads or freeways in Hobsons Bay, when compared to local roads. The data indicates an approximate two-to-one ratio between arterial/freeways and local roads across fatal, serious and other accidents. Speed is likely to be a key factor, as the limit on most local roads does not exceed 60 kilometres per hour. Unfortunately, however, two fatal accidents occurred on local roads within Hobsons Bay between 2011 and 2015. Future integrated transport planning may identify and assess the locations of road accidents in the municipality in more detail to develop appropriate responses, including bids to the Victorian and Australian governments to fund road safety upgrades.

Major roads projects

There are a number of major roads projects underway within Hobsons Bay. As noted in chapter three, the Victorian Government is overseeing the Western Distributor project and three level crossing removal projects (see page 28) in the municipality. These projects will not only change the way the road network operates, but also have long standing impacts on public and active transport, as well as the look and feel of some neighbourhoods.

The Victorian Government has also recently called for expressions of interest on a $1.8 billion roads package for Melbourne's west.[158] The 'Outer Suburban Roads Program' will involve a combination of duplication and widening works on eight high-priority roads. Some of these are physically located in Hobsons Bay (e.g. Dohertys Road from Fitzgerald Road to Grieve Parade), while others have the potential to reduce congestion on roads within the municipality (e.g. Dunnings Road and Palmers Road from Point Cook Road to Princes Freeway). Construction is expected to begin in 2018, with all upgrades due for completion within five years.

Challenges

Hobsons Bay faces a number of challenges with respect to roads, including responding to increasing congestion and improving safety.

Congestion

Some roads, locations and times of the day present particular congestion challenges in Hobsons Bay. Prominent examples include Point Cook Road in Seabrook, around schools during drop off and pick up, and on numerous roads during the morning and evening peak. Additionally, congestion can increase dramatically on some arterial roads (e.g. Kororoit Creek Road, Melbourne Road) and freeway interchanges when there is an incident on the Westgate Freeway and vehicles 'rat run' through Hobsons Bay to avoid freeway congestion.

There is considerable debate about the most appropriate response to address road congestion. These may be grouped broadly into supply and demand responses, both of which can be useful in particular situations. The conventional response has been to increase supply by building more roads or adding lanes to existing roads. While this approach is generally popular, research suggests that it simply delays the problem. Extra road space can lead to 'induced demand' that renders the additional space redundant within a few years, while it also increases the appeal of driving in the short term, further weakening the case for behaviour change toward other transport options.[159]

Other responses to road congestion include the use of systems to manage congested roads (e.g. traffic signalling), demand management tools (e.g. congestion pricing) and behaviour change initiatives (e.g. active and public travel promotion and infrastructure improvements). Each of these approaches attempt to regulate the demand for road space rather than simply adding to the supply. These approaches are generally employed less frequently, with the Victorian Auditor General's

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[158] Victorian Government (2016) *Major Works Set to Transport form Outer-Western Roads (media release)*, 8 November 2016.
[159] Hansen, M. (1995) 'Do new highways generate traffic?' *ACCESS*, No. 7, pp.16-22.

Office recently concluding that demand management has not been effectively used to address road congestion in Victoria.[160]

Integrated transport planning should consider both supply and demand approaches to addressing future road congestion within the municipality. However, both approaches ultimately seek to manage the problem, rather than offering a fundamental solution. Integrated land use and transport planning (see chapter 5) provides an additional response to road congestion by reducing the need to travel long distances, thereby addressing (at least part of) the problem at its cause.

Safety

Road safety is another important challenge in Hobsons Bay. As noted, car accident data indicates an increasing number of accidents, injuries and fatalities over the past five years, although the number of serious injuries has declined. Local data on accidents involving pedestrians and heavy vehicles highlight ongoing safety concerns, while national data on bike safety (coupled with local anecdotal evidence) suggest similar safety concerns for cyclists in the municipality, especially at roundabouts and on congested roads with large numbers of trucks. More broadly, the issue of conflict between different road users (cars, motorcycles, trucks, cyclists, pedestrians) should be considered in future integrated transport planning, with particular emphasis through the development of Council's next Road Safety Plan.

Opportunities

Integrated transport planning in Hobsons Bay will examine various opportunities with respect to roads, including advocacy and local road planning and management.

Advocacy

Advocacy presents a critical opportunity to address congestion and safety challenges. Council will continue to work with state government transport agencies (particularly VicRoads) to highlight local congestion issues and seek commitments to address these, including through major infrastructure projects. This role will become increasingly significant through the implementation of the Victorian Government's recently announced roads package for Melbourne's west. Indeed, securing additional transport infrastructure (informed by a regional network planning approach) will be critical to meeting growing population pressures (particularly from Wyndham) in the coming decades.

Council also plays an important advocacy role on major projects such as the Western Distributor and level crossing removals. Importantly, advocacy on these projects is not limited to roads and extends to how the project may impact the surrounding area, including the effectiveness of other modes of transport. Council has provided extensive feedback to the Western Distributor Environmental Effects Statement, calling for improvements to north-south connectivity for Altona North industry, truck bans on key arterial roads, and the construction of new shared paths under the Westgate Freeway.

The development of detailed structure plans for these precincts provides a further opportunity to provide direction to state government transport agencies on local priorities and community

[160] VAGO (2013) *Managing Traffic Congestion*, Melbourne.

expectations. For example, Council's list of local priority projects (which it submits to VicRoads) highlights the need for a collaborative precinct planned approach for the level crossing removal sites at Laverton and Williamstown North. This approach also aligns directly with Council's forthcoming Activity Centre Strategy. Finally, Council also has opportunities to advocate for the local community by attracting resources to address road safety concerns through Australian Government's Black Spot and Roads to Recovery programs.

Local road planning and management

Updating Hobsons Bay's Local Area Traffic Management (LATM) assessments provides an important local road planning opportunity. LATMs focus on a designated area (usually one suburb or neighbourhood) to address local road safety issues, traffic speed and volume issues, parking safety problems and improved residential environment. The process involves extensive community consultation leading to the development of a traffic management plan. Future integrated transport planning may seek to establish a rolling program of LATM projects to address local traffic issues and complement the local implementation of VicRoads' SmartRoads approach and related municipal Network Operating Plans. It will be important, however, to carefully schedule LATM projects as they may raise community expectation and should be actioned within two to three years before recommendations become outdated.

Road management is another opportunity to respond to the challenges impacting roads in the municipality. As noted, Council's core business includes the renewal, resurfacing and rehabilitation of local roads and this vital work continues to support thousands of daily car, bike, truck and motorbike trips. Additionally, innovative road design principles to encourage the development of shared road spaces may be used to address safety concerns at key locations, particularly at some of the larger roundabouts (e.g. Point Cook Road and Central Avenue in Altona Meadows) which are becoming increasingly dangerous for cyclists and pedestrians.

Finally, Council also receives regular community enquiries on the condition of street signs, lighting, and road infrastructure, as well as negative road behaviour such as speeding. In 2016, Council's Traffic and Amenity team received just under 1,000 enquiries relating to Hobsons Bay's local road network, with the most common topics relating to signage (20% of total enquiries), lighting (18%), and line marking (15%). Traffic calming measures (e.g. bollards, speed humps) also contributed around 19 per cent of enquiries. The development of a suite of road and traffic policies will support Council to make consistent decisions at the strategic level and help to manage and respond to community feedback and operational enquiries.

Other transport modes

There are several other transport modes that should be considered in integrated transport planning, including taxis, community transport, water transport, and new transport options based on intelligent transport systems.

Taxis

Taxis provide a flexible, door-to-door transport service that helps to satisfy demand not met by other modes. They are an important part of an integrated transport system as they offer relatively fast travel in areas (and at times) not serviced by public transport, and over distances not feasible by walking or cycling. Taxis are also used for shorter trips by older people or people with a disability who find it difficult (or impossible) to use other forms of transport.

These benefits come at a financial cost to users, with the average off-peak taxi fare from Altona Meadows to the CBD costing around four or five times more than a public transport fare. To support increased equity, programs (such as the Multipurpose Taxi Program) have been in place for many years to reduce the financial burden for people who rely heavily on taxis. Council's role with regards to taxis includes advocating to Victorian Government transport agencies for better service for people with a disability (including increased supply of wheelchair accessible taxis) and the provision of taxi ranks and their integration with existing land use (e.g. activity centres) and other forms of transport.

The Victorian taxi industry has undergone several reform processes over the past decade, most recently the Taxi Industry Inquiry led by Professor Allan Fels. The Inquiry's Final Report (released in 2013) identified a range of issues and proposed a package of reforms to help build a more open, competitive, diverse and dynamic industry.[161] The Inquiry was particularly critical of taxi services for people with a disability, noting that services were 'poor and unreliable' and that this has more serious consequences than for other users.

The Victorian Government accepted the majority of the Inquiry's 139 recommendations, subsequently establishing the Taxi Services Commission to regulate the Victorian taxi and hire car industries (replacing the previous regulator, the Victorian Taxi Directorate). More recently, the Victorian Government has commenced a financial assistance scheme for the taxi industry following the decision to legalise the ride share service Uber. The $50 million Fairness Fund provides targeted financial support for taxi and hire car licence owners who have been affected.

Hobsons Bay is served by all major metropolitan taxi companies, including 13CABS, Silver Top Taxi Services and West Suburban Taxis. Taxi ranks are available within all activity centres and at most train stations (figure 62). Journey to work data showed that just 0.4 per cent of work trips were completed by taxi, and VISTA data (for Metropolitan Melbourne) show similar levels for short trips (0.5%)

Figure 62: Taxi rank at Altona Station

[161] See Taxi Industry Inquiry (2012) *Final Report: Customers first – Service, Safety, Choice*, Melbourne.

and shopping trips (0.1%). Usage for trips to social activities (particularly at night) are likely to be higher and, as noted, people without other transport options often rely heavily on taxis to reach key destinations such as shopping and medical appointments.

The availability, affordability and accessibility of taxi services for vulnerable community members is a key challenge for taxi services in Hobsons Bay. However, integrated transport planning in Hobsons Bay may also examine their role within a local community transport network (see page 128) and initiatives to establish closer integration within activity centres and existing transport hubs. The growing popularity of Uber also presents an opportunity to consider how it may be incorporated into Hobsons Bay's integrated transport system, particularly within tourist precincts and activity centres.

Community transport

Like taxis, community transport services help to satisfy unmet demand within an integrated transport system, particularly for people who are unable to use conventional modes. Community transport is delivered through various models but is generally provided by not-for-profit organisations (including local governments). It also has strong volunteer involvement, and is flexible, affordable, accessible and responsive to locally-identified mobility needs.

Community transport services generally support people to access social activities, shopping centres and some health services. Separate patient transport services also operate where passengers require specialist clinical care or monitoring. Council currently provides a service delivery role for community transport, and also undertakes advocacy and planning in order to maintain and expand service levels within the municipality.

There is no specific legislative or policy framework for community transport in Victoria, although it is captured broadly through the *Transport Integration Act 2010* and indirectly through other legislation such as the *Bus Safety Act 2009.* The latter establishes a formal safety regime for all bus operators, with Hobsons Bay recently achieving full compliance following an audit by Transport Safety Victoria.

Community transport is funded through all levels of government in Australia, with Council contributing approximately $92,000 to meet the costs of service delivery during 2014-15. The Victorian Government's Home and Community Care program provides funding for volunteer coordination, some of which is used by Council to deliver community transport. Additionally, the Commonwealth Home Support Program provides funding for the provision of a structure or network that delivers accessible transport to eligible clients. Agreements between Council and the state and federal governments are due to expire in June 2019.

A range of community transport services currently operate in Hobsons Bay through a range of providers, including Council, disability services, community services, aged residential facilities, sports clubs, and social clubs. Council operates six buses (five minibuses and one medium sized bus, including two with hoists) to deliver the following core community transport services:

- **planned activity groups** – socially isolated residents who require personal care assistance receive transport to get to community activities; this service is required as part of funding agreements, with over 170 clients participating between November 2015 and October 2016

- **seniors groups** – transport is provided for older people attending seniors' social groups within Council facilities, with more than 3,400 people accessing the service between November 2015 and October 2016
- **self-drive bus** – a Council-owned bus is available for hire by community groups, with 16 groups using the bus on 57 occasions between November 2015 and October 2016

These services are delivered using a mix of paid and volunteer drivers, and passengers pay a small fee to participate. Occasionally, taxis are used to meet additional demand.

In recent years, two initiatives have also been trialed to expand community transport provision in Hobsons Bay. Firstly, a Community Care Transport Service was trialed between November 2015 and October 2016 (figure 63). The program provided an additional 42 services to shopping centres (Highpoint, Pacific Werribee, Altona Gate and Point Cook Town Centre), as well as three cultural outings to Oakleigh in Melbourne's south-east. Evaluation found that key benefits of the service included increased social connectedness from the users as well as providing additional volunteer opportunities for community members as drivers (see page 46). The program is set to continue in 2017.

Figure 63: Community Care Transport Service Trial promotion

Secondly, Council initiated discussions with several community transport providers to establish a local community transport network to promote increased sharing of vehicles and improved overall efficiencies. Although several providers (including Council) entered into a memorandum of understanding, this model has been less successful, with limited availability of vehicles and low take up of an electronic communication and information sharing system. Other barriers include varying condition of vehicles between organisations, and concerns with engaging organisations that provide electronic gaming machines within their premises, as this contradicts Council's Electronic Gaming Machine Policy Statement.

Key challenges for community transport in Hobsons Bay include keeping up with demand as the population ages, uncertainty of funding beyond current agreements, and ongoing maintenance and vehicle replacement costs. The continuation (and potential) expansion of Council's community transport trial provides an important opportunity, as well as further activities to establish a local community transport network. The latter has been implemented elsewhere in Melbourne such as the Frankston and Mornington Peninsula Community Transport Network.[162] Other service delivery models may also be investigated such as a free route-based shuttle bus, which is currently operating between Ocean Grove and Barwon Heads with the support of local government, traders'

[162] Victorian Government (2012b) *Innovative new transport solution for Mornington Peninsula and Frankston residents (media release)*, 14 May 2012.

organisations and local business.[163] Finally, increased integration between community transport and other modes (supported by travel training and information) may offer a useful means of expanding transport options across the municipality, particularly for more vulnerable residents.

Water transport

Water transport can support longer distance commuter travel, and currently provides alternatives to trains and buses in some cities such as Sydney. However, it must be cost and time effective to compete effectively and often relies on close integration with cars ('park and ride') and public transport. Council's role with regards to water transport is largely limited to advocacy, although it may also potentially contribute through planning, promotion and the delivery of supporting infrastructure to facilitate local services.

In 2013, the Victorian Government released the Melbourne Ferries Background Study Discussion Paper.[164] It was developed at the same time as Plan Melbourne and explored the need and feasibility of ferry services within Port Phillip Bay, connecting the CBD with the western suburbs and the Bellarine Peninsula (figure 64). Altona and Williamstown were suggested as 'natural intermediate stops'. The presence of existing activity centres and surrounding residential catchment were noted as advantages for these locations, although the development of an appropriate ferry terminal at either location would require substantial investment. The extent to which the current Victorian Government is exploring water transport options is unclear.

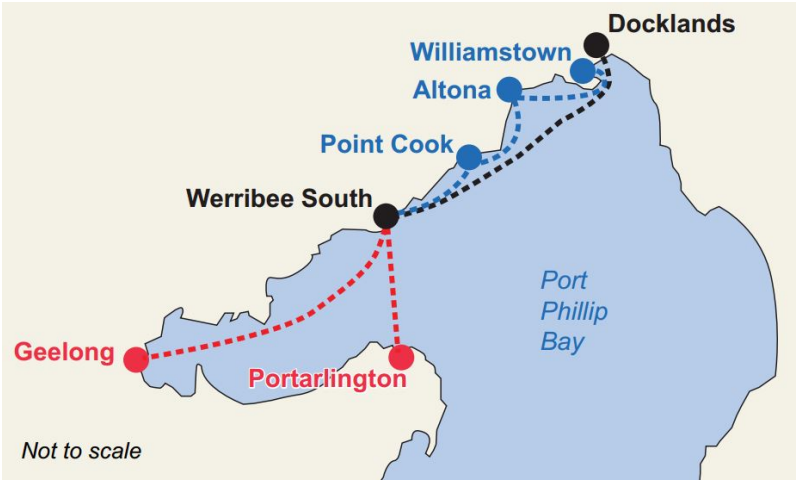

Figure 64: Potential Melbourne ferry network
(Source: DPCD, 2013)

Given its bayside location, Hobsons Bay currently has a large volume of water transport, although it is largely focused on the tourism and recreation market. For example, numerous ferry services operate from Williamstown, travelling to the CBD and other locations such as Scienceworks. The Westgate Punt provides a more cycling commuter-focused service from Spotswood to Port Melbourne. The crossing takes around 10 minutes, costs just $2 per trip, and runs every 20 minutes during the morning and afternoon peak. It is also reasonably well integrated with popular bike paths on either side, as well as a bus travelling from Port Melbourne to the CBD.

[163] Barwon Coast Committee of Management, *Free Shuttle Bus Live Tracker*, http://barwoncoast.com.au/bus, accessed 6/1/17
[164] DPCD (2013b) *Melbourne Ferries Background Study: Discussion Paper,* Melbourne.

During 2016, a commuter ferry trial to the CBD was conducted by Port Phillip Ferries from two locations – Wyndham Harbour (Werribee South) and Portarlington. Both services bypassed Hobsons Bay and experienced varying levels of success. The Wyndham service did not attract much interest, possibly due to the long travel time (70 minutes) and high cost, which was subsequently reduced by around 60 per cent. The Portarlington trial proved more successful and has now been established as a permanent service, offering a 90 minute trip time between Portarlington Pier and Victoria Harbour, Docklands.

The outcomes from this trial highlight the considerable challenges in establishing water transport services in Port Phillip Bay, particularly within the metropolitan area. The cost, relative speed, and availability of other transport options all reduce the service's viability. Additionally, the cost to establish local infrastructure is a barrier, as well as the involvement of multiple landowners. Nonetheless, water transport remains an important consideration for the local community and is referenced in Hobsons Bay 2030. As such, integrated transport planning may pursue opportunities to advocate further investigate its local viability for future services to the municipality.

Intelligent transport systems

Intelligent transport systems cover a range of technologies, including in-vehicle systems (e.g. lane detection, intelligent speed assist), vehicle-to-vehicle systems (e.g. collision avoidance systems) and vehicle-to-infrastructure systems (e.g. traffic signal and variable speed control).[165] Although there has been considerable recent interest in ITS, it has been evolving over the past two decades, with the 23rd Intelligent Transport Systems World Conference held in Melbourne during October 2016.

Perhaps the most well-known example of ITS is the 'driverless car', more correctly known as an automated vehicle. There are various levels of automated vehicles, ranging from driver assistance (level 1) to fully automated (level 5), with this technology being used in both cars and trucks.[166] The Victorian Government recently released a discussion paper to consider options for the future regulation and testing of highly automated vehicles, the application of safety assurance measures, and how Victoria can work towards removing barriers to automated vehicle use on a national scale.[167]

'Connected vehicle technology' is another form of ITS, which allows vehicles to exchange information with other vehicles, road infrastructure or public transport systems. These are becoming increasingly prevalent through technological advances in the provision of real time information and network management systems. For example, VicRoads will soon commence a trial of traffic signalling technology that will communicate road conditions to drivers via a smartphone app, including a

[165] ITS Australia, About, https://www.its-australia.com.au/about-us, accessed 14/12/16.
[166] Levels are based on the National Transport Commission's adaptation of the levels of automation in the SAE International Standard J3016 (September 2016) – see VicRoads, *Automated and connected vehicles*, https://www.vicroads.vic.gov.au/safety-and-road-rules/vehicle-safety/automated-and-connected-vehicles/automated-and-connected-vehicles, accessed 14/12/16.
[167] VicRoads (2016c) *Future Directions Paper: How Victoria will continue to support the development of automated vehicles*, Melbourne.

suggested travel speed to ensure a continuous flow of green lights.[168] Public Transport Victoria will conduct similar trials to alert traffic signals of approaching trams and to track trams in relation to other vehicles on the road.[169]

Intelligent transport systems also have the potential to fundamentally alter the way people travel in urban environments. When coupled with carshare and rideshare options, automated vehicles may greatly reduce the future need for car ownership, with some commentators suggesting that we may purchase 'mobility plans' in future, in the same way that we currently purchase data plans.[170] Indeed, major US telecommunications companies such as AT&T and Verizon have begun to invest in ITS, with the latter recently agreeing to acquire a telematics, compliance and navigations systems developer used by major car companies such as Ford and General Motors.[171] Similarly, Google has been testing self-driving cars on public roads in the US since 2009, and has recently established Waymo, an independent self-driving technology company (figure 65).

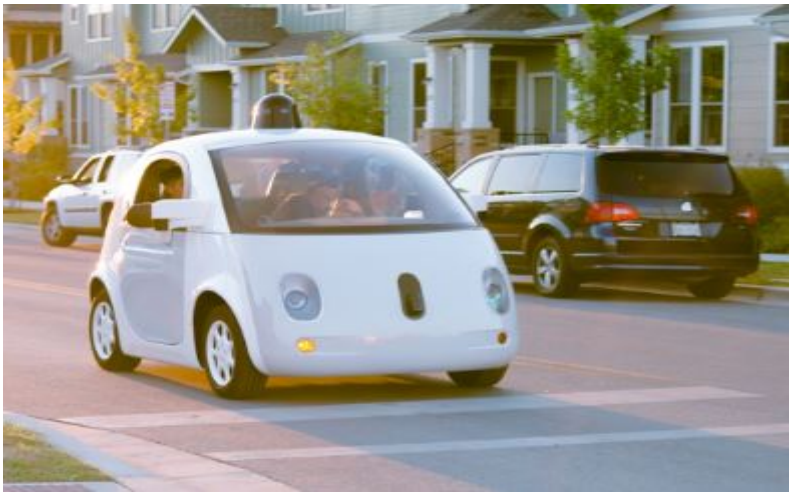

Figure 65: Google self-driving car prototype vehicle (Source: www.waymo.com)

Some of the potential benefits of ITS include improved road safety, network efficiency, productivity and energy efficiency. Increased use of these services also have the potential to reduce the need for car parking, freeing it up for other uses such as open space or affordable housing. However, it may also reduce government revenue currently sourced through vehicle registration (Victorian Government) and fuel excise tax (Australian Government).

There are many challenges associated with intelligent transport systems, including their inherent complexity and the sense that some elements (such as 'driverless cars') seem to belong in the far distant future. A more immediate challenge is predicting how the technology will develop and what effects it will have. For example, the potential impact on road congestion is unclear. While the use of ITS under a carshare model may reduce congestion by increasing passenger occupancy rates,

[168] Devic, A. (2016), 'New 'congestion-busting' app launched in Australia-first trial, *Herald Sun*, 17 October 2016.
[169] Carey, A. (2016d) 'Traffic light tweak aims to stop trams getting stuck as roads congest', *The Age*, 17 October 2016.
[170] Intelligent Transport Systems World Conference (2016) 'Melbourne Conversations: Smart Transport – Smart City: Making streets better placed for people', panel discussion 13 October 2016.
[171] Newcomb, D. (2016) 'Verizon Acquisition of Telogis Expands Company's Connected Car Footprint', *Forbes*, 30 June 2016.

congestion could get worse if more cars are on the roads, particularly if regulation is poorly executed or the technology becomes extremely popular.

There is similar ambivalence with regards to the safety of autonomous vehicles, with the potential benefits of reduced (or eliminated) user error offset by possible technical faults, limited suitability to local roads, and the added risk to pedestrians from much quieter autonomous electric vehicles. Further challenges include maintaining the privacy of users (e.g. travel patterns, financial details) and increasing online security, with the most extreme case being the use of a remotely controlled autonomous vehicle as a weapon in a crowded urban environment.

Given the broad range of challenges, consistent government regulation (primarily at the federal and state levels) will be critical to the development of intelligent transport systems in Australia. With so much innovation and uncertainty, there are clear opportunities for integrated transport planning to stay informed of developments and investigate how they may be implemented and developed at the local level.

Summary: considerations for integrated transport planning

The following is a summary of the key points from this chapter that should be considered in Hobsons Bay's integrated transport planning.

Walking

- Walking includes all forms of travel undertaken by pedestrians (including wheelchair and motorised scooter users) and is ideal for short trips, linking to other modes and has important health benefits.
- Council's main role is the planning, provision, renewal and maintenance of walking infrastructure, including footpaths, street furniture, lighting, and shared trails.
- Although it does not have a current overarching walking strategy, the Victorian Government provides planning and funding support through a number of agencies, including Active Transport Victoria and VicHealth.
- Walking has low mode share for the journey to work (2%) but occurs more frequently for other purposes (e.g. shopping, education) and over shorter distances up to one kilometre.
- Walking to school rates (16.5%) are relatively low for primary school students, compared to children who are driven to school (more than 70%).
- A majority of pedestrian accidents occur within activity and neighbourhood centres, although Point Cook Road, Seabrook (including the roundabout at Central Avenue) has also experienced a relatively large number of accidents.
- Challenges include addressing physical barriers (infrastructure gaps, footpath condition, distances to destinations, and lack of supporting infrastructure), as well as increasing the number of children who walk to school.
- Opportunities include improving the walkability of Hobsons Bay neighbourhoods through strategic land use planning, urban design, and localised pedestrian access planning.

Cycling

- Cycling is ideal for short to medium distance commuter trips, linking to other modes, exercise and recreation, and has important health benefits.
- Council's main role is the development, renewal and maintenance of cycling infrastructure, including shared trails and local on-road bike lanes.
- While the Victorian Government has a strong policy and network planning role for cycling, funding opportunities have diminished in recent years.
- Hobsons Bay's Strategic Bicycle Plan 2013-17 identified a number of high priority projects, many of which have been completed in the past four years.
- Cycling has low mode share for the journey to work (1.6%), particularly in the western part of the municipality and amongst females.
- Recent data shows that 'cycling for transport' (for a period longer than 10 minutes) is relatively popular in Hobsons Bay, although cycling to school and for shopping trips is low.
- Cycling on Hobsons Bay's shared trails is becoming increasingly popular, although this has the potential to exacerbate 'conflicts' with other users such as pedestrians.
- Challenges include identifying and responding to infrastructure gaps, attracting additional funding, and responding to safety concerns to help improve cycling activity.
- Opportunities include examining how a network planning approach can cater to a wider range of cyclists, maintaining advocacy toward government agencies, and a range of behaviour change initiatives to encourage higher cycling rates.

Public transport

- Public transport attracts strong commuter use (primarily into the CBD via train) and provides local connections for large numbers of people, including for those who are unable to drive a car such as young people.
- Council's main role is to advocate to government agencies for improved service levels and infrastructure, as well as improving the built environment around public transport and supporting the community to use services effectively.
- The Victorian Government sets the legislative and policy context for public transport in Victoria with a range of agencies in place to manage various aspects of the system.
- Coverage of public transport services is unevenly spread across Hobsons Bay, with less than one-third of households within walking distance of a train station or bus interchange.
- Public transport service levels vary considerably across the municipality, with reduced bus frequency and service span reinforcing car use and affecting people who are unable to drive, do not own a car and/or live in a neighbourhood without a train station.
- Public transport has above average mode share for the journey to work (18.4%) and is also used extensively for trips to secondary school and tertiary education.

- Challenges include improving service levels (e.g. frequency, service span, reliability, overcrowding, bus route design) and infrastructure (e.g. stations, rail duplication, previously closed stations), as well as addressing accessibility issues, perceptions of safety and overcrowded commuter parking.
- Opportunities include maintaining and extending advocacy activities on a range of issues (e.g. service levels, infrastructure needs, network planning), and supporting improved intermodal integration through advocacy and transport-focussed urban design projects.

Freight

- Freight is an important part of Hobsons Bay's integrated transport system due to the municipality's large industrial precinct, proximity to sea and inland ports, and growing transport and logistics sector.
- Council's main role is to balance the competing economic and social effects of freight activity through advocacy to government agencies, mitigate the negative effects on residential amenity, and regulating the movement of heavy vehicles on local roads.
- The National Land Transport Network and the National Heavy Vehicle Regulator provide oversight of local freight activity at the Commonwealth level, while the Victorian Government has recently privatised operations of the Port of Melbourne and has maintained a focus on shifting freight activity toward rail.
- Hobsons Bay attracts considerable freight activity due to its proximity to the Port of Melbourne, intermodal freight terminals and relatively large manufacturing, petrochemical and transport industries.
- Freight activity is highest on non-residential arterial roads, but there is considerable road and rail freight activity through local residential areas.
- Challenges include contribution to increased road congestion, protecting residential amenity from freight activity, and responding to the local impact of increased rail freight.
- Opportunities include improving the local freight network to support economic development, advocating to government agencies to improve freight efficiencies and local amenity, and undertaking local planning and research to better understand and respond to freight needs and impacts.

Private passenger vehicles

- While PPVs occupy a predominant role within an integrated transport system (as the most widely used mode of transport for almost every trip type), a key objective of integrated transport planning is to encourage mode shift to other transport options.
- Council's main role is to plan, construct, renew and maintain roads and car parking spaces, as well as promoting behaviour change (safer driving, shift to alternate transport options) and advocating to government transport agencies for improved road conditions.
- Private passenger vehicles are costly to purchase, operate and maintain (the estimated annual cost for a medium sized car is $10,000).

- Almost half of Hobsons Bay households (47%) own two or more vehicles, with higher ownership rates generally found in larger households and within areas of lower housing density, although overall rates are slightly below the Metropolitan Melbourne average.
- Hobsons Bay has typical mode share for the journey to work (78%), with rates increasing in areas with reduced access to public transport (particularly train services).
- There are very few trip types in Hobsons Bay that are not dominated by private passenger vehicles – examples include trips less than one kilometre (44%), trips to secondary school (39.8%) and trips to tertiary education (30%).
- Challenges include reducing transport emissions and road congestion caused by large numbers of private passenger vehicles.
- Opportunities include further investigating and supporting the uptake of electric vehicles and shared mobility initiatives such as rideshare and carshare programs.

Roads

- Roads are fundamental to an integrated transport system as they take up considerable space within urban environments and every transport mode either uses or crosses them.
- Council has a legislated role to manage the local road network (including planning, infrastructure works, and maintenance), as well as advocating to state government agencies and supporting the community to use roads more safely.
- The Australian Government funds major and local roads projects, while the Victorian Government (through VicRoads) plans, develops and manages the arterial road network.
- Council's Road Management Plan guides its work on the local road network, and it also works with VicRoads to implement a municipal Network Operating Plan to establish priority routes for various transport modes across the municipality.
- Congestion levels vary across the municipality, with the Westgate Freeway and Point Cook Road experiencing high levels at peak times; congestion is expected to increase in the north of the municipality, particularly on Millers, Melbourne and Blackshaws Roads.
- While the total number of people injured in car accidents increased by around 20 per cent between 2011 and 2015, the number seriously injured fell by approximately 25 per cent; seven people were killed on Hobsons Bay roads during this period.
- Challenges include managing current and future congestion and improving safety for all road users.
- Opportunities include advocacy for roads funding and major projects, as well as local road planning and management that improves road safety and supports Council to make consistent decisions in response to community and stakeholder feedback.

Other modes

- Taxis provide a flexible, door-to-door transport service that helps to satisfy demand not met by other modes. Challenges include the availability, affordability and accessibility of taxi

services (particularly for more vulnerable residents), while opportunities include further investigating their role in a local community transport network.

- Community transport also helps to satisfy unmet demand within an integrated transport system, particularly for older people and people with a disability. Challenges include keeping up with demand and securing long-term funding, while opportunities include investigating other local service delivery models, e.g. local community transport network, route-based shuttle bus.
- Water transport can support longer distance commuter travel as an alternative to public transport. Challenges include cost, relative speed and availability of currently better alternatives, while opportunities include advocacy and further investigation regarding local viability.
- Intelligent transport systems cover a wide range of technologies such as automated vehicles and connected vehicle technology; challenges include predicting their impact on integrated transport systems (e.g. on congestion and on safety), while there are opportunities to stay informed as they evolve and become more widely used.

07 Priority areas and recommendations

Hobsons Bay's future integrated transport planning will respond to a wide range of challenges and opportunities to support positive social, economic and environmental outcomes for the municipality.

This background paper has identified a wide range of transport challenges and opportunities within Hobsons Bay. These range from specific issues (such as walking to school, public transport service levels and the impact of freight) to much broader topics, including mobility disadvantage, car dependency, and balancing residential and industrial growth in the municipality.

This chapter discusses these issues in greater detail, as well as providing a series of recommendations for consideration in future integrated transport planning. They are summarised under four priority areas: research and planning; infrastructure and service; engagement and behaviour change; and advocacy, funding and partnerships (figure 66). However, before describing these priority areas, it is helpful to make some broad summary observations regarding integrated transport planning in Hobsons Bay.

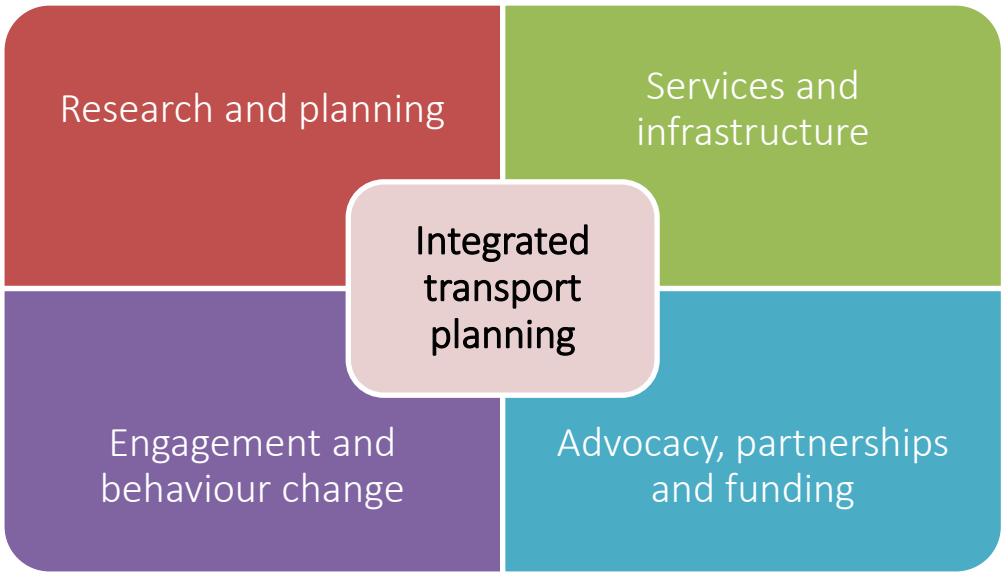

Figure 66: Integrated transport planning priority areas

Integrated transport planning

As noted in chapter one, integrated transport planning aims to coordinate interrelated transport systems through long term strategic planning. While private passenger vehicles play an important role in any transport system, integrated transport planning is underpinned by a 'sustainable transport hierarchy' which prioritises other transport modes such as walking, cycling, public transport and freight. It is based on a network planning approach that takes account of the needs of

all transport users across all transport modes, in the context of specific neighbourhoods, the municipality and the wider metropolitan network.

Understanding and implementing this approach will help respond to Hobsons Bay's many transport challenges and opportunities and, in doing so, support important social, economic and environmental outcomes. For example, 'mobility disadvantage' experienced by vulnerable groups can be addressed through the provision of more affordable, available and accessible transport options. Similarly, well maintained and connected active transport infrastructure can help to improve actual and perceived safety, and reduce disease risk factors (such as obesity) by supporting increased levels of walking and cycling.

Integrated transport planning also supports economic objectives through freight and roads planning that helps to increase efficiency and productivity (e.g. through reduced congestion and improved safety) as well as providing investment clarity for business and industry. Additionally, a number of natural and built environmental objectives may be achieved through integrated transport planning, including lower transport-related emissions, improved residential amenity, more walkable and vibrant public places.

Some of these issues were addressed in Council's previous Integrated Transport Strategy (released in 2006), although limited resources meant that planned and coordinated implementation and monitoring was limited. Additionally, this strategy was developed over 10 years ago and therefore does not represent current needs within the municipality.

Recommendations

The following recommendations should be considered in future integrated transport planning:

1. *develop an **Integrated Transport Plan** for Hobsons Bay, including an implementation plan*
2. *undertake **targeted consultation** with key stakeholders (as required) through the development of the Integrated Transport Plan*
3. *review **available resources** to ensure the implementation plan is achievable*
4. *develop an **evaluation framework** to track progress of the plan*
5. *establish an **internal working group** to support the development of the plan, as well as future implementation, evaluation, funding and research*

Research and planning

Research and planning helps to provide the evidence and direction for future transport projects in Hobsons Bay. It is critical to ensuring that transport activities are coordinated and reflect the needs of local residents, business and industry. Council has a role to plan for current and future populations through research, consultation and policy development, including in relation to transport.

A range of research and planning challenges have been described in this background paper. For example, land use planning faces challenges to understand and incorporate the transport implications of future growth, and to support appropriate location of residential, commercial and

industrial development. Additionally, some of Council's transport data is also nearing the end of its useful life such as local car parking studies and strategies.

There are many opportunities with regards to transport planning and research. Network planning may be undertaken to establish local neighbourhood routes to complement the existing commuter and recreational cycling network. Localised pedestrian access planning may also be conducted to identify a suite of actions to improve walkability in and around activity centres. Additionally, local freight planning may be undertaken to ensure businesses maintain efficient access to the principal freight network whilst minimising the impacts on surrounding sensitive land uses.

Recommendations

The following recommendations should be considered in future integrated transport planning in relation to research and planning.

Research

6. *monitor **best practice research and practices** on a range of transport issues, including car parking, travel demand management and intelligent transport systems*
7. *investigate **Council's role with regards to sustainable transport options**, including electric vehicles, shared mobility and the development of Green Travel Plans for use by local business, industry and private developers*

Planning

8. *undertake planning to respond to local transport challenges and opportunities arising from **population growth** within Hobsons Bay and surrounding municipalities*
9. *further integrate **land use and transport planning** to facilitate appropriately located residential and commercial activity, attract investment in local transport services and infrastructure, and support economic development opportunities located close to public transport hubs*
10. *undertake **local pedestrian and cycling access planning** to guide ongoing infrastructure works, local network planning, way finding signage, and advocacy to transport agencies*
11. *undertake **local freight planning** to clarify the key issues and inform future advocacy, route planning, infrastructure needs and land use planning*
12. *update the Hobsons Bay **Road Safety Plan**, incorporating current research and funding opportunities*

Services and infrastructure

Services and infrastructure support the safe, equitable, efficient and sustainable movement of people and goods in Hobsons Bay. The municipality has a wide range of transport services and infrastructure, including public transport, taxis, roads, footpaths and shared trails. However, Hobsons Bay also experiences service and infrastructure gaps, and these can have a disproportionate impact on some population groups. Council has a key role to provide and maintain

local transport infrastructure, as well as delivering services (such as community transport) that support health and wellbeing.

Hobsons Bay faces a range of transport service and infrastructure challenges. Public transport services vary considerably across the municipality in terms of frequency, service span, reliability and accessibility, while infrastructure gaps are regularly highlighted such as the need for Altona Loop duplication, re-opening of closed train stations, increased commuter car parking capacity and improved end-of-trip facilities. Some gaps also exist within Hobsons Bay's footpaths and shared trails, as well as physical barriers (such as main roads, train lines, limited connectivity and large tracts of industrial land) that reduce the appeal of walking and cycling.

Gaps in service levels and infrastructure can also contribute to reduced real and perceived safety across several transport modes, including cycling (e.g. narrow or lack of bike lanes and roundabouts), public transport (e.g. infrequent night time services) and roads (e.g. 'conflict' between different road users). Current levels of service and infrastructure also pose challenges for land use planning in terms of congestion arising from increasing residential density and existing rail and level crossing infrastructure which may lead to additional congestion if the volume of rail freight increases in future.

Various service and infrastructure opportunities may be examined through future integrated transport planning. For example, appropriately located residential and commercial density can help attract state government investment in public transport services and infrastructure. There are also opportunities to trial alternate and innovative uses for a small number of car parking spaces within activity centres. Other opportunities include ongoing targeted local infrastructure projects (such as Council's footpath implementation program) and road and intersection design to facilitate safe and efficient freight movement. Council may also identify further opportunities to consolidate existing community transport services and examine its role in other service delivery models.

There are further opportunities to draw on Hobsons Bay's SmartRoads Network Operating Plan to establish priority mode networks across the local road system, complemented by a rolling program of Local Area Traffic Management projects to address local traffic issues. Freight network planning also provides opportunities to promote and consolidate existing freight routes and investigate the need for grade separations along the rail freight corridor. There are additional opportunities to promote public transport usage and integration through improved walking and cycling connections, as well as urban design and place making projects based around public transport infrastructure.

Recommendations

The following recommendations should be considered in future integrated transport planning in relation to services and infrastructure.

Services

13. *investigate the feasibility of additional **community transport** service delivery models within Hobsons Bay, e.g. local network, route-based shuttle bus*

Infrastructure

14. *develop an integrated approach to **car parking**, incorporating parking permits, planning scheme requirements, paid parking, enforcement, seasonal parking restrictions, commuter parking, activity centre strategies, alternate use of spaces, and other relevant topics*
15. *develop a **coordinated transport infrastructure capital works program** (incorporating Council, state government transport agencies and private developers) to support network improvements for local roads, shared trails and footpaths*
16. *undertake **strategic road infrastructure planning** to establish priority mode networks across the local road system*
17. *establish a rolling program of **Local Area Traffic Management studies** across the municipality*
18. *investigate opportunities to implement innovative urban design and place making projects to complement local **public transport infrastructure***

Engagement and behaviour change

Engagement and behaviour change seek to understand and influence the way the transport system is used in Hobsons Bay. Community and stakeholder engagement underpins integrated transport planning in various ways such as seeking input into policy development, and explaining policies and decisions on various issues. Behaviour change may be considered the ultimate goal of integrated transport planning, resting on a wide range of other factors to be successful such as planning, advocacy and infrastructure. Council has a role to listen to and engage with the local community and stakeholders, as well as provide support through targeted behaviour change programs.

Perhaps the biggest challenge to behaviour change is the wide range of factors that make non-car transport less appealing such as reduced public transport service levels, cycling safety concerns, physical barriers to walking, as well as their often lower relative speed. More specifically, some of the more prominent behaviour change challenges include parental attitudes towards children walking to school alone, managing 'conflict' between shared trail users, and influencing driver behaviour toward other road users. Important engagement challenges include delivering careful messaging on transport issues, particularly on potentially contentious topics such as changes to car parking arrangements, re-allocating road space away from cars, or increasing residential density.

A number of behaviour change opportunities were raised during community consultation, including the walking school bus and other programs to encourage walking to school. More generally, behaviour change programs should complement the overall strategic direction of integrated planning for the municipality and the development of new infrastructure. Additionally, a range of target groups and organisations may be engaged through behaviour change programs, including schools, local business, culturally and linguistically diverse communities, women, people with a disability, older people or even entire neighbourhoods and residential developments. Engagement opportunities include developing better knowledge of local transport usage and needs, and working with stakeholders and the community on transport projects. Council advisory groups also provide a useful engagement forum, although there is currently no group specifically focused on transport.

Recommendations

The following recommendations should be considered in future integrated transport planning in relation to engagement and behaviour change.

Engagement

19. *deliver targeted community and stakeholder **engagement activities (as required)** to build the local evidence base on transport usage and needs, inform future planning, and support transport and land use decisions with high community interest and/or impact*
20. *review, update and/or develop relevant **roads and traffic policies** to support consistent responses to key issues raised through community feedback, e.g. lighting, signage, line markings*
21. *review the role of **Council's Advisory Groups** in supporting community and stakeholder engagement in future integrated transport planning*

Behaviour change

22. ***work with the community and key stakeholders** to support transport behaviour change programs, including for short trips, shopping trips and walking to school (subject to review of available resources, see Recommendation 3)*
23. *investigate opportunities to further promote behaviour change toward **sustainable transport within Council**, including through Green Travel Plans and increased use of electric vehicles*

Advocacy, partnerships and funding

Advocacy, partnerships and funding are important mechanisms to ensure that transport needs are addressed in Hobsons Bay. This reflects Council's limited influence over some aspects of the transport system (such as public transport) and the benefits of working with the community and stakeholders to achieve shared objectives. Council has a key role to advocate on behalf of Hobsons Bay and to support and facilitate projects that build community resilience and maximise potential.

Major Victorian Government transport projects provide a key advocacy challenge for Hobsons Bay, including the Western Distributor and level crossing removal projects. These (and future major projects) can have far-reaching impacts on the local community; therefore, Council advocates directly to government transport agencies to achieve the best possible outcomes for the community. The size and complexity of the Victorian transport bureaucracy is another challenge, particularly with expected changes due to the establishment of Transport for Victoria. Reduced funding for cycling infrastructure, cost shifting between levels of government, and the growing prominence of value capture as a model to fund large infrastructure projects provide additional challenges.

A wide range of advocacy, partnership and funding opportunities may be addressed through integrated transport planning. Council's advocacy activities will continue on various transport issues, including public transport service levels, road projects and local freight routes, as well as leveraging other improvements (such as shared trail or rail infrastructure) through major transport projects.

A range of external funding opportunities may also be investigated, including funding for roads (Australian Government), cycling infrastructure (Victorian Government) and behaviour change projects (VicHealth). Additionally, Council may further explore other funding opportunities such as Developer Contribution Plans and local applications of a 'value capture' approach to complement the transport infrastructure capital works program. Finally, various partnership opportunities may be explored to build stronger relationships and promote increased organisational integration, including with transport agencies, other local governments, schools and local community transport providers.

Recommendations

The following recommendations should be considered in future integrated transport planning in relation to advocacy, partnerships and funding.

Advocacy

24. *develop a coordinated evidence-based **transport advocacy program** to support advocacy on public transport services and infrastructure, road network improvements, water transport options and other relevant transport issues*
25. *continue to monitor and advocate on current and future **major transport projects** such as the Western Distributor*

Partnerships

26. *prioritise a **partnership approach** (both at the project and strategic level) to promote closer organisational integration in the pursuit of shared transport objectives*
27. *participate in **regional partnerships** (with LeadWest, WeTal and other local governments) to respond to regional transport issues, including freight management and shared trail development*

Funding

28. *proactively seek **external funding opportunities** to support partnerships with local communities or stakeholders to achieve shared transport objectives*
29. *establish a **developer contribution policy** to guide the development of fair and equitable Developer Contribution Plans for local transport infrastructure, and effective and consistent strategies to mitigate adverse impacts on the local transport system*
30. *update Council's **transport infrastructure policies** to ensure they are fair and equitable and provide increased flexibility to attract external funding for local transport infrastructure projects*

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