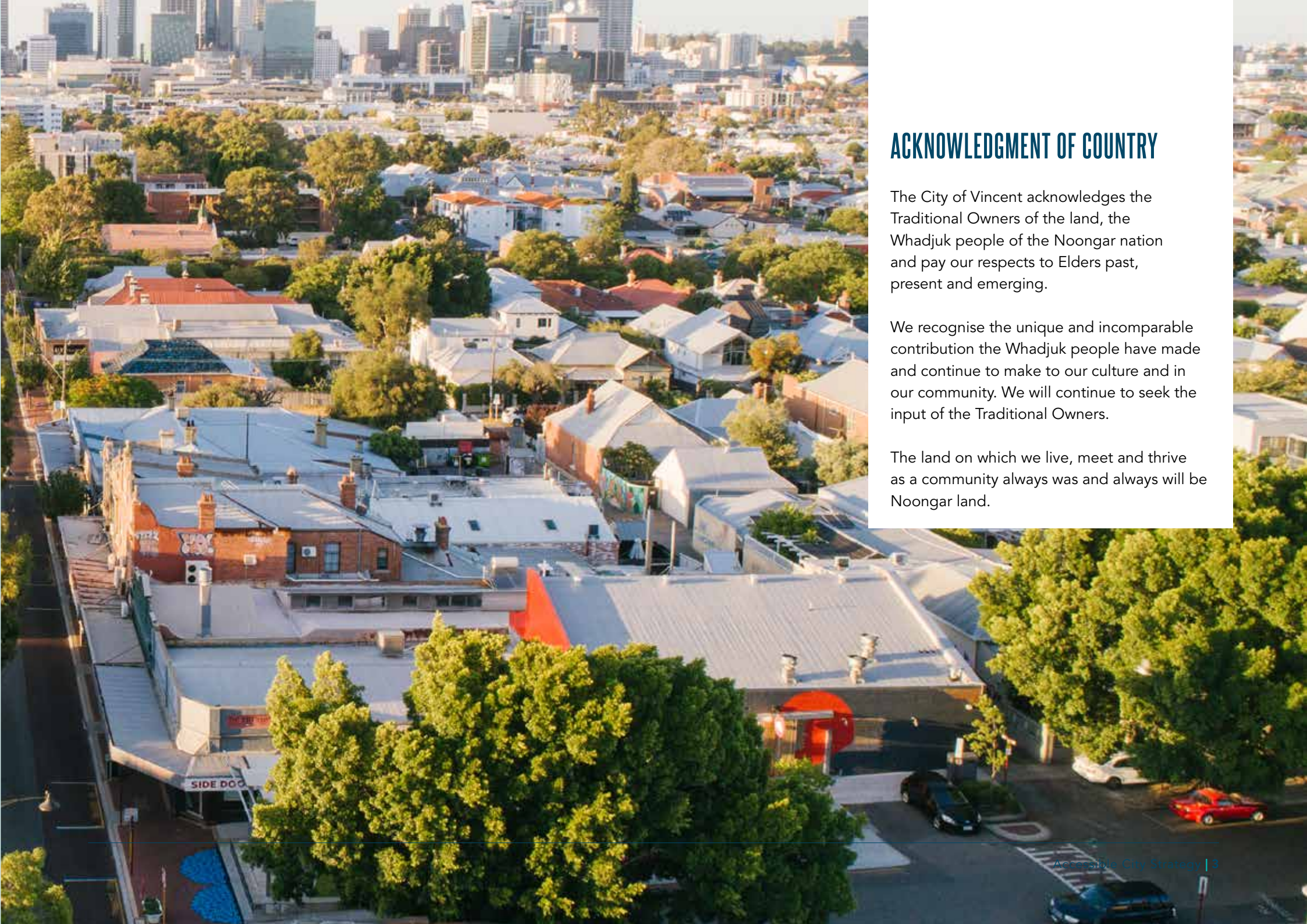
CITY OF VINCENT

ACCESSIBLE CITY STRATEGY

2020 – 2030



ACKNOWLEDGMENT OF COUNTRY

The City of Vincent acknowledges the Traditional Owners of the land, the Whadjuk people of the Noongar nation and pay our respects to Elders past, present and emerging.

We recognise the unique and incomparable contribution the Whadjuk people have made and continue to make to our culture and in our community. We will continue to seek the input of the Traditional Owners.

The land on which we live, meet and thrive as a community always was and always will be Noongar land.

STRATEGY ON A PAGE

VISION

The City of Vincent puts people first. Getting around is safe, easy, environmentally friendly and enjoyable.

OBJECTIVES

- Create a **safe** transport environment
- Ensure easy **accessibility** and connectivity into and around Vincent
- Promote **environmentally friendly** transport modes and initiatives
- Make it **enjoyable** to get around the local area

STRATEGIES

Safe

- Create active and sustainable transport networks that are safe and understandable.
- Ensure pedestrian and cycling routes (including schools) are of a high-quality and safe for all users.

Accessible and Connected

- Advocate for connected and reliable public transit.
- Reallocate road and verge space, including on-street parking, throughout the City to prioritise vulnerable users according to user hierarchy and road hierarchy.
- Be a leader in adaptability and technology.

Environmentally Friendly

- Reduce carbon emissions caused by the transport network.
- Prioritise and encourage the use of active and sustainable transport modes.
- Manage car parking (including supply and pricing) to improve efficiency and support mode shift.
- Use residential density to support transit.
- Obtain relevant data to inform decisions and monitor progress.

Enjoyable

- Increase pedestrian amenity on residential streets.
- Increase pedestrian amenity in town centres.

ACTIONS

According to implementation plan and subsidiary documents.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CONTENTS

HOW TO READ THIS DOCUMENT

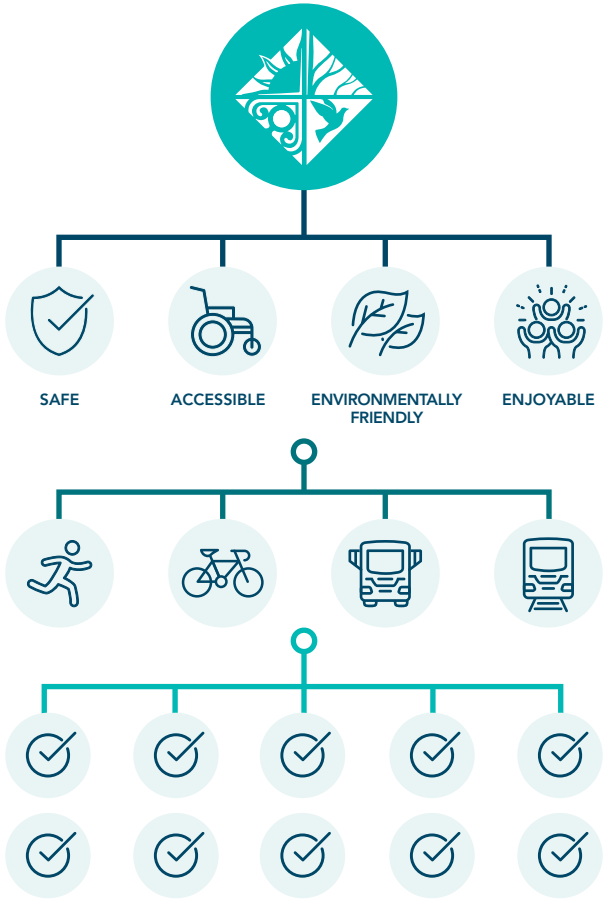
The Accessible City Strategy (ACS) is structured around three Key Focus Areas:

WHERE ARE WE NOW?
Sets out the **strengths, weaknesses, opportunities** and **threats** of Vincent's current transport network and the results of the **stakeholder engagement** surrounding this.

WHERE DO WE WANT TO BE?
Sets out the **vision** and associated **objectives** and **plans** that will respond to the data and consultation collected in the 'where are we now' focus area, to enhance and improve Vincent's transport network. The supporting **tools** which will be used to achieve this are also outlined.

HOW DO WE GET THERE?
Outlines the actions which contribute to achieving the vision, objectives, and plans of the Accessible City Strategy.

HOW DO THE VISION, OBJECTIVES, PLANS, & ACTIONS RELATE?



VISION
High level goal for the Accessible City Strategy.

OBJECTIVES
Capture the major themes that will influence the future transport network.

PLANS
Related to each objective, these articulate our approach and priorities.

ACTIONS
Corresponding with each of the plans are a series of actions which specify what we will do to achieve the overall vision.

INTRODUCTION

Transport systems are crucial in creating connection[1] and supporting opportunities for people to access all aspects of daily life, including work, education, shopping, leisure, healthcare and other services.

The City of Vincent's Strategic Community Plan 2018–2028 – Imagine Vincent identifies the need for an Accessible City Strategy (ACS) to guide Vincent's future transport infrastructure and advocacy.

Ensuring that our transport network is equitable and efficient means combating a number of challenges, including:

- population growth;
- congestion pressures; and
- the environmental costs of transport.

These challenges have arisen due to historic patterns of car-centric considerations and design[2]. A shift towards active and sustainable transport options is becoming increasingly important in addressing this[3].

The City of Vincent has an opportunity to create and influence a high-quality transport network that supports the economy, environment, and social activities in Vincent.

The transport network includes:

- The pedestrian environment that forms the basis for transport and land-use connections, which must be considered in the context of the road environment and adjacent land uses; and
- Other modes of transport that provide crucial links and efficient access between and within different areas. This includes current modes and possible modes in the future.

The transport network is reliant on achieving a balance between pedestrian demands and the requirements of other modes[4].

This ACS explores the current provision for transport and compares this infrastructure to the current and future needs of the community, across all transport modes, to support the long term success and viability of Vincent.

The main 'vision' and 'objectives' of the ACS supported by the 'plans' and 'actions' seek to create a more liveable, sustainable, healthy, equitable and prosperous Vincent through placing emphasis on walking, cycling, and public transport.

KEY TERMS

A **mode** refers to different ways by which people travel to destinations. Walking, cycling, catching public transport and driving are all examples of transportations modes.

Mode share describes the proportion of people using each of the various types of transportation modes.

Mode shift refers to changing mode share over time

Mobility is the capacity for all people to freely move through spaces.

Places are locations with specific combinations of, and interactions between land uses, activities, environments, buildings, urban design elements and transport.

Movement refers to the passage of people along streets and roads. The level of movement is understood in terms of the number of people, rather than the number of vehicles.

CONTEXT (Area 11.3km2)

Transport

- **2** train station
- **20** carparks
- **144km+** of road
- **260km+** of footpath

Environment

- **21%** tree canopy
- **106.4ha** of parks and gardens
- **+13,000** street trees

Population & Housing

- **35,000** People live in Vincent
- The population is forecast to grow to approximately **44,500 by 2026**, and to nearly **52,000 by 2050**.
- The highest population growth has been occurring amongst **25 – 34**.
- **51%** of dwellings are medium or high density (compared with **25%** in greater Perth.

Current Mode Share

Across Vincent the following observations have been made about how the community travels.

- **15%** of residents get to work using active modes of transport including walking and cycling.
- **18%** of people catch public transport including buses and trains to get to work.
- **67%** of residents drive to work or are a passenger in a vehicle.

Dwellings

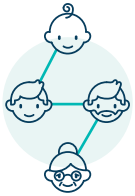
- **5** town centres
- **4** mixed use areas
- **4000+** local businesses
- **8** Primary Schools
- **1** High School
- **2** Tafe campuses

VINCENT SNAPSHOT

AGE

Vincent

- The median age is **34.**
- People aged **1–14** years make up **14.2%** of the population.
- People aged **65+** make up **10.8%**



Western Australia

- The median age is **36.**
- People aged **1–14** years make up **19.2%** of the population.
- People aged **65+** make up **14%**

COUNTRY OF BIRTH

Vincent

- Australia – **56.8%**
- England – **6%**
- Italy – **2.9%**
- New Zealand – **2.1%**
- Ireland – **1.7%**
- Vietnam – **1.6%**

Western Australia

- Australia – **60.3%**
- England – **7.8%**
- Italy – **0.8%**
- New Zealand – **3.2%**
- Ireland – **0.7%**
- Vietnam – **0.6%**

EMPLOYMENT

Vincent

- Work full time – **61%**
- Work part time – **28%**
- Away form work – **4.4%**
- Unemployed – **6.1%**

Western Australia

- Work full time – **57%**
- Work part time – **30%**
- Away form work – **5.2%**
- Unemployed – **7.8%**

OCCUPATION

Vincent

- Professionals – **38.1%**
- Managers – **14.9%**
- Clerical and Admin – **11.5%**
- Technicians and Trade – **10.4%**
- Community and Personal Services – **9.2%**
- Sales workers – **6.7%**
- Labourers – **5.5%**
- Machinery Operators and drivers – **2.4%**

Western Australia

- Professionals – **20.5%**
- Managers – **12%**
- Clerical and Admin – **13%**
- Technicians and Trade – **16.2%**
- Community and Personal Services – **10.6%**
- Sales workers – **8.8%**
- Labourers – **9.7%**
- Machinery Operators and drivers – **7.5%**

MEDIAN WEEKLY INCOME

Vincent

- Personal – **$992**
- Family – **$2553**
- Household – **$2019**

Western Australia

- Personal – **$724**
- Family – **$1910**
- Household – **$1595**

FAMILY COMPOSITION

Vincent

- Couple without children – **48%**
- Couple with children – **38.8%**
- One parent family – **10.6%**
- Other family – **2.5%**

Western Australia

- Couple without children – **38.5%**
- Couple with children – **45.3%**
- One parent family – **14.5%**
- Other family – **1.7%**

DWELLING TYPE

Vincent

- Separate house – **51.2%**
- Semi detached, town or terrace house etc – **21.4%**
- Apartment – **26.6%**
- Other Dwelling – **0.4%**

Western Australia

- Separate house – **79.1%**
- Semi detached, town or terrace house etc – **14.1%**
- Apartment – **5.7%**
- Other Dwelling – **0.7%**

HOUSE HOLD COMPOSITION

Vincent

- Family household – **58.9%**
- Single person household – **31.2%**
- Group household – **9.9%**

Western Australia

- Family household – **72.2%**
- Single person household – **23.6%**
- Group household – **3.8%**

NUMBER OF VEHICLES PER HOUSEHOLD

Vincent

- None – **9.1%**
- One vehicle – **42.9%**
- Two vehicles – **34.2%**
- Three or more vehicles – **11%**

Western Australia

- None – **4.9%**
- One vehicle – **31.6%**
- Two vehicles – **38.9%**
- Three or more vehicles – **21.5%**

Data source – ABS 2016 Census Data

Vincent's transport network is influenced by several different bodies including the City, the community, and external agencies.

WHAT IS THE CITY'S ROLE?

We are the key point of contact for our community. We are responsible for balancing the needs of residents, schools, community groups, and local businesses with legislative requirements and an established strategic direction.

We have authority over a series of localised infrastructure including local streets, footpaths, shared paths and cycle infrastructure, and street furniture including street lighting. We also have the ability to influence transport mode choice by supporting behaviour change programs, adjusting the supply and pricing of parking, and modifying street layouts.

Those visiting Vincent generate significant activity in town centres and other places throughout the City[5]. The needs of visitors are often different from those of residents and employees[6].

Our role requires us to be financially responsible. It is important that considerations of cost and identifying additional funding mechanisms be explored where possible. There are also a number of ways in which transport choices can be influenced that do not require large amounts of funding, including amendments to the City's Planning Policies and other statutory instruments.

We have an important advocacy role to play to State Government bodies that control movement to and through the City.

STRATEGIC CONTEXT

All local governments are required to have a plan for the future. This takes the form of a Strategic Community Plan, which is an overarching document informed by extensive community consultation. It sets the strategic direction for the entire organisation and is supported by a number of informing strategies and plans. One of these is the Accessible City Strategy.

The vision for the City of Vincent has been agreed as:

"In 2028, The City of Vincent is a leafy and vibrant 24-hour city, which is synonymous with quality design and sustainability. Its diverse population is supported in their innovative endeavours by a council that says YES!"[7]

ENHANCED ENVIRONMENT

ACCESSIBLE CITY

CONNECTED COMMUNITY

THRIVING PLACES

SENSITIVE DESIGN

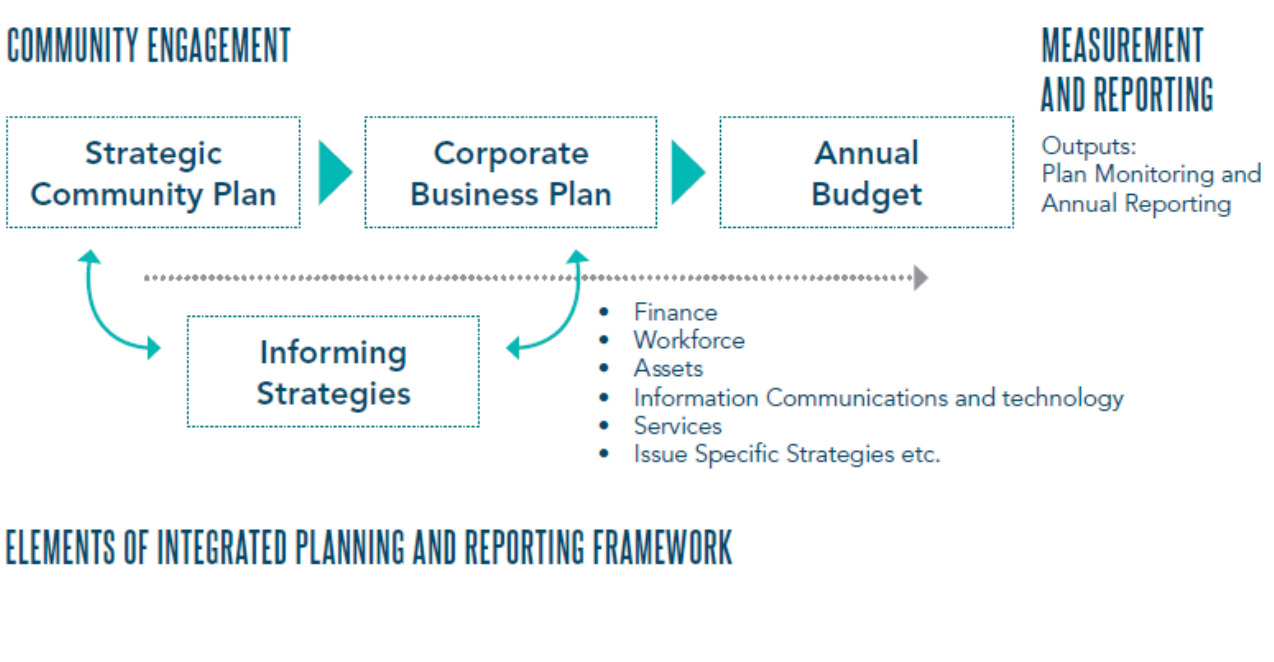
INNOVATIVE & ACCOUNTABLE

The relationship between the Guiding Principles of Imagine Vincent and the outcomes the ACS are highlighted below:

GUIDING PRINCIPLE	IMAGINE VINCENT INTENT	APPLICATION TO THE ACS
 ENHANCED ENVIRONMENT	The natural environment contributes greatly to our inner-city community. We want to protect and enhance it, making best use of our natural resources for the benefit of current and future generations.	• Our parks and reserves are maintained, enhanced and well utilised; • Our urban forest/canopy is maintained and increased; • We have improved resource efficiency and waste management; and • We have minimised our impact on the environment.
 ACCESSIBLE CITY	We want to be a leader in making it safe, easy, environmentally friendly and enjoyable to get around Vincent.	• Our pedestrian and cycle networks are well designed, connected, accessible and encourage increased use; • We have better integrated modes of transport and increased services through the City; and • We have embraced emerging transport technologies.
 CONNECTED COMMUNITY	We are a diverse, welcoming and engaged community. We want to celebrate what makes us unique and connect with those around us to enhance our quality of life.	• We have enhanced opportunities for our community to build relationships and connections with each other and the City; • Our community facilities and spaces are well known and well used; and • We are an inclusive, accessible and equitable City for all.
 THRIVING PLACES	Our vibrant places and spaces are integral to our identity, economy and appeal. We want to create, enhance and promote great places and spaces for everyone to enjoy.	• We are recognised as the City that supports local and small business; • Our town centres and gathering spaces are safe, easy to use and attractive places where pedestrians have priority; • We encourage innovation in business, social enterprise and imaginative uses of space, both public and private; and • Our physical assets are managed and maintained efficiently and effectively.
 SENSITIVE DESIGN	Design that 'fits in' to our neighbourhoods is important to us. We want to see unique, high quality developments that respect our character and identity and respond to specific local circumstances.	Our planning framework supports quality design, sustainable urban built form, and is responsive to our community and local context.
 INNOVATIVE & ACCOUNTABLE	The City of Vincent has a significant role to play in supporting our community to realise its vision. To achieve this, we will be an innovative, honest, engaged and responsible organisation that manages resources well, communicates effectively and takes our stewardship role seriously.	Our resources and assets are planned and managed in an efficient and sustainable manner; and Our community is satisfied with the service we provide.

There are a number of Council strategic documents that also inform the ACS.

The relationship between the Accessible City Strategy, the Strategic Community Plan (SCP), and other strategic documents is represented. Together these strategies and plans inform the City's four-year Corporate Business Plan and Annual Budget.



ELEMENTS OF INTEGRATED PLANNING AND REPORTING FRAMEWORK

The role of the ACS is demonstrated here. The ACS intends to guide the review or amendment of the following documents, in accordance with the implementation plan. An advocacy role is also undertaken when Vincent is being consulted by other agencies.

STRATEGIC INPUT

- Strategic Community plan 2018 – 2028
- Greening Plan 2018 – 2023
- Sustainable Environment Strategy 2019 – 2024
- Local Planning Strategy (2014)
- Car Parking Strategy 2008
- Precinct Parking Management Plans (2009)
- Bicycle Network Plan (2013)

ACCESSIBLE CITY STRATEGY

REPLACES

- Car Parking Strategy

ADVOCATES

- External Agencies
- Greater Perth Transport Plan
- Public Infrastructure
- Long Term Cycle Network Plan

GUIDES

- Bicycle Network Plan
- Car Parking Policy
- Parking Management Plans
- Capital Works Program

WHAT ROLE DOES THE COMMUNITY HAVE?

The community helps to establish the strategic direction of the City of Vincent through the Strategic Community Plan. Our community has determined that we should be a leader in making it safe, easy, environmentally friendly and enjoyable to get around Vincent.

As a community, to achieve effective outcomes, we also need to consider the individual decisions we make about transport to help us achieve the strategic direction, rather than just meeting the status quo. These decisions are instrumental in the future sustainability of the transport network.

As a community, there is the opportunity to make behavioural changes to support healthy and sustainable ways of living[8]. This includes replacing short car-trips with active modes and public transit. Examples of this include walking 500m to the local park, taking the bus to the local services and facilities or the workplace, and cycling 1km to meet friends for coffee.

WHAT ROLE DO AGENCIES HAVE?

Vincent does not have control over some aspects of the broader transport system. State Government and other agencies play a critical role in planning for and managing the major road/freeway network, in operating the various components of the public transport system, and also ensuring consistency across various local government authority areas. These agencies' various responsibilities and relevant strategies and plans which they look to produce and implement, are below.

The ACS guides our advocacy role in the development and implementation of these strategies and plans:

DEPARTMENT	RESPONSIBILITIES	RELEVANT STRATEGIES AND PLANS
Federal	• Grants and infrastructure funding	N/A
Main Roads WA (MRWA)	• Management of Primary Distributor roads across the state of Western Australia. In the City of Vincent, this includes Charles Street, East Parade, and Guildford Road. • Approval is required for traffic signals, signs and lines on all roads	• Central Area Transport Plan; • Perth and Peel @ 3.5 Million; • Transport @ 3.5 Million; and • Policy for Cycling Infrastructure (2000).
Public Transport Authority (PTA)	• Train services • Number and frequency of bus routes throughout the City • Ensuring that bus stops comply with the Disability Standards for Accessible Public Transport, including constructing level concrete hard-stand boarding areas and up to 3m of pathway connecting to existing footpath networks • Supporting the implementation of transit-supportive infrastructure by LGAs, including roadside bus shelters • Work collaboratively with MRWA and local government to introduce bus priority lanes	• Central Area Transport Plan; • Public Transport for Perth in 2031 (draft); • Perth and Peel @ 3.5 Million; • Transport @ 3.5 Million; and • Accessibility policy (2007).
Department of Transport (DoT)	• Working collaboratively with local government to develop strategic cycling networks for the region • Providing grant funding for implementation of Western Australian Bicycle Network (WABN) routes	• Central Area Transport Plan; • Public Transport for Perth in 2031; • Perth and Peel @ 3.5 Million; • Transport @ 3.5 Million; and • WA Bicycle Network.
Department of Planning (DoP)	• Land use and Spatial Planning	• State Planning Strategy directions 2031; • Perth and Peel @ 3.5 Million; • Central Sub-regional Planning Framework; and • Capital City Planning Framework (2013)
Metropolitan Redevelopment Authority (MRA)	• Development of various land parcels, including the East Perth Power Station site.	• Various site/precinct plans and design guides.
Neighbouring Local Government Authorities	• Working collaboratively to ensure strong connections between localities.	• Various Planning Schemes; • Transport and Urban Design plans and policies; and • Parking approaches.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WHERE ARE WE NOW?

We have undertaken a series of investigations to identify the strengths, weaknesses, opportunities, and threats associated with the existing transport and land use network.

The following data sources inform Vincent's TransPriority Assessment across the areas of parking, bus services, train services, private vehicles, cycling infrastructure and pedestrian infrastructure.

By analysing the strengths, weakness, opportunities, and threats of the existing transport network we can build on what we do well, address what is lacking, minimise risks and take the greatest possible advantage of chances for success.

This summary of data has been broken into modes and looks to create a Vincent specific snapshot of how each mode operates within the local transport network. This contributes to the items identified in the strengths, weaknesses, opportunities, and threats.

VINCENT TRANSPRIORITY ASSESSMENT

Land Use Surveys | **PTA Smart Rider Data** | **Bicycle counts**

Intersection turning movement, link count and travel time surveys | **Off-street and on-street pedestrian and cycling provision.**

2016 Census data for journey to work and mode share by trip purpose | **Car parking occupancy and utilisation surveys**

Modelling the existing traffic network to determine available strategic network capacity along major corridors and key intersections to determine traffic growth capability

PARKING

The needs for parking differ greatly across Vincent. These needs are influenced by the activity, density and variety of development in the area, as well as the availability of alternative transport modes. Parking is an effective bridge between land-use and transport mode choice.

Parking is an essential and inherent component of both the transport and land use system, and unique in that behaviour can be influenced directly at the planning and policy stage rather than solely through infrastructure provision. An appropriate supply of quality, well located car parking is a critical issue for people and businesses.

Parking management has the ability to influence a reduction in private vehicle trip generation and to create a more sustainable land-use and transport environment.

PARKING DEMAND – CENTRES

Data has been collected and assessed to calculate the theoretical parking demand for each town centre. This has taken into consideration the different land use types in each of the town centres and the walking catchment which surrounds them.

Parking demand varies considerably between the town centres. Leederville generates a substantial proportion of the overall requirement for parking in Vincent's town centres. However, this needs to be considered in the context of Leederville being the largest town centre.

PARKING DEMAND – CORRIDORS

Parking along corridors is primarily provided on-site (particularly for employees), along the primary street frontage, and in adjacent minor roads.

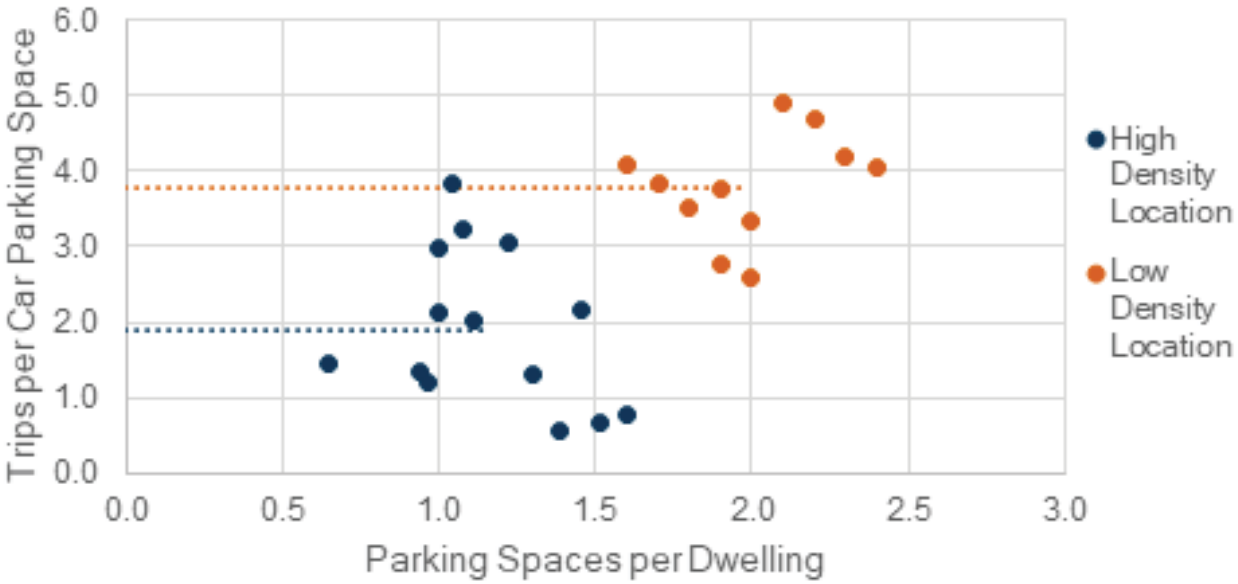
Due to the concentration of existing development along corridors in Vincent, there is less opportunity to create a large, communal public car park. As such, demand can spill over to on-street parking. For this reason, parking management is increasingly important

RESIDENTIAL PARKING

There is a strong relationship between residential density, car parking and trip generation. This largely determines the potential traffic impacts a residential property can have on the surrounding area.

Data taken from the NSW *Roads and Maritime Services Guide to Traffic Generation Developments*, 2013 (a resource of surveyed trip rates for residential dwellings), indicates that low density residential development and high private vehicle ownership, create an environment with significantly higher household vehicle trip generation.

RATIO OF TRIP GENERATION TO PARKING SPACES



Vehicle ownership in the City of Vincent (1.48 cars per household) is lower than the Greater Perth Average (1.78 cars per household). A reduction in car ownership will be further supported by the provision of more attractive alternative modes of transport. However, due to the difference in household demographics, the number of cars per resident is marginally higher in Vincent than in Greater Perth.

PUBLIC PARKING SUPPLY

Parking surveys have been undertaken for all public parking spaces within the City of Vincent. Public parking in Vincent can be summarised as;

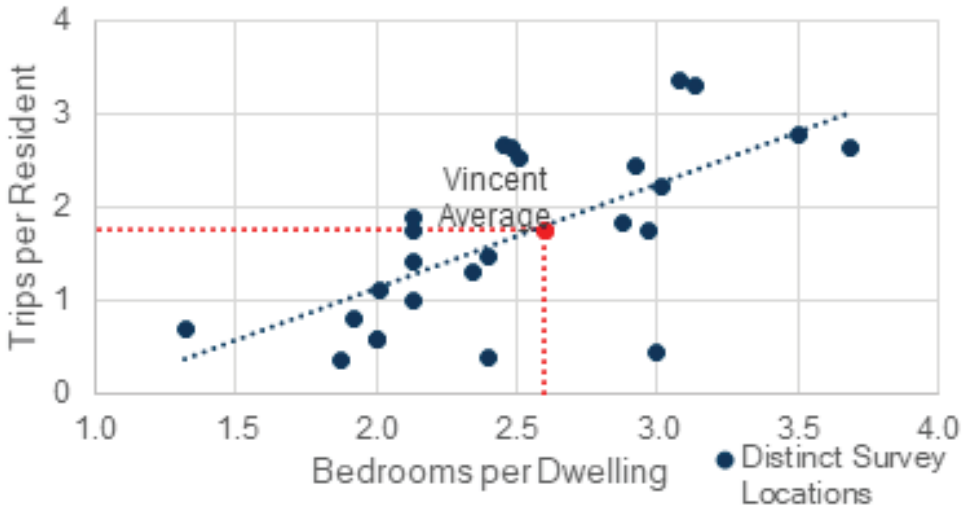
- More than 17,500 spaces, distributed across the LGA.
- 2,000 bays in off-street car parks.
- 1,600 bays paid bays (1,100 off-street and 500 on-street bays).
- 6,000 unrestricted (free all-day) parking bays, located primarily in residential neighbourhood streets
- 8,000 time-restricted bays (paid or free), located within or adjacent to Activity Centres or Corridors, or in other areas of increased demand.
- 500 on-street spaces are subject to some form of residential permit (either as a restriction or an exemption).

Public parking is available for use by residents, employees and visitors. This is in addition to the off-street private supply. The provision of private and public parking is significantly greater than the demand for car parking, but it may not necessarily be located in the right areas.

The extent of parking demand has been measured directly through occupancy surveys across three periods (Wednesday, Friday and Saturday, 9am – 8pm in November 2018). The adjacent maps show the difference in demand at two contrasting times.

- Parking occupancy generally peaks at midday. During this period, on-street and off-street parking has an average of 50% occupancy, some individual streets and car parks are approaching 100% occupancy.
- Parking demand is concentrated in town centres, and within the mixed-use commercial zone south of Vincent Street.
- South of Vincent Street, the greater intensity of commercial land uses and a high percentage of residential housing not having on site parking results in a higher demand for on-street parking, with occupancy rates generally between 60% and 80% occupancy throughout the day.
- North of Vincent Street, large areas of residential development generate consistent levels of public parking demand throughout the day. As much as 25% of public parking in these residential streets is used by residents for on-street vehicle storage.
- There are parking demand hotspots around schools in the City including Highgate Primary, St Albans Anglican Church and North Perth Primary Schools. The roads adjacent to these areas have occupancy over 80% throughout most of the day, reducing in the 6pm-8pm window.
- The Leederville, North Perth/Fitzgerald Street, and Mount Hawthorn precincts are obvious demand hotspots, with higher parking occupancy rates than their surrounding areas (60% – 80% vs 20% – 40%).
- Majority of ticketed parking is located within town centres. Only View Street and the Leederville town centre car parks appear to be approaching capacity. This suggests that there is an abundance of free parking available outside of the ticketed parking areas which reduces demand for paid parking.
- There were also high occupancy rates observed near the East Perth Station. This may reflect an overspill of park 'n' ride commuters into the adjacent street network.

RATIO OF TRIP GENERATION TO NUMBER OF BEDROOMS




Kingston International College
MEATBALLS
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Street
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40

WEDNESDAY NOON

SATURDAY EVENING

PARKING SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
• Recent parking policy amendments align with planning function and framework. • Vincent residents are more likely to own one or zero cars and are more likely to use active modes. • Paid parking is well developed in many locations across Vincent.	• Free, unrestricted on street car parking in residential areas means that residents may own more cars than available car spaces on the property. • Kerbside parking reduces the capacity for active transport.	• Road upgrades or future centre plans will create opportunity to modify parking management and supply. • Development in town centres can help fund public parking. • An increase in electric vehicles will require an increase in vehicle charging stations and public parking. • Increased residential density allows for reductions in private parking, including zero parking minimums. • Strata title laws increase flexibility for developments to provide shared parking.	• Businesses and residents have an extreme emotional attachment to free proximal parking. • The cost of additional parking or increased management must be borne by the Local Government. • Future technologies are likely to impact the viability of parking investments.


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AREA

PUBLIC TRANSPORT

Public transport networks (bus and train services) are a core component of Vincent's transport network. *Perth and Peel@3.5million* and the *Central Sub-Regional Planning Framework* indicate that there is likely to be extensive growth in development across the City of Vincent and throughout the entire region.

This growth will likely assign a comparative level of transport demand to a network already approaching capacity. There is insufficient road capacity to accommodate this transport growth under the current paradigm of predominantly peak-hour private vehicle trips.[9] The focus on moving cars and trucks in traffic lanes limits the people-moving capacity of the corridor.

As such, an alternative framework and infrastructure solution should be considered which prioritises the movement of people and goods over traffic.

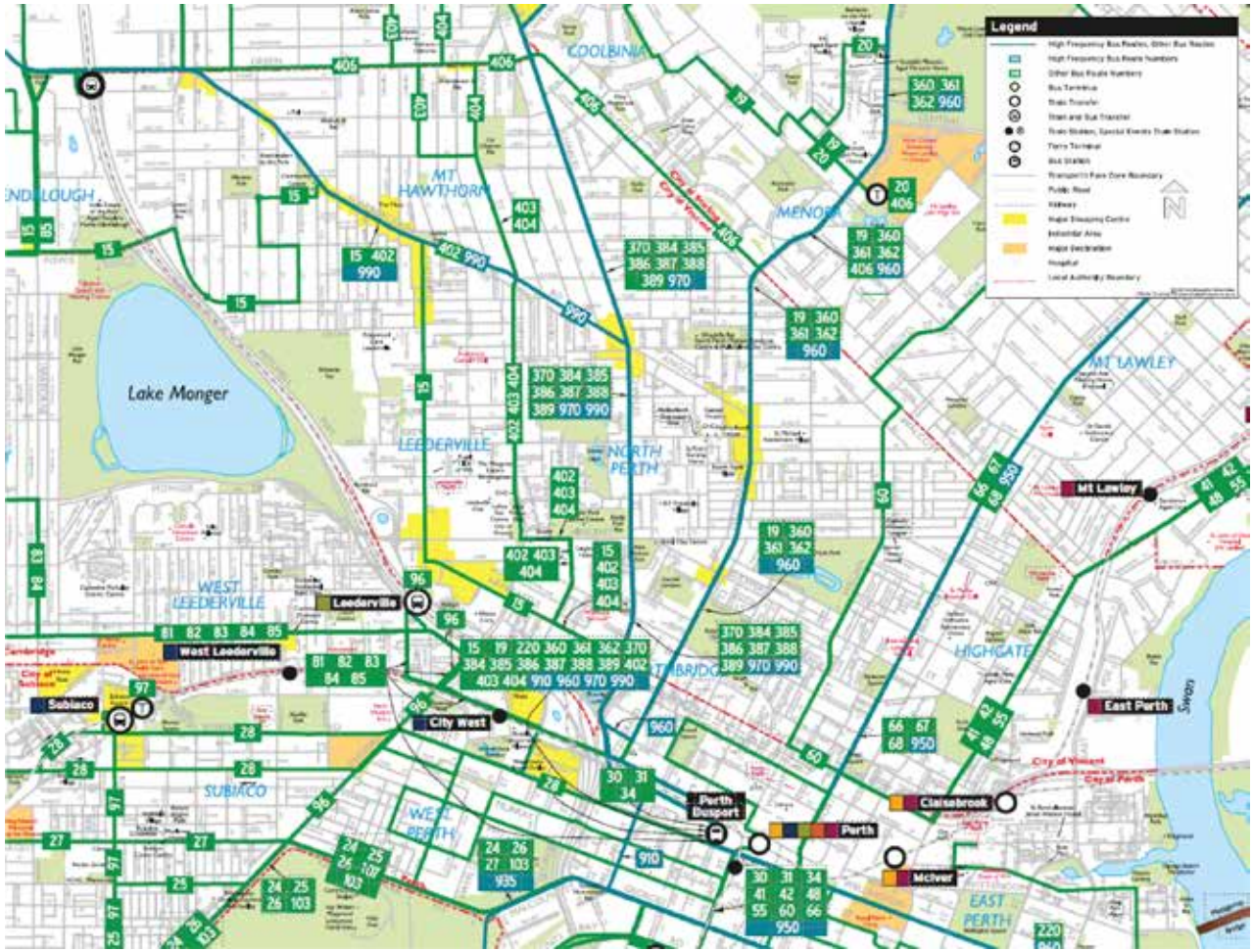
Public transport is an ideal mode, able to provide regional travel for large numbers of people within a relatively small footprint.

BUS ROUTES AND SERVICE

Due to its proximity to the Perth CBD, the City of Vincent has the advantage of substantial public transport service provision, running in a dense array of north-south alignments. The 29 Transperth bus Routes operating within the road network include four high-frequency (Superbus) services.

The number of bus routes into the CBD creates very effective 'turn up and go' service during the peak period. Off-peak service remains very good along many corridors, but less than ten-minute wait times are not maintained throughout the whole City.

East-west (radial) services are much more limited. There are no services that run from the western suburbs of Vincent through to the east. There are minimal services along Green Street and Walcott Street to the Mount Lawley ECU Campus, and these do not continue through to the Mount Lawley town centre.



Compounding this separation, bus routes to the west of Fitzgerald Street terminate or continue through the Perth Busport, while routes to the east of Fitzgerald Street operate out of the Esplanade Busport. There is effectively no interchange opportunity for public transport connection between the east and west of Vincent.

EFFECTIVE BUS FREQUENCY		
ROAD CORRIDOR	PEAK	OFF-PEAK
Lord Street	3½ min	14 min
Beaufort Street	1½ min	5 min
William Street	6 min	14 min
Fitzgerald Street	5 min	7 min
Charles Street	1½ min	3 min
Loftus Street	7 min	12 min
Oxford Street	11 min	30 min
Scarborough Beach Road	10 min	10 min
Vincent Street	No service	
Walcott Street	No Service east of Fitzgerald St	
Green Street	21 min	30 min

BUS PRIORITY

Public transport is at its most effective when it is provided in dedicated corridors and given priority at key congestion points. Bus priority in Vincent is currently available along key corridors including:

- Beaufort Street
- Fitzgerald Street.
- Charles Street (near the bus bridge)
- Newcastle Street / Cleaver Street

Despite the high volume of peak period buses along Charles Street and Lord Street, there are no bus priority facilities along these roads. Both of these roads have been identified by Vincent as Transit Corridors.

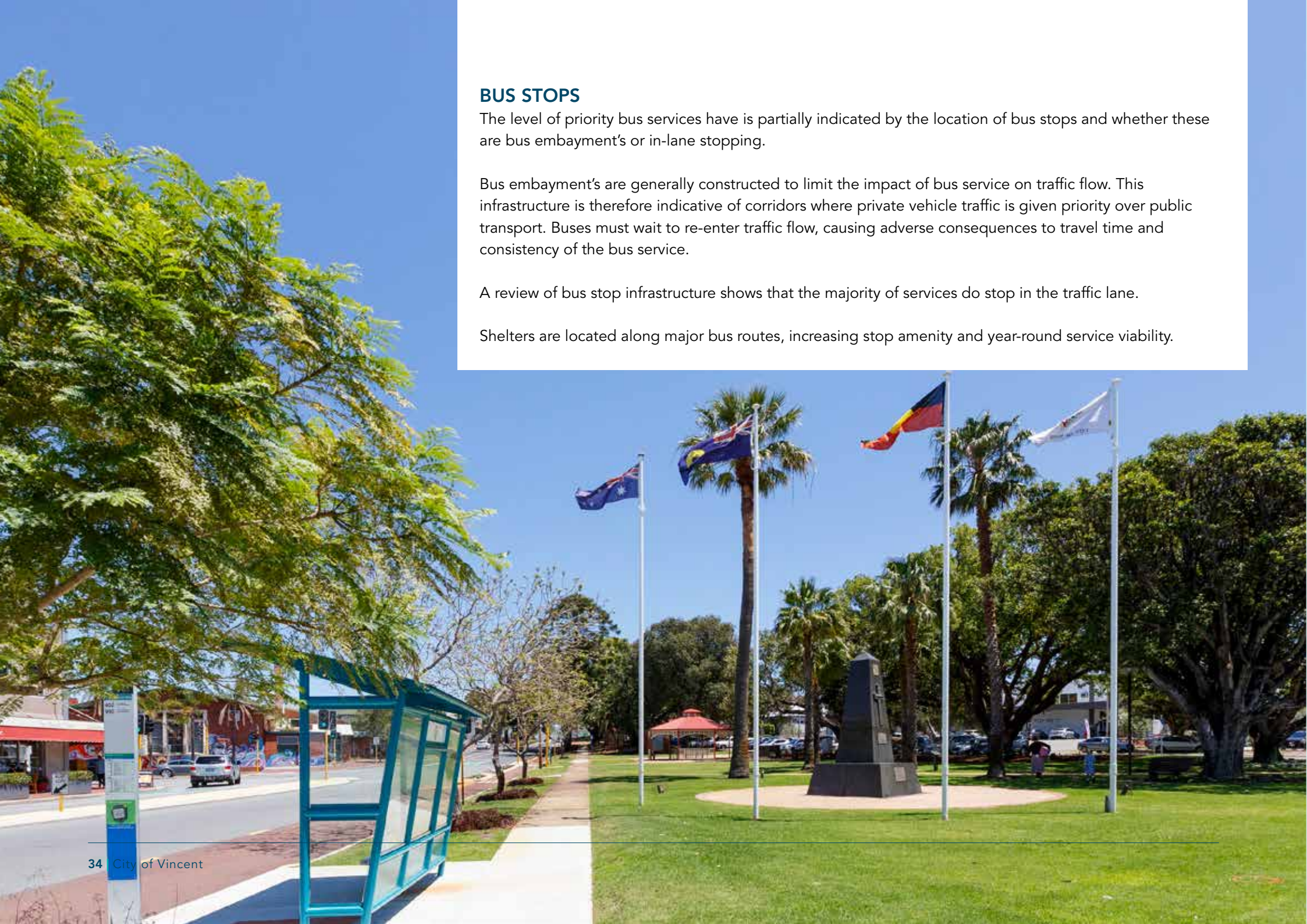
BUS STOPS

The level of priority bus services have is partially indicated by the location of bus stops and whether these are bus embayment's or in-lane stopping.

Bus embayment's are generally constructed to limit the impact of bus service on traffic flow. This infrastructure is therefore indicative of corridors where private vehicle traffic is given priority over public transport. Buses must wait to re-enter traffic flow, causing adverse consequences to travel time and consistency of the bus service.

A review of bus stop infrastructure shows that the majority of services do stop in the traffic lane.

Shelters are located along major bus routes, increasing stop amenity and year-round service viability.



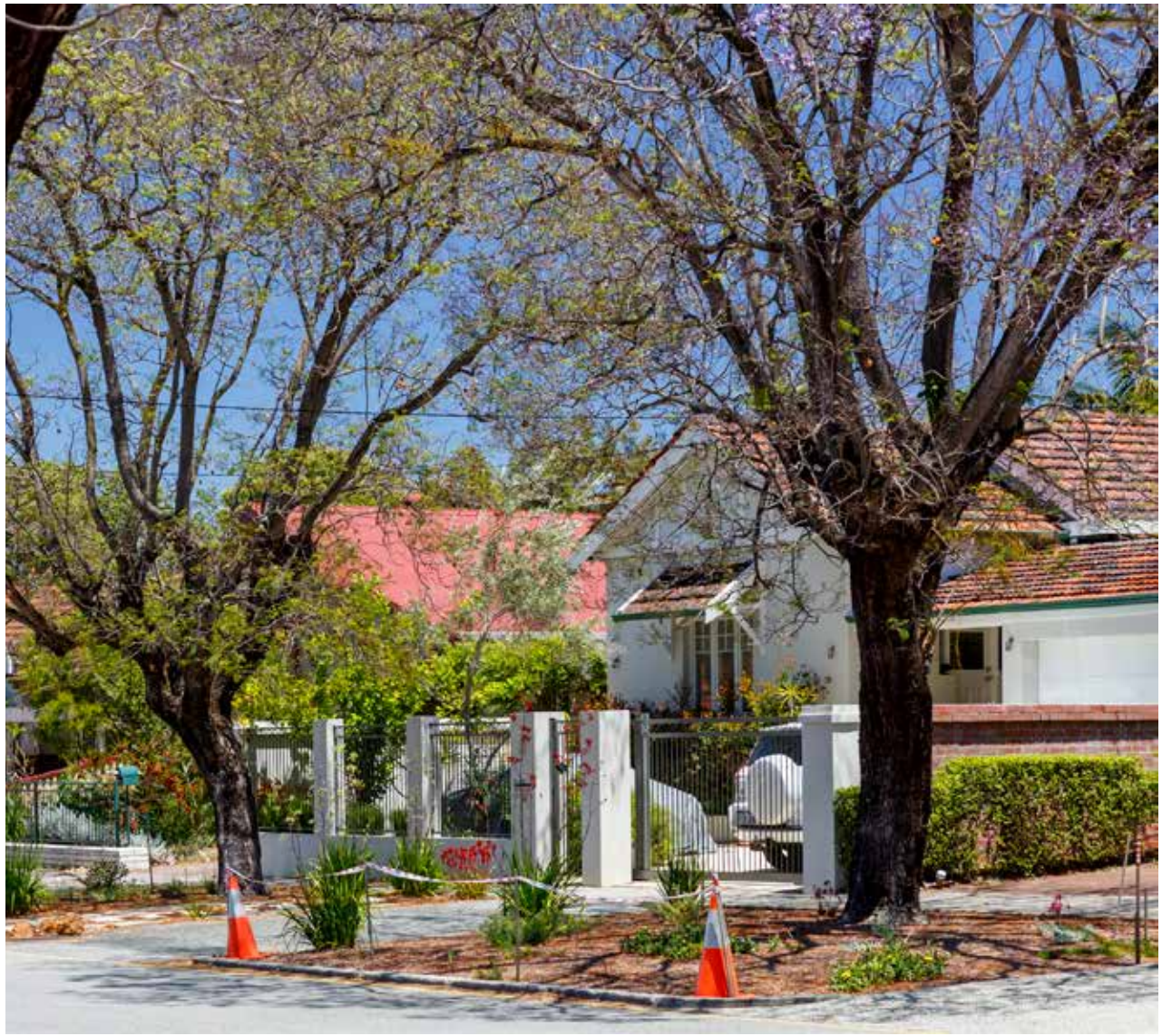
TRAIN SERVICE

The City of Vincent is served by two train lines:

TRAIN LINE	TRAIN STOPS	FREQUENCY
Midland Line	• Claisebrook Station • East Perth Station • Mount Lawley Station	• Peak – every 10 minutes • Non-Peak – every 15 minutes
Joondalup Line	• Leederville Station • Glendalough Station	• Peak – every 5 minutes • Non-Peak – every 15 minutes

PUBLIC TRANSPORT SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
• North-south bus service along key corridors is efficient during the day. • Bus connections in an out of the Perth CBD are frequent. • In general, train service frequency is good across the day, particularly to Leederville and Glendalough. • The Leederville town centre can leverage the train service for employee and visitor trips, increasing pedestrian activity and reducing car dependency. • Glendalough station provides for effective interchange to east-west bus routes.	• East-west bus services are limited. • Due to the configuration of routes, even bus-to-bus interchange across Vincent is infeasible. • The connection between town centres is poor. • Shared bus/cycle lanes reduce public transport capacity. • Bus routes along key corridors create barriers for passenger crossing. • The East Perth and Mount Lawley train stations are not located near dense centres and service very limited catchments. This creates a high demand for park 'n' ride. • The express service negatively impacts the viability of train services to and from Mount Lawley.	• Current high frequency bus routes may be sufficient for high capacity bus and light rail. • Bus transit will induce PTA to continue to improve service levels. • Connectivity between town centres could be addressed through a free circle route bus service. • Mobility as a service has the potential to improve transport options and cost transparency. • Further priority measures including extended bus lanes and 'bus sensing' signals, would maximise the efficiency of transit corridors. • Service frequency is likely to continue to increase as part of network-wide improvements across the system. • Optus stadium has the potential to increase activity within Vincent prior to and post events. • There is the potential to increase utilisation of the East Perth and Mount Lawley stations by developing access strategies to address shortfalls in patronage. Increasing accessibility to town centres which are otherwise disconnected from train services	• Future expansion of public transport may need to come at the cost of parking or by mixed traffic. • Dense development is dependent on high-capacity public transport, however this may precede any road corridor upgrades. • Access and parking constraint principles will be required along transit corridors. • Any peak period congestion in the system will be felt by the inner city stations closest to the Perth CBD.



PRIVATE VEHICLES

The City of Vincent road network exists as both a regional distributor network, with large amount of through regional traffic connecting neighbourhoods, and a local connector servicing residents, town centres and mixed-use areas.

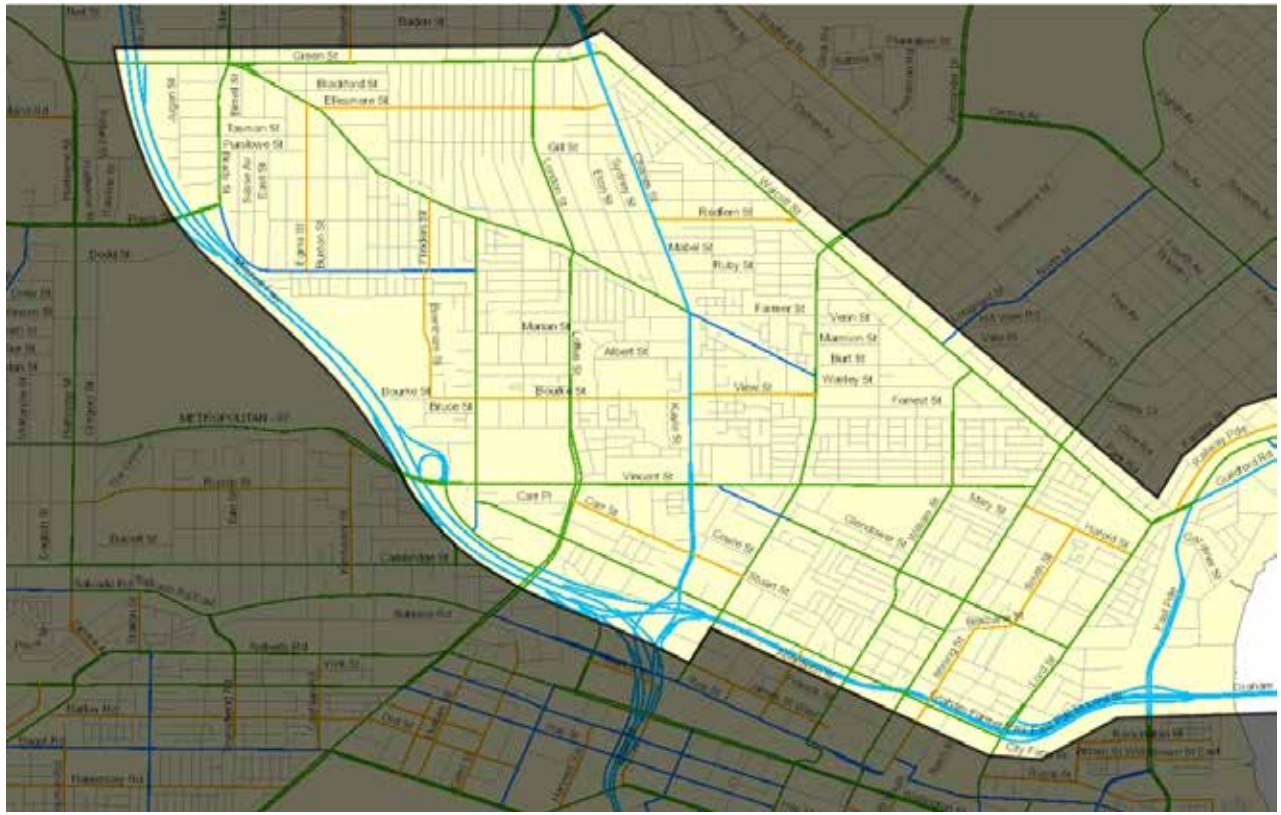
Vincent is expected to grow in population by approximately 2% per year. This growth combined with existing car ownership levels places an unstable load on the road network in the long run.

ROAD HIERARCHY

The function of private vehicles in the road network is partially defined by each roads position in the Main Roads Functional Hierarchy (MRFH) (see mapping on following spread).

The MRFH classifies road corridors based on role, varying between high volume, fast moving urban and rural roads to low traffic volume, pedestrian and cyclist friend access roads throughout residential areas. This classification can dictate the number of access points, number of lanes and speed limit of each road. The MRFH considers road function only in terms of private vehicle and freight movement.

ROAD HIERARCHY FUNCTION				
ROAD TYPE	RESPONSIBILITY	PREDOMINANT PURPOSE	INDICATIVE TRAFFIC VOLUME	RECOMMENDED OPERATING SPEED
Primary Distributor	Main Roads WA	Major network. Movement of interregional and/ or cross town/city traffic, e.g. freeways, highways and main roads.	Over 35,000 vehicles per day.	60 – 110km/h (depending on design characteristics).
Distributor A	Local Government	Important network. High capacity traffic movements between industrial, commercial and residential areas.	20,000 to 35,000 vehicles per day.	60 – 80km/h
Distributor B	Local Government	Less important network. Reduced capacity, but high traffic volumes travelling between industrial, commercial and residential areas.	7,000to 20,000 vehicles per day.	60 – 70 km/h
Local Distributor	Local Government	Minor Distribution network. Movement of traffic within local areas and connect access roads to higher order distributors.	3,000 to 7,000 vehicles per day.	50 – 60km/h (desired speed)
Access Road	Local Government	Forms part of local distribution network. Provision of vehicle access to abutting properties.	Maximum desirable volume of 3,000 vehicles per day	40 – 50km/h (desired speed)


Green St
Bradford St
Ellesmere St
Eastman St
Gill St
Redfern St
Ruby St
Forrest St
Vivian St
Morrison St
Burt St
Wolsley St
Moran St
Albert St
Bourke St
Bruce St
View St
Vincent St
Carr Pl
Carr St
Mary St
Harold St
Cambridge St
Oxford St
Dodd St
Bulwer St
Lindsay St
Claisebrook Rd
Graham

TRAFFIC SPEEDS

Posted speed limits tend to relate directly to the road hierarchy considering both safety and convenience.

In several locations, the City has imposed lower traffic speeds to improve pedestrian amenity and safety. This is one key step in creating more effective, navigable spaces for activity[10].

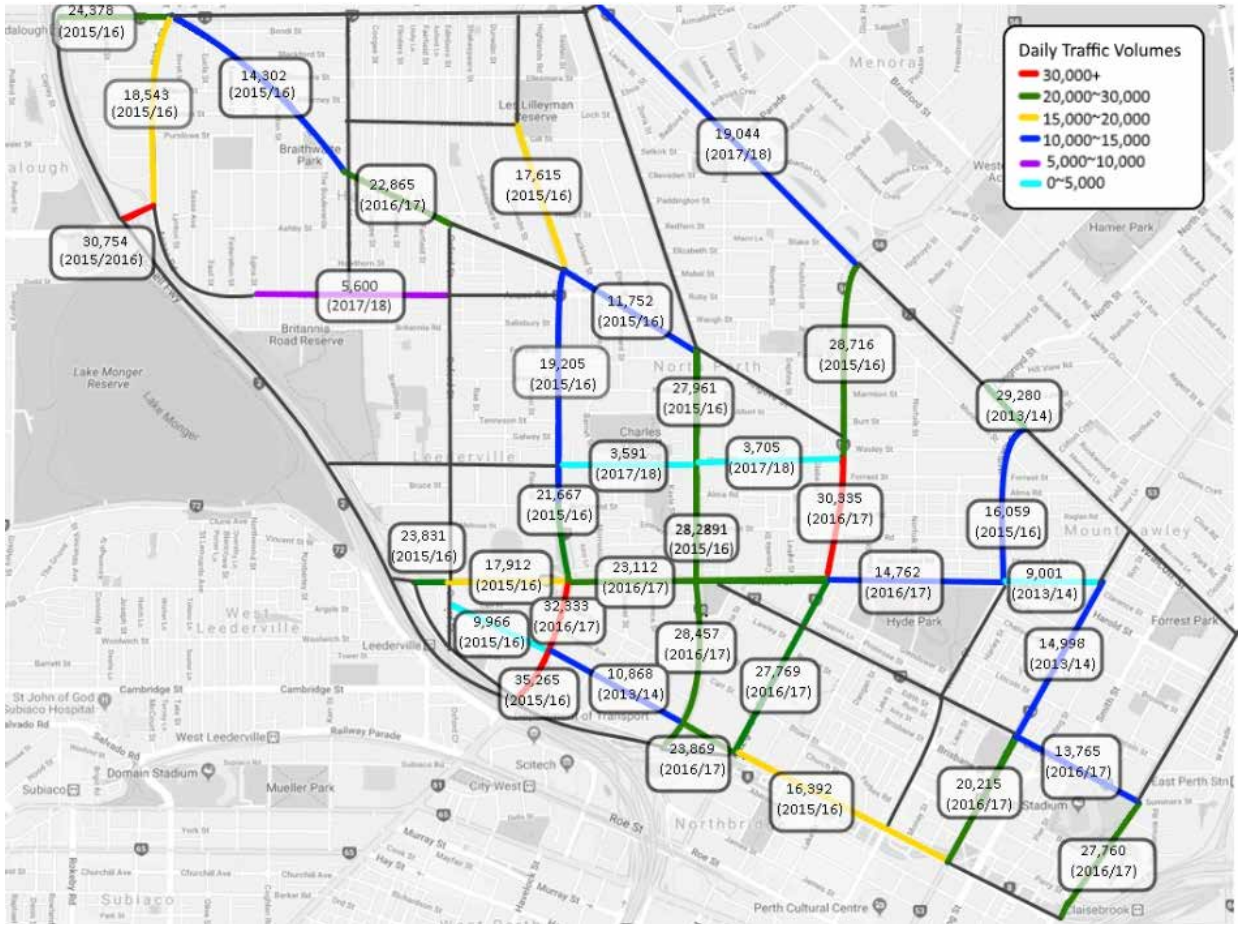
These areas include:

- Leederville town centre (Oxford St/Newcastle St)
- North Perth town centre (Fitzgerald St)
- Mt Hawthorn town centre (Scarborough Beach Rd)
- Mount Lawley town centre (Walcott St)

TRAFFIC VOLUMES

Traffic congestion occurs when peak period demand exceeds the carrying capacity of the road. A comparison of MRFH map to the observed traffic volumes shows that there is only a loose relationship between road hierarchy and traffic volume, with many Distributor Roads carrying traffic close to or in excess of 30,000vpd, while others carry less than 10,000vpd.

Traffic volumes along key roads across Vincent are at a level that suggests demand is at or near the practical capacity during peak periods. Any future growth in transport demand cannot occur under a 'business as usual' scenario; there is no road space to support more cars travelling at peak times.



FREIGHT

Vincent is predominantly a residential city acting as a thoroughfare for freight traffic in some areas to neighbouring suburbs. The City of Vincent road network currently accommodates freight vehicles which are a maximum length of 36.5 metres and have a maximum mass of 87.5 tonne (RAV2) along Lord Street, Brady Street and Scarborough Beach Road.

In an effort to improve vehicular traffic flow, and cyclist and pedestrian safety, it is vital that freight is managed away from built up areas and active transport networks into the future[11].

PRIVATE VEHICLES SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Distributor roads within Vincent result in an efficient strategic transport network, despite the demands placed on its inner-city location. The extent of the strategic network reduces the degree of bypass or 'rat-running' trips through residential streets.	The majority of Distributor Roads are operating at or close to capacity. There is no additional space in the existing road reserve to expand the carrying capacity, resulting in a need for adoption of alternative transport modes.	Future private vehicle travel is likely to be dominated by electric vehicles. Autonomous vehicle transport will have a fundamental impact on the way people travel. 30km/hr residential speed limits allow for an integration of mixed traffic cycling and significantly improved road safety outcomes. In combination with low ownership policies, car sharing schemes have been shown to be extremely effective in providing mobility to residents while heavily reducing kilometres travelled. Parking policies imposed on employees, visitors and residents can be used to reduce traffic generation and maintain effective road corridors.	A high proportion of traffic along the Distributor Road network in Vincent originates in suburbs beyond the Local Government area. Vincent therefore has less control over the generation of this traffic. As congestion increases, traffic will become necessary to retain resident amenity. Autonomous vehicles have the potential to disrupt the transport network.

CYCLING

Extensive growth in residential and employment density across the Perth Metropolitan Area, particularly in inner city locations will trigger the need for substantial changes in the transport network and mode shift will need to occur. Mode shift will result in an increase in the number of cyclists and the demographic of those who cycle will widen to include the full age and ability spectrum.[12]

CYCLE INFRASTRUCTURE

Vincent, through the 2013 Bike Network Plan, aims to have a cycle network which is safe, links communities and has facilities for all types of cyclists.

An evaluation of the 2013 network showed that the majority of routes through the City were "Average" in quality. The City has made progress in implementing its vision, with significant investment in cycling infrastructure along key routes greatly improving connectivity.

Cycling infrastructure is varied in Vincent and caters to different levels of cycling confidence. The majority of the infrastructure across the City is provided in shared paths of varying widths and quality. These paths tend to give priority to cars, with crossing controls and amenity suitable for small volumes of cyclists only.

Sealed shoulders along Oxford Street, Palmerston Street, Stirling Street and several more define routes for 'medium' confidence cyclists, though these are largely provided adjacent to on-street parking, without a buffer to traffic.

Cycling is permitted within the bus lanes on Beaufort Street and Fitzgerald Street, though there are inherent conflicts between high-frequency bus services and commuter cyclists that are likely to limit the uptake of these corridors to the most confident cyclists.

Quiet residential neighbourhood streets and slow-speed Activity Centre corridors allow safe cycling in mixed traffic, however the use of these relies on residents and visitors with less cycling proficiency and confidence.

Recent investment in the strategic cycling network has created higher-quality, more attractive and efficient on- street facilities, in the form of buffered bike lanes along Bulwer Street and Scarborough Beach Road and the Shakespeare Street 'Safe Active Street'. This form of infrastructure substantially increases the cycling capacity of these corridors for less experienced cyclists.[13]

NETWORK PROVISION

From a network perspective, sections of high-quality separated bike lanes and wide shared paths give local access and mobility, but do not connect to each other. This represents the largest deficiency in Vincent's cycling provision.

POTENTIAL DEVELOPMENTS

Further investment in high-quality separated on-street and off-street cycling provision is required to fill in the gaps between existing components. A strong skeleton of such facilities is necessary to support the future growth of cycling.

CYCLING INFRASTRUCTURE SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
• Safe sections of cycle-friendly infrastructure along strategic commuter routes. • Vincent has a well established active transport culture.	• A lack of network connectivity. • On street cycle lanes are compromised by their proximity to traffic and parking, in the form of door zone cycle lanes or shared bike/bus lanes. • The priority of movement is still generally in favour of cars. • Crossing facilities for cyclists tend to be rudimentary.	• Current on street separated cycling infrastructure already built in Vincent provides a strong foundation to extend into a fully-fledged cycling network. • Passive wayfinding and signage can assist to define the high quality network. • Priority should be afforded to cyclists, particularly in neighbourhood streets. • An audit of all street crossing facilities along the bike network, focusing on high traffic crossings. • E-bike and E-scooter hire schemes. • Multimodal trips can be supported and encouraged by increased cycle infrastructure.	• Demand for private vehicle road space and parking poses an ongoing threat to cycling in Vincent.

PEDESTRIANS

Pedestrian activity and connectivity are factors in the effectiveness and vitality of town centres and activity corridors and Vincent as a whole. For this reason, the pedestrian environment must be carefully considered, particularly along primary pedestrian routes. By allocating suitable resources to the pedestrian environment, the number of people choosing to walk as a way of getting around will grow[14], reducing the demand for other modes as well as the requirement for parking.

Pedestrian travel is much more localised than other transport modes, and vital for the function of all land use and transport systems.[15] Outside of centres, high quality pedestrian facilities should support residential travel to services and facilities, schools, and recreation, and provide a connection to public transport facilities.

An attractive and safe pedestrian realm results in improved health and social outcomes for residents.[16] Attractive pedestrian environments can also improve economic outcomes attracting more residents and businesses.[17]

PEDESTRIAN LEVEL OF SERVICE

A pedestrian level of service approach considers the quality of the pedestrian experience across the length of the trip. Pedestrian level of service is a key measure of the distance pedestrians are willing to walk depending on the type of activity (shopping, commuting, recreation) and the quality of the built environment.

The table below *(Adapted from Butcher, 1994)* is the serviceability matrix outlining the distance and relevant amenity associated with the pedestrian environment. What is apparent is the greater the environmental control along the path (e.g. shade) the further pedestrians are willing to walk to get to the activity node.

DESTINATION	HIGH AMENITY	LOW AMENITY
Train Station	800m	600m
School	700m	400m
Shops	400m	200m
Recreation	250m	100m

The most common elements contributing to the existence of a high-quality pedestrian environment relate to aesthetics, safety, and ease of movement. Specific features include:

- Path width, to enable passing and provide for people with varied abilities;
- Safety, including path maintenance, lighting and sight lines;
- Amenity, including ground level activity, type and frequency of street trees, street furniture, public art, and general clutter of the path environment;
- Legibility of the network, wayfinding, and being in proximity of destinations worth walking to; and
- Climate, with shade provided by street trees and awnings.

200m walking catchment along public transport corridors

400m walking catchment around residential destinations (school, activity centres, and recreation areas).

800m walking catchment around train stations.

PEDESTRIAN INFRASTRUCTURE

Vincent's pedestrian path network is highly variable, with built up Activity Centres including Leederville and Beaufort Street, each maintaining 3m wide paths. These areas also benefit from a combination of tree canopy and shopfront awnings providing shelter, resulting in an attractive pedestrian environment.

Pedestrian crossing priority is lacking within key activity areas, with vehicular traffic prioritised over pedestrians.

The provision of numerous shared paths, such as along Mitchell Freeway and East Parade, allow for commuters to freely pass through Vincent to the outer suburbs.

There is a lack of direction and wayfinding throughout the internal network. As a result, pedestrians are apprehensive to walk between centres.

Low volume residential streets are found to accommodate continuous, dual concrete footpaths, approximately 1.6m in width with varying coverings. These are considered low priority paths and exist to transport low volumes of pedestrians to key transit corridors and smaller activity generators. These vary in quality and condition, but currently they are considered adequate for their purpose.

Pedestrian accessibility to Leederville Station is good, however wayfinding and signage is subpar. East Perth station accessibility and wayfinding is severely lacking, with pedestrian linkages to surrounding residential and activity centres undefined.

Provisions around major schools are intended to minimise potential pedestrian conflict zones. For example, Mount Hawthorn Primary incorporates an overpass across Scarborough Beach Road and wide medians. These are accessible by residents via the 1.5m minor pathway network, present on both sides of most residential streets.

PEDESTRIAN INFRASTRUCTURE SWOT ANALYSIS

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
• Extensive path network on most streets within Vincent.	• Lack of network of wide shared paths to support higher pedestrian volumes or improved amenity. • Distributor roads lack sufficient safe crossing infrastructure. • Verges along major roads are often narrow, reducing pedestrian amenity. • Lighting is inconsistent and insufficient to provide a feeling of safety.	• Underground power unlocks additional room for pedestrian amenity. • Growth of activity corridors. • The reprioritisation of corridors to public transport and activity based spaces can provide the nexus for reallocation of road space to pedestrians – necessary to support these other purposes. • Capitalising on existing seating infrastructure to support pedestrian movement. • Increased pedestrian movement will support economic vitality.	• Competing modes of transport often sacrifice the pedestrian environment.

Existing TransPriority Map


Future Shelter

STAKEHOLDER ENGAGEMENT

COMMUNITY ENGAGEMENT

The engagement process for the ACS builds on the broad community engagement undertaken as part of the development of Imagine Vincent - *the Strategic Community Plan 2018 – 2028 (SCP)*. The consultation process for Imagine Vincent included an online community survey containing broad questions about transport.

Community consultation consisted of a workshop and an online survey. In both instances, an initial snapshot of Vincent was produced detailing the strengths, weaknesses, opportunities and threats for the Vincent transport network.

The workshop was held at North Perth Hall on Saturday March 30. This focused on individuals transport experiences and concerns and was designed to be a free form discussion with comments received on any transport mode and/ or land use topic. Approximately 40 local residents and community stakeholders attended.

The Online survey was held from the 18 March to 13 April 2019 and was taken by 60 people. The surveys collected a combination of ratings regarding different modes as well as mode specific comments. The feedback we received included:

COMMUNITY FEEDBACK

A preference for the overall reduction in congestion on the road network and rat-running on residential streets associated with that congestion

Dissatisfaction with connectivity in Vincent, particularly for east-west and circular public transport, and cycle route connectivity.

Comments received regarding the provision and pricing of parking are divided in opinion. Extensive parking surveys have been undertaken to inform recommendations regarding parking.

Indication that there is insufficient green time for pedestrians to safely cross major roads.

The need to recognise Vincent as being primarily a place for people rather than the movement and storage of people.

Appreciation of the Greening Plan Program and support for further commitment to expanding.

There was a strong desire for Vincent to be a leader in innovation.

Concern for pedestrian and cycling safety, specifically across major streets, at roundabouts, and when using cycle lanes (specific locations were noted by some respondents).

TECHNICAL STAKEHOLDER ENGAGEMENT

Detailed input was also sought during this period from a range of government and community stakeholder groups, including the following:

- Adjoining local governments: The Cities of Perth, Bayswater, and Stirling;
- Department of Planning, Lands and Heritage (DPLH);
- Department of Transport (DoT);
- Public Transport Authority (PTA);
- Main Roads Western Australia (MRWA); and
- City of Vincent's Urban Mobility Advisory Group (UMAG).

Input was gathered at individual meetings held with the stakeholders, as well as a group meeting with multiple stakeholders.

Developments and infrastructure changes/improvements in the adjoining LGAs and the broader region were discussed with relevant stakeholders. Developments were considered in the context of Vincent and how these are likely to integrate with the community's vision for Vincent's transport networks.

- City of Perth discussed their plans for the road network, and their emphasis on Stirling Street bike route as an alternative to Beaufort Street.
- City of Stirling expects significant increases in density and has had success in dropping private vehicle trip generation over the last 5 years. The need for greater cycling route connectivity was raised.
- The need for high-capacity transit was reiterated amongst the neighbouring LGAs.

The group stakeholder meeting was centred on specific corridors within Vincent. The session revealed stakeholders' conflicting priorities regarding the function of these corridors. The function of Charles Street in particular was divisive amongst stakeholders.

UMAG provided a range of significant comments. These included identifying strategic priorities such as an emphasis on people rather than vehicle movement, a reduction in the number of on street parking spaces, and the introduction of more street trees. Specific areas of concern were also discussed. These included the pedestrian catchment around schools, and the need to further promote slow vehicle speeds within residential areas.

The ACS consultation feedback is in line with Imagine Vincent in terms of the broad objectives of the ACS and specific community concerns raised.

The above SWOT analysis and community engagement helps us to establish *'where do we want to be?'* Through this we are able to define realistic, clear and measurable goals for an integrated transport system throughout Vincent, providing a list of actions that directly respond to the opportunities and threats over the next 5 to 10 years.

DID WE GET IT RIGHT?

The draft ACS was advertised from 3 December 2020 to 19 February 2021. With the purpose of this being to gain feedback on whether the vision and objectives of the draft ACS align with community expectations, the level of importance the community place on each action and whether anything has been missed. Consultation included an online survey, workshop, and engagement with key stakeholders.

The results of the consultation period were:

- Unique page views – **396**
- Document downloads – **172**
- Survey participants – **43**
- Email submissions – **10**

Responses were generally supportive of the intent of the draft ACS, with many suggestions on how to make the document clearer, which actions to prioritise, and which actions are not as important. These comments have been incorporated into the final version of the ACS.

WHERE DO WE WANT TO BE?

Vincent's transport network needs to be thought of as one system, not individual projects or modes. This enables the City to get the balance right in managing demand, make the most of existing assets, take up new technologies, and plan for major infrastructure. This helps in the consideration of future changes and identification of options to adapt to changing needs.

The City will consider all transport modes in our planning so that they work in harmony to move people and freight effectively and efficiently. Where modes share the same space, it is imperative that they do so in a way that balances the needs of different users.

The two tools that assist in achieving this are a user hierarchy and the link and place theory.

SUPPORTING TOOLS

PEOPLE – USER HIERARCHY

Many streets and roads support specialised transport networks. This includes walking, public transport routes, cycling, heavy vehicle routes, and service and delivery. These specialised transport networks have different requirements and it is important that their role is recognised and understood as part of the wider network.

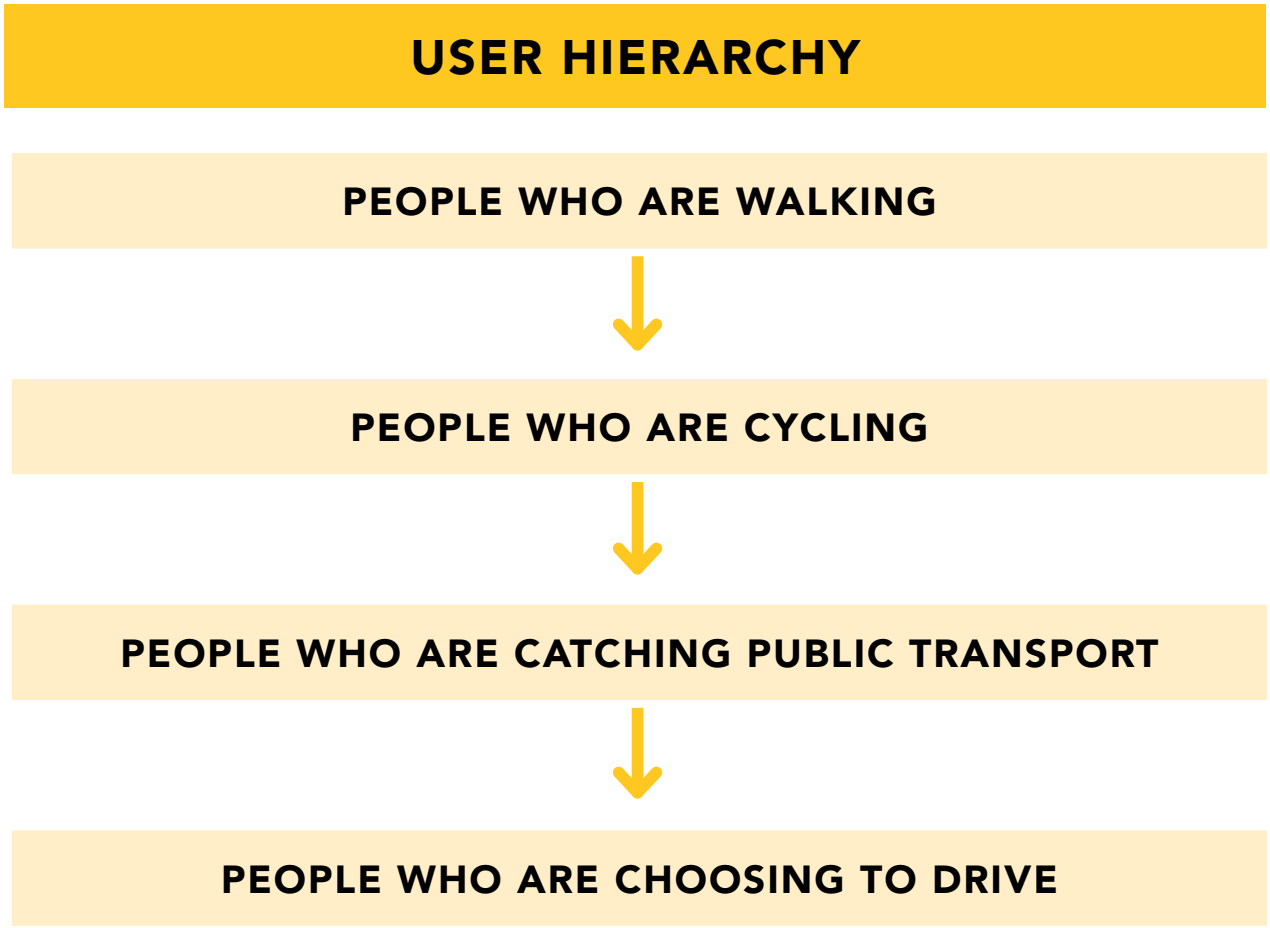
Different networks also often compete for the same space and conflict with each other, particularly where roads are narrow or crowded.

A road should operate under a hierarchy of use where infrastructure is provided to support that use. In the context of high-traffic corridors, the existing priority is for cars. There is limited capacity to support the prioritisation of private vehicles as the network densifies. A change is required.

Vincent community has already identified a preference for prioritising pedestrians and better connections with cycling and public transport facilities. A future transport hierarchy of use must therefore preference mobility for people, not cars, through greatly improved pedestrian, cycle, and public transport infrastructure.

In support of the ACS, a user hierarchy has been established for Vincent. This hierarchy is intended to summarise the needs of people travelling within Vincent in order of priority for improvements to the transport network.

The hierarchy is based on a people first philosophy, which prioritises vulnerable people and supports active and sustainable modes of transport before traditional considerations of private vehicle movement.



On Vincent's roads, existing priority is typically for people who choose to drive. In upgrading and/or making changes to these roads, pedestrian infrastructure will be the first focus. This may generate the need for more pedestrian paths, verge space, street trees and shade, median treatments and safe crossing points.

Secondly, the City will ensure that safe and convenient access is provided to people who are cycling.

Thirdly, the City will aim for public transit that is safe, accessible, and convenient. This may include supporting queue jumps at intersections and bus priority lanes above the needs of people who choose to travel using private vehicles.

Application of the hierarchy may require the reallocation of road space to support mobility for people rather than for cars.

This hierarchy is consistent with the opportunities and threats identified in the SWOT and is supported by the feedback obtained during consultation.

LINK AND PLACES

Many of our roads are limited in widths by existing infrastructure which means we need to consider how the function of these roads can be better utilised to meet growing demand. We need a new approach to designing, planning and delivering a modern transport system that meets the increasing needs of people and businesses whilst creating and improving the great places that make up Vincent.

Streets perform multiple functions. Transport links not only move people from A to B, they also serve as key places and destinations. There is a natural tension between these two functions. As a movement corridor, every link aims to minimise travel time and keep people and goods moving. Alternatively, as a destination it aims to increase visitor amenity.

Not all streets can be popular destinations, just as not all streets can prioritise vehicle movement. It is important to recognise the competing demands between movement and activity on our streets. Finding the right balance between the two is fundamental to integrated transport planning.

This way of thinking means that when we plan and develop the transport network, we need to consider the breadth of community needs, expectations and aspirations for the places and streets they pass through.

A combination of dedicated private vehicle and mixed traffic (buses and cars) can achieve movement of 1,600 – 2,800 person-trips/hour/lane. We can increase this capacity by applying the user hierarchy to prioritise pedestrians, cyclists and those catching public transport before private vehicle users.

Using the Link and Place framework, movement is understood in terms of **people carrying capacity**, rather than simply private vehicle movement.

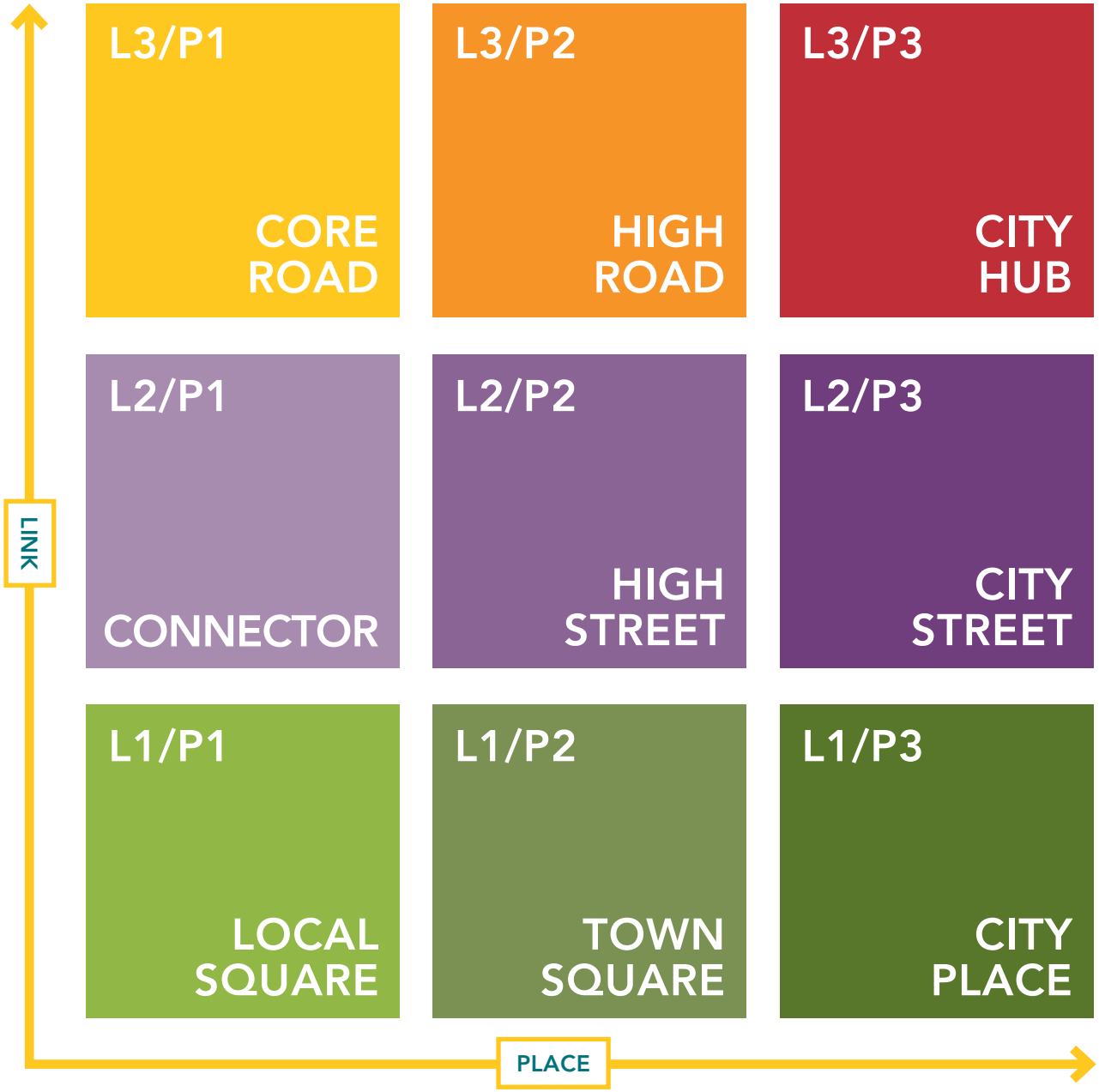
Link refers to how people move along streets and roads. The Link or level of movement is understood in terms of the number of people moving, including pedestrians, cyclists, people catching public transit, and those in cars, rather than the number of vehicles per day.

Places are locations which are of specific interest to people or where people undertake activities. Place considers the mix and type of retail, commercial, residential, food and beverage, and entertainment options in an area, and how people move through and to the space. Different streets in Vincent are intended to support different intensities of activity. These places are identified in the City's Local Planning Policy 7.1.1 Built Form as 'Built Form Areas'.

FRAMEWORK

In the Link and Place Framework, streets within the network are categorised according to their specific combined place and link function. The combination of place and link is shown in the below matrix (Figure 6.1). This framework recognises that a liveable and successful city needs a variety of street types that serve different roles and functions in different places.

The typical features for link and place and predominant users of each category have been listed in the corresponding tables.


L3/P1
CORE ROAD
L3/P2
HIGH ROAD
L3/P3
CITY HUB
L2/P1
CONNECTOR
L2/P2
HIGH STREET
L2/P3
CITY STREET
L1/P1
LOCAL SQUARE
L1/P2
TOWN SQUARE
L1/P3
CITY PLACE
LINK
PLACE


wrapnrice
THAI CAFE
MANGOVE KITCHEN

CORE ROAD **L3/P1** **HIGH LINK/ LOW PLACE**	**PLACE** • Medium to high density • Big block commercial	**LINK** • Lower levels of pedestrian activity • Public transport priority in peak AM and PM • High trafficked roads
	USERS • Pedestrians walking to public transport • High levels of though movement • Fewer pedestrian and cyclist movement • High levels of public transport	

CONNECTOR **L2/P1** **MEDIUM LINK/ LOW PLACE**	**PLACE** • Low intensity land use • Low to medium density residential and commercial • Lower level of movement functionality than core roads, higher level than local streets • Neighbourhood and local centres	**LINK** • Low traffic capacity • Low speed zone • Mostly through traffic • Key connectors between town centres • Cycle routes for pedestrians to homes and various destinations including schools • On street parking
	USERS • Pedestrians walking to public transport and local centres • Mix of all modes • Popular cycle routes • Low volumes of heavy goods vehicles	

LOCAL STREET **L1/P1** **LOW LINK/ LOW PLACE**	**PLACE** • Residential is the predominant use • Low to medium density housing • Higher density developing near public transport, local shops and mixed use • Increased trees planting and traffic calming increase	**LINK** • Low speed environment • Pedestrian priority around key attractors • Used by locals as primary access to residential • Quiet routes for cycling and walking • Low volumes of goods and service vehicles
	USERS • Mix of all modes • Public transport provides access for people on defined routes • Levels of traffic change over the day • Pedestrians walking to public transport stops • Cycling for local trips and/or commuting	

HIGH ROAD **L3/P2** **HIGH LINK/ MEDIUM PLACE**	**PLACE** • Low to medium density mixed use zones • Supports a moderate level of social and economic activity • Moderate density of commercial, civic and residential • Street and public realm support street edge activity	**LINK** • Large volume of mixed traffic • Bus routes and interchanges at peak times • Significant through movement • Peak hour congestion near denser urban areas • Provision for pedestrian and cycling amenity
USERS	• High pedestrian movement in centres • People using public transport interchanges • Public transport provides efficient movement for people • Cycle routes • General traffic	

HIGH STREET **L2/P2** **MEDIUM LINK/ MEDIUM PLACE**	**PLACE** • Moderate level of street-side activity • Mix of residential, commercial and civic uses • Medium density residential • Shops • Civic institutions	**LINK** • Efficient public transport providing • Traffic peaks in the AM • Pedestrian movement is high in the evening • Cycle routes • On street parking • Direct access to local businesses and properties
USERS	• A mix of all modes with public transport providing access for people on defined routes • Pedestrians walking to bus stops and local centres	

TOWN SQUARE **L1/P2** **LOW LINK/ MEDIUM PLACE**	**PLACE** • Medium to high density residential • Offices, retail and mixed use • Street markets • Medium level of active frontage • Support main streets	**LINK** • Emphasis on pedestrians • Mixed traffic provision • Short term parking • Low speed environment • Local street serving local people • Congested conditions in peaks
USERS	• Pedestrian movement is high throughout the day • Cyclist volumes increase as facilities improve • Public transport is important for people movement • A mix of all modes, can be high in volumes	

CITY HUB **L3/P3** **HIGH LINK/ HIGH PLACE**	**PLACE** • Main streets • High quality public realm • Significant destinations in their own right • Well used • Support intense concentration of activity • High density residential nearby	**LINK** • Emphasis on pedestrian activity and priority • High number of pedestrians • Large volumes of mixed traffic at peak times • Emphasis on public transport in peak times • Cycle routes
	USERS • High pedestrian levels especially afternoon peak and evening • Cycle access is important • Buses and cars are a significant portion of traffic • Parking on street or side street	

CITY STREET **L2/P3** **MEDIUM LINK/ HIGH PLACE**	**PLACE** • Continuous street frontages • Shops, restaurants, and cafes • Offices • Civic function • Well known destinations	**LINK** • High pedestrian priority • Low speed zone • Important movement corridors (high pedestrian activity and movements) • Mix of all modes • Significant through movements and peak hour commuters
	USERS • Pedestrian movement is high throughout the day • Cyclist volumes increase as facilities improve • Public transport particularly important for people movement • A mix of all modes, can be high in volumes	

CITY PLACE **L1/P3** **LOW LINK/ HIGH PLACE**	**PLACE** • Shared Spaces • Plazas • Town squares • High quality public spaces • High quality retail • Important social spaces • May support high density • Civic land uses	**LINK** • Pedestrian orientated activity prioritised • Low speed environment • No provision for significant through routes • High quality lighting • Service vehicle provision • Bike parking • Public transport access
	USERS • • Mostly pedestrians, access for vehicles is restricted • • Cyclists • • Service and Delivery	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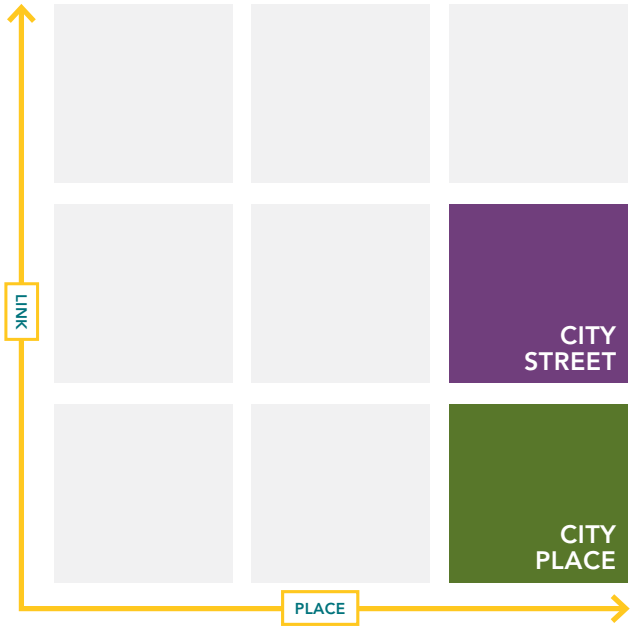
Building on what has been identified through the SWOT analysis and taking into consideration the User Hierarchy, the Link and Place framework has been applied to Vincent to develop a road function map to guide the future Vincent transport network.

The road and street types have been developed based on link and place functions for now and how they could be into the future, ensuring more efficient, liveable, sustainable and inclusive transport outcomes. The street types establish the roles and priorities of the street.

As per the Link and Place Matrix, the road designations guide what types of infrastructure or other improvements may typically be required to support place, activity and movement.

This evaluation considers the pedestrian amenity, streetscape activation and development accessibility criteria of an area, and uses this to affect the form of the transport infrastructure that will best support the desired land use planning outcomes.

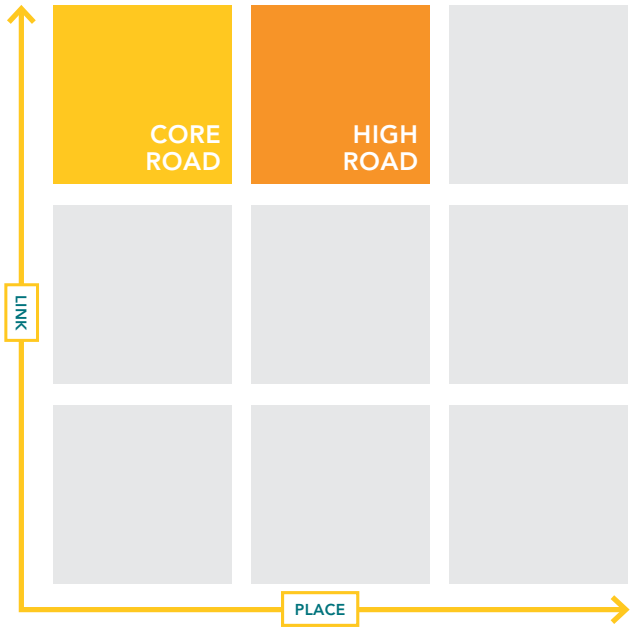
Where activity levels are high (high level of Place - P3), infrastructure is designed to improve pedestrian amenity, street trees, furniture,



Oxford Street, Leederville

al fresco dining opportunities, on-street parking, etc. This enables the street environment to act as an extension of the land use. This is typical of town centre main streets such as Oxford Street, Leederville.

A road that serves primarily to provide mobility would be built to ensure efficient travel for appropriate modes (high link function M3). This might involve high frequency bus lanes, access control, bike lanes, etc., all of which focus on the movement of people through an area. This is typical of arterial roads between Activity Centres, including Beaufort Street, Mount Lawley or Walcott Street, North Perth.



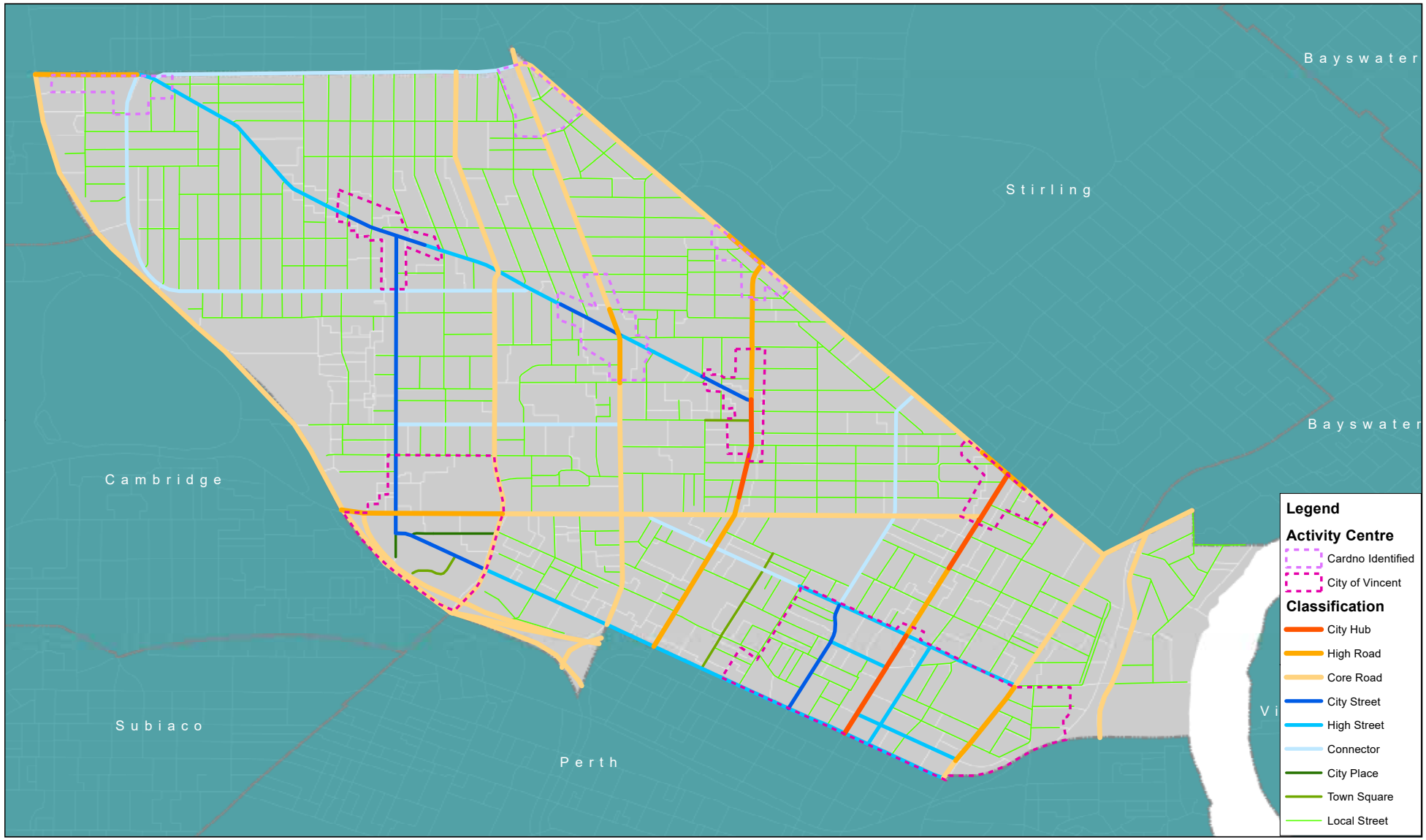
Beaufort Street, Mount Lawley

There are many locations which function as Activity Corridors (with a high place function - P3) as well as Mobility Corridors (with a high movement function – M3) the Link and Place classification being a 'City Hub'. Careful consideration is required to ensure that the transport infrastructure is consistent with the desired environment (high link (M3) and Place (P3) function. This may involve construction of high-capacity but slow-speed traffic lanes, well-defined pedestrian crossing points, and deep footpaths/verges to create pedestrian amenity and shade (where street trees are present).

Beaufort Street is an excellent example of the benefits of multi-modal corridors: during peak periods buses carry over 60% of the people in 5% of the vehicles, while operating well below the carrying capacity of the bus lane.

At a time when communities are expecting to have a greater say in transport and infrastructure decision making, link and place provides opportunities to have discussions about how we can address and prioritise our future transport challenges.

Future Road Function – Link & Place Map



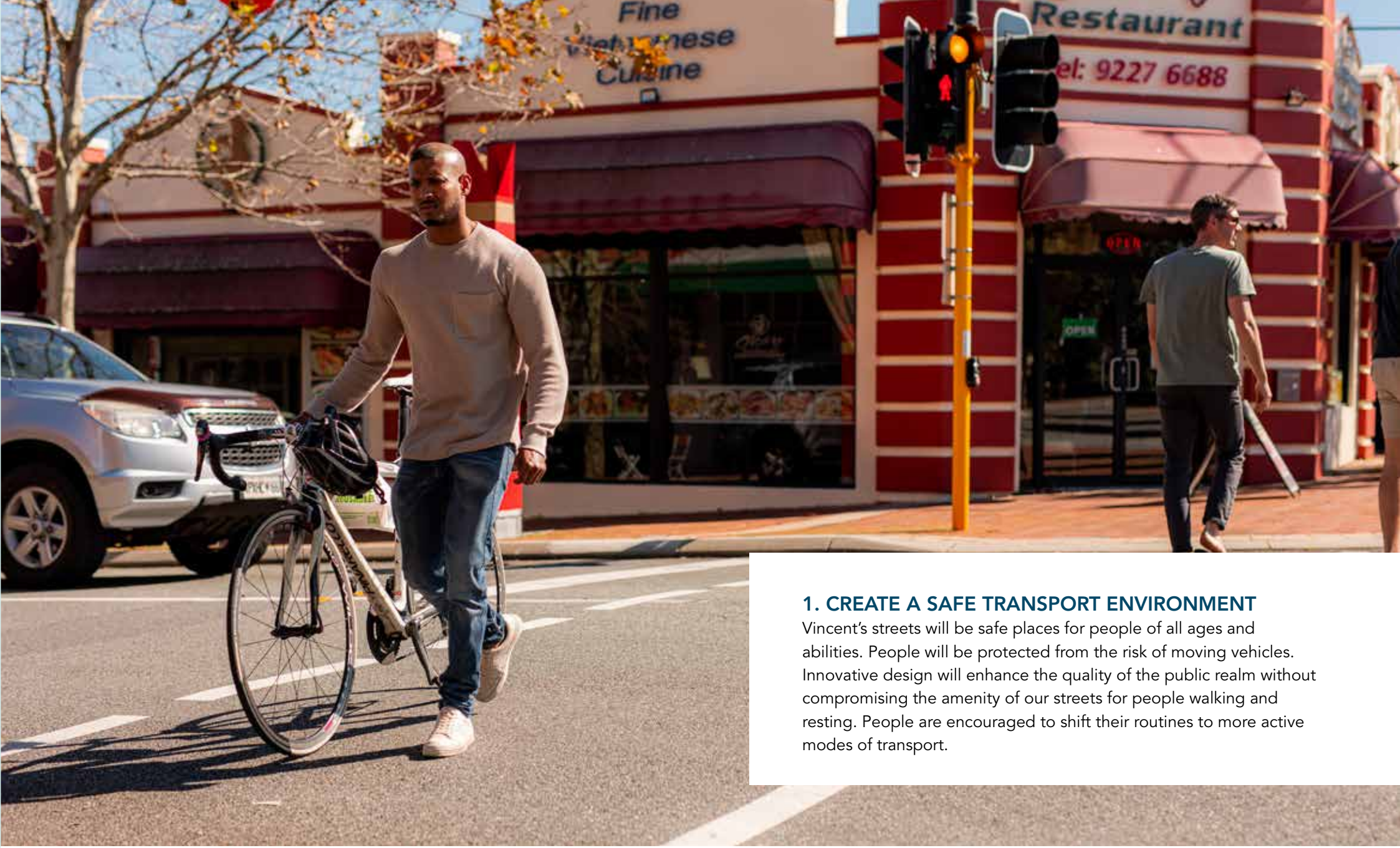
VISION, OBJECTIVES & ACTIONS

After establishing where we are now, we determined what our major opportunities and threats would be in the future. Community consultation reinforced what we found and reaffirmed the findings of the Imagine Vincent consultation undertaken in 2017. The resulting vision integrates the opportunities within each mode of transport, as follows:

The City of Vincent puts people first. Getting around is safe, easy, environmentally friendly, and enjoyable.

The Vision feeds into four key objectives. Within each objective are several plans. These plans are achieved by the actions listed in the Implementation Plan.

OBJECTIVE	PLAN
Create a safe transport environment.	• Create active, sustainable transport networks that are safe and legible. • Ensure pedestrian and cycling routes (including schools) are of a high-quality and safe for all users.
Ensure consistent accessibility and connectivity into , around and beyond Vincent.	• Advocate for connected and reliable public transit. • Reallocate road and verge space, including on-street parking, throughout the City to prioritise vulnerable users according to user hierarchy and road hierarchy. • Be a leader in adaptability and technology.
Promote environmentally friendly and healthy transport modes and initiatives.	• Reduce carbon emissions caused by the transport network. • Prioritise and encourage the use of active and sustainable transport modes. • Manage car parking (including supply and pricing) to improve efficiency and support mode shift. • Use residential density to support transit. • Obtain relevant data to inform decisions and monitor progress
Make it enjoyable for people (pedestrians, cyclists and active transport users)to get around the local area.	• Increase pedestrian amenity on residential streets. • Increase pedestrian amenity in town centres.



1. CREATE A SAFE TRANSPORT ENVIRONMENT

Vincent's streets will be safe places for people of all ages and abilities. People will be protected from the risk of moving vehicles. Innovative design will enhance the quality of the public realm without compromising the amenity of our streets for people walking and resting. People are encouraged to shift their routines to more active modes of transport.

1.1 CREATE ACTIVE, SUSTAINABLE TRANSPORT NETWORKS THAT ARE SAFE AND LEGIBLE.

Assuming an increase in population, there is likely to also be an increase in residential and employment density across the Perth Metropolitan Area, particularly in inner-city locations such as Vincent. As our road network is reaching capacity with limited to no opportunity for it to expand there is the need for substantial changes in the way people travel so that the network can accommodate travel demand growth.

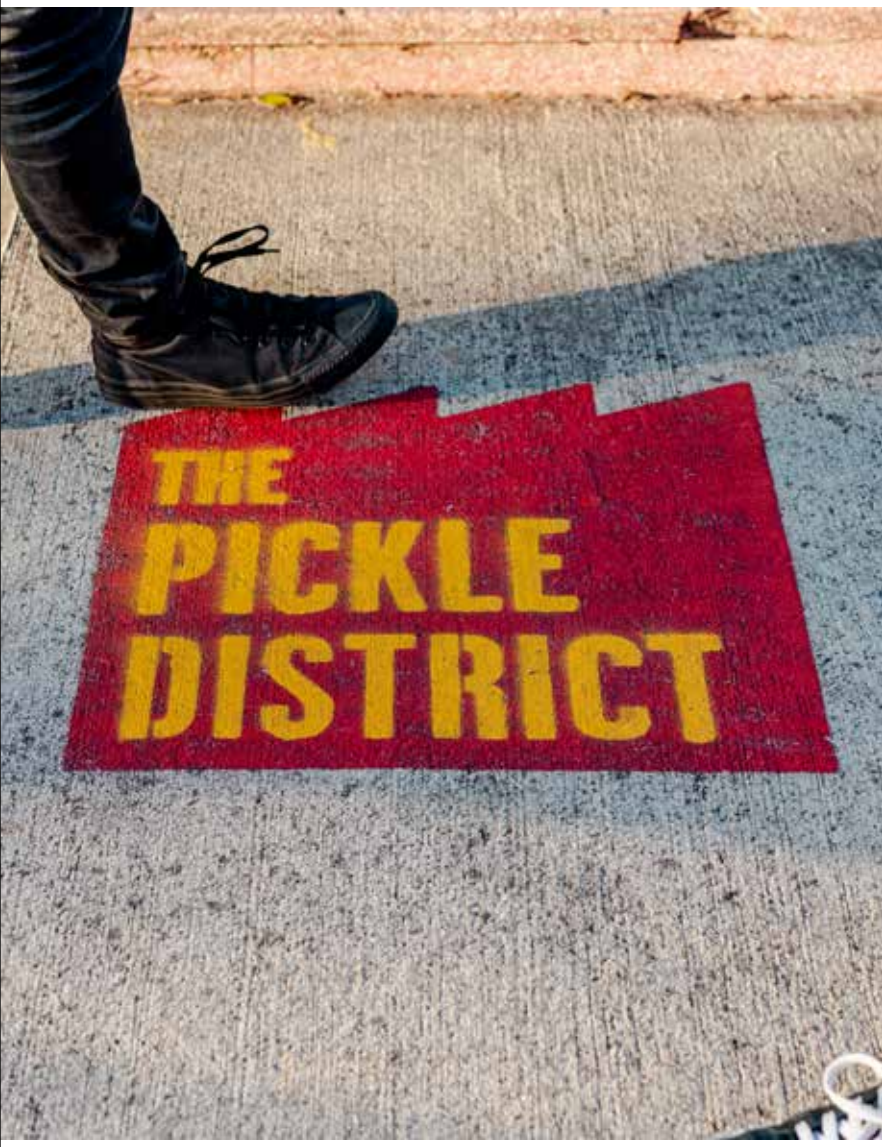
Vincent's pedestrian and cycle network is generally comprehensible, with paths available on at least one side of most streets across the City. Though comprehensible, pedestrian and cycle crossing priority is lacking within key activity areas, with vehicular traffic prioritised compromising safety in favour of traffic flow. Distributor roads often lack sufficient safe crossing infrastructure, in the form of signalised intersections or pelican crossings, pram ramps and median islands.

Consultation identified a lack of confidence and safety as the biggest barriers to cycling in Vincent. Infrastructure that creates a safe space for cyclists and indicates to drivers that cycling is a viable transport mode, can help to alleviate these concerns.

Improving the connectivity and quality of the network is also aligned with the objectives of the Department of Transport's draft *Long Term Cycle Network*, which looks to create safe and attractive links between key destinations. There are many ways in which a cycle route can be established. The location of each cycle route will determine the best form of infrastructure to support safe cycling and improve connectivity. The identification of new and upgrade of existing cycle routes and their infrastructure will be based on best practice examples, evidence, data and extensive community consultation.

Action 1.1.1:
Review Vincent's Bike Network Plan taking into consideration relevant State Planning Policy to ensure the provision of a dense network of cycling routes to support cycling as a safe alternative transport mode to private vehicles. The review of the Bike Network Plan will consider:

Action 1.1.2:
Implementation of the Bike Network Plan.



Wayfinding is recognised as a critical component of the legibility of place, helping to determine how people move through spaces. These decisions are guided by architecture, urban design, landmarks and views and further supported by signage, tactile interventions and technology.

The current lack of directional signage and wayfinding across the internal shared path network is a barrier for those wanting to choose active transport modes as their primary way of getting around. Wayfinding provides direction and guidance for pedestrians, cyclists, public transport users and those parking vehicles, and can include information such as the time and distance to a destination.

Comprehensive directional and wayfinding signage is crucial to the safety, ease and success of increasing the number of trips taken by active transport modes within Vincent.

Vincent's wayfinding strategy currently provides for car parking and some pedestrian signage throughout the City. To promote safe active transport, wayfinding for pedestrians and cyclists should be included in Vincent's wayfinding strategy, focusing on key strategic routes and destinations.

Vincent looks to support improved connection across the pedestrian and cycle networks in turn creating a safe and understandable transport network to assist in shifting people's behaviour from prioritising private vehicular travel to more active and sustainable modes of transport.

Action 1.1.3:
Develop and implement a consistent wayfinding and signage strategy across the City. This should consider pedestrian transport modes, cycling, and parking, providing appropriate localised details for each town centre and activity and transit corridor.

1.2 ENSURE PEDESTRIAN AND CYCLING ROUTES (INCLUDING SCHOOLS) ARE OF A HIGH QUALITY AND SAFE FOR ALL USERS.

Pedestrian activity and connectivity are important factors in the effectiveness and vitality of Vincent. The pedestrian environment must be carefully considered, particularly along primary pedestrian routes. By allocating suitable resources to the pedestrian environment, the number of people choosing to walk as a way of getting around will grow, reducing the demand for other modes as well as the requirement for parking.

The pedestrian environment should be accessible to all. Pedestrians with mobility issues, children, and elderly should be prioritised. By ensuring that the path network is suitable for those who may experience physical or cognitive barriers, this is achieved. A high degree of safety and amenity can support the pedestrian environment. The inclusion of lighting and shade (street trees which are well maintained and awnings) can support this. The obstruction which can be created by temporary structures and works will also influence the usability of the pedestrian environment and should be mitigated accordingly.

Action 1.2.1:

Develop a high quality, safe pedestrian path network which supports all mobility levels and is accessible to all. **This includes:**

- Undertaking an audit of network crossings including intersections, mid-block crossings and high traffic crossovers. Priority should be given to areas surrounding schools, key routes to town centres and mixed-use areas, activity corridors, and transit nodes;
- Identifying midblock crossing opportunities;
- At intersections, ensure pedestrian priority traffic lights are in place; and
- Use planning requirements to manage streetscape development and temporary obstructions.

Action 1.2.2:

Upgrade and improve paths based on the condition assessment undertaken every 3 years. Ensure a high-quality pedestrian environment which is accessible to all is maintained throughout Vincent.

Roundabouts are a function of the transport network which are increasingly problematic for active transport users, they were flagged as a consistent risk for cyclists during consultation.

Roundabouts are generally designed to support the high-speed movement of cars in all directions, and the high-speed design of these facilities can adversely impact pedestrian and cycling safety. The standard geometry of Roundabouts restricts the opportunities for pedestrian and cycle crossing of roads and limit the potential for the addition of dedicated cycling facilities.

The modification of the standard roundabout form and improvement of crossings at roundabouts should be prioritised. This can be delivered in the form of compact roundabouts.

Compact roundabouts use raised platforms, narrow lanes, and restricted sightlines to slow vehicular speeds and increase safety for pedestrians and cyclists. Additional interventions increasing pedestrian priority can also be included.

In the implementation of this action, there is the opportunity to conduct a trial based on community and key stakeholder engagement to ensure that this form of infrastructure intervention is suited to Vincent. The trial will provide ground-based data on the effect that compact roundabouts have on pedestrian and cycle safety, speed on residential streets and the impact of rat running.

Existing roundabouts can be easily retrofitted to support a compact configuration, with the introduction of infill medians at roundabout entries. Consideration is to be given to best practice public transport infrastructure and design guidelines.

Action 1.2.3:
Promote compact roundabout geometry through the conversion of existing roundabouts and new roundabouts (where deemed appropriate) in City to reduce vehicle speeds.

Schools act as a major trip generator with a mix of primary, secondary and tertiary educational facilities located within Vincent and also in neighbouring local government areas (accessed by students and staff living in Vincent). Primary and secondary schools are typically located within residential areas, with tertiary located within activity and transit corridors.

Provisions around major schools have already been made to protect pedestrians. For example, Mount Hawthorn Primary incorporates an overpass across Scarborough Beach Road and wide medians ensuring adequate protection.

The quality of the infrastructure directly impacts the mode choice of parents and students and it has the ability to encourage active lifestyles.

To further promote pedestrian and cycling mode share for those travelling to and from schools, street environments within residential areas need to promote safe, legible, and sensible routes to destinations.

In particular, cycling connections to schools should be designed for all ages and abilities. This includes safe, slow speed roads, high quality crossing points and wide well-maintained pathways.

Within the Safe Active Street and Crossing Audit program, Vincent will ensure streets near schools will be the highest priority.

Action 1.2.4:
Develop a comprehensive program to support students and staff using education facilities to travel using sustainable and active transport modes which are safe and have a high level of amenity.

The use of active and sustainable transport modes for the journey to and from school is data which can be measured and utilised to understand travel behaviour and the ways in which it can be influenced to create mode shift.

Your Move is a free program helping students get active by increasing walking, scooting, and riding to school. Students are educated on ways to tackle traffic issues and are provided with practical tool to teach and develop sustainable travel behaviour.

Your Move collects journey to school data from schools who have subscribed to the program. By encouraging all primary schools and high schools to join the Your Move program we will be able to better understands the needs of these transport network users and monitor travel behaviour and create targets for mode shift for journey to school.

Education should also be available to parents. This will help to support student and staff travel to and from education facilities and influence a change in behaviour at all levels.

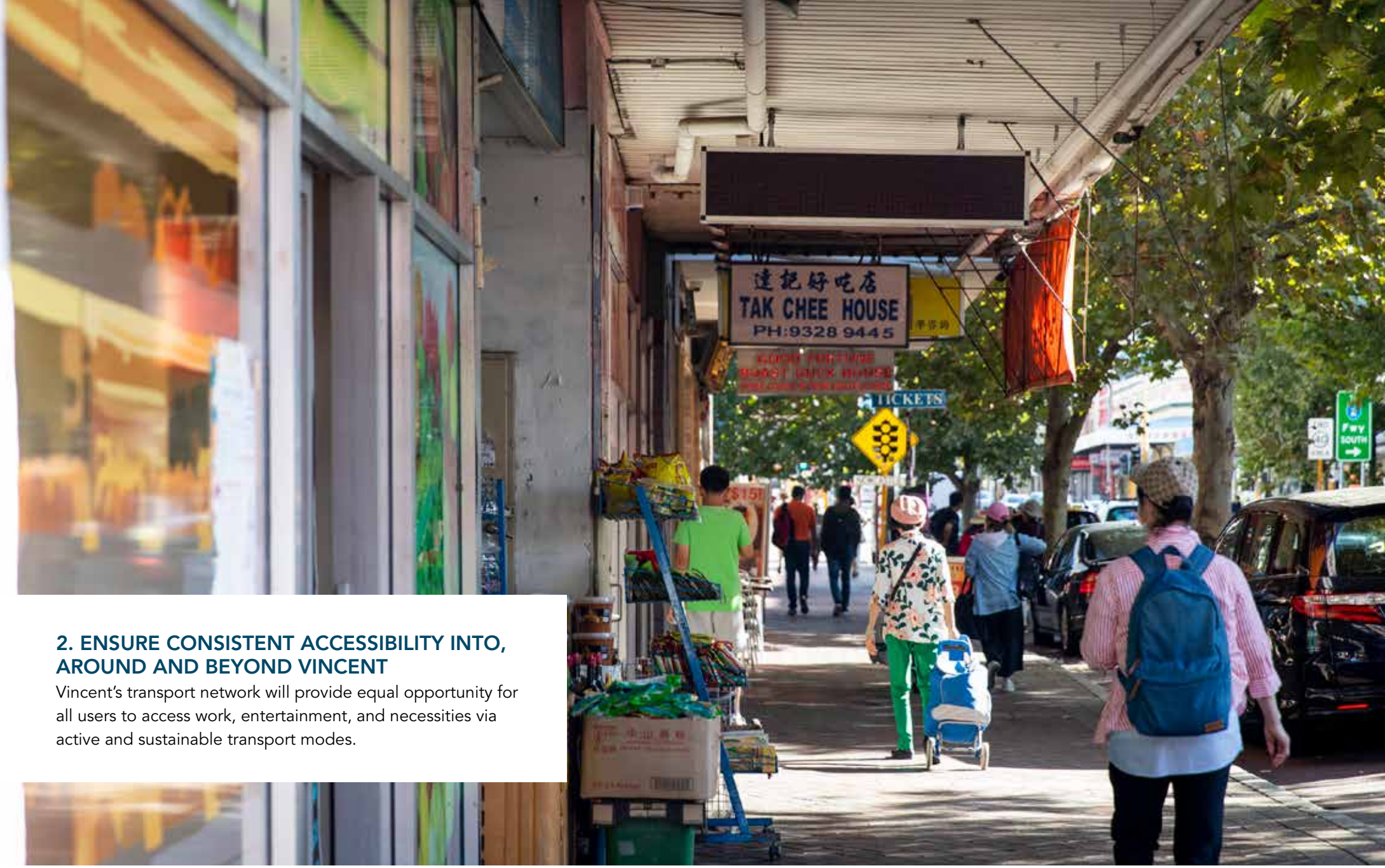
Action 1.2.5:
Work with schools (students, parents, and staff) and The Department of Transport to support active travel through resources and programs, including route maps and education programs. Encourage schools to join the Your Move program so that journey to school data can be collected and appropriate mode shift targets created.

Claisebrook station is located to the south-west of Vincent. This station provides an important connection to residential and mixed-use development within Vincent. It also plays an important role in providing transportation to events held at Perth Oval.

Pedestrian access from Claisebrook station to Perth Oval is currently via an 850m – 1300m walk (inclusive of a pedestrian bridge). The pedestrian crossing amenity over Lord street is low given the volume of activity generated by Perth Oval events. Further to this, the Parry street intersection should be reviewed to ensure that signal timing prioritises pedestrians.

Providing for high quality, accessible, legible, and safe pedestrian and cycling routes from Claisebrook Station to destinations within Vincent is a priority.

Action 1.2.6:
In collaboration with the DoT and PTA, develop a high quality and safe active transport environment between Claisebrook station and Perth Oval.



2. ENSURE CONSISTENT ACCESSIBILITY INTO, AROUND AND BEYOND VINCENT

Vincent's transport network will provide equal opportunity for all users to access work, entertainment, and necessities via active and sustainable transport modes.

2.1 ADVOCATE FOR CONNECTED AND RELIABLE PUBLIC TRANSIT.

Perth and Peel@3.5million indicates that there is likely to be extensive growth in development and population across Vincent and the broader region. Growth in development and population will generate additional transport demand. There is insufficient road capacity available within Vincent to accommodate this growth if private vehicle use grows at the same rate.

Prioritising private vehicles in traffic lanes limits the people moving capacity of the network. For this reason, infrastructure improvements should prioritise the movement of people and goods over traffic.

The level of priority afforded to bus transport is dependent on whether the stop has an embayment or is in the lane of traffic. Public transport is at its most effective when it is provided in dedicated corridors with priority at key congestion points.

As per the link and place framework, streets within the City's transport network are categorised according to their combined place (locations which are of specific interest to people or where people undertake activities. This considers the mix of activity and how people move through and to the space.) and link (How people move along streets and roads in terms of the number of people moving as opposed to vehicles per day) function. This will ensure that we plan and develop the transport network considering a breadth of community needs seeing transport links as not only a way of moving people from A to B, but also as key places and destinations.

Bus priority in Vincent is currently available along key corridors including Beaufort Street (peak period transit lanes), Fitzgerald Street (peak period transit lanes), and Charles Street (portion of full-time priority).

Service reliability was flagged as an issue during the consultation process. Poor service reliability occurs due to combinations of road congestion and limited bus priority infrastructure. Improved bus priority infrastructure could include extended bus lanes and 'bus sensing' signals.

Public transport infrastructure is ideal to prioritise as it can enable the movement of the highest number of people in the smallest amount of space. A frequent and convenient public transport service would support a vibrant, sustainable, and connected city. Public transport infrastructure includes but is not limited to dedicated bus lanes and the strategic placement of bus stops.

Provision for public transport should not compromise the safety and accessibility of the pedestrian environment. Instead, public transport facilities should be well integrated in streetscape environments to complement and connect with pedestrian amenities.

Action 2.1.1:
Advocate for additional public transport infrastructure along corridors.

Action 2.1.2:
Using the Link and Place framework, incorporate an appropriate level of pedestrian amenity along bus priority routes.

While connections into and out of the Perth CBD are frequent, connection between Vincent's town centres (Leederville town centre, Mount Hawthorn town centre, North Perth town centre, Beaufort St, Mount Lawley, and William St, Northbridge) or beyond is poor. Existing public transport options frequently require patrons to travel first into Perth City before transferring to an outgoing service to reach a different activity centre within Vincent, this is inefficient and time-consuming.

Consultation revealed a desire for greater interconnectedness within Vincent. The existing network provides for limited access between town centres, forcing people who would prefer to use active and sustainable modes of transport to drive.

Vincent will continue to advocate for and support the provision of connected and reliable transport as a way of improving accessibility throughout the City. This will include advocacy to the Public Transport Authority and the investigation of alternate interventions such as cross council circle routes.

Action 2.1.3:
Advocate for and support improved east-west public transit connectivity.

2.2 REALLOCATE ROAD AND VERGE SPACE, INCLUDING ON-STREET PARKING, THROUGHOUT VINCENT TO PRIORITISE VULNERABLE USERS ACCORDING TO USER HIERARCHY AND ROAD HIERARCHY.

Within Vincent, verges along major roads are often narrow, lacking street trees and shade, and are cluttered with street furniture and road signs, reducing pedestrian amenity. Further to this, lighting is inconsistent, predominantly relying on street-light spill to illuminate paths. This is often insufficient to provide a feeling of security, and the effect is exacerbated where tree cover obscures the lighting.

One of the primary constraints for Vincent's town centres is the lack of verge width. This limits the area available to define high-quality pedestrian environments. To provide this extra space, town centres should consider removing on-street parking along at least one side of the activated corridor; with the need for parking fulfilled elsewhere in the area, along peripheral streets or in consolidated off-street parking. Opportunities to clear pedestrian environments of obstructions should be taken wherever possible. This may include suspending streetlights from buildings or awnings, street trees, consolidating signage and maintaining street furniture.

Beyond town centres, there is further opportunity to reallocate road and verge parking to enhance the pedestrian and cycling network as there is generally lower demand for parking in these areas. This would provide for cyclists of a greater range of abilities and confidence. Extension of cycling infrastructure, even at the cost of on-street parking and vehicle capacity, is necessary to support cycling as a viable transport mode.

Cycling facilities should follow primary desire lines and provide fine-grained access to all areas of Vincent. They can take on a number of forms including:

- High quality shared paths;
- Bi-directional protected bike lanes;
- Protected on-road bike lanes; and
- Safe Active Streets (Bicycle Boulevards).

Unprotected on-road bike lanes are generally not considered as appropriate cycling infrastructure since they only provide for confident cyclists. These should only be used as a last resort on low traffic volume streets.

The reallocation of parking to support active transport modes is a way of encouraging transport network users to travel via active modes of transport. Though this may be perceived as removing accessibility to locations based on the current preference for people to use private vehicles as their primary mode of transport, eventual mode shift will mean that these bays are no longer required.

The link and place guidelines are a way of achieving these upgrades. These are to be developed considering the function of each individual street and taking into consideration best practice examples and existing frameworks from around the world.

Action 2.2.1:
Develop a set of link and place guidelines to guide future streetscape improvements.

The Perth Parking Policy was developed to create a sustainable transport system in central Perth by managing parking within the Perth Parking Management Area – Perth, East Perth, West Perth, and Northbridge.

Under the Perth Parking Management Act (1999), all non-residential parking bays within the Perth Parking Management Area are licensed and an annual levy must be paid on these bays where applicable.

Money raised by the Perth Parking Levy is spent within the Perth Parking Management Area to deliver services such as the free Central Area Transit (CAT) bus service and the Free Transit Zone for public transport, it also funds public transport projects and new or improved services that reduce the need for cars within the area.

The investments made with the revenue directly benefit community members and businesses by:

- Managing traffic congestion on inner city streets as the city rapidly grows to improve amenity for residents, businesses and visitors to central Perth;
- Offering free travel on all public transport services within the PPMA; and
- Improving inner city cycling facilities to meet the growing need for convenient, safe cycling routes, and helping to make cycling a safe and attractive alternative transport mode.

Currently, the City pays approximately $400,000 per year towards the Perth Parking Management Area fund. This fund pays for the free transit zone and CBD CAT bus, which are considered to provide minimal benefit for Vincent residents.

Action 2.2.2:
Advocate for use of the Perth Parking Management Area (PPMA) funds for Vincent public transport services, transport studies, and transport infrastructure improvements or a reduction in the levy paid

2.3 BE A LEADER IN ADAPTABILITY AND TECHNOLOGY.

Future change in transport technology is likely to have an ever-increasing impact on travel behaviour. Specific emerging technologies in transport include autonomous and connected vehicles, electrified and hydrogen fuelled transport, renewable energy run mass public transit, car and bike sharing, ride sourcing, and mobility as a service. These technologies will have a range of different effects on Vincent's transport networks and development planning.

Dependent on the manner in which emerging technologies enter the market, there is a risk that the uptake of new technologies may impact congestion in a negative way. If managed effectively, the result can be positive. The role of local government in this space is significantly lower than that of the State Government, in terms of the ability to legislate and regulate these markets.

Autonomous or driverless vehicle technology is in its infancy but developing quickly. No one can predict if and when autonomous vehicles will enter the market on a mass scale. Vincent's role is to remain responsive to ensure that the street networks and wider transport networks are enhanced, not hindered, by any autonomous vehicle technology.

The basic principles of urban transport planning will require vehicles regardless of the technology driving them, to be sensitive to active street environments. This means that people will remain the top priority on our streets, with vehicle use managed so it does not deteriorate the economic, environmental, and social function of the street.

Transit corridors should provide high frequency, fast, reliable travel. When services are upgraded to provide this, people become more inclined to use the service.

This is already being experienced along Beaufort Street where peak, high-frequency services are running near or at capacity. The existing congested traffic conditions reduce the reliability and efficiency of these services.

To further accommodate demand, the capacity of the corridor needs to be increased, this can be done by creating full time transit priority and/or changing to an alternative high capacity mode of transport.

Traditionally, light rail has been used as the foundation of a high capacity transit network, but trackless trams are a recent innovation that may provide an alternative.

Vincent's role during a technology transition period should be to enable and advocate for implementation in a manner that contributes to achieving the City's Vision.

Action 2.3.1:
Recognise emerging transport technologies and the benefits they can provide, as well as the potential negative impacts and how these may be mitigated.

Instead of designing parking as a fixed element as we do now, purposefully designing a mix of different parking types for developments allows parking to adapt to changing needs. Providing parking can be done in permanent, convertible, or temporary manners to meet current needs while maintaining flexibility for future demands.

Current car parking structures may have a variety of features that prevent them from being easily repurposed into other uses beyond parking. Some of the most common restrictive features are reduced floor to ceiling heights and the location of ramps where parking extends beyond one floor. Creating parking structures with taller ground floor heights allows for these to be converted to active uses when the need for parking is reduced. This explanation is to be included in the explanation of the action.

Action 2.3.2:
Require car parking configurations be adaptable to alternative uses for future development.

Electric vehicle (EV) technology has the potential to make motorised travel significantly cleaner than the current petrol and diesel motors that dominate the network. This would improve air quality and reduce noise pollution.

Advocating for the use of electric buses would also improve the amenity and quality of our street environment, especially on the high frequency routes through town centres.

Whilst the Accessible City Strategy has the aim of reducing private vehicle use, there will always be circumstances where a private vehicle is required, whether it be due to differing levels of mobility or for car sharing services and the like. Supporting the transition to electric vehicles in the future ensures that the impacts of private vehicles are reduced.

Supporting the transition to electric vehicles can be done through the introduction of development requirements to ensure new developments have access to EV charging points.

Action 2.3.3:
Ensure all new and existing high-density residential development has access to EV charging bays.

As infrastructure improves, so will the viability of public bike hire schemes. This opportunity may be realised only in partnership with a private firm but can be supported through allocation of public space and other supporting policy measures.

In addition to this, e-bikes and e-scooters can reduce barriers to active transport and therefore facilitate increased uptake of sustainable transport modes. They can achieve this by allowing for reduced travel times and increased ease of journey compared to traditional bicycles and scooters. These allow for extended range and for quicker journey times.

Vincent can support reduced emissions and help to ease vehicle congestion pressures by enabling the uptake of e-bikes and e-scooters. One way to foster the uptake of e-bikes and e-scooters is through the introduction of charging facilities at key nodes. While Vincent does not have a specific role in the development of private sharing services using e-bikes and e-scooters, there may be a role for Vincent in supporting and advocating for community interests including supporting private share schemes.

E-bikes can also be used for cargo. This may assist in reducing traffic generated by delivery and loading/unloading from constrained town centres. Parking for loading activities may be reallocated to the periphery of the centres, with cargo bikes used as an alternate form of delivery inside the town centre. In particular e-cargo has the potential to assist small, local deliveries as well as allowing greater convenience for private trips.

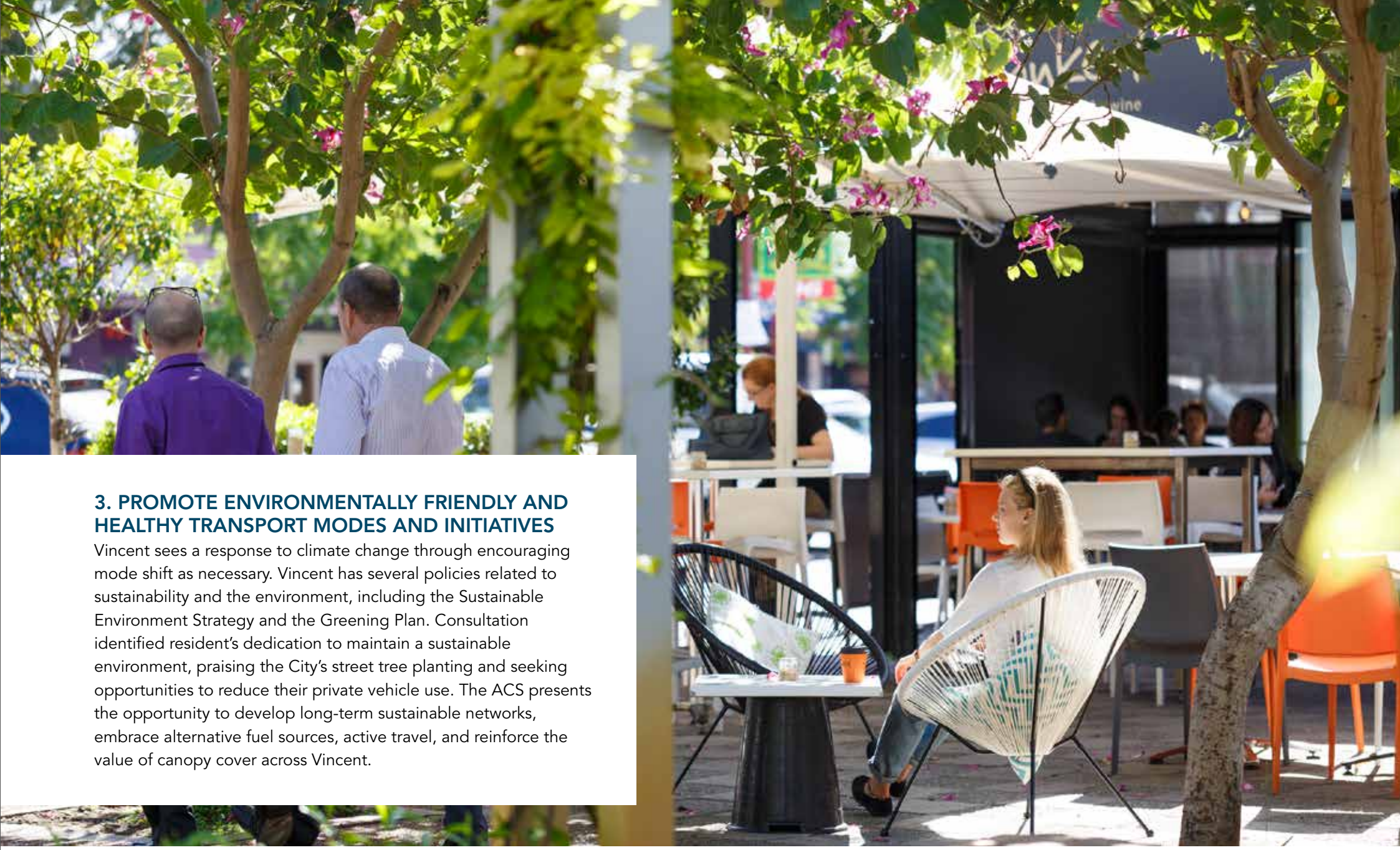
Bike and scooter sharing platforms are currently popular in many cities around the world. These platforms allow for one-way travel and dockless systems are convenient for users.

Action 2.3.4:
Explore supporting the provision of increased bicycle and scooter usage by investigating concepts such as locating bike share docks, e-cargo, e-bikes and e-scooters within town centres and mixed-use areas. One option is to locate bike share docks or e-bike chargers within existing car parking bays.

The rise of autonomous vehicles is occurring in tandem with a shift away from traditional ownership models, towards sharing and on-demand services. These two changes both have similar impacts in a variety of ways.

Car sharing includes traditional daily rental, by-the-hour services and one way car sharing. Changing consumer preferences provides for an increased focus on access rather than ownership. While there is currently no operator in Western Australia, Vincent can support car sharing through the designation of specific bays on-street parking and/or in public parking lots.

Action 2.3.5:
Ensure there is adequate policy to support the introduction of car sharing within Vincent.



3. PROMOTE ENVIRONMENTALLY FRIENDLY AND HEALTHY TRANSPORT MODES AND INITIATIVES

Vincent sees a response to climate change through encouraging mode shift as necessary. Vincent has several policies related to sustainability and the environment, including the Sustainable Environment Strategy and the Greening Plan. Consultation identified resident's dedication to maintain a sustainable environment, praising the City's street tree planting and seeking opportunities to reduce their private vehicle use. The ACS presents the opportunity to develop long-term sustainable networks, embrace alternative fuel sources, active travel, and reinforce the value of canopy cover across Vincent.

3.1 REDUCE CARBON EMISSIONS CAUSED BY THE TRANSPORT NETWORK.

Vincent has already declared a climate emergency. Climate change presents a series of threats for our people, our environment and our cities, including contributing to hotter, drier climates and greater frequency of extreme weather events. These conditions threaten buildings, utilities, and transport networks, as well as damaging ecosystems which contribute to maintaining clean air and fresh water.

Strategic State planning is premised on the likelihood of extensive growth in development and population throughout the entire Perth and Peel region. Within Vincent, the population is expected to increase. Significant population increase causes higher transport demand which will in turn increase pressure on the existing road network and the environment.

In a global context, transport networks contribute significantly to carbon emissions and climate change. Providing for effective urban mobility and reduction in the use of traditional private vehicles is an essential step in reducing carbon emissions and addressing climate change.

If anticipated growth continues to utilise the transport network as it does currently, the liveability of Vincent will be affected. The ACS intends to support the mobility of all users and reduce reliance on private vehicles. Reducing congestion pressure requires network and infrastructure changes to shift modes of travel away from private vehicle trips and foster the use of active and sustainable modes. The ACS provides the opportunity to support this shift.

A transport emissions budgeting process encourages active and public transport usage through economic support for active and public transport use and economic deterrent for private vehicle use. This can be achieved in a range of financial arrangements including economic support such as subsidised public transport provision and the supply of free active transport infrastructure including bikes and electric scooters. This support can be funded through a budget that is created through the collection of funds due to a number of initiatives.

Action 3.1.1:
Advocate for the introduction of State and Federal economic incentives to improve mode shift.

3.2 PRIORITISE AND ENCOURAGE THE USE OF ACTIVE AND SUSTAINABLE TRANSPORT MODES.

The current trend of prioritising private vehicles as peoples primary travel choice means that many users of the transport network are not aware of the alternative travel options that are available to them.

The effective promotion of these alternative modes and education around the amenity which is available to people is a way of influencing mode shift. This does not apply only to the path taken to get to the destination but also the services which are available once the destination has been reached.

Action 3.2.1:
Engage with the Department of Health to develop and implement the next phase of the Travelsmart program for Vincent.

The existing travel smart program delivered by the Department of Health helps people make decisions on how they commute. It encourages people to use their cars less, and to choose alternatives such as carpooling, cycling, public transport and walking where possible. There is the opportunity for the City of Vincent to inform and improve this program with a vast knowledge of the local area.

Appropriate end of trip facilities are vital for commuter and leisure cyclists. End-of trip facilities are broadly described as dedicated places that support people using active transport modes to travel to their destination rather than driving or taking public transport. They can include secure bicycle racks, lockers and change rooms where cyclists, joggers and walkers can shower, change, and secure their belongings.

For leisure and entertainment trips, bicycle parking should meet the needs of those using it while also considering the adjacent land uses. Consideration should be given to utilising on-street parking areas for bike parking in pedestrian priority areas where cycling is expected to occur within the roadway and potential risk of pedestrian/cycle conflict is high.

For town centres catering to a dense mix of uses including commercial and business uses, end of trip facilities may be provided by individual private businesses. To further encourage commuter cycling, Vincent can support the development of public end of trip facilities through policy measures and funding ongoing maintenance.

Providing high quality amenity to active transport users and ensuring that they are aware of its availability is a successful way of influencing the mode choice of transport network users.

Action 3.2.2:
Ensure appropriate end of trip facilities are provided within town centres, mixed use centres and major parks in accordance with LPP 7.7.1.

3.3 MANAGE CAR PARKING (INCLUDING SUPPLY AND PRICING) TO IMPROVE EFFICIENCY AND SUPPORT MODE SHIFT.

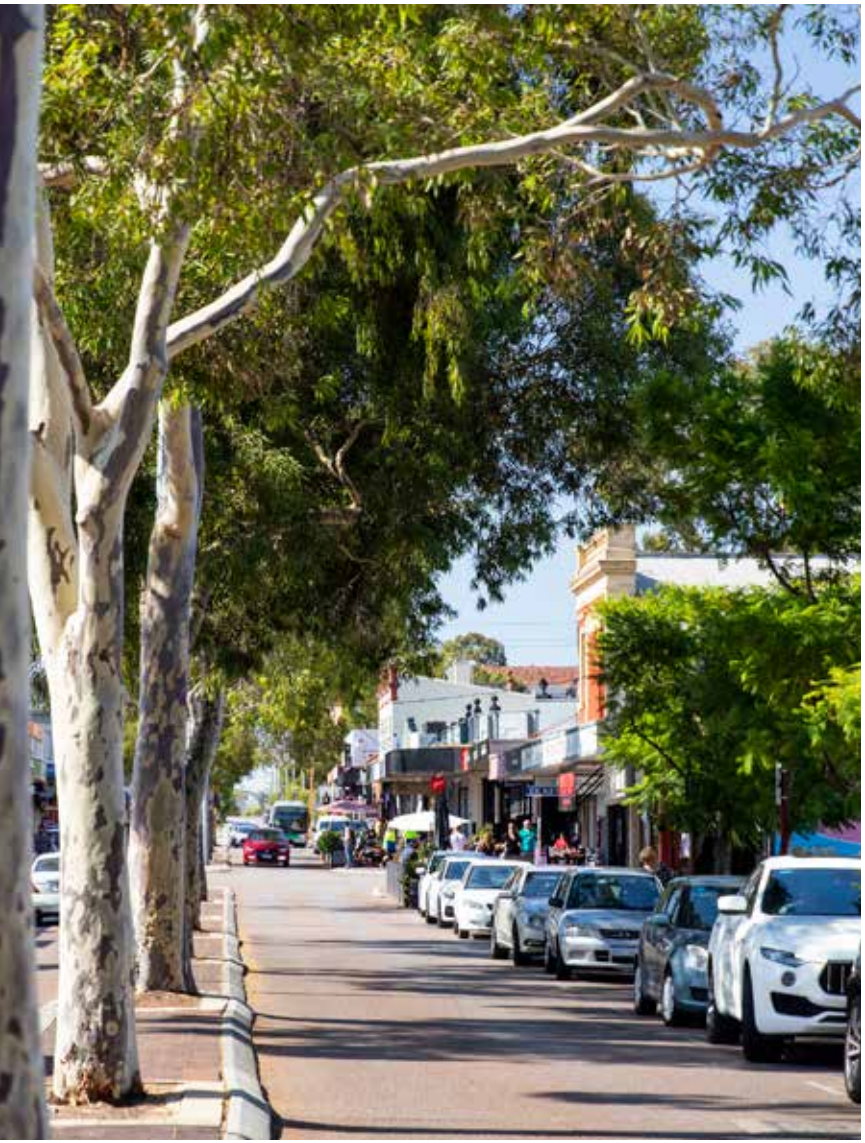
The needs of parking differ greatly across Vincent. These needs are dependent on the level of activity in the area, the density and variety of development, and the availability of alternative transport modes. Parking should be considered as an ecosystem consisting of public and private, on street and off street, and considering all the many needs of people who use those bays. The optimal parking system would be one where all parking is used efficiently, with the minimum amount of space devoted to parking.

Parking is an effective bridge between land-use and transport mode choice. Constraining parking through planning policy can be an effective method to allocate road space for particular trip purposes (residents, employees, and visitors). This helps to reduce private vehicle trip generation and to create a more sustainable land use and transport environment.

Parking infrastructure is an essential and inherent component of both the transport and land use system and is unique in that behaviour can be influenced directly at the planning and policy stage rather than solely through infrastructure provision. An appropriate supply of well-located car parking is a critical issue for people and businesses.

Vincent's objective for parking is to maintain an appropriate supply of affordable, secure, convenient and appealing parking, that is accessible to all.

Supply of public parking should be located in proximity to major activity generators and be managed so that bays with a high turnover are closest to the centre, and vulnerable users are prioritised. The hierarchy applies primarily to on-street parking but should be considered with respect to off-street supply and include specific provisions within public and private car parks for high priority users. This helps to ensure that the on-street space is utilised efficiently and effectively in locations with high demand for parking.



The usage of public parking should be monitored to determine hot spots and low utilisations areas so that refinements to parking restrictions can be made. This will ensure a robust system that maximises efficient use of available parking and minimises the capital investment required to accommodate demand. Parking availability is a useful tool in determining the way in which a transport user will reach their destination. Vincent will look to utilise this to the best of its ability whilst maintaining an appropriate level of accessibility to destinations for all users.

Action 3.3.1:
Establish a business plan for the management of parking within Vincent with a view to the following:

- Prepare precinct-specific parking management plans, with priority given to precincts already at capacity; and
- Expand paid parking using the 'demand responsive pricing' methodology.

Action 3.3.2:
Ensure precinct plans provide the right amount of parking, in the right locations to support reduced car dependence.

Consultation identified the need for a better and more consistent approach to be applied to issues raised by residents and ratepayers around traffic volumes, speed, and parking matters throughout Vincent. The effective management of this can ensure that we achieve peak network function and that the network provides a higher level of safety for all users.

Action 3.3.3:
Develop, document, and implement a transparent process for the assessment of resident and ratepayer concerns relating traffic value, speed, and parking matters.

Private vehicle ownership should be consistent with resident's capacity for on-site storage. Parking within residential areas is primarily provided on-site, however in many locations, on-street parking is used to supplement or replace car-parking on site. This has repercussions on the availability of parking for residential visitors, service/delivery and other needs, and prevents repurposing of on-street parking for other modes of transport or amenity uses.

Policy options for Vincent's low-density areas effectively revolve around the management of on-street parking supplies as a way of reinforcing a theoretical cap on parking supply and in turn vehicle ownership.

On-street parking in Vincent's residential areas is primarily unrestricted, creating an incentive for outside use; overfill from adjacent corridors and centres. Many streets are time limited during the day, and unrestricted after 6pm. This reduces overspill but creates an undesirable effect on travel behaviour: residents that store their surplus vehicles on street are forced to drive to work or risk an infringement.

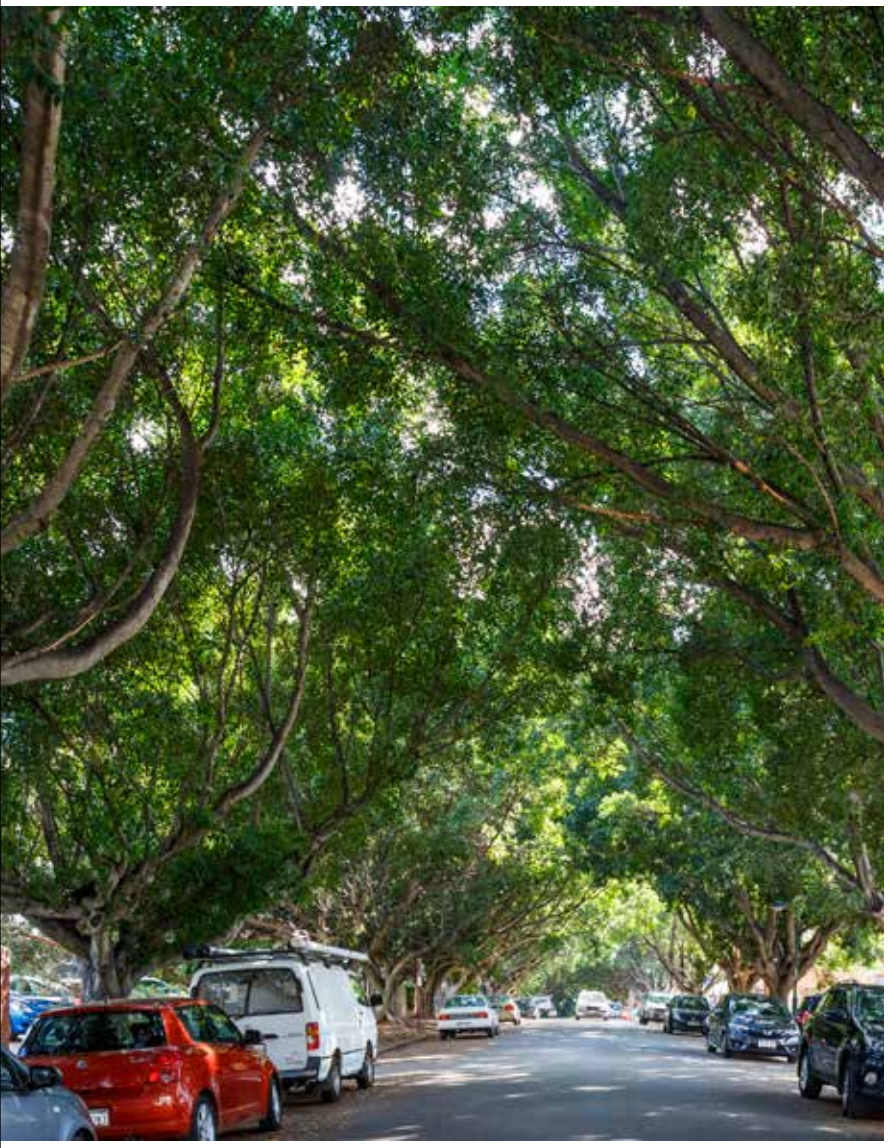
Nevertheless, restricting parking in residential streets to 1-hour or 2-hour parking is an appropriate first step wherever peak period demand exceeds 85% of capacity along a street block. This has been applied to a number of locations across Vincent, including the area surrounding Hyde Park, The areas adjacent to a number of high frequency transit corridors and at the periphery of town centres.

The reason for parking demand on residential streets is varied but is generally related to the use of residential streets for employee park 'n' ride commuters, as well as for visitors.

Action 3.3.4:

Better manage the supply of on street parking through the implementation of various restrictions by:

- Limiting roadside residential parking, confining parking to the property;
- Restricting parking to 3P or less within 2 blocks of train stations or transit nodes, with residential permit exemptions;
- Restricting parking to 3P or less within 1 block of high-frequency transit corridors, with residential permit exemptions;
- Restricting parking to 2P or less within 2 blocks of town centres or mixed-use areas, with residential permit exemptions;



Vincent's objective for parking is to maintain an appropriate supply of convenient and appealing parking that is accessible to all. It is significantly more challenging to ensure this is achieved and encourage active transport use and mode shift when the supply of large scale parking available is managed in different ways.

Parking prices can be an effective tool for traffic demand management. There is the ability for the parking fee structure to be set to best service its user, based on the ideal function of the particular car park in its location. Parking prices should be set so that demand is continually high (peaking at approximately 85-90% occupancy). Where car parks are controlled by one entity there is the opportunity for the fees of car parks to be increased or decreased based on their occupancy ensuring the demand is continually high. This consistent approach will allow for efficient utilisation of existing car spaces and ensure that there is not an oversupply, allowing larger land parcels to be more effectively utilised.

Action 3.3.5:
Liaise with neighbouring LGAs and private car park managers to promote more consistent management arrangements to optimise the demand and supply of car parking for residents, visitors and customers.

Action 3.3.6:
Undertake a strategic review of all City land holdings to investigate the viability of sites to consolidate publicly accessible parking.

3.4 USE RESIDENTIAL AND MIXED-USE DENSITY TO SUPPORT TRANSIT.

Some of the most effective transport networks can be delivered through the way we manage and plan the built form. Increasing density through creating opportunities for more residential and mixed-use developments, can have significant transport benefits. There is a strong relationship between residential density, car parking, and trip generation which largely determines the potential traffic impacts of development.

The majority of Vincent's residents have access to a private vehicles, but household ownership is substantially less than the metro average: As of 2016, 54% of Vincent households owned one or less vehicles, compared to the Perth Metro average of 35%.

Reduced car ownership means that residents rely heavily on alternative transport modes for all trip purposes including to and from local employment, retail and recreational destinations. The lower-than-average vehicle ownership rate also contributes to a reduced requirement for parking throughout Vincent.

As density intensifies, and residential parking supply declines, vehicle trip generation drops. This occurs due to a number of reasons: smaller household sizes, greater accessibility to alternative transport and proximal activity and reduced reliance on private motor vehicles.

By increasing the number of people living within a walkable/cycle distance from their place of employment and reducing the need for people to travel by car, the efficiency and sustainability of accessing Vincent can be significantly improved.

The Local Planning Strategy will be a major tool in implementing land use change over time.

As transport accessibility improvements are planned and delivered, land use controls in areas that benefit from increased access will need to be revised and updated. The continual revision of land use controls in the context of changing transport service provision will be an ongoing priority for Vincent.

At nodes that have been identified for high-density development, the pedestrian environment is a particular priority. High quality streetscapes are required to support residential amenity and commercial activity in these areas.

These pedestrian environments further support the use of public transport. Public transport can be used by everyone, this includes people with disabilities, school children and the elderly, the pedestrian environment should reference the needs of all users.

Action 3.4.1:
Use planning policy to encourage people to use public and active modes of transport by developing diverse housing types within the City which don't require the number of car parking bays currently mandated by the R-codes, particularly along transit corridors and within transit nodes to support public transport uptake.

Action 3.4.2:
In the next planning scheme review, consider the location and design of transit stops s to support high-capacity services. Consider proximity to transit stops when determining residential density.

3.5 OBTAIN RELEVANT DATA TO INFORM DECISIONS AND MONITOR PROGRESS.

Gaining a greater understanding of the transport network in Vincent will help us to continually improve the way in which it functions. We need data to underpin our decisions, and there are many new and innovative techniques we can use to collect it and increase our knowledge.

This will involve ongoing research aimed at gaining a greater understanding of the network and how it contributes to Vincent's economy, environment, health, social, and cultural value. This will also involve collaborating with external agencies to obtain data which can be used to measure and forecast changes to the transport network in the future.

Leederville is suggested to be re-surveyed first as it is likely to have the largest amount of new development occurring in the coming years and so could be most at risk of parking issues. Leederville also recently lost a large car park to the rear of the Leederville Hotel. It appears that the demand for parking has been met by the other existing car parks but this will need to be verified through surveys.

Action 3.5.1:
Repeat parking surveys at 3-5year intervals on a rolling basis across the City. A schedule of priority areas based on the data collected has been produced, with surveys recommended to start in Leederville Town centre and surrounding area.

4. MAKE IT ENJOYABLE FOR PEOPLE (PEDESTRIANS, CYCLISTS AND ACTIVE TRANSPORT USERS) TO GET AROUND THE LOCAL AREA

Vincent's transport network will extend beyond the function of movement and be enhanced to encourage people to stay and enjoy the areas that they are in. Vincent's transport network will function equally as both a way to reach a destination and a place which is to be enjoyed.

4.1 INCREASE PEDESTRIAN AMENITY ON RESIDENTIAL STREETS.

Residential areas are key to the effectiveness of active transport modes as a viable choice of travel. The low traffic volumes and speeds combined with wide verges, mean that there is an immense opportunity for growth in these trips.

Residents begin their journeys in relatively quiet neighbourhood streets. However, these areas are not inherently designed for shared use by cars, pedestrians and bikes.

Community consultation revealed significant issues with excessive numbers of vehicles and excessive speeds in residential areas. To reinforce a safe pedestrian environment, vehicle speeds should be reduced, and unnecessary vehicle movements eliminated.

The current 50km/hr speed of local streets creates an unsafe speed variance between active modes of transport and driving. Decreasing vehicle speeds allow mixed-traffic movement networks that become attractive to active transport users. The higher degree vehicle speeds are reduced, the more attractive, safe and accessible they become.

International research strongly supports lowering speed limits within built up areas to increase driver, pedestrian and cyclist safety and amenity. Reduced speed limits make roads safer for all road users, but they also contribute to more active and liveable neighbourhoods. Some of the benefits of slower speeds are:

- Low speeds encourage better interaction between drivers, pedestrians and cyclists;
- They help create more attractive and connected communities;
- They make neighbourhoods safer;
- The risk of trauma in an accident reduces at slower speeds;
- There is less noise pollution; and
- Slower speeds do not cut travel time significantly.

Vincent is currently trialling 40km/h speed zone in the area bounded by Newcastle, Vincent and Charles Streets and the Swan River. Main distributor roads have stayed at their current speed limits, with the exception of part of Vincent Street near Hyde Park. The evidence and findings from the 40km/h zone trial will be evaluated and learnings taken into account in the expansion of the 40km/h zone to all residential areas of Vincent.

Road geometry is required to change to reinforce appropriate speeds. Safe Active Streets is a program being promoted by the Department of Transport which delivers road environments that support slower traffic speeds along quiet residential streets. They are predicated on a slow speed, low volume environment using local area travel management (including horizontal and vertical deflection, narrow lanes, street trees and traffic redirection) to reinforce a 30km/hr travelling speed. The location and supply of on street parking can also support this.

Vincent is one of the early champions of this program (Shakespeare Street) and will endeavour to continue working with the Department of Transport to deliver more Safe Active Streets.

Action 4.1.1:
Work with the State Government and Inner-City Group of Councils to implement a 40km/h zone in all residential areas of the City of Vincent by 2023.

Action 4.1.2:
Through consultation with key stakeholders develop the City's residential streets in line with the principles of Safe Active Streets with slow design speeds to promote safety and amenity. The aspirational long-term vision is that residential streets will have Safe Active geometry, relevant to their location, context and function.

Play streets is an initiative which has been successfully implemented throughout cities across the world. To reinforce the concept that residential streets should ensure the safety of pedestrian users, particularly children, Play Streets temporarily close residential streets to through traffic so that children are empowered with the freedom to play outside in a safe environment.

Play streets support the approach to residential streets as being primarily people-focused areas, supporting behaviour change and a shift away from private vehicles in residential areas. Vincent's continued support of Play Streets is a valued mechanism to support slow residential vehicle speeds and streetscapes designed for all ages and abilities.

Action 4.1.3:
Continue to support Play Streets within the City.

The density of high frequency public transport routes is unique to Vincent (within the metro area). This makes attractive pedestrian connections to these Transit and Activity Corridors extremely important.

In this instance, the quality of the path is not nearly as critical as the availability of safe crossings, the density of street trees to provide cover and shade and the quality of street lighting in creating a feeling of safety and security.

Pedestrian connections to destinations within residential environments are critical. Major destinations within residential areas are schools, parks, and public open spaces.

Action 4.1.4:
Improve streetscapes to enhance pedestrian experience and safety as per the link and place design guidelines, including the provision of additional street trees, native verges, lighting, street furniture, pedestrian crossings etc.


ROAD CLOSED
EVENT IN PROGRESS

4.2 INCREASE PEDESTRIAN AMENITY IN TOWN CENTRES.

Vincent's town centres are vibrant places supporting the liveability, amenity and economic success of the community.

Access to and around the town centres must be via a combination active transport modes. The viability of the town centres is directly linked to providing a variety of transport modes.

Given the highly car dependent nature of cities, and limited provision of alternative transport networks, car parking remains a primary factor in determining economic viability. Parking infrastructure to support this has an enormous cost directly to construction and maintenance, and inadvertent costs in landscape, streetscape amenity, development density and proximity.

Due to the intensity of activity, town centres are usually located adjacent to busy arterial roads. These constrained environments are precisely where infill development is planned, resulting in an ever-increasing pressure on the function of the transport network.

Therefore, if town centres are to function effectively, we need to manage the internal land use and transport infrastructure, as well as the capacity of the key transport corridors that provide access. Mode share needs to shift to active modes of transport.

Pedestrian activity and connections are critical in creating this sustainable transport environment. For this reason, the pedestrian environment must be carefully considered. This includes the construction of high-quality paths, shade trees and street furniture to provide amenity and safe access for pedestrians and cyclists (suitable path widths should always be complied with). Pedestrians are most important where activated building frontages and public spaces are proposed, as these rely on pedestrian traffic to retain their commercial viability and place making appeal.

All streets within the town centres must provide some form of off-street pedestrian path, with a higher standard of provision along critical and high-demand links. A fine-grained network of pedestrian paths which supports all mobility levels allows the networks to more closely match the desire lines of commuters, residents and visitors.

By allocating suitable resources to the pedestrian environment, the uptake and use of these facilities will grow, resulting in a positive feedback loop, reducing demand for other modes and requirement for parking. Community consultation forms an important component of this and informs the improvements and changes which can be made.

Creating mode shift in town centres will make them both easy to access and increase people's desire to want to stay longer, utilising the pedestrian amenity which is available to them.

Parking bays for loading/unloading activities in town centres can negatively impact the viability of active transport modes. There is currently limited understanding of the needs of businesses regarding the delivery of goods.

Vincent will investigate the viability of the relocation of this service to the periphery of the town centres as a way of enhancing the amenity of the town centres.

Action 4.2.1:
Place plans should identify methods to improve pedestrian and cycling safety in the public realm making town centres safe and accessible to all.

Action 4.2.2:
Support the vitality of town centres and mixed-use areas for pedestrians by investigating the viability of parking bays for loading/unloading activities at the periphery of the town centres and mixed-use areas as well as other alternate methods.

TARGETS

By looking at the outcomes which need to be achieved for transport in Vincent, there is a greater understanding of the problems and the wider opportunities that stem from every transport decision.

To ensure the Aim and Objectives of the ACS are being achieved, mode share targets have been created. Mode share describes the proportion of people using each of the various types of transportation modes. Mode shift refers to changing mode share over time.

Extensive growth in development and population across Vincent and throughout the entire region will generate additional transport demand that must be assigned to a movement network already approaching capacity.

The road network within Vincent has a limited capacity, and regional and local development will place further pressure on the existing transport network. Mode shift from private vehicles to more sustainable and active modes of transport is necessary to more efficiently use the existing road capacity.

Behavioural changes will need to be made by residents, employees, and visitors to achieve this mode shift. Behavioural change can be supported by the provision of alternative transport, improved infrastructure, densification of mixed-use centres, and appropriate management of parking.

A measurable outcome of the ACS is the journey to work mode share targets. This includes a 5-year target and a 10-year vision. Achieving these mode share targets will contribute towards achieving the aim of the ACS.

The targets for the 5-year interim timeframe represent the bare minimum change required to allow for a sustainable network. Additional private vehicle travel beyond these limits will ultimately result in unacceptable access and mobility for residents, employees and visitors, and reduce Vincent's development potential.

The target for the 10-year vision represents Vincent's potential to become an even more accessible destination; improving environmental, health and economic outcomes for everyone.

JOURNEY TO WORK

Most commonly, mode share for cities is expressed in terms of journey to work for residents. For the purposes of easy comparisons to the Census and to other local government areas, the current and target journey to work mode share has also been calculated for the City, below.

	CURRENT JOURNEY TO WORK	5 YEAR TARGET	10 YEAR VISION
	15% of residents use active transport modes including walking and cycling	**17%** of residents will use active transport modes	**20%** of residents will use active transport
	18% of people catch public transit including buses and trains	**25%** of residents will catch public transit	**32%** of residents will catch public transit
	67% of residents drive or are a passenger in a vehicle	**58%** of residents will drive or be a passenger in a vehicle	**48%** of residents will drive or be a passenger in a vehicle

The ACS will further inform a number of strategic documents that will contribute to an increase in the number of people using active transport and creating mode shift.

These documents will influence the transport networks legibility and functionality improving it so that all users including those visiting Vincent will feel comfortable and confident getting around. There will be measurable targets included in these documents which will further support in achieving the Aim and Objectives of the ACS.

FUNDING

Implementing a diverse range of transport infrastructure generally requires significant funding commitments. Ultimately funding is limited, and there are a number of alternative funding sources that may be identified and embraced in the implementation of any action.

The City of Vincent has a key role in supporting the development of a sustainable, safe, efficient and effective transport network through investment in high-quality infrastructure and targeted improvements in key Centres, along critical corridors and in neighbourhoods.

The cost of a full implementation of this Plan is considered to be beyond the existing funding available from the City alone. However, the primary function of Local Government is not merely to provide funding, but to determine and direct development of transport infrastructure that best supports community needs.

Infrastructure funding may in fact be derived from a range of sources. For example:

- Projects aligning with State or Federal Government priorities attract their **own budget allocation**, in particular in the context of road capacity or safety upgrades, the provision of public transport or the construction of strategic cycling facilities.
- Alternatively, **grant funding** can assist the City to fast-track construction of transport improvements. Potential grant sources include:
  - Department of Transport WA Bicycle Network Grants
  - Road Safety Commission Project Grants
  - Australian Federal Government Stronger Communities Program or Built Environment and Prevention Research Scheme
  - Australian Federal Government Roads to Recovery
  - State and National Black Spot funding
  - Metropolitan Regional Roads Grants

- Local improvements to streetscapes or the construction of public facilities, including public parking, are ideally suited to funding via **developer contributions or cash-in-lieu provisions**.
- **Paid parking and parking permit revenue** naturally pays for the installation and maintenance of parking infrastructure but is ideally allocated to funding local improvements within individual parking precincts. This can include everything from road network and footpath upgrades to landscaping and canopy treatments, providing direct benefit to the areas affected by the scheme.

MONITORING AND REVIEW

As planning progresses, development intensifies and road corridors become more congested, mode share targets will need to be revised to meet the next challenge.

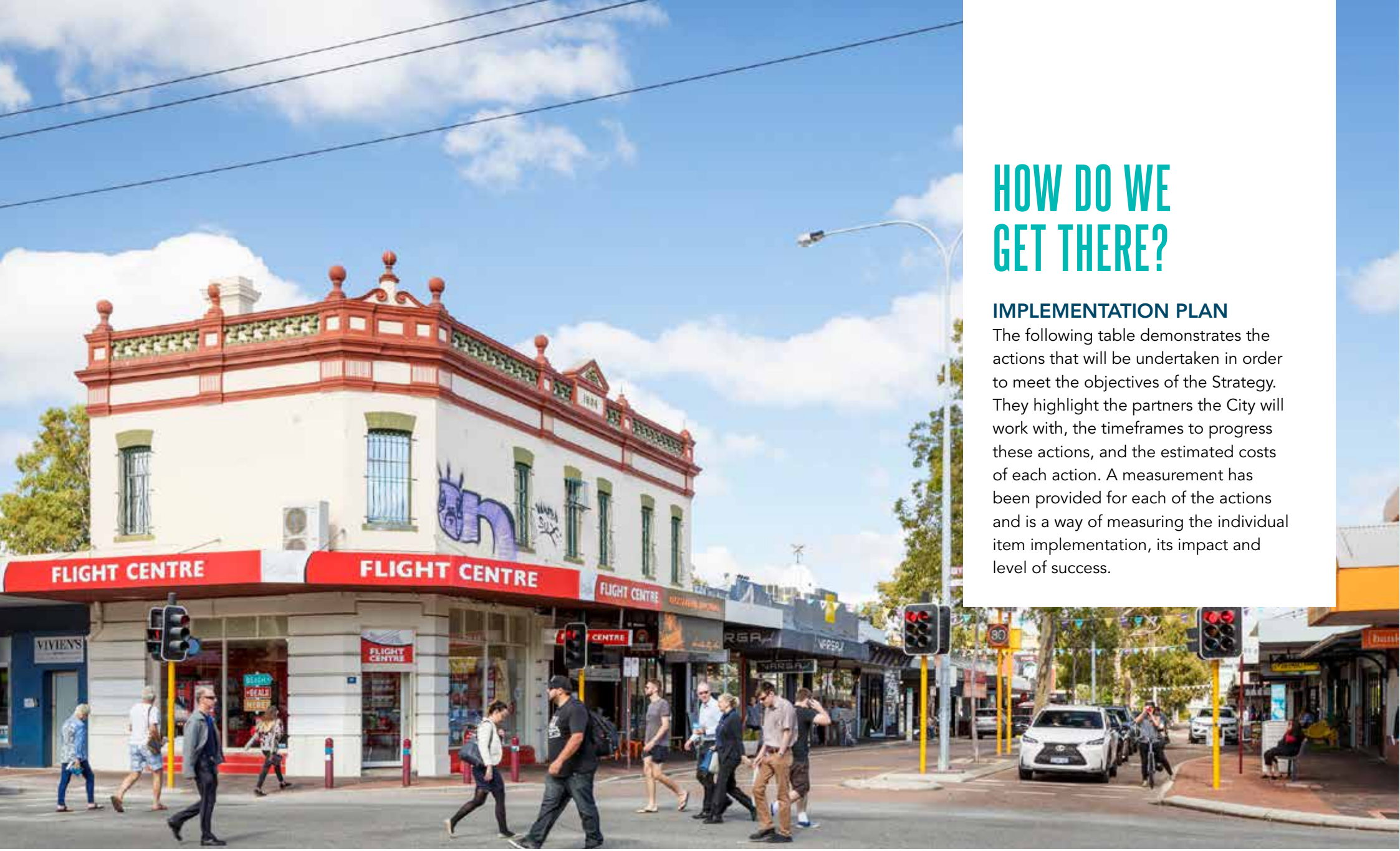
Future mode share targets will further consider the needs of Vincent with respect to car parking and the surrounding road network. These targets will be informed by future master planning, ensuring that land use and transport considerations are truly integrated.

Reporting is important for the City to be able to measure and monitor progress of the actions identified in the Strategy. We are committed to reviewing the Strategy to ensure we are working towards the objectives and delivering great outcomes.

It is important to note that this Strategy will likely not remain static. As it is reviewed, new information will be included that may modify previously accepted positions. As we continue to deliver and refine the actions, we will make sure to keep an open and transparent dialogue with our community.

We will undertake a desktop review of this plan annually, in alignment with the Capital Works Program and Corporate Business Planning processes. This will include updating any necessary data, checking whether our objectives are still relevant, and updating whether we've delivered on each action.

THE NEXT MAJOR REVIEW OF THIS DOCUMENT WILL OCCUR IN 2025.



HOW DO WE GET THERE?

IMPLEMENTATION PLAN

The following table demonstrates the actions that will be undertaken in order to meet the objectives of the Strategy. They highlight the partners the City will work with, the timeframes to progress these actions, and the estimated costs of each action. A measurement has been provided for each of the actions and is a way of measuring the individual item implementation, its impact and level of success.

1			CREATE A SAFE TRANSPORT ENVIRONMENT	
1.1	Create active and sustainable transport networks that are safe and understandable.	1.1.1	Review Vincent's Bike Network Plan taking into consideration relevant state planning policy to ensure the provision of a dense network of cycling routes to support cycling as a safe alternative transport mode to private vehicles. The review of the Bike Network Plan will consider: • Appropriate network links to destinations within the City; • Implementing a wayfinding strategy to support the Bike network; • Providing infrastructure consistent with current standard; • Focus on improving network crossings. Including the provision of toucan crossings at intersections and safe mid-block crossings; • Provide access to and through all areas of open space within the City; • Where possible, consider the introduction of segregated cycle lanes along activity corridors; • Consider the introduction of parallel route connections to activity and transit corridors where there are corridor constraints and segregated cycle lanes are not feasible; • Advocate for slow vehicle speeds where on-street cycle lanes are unable to be segregated; • Extend existing infrastructure to fill network gaps; and • Ensure sufficient connection exists to and within with transit nodes.	**Timing:** 2 – 3 years **Measurement:** Completed review of Vincent's existing Bike Network Plan. **Responsibility:** Local government. Opportunities for State government funding is available and should be pursued. **Cost:** $60k
		1.1.2	Implementation of the Bike Network Plan.	**Timing:** 5+ years. **Measurement:** Bike Network Infrastructure implemented. **Cost:** $1M p.a. (Seek grant opportunities where available). *potential for cash-in-lieu
		1.1.3	Develop and implement a consistent wayfinding and signage plan across the City. This should consider parking, cycling and pedestrian transport modes, and provide appropriate localised details for each town centre and activity and transit corridor.	**Timing:** 2 – 3 years. **Measurement:** Adoption and implementation of wayfinding and signage plan. **Responsibility:** Local government. For Western Australian Bike Network routes, DoT and local government are to collaborate on wayfinding. **Cost:** $50k (Strategy) $500k (Signage & Linemarking)

1.2	Ensure pedestrian and cycling routes (including schools) are high-quality and safe for all users.	1.2.1	Develop and implement a high-quality, safe pedestrian path network which supports all mobility levels and is accessible to all. This includes: • Undertaking an audit of network crossings including intersections, mid-block crossings high traffic crossovers. Priority should be given to areas surrounding schools, key routes to town centres and mixed-use areas, activity corridors, and transit nodes; • Identifying midblock crossing opportunities. Provision should be made for crossings for blocks over 150m long; • At intersections, ensure pedestrian priority traffic lights are in place, and allowing sufficient time for crossings; and • Use planning requirements to manage streetscape development and temporary obstructions.	**Timing:** 3 – 5 years. **Measurement:** Captured within existing asset management framework and reflected in audit. **Responsibility:** Local government and MRWA. **Cost:** $250kp.a. (Audit, Design and Construction) *potential for cash-in-lieu
		1.2.2	Upgrade and improve paths based on the condition assessment, undertaken every 3 years. Ensure a high-quality pedestrian environment which is accessible to all is maintained throughout Vincent.	**Timing:** Ongoing. **Measurement:** Condition assessment undertaken and actioned every 3 years. **Responsibility:** Local government. **Cost:** $200k p.a. (Maintenance/Works)
		1.2.3	Promote compact roundabout geometry through the conversion of existing roundabouts and new roundabouts (where deemed appropriate) in the City to reduce vehicle speeds: • Support only compact alignment on new and upgraded roundabouts; and • Retrofit existing roundabout alignments to compact alignment with priority given to those located close to schools.	**Timing:** Ongoing. **Measurement:** Number of compact roundabouts and reduction in crash statistics. **Responsibility:** Local government **Cost:** $20k – 50k per location / $100k p.a. (Design & Construction)
		1.2.4	Develop and implement a comprehensive program to support student and staff using education facilities to travel using sustainable and active transport modes which are safe and have a high level of amenity, including: • Ensure safe crossing opportunities close to schools, specifically along key routes and near school entrances; • Ensure access to schools is provided at-grade where possible; • Support safe desireline paths; • Use traffic management techniques (including the development of Safe Active Streets) to reduce traffic speeds and volumes on streets surrounding schools; • Work with schools to support active travel through resources and programs, including route maps and education programs; • Encourage bicycle and scooter parking to be located in accessible, safe areas close to school entrances; • Locate school drop-off points away from entrances; and • Conduct access and safety audits for key pedestrian and cycling routes to schools, including assessing kerb alignments and cuts; surface conditions; eye-level hazards; shade; orientation, etc.	**Timing:** 2 – 3 years. **Measurement:** Number of children using active transport to get to school. **Responsibility:** Local government in collaboration with individual schools and with the support of Department of Transport. **Cost:** $100k p.a.

		1.2.5	Work with schools (students, parents and staff) and the Department of Transport to support active travel through resources and programs, including route maps and education programs. Encourage schools to join the Your Move program so that journey to school data can be collected and appropriate mode shift targets created.	**Timing:** 1 – 2 years.
				Measurement: Mode shift targets created for journey to school
				Responsibility: Local government in collaboration with individual schools and with the support of Department of Transport.
				Cost: 50k p.a. (personnel)
		1.2.6	In collaboration with DoT and PTA, develop a high quality and safe pedestrian environment between Claisebrook Station and Perth Oval.	**Timing:** 5+ years
				Measurement: Improved safety and quality.
				Responsibility: Local government in collaboration with DoT and PTA.
				Cost: $500k (Design and Construct)

2			ENSURE CONSISTENT ACCESSIBILITY AND CONNECTIVITY INTO, AROUND AND BEYOND VINCENT	
2.1	Advocate for connected and reliable public transit.	2.1.1	Advocate for additional public transport infrastructure along corridors including: • Modifying road layouts to introduce bus-priority infrastructure along corridors where it is not existing; • Extending existing bus-priority along Charles St; and • Investigate the introduction of other public transport modes including trams, light rail and trackless trams	**Timing: 5+ years.** **Measurement:** Bus-priority introduced of Charles St. **Responsibility:** Local government will be required to liaise with MRWA and PTA. **Cost:** $20k p.a. (personnel)
		2.1.2	Using the Place and Link framework, incorporate an appropriate level of pedestrian amenity along bus priority routes.	**Timing:** 5+ years. **Measurement:** Increased pedestrian amenity. **Responsibility:** Local government. **Cost:** 1M+
		2.1.3	Advocate for and support improved east-west public transit connectivity. • Prepare a business case to put to PTA for a Vincent circular service to connect the City's town centres; and • Advocate to PTA for additional bus routes which provide east-west links.	**Timing:** 1 – 2 years. **Measurement:** Additional services provided. Responsibility: Local government to prepare circle route business case. Advocate for additional east-west routes with PTA. **Cost:** $50k (Business Case) $1M p.a. (Service Cost) *potential for cash-in-lieu
2.2	Reallocate road and verge space, including on-street parking, throughout the City to prioritise vulnerable users according to user hierarchy and road hierarchy.	2.2.1	Develop a set of link and place guidelines to guide future streetscape improvements.	**Timing:** 1 – 3 years. **Measurement:** Process for infrastructure upgrades. **Responsibility:** Local government. **Cost:** $100k (Design Guidelines) *potential for cash-in-lieu
		2.2.2	Advocate for use of the Perth Parking Management Area (PPMA) funds for Vincent public transport services, transport studies, and transport infrastructure improvements or a reduction in the levy paid.	**Timing:** 5+ years. **Measurement:** PPMA funding applied to Vincent Transport Network. **Responsibility:** CoP, DoT. **Cost:** $10k internal

2.3	Be a leader in adaptability and technology.	2.3.1	Be aware of emerging transport technologies and the benefits they can provide, as well as the potential negative impacts and how these may be mitigated.	**Timing:** 5+ years **Measurement:** Recognition of emerging technologies in future strategic documents. **Responsibility:** Local government. **Cost:** $50k (Strategy)
		2.3.2	Require car parking configurations be adaptable to alternative uses for future development.	**Timing:** 5+ years. **Measurement:** Inclusion of adaptability measures in planning framework. **Responsibility:** Local government. **Cost:** $5k (Policy)
		2.3.3	Ensure all new and existing high-density residential development has access to EV charging bays: • Amend LPP 7.7.1 to require EV parking bays for new developments; • Support the retrofit of existing private car parking to provide EV bays; and • Provide EV charging bays in public lots.	**Timing:** 5+ years. **Measurement:** Inclusion in planning framework. Increased number of EV bays in public lots. **Responsibility:** Local government to require new development to provide EV bays. Local government to liaise with landowners. **Cost:** $5k (Policy) $50kp.a. (Infrastructure roll-out)
		2.3.4	Explore supporting the provision of increased bicycle and scooter usage by investigating concepts such as locating bike share docks, e-cargo, e-bikes and e-scooters within town centres and mixed-use areas. One option is to locate bike share docks or e-bike chargers within existing car parking bays.	**Timing:** 5+ years. **Measurement:** Increased number of bike share docks. **Responsibility:** Local government. **Cost:** $20k (Strategy/Policy) *potential for cash-in-lieu
		2.3.5	Ensure there is adequate policy to support the introduction of car sharing within Vincent.	**Timing:** 5+ years. **Measurement:** Inclusion in planning framework. **Responsibility:** Local government. **Cost:** $5k (Policy)

3		PROMOTE ENVIRONMENTALLY FRIENDLY AND HEALTHY TRANSPORT MODES AND INITIATIVES		
3.1	Reduce carbon emissions caused by the transport network.	3.1.1	Advocate for the introduction of State and Federal economic incentives to improve mode shift.	**Timing:** 5+ years. **Measurement:** Introduction of budget. **Responsibility:** Local government. **Cost:** $50k (Strategy)
3.2	Prioritise and encourage the use of active and sustainable transport modes.	3.2.1	Engage with the Department of Health to develop and implement the next phase of the Travelsmart program.	**Timing:** 2 – 3 years. **Measurement:** Program developed. **Responsibility:** Local government. **Cost:** $20k (Strategy)
		3.2.2	Ensure appropriate end of trip facilities are provided within town centres, mixed use centres and major parks in accordance with LPP 7.7.1.	**Timing:** 3 – 5 years. **Measurement:** Updated and enforceable planning policy. **Responsibility:** Local government. **Cost:** $20kp.a. (Infrastructure roll-out) *potential for cash-in-lieu
3.3	Manage car parking (including supply and pricing) to improve efficiency and support mode shift.	3.3.1	Establish a business plan for the management of parking within the City with a view to the following: • Prepare and deliver precinct-specific parking management plans, with priority given to precincts already at capacity; and • Expand paid parking using the 'demand responsive pricing' methodology.	**Timing:** 3 – 5 years. **Measurement:** Production of business case. **Responsibility:** Local government. **Cost:** $50k (Business Case) *potential for cash-in-lieu
		3.3.2	Ensure precinct plans provide the right amount of parking, in the right locations to support reduced car dependence.	**Timing:** 3 – 5 years. **Measurement:** Inclusion of parking supply and rates during town centre planning. **Responsibility:** Local government. **Cost:** $50k (additional cost to Strategies)
		3.3.3	Develop, document, and implement a transparent process for the assessment of resident and ratepayer concerns relating to traffic volume, speed and parking matters.	**Timing:** 1 – 2 years **Measurement:** A completed process and record system **Responsibility:** Local government. **Cost:** $50k (process)

		3.3.4	Better manage the supply of on street parking through the implementation of various restrictions by: • Limiting roadside residential parking, confining parking to the property; • Restricting parking to 3P or less within 2 blocks of train stations or transit nodes, with residential permit exemptions; • Restricting parking to 3P or less within 1 block of high-frequency transit corridors, with residential permit exemptions; • Restricting parking to 2P or less within 2 blocks of town centres or mixed-use areas, with residential permit exemptions;	**Timing:** 5+ years. **Measurement:** Assessment of residential street parking environments against the recommendations. **Responsibility:** Local government. **Cost:** $50k (Strategy and Policy) $100kp.a. (Signage and Infrastructure) *potential for cash-in-lieu
		3.3.5	Liaise with owners of large-scale private car parks adjacent to activity and transit corridors to transfer management to Local Government.	**Timing:** 2 – 3 years. **Measurement:** Number of bays transferred. **Responsibility:** Local government. **Cost:** $10k (Internal) *potential for cash-in-lieu
		3.3.6	Undertake a strategic review of all City land holdings to investigate the viability for development of sites to consolidate publicly accessible parking.	**Timing:** 5+ years. **Measurement:** As part of asset management framework. **Responsibility:** Local government. **Cost:** $100k
3.4	Use residential and mixed-use density to support transit.	3.4.1	Use planning policy to encourage people to use public and active modes of transport by developing diverse housing types within the City which don't require the number of car parking bays currently mandated by the R-codes, particularly along transit corridors and within transit nodes to support public transport uptake.	**Timing:** 5+ years. **Measurement:** Inclusion in planning framework. **Responsibility:** Local government. **Cost:** $20k (Policy)
		3.4.2	In the next planning scheme review, consider the location and design of transit stops to support high-capacity services. Consider proximity to transit stops when determining residential density. When identifying future transit nodes, the following should be considered: • Density of existing development; • Transit interchange opportunities; • Pedestrian amenity; • Cycling connectivity; and • Distance between other nodes.	**Timing:** 5+ years. **Measurement:** Inclusion of new transit nodes and high capacity stops in future planning documents. **Responsibility:** Local government. **Cost:** $50k (Strategy/Policy)
3.5	Obtain relevant data to inform decisions and monitor progress.	3.5.1	Repeat parking surveys at 3-5 year intervals on a rolling basis across the City. A schedule of priority areas based on the data collected has been produced, with surveys recommended to start in Leederville town centre and surrounding area.	**Timing:** Ongoing. **Measurement:** Reliable data to inform decisions. **Responsibility:** Local government. **Cost:** $50k p.a. *potential for cash-in-lieu.

4			MAKE IT ENJOYABLE TO GET AROUND THE LOCAL AREA	
4.1	Increase pedestrian amenity on residential streets.	4.1.1	Work with the State Government and Inner-City Group of Councils to implement a 40km/h zone in all residential areas of the City of Vincent by 2023.	**Timing:** 1 – 2 years **Measurement:** Number of streets transformed to 40km/h speed limits and reduction in vehicle incidents **Responsibility:** Local Government and Main Roads **Cost:** $50k p.a. personnel $200k infrastructure (signage)
		4.1.2	Through consultation with key stakeholders, develop the City's local streets in line with the principles of Safe Active Streets with slow design speeds to promote safety and amenity and utilise 40km/h zones as a tool to transition to lower speeds where appropriate. The aspirational long-term vision is that residential streets will have Safe Active Street geometry, relevant to their location, context and function. Priority should be given to the following: • Streets identified as part of the WABN (DoT); • Cycling local routes; • Streets surrounding schools; • Any residential streets that have been earmarked for resurfacing projects; and • Any residential streets where reallocation of road space is proposed.	**Timing:** 5+ years (Aspirational, long-term achievement). **Measurement:** Catalogue of residential streets and whether or not they implement SAS geometries. **Responsibility:** Coordination with MRWA for future speed reductions on residential streets. State government funding opportunities are available for the development of Safe Active Streets. **Cost:** $1M p.a. (Shakespeare Street SAS construction cost approximately $835,000). *potential for cash-in-lieu
		4.1.3	Continue to support Play Streets within the City.	**Timing:** 5+ years. **Measurement:** An increase in the uptake of Play Streets within Vincent. **Responsibility:** Local government. **Cost:** $10k p.a. (Promotion, Technical Support and Infrastructure)
		4.1.4	Improve streetscapes to enhance pedestrian experience and safety as per the link and place design guidelines, including the provision of additional street trees, native verges, lighting, street furniture, pedestrian crossings etc.	**Timing:** Ongoing **Measurement:** Public satisfaction with pedestrian experience. **Responsibility:** Local government. **Cost:** $400k p.a.
4.2	Increase pedestrian amenity in town centres.	4.2.1	Place plans should identify methods to improve pedestrian and cycling safety in the public realm making town centres safe and accessible to all.	**Timing:** 2 years. **Measurement:** Included in Place Plans. **Responsibility:** Local government. **Cost:** $10k *potential for cash-in-lieu
		4.2.2	Support the vitality of town centres and mixed use areas for pedestrians by investigating the viability of parking bays for loading/unloading activities at the periphery of the town centres and mixed use areas as well as other alternate methods.	**Timing:** 5+ years. **Measurement:** number of loading zones. **Responsibility:** Local government and business owners. **Cost:** $20k per Centre *potential for cash-in-lieu

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