Keeping Kingston moving

AUGUST 2020

INTEGRATED TRANSPORT STRATEGY

City of KINGSTON

Foreword

Background

The City of Kingston is home to over 165,000 people. It is located 15km south of Melbourne's central business district and spans an area from Moorabbin to Carrum to Dingley Village – covering an area of 91km^2.

The City of Kingston will experience significant growth in population and development over the next 15 years – with the population projected by State Government Victoria in Future (ViF) to be about 200,000 in 2036. To respond to these challenges Kingston's Integrated Transport Strategy (**KITS**) sets out a vision for a connected, integrated and sustainable transport network that is safe, healthy, accessible, reliable and efficient (SHARE).

The strategy will provide the long-term direction and guidance for integrated transport and land-use planning that will enable Council to make informed decisions about future investments, strategic planning, advocacy to state government, and policy direction to ensure that the future growth of Kingston meets the diverse needs of our residents, visitors and workers.

Historically transport has been considered as separate, competing modes. Investment has been focused on roads and car drivers, with provision for people on foot, bicycle or public transport a secondary consideration.

Integrated transport means a connected, sustainable, and coordinated transport system, in which land-use planning promotes convenient access to key destinations and reduces the need to travel by car. Integrated transport means local, regional and metropolitan transport agencies (and other groups) working together to deliver a range of ways people and goods can reach their destination.

Consultation and Background

Consultation

In early 2019 Council undertook a first stage of consultation focusing on the 'vision, objectives and key themes' of Kingston's Integrated Transport Strategy. This consultation involved internal and external stakeholders as well as the wider community through an on-line 'Your Kingston Your Say' survey. The feedback received helped shape the draft version of Kingston's Integrated Transport Strategy.

The feedback emphasised the need for a balanced approach to reconcile differing and conflicting opinions across a range of traffic and transport issues.

For example:

- Some respondents supported pedestrian, cycle and bus priority, as these measures improve safety and slow growth in traffic congestion, whilst other respondents thought such measures should not adversely impact on motor vehicle drivers (by narrowing road space for cars, increasing delay to drivers or removing parking).

- Some respondents commented that to reduce congestion and improve safety around schools, parents should drop-off and pick up students further away from the school gates to encourage pupils to walk a short distance, whilst other respondents commented that drop-off and pick-up facilities outside the school gates should be maintained or increased.

- The land-use and development objective in the KITS will reduce car dependency by concentrate development near activity and neighbourhood centres close to public transport routes, and some respondents commented that high density development should be discouraged in the municipality as this causes traffic, parking and other issues.

At a very broad level, these views reflect societies differing beliefs on how transport systems can be improved, by, for example either building more roads (increasing supply) or, for example, by reducing demand for car travel by encouraging walking, cycling and public transport. The vision, objectives, themes and actions set out in this

Strategy is the Council's approach to providing the long-term direction and guidance for integrated transport and land use planning whilst balancing these differing opinions.

In preparation for wider community consultation on the draft Integrated Transport Strategy, and to explore these opinions in more detail, in March 2020, Council sought in-depth feedback from Ward Committees. There are three Committees – one in each ward – with between 12 and 15 members from each ward representing the demographic profile of the community in each ward and reflective of a broad range of community interests, locations, gender, cultural background, suburb and age. Due to Covid-19 restrictions the meetings were combined and hosted via Webinar on the 25 March 2020 and continued via on-line portal.

The Ward Committee participants were asked to prioritise the actions set out this report. The feedback on walking and cycling supported actions such as completing a network of continuous cycle and walking routes, providing cycle parking, and developing minimum levels of service for footpaths. For the mobility objective, there was support for audits at activity centres to make them safer and more accessible, for school education programs, and safe drop-off and pick up areas around schools, and for exploring ways all users have equitable and affordable transport choices. The feedback on the land-use and development objective supported higher density development close to public transport networks, working with existing major employers to provide travel programs that encouraged flexible work hours, sustainable mobility, and working from home, and for significant new developments 'green travel' plans to promote safe, healthy and sustainable modes such as walking, cycling and public transport. For public transport there was support for advocating for improved bus services, improvements on the Frankston line and improved interchange facilities at stations. For the road network the priority was for monitoring traffic congestion to better understand the performance of the road network.

Council undertook further community and stakeholder consultation on the draft Integrated Transport Strategy over a five-week period starting in July 2020 - through a 'Your Kington Your Say' on-line survey. This survey provided respondents with an opportunity to identify (on a scale of 1 to 5) their support or opposition to the vision and the objectives, themes and actions set out in the draft Integrated Transport

Strategy. As shown in the Table below, a high proportion of respondents supported the vision and objectives.

Objective	1 Strongly Support	2 Support	3 No Opinion	4 Oppose	5 Strongly Oppose
Vision	59%	27%	5%	5%	5%
Objective 1 Walking and Cycling	54%	29%	5%	7%	5%
Objective 2 Mobility	59%	22%	7%	12%	0%
Objective 3 Land use and Development	30%	40%	5%	18%	8%
Objective 4 Better Public Transport	66%	22%	5%	7%	0%
Objective 5 The Road Network	40%	35%	3%	18%	5%

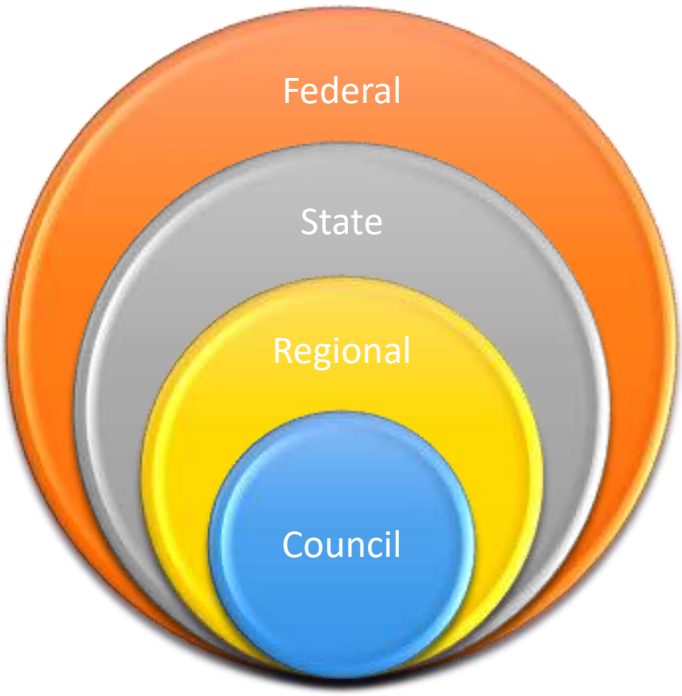
Background Report

As part of the consultation, Council also produced a background report which presents the statistical evidence that informs Kingston's Integrated Transport Strategy. The background report is an investigation of existing and future demographic characteristics of Kingston using Census Data forecasts and other sources of data.

Legislative Context

Introduction

Integrated transport covers a wide range of issues which requires a collaborative approach between numerous stakeholders. Residents, businesses, workers, the Department of Transport (**DOT** - *formally VicRoads and Public Transport Victoria PTV*), Metro Trains, State Government Departments and Federal Government all play a critical role in shaping integrated transport across the City of Kingston.



Federal Government

The Australian Government prioritises and progresses transport infrastructure of national significance. It also provides funding of transport projects largely carried out by the State and for local roads projects through the Black Spot and Roads to Recovery programs. They are responsible for economic policy, raising most transport taxes, emissions reduction, major funding projects, regulation and airports.

State Government

State Governments prioritise and progress transport infrastructure of state wide significance along the main road network. The Victorian State Government is responsible for main transport legislation, vehicle registration fees, strategic land-use planning, freight

and ports, public transport, freeways, highways and main roads, strategic road safety, major cycle trails, travel demand management, and the allocation of state and federal funding for transport projects.

Regional Organisations

The South East Melbourne Integrated Transport Group (SEMITG) advocates for improvements to transport in south-east Melbourne. It is a subgroup of South East Melbourne (SEM) that advocates for jobs, infrastructure, investment, liveability, sustainability and wellbeing for the south-east region.

The Metropolitan Transport Forum (MTF) is an advocacy group comprising members from Melbourne's metropolitan local government, and others representing transport companies, state government and environment groups. The MTF promotes effective, efficient and equitable transport in metropolitan Melbourne by providing a forum for debate, research and policy development, and sharing and disseminating information to improve transport choices.

The South East Council's Climate Change Alliance (SECCCA) is a local government member organisation representing Melbourne's south-east municipalities. Its strategic plan 2019-2024 has a vision where communities of the south east of Melbourne are thriving, living a zero emissions lifestyle, and are resilient to the changing climate.

Council's Role

The Council plays a significant role in delivering transport outcomes across the municipality. These roles include:

- Managing the local road network e.g. maintenance of local roads and paths (including off-road paths though Council reserves) and traffic management measures on local roads (such as speed humps) as part of a Local Area Traffic Management study.

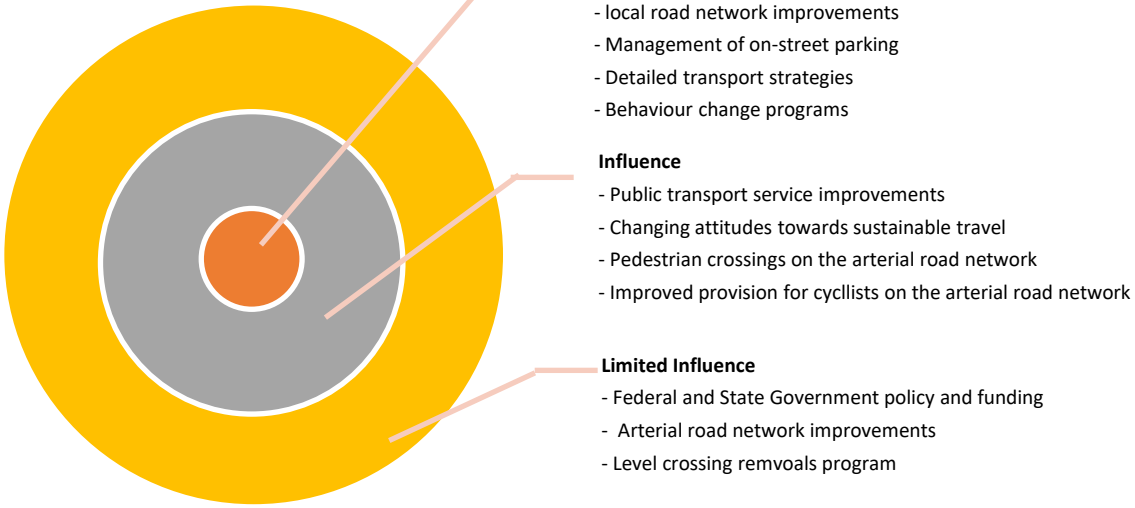
- Applying relevant legislation and regulation e.g. management and enforcement of parking restrictions and issuing permits for heavy vehicles to travel on local roads.

- Providing evidence to support policy and planning e.g. investigating new transport strategies and, assessing the transport issues relating to planning applications for new developments within the scope of the State Government's Planning Scheme.

- Advocating, partnerships and funding. Council works with other organisations on major traffic projects (such as the removal of level crossing) and changes to the DOT network (such as the extension of the Mornington Peninsula Freeway - Mordialloc bypass). The Council seeks funding for 'blackspot' works on local council roads from DOT or other external sources.

- Engagement and behaviour changes – Council works with communities and businesses to understand travel needs and encourage use of active transport e.g. consulting residents, providing programs to encourage children to walk to school, providing road safety advice to residents and developers, and improving accessibility for all member of the community.

Sphere of Influence – this chart shows Council's extent of control and influence in relation to transport.



Policy Context

Background

In developing the Integrated Transport Strategy, it is important to understand State and local policies that are fundamental to planning and growth of the city and the region. The following documents are important references and influences on the development of the KITS.

State Legislation, Strategies and Plans
Sets overarching direction for Integrated Transport Planning
• Planning and Environment Act 1987 • Transport Integration Act 2010 • Melbourne Plan 2017 – 2050 • 30 Year Infrastructure Strategy 2016 • Victorian Cycling Strategy 2018 – 2028 • Towards Zero • Safe Systems approach • Movement and Place - 2019
Kingston Integrated Transport Strategy
Sets Council's vision for integrated transport.
Council Documents and Processes
City of Kingston's internal strategies and plans influencing and influenced by the KITS
• Our Roadmap Council Plan - 2017-2021 • Climate Change Strategy – 2018-2025 • Draft Housing and Neighbourhood Character Study • Activity Centre Structure Plans • The Kingston Green Wedge Plan • The Urban Cooling Strategy • Public Health and Wellbeing Plan 2017 to 2021 • Biodiversity Strategy 2018-2023 • Disability Action Plan 2015-2019 • Kingston Positive Aging Plan 2014-2019 • Aboriginal Policy and Action Plan 2014-2019 • Tree Management Policy – 2011 • Kingston Cycling and Walking Plan 2009-2013 • Parking Management Policy – 2020

Planning and Environment Act 1987

The purpose of this Act is to establish a framework for planning the use, development and protection of land in Victoria in the present and long-term interests of all Victorians. The objectives include providing:

- A fair, orderly, economic and sustainable use and development of land;
- Protection of natural and man-man resources;
- Securing a pleasant, efficient and safe working environment;
- Conserving and enhancing areas of historical or cultural value.

Transport Integration Act 2010

The Transport Integration Act 2010 established the objectives by which the transport system in Victoria should operate. These cover the following:

- Social and economic inclusion - so that people of all abilities can access social and economic opportunities to support individual and community wellbeing.
- Economic prosperity – by supporting efficient access for persons and goods, reducing costs, fostering competition, facilitating investment and financial sustainability.
- Environmental sustainability **-** including: protecting the natural environment, avoiding and minimising harm to the environment, promoting forms of transport that have least impact on the natural environment**,** and improving environmental performance of all forms of transport and energy use.
- Integration of transport and land use - providing the effective integration of transport and land use and facilitate access to social and economic opportunities, by improving access to services, planning the transport system more effectively, reducing the need for motor vehicles and travel, and improving accessibility.
- Efficiency, coordination and reliability - facilitating network-wide efficient, coordinated and reliable movements of persons and goods.
- Safety, health and wellbeing.

Plan Melbourne 2017 – 2050

Plan Melbourne is the Victorian Government's long-term plan to accommodate Melbourne's future growth in population and employment. Its prime focus is land-use and development, but it recognises the impact these have on transport networks. The underlying aim is to protect and enhance the livability of the city, by addressing the

following challenges and opportunities: population growth, growing the economy, creating affordable and accessible housing, improving transport, responding to climate change, connecting communities.

The plan includes the following relevant principles:

- Principle 4: Environmental resilience and sustainability – protecting Melbourne's biodiversity and natural assets to maintain a productive, healthy city and to adapt to climate change and the transition to a low-carbon city.

- Principle 5: Living locally – a 20-minute city. Creating accessible, safe and attractive local areas where people can access most of their everyday needs with a 20-minute walk, cycle or local public transport trip will help make Melbourne a healthier, more inclusive city.

- Principle 6: Social and economic participation - To make it easier for every citizen – regardless of their race, gender, age, sexuality or ability – to attain the skills they need to fully participate in the life and economy of the city.

- Principle 7: Strong and healthy communities - Neighbourhoods and suburbs are safe and walkable, with affordable housing and access to community services.

30 Year Infrastructure Strategy – December 2016

The 30 Year Infrastructure Strategy is produced by Infrastructure Victoria - an independent advisory body tasked with developing a state wide, evidence-based plan for all types of infrastructure.

The strategy outlines short, medium and long-term infrastructure needs and priorities for Victoria. It includes a pipeline of projects to provide guidance to government and the community and allow the private sector to plan and make investment decisions.
The strategy includes the following relevant topics that will influence transport in Kingston:

- Development in established areas of Melbourne that are well serviced with infrastructure such as train stations and tram corridors.
- Cycling corridor/walking improvements.

- Road asset management and road space allocation.
- Public transport improvements.
- Transport Interchanges.

Victorian Cycling Strategy 2018 to 2028.

The Victorian Cycling Strategy 2018-2028 sets out a vision for the future of cycling in the state and a pathway to deliver it. The strategy seeks to increase the number, frequency and diversity of Victorians cycling by investing in a safer, lower-stress, better-connected network, prioritising strategic cycling corridors and making cycling a more inclusive experience.

Towards Zero.

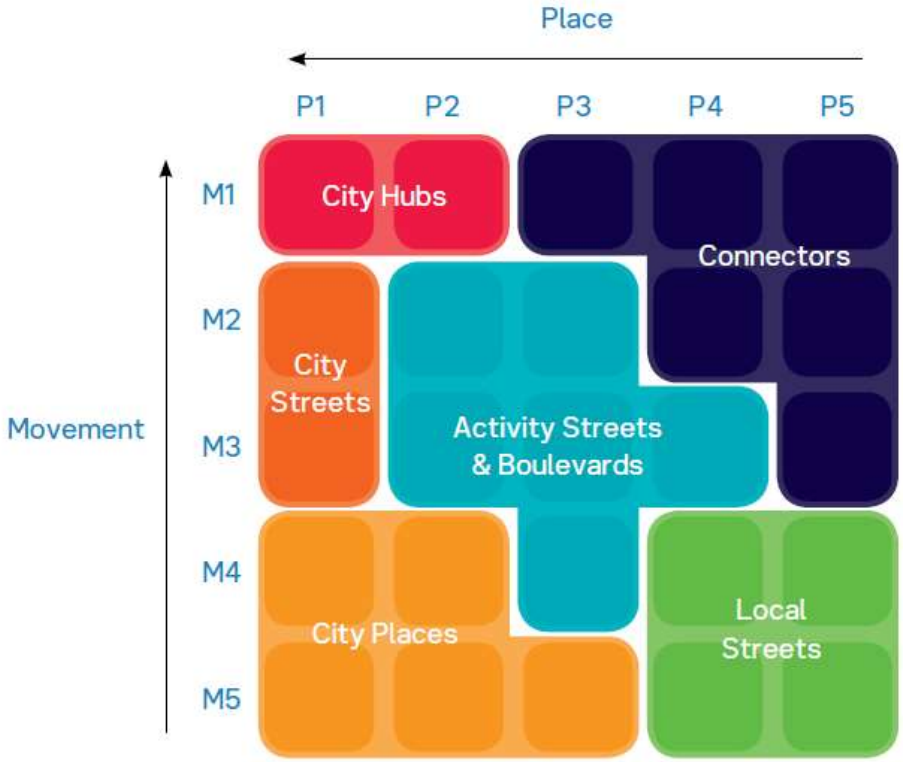
Towards Zero is Victoria's Plan to ensure no one is seriously injured on our roads. It acknowledges that we all face risks on our roads. But our choice to use the road shouldn't cost us our lives. That's why we need to have a safe transport system, a system that protects us from our own mistakes and those of others. We can change road safety for good by improving the safety of our roads, our vehicles and our behaviour.

Safe System approach to road safety

Safe System is an inclusive approach to improving road safety that caters for all users of the road system that recognises that people will always make mistakes and may have road crashes – but the system should be forgiving, and those crashes should not result in death or serious injury.

Movement and Place in Victoria – February 2019.

This DOT publication provides an overview of movement and place thinking. This thinking recognises that streets 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, road aims to miminise travel time and keep people and goods moving. Contrarily, as a destination, it aims to increase visitor dwell times. Not all streets can be popular destinations, just as not all streets can prioritise vehicle movement. Movement and Place provides a framework that helps to assess and plan the road and transport network so that it supports an integrated and sustainable transport system.



As part of Movement and Place thinking, the DOT is developing a design guide for urban roads and streets in Victoria with a vision for safe, connected, vibrant urban roads and streets for people to live, work, move, play and stay. A cycling guide will also be developed that will capture best-practice in bicycle network planning.

Local Policy Context

Our Roadmap Council Plan 2017-2021 sets out the Council's vision statement. It includes the Council's vision of a diverse, dynamic community where we all share a sustainable, safe, attractive environment and a thriving economy. The purpose is 'to work with the community to protect and enhance the quality of life for current and future generations'.

The Council Plan therefore sets five goals:

- Our well-planned, liveable city supported by infrastructure to meet future needs.
- Our sustainable, green environment with accessible open spaces.
- Our connected, inclusive, healthy, and learning community
- Our free-moving safe, prosperous and dynamic city
- Our well-governed and responsive organisation.

The Council Plan 2017-2021 also refers to the Living Kingston 2035 vision for a Kingston that is 'growing and thriving, changing and evolving but still remaining the place we love to live'. Living Kingston provides examples of how Kingston might look in 2035. For Transport this includes:

- Flexible and environment-friendly transport and traffic options that provide residents with a choice of travel within Kingston and beyond.
- Cycling and walking will offer safe and healthy travel connections to transport hubs, shopping precincts, beaches, recreational spaces, and popular destinations.
- A transport network that is safe, clean and reliable because of strong partnerships between Council, government agencies and industry.
- Industrial precincts benefiting from our efficient network of road, rail, air and water transport.

- A focus on innovative environmentally-friendly forms of transportation such as electric cars.
- Investment in infrastructure – such as roads, bridges, drains, footpaths and parking will be sensibly targeted to support population and housing density changes.

In addition to these plans, Council has produced several other strategies, plans and policies that are relevant to the KITS. These include:

- Climate Change Strategy – 2018-2025. This strategy guides Council towards reducing carbon emissions and adapting to the effects of climate change.
- Draft Housing and Neighbourhood Character Study – This strategy provides a framework to guide the growth and change of residential areas in the City of Kingston.
- Activity Centre Structure Plans – A structure plan is a long-term guide for changes to land use, building and public spaces in activity centres such a Moorabbin, Highett, Cheltenham, Mentone, Carrum and Chelsea.
- The Kingston Green Wedge Plan – This plan describes the approach to developing and managing all land outside the Urban Growth Boundary in the City of Kingston, which includes the potential to develop a 'chain of parks' linked by walking and cycling trails.
- The Urban Cooling Strategy – Heat waves affect the health and wellbeing of the very young, senior citizens and people living with a range of pre-existing illnesses and diseases. This strategy presents the City of Kingston's vision for creating a Cool Kingston. This includes increasing vegetation cover across Kingston, including tree canopy.
- Public Health and Wellbeing Plan 2017 to 2021. This plan sets out Kingston's approach to improve the health and wellbeing of the community, including increasing participation in physical activity; improved perceptions of safety; ensuring facilities, services and open spaces are accessible and equitably provided; and improved environmental resilience and sustainability.
- Biodiversity Strategy 2018-2023 – This strategy sets out goals and strategic objectives for protecting, preserving and improving biodiversity within Council's Natural Resource Areas including road and rail reserves.
- Disability Action Plan – 2015-2019. This plan includes goals to improve access to goods, services and facilities for people with a disability.

- Kingston Positive Aging Plan – 2014-2019. This plan identifies priority areas and objectives based on the needs, concerns and aspirations of older residents including responding to transport related issues impacting on older people and increasing the ability and confidence of older people to use all modes of transport, so they can move about the community safely and retain their independence and social connections.
- Aboriginal Policy and Action Plan 2014-2019. This policy seeks to facilitate opportunities for Council to work more closely with the local Aboriginal community in service delivery and engage with the local Aboriginal representative groups in seeking their input into relevant policies and strategies.
- Tree Management Policy – 2011. This policy provides a holistic approach to guide Council in managing the urban forest of about 90,000 trees within reserves, streets and Council managed facilities.
- Kingston Cycling and Walking Plan 2009-2013. This provided a snapshot of Kingston's cycling and walking facilities and raises opportunities for further enhancement of the network.
- Parking Management Policy 2020. This policy provides a framework for the City of Kingston to manage parking across the municipality for the benefit of the whole community, for all road users, and in a consistent, equitable and transparent way.

The Kingston Integrated Transport Strategy will form a high-level 'umbrella' document that sets the direction for the management of transport in Kingston and under which further transport strategies and plans will sit. The KITS sets out specific 'actions' for future works that arise from the objectives (outlined below). As these 'actions' closely aligned with the vision, objectives and themes they are more general in nature. The further strategies will include specific projects, advocacy plans and community engagement activities - for example strategies on walking and cycling, road safety, and parking (all of which will align with strategic direction in the KITS). The KITS will enable Council to make informed decisions about future investments, strategic planning, guide opportunities to advocate on behalf of our community, and set policy directions to ensure that the future growth of Kingston meets the diverse needs of our residents, visitors and workers.

Issues and Challenges

Population Growth

Greater Melbourne is the fastest growing capital city in Australia. This trend is expected to continue. Census Id data shows that Kingston's population is expected to grow by 23% between 2016 and 2036 (a population increase of about 35,000 people) further increasing the demand for transportation. Population growth will be higher in Cheltenham, Mentone, Clayton South, Moorabbin and Highett compared with other suburbs such as Clarinda, Heatherton and Waterways.

Climate Change

Over the past 100 years, global surface air temperatures have risen by almost 1°C. It is widely accepted that human activity is resulting in climate change through release of greenhouse gases from the burning of fossil fuels, land use change and agriculture. The City of Kingston's Climate Change Strategy 2018-2025 shows that 17% of community CO_2 emissions are transport related. Of these emissions, almost 90% were attributable journeys in cars, reflecting the dominant use of this mode (cars were used for 82% of all kilometres travelled). In January 2020, Council joined hundreds of councils around the world in declaring a climate and ecological emergency, which recognised that climate change is already causing significant damage to the economy, society and environment and that urgent action is required to reverse current trends. The KITS will support our community to reduce emissions and energy use with the aim of minimising the impacts of climate change.

Health and Safety

Obesity is one of Australia's biggest public health challenges. The Victorian Population Health Survey 2014 shows just over half (57%) of our population is overweight or obese. Yet, 2016 census data shows that only 0.7% of Kingston residents cycle to work, and only 1.7% walk to work. Encouraging active travel choices such as walking and cycling for short trips will help reduce obesity levels, risk of heart disease and stroke. The safety of all users is an important factor in planning and managing our transport network. Kingston's Road Safety Strategy will set out how the safety of our roads, our vehicles and our behaviour can be improved.

Traffic Congestion

Traffic congestion increases travel time and vehicle operating costs, with effects that cascade through the entire economy. The Bureau of Transport and Regional Economics estimates traffic delays in Melbourne cost the community around $4.6 billion a year in additional travel time and resource usage. Congestion also contributes to greenhouse emissions. Measures that encourage more people to walk, cycle and use public transport have an important role to play in slowing the growth in traffic congestion.

Ageing Population

Census data shows about 17% of Kingston's residents are aged 65 or older, which compares with 14% for the Greater Melbourne area. This percentage is likely to increase resulting in more residents relying on non-car travel modes to maintain their mobility, social connectedness and wellbeing.

Diversity

The City of Kingston has a diverse and multicultural community, including people with a disability, and areas of disadvantage which presents challenges to providing accessible and inclusive transport for all members of the community. 2016 Census data shows 5% of residents need assistance due to a disability. 4% of residents are not fluent in English. Lone persons make up 24% of households in the municipality. 22% of households are couples with dependent children (under 15 years of age) while almost 4% of households have one parent. Clarinda and Clayton South are the most social economic disadvantaged areas within the municipality.

Funding

Victorian local governments are subject to rate capping, which makes it difficult to keep pace with the demands for new infrastructure and maintaining existing facilities and services. Budgetary constraints and competing demands will mean less funding for transport. Improving walking and cycle routes as well as public transport can slow the need to upgrade the road network.

Covid-19 Pandemic

In early 2020 the World Health Organisation announced Covid-19 as a Pandemic. To protect others and stop the spread of the virus in Australia, restrictions were introduced by State and National Government to ensure practice of good hygiene, physical distancing, limits on public gatherings and (if necessary) self-isolation. To slow the spread of the virus, Victorians were therefore required to stay at home unless they were:

- shopping for essential supplies such as food;
- accessing medical services;
- exercising;
- working or studying, where this couldn't be done from home; or
- visiting friends and family, if really needed.

These restrictions had profound short-term (and potentially long-term) impacts on how we travel. These include:

- Working from home and e-learning;
- Flexible start and end times for work and education;
- More walking and cycling;
- Fewer cars on the road;
- Home delivery for shopping or pick-up services from supermarkets; and
- Fewer public transport trips.

However, these impacts also require to changes our transport systems to ensure they are Covid-safe and to make sure our roads do not become more congested, by, for example:

- Allocating more road space to walking and cycling;
- Providing more cycle parking on street, at stations, and work places;
- Providing 'Kiss and Go' and 'Park and Stride' parking arrangement around schools during the school drop off and pick up times.
- Making public transport safer, faster, more hygienic and less crowded in peak times.
- Creating more opportunities for public green spaces in cities; and
- Greater use of electric bicycles.

As part of the wider public consultation on the draft Integrated Transport Strategy undertaken in July 2020, participants to the on-line survey were given the opportunity to describe how – during the Covid-19 pandemic - their transport patterns have changed. Respondents reported more walking and cycling, less travel by car or public transport, and more working from home. The Strategy positions Council to respond to these changing travel needs by providing infrastructure to facilitate walking and cycling, travel programs that encourage work from home, and supporting initiatives that encourage well designed, compact, mixed-use, neighbourhoods that reduce the need to travel.

Major Projects and Key Development Sites

Background

In responding to Victoria's record population growth, the State Government has initiated unprecedented investment in infrastructure programs – as set out in the Victorian Infrastructure Strategy. This investment program represents a once in a lifetime opportunity to transform traffic, transport and land-use for the long-term benefit of all Victorians. In the City of Kingston these projects include:

- the removal of 12 level crossings,
- the Suburban Rail Loop; and
- the Mordialloc Bypass.

Level Crossing Removals

In 2015 the Victorian Government announced a plan to remove 50 level crossings across the state by 2022. The City of Kingston had nine crossings that were to be grade separated as part of this project. In July 2019, an additional three crossings at Chelsea were added to the existing nine to be removed. The grade separations are projects managed by the Level Crossing Removal Project (LXRP). These projects will improve traffic congestion, and safety. Council will work with DOT, Level Crossing Removal Project (LXRP) and other stakeholders to provide improved interchange facilities at stations so that they are accessible and integrate with other modes such buses, taxis, cars, cycle and walking routes.

Suburban Rail Loop

Melbourne is Australia's fastest growing city. To keep up with this population growth, the suburban rail loop will circle Melbourne's suburbs to connect communities with jobs, schools, universities without having to travel to the CBD. This will transform the way people travel by connecting every major train line and by providing a link to Melbourne airport. This will cut congestion across the entire transport network. The loop will include links to stations at Cheltenham, Clayton and Monash.

Mordialloc Bypass

The Mordialloc Bypass is a new 7.5km link between the Mornington Peninsula Freeway at Springvale Road (Aspendale Gardens) and the Dingley Bypass. This is a significant transport corridor cutting through the interior of the Kingston municipality aimed at improving traffic congestion and reducing journey times. The project will include a continuous 'shared' bicycle and pedestrian path that will provide an important new north-south cycle route connecting to existing bicycle and pedestrian paths.

Key Development Sites

Objective three of this report will reduce car-dependency by concentrating development in activity and neighbourhood centres close to public transport routes. Clayton Business Park (near Westall Station) and the gasworks site (between Highett and Southland stations) are examples sites where development will be concentrated.

Monash Employment Cluster

Located north-east of Kingston is the Monash Employment Cluster, which has the largest concentration of jobs outside Melbourne's CBD. It supports 75,000 jobs across a diverse mix of education, research and industry, and contributes over $9.4 billion to the Victorian economy each year. It is anticipated that employment numbers within the Monash Cluster have the potential to double over the next three decades. As it continues to grow, the cluster will become a major employer for Kingston residents. This will have a direct influence on many Kingston residents 'journey to work' patterns.

Kingston Green Wedge

Council will balance its transport objectives within broader environmental and policy considerations. For example, the green wedge will be protected to provide open spaces for recreation, biodiversity and agriculture. Green wedges are the non-urban areas of metropolitan Melbourne. They were created to safeguard areas for agriculture, biodiversity, recreation, open spaces and the like. The Kingston Green Wedge covers over 2000 hectares and extends roughly from Karkarook Park in the north to Braeside Park in the south. This will create a 'chain of parks' linked by walking and cycling trails.

Integrated Transport Strategy - Vision

Kingston is a city with a connected, integrated, and sustainable transport network that is:

- SAFE - for all users and attractive to use.
- HEALTHY - supporting transport choices that are active and reduce air pollution and emissions.
- ACCESSIBLE - to as many people that wish to use it.
- RELIABLE - so journey times are minimised and predictable - thus promoting economic prosperity.
- EFFICIENT - balancing the capacity of the network between all modes of transport and making travel easy.

Objective 1 - Walking and Cycling

Walking and cycling – to make walking and cycling the preferred transport choice, particularly for short local trips.

Introduction

Walking and cycling are inexpensive and healthy modes of travel – particularly for short local trips. Many local journeys in the municipality are relatively short - less than 5km. However, most cycle trips in Kingston are made for recreation rather than work or accessing other destinations such shops, schools and public transport. Yet the City has great potential for increasing cycling as is it relatively flat and has a 'spine' of activity centres and destinations that are well connected by transport networks such as the Nepean Highway and the railway corridors.

The experiences observed elsewhere in Australia and around the world show that encouraging more people to cycle and walk is highly dependent on the existence of a connected network of safe routes suited to people in all age groups and abilities. The provision of safe cycling and walking routes will enable more people to walk or cycle for short journeys, which will help to slow growth in traffic congestion, and reduce demand for car parking at major destinations. Walking or riding to work or the shops is also one of the most effective ways to combine regular exercise with your everyday routine. They are activities that can be done by almost anyone, regardless of fitness.

To encourage more walking and cycling the Council will provide new or improved:

- cycle routes and paths;
- pedestrian/cycle crossings;
- cycle parking;
- wayfinding and signs;
- public lighting;
- footpaths, and walking routes, including missing links in these networks;
- shade from trees, drinking fountains, and seating.

The following actions are therefore proposed.

- Review existing cycle and walking networks to identify gaps and deficiencies.
- Update the Council's Cycling and Walking Plan.
- Prioritise works on local council roads to improve or complete a network of continuous cycle and walking routes that are safe, direct, connected and accessible.
- Advocate to DOT and other stakeholders to complete cycle and pedestrian routes on roads or land they manage.
- Monitor cycling and pedestrian use, routes and demographics.
- Provide high quality and safe cycle parking in activity centres and key destinations.
- Improve cycle and walking route wayfinding and directional signs.
- Work with DOT to increase pedestrian (and where appropriate cycle) priority at traffic signals and provide safer pedestrian (or cycle) crossings such as zebra crossings.

- Review provision of public lighting, drinking fountains and seating in key walking and cycling areas such as activity centres or stations.
- Where space allows develop a network of ‘shade-ways’ – tree shaded priority pathways for cycling and walking.
- Consider the needs of pedestrians and cyclists in infrastructure upgrades and street maintenance programs.
- Develop and implement minimum level of services for the pedestrian network based on footpath widths, pedestrian demand, street trading activities, lighting levels, crossing points, and Disability Discrimination Act standards.

Objective 2 – Mobility

Mobility – to provide a transport network that allows people of all abilities to travel.

Introduction

Kingston's transport network needs to be accessible and cater for people from diverse backgrounds, income, ability, age and gender across a wide range of travel modes. Removing barriers that prevent people from carrying out their day-to-day activities, and considering the needs of all transport users, helps to promote a sense of social connection, independence, health, safety and well-being for all users.

Kingston is home to many primary and secondary schools. The streets around schools often suffer from traffic, parking and travel issues. Council therefore takes a holistic approach to travel to and from school. This involves working collaboratively with the school community to manage 'Safe Routes to School' programs. These programs include measures to encourage primary school students, staff and parents to travel to a school in an active, sustainable and safe way, which enables children to build healthy habits for the long term. 'Park and stride' schemes encourage parents who must drive to the school to park further away from the school gate, with students walking the remainder of the journey. These measures help to reduce congestion near the school and make the area around the school a safer more pleasant place.

Drivers over 75 years of age have a higher risk of fatal crashes than other age groups. Whilst people with a disability can face access issues at shopping precincts and public transport nodes. Removing barriers to access and providing accessible parking at key destinations provide people with a disability with greater travel choices. Measures that

make roads safer for older people, younger people and more accessible for people with a disability also make streets safer and more accessible for all road users, such as parents with prams or young children.

Men and women experience travel differently as they move around the city. Traditionally, women were more likely than men to have extra domestic and care-giving responsibilities, but fewer transport options. This affects their travel patterns, with women more likely to move between multiple destinations throughout their daily commute. Women and gender-diverse people also feel more at risk in public spaces such as on public transport, at pedestrian subways or bridges, activity centres or on pedestrian and cycle paths – particularly when travelling at night. As a result, avoiding danger in these areas may be priority for some people. Creating safe transport spaces is therefore critical, as well as developing new approaches for greater involvement of women and gender-diverse people in the design and delivery of urban transport to support the needs of all Australians.

To provide a transport network that provides for all abilities to travel Council will:

- Encourage children to walk and cycle to schools.
- Review access around schools, public transport and major destinations so they are safe and accessible for everyone.
- Review parking around schools and key destinations.
- Provide programs for older people and people with a disability.
- Advocate for equitable, affordable and accessible transport for all users.

The following actions are therefore proposed.

- Conduct traffic and transport safety audits around schools.
- Promote behavioural education programs to support safe, active travel choices to and from schools e.g. ‘bike education’, ‘Walk to School’, road safety and travel planning.
- Provide vehicle drop-off and pick-up areas around schools to improve safety, congestion and residential amenity – e.g. ‘park and stride’ schemes, and short-term ‘kiss and go’ drop-off and pick-up zone.
- Conduct audits of major activity centres and other Council facilities to ensure they safe are and more accessible for people with prams, wheelchairs, and mobility scooters.

- Undertake and audit existing accessible parking and ensure adequate provision for people with a disability and elderly drivers at key destinations.
- Advocate for and support community transport services for people who have difficulty accessing public transport and activity centres such as, accessible taxis services for the elderly and people with a disability, support services for mobility scooters such as electric charging points, and school bus services.
- Develop education campaigns - for example for older people about transport options e.g. ‘wiser driver’ and ‘wiser walkers’ and for community education on public transport.
- Explore ways in which all users have equitable and affordable transport choices, e.g. such as lower off-peak public transport fares to increase travel at off-peak times.
- Develop new approaches for greater involvement in and consideration of women and gender-diverse people in the planning, design, delivery and auditing of urban transport projects.

Objective 3 – Land Use and Development

Land-use and development – to promote land-use and transport choices that are sustainable, and reduce journey times and distance by concentrating development in activity and neighbourhood centres close to public transport routes.

Introduction

Land use planning is a crucial component of creating integrated transport. This is because the way land is used has a huge influence on the way we travel. Our choice of travel mode is determined by the distance between our destinations, the facilities around us, how close we are to public transport, reliability of public transport, parking availability and cost, and ease of travel. The Council will reduce car-dependency by concentrating development in activity centres and along main public transport routes. Having a range of services close to home and work give people freedom to do more of the things they enjoy locally and reduces the need to travel long distances. Making activity centres accessible, safe and attractive areas where people can meet most of their needs will help make Kingston a healthier, more inclusive city. New development also influences the need for new or improved infrastructure. Financial contributions can be sought from developers toward transport infrastructure improvements that support the new development such as walking and cycling routes, public transport improvements, traffic calming measures, or intersection improvements.

To provide a transport network that promotes land-use and transport choices that are sustainable (and reduce car-dependency) or reduce journey times and distance, Council will:

- Guide high density development close to activity centres and public transport routes.

- Ensure significant new developments support sustainable travel through ‘green travel plans’ that promote safe, healthy and sustainable travel modes.
- Review ‘structure plans’ so activity centres are distinctive, accessible, safe, appealing and thriving.
- Create suburbs where most peoples’ travel needs are within a 20-minute walk, cycle or local public transport trip of their home. In term of walking, this 20-min journey represents an 800m walk from home to a destination and back again. Or a 10m walk to your destination and 10 minutes back home.

The following actions are therefore proposed:

- Support higher density development close to the Principal Public Transport Network (PPTN).

- Ensure significant new developments support sustainable travel through ‘green travel plans’ that promote safe, healthy and sustainable travel modes such as walking, cycling and public transport.
- Work with existing major employers to provide travel programs that encourage sustainable mobility, flexible start or finish times**,** and work from home policies.
- Explore opportunities to provide electric charging technology and charging stations within new and existing developments.
- Explore ways financial contributions from developers can help fund new or upgraded transport infrastructure.
- Encourage efficient and innovative management of commercial parking within new developments, such as shared car parks by multiple users - to reduce the number of parking spaces that would needed for two separate ‘stand-alone’ developments and to reduce the need to travel between two the uses.
- Review structure plans (as opportunities arise) to ensure our key activity centres are distinctive, accessible, safe, appealing and thriving.
- Support initiatives that encourage well designed, compact, mixed-use neighbourhoods with diverse and affordable housing close to services (within 20-minute walk, cycle or public transport trip) that reduce the need to travel and recognised streets as places for people to live, work, and enjoy well as for movement.

Objective 4 – Better Public Transport

Better public transport – advocate to state government for improved public transport that is reliable, frequent, safe, and connects people and goods to where they want to go.

Introduction

Public transport helps link people to places they want to go. It is cheaper than driving a car and helps slow growth in traffic congestion. It provides an alternative travel choice for people who do not have access to a car – either because they are too young, too old, have a disability, or because they choose not to or cannot afford to own a car. Kingston is served by two train lines and 25 bus routes. However, there are significant service gaps within the network. Rail primarily services the activity centres dotted along the coast, whilst the north-eastern suburbs of Dingley Village, Waterways and Clarinda are reliant solely on buses. Existing bus routes serve the industrial areas – but generally the schedules do not match the needs of employees, many of whom do not work standard hours.

Investment in the bus system is a cost-effective way to improve public transport usage. Whilst the bus network provides a good overall coverage in the municipality, there are opportunities for improvement in scheduling, route servicing and reliability. A review of the bus network in Kingston and the surrounding South Eastern Metro Region is therefore needed, as the first step, to realise an integrated public transport network and boost patronage. On-demand bus services can complement existing services by providing flexible public transport services that pick you up from home (or an easy access location) and take you to where you need to go (such as a railway station, shopping precinct) providing a passenger-focused door-to-door transport service.

Southland railway station recently opened in 2017. This station serves both the Southland Shopping center visitors and Cheltenham residents. The addition of the station presents an opportunity to reassess how the existing provision and scheduling of the train and bus network operates.

Better quality of public transport (focusing on reliability, travel time and user experience of passengers) also means people are more likely to include walking or cycling in their daily travel patterns – particularly if safety at public transport interchanges is improved and wait time are reduced. Finding ways of moving freight by rail (such as Inland ports) can reduce the growth of truck use on the road network and thus slow growth in congestion and reduce pollution.

To provide better public transport Council will work with relevant agencies to create:

- Train stations and bus stops that are 'best practice' for all users.
- High-frequency public transport.
- Appropriate commuter parking at stations.
- Better travel information.
- More freight transported by rail.

The following actions are therefore proposed:

- Work with DOT, LXRP and other stakeholders to provide improved interchange facilities at stations and bus stops so that they are safe, accessible and integrate with other modes such buses, taxis, cars, bicycles and walking routes to create best practice for all users.
- Advocate for Frankston Train Line improvements including the removal of additional rail crossings, increase in capacity, frequency and efficiency.
- Advocate with DOT for improved bus services including bus service reviews, bus frequency and scheduling, reliability, safety and accessibility at bus stops.
- Investigate benefits and feasibility of on-demand public transport services.
- Produce a public transport accessibility map to identify areas with good and bad levels of public transport.

Map 9. Accessibility of public transport network in 2016.

- Advocate for proposed Melbourne Suburban Rail Loop – linking Cheltenham, Clayton, Monash, to Glen Waverly and beyond to the airport, sunshine and Werribee.

- Advocate for tram and light rails routes or extensions that connect with the municipality.
- Advocate for better real time information and better travel choice information.
- Advocate for a more coordinated public transport system that minimises interchange times to provide seamless journeys for passengers.
- Advocate to DOT for improved commuter station parking.
- Advocate for greater proportion of freight containers to be transport by rail.

Objective 5 – The Road Network

The road network– to manage our road networks so that it is safe, promotes sustainable transport, and reduces congestion.

Road transport plays an important role in the transport network in the City of Kingston. The road system currently provides a high level of service to motor vehicles, often with little thought for walking and cycling. A safe roads approach to transport focuses on all road users using a street as well as the various land-uses beside it.

Kingston's roads are also increasingly congested. Growth in population and land use development will further increase competition for road space. Whilst cars will remain an important means of travel for longer trips, they are not efficient when it comes to moving large numbers of people or for short trips. By giving priority to buses, walking and cycling we can expect growth in congestion levels to slow. By making travel easier for all road users, we reduce the need for short car trip so that the arterial roads can perform their primary function of moving high volumes of vehicle traffic as efficiently as possible. Making the roads safer and less congested, by reducing traffic speeds and flows, is an important part of making our streets more a more enjoyable experience for our community and visitors. Greater electric vehicle uptake would reduce both greenhouse gas emissions and urban air pollution from road transport. The potential benefits of driverless 'automated' vehicles are less certain, but they offer potential to reduce congestion, faster travel times, safer roads, improved access to services, and a stronger economy. These technologies are not without challenges; however, these could be addressed through evidence-based planning.

The DOT's report 'Movement and Place in Victoria' is changing the way land-use and transport is planned in Victoria. Fundamental to this thinking the recognition that streets not only move people from A to B, they also serve as key places and destinations.

- Movement considers the mix of transport modes and defines priority for moving people and goods.
- Place is about the land-use vision and the experience of users of a street.

This thinking (alongside consideration of road safety and the environment) provides a framework to:

- Consider the needs, expectations, and aspirations of a community for places they live and work in, as well as the roads and streets they pass through.
- Discuss how to address and prioritise transport so the experience and requirements of different users is reflected into transport solutions.
- To consider the types of transport modes appropriate to a road or street. Some transport modes may be more (or less) important in the context of the transport system as a whole. In some streets this will lead to opportunities to prioritise sustainable modes of travel over private cars and to allocate more space for buses, cycle and pedestrians.

The move Towards Zero is a collaborative effort for everyone in the community to build a safer road system that will change road safety for good. At the heart of Towards Zero is the belief that human health is more important than anything else. It acknowledges that, as people, we all make mistakes. Our bodies are strong up to a point, but if we are hit at high speed there is only so much force we can withstand before we break. The likelihood of being killed or seriously injured increases dramatically at as low as 30km/hr. This vision is underpinned by the Safe System approach to safety. That's why we need to build safer roads systems for everyone.

Kingston's industrial precincts employ a high number of workers from within the Kingston municipality. This helps residents to avoid travelling long distances to work outside the city. The continued viability of Kingston's businesses is therefore critical to maintaining and increasing employment levels within the municipality. Many businesses rely on easy access for goods delivery. If this access becomes difficult, businesses may move elsewhere, taking their jobs with them. By better understanding the needs of industry, including the management of major freight routes throughout the municipality, Council will be able to improve the management of heavy vehicles. Linking industrial precincts with direct and connected arterial roads increases efficiency and reduces delays and costs for logistics companies. Freight vehicles will also be less reliant on local roads - removing conflict between trucks with pedestrians, cyclists and cars which will make the local road network safer and less congested for all.

The management of parking in the municipality is considered in detail through Kingston's Parking Management Policy which is periodically reviewed.

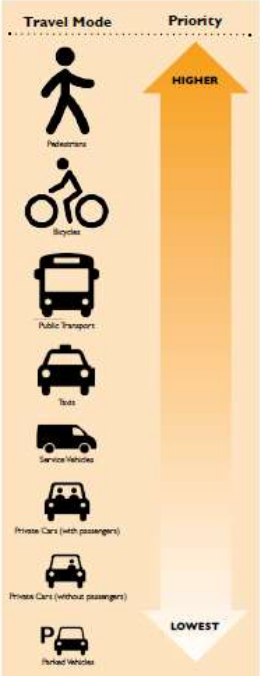
To manage and design our road network so that it is safe, promotes sustainable transport and reduces congestion, Council will:

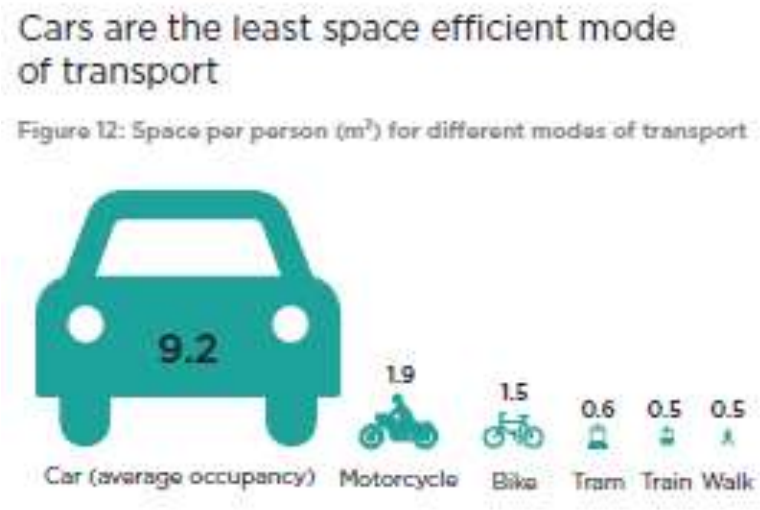
- Provide traffic and transport programs to make roads safer for all road users, including cyclists and pedestrians.
- Recognise that streets are places for people to live, work and play as well for the movement of people and goods.
- Prioritise sustainable modes over private cars through a 'road user hierarchy'.
- Allocate more road space for sustainable modes (bus, cycle, pedestrian priority).

- Review speed limits on key roads.
- Review the ‘last kilometre’ of freight movement to improve way-finding.
- Review and support new transport technologies e.g. electric vehicles, charging points, speed limiters, car/bike share schemes, and smart roads technology.

The following actions are therefore proposed.

- Monitor traffic congestion to better understand the performance of the road network.
- Develop a road user hierarchy in which sustainable modes are prioritised over private cars particularly in our activity centres and other areas identified within a Movement and Place Framework.





- Explore opportunities to reallocate road space for sustainable modes (bus, cycle, pedestrian priority) within a Movement and Place Framework.

- Ensure street-scape design guide-lines make streets attractive, accessible, and safe environments consistent with the road user hierarchy.
- Periodically review the municipal parking management policy.
- Review and update City of Kingston Road Safety Strategy.
- Advocate for (and work with) the State Government to implement new road projects such Mordialloc Bypass, Westall Road extension (between Princes Highway and Monash Freeway), the duplication of Governor Road (between Boundary Road and Springvale Road), and upgrade of South Road Moorabbin. For these projects, Council will also seek opportunities to provide safe pedestrian and cycling facilities.
- Review speed limits on key roads to reduce the risks to pedestrians and cyclists and to support the uptake of active modes.
- Review the 'last kilometre' of freight movement in Kingston's established industrial areas and produce destination freight management plans to improve way-finding, routes and technology to assist the distribution of freight in Kingston.
- Investigate the benefits of new and emerging transport technologies – such as driverless 'automated' vehicles, car sharing, app-based ride services, working from home, speed limiters, smart technology at traffic signals and street lighting that can improve congestion and improve safety.

- Review, support and advocate for use of electric vehicles and investigate providing infrastructure to support electric motor vehicles, bicycles, and mobility scooters.
- Advocate with DOT for improved safety and amenity on the arterial road network.

- Develop a program of Local Area Traffic Management (LATM) works in local streets that have been identified as traffic trouble spots and seek funding from State Government and other funding bodies.