Moreland Integrated Transport Strategy 2019

Appendix
Final

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1.1. Introduction

This document is the Appendix to the Moreland Integrated Transport Strategy ('MITS Appendix'). It builds on the MITS Background Report and contains further information, research and statistics which inform many of the strategies and actions in the Moreland Integrated Transport Strategy ('MITS'). The documents have been structured this way to reduce the length of MITS and improve its readability and clarity, whilst making background material available separately.

This document includes key challenges, a summary of key changes and a review of potential funding mechanisms. It is noted that the material in this Appendix is intended to inform MITS (and is not the Strategy itself) and is based on the direction provided by Council and the community, including input from Councillors at adoption.

1.2. Key Challenges

Growth and Congestion

What is the challenge?

Melbourne is forecast to overtake Sydney to become Australia’s most populous city by the 2030s and is on track to reach a population of eight million by 2051. Moreland’s population is expected to exceed 200,000 in the next five years and is projected to grow by 43,000 by 2036. As the city evolves, Moreland will need to begin a shift in the way we travel to protect our liveability and ensure we can continue to move efficiently.

As growth occurs, congestion and delays are worsening on roads across Victoria. The Victorian Auditor-General found that congestion is generally worse in inner Melbourne than in outer areas, with travel to school and work among the most significant contributing factors. Moreland is no exception, with 56 per cent of all journeys to work and 48 per cent of travel to educational facilities undertaken by car.

Moreland’s main roads are typically congested during weekday peak periods and across the middle of the day on weekends. During morning and afternoon peak periods on Sydney Road, when parking clearways are enforced, average travel speeds are typically slow, on average 17 kilometres per hour and 14 kilometres per hour respectively. Between peak hours across the middle of the weekday, when parking lanes are re-instated and general traffic shares the tram lanes, the average speed deteriorates to 9 kilometres per hour, the slowest of all arterial roads in Melbourne.

Traffic congestion can also slow on-road public transport services and make it harder to connect the right workers to jobs. It can introduce costs in time and fuel and significant carbon emissions and air pollution. By 2030, congestion is expected to cost every Melburnian $1,700 per year.

On the positive side, traffic congestion acts as a catalyst to change the way we travel and whether we travel at all. This includes shifting
to more environmentally sustainable, healthy or affordable modes, such as walking or cycling, which provide alternative access during periods of congestion.\textsuperscript{11}

Congestion can have the effect of changing what trips some people take, such as travelling at a different time of day or to a closer destination. This can result in more effective use of road space over the day, making shorter trips, and meeting daily or weekly needs more locally.

Traffic can also show that there is significant demand for travel to a location which may indicate latent demand for more efficient alternatives, such as public transport. Sometimes, the cost of building new infrastructure (like roads and public transport) can outweigh congestion’s cost to society, so that our roads are congested in peak periods can be a sign that we haven’t wastefully overbuilt our road network.\textsuperscript{12,13} While roads are typically congested in peak periods (and some key roads beyond this), many roads function adequately outside of peak times.

How can MITS address this challenge?

For the whole of Melbourne, the highest level of car use occurs during the morning and afternoon peak hours.\textsuperscript{14} This means at the times of day which have the highest demand for travel, we also have the largest number of the most space-inefficient vehicles on our roads at the same time.

Recent data shows that on average across Victoria, our traffic and on-road public transport lanes carry 570 – 800 people per lane per hour,\textsuperscript{15} far below the throughput achievable by other uses of the equivalent road space. By comparison, a dedicated bus or tram lane, or a two-way protected bikeway, could move up to ten times the number of people per hour in the same road width.\textsuperscript{16}

Figure 2: Capacity of a 3-metre (10-foot) wide transport corridor at peak conditions, National Association of City Transportation Officials\textsuperscript{16}

![Capacity of a 3-metre (10-foot) wide transport corridor at peak conditions](image)

Road schemes are often touted as ‘busting congestion’, but in an urban environment, if a road is widened or improved, more people will be attracted to use it. This phenomenon is known as ‘induced demand’ and is widely recognised as a problem in urban planning and a challenge facing our cities.\textsuperscript{17}

Building new road links can also encourage people to live further away from where they work, encouraging urban sprawl and ingraining reliance on the private car for travel.\textsuperscript{18} On this basis it is often said that we “cannot build our way out of congestion”\textsuperscript{19} and solving traffic congestion by building more roads has proven to be an unsustainable solution.\textsuperscript{19}

Instead, Council will implement a holistic transport solution for Moreland that considers both supply and demand-side interventions, and that seeks to break the self-reinforcing cycle of car dependency. The alternative is to promote a positive self-reinforcing cycle of integrated land use and transport planning which makes better, more efficient use of our existing

[Figure 2: Capacity of a 3-metre (10-foot) wide transport corridor at peak conditions, National Association of City Transportation Officials\textsuperscript{16}]

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urban space, including our road space. In short, increasing urban density, if managed well, can encourage more sustainable travel, and vice versa. As people live closer to their daily destinations, active modes become more convenient and viable. Likewise, while increased demand for public transport supports upgrades to services, which in turn encourages further increases in urban density, particularly around transport nodes and corridors.

Climate Change
What is the challenge?

The climate in Moreland is comfortable for most of the year, but we are increasingly feeling the impacts of climate change on our community and our environment. The consequences of climate change caused by humans are becoming more evident, with warmer weather and a number of ‘record’ high temperatures and heatwaves. More frequent and more intense fluctuations in weather and increasingly severe weather events can be expected, including droughts, fires, storms and floods. By 2030, approximately two weeks per year are expected to be over 35˚C. In September 2018, Council acknowledged that we are in a state of climate emergency requiring urgent action by all levels of government. The increasing severity of weather events (such as heatwaves) can be expected to impact on our community’s health and wellbeing. The body’s ability to respond to heat can be compromised in the elderly, infants or those with medical conditions, increasing the risk of heat stress, heat stroke or heat exhaustion, which can be fatal.

Weather events (like heat, storms and extreme rainfall) could also impact productivity, with more hot-weather ‘stop work’ events and potential disruptions to our infrastructure networks, including our transport and electricity supply. Weather events such as fire and floods can bring devastating consequences to safety and property, as well as substantial impacts on the natural environment. Rising temperatures can impact both land and water ecosystems and create challenges for food security.

How can MITS address this challenge?

In Moreland, transport accounts for more than one-third of an average household’s carbon emissions, and almost one-fifth of Victoria’s and Australia’s overall greenhouse gas emissions. Nationally, transport is the third largest source of greenhouse gas emissions, predominantly generated by road-based vehicles. On average, private cars are one of the highest-emitting modes of transport (on a per passenger-kilometre basis) in urban Victoria and are responsible for almost half of Australia’s transport-related greenhouse gas emissions.

Moreland has long been a leader in the sustainable transport space. In 2012, Council launched an electric vehicle hub in Coburg, including Victoria’s first electric vehicle ‘Fast Charge’ station and in 2013, we hosted an electric GoGet share car as part of the State Government’s Electric Vehicle Trial. Moreland also participated in Transport for Victoria’s ‘Bus Your Bike’ trial, with the ability to carry bicycles on front-mounted racks on routes 510 and 512.

We appreciate that being a true zero-emission community would require a shift to renewable power sources for our transport, including our electricity supply. As a city, we are heading in the right direction. In 2017, plans were announced to power the Melbourne’s tram network by solar energy.

The City of Moreland’s Council Plan has a goal of shifting towards zero-carbon emissions for the municipality by 2040. The Moreland Zero Carbon 2040 Framework recognises that “everyone in Moreland is responsible for climate change, everyone is vulnerable to the impacts and everyone must be part of the solution”. Consistent with these existing policies, many of the strategies and actions in MITS seek to reduce the production of greenhouse gas emissions which are driving climate change and halt the rising burden of carbon emissions and the impact of global warming on future generations.

Health
What is the challenge?

Many studies have confirmed the importance of recreation and physical activity to health and well-being. Organisations such as the Heart Foundation have also pointed out the link between urban form and physical activity – i.e. higher-density areas tend to be associated with higher rates of walking and cycling, while lower density, outer suburban areas have been found...
to be associated with more sedentary lifestyles, with certain groups in the community being more susceptible to sedentary behaviour than others.\footnote{\textsuperscript{31}}

More than 60 per cent of Australian adults and 25 per cent of Australian children are overweight or obese and coronary heart disease continues to be our single greatest cause of death.\footnote{\textsuperscript{32}} Australians spend more than $4,000 per person on health every year,\footnote{\textsuperscript{33}} with cardiovascular disease amongst the highest burden on the health system.

Almost half of Australian adults do not meet activity requirements to maintain good health.\footnote{\textsuperscript{32}} People in the lowest average household income areas tend to be overrepresented in these figures. For example, people living in disadvantaged areas are 2.6 times more likely to have diabetes and 2.2 times more likely to have a coronary heart disease. People in lower socioeconomic areas are also twice as likely to not undertake physical exercise compared to those in the highest socioeconomic areas.\footnote{\textsuperscript{34}} People with disabilities are significantly more likely to be obese or undertake inadequate physical exercise.\footnote{\textsuperscript{32}}

In a world where people are increasingly ‘time poor’, swapping to more active modes of travel (such as walking and cycling) is an easy way to increase physical exercise every day and decrease risk factors associated with major health issues. People need 30 minutes of moderate-intensity exercise five times a week to realise the health benefits of physical activity.\footnote{\textsuperscript{35}} We need not go to the gym or participate in a team sport to hit our target - the health benefits of choosing active travel for our everyday trips are comparable to those of formal exercise programs.\footnote{\textsuperscript{34}}

How can MITS address this challenge?

In Moreland, many short trips are currently undertaken by car, particularly over shorter distances.\footnote{\textsuperscript{36}} Many of these trips could be undertaken on foot or by bicycle, or a combination of these modes and public transport.

Studies have shown that people commuting by more active modes (walking, cycling and public transport) tend to have a lower body mass index and lower percentage body fat than those who drive.\footnote{\textsuperscript{37}} Commuters who walk and cycle also report significantly higher satisfaction than those who drive or take public transport.\footnote{\textsuperscript{38}}

Community feedback identified high speed traffic, limited crossing points and the need to cross multiple lanes of traffic as key barriers to walking, along with poor quality footpaths and large distances between homes and key destinations. Concerns were also raised about cars pulling out of driveways on busy streets, creating safety conflicts. For cycling, consultation identified traffic speeds, risk of dooring, road rage and congested traffic as key barriers, along with busy shared paths, unmaintained bicycle paths and disappearing bicycle lanes.

Acting on these barriers to can help create an environment which is conducive to active travel and a healthier lifestyle.
Safety

What is the challenge?

There have been almost 5,000 reported crashes in Moreland since 2006, with almost one in five crashes involving a cyclist and 15 per cent involving a pedestrian. Almost one third of crashes resulted in a serious injury, requiring hospitalisation. Most crashes occurred during the day and when conditions were dry.39

Some of the densest corridors for crashes involving cyclists in Moreland are located along Sydney Road and Lygon Street, particularly at the southern end of Moreland.39 These corridors are overrepresented for dooring incidents, side-swipe or incidents where cars turn left across the path of bikes (or vice versa). They are also overrepresented in incidents which resulted in serious injury, requiring hospitalisation. Most fatal or serious injury crashes involving cyclists were caused by either cyclists or cars turning right across through traffic.39 Dooring incidents represented one in eight crashes involving bikes in Moreland, while one in five crashes were the result of a right-turn-across conflict.

The densest concentrations of crashes involving pedestrians on the road are also along the same corridors of Sydney Road and Lygon Street, as well as localised high-pedestrian areas in Coburg and Glenroy.39

Consultation identified unsafe environments as a major barrier to walking and cycling. Many parents do not feel comfortable allowing their child to walk or cycle to school because it is perceived as unsafe. In Australia’s car-dominant culture, there is a tendency to protect children from the dangers of car traffic by keeping them in cars.41 As a result, in absolute terms, an Australian child is four times more likely to be killed as a car passenger than as a cyclist and nearly twice as likely to be killed in a car than as a pedestrian.40 Similar results were found in other Australian data which showed 59 per cent of transport-related deaths of children occur when the child is a car passenger, compared to 6 per cent on a bike and 26 per cent as a pedestrian.42 Children are allowed to cycle on footpaths until age 1243 and are often accompanied by adults.

Adults are also approximately five to ten times higher in risk of injury walking and cycling compared to driving a car.44 In relative terms, fatality risks are generally higher for pedestrians and cyclists than car passengers. Council is committed to improving conditions for vulnerable road users to reduce the risk of active travel and make walking and cycling attractive and accessible for everyone.

“I frequently ride with my young children, to their school and to local shops and to visit friends and with better infrastructure this could also be much safer” – Community consultation

Themes of personal security were also prevalent throughout the community consultation. Blind spots and poor lighting were raised as barriers to both walking and cycling. For public transport, community consultation identified ‘feeling unsafe at the..."
stop or station’ as the greatest barrier to tram use and amongst the highest barriers to train use in Moreland. ‘Poor waiting facilities’ and ‘stop seems unsafe’ were listed amongst the barriers to bus use.

How can MITS address this challenge?

Countries applying best practice for pedestrian and cyclist safety demonstrate a strong commitment to establishing a safe and comfortable active travel environment, including through the provision of infrastructure, safety education, speed reduction measures, traffic management and training. Council will continue to improve the safety and accessibility of walking and cycling routes, including committing not to install any new roundabouts due to poor safety and accessibility outcomes for pedestrians and cyclists.

Community responses suggested that reducing speed limits to 40 kilometres per hour (or lower) for vehicles and increased separation of cyclists from other modes (including pedestrians) would improve safety for all users. Broader feedback also identified a preference for reducing speed limits to encourage walking and cycling.

Reducing speed limits are a significant measure Council can pursue on many roads to create a safer environment for all road users. Research undertaken by the International Transport Forum for the Organisation of Economic Cooperation and Development (OECD) found a direct link between vehicle speed and crash occurrence and severity. A 10 per cent increase in average speed (for example, from 50 kilometres per hour to 55 kilometres per hour) can lead to a 40 per cent increase in fatal crashes, a 30 per cent increase in serious crashes and a 20 per cent increase in crashes which result in an injury.

The impact force of a vehicle colliding with a pedestrian at 30 kilometres per hour is enough to be fatal, with the risk of injury or death rapidly increasing with higher speeds.

Research by the World Health Organisation has found that a decrease in travelling speed by even 1 kilometre per hour can lead to a 2 to 3 per cent reduction in road crashes.

Trials in the UK found that decreasing speed limits resulted in an increase in walking and cycling trips. Other trials in the UK found that reducing speed limits resulted in more people cycling to school, more people walking regularly, more residents feeling safe for their children to walk to school and more primary school children allowed to play unsupervised on the street.

Around the world, cities and towns are making the shift to 30km/h zones to make their streets safer, quieter and calmer. Locally, some shopping strips in Melbourne and Perth have applied 30km/h speed limits. In 2017, the City of Yarra announced a trial for a 30km/h speed limit on local streets in Fitzroy and Collingwood. The City of Melbourne is also contemplating the introduction of 30km/h speed limits in central Melbourne under their revised Transport Strategy.

Reducing speed limits are not expected to significantly impact on travel time for car drivers, with some studies showing increases in vehicle journey times of seconds, rather than minutes. Initial studies in advance of the City of Yarra trial indicated that motorists would be delayed by less than 12 seconds per kilometre travelling at 30 kilometres per hour per hour compared to 40 kilometres per hour. These delays may be partially absorbed by congestion or other stoppages, such as at traffic lights. Reducing speed limits will help make everyone, especially children and the elderly, feel confident to travel on foot and bike to service their daily needs and make streets easier to cross.
With respect to personal security, Council will take actions to create safer spaces for all women and men, day and night, including by normalising walking and cycling and putting more ‘eyes on the street’.

**Air Quality**

What is the challenge?

In Melbourne, motor vehicles contributed to almost three quarters of carbon monoxide and nitrogen oxide emissions and almost a third of all small particle and volatile organic compound emissions,\(^5^3\) which can cause a range of health complications.\(^5^4\)

Diesel exhaust has been called “more carcinogenic than cigarette smoke.”\(^5^5\) Exhaust from diesel fuel contains more than forty air contaminants, including confirmed or suspected carcinogenic substances. Some of the most vulnerable members of our society have the highest sensitivity to diesel exhaust, including children, the elderly and those suffering from health complications. The microscopic particles released in exhaust can enter the lungs, eyes, nose and throat, causing a range of health implications from irritation to chronic respiratory issues and increased risks of lung cancer.\(^5^6\) Exposure to diesel particles can also make asthma and allergy sufferers more susceptible to symptoms.

How can MITS address this challenge?

Moreland has comparatively limited vegetation to provide shading, evaporative cooling and to combat air pollution.\(^5^7\) In recent years, Council has planted more than 5,000 street trees each year to contribute to the greening of Moreland.\(^5^8\)

“**In addition to offering shade, they reduce ambient temperatures in hot weather, absorb rainwater and tailpipe emissions, provide UV protection and limit the effects of wind. Trees also slow cars and improve the sense of enclosure by ‘necking down’ the street space with their canopies. A consistent cover of trees can go a long way toward making up for an otherwise nasty walk’.**” – Walkable City, Jeff Speck

More broadly, Council will encourage a shift away from fossil-fuel reliant vehicles to more efficient modes of travel, zero-emission transport and active travel alternatives.

**Equal Access**

What is the challenge?

Almost one in five Australians report living with a disability,\(^6^1\) which can have wide-ranging implications on liveability and accessibility. Those with disabilities are less likely to work, more likely to have lower levels of income and less likely to have a Year 12 education (or equivalent) than those without a disability.\(^6^2\)

We can only be a successful city if we maximise access to daily destinations for all of our people, and minimise ‘transport disadvantage’. For Moreland, this means ensuring that everyone has access to a range of transport choices that empower and provide independence. It also means accommodating the needs of all forms of disability, be it vision impairment, impaired hearing, mental health, intellectual disability or a physical disability.

Moreland’s Disability Working Group highlighted the inaccessibility of trams as a key barrier to their use. The limited range of accessible platforms and older trams mean that users with disabilities either cannot access services or cannot disembark at their desired destinations. Other users with limited mobility (including the elderly) or with prams often have difficulty accessing and disembarking the high steps on older trams. Narrow station platforms and entrances and footpaths introduce challenges to manoeuvrability. Some feedback indicated that poorly maintained footpaths, poor access for those with disabilities, dangerous crossing facilities and a lack of footpath links or crossings as key access barriers in Moreland. Broader consultation also reiterated the findings of the Working Group, with difficult access to tram stops and poor shelter and facilities (including seats) for disabled users.

“I would like the option of using trams but most of the trams and/or tram stops are not wheelchair-accessible, which rules trams out most of the time for me” – Community consultation
“I am disabled and cannot cycle or walk far, so rely more on other forms of transport which can be disappointing.” As we evolve, we need to ensure our streets are designed with all users in mind – when we accommodate for those with higher needs, we accommodate everyone” – Community consultation

More broadly, roads, freeways and railway lines can all introduce impediments to travel, where other users (such as walkers and cyclists) are required to travel out of their way in order to cross. Other impediments, such as parked cars, kerbs without ramps, stairs and overpasses or underpasses can also interrupt access for a range of users, including those with disabilities, prams, cyclists or limited mobility.

In Moreland, major arterial roads like Bell Street and Sydney Road, as well as railway lines and natural constraints like creeks are often considered to create severance effects on communities and introduce barriers to access for many users.

**Severance**

The presence (or absence) of transport infrastructure can have an impact on the way people live, move and behave. ‘Severance’ occurs when there is interference with the “ability of individuals to access goods, services or personal networks.” A common example is the barrier caused by physical transport infrastructure (such as roads, railways, structures and parking lanes) which inhibit the ability for pedestrians to access services and facilities beyond. The presence of other barriers, such as the speed or volume of passing traffic, restricted access routes (such as freeways) or access limitations for some users (such as stairs or kerbs) also create severance effects. While the introduction of footbridges and underpasses are often well-intended, these can also cause severance by creating longer journey times for users compared to at-grade crossings and often insufficiently cater for people with mobility restrictions.

In community consultation, walkers and cyclists alike identified ‘dangerous crossing’, ‘too long to wait to cross at signal’, ‘limited time to cross at signal’ and ‘cars ignoring traffic signals’, ‘speeding traffic’ and ‘cars blocking footpath’ as issues in Moreland. ‘No crossing facilities’ was identified as the number one barrier to walking in Moreland. ‘Speeding traffic’ was also the number one car issue identified in consultation.

Safer crossing points, shared zones, removal of on-street car parking, increased number of crossing points, increased crossing time for pedestrians, additional crossing bridges across the railway lines and creeks, more road space for pedestrians, automated pedestrian crossings and more accessible crossing points were identified as potential enablers to walking by the community.

Similarly, more crossing points, reduced speeds on cycling routes, removal of car parking on cycling routes, removal of level crossings and automated bicycle crossings were identified as potential enablers to cycling.

**How can MITS address this challenge?**

Council will work to ensure everyone has access to a range of transport choices that empower and provide independence. The higher needs of our community are not limited to mobility. Council will work to ensure its infrastructure provides access to a range of transport choices for users of every level of ability, including expanding the number of accessible (disabled) parking bays. Council will also advocate to other levels of government to continue to improve the accessibility of transport services throughout the municipality.

More broadly, Council will work to provide pedestrian crossings in locations where they are sought, based on understanding of desire lines. Council will also continue to pursue initiatives which prioritise pedestrians and cyclists.
1.3. Summary of Key Changes

1.3.1. Smarter parking management

What is the situation?

Background

During consultation, we asked the community to identify their level of support for two car parking scenarios – one which provided an abundance of free car parking on-site and at activity centres, and another which provided reduced (and paid) car parking where there was good access by public transport, walking and cycling. The community response was evenly divided across the two options, with support for both scenarios.

Responses from the north of Moreland favoured the scenario with more and free car parking, while responses from the south slightly favoured lower car parking provision in areas of good alternative transport access. This highlights the higher dependence on the car in the north of Moreland, where high-frequency public transport and access to walking and cycling are less prevalent. In these areas, people are likely to use their car to access key services and destinations due to a lack of viable alternative options, or distance between homes and activity centres. Due to car reliance, respondents in the north are likely to see car parking as a necessity and given higher car ownership, are likely to favour more car parking in apartment buildings.

By contrast, respondents in the south are more likely to have access to daily needs by other modes, including by higher-frequency trams, walking and cycling. As a result, respondents in the south are more likely to appreciate car parking as an inefficient use of space and favour a reduction in actions which support car use in areas where alternatives are available.

The community told noted that different responses to parking were required for different areas across Moreland, recognising the different contexts.

Car Parking Provisions

Current planning laws in Moreland require a certain (minimum) number of car parking spaces to be provided for every new development in the municipality, based on its scale and type of use. If a developer wishes to provide less than this minimum level, they must seek approval from Council, even if the site is very near good-quality public transport, walking and cycling links, shops or on a road that is heavily congested. This current arrangement is called a “minimum parking provision”, because it sets a minimum level of car parking that must be provided.

A London study found that planning regulations forcing developers to provide a set minimum rate of car parking actually resulted in an oversupply of parking that was underutilised. When this requirement was removed, parking continued to be provided, but at a rate approximately 40 per cent lower. The surplus that was initially required was an inefficient use of space, as well as an avoidable increase to housing cost.

State Government Car Parking Levy

In 2005, Melbourne introduced a congestion levy to off-street car parks in the central city area to reduce traffic congestion and encourage drivers to use alternative modes to access the CBD. Owners and operators of car park spaces in the congestion levy zones are required to pay an annual fee for all non-exempt car parking spaces. Exemptions apply for spaces which are exclusively provided for disabled users, residents, visitors, hotel guests, loading, emergency vehicles or employees of specific organisations such as charities and hospitals.

In 2015, the car parking congestion levy was extended to other areas of inner Melbourne, including parts of Moreland to the south of Dawson Street/Glenlyon Road. In 2018, owners and operators of car parking spaces are required to pay $1,000 annually for every non-exempt off-street car parking space. This cost can be passed on to the person using the parking space. The revenue from the scheme is returned to the state government, with the City of Melbourne receiving a lump sum.
annual payment to be spent on transport initiatives. At present, state revenue collected from the levy is not returned directly to Moreland or necessarily used for improvements in the area.

What is the solution?

**Car Parking Provisions**

MITS proposes to introduce a ‘maximum parking provision’ in ‘Activity Centres’ where there is generally good access to walking, cycling and public transport, as well as the ability to service many daily needs nearby. The Activity Centres are generally located along major commercial strips in Brunswick, Coburg and Glenroy. This means the planning scheme will set the maximum number of car parking that can be provided in a new development and developers can then provide any amount of car parking between zero and the maximum limit as of right. If a developer wishes to provide more than the maximum limit, they must seek approval from Council. This approach limits oversupply of car parking, controls congestion in the area and provides new residents with a choice about a level of car parking to suit their needs.

The case for introducing maximum car parking provision includes:

- Consideration of maximum rates under the former Moreland Zero Carbon Evolution Strategy (now the Moreland Zero Carbon 2040 Framework).
- In 2004, car parking maximums were implemented across London which led to a 15 per cent reduction in trips by car in Councils that have similar public transport access and housing density to Moreland (Brent and Greenwich).
- Recent research suggest that parking maximums help restore the attractiveness of inner cities and promote smart growth.
- Policy analysis by RMIT shows that the historical intention of car parking minimums does not align with the objectives for MITS.

Introducing maximum car parking rates also allows a greater mix of housing affordability, with the flexibility to construct some (or all) housing with or without car parking. The Real Estate Institute of Victoria estimates that a car space can add more than $100,000 to the price of a one-bedroom apartment in central Melbourne, compared to an apartment with no parking. In Moreland, a one-bedroom apartment in Brunswick or Coburg can cost $40,000 - $60,000 more to buy than a similar apartment with no car space. Providing a lower level of car parking does not necessarily represent profit for the developer – the savings can be passed on to the purchaser.

Generally, it would be expected that some degree of parking would be provided, dictated by market appetite. For example, car parking is still provided in Melbourne CBD, where there is no minimum requirement and a maximum car parking rate applies instead. Maximum car parking rates also exist in other areas of Melbourne’s central city and surrounds (including Carlton, Southbank, Docklands and Fishermans Bend), Footscray Major Activity Centre and in London.

MITS also proposes to introduce restrictions to on-street spaces in the surrounding area to ensure that development does not simply seek to benefit from surrounding parking supply while not contributing to the supply in any form. This also provides many existing residents, eligible for resident parking permits, with greater opportunity to continue to use local on-street parking where they have no other alternative. Per current policy, new developments would not be able to access on-street car parking permits in lieu of providing car parking on-site. At the same time, Council will expand the number of accessible (disabled) parking bays, particularly in areas where parking restrictions are being applied.

**Paid Car Parking**

To manage demand, Council will seek to extend paid on-street car parking in appropriate and strategic locations (such as activity centres) to encourage the turnover of vehicles, more fairly price the use of roads and encourage visitors to use other modes to access their daily needs, while also providing opportunities for all-day parking. The locations, fees and timing of delivery will be assessed and extended periodically. Introducing paid parking as a demand management measure will also support the objectives of maximum car parking rates, which together aim to reduce car ownership and dependence. Revenue raised from the introduction of paid parking, as well as from transport-related permit schemes such as residential and
business car parking permits will be returned into sustainable transport investment for Moreland or improvements to the local area.

Council will also ensure that use of its public space by private enterprises is also appropriately valued. At present, car share companies pay a nominal fee to use on-street parking areas to provide their services. Council will review the cost of the space used for car share and similar privately-operated transport schemes to ensure they represent value for money to Council and are priced to reflect use of public space.

**State Car Parking Levy**

As part of MITS, Council will also advocate for state government car parking levy revenue to be shared with the Councils in which the levy is collected, consistent with recent Infrastructure Victoria recommendations.

**Summary**

In summary, the key directions of MITS are:

- Permitting less parking in new developments to allow people to choose a lower level of parking to suit their needs
- Expanding parking restrictions to protect local streets from changes to parking requirements in new developments
- Using paid parking in some areas for all-day parking

Further actions can be found in the Implementation Plan chapter of MITS.

**Reallocation of road space & creating safer, quieter streets**

What is the situation?

Recognising the value of space as a limited resource in urban areas, we need to shift the way we view our streets to capture the two key functions they play in our community:

- A corridor for movement – where streets function as conduits in moving people.
- A place for people – where the community is encouraged to linger and spend time.

In Moreland, our streets take up a significant proportion of our urban space, with roads, footpaths and nature strips presently making up more than one fifth of our community’s land. Some of our older streets are relatively narrow and we do not have many road reserves available to widen our streets, meaning any expansion of our road space would require expensive and complex land acquisition. This generally does not reflect the best use of Council’s limited funding or resources. Giving greater priority to sustainable transport modes (including walking and cycling) means more people can travel along our limited road space.

Moreland is fortunate to have a relatively flat topography across most of the municipality, ideal for walking and cycling. Household survey data shows that approximately two-thirds of trips originating in Moreland are less than five kilometres in length, with 60 per cent of these trips undertaken by private vehicle. This represents a significant opportunity to encourage mode shift to walking and cycling. Walking and cycling make up a quarter of all trips in Moreland but for travel to work, active travel comprises just 10 per cent of journeys, potentially due to longer commuting distances.
Current walking and cycling uptake is typically higher in suburbs in the south of Moreland, where there is a denser fabric of walking and cycling routes and a diverse mix of land uses close to higher-density housing, enabling residents to live locally. The southern suburbs are also central to key employment areas for Morelanders, including the CBD, inner north (Carlton, Parkville) and within Moreland (Brunswick, Coburg). Community consultation reflected these realities, with ‘travel time’ and ‘distance’ raised as barriers to walking and cycling more often in the north of Moreland than in the south of Moreland.

Travelling by foot and bicycle are environmentally-sustainable modes of travel, generating zero pollution or emissions, no demand for fossil fuels during use and no noise impact. They are also amongst the most reliable modes of travel for many local trips and can be a time-competitive choice for short distance trips, particularly considering the time it takes to park a car and walk to the final destination. Walking and cycling have a very low space requirement, meaning valuable urban space can be used to move more people, more efficiently.

Cycling, and in particular e-bikes, can help ease topographical challenges in hillier areas, such as near creeks, in Pascoe Vale and when travelling to neighbouring areas like Moonee Valley. E-bikes make it easier for people with lower fitness levels, the elderly or physically impaired individuals to choose cycling as a genuine form of transport. They increase the distance that a cyclist can travel (compared to a traditional bicycle) and make other applications for the bicycle (such as transporting children or goods) more viable.

During the community engagement conducted in February and March 2018, we asked the community to consider two scenarios to understand the level of support for a walking and cycling-friendly environment against a car-oriented environment. Of the hundreds of Morelanders who responded, there was strong support for improvements for pedestrians and cyclists, even where this might decrease convenience for car users, such as lower speeds or longer waits at intersections. There was strong support for this scenario across both northern and southern suburbs of Moreland, and also among car users, not just people who only use public transport, cycling and walking. The feedback reflected support for lower speed limits, traffic management measures, more crossings and greater pedestrian and cyclist priority. It also showed a preference for allocating a greater share of our road space to wider footpaths and more bicycle lanes.

We also asked the community to consider two scenarios which tested the level of support for various levels of public transport priority. Again, there was overwhelming support for giving public transport the highest priority over cars, including tram and bus lanes, priority at traffic lights and restrictions on turning movements so cars don’t hold up public transport services. This support was again consistent across both the north and the south of Moreland and across current drivers, passengers, cyclists and public transport users alike.
Many community consultation responses sought stronger pedestrian priority, with more road space given to pedestrian uses in activity centres, longer crossing times and more accessible and regular crossing points. Consultation responses suggested road closures and improved and widened footpaths to improve access and establish a sense of place.

From a cycling perspective, safety was identified the most significant concern, particularly in the south of Moreland. Feedback reaffirmed the need to create a 'low-stress' cycling network that gets people from A-to-B safely and conveniently. This requires an extended and integrated bicycle network that provides access to a wide range of areas, needs and services, improved capacity on key routes, separation from other users (including pedestrians and dog-walkers) where possible and removal of risks to cyclists, such as ‘dooring’ risks introduced by parked vehicles and other obstructions in bicycle lanes. Designing a safe, low-stress environment will enable access for more of the community to cycle, including underrepresented groups such as women, children and the elderly.80

Community consultation also identified that traffic rat-running and hooning through local streets is an issue. Research undertaken on behalf of Infrastructure Victoria found that more than two-in-five peak hour travellers will regularly take shortcuts on local streets in response to congestion. In addition, more than a quarter of peak hour travellers experience congestion on local streets and ‘back streets’.81

What is the solution?

Council are open to removing car parking where it will benefit sustainable transport or create a greater sense of place, for example by providing widened footpaths, bicycle lanes, public transport priority or improved streetscapes. Council will support a net loss in car parking where this improves sustainable transport or place outcomes.

Council will also take steps to protect local streets through strategic road closures, which reduce through-traffic volumes and rat-running. As the case studies below demonstrate, this can improve safety outcomes and perceptions of safety in terms of both road safety and personal safety.

CASE STUDY
CANNING STREET, CARLTON NORTH

Canning Street is a local traffic street in Carlton North which serves as a key north-south cycling thoroughfare. VicRoads data shows more than 3,600 cyclists using Canning Street on a typical day, including more than 800 in the morning peak hour.82

Canning Street features on-street cycling lanes along most of its length and despite its convenient north-south alignment (parallel to Nicholson Street and Rathdowne Street), the street presents a safe environment for cyclists due to a series of road closures in strategic locations. These closures enable pedestrian and cyclist permeability (with paths and bollards) and maintain local access to properties but prevent rat-running by making travel through local streets inconvenient for private cars.

A recent study undertaken by CrowdSpot sought to understand how comfortable and safe people feel on bicycles in Melbourne. From more than 8,000 submissions, Canning Street was perceived by the community as the number one ‘safe spot’ for cycling in Melbourne.83
CASE STUDY
WILSON AVENUE, BRUNSWICK

In 2015, Moreland introduced the first new park in Brunswick in 15 years at the intersection of Wilson Avenue and Sydney Road. The area was perceived as unsafe and unattractive, with no reason to linger or spend time. At the same time, there was a high turnover of retail business on the street. A park was proposed to reduce crime, establish Sydney Road and Wilson Avenue as a place and act as a catalyst for further investment in the public realm in Moreland.

The park closed Wilson Avenue to traffic and provided green space, trees, places to sit, artwork and a climbing wall for all abilities. Feedback from the community has indicated that the park “gives a really nice sense of place to the neighbourhood” and establishes “a community vibe and feels like a safe neighbourhood space.”

Data showed that the park was used by hundreds of people every week, even during winter. The peak number of pedestrians passing through the area increased by 50 per cent and shifted from the morning to the early afternoon, indicating that the space had become a public place which was well-used and well-loved.86

“...this clever piece of planning has taken our avenue back and humanised it. Before this happened, the pedestrian, cyclist and motor vehicle balance was out of equilibrium, dominated by motor vehicles. The businesses on this side of Sydney Rd seem to be busier also. This is now a place where we see all generations enjoying a well-designed community space...”86

- Survey Response, Wilson Avenue One Year Evaluation Report
Fostering a walking and cycling environment has been shown to contribute to the economic prosperity of activity centres. For example, one study of Lygon Street, Carlton found that each square metre of bicycle parking generated five times more customer retail spending than one square metre of car parking space. This means that if shopping strips can attract more cyclists and fewer car drivers, it may assist in stimulating retail activity. Another study in Brisbane showed that restaurateurs overestimated (by more than double) the mode share and revenue share of people driving to their venues, with the highest revenue share generated by customers who walked or took public transport.

More broadly, the key directions in MITS are to:

- Reallocate space from cars and car parking to walking, cycling and public transport
- Reallocate space for greener, more pleasant streets
- Create more pedestrian crossings
- Continue to roll out 40km/h limits on all local roads
- Reduce speed limits on arterial roads near places like schools, hospitals and activity centres
- Conduct a 12-month trial of 30km/h limits in selected areas
- Close some local roads to through traffic

Further actions can be found in the Implementation Plan chapter of MITS.

In implementing these measures, Council will prioritise:

- High volume pedestrian and cyclist areas, such as activity centres, around hospitals, schools and community facilities
- Areas of high pedestrian and cyclist casualties, such as activity centres in Glenroy, Coburg and Brunswick
- Areas on the Principal Pedestrian Network and Strategic Cycling Corridors
- Key walking and cycling routes to schools
- Streets with strong year-on-year traffic volume growth due to rat-running
- Areas with a high ‘place’ function

Advocating for better public transport

What is the situation?

Public transport is one of the most effective ways to move a large number of people in a small amount of road space, particularly over longer distances and where services are given priority. Public transport services can move people more efficiently than by car, even when co-mingled with traffic.

Melbourne’s public transport system is estimated to remove 540,000 cars from the road network in peak periods every day. In Moreland, more than 70 per cent of surveyed households live within a 10-minute walk of the nearest public transport service, with analysis showing areas in the north of Moreland more likely to be outside of walking distance of public transport than the south.

Studies show that in general, travel on a full public transport service is significantly less energy-intensive (on a per passenger kilometre basis) than travel by private car. On average, in urban Victoria, electric trains and trams are less greenhouse gas intensive than private cars (per passenger-kilometre), while buses are, on average, more intensive. This could be mitigated by the implementation of electric buses, particularly those powered by renewable energy sources. It is important to note that public transport services are provided for a broader range of reasons, including to meet social, accessibility, equity and agglomeration needs, rather than solely environmental or economic reasons.
In summary, when well-utilised, public transport modes can represent a more sustainable alternative to private vehicle travel, in terms of reducing emissions per passenger kilometre and also tackling congestion on our roads. However, at present, public transport comprises almost one-in-ten of all Moreland trips and a quarter of all journeys to work – there is significant scope for greater use of public transport in our municipality for many trips. Council will work with the state government and transport providers to improve the public transport experience for Morelanders, with stronger network integration enabling people to get around with smoother transfers between different modes.

“Trains through Coburg do not run frequently enough and are always too full. To go into the city, I’d rather take the tram as while it takes longer, it’s more comfortable and accessible” – Community consultation

Bus

In Moreland, community consultation showed waiting time, travel time and inconvenience to be the biggest barriers to taking the bus. Travel time, reliability and a lack of bus routes to desired destinations was a particular issue in the north of Moreland. People also expressed frustration with existing bus services as a viable mode of transport, telling us that buses do not run often enough, nor in all the hours they are needed. Many were also dissatisfied with the reliability of buses, which are often late due to congested traffic.

Analysis shows that bus services in the north are generally infrequent, even in peak periods. Once on board, residents in the far north (such as Fawkner and Gowanbrae) cannot travel as far on public transport in a given timeframe as those living in the southern suburbs. On weekends, the quality of public transport services deteriorates even further. Across Moreland, bus services generally run at half-hour intervals or longer on weekends (with the exception of a handful of routes operating at 20-minute frequency), while some areas are serviced by only one bus every hour (or longer). Many services which provide the only public transport options in the far north of Moreland (including in Gowanbrae and parts of Glenroy and Hadfield) do not operate on Sundays, cutting connectivity in areas where transport accessibility is already strained. In these areas, a heavy dependence on cars is evident – Gowanbrae has the highest car ownership in Moreland and approximately 90 per cent of residents drive to work. Many east-west services in the south of Moreland are also discontinued on the weekend, creating further barriers to lateral movement across the municipality.

“Frequency is too low to make it a primary mode of transport... during the busiest times, which is also when I would most like to take the bus, it does not appear to run to any discernible schedule. This makes planning to take the bus impossible” – Community consultation

Tram

VicRoads data shows that roads with trams carry more people (per lane per hour) than those without trams. Tram movements could be even more efficient with improved prioritisation or separation from general traffic. Trams which co-mingle with car traffic have lower average travel speeds than those which are separated, with the highest average travel speeds achieved in a ‘light-rail’ environment. Waiting times and travel times were also identified as challenges for tram uptake in Moreland, with trams co-mingling with on-street traffic introducing delays and experiences of overcrowding in peak hours.

Market research for Yarra Trams shows the focus for tram improvements should revolve around travel time reliability, accessibility to services and targeted improvements to frequency and capacity.

Train

Community consultation identified distinct differences in the needs and challenges for train travel in the north of Moreland, compared to the south. In Moreland's southern suburbs, waiting time was the most significant barrier to travel by train, reflective of overcrowded trains in peak periods, perceptions of service infrequency and experiences with trains skipping stops or “short shunting” (terminating before the end of the line) when they are running late.
Distance to train stations was also a significant barrier for train travel in the south of Moreland, with many identifying that trains are not within walking distance of home and did not travel where they needed to go. By comparison, waiting time and destinations were considered less of a barrier in the north of Moreland, and safety was a much greater concern to residents compared to the south.

"...I have also found the Upfield line to be unreliable and often there are delays or cancellations and when there is only a train every 20 mins every delay or cancellation causes great disruption" – Community consultation

What is the solution?

Council does not have direct control over public transport in our municipality, but can advocate to relevant authorities and agencies on behalf of the community Council is more likely to achieve state government investment and positive public transport outcomes for the community if it focuses its advocacy efforts on a smaller number of priority outcomes and consistently supports state government-led improvements.

The key directions in MITS are to advocate for:

- Improved frequency and span of hours for bus services, particularly in the north of Moreland and running east-west, including that buses should run from first train and tram to last train and tram in a 24-hour period
- Improved reliability for bus, tram and train services, including supporting removal of car parking if this improves public transport priority
- More capacity on trains and trams
- Increased frequency of night time trams and trains
- Improved accessibility to public transport services
- Better connectivity between transport modes

Further actions can be found in the Implementation Plan chapter of MITS.

Fostering partnerships for sustainable transport

What is the situation?

Emerging and Future Technology

Intelligent transport systems are likely to start re-shaping how we travel within the next decade. Vehicles themselves will start ‘talking’ to one another, and to roadside infrastructure, potentially improving safety for all road users, including pedestrian and cyclists. We may begin to see the introduction of automated vehicles that may enable more people to give up owning cars of their own. Both driverless shuttles and taxis have the potential to better support ‘first- and-last-mile’ travel. However, this technology may also increase vehicle travel through increased uptake and the empty-running of vehicles.

We will also likely see continued demand for ride-sharing and the continuing introduction of ‘disruptive’ personal mobility devices (such as motorised scooters). These modes, and other emerging technologies and trends, will open the door to potential integrated solutions, such as mobility- as-a-service.

However, while ride-sharing services do give residents an alternative to owning cars and service users who cannot use other modes, evidence is emerging from around the world that the operation of these services could potentially increase overall car travel, by drawing people away from public transport, walking and cycling.94

Throughout the delivery of emerging and future technologies, Council will continue to recognise mass transit as a reliable, sustainable and efficient way of moving large volumes of people.

Looking forward, there are many unknowns in the timing, nature, intensity, consumer response and drivers for various emerging technologies. In many cases, the introduction and rollout will fall under the domain of other government agencies and private entities.
What is the solution?

Emerging and Future Technology

Council has a role to play in guiding the development of new technology in Moreland, but it will also need to be responsive to global trends (e.g. Uber, Lime scooters). An ongoing challenge will for Council to cut through the complexity created by the technologically-propelled wave of new ideas.

Council will collaborate with new providers and operators, as long as their technology is aligned with the vision and outcomes of MITS. This means the technology will:

- Improve social equity, access, safety, liveability
- Improve environmental sustainability
- Contribute to the economic prosperity of Moreland
- Minimise negative impact on the community
- Represent value for money to Council, or be cost-neutral
- Be implemented collaboratively with Council, including sharing of data

Proposals which meet the above criteria will be supported. Any proposals which negatively impact upon any of the above outcomes for Moreland will not be supported. This approach includes (but is not limited to) emerging technologies such as autonomous vehicles, on-demand transport, transport sharing (bike, car, scooters etc.) and transport hailing (ride-hailing) operators.

Council will also be more proactive in understanding its data gaps and requirements and work with transport operators to encourage the sharing of data to address these gaps.

Freight and Loading

By its nature, local freight and loading services often require proximate and convenient access to their destinations, often in larger vehicles and at varying times of day. Council will work with the local business community to improve the operation of loading areas, explore further opportunities for business parking, and promote alternative modes of transport to the business community and their customers. Broader actions in MITS also seek to make business precincts (like shopping strips) more attractive.

Summary

The key directions in MITS are to:

- Work with schools to support walking and cycling
- Work with communities to support behaviour change
- Work with traders and business to improve loading and deliveries

Further actions can be found in the Implementation Plan chapter of MITS.
1.4. Ongoing Funding Mechanisms

Aside from Council’s capital and operational funding, the planning and delivery of sustainable transport infrastructure on an ongoing basis will require funding provisions. According to the Council’s 2016-17 Annual Report, the amount of infrastructure spending was around $15.5 million in 2016-17, of which footpaths and cycleways accounted for around $2.6 million or 17 per cent of the total. The spending on footpaths and cycleways included dedicated bike lanes and wider footpaths on Dawson Street in Brunswick as well as an upgrade to the pedestrian crossing at the Upfield bike path. The previous infrastructure spending provides a broad indication of the annual funding requirements, while noting the implementation of the bike strategy may require additional funding into the future.

In terms of the Council’s revenue, in 2016-17 the Council received a total revenue of $205 million. Council’s rates and charges represent the most significant revenue source accounting for 67 per cent of the total revenue, followed by grant funding at around 10 per cent and development contributions at around 9 per cent.

Figure 9: Moreland City Council’s revenue breakdown (2016-17 actuals)

Source: Moreland City Council 2016-17 Annual Report

The revenue breakdown suggests that while rates and charges are the main revenue source, development contributions are an established mechanism in Moreland which contributed around $15.5 million revenue to the Council in 2016-17. There might also be opportunities to seek additional funding through alternative means. The following sections describe a number of funding options currently used by Council that could be considered to support the delivery of sustainable transport infrastructure. Further discussion is also provided on alternate funding options not currently used by Council.

It is noted that Council has a current Development Contributions Plan in place and has in the past used Special Rates as funding mechanisms (both discussed further below) however neither have been specifically used for the funding of sustainable transport infrastructure.
1.4.1. Suite of Funding Options

Development Contributions

A Development Contributions Plan (DCP) is a way by which Council can charge new development in a given area for contributions towards planned infrastructure projects. It is a certain and transparent means by which Council can recover some of the costs towards the on-going provision of adequate development and community infrastructure.

Money received through the DCP can go towards a varied range of projects such as, but not limited to:

- Road and drainage upgrades
- Landscaping and streetscaping works
- Bike paths

The DCP outlines why and how Council will charge new development for a financial contribution towards planned infrastructure projects from which that development will benefit.

A DCP currently exists within the City of Moreland at Clause 45.06 of the Planning Scheme with funds being collected to support drainage, road, planning and community facility infrastructure.

Contribution amounts range between $323.64 and $1,459.98 per dwelling. Contribution amounts are also identified for industrial and commercial developments.

The process of preparing a DCP requires the integration of the provision of infrastructure with the strategic planning framework for the municipality and provides a number of benefits including, but not limited to:

- A DCP enables infrastructure costs to be shared fairly amongst multiple contributors.
- A DCP can enable the earlier delivery of infrastructure than if its provision is dependent upon general taxes or rates. It also provides certainty about the delivery of infrastructure for the community and developers, because a DCP must satisfy accountability and transparency principles.
- A DCP provides developers with certainty that the money that they contribute will be accounted for separately and spent on the infrastructure it was collected to provide.

Special Rates Schemes

Councils are able to levy a special rate or charge on existing property owners to help pay for any council service or activity that will be of special or unique benefit to those particular property owners.

Examples include schemes for constructing carparks, footpaths, roads or drains in a particular area, and schemes for promoting and marketing local businesses.

Council must comply with the Local Government Act 1989 when proposing and establishing special rates or charges. Council must give public notice of any proposal to levy special rates and charges and must undertake public consultation.

Before proposing a special rate or charge, Council must evaluate the benefits of the proposed works or services to the people who are liable to pay and must also levy the rate or charge in proportion to the benefit to be received. Special rates schemes have been historically used by Council to fund the construction of carparks in both Brunswick and Coburg.

As a means calculating contributions for Special Rates Schemes a concept of ‘value capture’ could also be used. The concept of value capture essentially involves capturing land or property value uplift from the improved infrastructure and attributing the cost of providing such infrastructure to the beneficiaries.

Value capture has been increasingly applied in Australia for major transport projects such as Sydney Metro.

There has been a well-established legislation and process to facilitate the implementation of development contribution for funding local infrastructure. However, the key challenges associated with implementing value capture would include:
• Demonstrating that people value the proposed sustainable transport infrastructure and are willing to pay more for housing and commercial development with access to such infrastructure.

• Quantifying the benefits of sustainable transport infrastructure and attributing the cost to specific beneficiaries.

The Value Capture concept could also be used as a means to calculate contributions applied through the Developer Contributions mechanism above.

Cash in Lieu of Parking

There have been discussions around using the developers’ cash-in-lieu of parking to fund sustainable transport. It involves taking financial contributions from prospective developers rather than requiring the on-site provision of parking spaces.

The cash-in-lieu scheme would require the Council to address the core principles of need, nexus, accountability and equity in the strategic assessment of the proposal before it is introduced. It is important to justify that there is a direct link between the types of proposals affected by the scheme and the infrastructure provision.

If the cash-in-lieu of parking were to be used to fund sustainable transport infrastructure, there would be a need to demonstrate that the provision of the sustainable transport will encourage a mode shift from car to the extent that the existing parking provision will meet future demand.

A cash-in-lieu of parking scheme to fund parking and sustainable transport improvements was proposed by the Moonee Valley City Council for the Moonee Ponds Activity Centre in 2017. The proposed scheme was consequently refused by the Minister of Planning with a recommendation to the Council that the type of infrastructure proposed would be better achieved using other means, such as special rates charge or Development Contributions Plan Overlay.

Following a review of the supporting documentations published by the Moonee Valley City Council and subsequent Panel report, the following issues have been identified which could exist and make it challenging to use cash in lieu as a means to support sustainable transport infrastructure in Moreland:

• A cash-in-lieu scheme is not possible where there are maximum car parking requirements, which will be introduced as part of MITS.

• It is difficult to justify the provision of public transport, or sustainable transport infrastructure can be directly related to a reduction in car parking provision.

• While a cost-benefit-analysis as part of the strategic justification report was prepared, the economic benefits (e.g. health benefits, reduced vehicle operating costs and emissions) quantified in the report for the cash-in-lieu scheme could only be justified if the assumed mode shift target was achieved.

• There may be limited economic benefits associated with mode shift from car from the overall community’s perspective, as people who used to drive may choose an alternative living area with sufficient parking provision.

• Even if the approval of the cash-in-lieu scheme can be obtained, there might not be sufficient incentives for developers to take on the cash-in-lieu scheme, as the construction cost of on-site parking can be recovered through the property sale price. As such, a cash-in-lieu is unlikely to achieve cost savings for developers. In turn this may encourage developers to provide more rather than less car parking.

Parking Revenue

Parking revenue could be a major source of income to the Council. In many local government areas, paid parking has been introduced to manage parking demand. Revenue over and above the cost of managing and enforcing parking could be spent on local area or sustainable transport improvements.

Parking revenue is an implementation of the “user pays” principle, which has been gradually accepted by local residents over the years. The key advantage of using the parking revenue to fund local infrastructure is that local residents can perceive the benefits when making their financial contribution with regard to parking facilities.
However, it may require establishing a scheme or policy which enforces the dedication of parking revenue to local sustainable transport infrastructure to ensure a consistent and sustainable source of funding is available. It may also require an ongoing monitoring and forecasting of parking revenue to reduce the impact of policy or travel behaviour changes on the revenue outcome.

The ability to collect revenue is also impacted by the state government parking levy which is currently applicable to off-street paid parking in the southern portion of the municipality.

**Government Funding**

Government funding can be a potential source of local transport infrastructure funding. It would require preparing a business case or relevant funding submission documentations for grant funding or inclusion in State Government budgets.

While the investment in sustainable transport infrastructure may be justifiable given its benefits to the community, the process of funding application can be long and there is a greater uncertainty of the funding availability. Therefore, government funding may be more appropriate for major infrastructure or a sustainable transport infrastructure “program” that comprises staged investments.

This means that a long-term plan in relation to future investment will need to be developed to raise the significance of the funding request.

**Summary**

A comparison of the above funding options is presented in Table 1 along with consideration of a number of other funding opportunities.

**Table 1: Comparison of sustainable transport funding options**

<table>
<thead>
<tr>
<th>Mechanism / Description</th>
<th>Nexus</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Contributions</td>
<td></td>
<td>Already exists within Moreland. Established process (Local Government Act)</td>
<td>Limited to new development</td>
<td>Underestimation of whole-of-life infrastructure cost</td>
</tr>
<tr>
<td>Payments or works-in-kind towards the provision of infrastructure made by the proponent of a new development</td>
<td></td>
<td>No financial impact on existing residents</td>
<td>Requires planning scheme amendment</td>
<td></td>
</tr>
<tr>
<td>New development to be levied is likely to benefit from the sustainable transport infrastructure to be provided.</td>
<td></td>
<td>Enables collection of funding where parking limitation policies are in place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Rates</td>
<td></td>
<td>Established process (Local Government Act)</td>
<td>Extensive public consultation process</td>
<td>Objection from the community</td>
</tr>
<tr>
<td>Financial contribution to sustainable transport infrastructure from beneficiaries</td>
<td></td>
<td>Requires buy in from community to be implemented</td>
<td>Inflexibility in re-purposing infrastructure funded by special rates</td>
<td></td>
</tr>
<tr>
<td>LEVYING SPECIAL RATES FOR UPGRADING SUSTAINABLE TRANSPORT INFRASTRUCTURE TO A PARTICULAR GROUP OF PROPERTY OWNERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash in Lieu</td>
<td></td>
<td>There is a need to demonstrate that the provision of sustainable transport infrastructure will achieve mode shift from car, whilst ensuring the existing parking provision will be able to meet future demand.</td>
<td>Less financial burden to community</td>
<td>Lack of incentives from developers compared to building on-site parking</td>
</tr>
<tr>
<td>Taking a financial contribution from prospective developers rather than requiring the on-site provision of parking spaces to fund sustainable transport infrastructure.</td>
<td></td>
<td>Such mechanism has not been established with previous lack of success by others Approach is not possible when parking minimum requirements have been removed</td>
<td>Funding certainty limited as not only reliant on development occurring but also</td>
<td>Reduced likelihood of obtaining approval</td>
</tr>
</tbody>
</table>
Based on the above assessment the following discussion is provided.

The use of a Cash in Lieu Scheme is not possible where a minimum parking requirements have been removed, as is recommended for Major Activity Centres earlier, diminishing the effectiveness of this tool in Moreland. In addition, there are suitable queries around the ability of a Cash in Lieu scheme to support mode shift aims.

The use of a Development Contributions Plan represents a lower risk option (than a Cash in Lieu scheme) to the Council to achieve funding to support the development of sustainable transport infrastructure and achieving mode shift objectives of MITS. Such a scheme, however, commits Council to specific prescribed investment (to be detailed through work beyond this strategy) that cannot be easily altered in future years.

However, it must be recognised that a Development Contributions Plan places a cost on development (albeit relatively small ranging between $323.64 and $1,459.98 per dwelling\(^1\) based on the existing DCP), ultimately driving up the cost for new dwellings in Moreland. However, this cost in minor compared to the cost to home buyers who are forced to purchase car bays through bundled accommodation packages.

The use of funds from future paid parking reflects an outcome that, not only is the introduction of paid parking being used to discourage private car use, but the funds collected from it are being used to invest in sustainable transport infrastructure to better facilitate and encourage mode shift occurring. The use of funds will also remain flexible to be allocated to specific projects on a needs basis. The availability of funds however may not be immediately available as any paid parking system

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\(^1\) Contribution amounts are also identified for industrial and commercial developments.
must be implemented and go through a payback period before a revenue stream would be available to fund other projects. The ability to collect revenue may also be impacted by the state government parking levy which is not shared with Moreland or invested in the local area.

As such, from the options explored in the above, a Development Contributions Plan would appear to be the most appropriate mechanism by which to use new developments to fund sustainable transport infrastructure, but the use of funds collected from future paid parking could also represent an appropriate and flexible funding source.

A DCP already exists within the Moreland Planning Scheme. In the short term, it is recommended that Council investigate the possibility of including sustainable transport improvements in the current DCP, such as through substituting them for similar projects within the same charge areas. In the medium term, the next DCP could have a stronger focus on funding sustainable transport improvements, including through charging higher contribution rates, given the current rates are relatively low.

In the longer term, revenue captured from paid parking could become a significant revenue source and complement a DCP as a funding mechanism for sustainable transport.
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