

# INDEPENDENT TRANSPORT REVIEW

DELOITTE SUMMARY REPORT  
CITY OF MELBOURNE RESPONSE



CITY OF MELBOURNE



## **Acknowledgement of Traditional Owners**

The City of Melbourne respectfully acknowledges the Traditional Owners of the land, the Wurundjeri Woi Wurrung and Bunurong Boon Wurrung peoples of the Eastern Kulin and pays respect to their Elders past, present and emerging. We are committed to our reconciliation journey, because at its heart, reconciliation is about strengthening relationships between Aboriginal and non-Aboriginal peoples, for the benefit of all Victorians.

## Council Plan 2021-25

The Council Plan 2021-25 sets out our strategic direction and commitment to the community for the next four years. Based on six strategic objectives for our city, this is our detailed plan for our city's revitalisation and considers the needs of all people who access and experience the City of Melbourne municipality. For more information visit [melbourne.vic.gov.au/council-plan](https://melbourne.vic.gov.au/council-plan)



### Safety and wellbeing

Ensuring the city is safe, and that people feel safe when they come into the city is our priority. We will plan and design for the safety and health and wellbeing of all people in Melbourne, and we are committed to strengthening community social connections.

October 2021

#### Disclaimer

This report is provided for information and it does not purport to be complete. While care has been taken to ensure the content in the report is accurate, we cannot guarantee it is without flaw of any kind. There may be errors and omissions or it may not be wholly appropriate for your particular purposes. In addition, the publication is a snapshot in time based on historic information which is liable to change. The City of Melbourne accepts no responsibility and disclaims all liability for any error, loss or other consequence which may arise from you relying on any information contained in this report.



# OBJECTIVE OF THE INDEPENDENT TRANSPORT REVIEW

Deloitte was engaged by the City of Melbourne (CoM) to undertake an independent review of pre-Covid and current transport patterns to:

- Assess the potential for each travel mode to support central city recovery from the impacts of Covid
- Recommend interventions to address near-term, transport-related obstacles to central city recovery





# THE ROLE OF THE TRANSPORT NETWORK IN CENTRAL CITY RECOVERY

The Covid pandemic, and the range of restrictions enforced to reduce the transmission of the virus have had a profound and visible impact on central city activity and travel patterns and behaviour to, and within the city. These impacts have corresponded with significant changes to the central city transport network, including segregated bicycle lanes and kerbside parking changes.

Overall sentiment towards public transport and mode share has shifted as a result as shown in Figure 1. Early in the pandemic the City implemented a diverse range of transport-related changes to respond to the evolving circumstances, such as cycling corridor upgrades throughout the CBD.

Much of the sentiment regarding bike lanes has been positive, with 61% of 866 respondents in a recent survey indicating they are 'supportive' or 'very supportive' of the new bicycle lanes. However, it has been echoed as a key obstacle to city recovery via councilor feedback, with samples of the key messages illustrated in Figure 2.

The transport network provides access and circulation within the central city, efficiently connecting people to activity. This drives central city activation and economic growth. As shown in Figure 3, Melbourne's central city is the location of activities which are unmatched in metropolitan Melbourne and Australia in terms of their scale, diversity and interoperability.

Figure 1: Sentiment towards mode choice during and post-Covid



Figure 2: Community feedback on transport challenges - Common Themes



Figure 3: A Model for central city recovery

- Transport is an enabler of city activation
- The network provides high service levels and service connectivity across a diverse range of travel modes
- Central city activities seamlessly combine to create ‘the city experience’
- The strength of the city experience is fundamental to attracting people and investment to Melbourne CBD



2019 ECONOMIC CONTRIBUTIONS			
2019 Gross Local Product per employee \$209,000	2019 Gross Local Product \$104 billion	2019 Resident Population 183,000 residents	2019 Employment 497,000 jobs

Key

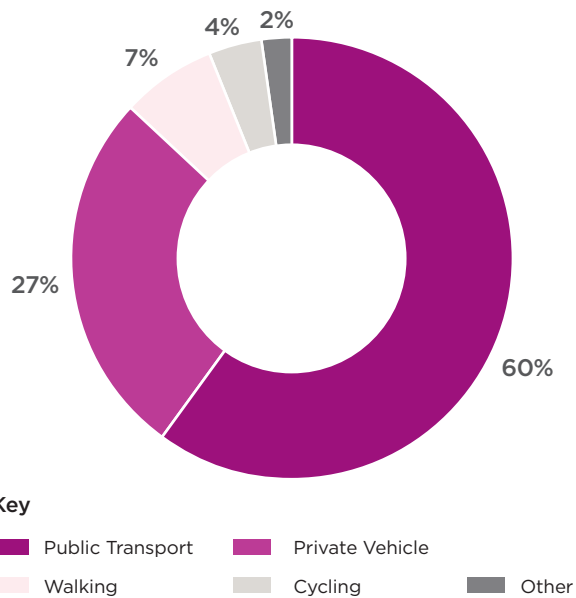
- Visitors to the CBD
- Reasons for coming into the CBD
- Modal choice for travel to the CBD

# THE CENTRAL CITY TRANSPORT TASK PRE-COVID

Prior to the pandemic, there was an estimated average of ~360,000 daily trips to the central city on an average weekday. Most of these trips were made on public transport (46%). The transport task emerging from Covid, is to return to pre-Covid levels which will enable the activation of the CBD and revitalise 'the city experience'.

- Pre-Covid, the diversity of high-quality transport options connected people to activities, meeting a wide range of individual travel preferences and budgets
- Average daily trips to the central city across all modes were ~360,000 as shown in Figure 4
- The average daily pre-Covid mode share is shown in Figure 5, which shows that most trips were made on public transport
- It is anticipated that central city recovery – a return to pre-Covid levels of activation – will generate trip numbers similar to those experienced pre-Covid

Figure 5: Pre-covid mode Share (~360,000 total trips)

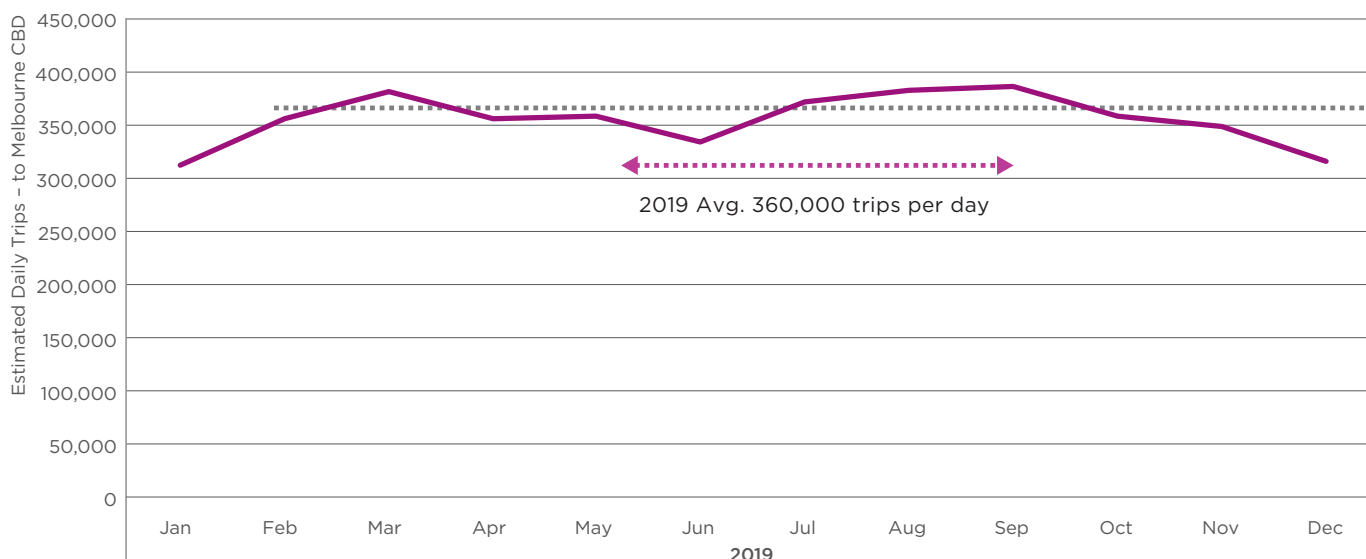


**Key**

- Public Transport
- Private Vehicle
- Walking
- Cycling
- Other

Sources: Dot PT Patronage; DoT SCATS & Bicycle Sensors

Figure 4: Estimated Daily Trips - to Melbourne CBD

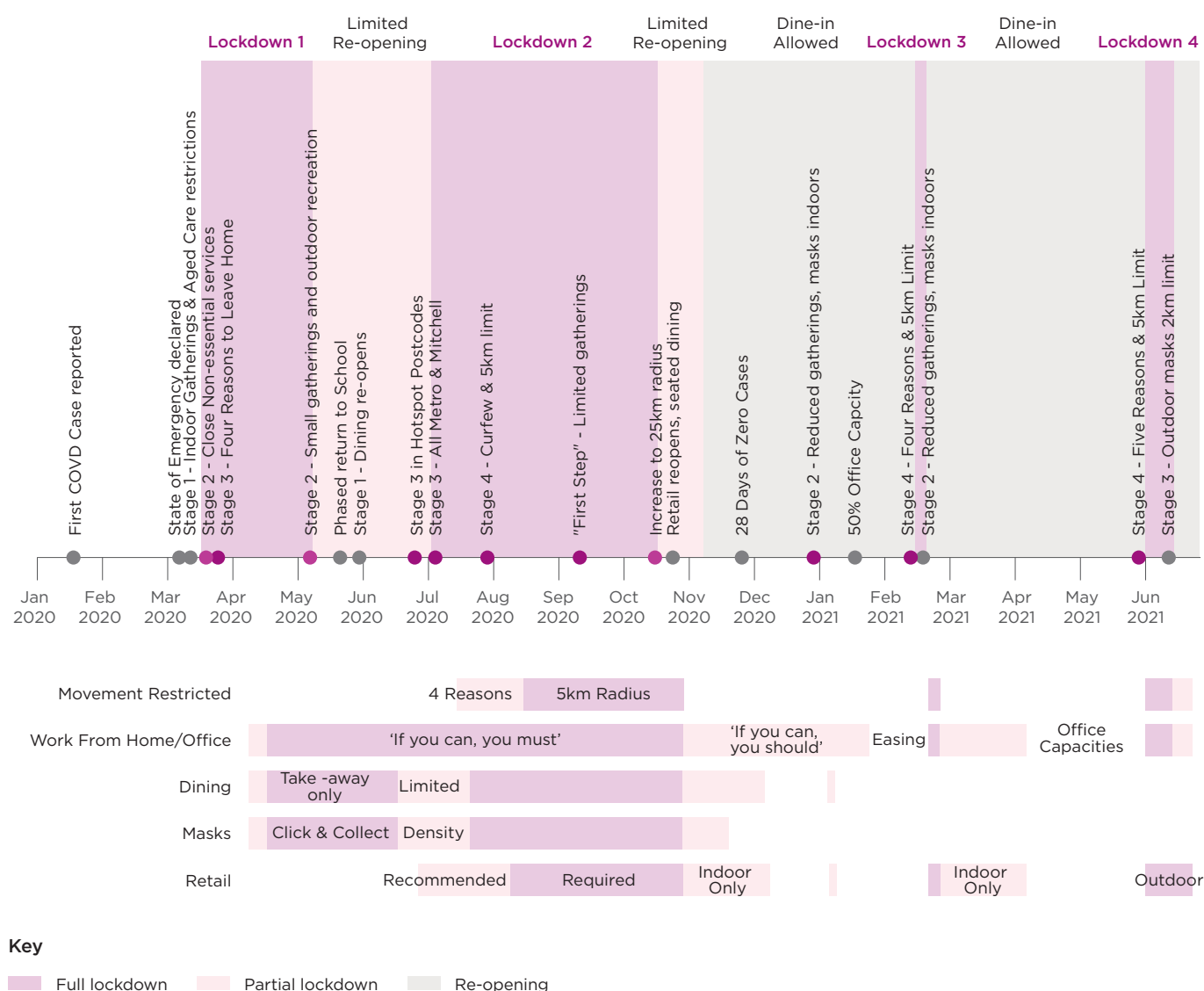


Sources: VISTA 2018, CoM Population Estimates, DoT Train, Bus, Tram Patronage, DoT SCATS, DoT Bike Sensor

# IMPACT OF COVID ON ACTIVITY AND MOVEMENT

Rolling restrictions on activity and movement have been imposed throughout greater metropolitan Melbourne since early 2020 in response to Covid transmission. The Victorian Government has imposed rolling lockdowns and restrictions to varying extents in 2020. Figure 6 outlines the timing of lockdowns and indicative levels of restrictions to date.

Figure 6: Covid restrictions – timing and indicative restriction of movement

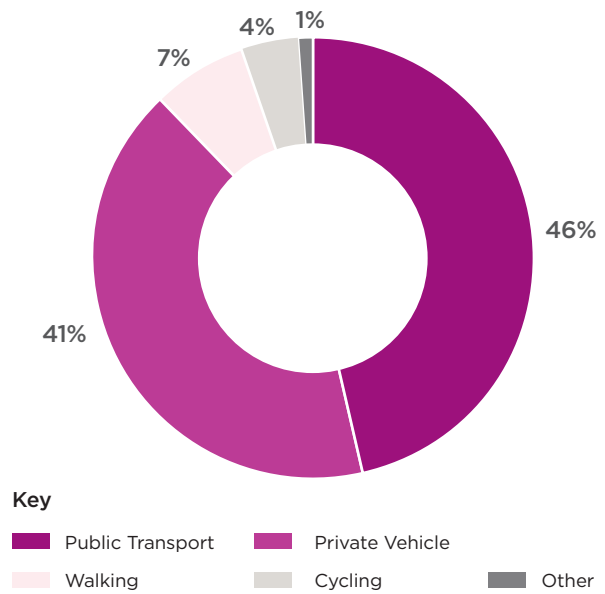




# IMPACT OF COVID ON CENTRAL CITY TRANSPORT TASK BY MODE

Trips by car and public transport to the central city declined sharply following the first restrictions in 2020. Trips by car increased in 2021 before plateauing, while the public transport recovery has been slow. Traffic volumes fell to ~30% of pre-Covid levels at the low point of 2020 before steadily increasing to a peak of ~90% (Figure 8). However, private vehicle mode share increased (Figure 7). Trips by public transport increased at a slower rate than car trips (Figure 9), ultimately reaching ~45% of pre-Covid levels.

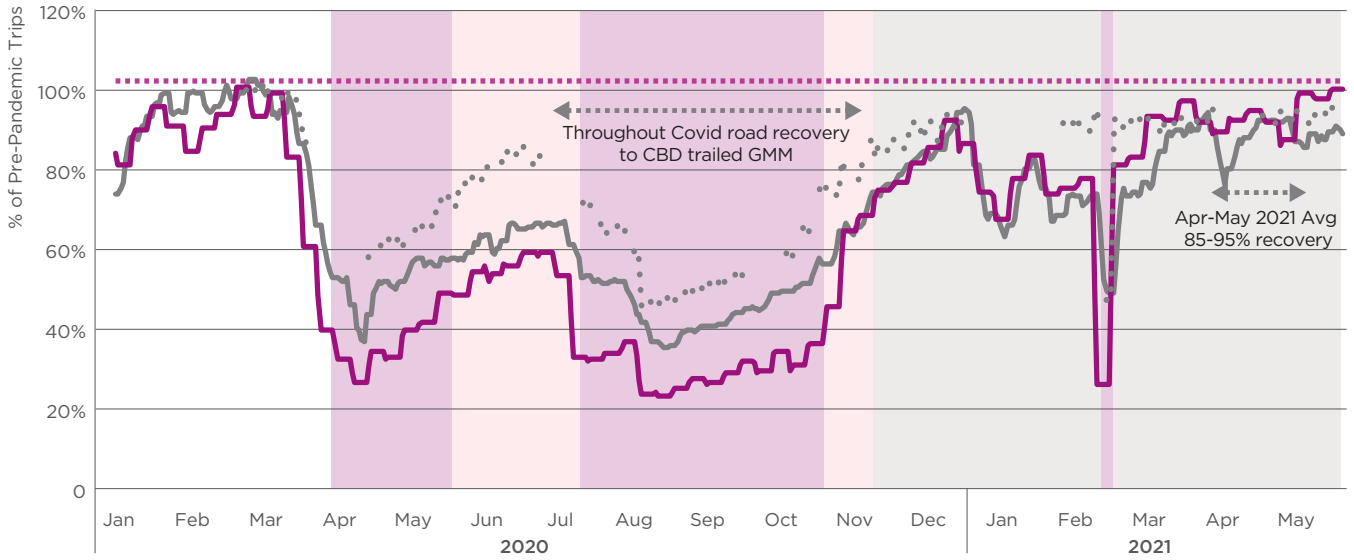
Figure 7: Covid Mode Share May 2021 (~210,000 total trips)



Sources: Dot PT Patronage; DoT SCATS & Bicycle Sensors



Figure 8: Road Recovery - Weekday vs Weekend - CBD SCATS Sites

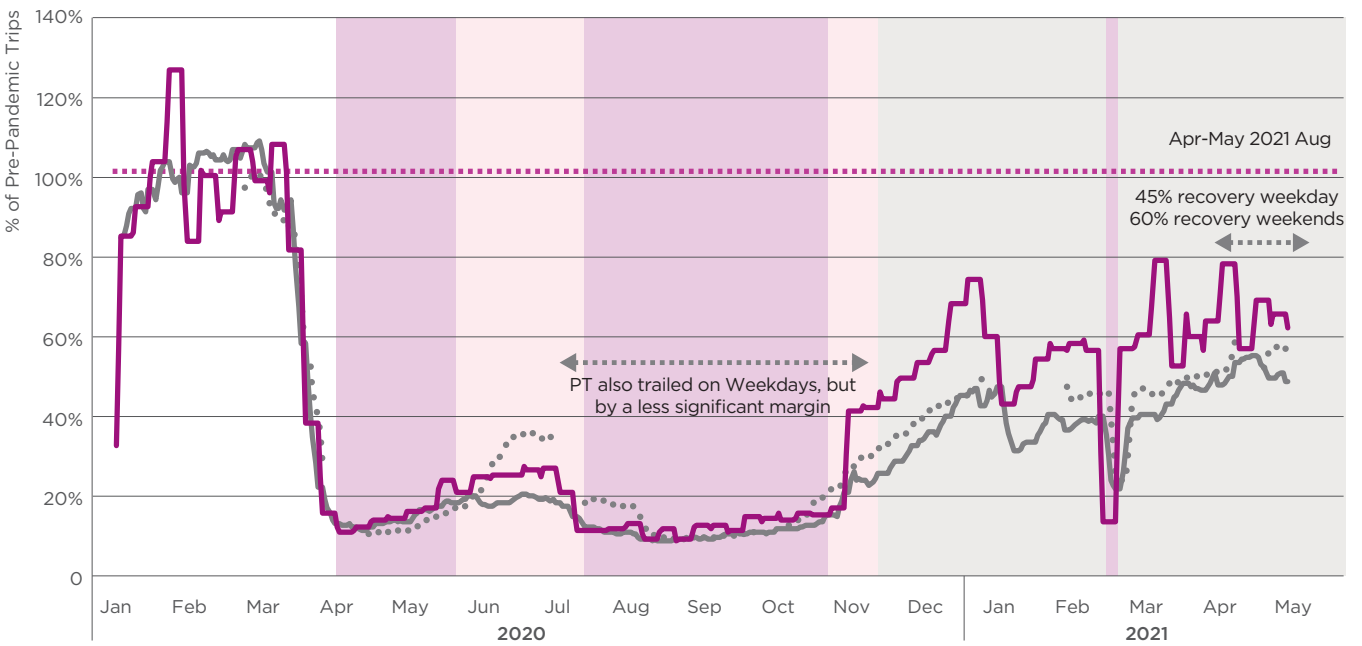


Key

- Weekday CBD    ●●● Weekday GMM    ■ Weekend    ■ Full lockdown    ■ Partial lockdown    ■ Re-opening

Sources: SCATS (Actuals) – DoT Open Data; DoT Data – Road Usage GMM Weekdays

Figure 9: CBD Train Recovery - Weekday vs Weekend (estimated)



Key

- Weekday CBD    ●●● Weekday GMM    ■ Weekend    ■ Full lockdown    ■ Partial lockdown    ■ Re-opening

Sources: CoM Pedestrian Sensors – Flinders St Station Underpass; DoT Data – PT Usage GMM Weekdays

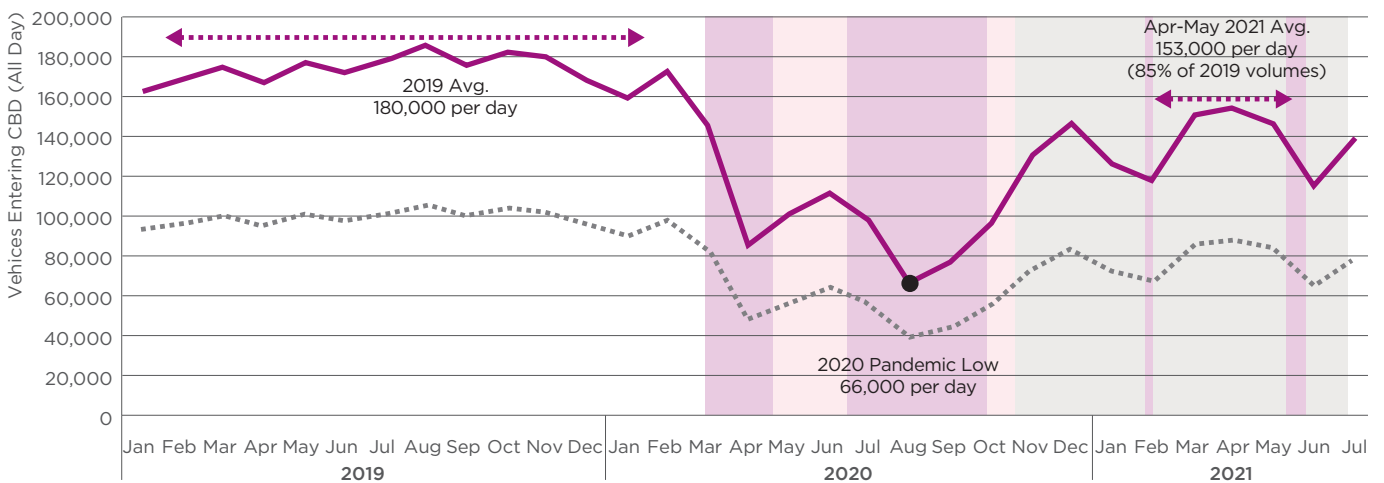


## Car

Vehicle entries to the central city declined sharply at the commencement of Covid restrictions. As shown in Figure 10. At the lowest point in July 2021, vehicle entries had declined to around 66,000 per day – compared with a pre-Covid average of 180,000 per day.

This began to recover toward pre-Covid levels in May 2021, where private vehicle volumes peaked ~153,000 per day (~88% of pre-Covid levels), and as shown in Figure 11, nearing capacity. Approximately 43% of this capacity is used for trips that do not contribute to central city activation (through trips).

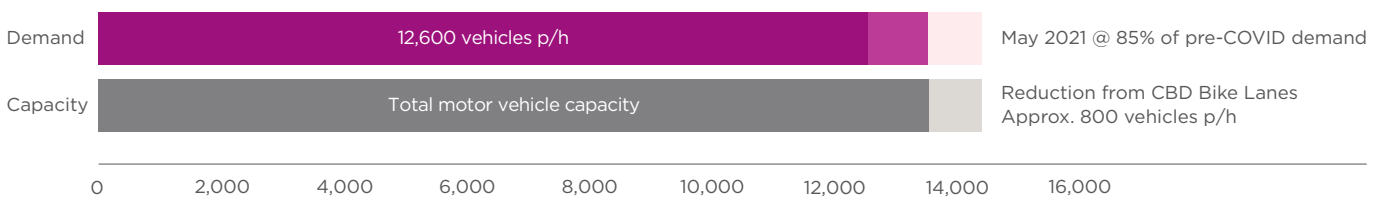
Figure 10: Vehicles Entering CBD



### Key

- Vehicles Entering CBD
- Vehicles Remaining in the CBD (Estimate - 57%)
- Full lockdown
- Partial lockdown
- Re-opening

Figure 11: Avg. Hourly Demand (8:00 - 9:00 AM Peak) – May 2021

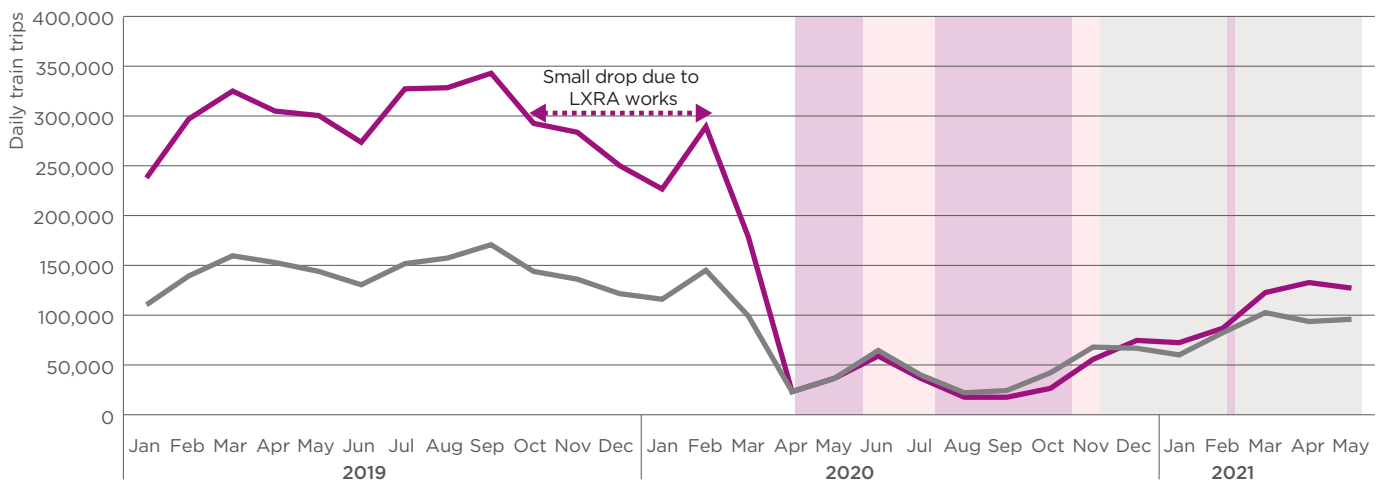


## Train

As shown in Figure 12, trips by train declined sharply at the outset of Covid from the pre-Covid CBD daily average in 2019 of ~300,000 daily trips to ~25,000 per day. Trip recovery began in 2021, and trips by train grew to ~45% of pre-Covid levels (~130,000 daily trips).

This represents ~75,000 trips with CBD destinations. Below, Figure 13 also shows current train loads are significantly less than the pre-Covid levels and the capacity for growth in train trips is large.

Figure 12: Average Avg. Hourly Demand – 8:00-9:00 AM Peak – May 2021

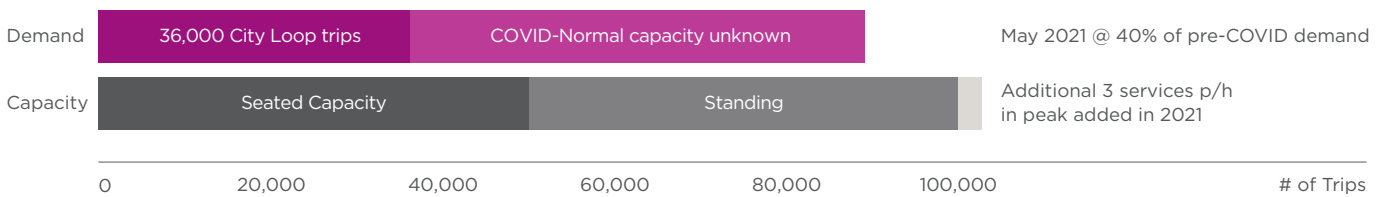


### Key

- CBD
- Non-CBD
- Full lockdown
- Partial lockdown
- Re-opening

Sources: DoT Train Patronage by Station

Figure 13: Train Boardings - % of 2019 Average Weekday Trips



Source: PTV GTFS; DoT Train Patronage by Station



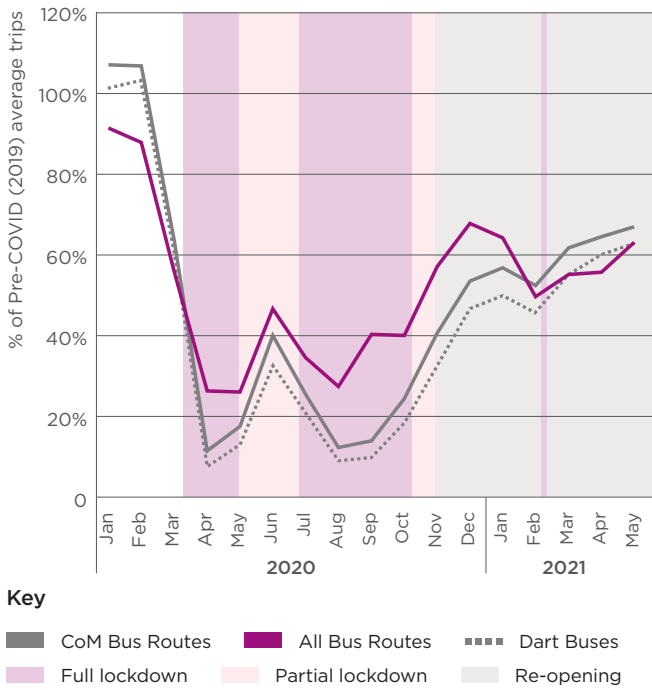
## Bus and Tram

VISTA analysis indicates that pre-Covid, CBD bus trips averaged ~9,500, and tram trips averaged ~38,000 per day. Figure 14 and 15 shows demand declining to below -15% of this volume for both tram and bus boardings within the CBD during lockdowns 1 and 2. Non-CBD trips were less affected over the pandemic, declining to ~30% for both modes.

In May 2021, CBD-centric trips had recovered to ~60% (Tram) and ~50% (Bus) of pre-Covid levels, similar to the recovery for non-CBD bus and tram travel.

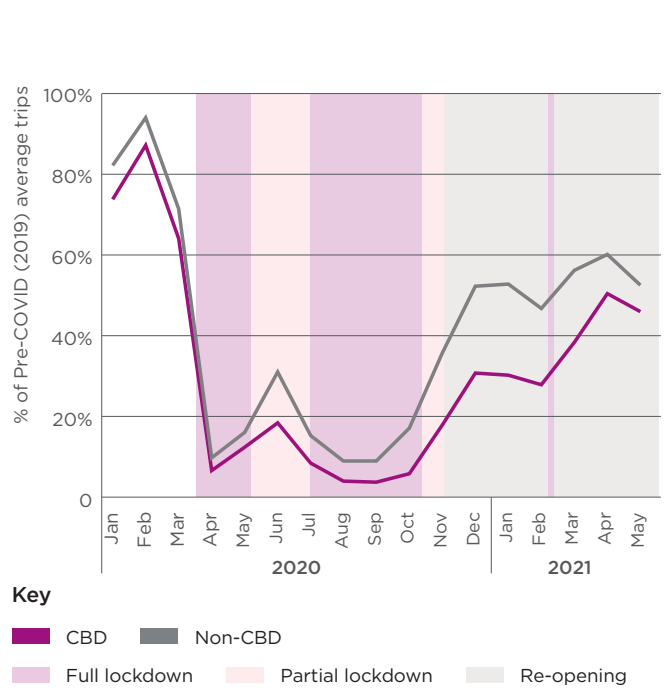
The 'Covid capacity' of the network is unknown, however, as shown below in Figure 16 and 17, there is substantial capacity for additional trips in the bus and tram network serving the central city.

Figure 14: Bus Boardings, % of 2019 Average



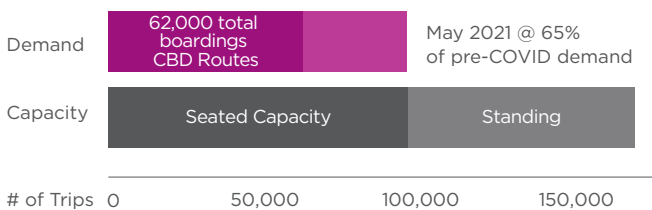
Source: DoT Bus Patronage

Figure 15: Tram Boardings, % of 2019 Average



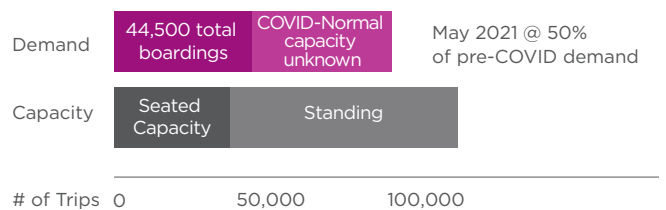
Source: DoT Tram Patronage

Figure 16: Daily demand for bus - all CBD routes - May 2021



Source: PTV GTFS; DoT Bus Patronage

Figure 17: Daily demand for tram - CBD boardings - May 2021



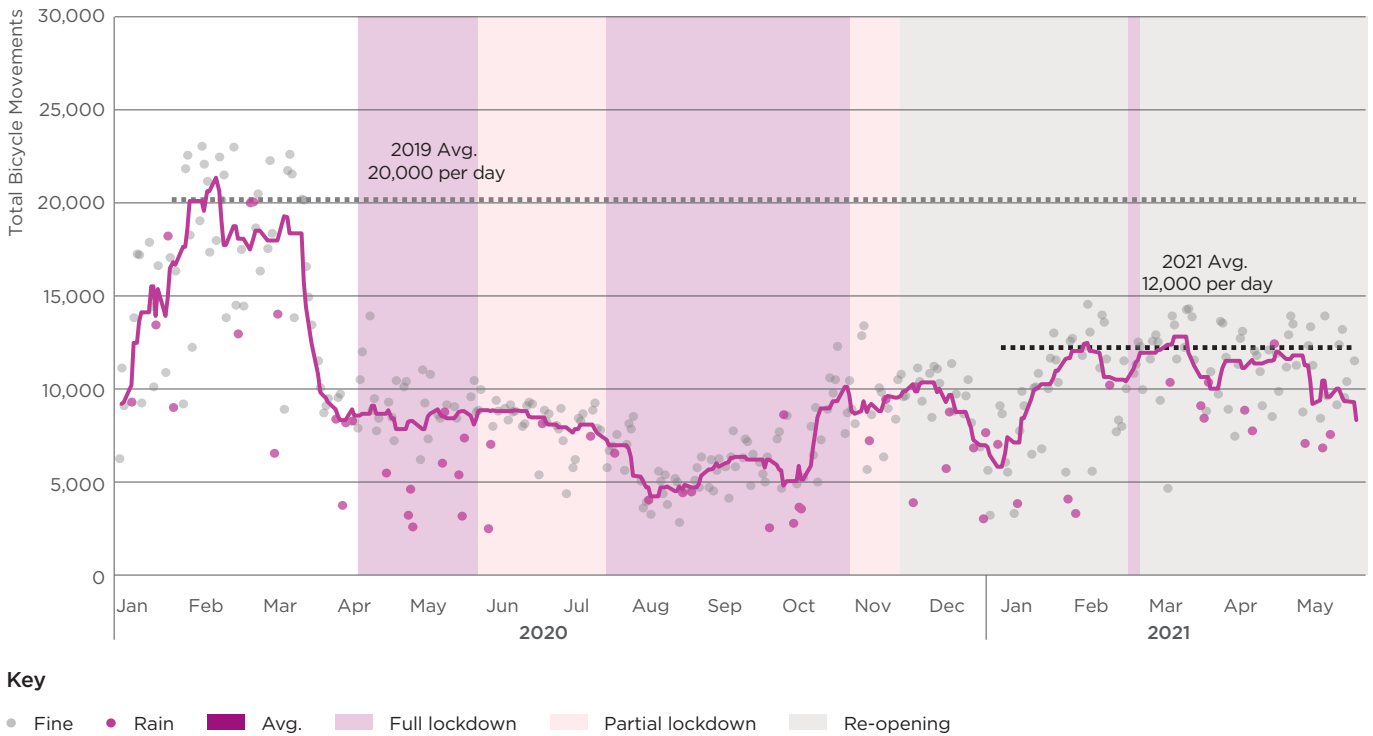
Source: PTV GTFS; DoT Train Patronage

## Bike

Figure 18 indicates that bicycle trips to the CBD are currently at around half of pre-Covid levels, with 'working from home' becoming the new normal, the need and advantages of riding a bicycle to the CBD has declined as lockdowns have reduced road congestion, one of the main benefits derived from riding.

Of the 20,000 observed bicycle movements captured by DoT sensors, bicycle trips to the CBD in 2019 were estimated at 15,000 per day and are expected to continue to recover in line with return to work in the CBD. Bicycle trips will recover as on-road and public transport congestion returns to disrupt and slow motor vehicle and public transport trips, influencing a modal shift to bicycle riding.

Figure 18: Total Bicycle Movements – All DoT Counters within 3km of CBD



Source: DoT Bicycle Counters – Weekdays Only



# IMPACT OF COVID ON CENTRAL CITY TRANSPORT TASK

The primary transport-based obstacles to central city recovery identified in this report are summarised below in Figure 19. The obstacles identified are based on analysis of the best available data at the time of this engagement, including transport data and community sentiment data.

Figure 19: Key Transport based obstacles to central city recovery



# RECOMMENDED INTERVENTIONS AND THEIR INTERDEPENDENCIES

The following five transport interventions are recommended to assist Melbourne’s recovery from the impacts of the Covid-19 pandemic.

## 1. Encourage flexible work hours to manage peak demand

Promoting flexible work hours will distribute demand on the transport network

## 2. Implement real-time transport tracking and capacity data

Real-time capacity tracking software will enable users to make informed decisions and reduce overcrowding

## 3. Trial demand-responsive parking pricing

It is expected that trialling demand responsive parking pricing will increase use of the kerbside parking system and facilitate a range of kerbside uses (pick up/drop off)

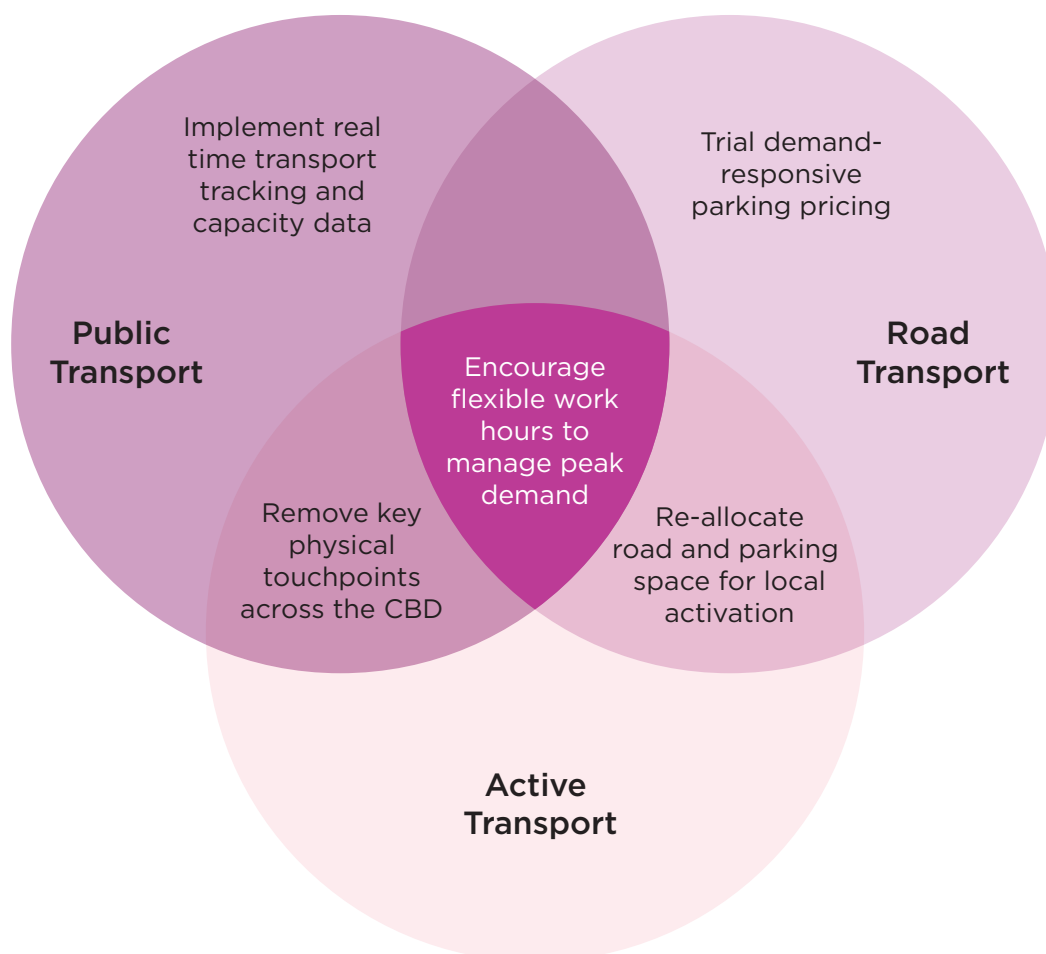
## 4. Remove key physical touchpoints across the CBD

It is recommended that the removal of physical touchpoints continue to occur and be accelerated

## 5. Reallocate road and parking spaces for local activation

Re-allocation of road and parking spaces for local activation to continue with ongoing monitoring and refinement (timing, location)

Figure 20: Interdependencies and interrelationships of the recommended interventions



## City of Melbourne Transport Program to aid City Recovery and Reactivation

Getting people back into the City is vital for our recovery from Covid-19. People travel to the city for a variety of reasons: work, entertainment, shopping, dining or other city experiences. The task of the transport network is to facilitate access and travel, as an enabler of city activation, by providing high-quality transport choices which suit people's various needs and budgets.

The Independent Transport Review (ITR) recommends five priority transport interventions to maximise the opportunity for as many people as possible to access the city's unique experiences and support economic recovery and reactivation as the city reopens from lockdown.

All recommended interventions of the ITR require action from City of Melbourne and continued close cooperation with the Department of Transport (DoT).

The City of Melbourne response to each of the five recommended interventions is as follows:

### Independent Transport Review

RECOMMENDED INTERVENTION	CITY OF MELBOURNE RESPONSE	TIMING	EXPECTED OUTCOME
1 Encourage flexible work hours to manage peak demand	Promote workforce flexibility through advocacy to the business community	Immediate	Reduce congestion on all transport modes during peak hour travel to build confidence in travelling to the city.
	Advocate for off-peak fare discounts and encourage trips outside peaks to commence in February 2022	Immediate	Reduce congestion on all transport modes during peak hour travel to build confidence in travelling to the city.
2 Implement real time tracking and capacity data	Provide additional data to support DoT's RideSpace data system. RideSpace provides real-time information on crowding on public transport to allow passengers to decide when to travel.	Early 2022	Increased confidence to use public transport and maximise visitation to the city.
3 Trial demand-responsive parking pricing	Investigate opportunities to trial on-street demand-based parking pricing to maximise arrivals per bay and deliver the greatest recovery benefit to the city.	- Return to Council with approach in Q3 of 2021/22 - Begin trial Q4 2021/22 - Report on trial and possible approach to wider rollout in Q1 2022/23	Increase turnover of vehicles in car parking spaces to maximise visitation to the city.
	Continue to work with off-street parking providers to support access to the city.	Ongoing. Linked to events, festivals and promotions	Make it easier to find long term parking for visitors to the city.  Free up on-street parking for short term use to support retail, delivery and street activation.
4 Remove key physical touchpoints across the CBD	Continue to make the city COVID-safe through the design and operation of city infrastructure including reducing footpath clutter and expanding footpaths where required to reduce crowding.	Immediate and ongoing	Ensure a safe environment is provided and boost confidence for visitors returning to the city.
	Advocate to DoT for signal changes to reduce pedestrian wait times and crowding, and provide more auto-on signals.	Immediate and ongoing	Enable social distancing for people crossing streets. Improve traffic flow via more frequent turning opportunities at intersections.
5 Re-allocate road and parking space for local activation	Continue to deliver on-street activations to make the city more attractive for visitors and workers outdoor dining, public art, events and other activities in line with the Inside Out program, the Covid-19 Reactivation and Recovery Plan, the Economic Development Strategy 2031 and other key council strategies.	Commence October 2021, review in Q3 21/22	Increase the number of visitors to the city and support local businesses.
	Continue to invest in the 'Little Streets' to improve pedestrian priority, improve bike safety and support economic recovery with road markings, plantings and street furniture, extended outdoor dining and other activations.	Immediate and ongoing	More people using the Little Streets for dining, shopping and other city experiences.



## Independent Transport Review (Continued)

RECOMMENDED INTERVENTION	CITY OF MELBOURNE RESPONSE	TIMING	EXPECTED OUTCOME
Additional transport actions	Advocate for the Victorian Government to waive public transport fares associated with events and reactivation activities within the City of Melbourne throughout December 2021 and January 2022, to promote public transport and reinstate confidence in its use as the preferred mode of travel as people return to the central city.	Dec 2021 – Jan 2022	Increase the number of people travelling to the city and visitor spend.  Free up road capacity for essential vehicle movements including freight, local access and people with disabilities.
	Introduce additional short term car parking bays within the Hoddle Grid to facilitate click and collect and other similar retail trade activities, including in Exhibition Street between Bourke Street and Flinders Street (northbound and southbound).	Complete Exhibition St by end Q2 21/22, then ongoing	Increase turnover in parking spaces to boost retail trade during COVID recovery.
	Investigate with the DoT the opportunity to install additional hook turn movements to enhance throughput of traffic at key intersections within the Hoddle Grid including along Exhibition St.	Immediate	Reduce congestion and improve road safety and consistency for drivers.
	Continue to deliver the program of bicycle infrastructure to ensure people riding bikes and e-scooters can enter and move throughout the city safely.	Ongoing	Boost economic recovery by encouraging more people to travel to the city and move around within it.  Free up road capacity for essential vehicle movements including freight, local access and people with disabilities
	Monitor and evaluate traffic hot spots which include bicycle infrastructure and adjust designs and interventions as required. This will include the intersections of Queens Bridge and Flinders street. Officers are completing further design work and traffic analysis, including the nearby intersection at Queen Street and Flinders Street including improving bus priority, planning for Greenline and optimising local traffic network operation. Promote the arterial road network as the most efficient way for people driving to access the central city.	Works planned for late 2021	Reduce congestion and improve road safety and consistency for all road users.
	Deliver an E-scooter trial to encourage local travel and provide a new way to visit the city.	Late 2021	Attract people to the city to try a new fun travel mode.  Increase travel within the city.
	Continue the “Let’s Ride, Melbourne” program to encourage more city visitation by bike. This may help free up space on other modes as well as boost visitation. Advocate to the DoT and the Victorian Government to deliver a bicycle encouragement program.	Ongoing	Encourage more people to travel to the city and move around within it.  Free up road capacity for essential vehicle movements including freight, local access and people with disabilities.
	For all transport actions, continue to seek and respond to community feedback to improve design outcomes and optimise movement around the city.	Ongoing	The community is confident that CoM will listen to concerns and respond to issues to support the economic recovery of the city.

## How to contact us

### Online:

[melbourne.vic.gov.au](http://melbourne.vic.gov.au)

### In person:

Melbourne Town Hall - Administration Building  
120 Swanston Street, Melbourne  
Business hours, Monday to Friday  
(Public holidays excluded)

### Telephone:

03 9658 9658  
Business hours, Monday to Friday  
(Public holidays excluded)

### Fax:

03 9654 4854

### In writing:

City of Melbourne  
GPO Box 1603  
Melbourne VIC 3001  
Australia



### Interpreter services

We cater for people of all backgrounds  
Please call 03 9280 0726

03 9280 0717 廣東話  
03 9280 0719 Bahasa Indonesia  
03 9280 0720 Italiano  
03 9280 0721 普通話  
03 9280 0722 Soomaali  
03 9280 0723 Español  
03 9280 0725 Việt Ngữ  
03 9280 0726 عربي  
03 9280 0726 한국어  
03 9280 0726 हिंदी  
03 9280 0726 All other languages

### National Relay Service:

If you are deaf, hearing impaired or speech-impaired,  
call us via the National Relay Service: Teletypewriter (TTY)  
users phone 1300 555 727 then ask for 03 9658 9658  
9am to 5pm, Monday to Friday (Public holidays excluded)

[melbourne.vic.gov.au](http://melbourne.vic.gov.au)



CITY OF MELBOURNE