Report to the Future Melbourne Committee

Agenda item 6.9

Implementation Update: City of Melbourne Transport Strategy 2030 and Transport Program to Aid City Recovery and Reactivation

7 June 2022

Presenter: Sophie Handley, Director City Strategy

Purpose and background

1. The purpose of this report is to provide an update on implementation of the City of Melbourne Transport Strategy 2030 (the Transport Strategy) as the city begins to recover from the effects of the pandemic, as well as an update on the Transport Program to Aid City Recovery and Reactivation.
2. The Transport Strategy establishes a long-term vision for all city commuters, business operators and residents. By 2030, plans will be in place to reduce congestion caused by through-traffic in the busiest parts of the city, convert our 'Little Streets' into pedestrian priority shared zones, upgrade key station precincts as expanded public spaces and transform Melbourne into the country's leading bicycle city by working with the Victorian Government to create more than 90km of protected bicycle lanes in the heart of the city.
3. Implementation of the Transport Strategy will provide more space for people on footpaths and around major transport hubs, to boost Melbourne's retail and hospitality sector, and deliver approximately $870 million in economic benefits to Victoria (Deloitte, 2019).
4. A number of actions and activities are underway to implement the Transport Strategy, these include:

Summary of recent transport network upgrades

4.1. During 2021, approximately 9km of new tram separation kerb has been installed by Yarra Trams in the CBD to improve tram safety and reliability. The kerbs are an important safety measure to prevent collisions between vehicles and trams on dedicated tramways, and improve high volume movement of people across the grid.

4.2. In late 2021, E-Class trams began operating on route 58 (Toorak-William St-West Coburg). This boosted the peak hour capacity of the route by 60 per cent (1,000 people) compared with the previous fleet. New accessible tram platforms have also been completed on William Street at Collins Street.

4.3. From February 2022, an additional 50 train services began running on the Cranbourne line each week. This provides capacity for at least 45,000 more people to come to the city each week.

4.4. The trial of shared electric scooter hire (e-scooter trial) began in February 2022. People have taken more than 1,000,000 trips to date with more than 5,000 trips in CoM each day on average. Approximately 1,400 people travel by e-scooter each day to Docklands, Southbank or the Hoddle Grid. The e-scooter operators report that approximately 200 new local jobs have been created doing maintenance, recharging batteries, marketing, customer service and social media.

4.5. The Metro Tunnel Project is due to be completed in 2025, transforming Central City rail access providing capacity for an extra approximately 500,000 people to travel to the city each week. New surface level street treatments are soon to begin construction at Anzac, Town Hall, State Library, Parkville and Arden Stations. The new stations will be transformational for Melbourne, create new jobs and provide access for thousands of additional people each day.

Accelerated delivery of Council's Cycle Infrastructure Program

4.6. The adoption of the Transport Strategy in September 2019 included a commitment to delivering 90km of protected bicycle lanes by 2030, including 50km on local roads to be delivered by Council and 40km on arterial roads to be delivered by the Victorian Government.

4.7. In February 2020 Council committed to accelerate delivery of 44km of protected bicycle lanes by mid-2024 in response to the Climate and Biodiversity Emergency. Council is on track to meet this target.

4.8. In September 2020 Council committed to improved safe travel options supporting city reactivation and recovery in response to COVID-19, and taking advantage of the limited disruption infrastructure works would have on travel patterns during lockdowns. This included accelerated delivery of 32.5km of protected bike lanes and 7.5 km of shared zones and traffic calming on little streets to be delivered over two years. More than 19 km are now complete. Upcoming projects

soon to be delivered include Royal Parade (southbound), Grattan Street and Arden Street. A map showing projects completed so far is provided as Attachment 2.

Implementing the recommendations of the Independent Transport Review

4.9. An Independent Transport Review (ITR) was completed by Deloitte in 2021 to assess transport activity in the city and identify actions that could be taken to support city recovery and achieve the policy outcomes of the Transport Strategy. In response, Council endorsed the 'City of Melbourne Transport Program to Aid City Recovery and Reactivation'. This included a range of initiatives including: advocacy; working with the Department of Transport (DoT) particularly in relation to boosting public transport use; on-street activation; improvements to the transport network; commissioning a study to understand the economic uplift associated with each mode of transport; and continuing to seek feedback from the community in relation to the transport network. Progress towards the delivery of this Transport Program is outlined in key issues below and in Attachment 3.

4.10. An analysis of the economic contribution of different modes of transport to city activation and recovery including the economic uplift associated with each mode of transport has been completed. The outcomes are presented under key issues below. The full study is provided as Attachment 4.

Ongoing collection and monitoring of data and community feedback

4.11. In April 2022, additional bicycle and traffic counters were installed across the bike lane network within the municipality to more accurately quantify ongoing use of cycling infrastructure. Early findings are presented in key issues below. Traffic counts have also been commissioned as part of the regular program, which will allow the comparison of movement into the central city to pre-COVID-19 baselines.

4.12. Community feedback on the new protected bike lanes has continued to be collected via Participate Melbourne website and direct correspondence to Council. In addition, in December 2021 Council officers conducted face to face interviews with 170 street-facing businesses across the municipality to better understand transport experiences and issues. Summary outcomes of the engagement are presented in Attachment 3.

4.13. A telephone survey of 1,370 people across metropolitan Melbourne was also conducted in April 2022 to better understand current community views on transport and inform approaches to delivering the CoM transport program. Findings are presented in key issues below with more detail in Attachment 3.

5. The DoT is delivering a further 100km of bicycle lanes across eight municipalities including Darebin, Maribyrnong, Moreland, Melbourne, Yarra, Stonnington and Port Phillip.

6. Other international cities are making extensive and rapid commitments to accelerate increased sustainable mobility options and capacity to move more people in and around cities. Including:

6.1. In Milan 750km of bicycle lanes are to be delivered by 2035 targeting 80 per cent of public facilities within 1km of a bike route.

6.2. In Paris 650km of bicycle lanes are to be delivered by 2024 along with 120,000 new bike parking spaces and 72,000 on-street car parking spaces removed.

6.3. In London 260km of protected and low-traffic bicycle routes have been installed since 2016, including more than 100km since the start of the pandemic.

6.4. New York is upgrading 32km of the existing 64km of protected bike lanes with concrete barriers to make riders feel more confident and physically protected from traffic and encourage more riding.

6.5. Sydney is introducing new protected bike lanes and streetscape improvements on key inner city streets; King Street, College Street, Castlereagh Street, Oxford Street and Pitt Street.

7. As the Victorian Government continues to lift remaining COVID-19 restrictions and the trend of people returning to the city continues, there is an opportunity to pause and consider the timing and sequencing of implementing planned transport projects while the city establishes a new rhythm.

Key issues

8. In December 2021 the Omicron COVID-19 strain resulted in a further delay to city recovery and reactivation. The Victorian Government continued recommendations to work from home throughout January and February. As a result, patronage remained relatively low across all modes of transport accessing the central city during this period. In February, when these recommendations were removed,

office attendance increased to 15 per cent of pre-COVID-19 levels, increased again in March to 32 per cent then to 36 per cent in April.

8.1. Central city motor vehicle volumes during the AM peak in March were around 94 per cent of the 2019 baseline. The ITR found that this is likely to be closer to the total AM capacity and any additional traffic will increase travel time, making other modes more attractive.

8.2. In contrast, public transport patronage in May is at approximately 62 per cent of the pre-COVID-19 baseline.

8.3. Bike and e-scooter volumes are 70 per cent of pre-COVID-19 in the AM peak, while office attendance is 36 per cent (April 2021), meaning commuters are nearly twice as likely to choose a bike or e-scooter than before COVID-19. The ITR concluded that these volumes will likely continue to recover in line with office worker attendance increasing, however the recovery timeline is uncertain.

8.4. In April 2022, bike volumes in upgraded bike lanes on Peel and Swanston Streets were at 156 per cent and 113 per cent of the pre-COVID-19 baseline respectively. Queens Bridge Street was at 186 per cent of the baseline. However, volumes on other routes have increased more slowly with Rathdowne Street at 50 per cent of the pre-COVID-19 volumes. Overall, data from completed projects shows a steady increase in bike volumes throughout 2022 with safer infrastructure attracting new riders.

8.5. Officers will continue to work closely with the DoT to monitor trends in travel behaviour and make adjustments to facilitate access to central city activities and destinations.

9. The ITR identified encouraging a return to public transport as the most important priority to rebalance city transport behaviour. DoT is actively encouraging patronage to return including ensuring mask compliance and producing promotional campaigns to increase passenger confidence. Management continues to collaborate with DoT to achieve this objective and will continue to advocate for a reduction in off-peak fares and integrating public transport fares for major events.

10. The Victorian Government e-scooter trial began in February 2022. E-scooters have been extremely popular making a significant contribution to people accessing city attractions and creating a sense of activation. E-scooters account for up to 20 per cent of vehicles using protected bike lanes which are the safest and most appropriate place for them to travel. It is illegal to ride e-scooters on footpaths and work continues with e-scooter operators to improve rider behaviour, discourage footpath riding and promote use of the protected bike lane network. Victoria Police has been issuing infringement notices for illegal riding.

11. Key themes raised during the December 2021 engagement with businesses included concern about the attractiveness of public transport and the cost of travel. Traffic congestion and the impact of new protected bike lanes were not identified as significant concerns for the businesses interviewed. In contrast, social and print media have criticised bike lanes as the key reason for traffic congestion in the CBD. The data does not support the claim that removing bike lanes would reduce congestion.

12. The telephone survey found that issues which may impact the likelihood of people travelling to the city include high petrol prices, low confidence using public transport and a perception that protected bike lanes make it harder to drive. The survey found that: a majority of people (55 per cent) support installing protected bike lanes in the city; a majority (61 per cent) agree that protected bike lanes make it safer to travel around the city; and nearly 20 per cent of people living within 10 km of the city say that they are more likely to visit the city due to the new protected bike lanes. Based on the survey, an estimated 400,000 people have already used the new bike lanes. While 57 per cent agreed with the proposition that bike lanes made it harder to drive around the city, 55 per cent reported they had not noticed any new bike lanes in the city. Thirty eight per cent of people agreed with the proposition that they were less likely to drive to the city because of the new bike lanes (47 per cent disagreed and 15 per cent were unsure) but it is not known whether these people intended to travel to the city.

13. The analysis of the economic contribution of different modes of transport to city activation shows that public transport will be the most significant making a contribution of $35.4 billion dollars in 2026. The contribution of motor vehicles is projected to be $7.5 billion and bicycles $3.5 billion. The contribution of walking is projected to be $3.3 billion. However, the analysis is based on assessing the main mode of transport for travel to the city so does not take into account walking trips within the city. The analysis found that the average pedestrian returns $256,940 per year to the city economy whereas the average person using a car returns $225,420. The full report is provided in Attachment 4.

14. Most bike lanes completed in the previous two years have been constructed using adjustable components to enable post-installation design changes. Management continues to make adjustments to

bike lane projects, often in response to community feedback. More than 100 changes and design refinements are now complete. Another approximately 60 changes are being progressed. Examples of these adjustments are outlined in Attachment 5. Key aims of the adjustments are to improve safety, maximise the attractiveness of new bike lanes, protect and improve public transport and pedestrian movements, smooth traffic flow and provide access to nearby activities including via parking and drop-off facilities. Without a mechanism to control the number of vehicles using the roads, Council is not able to deliver specific congestion or travel time outcomes. The review process involves:

14.1. Issues are raised via community feedback, observation or regular discussion with the DoT.

14.2. Issues are analysed and considered in light of engineering standards and policy.

14.3. Potential solutions are developed, assessed and approved using accepted traffic engineering guidelines and established processes.

14.4. Community engagement occurs as appropriate.

14.5. Alterations are implemented as appropriate.

15. Assessing whether a change is required and developing an appropriate solution frequently requires a balance between competing interests. For example, removing parking to create a traffic lane facilitates movement along a street but reduces local access including for deliveries. Each individual change seeks to provide an overall improvement in terms of transport efficiency and therefore an improvement in amenity and economic outcomes. However, the complex nature of the movement of people and the interrelationship of all actions and reactions make it near-impossible to draw a direct relationship between an individual alteration and an economic outcome. The most important aim of the program is to make the transport network as safe as possible for everyone in the city regardless of their choice of mode.

16. On Exhibition Street, a significant number of post-installation improvements have now been completed including new hook turns at Exhibition/Collins and Exhibition/Bourke to smooth traffic flow. Preliminary observations indicate the hook turns have improved the reliability of vehicle movement along Exhibition Street. No stopping areas have been extended and adjusted to provide extra traffic capacity and additional pick-up drop-off bays have been installed. Further changes have been identified and are proposed to be installed depending on outcomes of consultation. These include parking changes to address bottlenecks and more short term parking. Details are provided at Attachment 6.

17. In strategic locations, traffic capacity has been impacted in order to reallocate road space required for safe protected bike lanes. For example, Queens Bridge Street was determined to be the preferred river crossing connecting south of the city, rather than Clarendon Street which is identified as a main traffic route. A traffic lane was reallocated to provide a protected bicycle lane across the bridge as there was insufficient road space to retain two traffic lanes. Queens Bridge Street is subsequently experiencing congestion during the PM peak. Reducing traffic capacity on Queens Bridge Street and redistributing trips to King Street; the State identified and managed main thoroughfare (arterial road), is consistent with the Transport Strategy which aims to reduce through-traffic in the CBD and concentrate through trips on arterial roads.

18. In order to improve the flow of traffic onto Queens Bridge, officers are considering the introduction of a southbound dedicated bus lane in the southern portion of Queen Street. (Attachment 7). This, along with sings to advise drivers of changed condition ahead, will have the effect of dispersing the southbound traffic onto King Street sooner and providing a smoother flow from the Hoddle Grid to Southbank.

19. Noting these considerable network changes, the delivery of new protected bike lane projects within Hoddle Grid including Flinders Street and Bourke/Spring Streets is recommended to be deferred while the city continues to recover and travel behaviour settles into a new rhythm. Protected bike lane projects outside the Hoddle Grid and those associated with major DoT projects will continue to be delivered as per Council's Cycle Infrastructure Program along with adjustments to existing bike lanes inside the Hoddle Grid to improve safety, smooth traffic flow and facilitate movement by pedestrians and public transport.

20. Communicating traffic changes to the community can assist people to make the most efficient route and mode choice for their journeys. Now that the city is busier than during lockdown when the first protected bicycle lanes were installed, management will investigate the use of signage where appropriate to alert travellers to changed traffic conditions. Council will also promote the use of travel planning apps to assist travellers to choose the most efficient route for their journey in real time. To aid further communication with commuter in particular, a map is provided as Attachment 8 which identifies prioritised routes in and around the city for walking, riding and driving.

21. It is difficult to predict exactly how and when the city will emerge fully from the impacts of the pandemic. A new rhythm is likely to have been established when office attendance and public transport patronage has

increased and stabilised. Once this rhythm is established Council will be in a position to recommence the delivery of protected bike lanes within the Hoddle Grid.

Recommendation from management

22. That the Future Melbourne Committee:

    22.1. Notes the update on implementation of the City of Melbourne Transport Program to Aid City Recovery and Reactivation (refer Attachment 3 of the report from management)

    22.2. Notes the findings of the Urbis study; Contribution of Different Modes of Transport to City Recovery (refer Attachment 4 of the report from management)

    22.3. Notes the design improvements recently completed or upcoming in response to community feedback (refer Attachment 5 of the report from management)

    22.4. Notes the further proposed changes to Exhibition Street to smooth traffic flow and provide access to adjacent businesses and destinations (refer Attachment 6 of the report from management)

    22.5. Notes the analysis of options to smooth traffic flow on Queens Bridge Street and management's intention to continue to investigate the option of a bus lane (refer Attachment 7 of the report from management)

    22.6. Endorses the deferral of further installation of new protected bike lanes in the Hoddle Grid during financial year 2022/2023, following two years of accelerated delivery.

    22.7. Endorses prioritised delivery of protected bike lanes outside the Hoddle Grid to high value routes including Arden Street, Macaulay Road and Royal Parade during financial year 2022/2023.

    22.8. Note the above endorsements will still allow the continued delivery of protected bike lanes per the Transport Strategy 2030 and accelerated commitments made in response to both the Climate and Biodiversity Emergency and COVID-19 pandemic.

Attachments:

Supporting Attachment

Legal

1. There are no direct legal implications arising from the recommendation from management.

Finance

2. The current works are funded within the FY21-22 Council Works Budget. Future funding will be subject to approval of the FY22-23 (and future) Annual Plan & Budget.

Conflict of interest

3. No member of Council staff, or other person engaged under a contract, involved in advising on or preparing this report has declared a material or general conflict of interest in relation to the matter of the report.

Health and Safety

4. Council Plan 2021-2025 commits City of Melbourne to plan and design for the safety and wellbeing of those who live, visit, work and do business in Melbourne, regardless of their background. One of the major initiatives under this commitment is to deliver the Transport Strategy which aims to halve the number of significant injuries and fatalities on Melbourne's streets by 2030. The recommendations in this report have been developed in line with this commitment.

Stakeholder consultation

5. The ITR considered public sentiment including feedback about transport initiatives. Sentiment data included correspondence to councillors, feedback provided via the Participate Melbourne website, business interviews, other correspondence and market research. No specific community engagement was done as part of the ITR or as part of this report.

Relation to Council policy

6. The recommendation is consistent with Council policy including the Council Plan 2021-2025, Transport Strategy, COVID-19 Reactivation and Recovery Plan, Economic Development Strategy 2031, Climate Change Mitigation Strategy 2050 and others.

Environmental sustainability

7. The recommendations in this report align with the Transport Strategy which aims to deliver improved environmental sustainability through increases in the use of more sustainable transport including walking, bicycles and public transport.

BIKE LANE DELIVERY PROGRAM

Transport Strategy 2030 network
Projects completed to April 2022

Legend

- Protected bike lane/path
- Future protected bike lane/path
- Protected lanes completed 20/21-21/22

Attachment 3
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City of Melbourne Transport Program to Aid City Recovery and Reactivation			
	Action (CoM response to recommendations of the Independent Transport Review)	**Timing**	**Progress to date**
1.	Promote workforce flexibility through advocacy to the business community	Early 2022	Management promoted workforce flexibility and a return to the office by engaging with peak bodies. This included the Business Council of Australia, Property Council of Australia, Victorian Chamber of Commerce and Industry, and Committee for Melbourne. Advocacy following the release of the Independent Transport Review (ITR) included several media mentions and direct engagement with Ministers of the Victorian Government. Given the significant impact of lockdowns on the central city, there has been a strong focus by City of Melbourne on advocacy to lift working from home recommendations following the Omicron outbreak and bring workers back to the city. This has included extensive media. With office attendance in March at 32 per cent of pre-COVID-19 levels, encouraging workers back to the city will remain a priority.
2.	Advocate for off-peak fare discounts and encourage trips outside peaks to commence in February 2022. This encourages people to choose public transport, reducing road congestion, especially at peak times.	Ongoing	Public transport fares outside of peak times were discounted from Sunday 31 January to Friday 27 August 2021. Management continues to advocate for extended public transport fare discounts to increase the volume of trips outside the peaks. On 22 October 2021 and 27 February 2022, the Herald Sun reported on calls for the State Government to reinstate an off-peak discount on public transport to help kick start the city's economy. The articles referenced the ITR, which recommended Council advocate to the Government for ongoing cheaper off-peak travel on public transport. Advocacy following the release of the ITR has included several media mentions and direct engagement with Ministers of the Victorian Government.

			Midweek Melbourne Money 2 was launched on 7 March 2022, with a focus on hospitality, and a range of other city events and activations. This has encouraged travel to the city outside peak times.
3.	Provide additional data to support DoT's RideSpace system. RideSpace provides real-time information on crowding on public transport to allow passengers to decide when to travel. This provides another way to encourage people back to public transport	Early 2022	Officers have provided data to DoT and are continuing to work with DoT to identify opportunities to collaborate and provide improved real-time information to improve the customer experience of travelling by public transport. On 10 March 2022, the Victorian Government announced that the RideSpace service was expanded to an additional 11 bus routes.
4.	Investigate opportunities to trial on-street demand-based parking pricing to maximise arrivals per bay and deliver the greatest recovery benefit to the city.	2022	This action is yet to commence. CoM's parking technology is being upgraded across the city. This is the first step towards facilitating trials of innovative parking management.
5.	Continue to work with off-street parking providers to support access to the city. This reduces the demand for on-street parking spaces and allows the land to be reallocated to other uses; travel or activities.	Ongoing. Linked to events, festivals and promotions	The central city weeknight and weekend parking offer was extended in late October. The deal was promoted via an email to City of Melbourne's What's On subscriber base and supported by promotions across the What's On Melbourne channels, social media and digital advertising.
6.	Continue to make the city COVID-19-safe through the design and operation of city infrastructure including reducing footpath clutter and expanding footpaths where required to reduce crowding.	Immediate and ongoing	The footpath was expanded at Spring/Lonsdale Streets near Parliament Station to reduce the crossing distance and reduce pedestrian congestion. Since August 2021, a 'Footpath Blitz' has been underway to upgrade our footpaths in time for people to return to the city. In and around the CBD, the delivery of $2.4m worth of footpath upgrades is being accelerated creating a cleaner and safer environment. More than 2,600sqm of aging footpaths will be renewed, using locally sourced bluestone in some of the city's heaviest foot traffic areas. Council's 2022/23 budget includes a further $5.3 million for renewal of over 40,000m2 of aging and $6.3M worth of footpath upgrades
7.	Advocate to DoT for signal changes to reduce pedestrian wait times and crowding as well as provide more auto-on signals.	Immediate and ongoing	New pedestrian signals have been delivered at Lonsdale St/Hardware Lane to provide a mid-block pedestrian link between Elizabeth and Queen Streets. This project was funded by the Victorian Government blackspot program, due to a significant crash history in this location. This new connection significantly improves connectivity in the precinct, reducing pedestrian congestion at Lonsdale/Elizabeth and Lonsdale/Queen intersections.

			Management continues to advocate to DoT for reduced signal cycle times and expanded auto-on operations.
8.	Continue to deliver on-street activations to make the city more attractive for visitors, 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	Initiatives delivering on-street activation include: - Continuation of the subsidised extended outdoor dining program - Christmas festival - Drone show - Moomba Festival - Live music pop-ups - Shopfront activations - Pop-up libraries - Melbourne Attractions and Experiences Pass
9.	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	Design work is in progress for Little Lonsdale Street (Swanston to Queen) to widen footpaths and increase pedestrian priority. The project is scheduled for delivery in 2022/23, with final timing to be determined in consultation with utilities providers. Projects for 22/23 include the continuation of Little Lonsdale Street, the Latrobe St footpath outside the State Library and Lygon Street. The 22/23 budget is $1.4m. Evaluation of reduced speed limits and traffic calming is ongoing, with further data collection planned. This will support an application to DoT for permanent approval of the 20km/h shared zones in one-way little streets.
10.	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	On 7 December 2021, FMC endorsed the M9 councils' agreed advocacy priorities. The transport priorities include for the Victorian Government to: 'Undertake a public transport promotion and behaviour change program to encourage a return to public transport.' The Victorian Government provided free public transport on Christmas Day and New Year's Eve 2021. On 13 December 2021, the Victorian Government announced 250,000 free public transport travel vouchers for Victorians to travel into the city in December and January. Public transport use is being promoted by the DoT via a range of media channels.
11.	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	Ongoing	New pick up/drop off bays have been installed outside 121 Exhibition Street and 516 Bourke Street.

	between Bourke Street and Flinders Street (northbound and southbound).		Further loading and short term parking needs in the city will be considered as part of the Kerbside Parking Plan.
12.	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	Hook turns have been installed at the intersections of Exhibition Street and Collins Street and Exhibition Street and Bourke Street. This change will ensure that all turning movements are consolidated in the left/hook lane, improving traffic flow in the through lane.
13.	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	Delivery of the bicycle infrastructure program has continued with progress on key routes including Princes Park Drive and Alexandra Avenue. Consultation continued in relation to the Royal Parade project.
14.	Monitor and evaluate traffic hot spots which include bicycle infrastructure and adjust designs and interventions as required.	Ongoing	Adjustments have been completed at the Little Bourke/Spencer intersection to address a bottleneck due to private vehicle turning movements. Observations indicate that hook turns on Exhibition Street are improving journey time reliability and smoothing traffic flow. Officers continue to work with the DoT to improve the management of traffic at the Flinders/Queens Bridge intersection. This includes options to improve bus priority, moderate traffic bottlenecks, planning for Greenline and optimising local traffic network operation. See Attachment 5 for more detail.
15.	Deliver an E-scooter trial to encourage local travel and provide a new way to visit the City.	Early 2022	The Victorian Government shared e-scooter trial began in the Cities of Melbourne, Port Phillip and Yarra on 1 February 2022. Since the start of the trial, e-scooters have made a significant contribution to city activation. There had been more than 1,000,000 e-scooter trips by the end of May 2022. The most popular locations for e-scooter use include the Docklands waterfront shared paths, Southbank Promenade, the Main Yarra Trail and Swanston and other central city streets. Peak e-scooter use is between 5pm and 9pm. There have been 8-12 trips per e-scooter per day which is very high on international comparisons. Tube counts indicate that for the City of Melbourne's new protected bike lanes, e-scooter travellers account for up to 20 per cent of users in streets such as

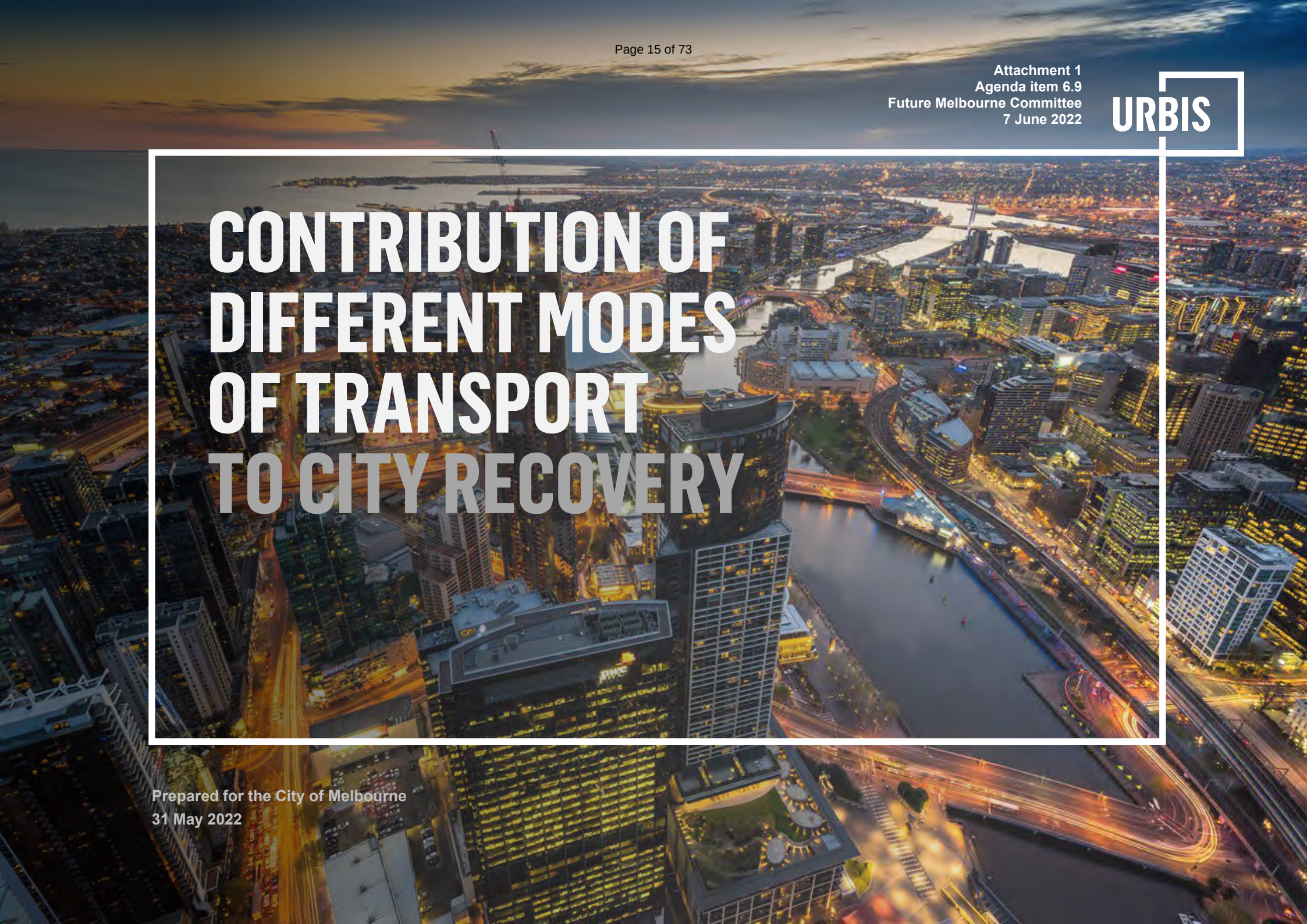
			Rathdowne Street, Queens Bridge Street and Latrobe Street Bridge. The two operators have hired approximately 200 people locally to deliver services including maintenance, e-scooter repositioning, communications and customer service. One of the e-scooter operators, Neuron estimates that the scooters replaced an estimated 72,450 car trips in February.
16.	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	Delivery of the next phase of Let’s Ride, Melbourne is underway including promotion, confidence classes and marketing. Officer level advocacy to DoT to support an active transport behaviour change campaign is ongoing. The M9 active transport advocacy priorities adopted by FMC on 7 December 2021 include promoting active transport through the Let’s Ride, Melbourne program.
17.	For all transport actions, continue to seek and respond to community feedback to improve design outcomes and optimise movement around the city.	Ongoing	The bike lane engagement program is ongoing via Participate Melbourne. The engagement is supported by notification letters, project signage and targeted social media posts in local areas adjacent to upcoming projects and communications to encourage more people to provide feedback. Community engagement for the program has been ongoing since late 2020 with more than 1,200 responses received: • 728 (61%) expressed support for the program (+1% since Oct 2021), • 313 (26%) expressed opposition to the program (+1% since Oct 2021), • 151 neutral (13%). The development of neighbourhood plans for Kensington and Melbourne CBD has included engagement with the community on a range of transport issues. For further detail on recent improvements, see Attachment 5.
18.	Continue working with the DoT to undertake traffic management reports on congestion points and deliver improvements to reduce congestion where appropriate.	Ongoing	See response to 14 above and Attachment 5.

19.	Invite further feedback from the community, including city businesses, as to further improvements that are required to improve the transport experience and assist in city reactivation and recovery.	Immediate and ongoing	Business Concierge captured feedback from businesses in December 2021 as part of face to face discussions. About 170 businesses have been interviewed and provided comments. Key themes raised by businesses included concerns about people returning to safe public transport use, mask compliance and about the cost of transport (parking and public transport fares). It is likely that there has been a shift in public concern relating to COVID-19 since December 2021. Traffic congestion and the impact of new protected bike lanes was not a significant concern for the businesses interviewed. In early April, a survey of 1370 people across metropolitan Melbourne was conducted. The margin of error for the survey is +/- 4.7 per cent. There is no pre-COVID-19 baseline for comparison as this is the first time this survey has been undertaken. The responses are the stated preferences and views of people at a point in time and may not reflect actual behaviour. Key findings of the research include that: • 55 per cent of people support installing protected bike lanes in the city (increasing to 59 per cent for people living in inner Melbourne); • 61 per cent of people agree that protected bike lanes make it safer to travel around the city; • 18 per cent of people living within 10 km of the city say that they are more likely to visit the city due to the new protected bike lanes; • 57 per cent of people reported being comfortable to use public transport to travel into the city • 45 per cent of people were aware of the new bike lanes (55 per cent had not noticed them), • Nine per cent of people have used the bike lanes (increasing to 14 per cent for people living in inner Melbourne). This suggests more than 400,000 people have used the bike lanes. • 51 per cent of respondents indicated that - when they come to the city - they are more likely to drive than before COVID-19. The remaining 49 per cent indicated they were more likely to take public transport (23 per cent), walk (15 per cent) and cycle or scoot (10 per cent). • 57 per cent of people thought that the new bike lanes made it harder to drive around the city; • 52 per cent of people said higher petrol prices would make them drive to the city less often; • 47 per cent of people disagreed that bike lanes would make them less likely to drive to the city compared to 38 per cent who agreed (15 per cent unsure).

			• Work is the most frequent reason to travel to the city (30 per cent), ahead of sport/culture (15 per cent), social (14 per cent), other (12 per cent), eat/drink (seven per cent), shopping (seven per cent) and study (four per cent).
20.	Outline the changes made and improvements delivered and assessing the effectiveness of the measures taken to reduce congestion and deliver economic value to the city.	April 2022	See response to 14, 17 above and Attachment 5.
21.	Outline the contributions of different modes of transport to city activation and recovery including the economic uplift associated with each mode of transport.	April 2022	The analysis of the economic contribution of different modes of transport to city activation shows that public transport will be the most significant making a contribution of $35.4 billion dollars in 2026. The contribution of motor vehicles is projected to be $7.5 billion; and bicycles $3.5 billion. The contribution of walking is projected to be $3.3 billion however the analysis is based on assessing the main mode of transport for travel to the city so does not take into account walking trips within the city. Walking trips within the city make a very significant contribution to economic uplift. The analysis found that in terms of economic return (GVA) per metre width of transport space per city worker, the space required for a pedestrian returns $321,175 per year to the city economy - the highest of all modes - whereas the space required for a car returns $93,277 which was the lowest of all modes. Other findings of the analysis include: • Travel for work, socialising and shopping account for 80 per cent of trips to the Central City. These activities are strongly interconnected and a drop in the level of one activity reduces the economic contribution of the others. • In the post-COVID-19 recovery scenario, 71 per cent of economic activity is expected to be generated by people who use public transport to access the central city, 15 per cent by driving to the city, 7 per cent by walking to the city and 7 per cent by riding and e-scooter trips to the city • During the COVID-19 lockdowns, driving generated 44 per cent of the city's economic activity and public transport 46 per cent as people used public transport less. • Pre-COVID-19, public transport generated 68 per cent of economic activity, driving 21 per cent, walking 7 per cent and riding and e-scooting 4 per cent. • The report recommends that Council continue to attract workers back to the CBD, emphasise active and public transport for city access, look for ways to further reduce through traffic and allocate road space based on the value of users of that space to the central city economy.

Attachment 1
Agenda item 6.9
Future Melbourne Committee
7 June 2022

URBIS



CONTRIBUTION OF DIFFERENT MODES OF TRANSPORT TO CITY RECOVERY

Prepared for the City of Melbourne
31 May 2022

This report is dated 25/5/2022 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (Urbis) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of the City of Melbourne (Instructing Party) for the purpose of a Contribution of Different Modes of Transport to City Recovery (Purpose) and not for any other purpose or use. Urbis expressly disclaims any liability to the Instructing Party who relies or purports to rely on this report for any purpose other than the Purpose and to any party other than the Instructing Party who relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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All surveys, forecasts, projections and recommendations contained in or made in relation to or associated with this report are made in good faith and based on information supplied to Urbis at the date of this report. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

Urbis has made all reasonable inquiries that it believes is necessary in preparing this report, but it cannot be certain that all information material to the preparation of this report has been provided to it as there may be information that is not publicly available at the time of its inquiry.

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Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

Urbis staff responsible for this report were

Director	Graham McCabe Richard Gibbs
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Project code	P0037947
Report number	Final Report

EXECUTIVE SUMMARY

KEY FINDINGS

1. **CBDs could take longer to recover.** CBDs could take more time to recover than many suburban and regional locations due to the relatively slow / subdued return of office workers to the city.
2. **Some degree of WFH will persist.** During Covid Recovery there has been a 19 per cent increase in WFH compared to pre-Covid.
3. **Work, socialising and shopping account for 80 per cent of trips to the Central City.** The interconnectedness of these industries is significant. If one changes, the others are impacted.
4. **The majority of trips to and around the Central City are by sustainable modes.** 58 per cent of trips to the Central City are by walking, cycling/scootering and public transport and 94 per cent of trips around the central city are by these modes.
5. **It will be important for the City of Melbourne to support people to come back into the Central City for work** as well as strengthen other sectors which are likely to be affected by work-from-home trends.
6. **Walking, cycling/scootering and public transport modes are the most efficient ways of moving large volumes of people.** The degree to which the Council can influence the movement of more people within the available space will see more people accessing the Central City.
7. **2026 will see a mode shift toward sustainable modes.** The opening of Melbourne Metro forecast a 3.5 per cent shift in mode share from 2026 towards public transport. Similarly bicycles and scooters are anticipated to experience a mode shift of seven per cent.
8. **A person walking to the Central City makes the greatest contribution to the Central City economy compared to all other modes.** Specifically, walking economic contribution is 8 per cent higher than the average contribution across all modes. Freight trips also provide significant economic contribution.
9. **Road space used for sustainable modes represents the highest return on investment compared with cars.** The space required for a pedestrian returns $321,175 p.a whereas the space required for a car returns $93,277 p.a in economic benefit.

Contribution of people coming in to the Central City

	PRE-COVID	COVID-RECOVERY (PROJECTED 2026)
Annual contribution of walking to the Melbourne CBD	$3.7 B	$3.3 B
Annual contribution of cycling to the Melbourne CBD	$2.1 B	$3.5 B
Annual contribution of public transport to the Melbourne CBD	$37.8 B	$35.4 B
Annual contribution of driving to the Melbourne CBD reduced due to mode shift associated with State and local Government targets	$11.9 B	$7.5 B

*Note this study evaluates the economic contribution of people coming into the city rather than the trips made within the Central City. Trips within the Central City are largely made on foot and when considering these trips it is likely that the contribution of pedestrians to the Central City Economy is much larger (see Page 24 for more).

CONTENTS

INTRODUCTION

01

BACKGROUND

The Covid-19 pandemic has been a shock to the Melbourne CBD's economy. As the city moves into its next post-lockdown phase, it is necessary to understand how the transport system contributes to recovery, in order to guide a reconfiguration that will increase economic activity, according to the value of each mode of transport.

COVID-19 IMPACTS ON CITIES

Across the world the Covid-19 pandemic has impacted cities as people were told to stay home. The interconnectedness of sectors such as retail and food/drink on office and education came into stark relief as the former were heavily impacted by the move to online work and study. Responses to the Covid-19 pandemic have varied, but common to many cities has been the reallocation of street space to support social distancing through

- Bicycle travel.
- Wider footpaths for pedestrians.
- Outdoor dining to support businesses with indoor capacity limits.

Transport provides a critical connection between homes and the Central City and needs to be provided in a way that supports economic activity to its maximum extent.

A SHARP, DEEP RECESSION

Covid-19 has led to a recession that has been sharper and deeper than any in recent history. In work undertaken for the City of Melbourne in 2021, PWC pointed out that it has been comparable to

- The effects of combining the impacts of the Spanish Flu and WW2.
- Three times worse than job losses experienced in the recession in the 1990s.

This recession has had a disproportionate impact on Melbourne's economy which relies on the confluence of multiple industries. Melbourne has been the most locked-down city in the world with 262 days spent under lockdown orders through 2020-21.

PWC data shows that compared to pre-Covid forecasts, the City of Melbourne economy would be up to $23.5 billion – or 22 per cent - smaller in 2020. Although the economy shrunk in the rest of Victoria also, the reduction was less (15 per cent).

A CITY IN RECOVERY

In the aftermath of the Covid-19 pandemic, the focus has been on economic recovery of the Central City.

The City of Melbourne is interested in developing a greater understanding of the role transport can play in city recovery. Key to the recovery of the city is ensuring people can access the city, noting that

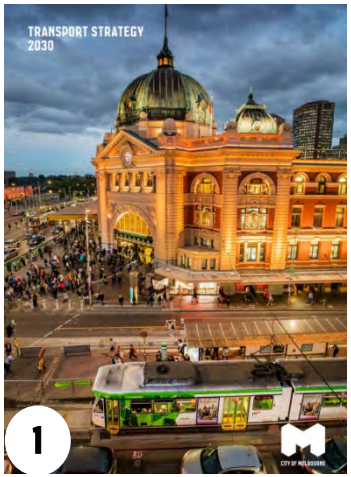
- There has been reluctance by some to use public transport out of fear of catching Covid.
- Many office workers are now choosing to work hybrid work weeks only partially in the office.

There is a role for local government in managing the transport network in a manner that supports economic recovery by seeking to attract people back to the central city. Decisions regarding how road space is managed should be informed by an understanding of the value that is derived from transport modes.

The City of Melbourne's existing policy to support economic development and transport is on **Page 7.**

POLICY BACKGROUND

The City of Melbourne has a long history of supporting the Central City through transport and economic policy aimed at increasing its attractiveness as a place to do business, work, study, shop and visit.



1. TRANSPORT STRATEGY 2030

The Transport Strategy 2030 establishes a long-term vision for all city visitors and comprises of projects which will see enhanced amenities including city greening. The 2030 plan will see

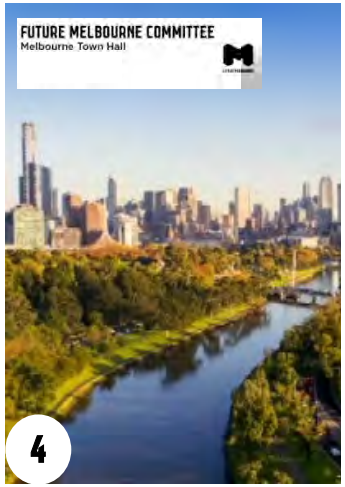
- Reduced through traffic.
- Conversion of ‘Little Streets’ into pedestrian priority shared zones. Providing more space for pedestrians, cyclists and
- Create a network of more than 50 KM of protected bicycle lanes.
- More space for people on footpaths (emphasising major transport hubs).

2. ECONOMIC DEVELOPMENT STRATEGY 2031

In 2021, the City of Melbourne released Melbourne’s Thriving Economic Future, which highlights the massive drop in daily population (90 per cent lower in mid-2020, compared with previous data), the impact of this on the sharpness and deepness of the ensuing recession, and the critical role of active and public transport on the economic life of the city.

3. INDEPENDENT TRANSPORT REVIEW

In 2021, the City of Melbourne adopted the Independent Transport Review (ITR). The ITR identified interventions for city recovery including the reallocation of “road and parking spaces for local activation”.



4. FUTURE MELBOURNE COMMITTEE RESOLUTION

The Future Melbourne Committee adopted the following resolution when the Independent Transport Review was endorsed on 19 October 2021 –

That the Future Melbourne Committee

Notes the need for improved data on the role of the transport system in city recovery and requests a report in 6 months outlining the contributions of different modes of transport to city activation and recovery including the economic uplift associated with each mode of transport.

This resolution has led to this work which will be reported back to the Future Melbourne Committee in 2022.

ABOUT THIS PROJECT

This project looks at the Central City as the engine room of economic activity in the state and asks how it can be best supported by its transport networks.

PROJECT OBJECTIVE

The objective of this project is to –

Understand how each mode makes up the entire transport system and quantify the contributions of different modes of transport to city activation and recovery including the economic uplift associated with each mode of transport.

PROJECT SCOPE

This project looks at the Central City area of Melbourne – the engine room of Victoria's economy, and the principal place of economic activity in Melbourne as a place of work, shopping, education, entertainment, and visitors – and how different transport modes contribute to this economic activity within the Melbourne Central City.

This project is focused on macro-level travel activity and does not account for the low-level variation that occurs within modes, including the different value-added per trip type.

This project was undertaken by Urbis on behalf of the City of Melbourne. The project was undertaken from March to May 2022.

KEY QUESTIONS AND WHERE TO FIND ANSWERS IN THIS REPORT

What is meant by City 'recovery'?

Sections 1 and 2 of this report provide a deeper understanding of the relationship between transport and recovery including a definition of 'city recovery' and a blueprint for how economic contribution can be measured in this context.

How and why do people come to the Central City? When they're in the Central City, how do they get about?

Section 3 summarises what mode people use to get to the Central City, how people move about the Central City and their reason for visiting.

How much economic contribution is made by each transport mode?

Section 4 collates data to determine the economic contribution of each mode and provides a snapshot of economic activity pre-Covid during and post-Covid. This section also reveals the Annual GVA per worker by mode, as well as the GVA contribution of each mode per metre width of transport space.

METHOD AND DATA

HOW DO PEOPLE GET TO AND AROUND THE CITY? WHY DO THEY COME?

Trip mode

Analysis of the 2017-2018 Victorian Integrated Survey of Travel and Activity (VISTA) and ABS Journey to Work (JTW) data, provides information on how and why people travel to and around the Central City.

HOW DO WE MEASURE ECONOMIC ACTIVITY?

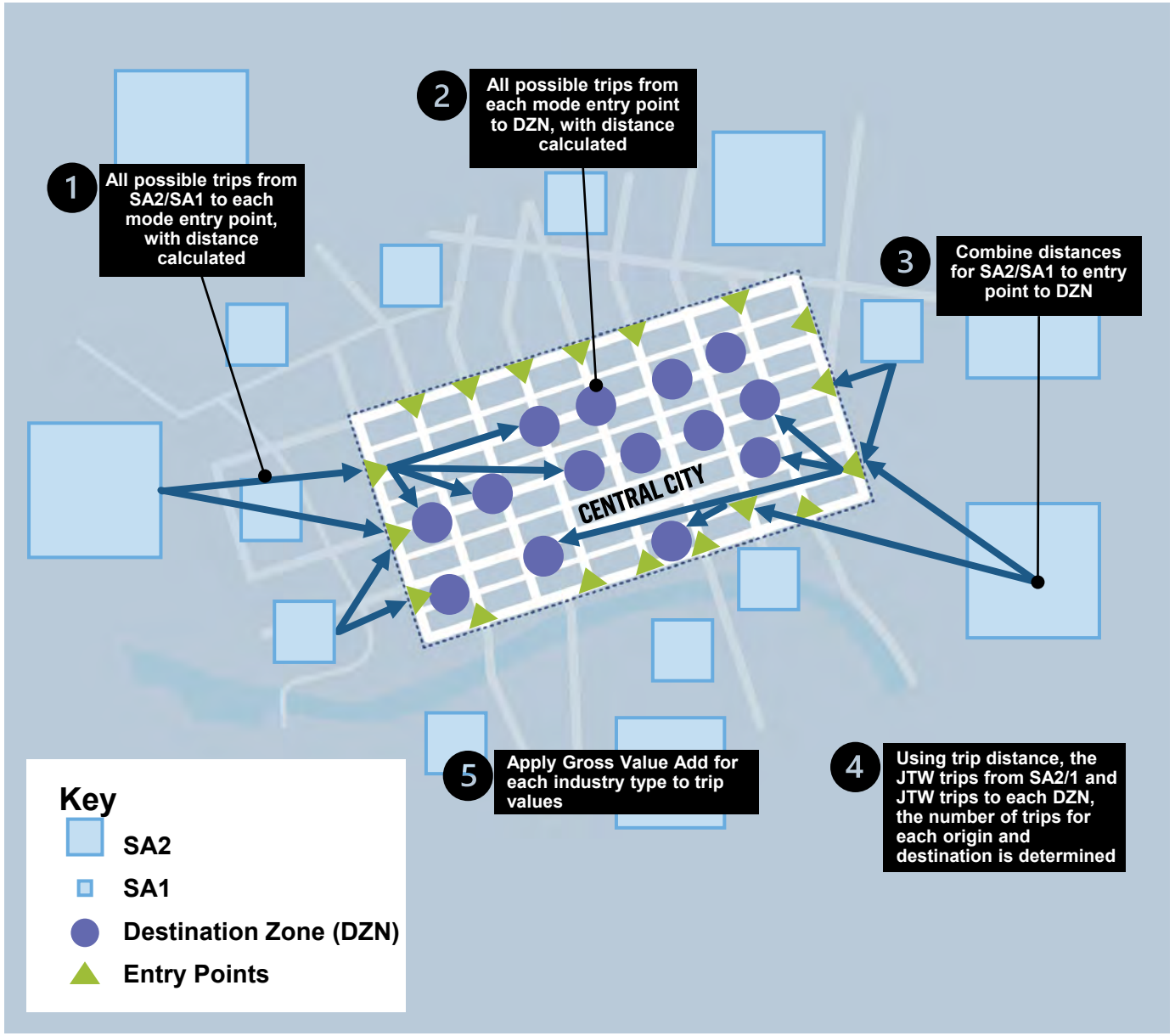
Economic activity is most commonly measured by Gross Value Add (GVA) within a region. It represents the making, provision, purchase and selling of goods and services. In addition to GVA, several factors were applied in this analysis to represent mode-splits, work from home, and employment growth.

WHERE DOES ECONOMIC ACTIVITY OCCUR?

Using the ABS standard industry codes (ANZCO), the location of economic activity (GVA) is assigned to census Destination Zones (DZN) as a proxy for economic activity. As JTW is the most reliable source of industry, DZN and economic activity, trips are mapped from their source statistical area (SA1 for nearby areas and SA2 for the remainder of Melbourne) to their logical entry point by transport mode to the city (station, tram stop or CBD edge) using standard transport modelling processes. This method allowed Urbis to identify the effects of transport on the economy at locational level for entry to the central city and the destination.

This analysis has enabled the determination of the value of one metre in width of transport space for each transport mode.

Methodology Visual Representation



WHAT IS 'CITY RECOVERY'?

This examination of 'city recovery' on this page and Page 11 looks at the sectors of

- Office
- Tourism
- Education
- Retail.

In July 2021 the City of Melbourne commissioned SGS Economics and Planning to examine the potential scenarios for recovery. Under the expected recovery international migration and travel returns to pre-Covid levels from 2022-2024. The overall jobs forecasts are shown right with Retail and Education and Training on the following page.

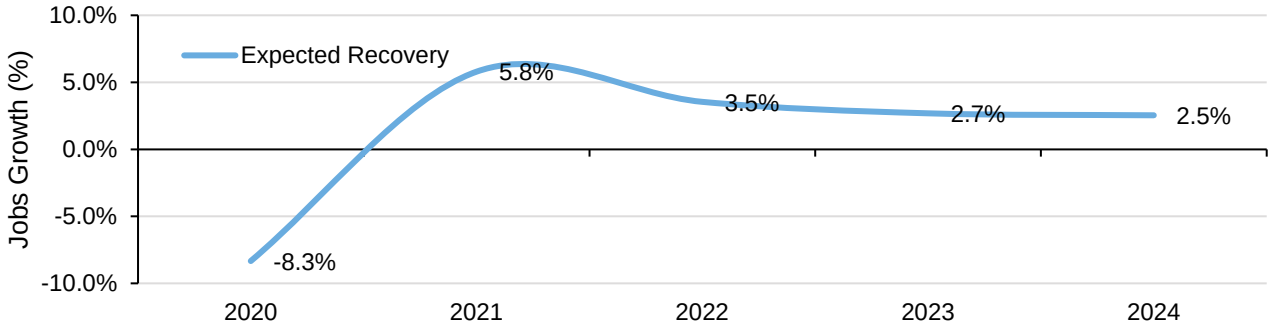
OFFICE SECTOR RECOVERY

The economic recovery from the Covid-19 pandemic has tended to progress more slowly in CBD locations due to the relatively subdued return of office workers. The impact of remote working not only affected the office sector but has had downstream impacts on other activities in the CBD. There are some clear trends emerging from attitudinal data (VISTA) on remote working, as follows

- During-Covid there were significantly greater opportunities to work from home, particularly "all or most of the time".
- Post-Covid office workers are still more likely to work from home than pre-Covid despite a significant decrease in working remotely compared to during-Covid.
- The 'new normal' involves greater flexibility with hybrid work-weeks becoming common.

The Property Council of Australia has indicated a similar trend with higher office occupancies reported during the latest reported monthly survey (March 2022). This survey indicated a 32 per cent occupancy of CBD office space, around double the result of a month earlier.

Central City Total Jobs Forecast Recovery



Source - City of Melbourne Population and Jobs Forecasts 2020-2040 SGS Economics and Planning (July 2021).

Attitudes to Working from Home (WFH) Trends, Before, During and Post-Covid

Frequency (responses as a % of WFH responses)	Pre- Covid	During Covid	Post- Covid
Occasional opportunities to work from home	59%	21%	46%
Frequent opportunities to work from home	28%	23%	39%
All or most work is delivered from home	14%	56%	15%

Office Occupancy

NOV-21 12% ↓ **JAN-22** 4% ↑ **FEB-22** 15% ↑ **MAR-22** 32%

Source - Property Council of Australia (April 2022).
https://research.propertycouncil.com.au/blog/office-occupancy-rates-doubles-in-most-cbds

WHAT IS 'CITY RECOVERY'?

RETAIL SECTOR RECOVERY

Retail recovery in Central City is forecast to follow the return to work in the office sector. Retail is considered a customer-facing sector and, largely requires workers to be in store. During Covid, CBDs had a reduced number of people visiting daily, and many retailers closed or operated as click and collect due to lockdown orders or to avoid more significant losses. Recovery to a new normal is expected to occur by 2024, due to a stabilisation of population and employment growth and a slow tourism recovery. Retail jobs growth of 1.4 per cent is forecast for 2024.

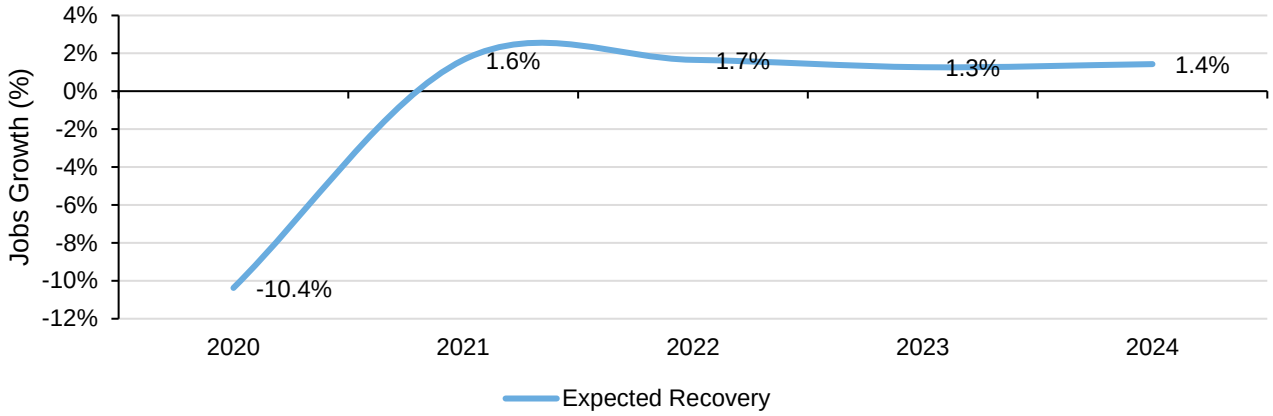
EDUCATION SECTOR RECOVERY

The recovery of the education sector is expected when international students return. While education jobs are likely to rebound in 2022 more sustainable levels are expected in 2023 and 2024, it is likely that a full return of international student numbers will occur in 2024 as the 2020 and 2021 enrollments will continue to impact until these cohorts graduate.

TOURISM SECTOR RECOVERY

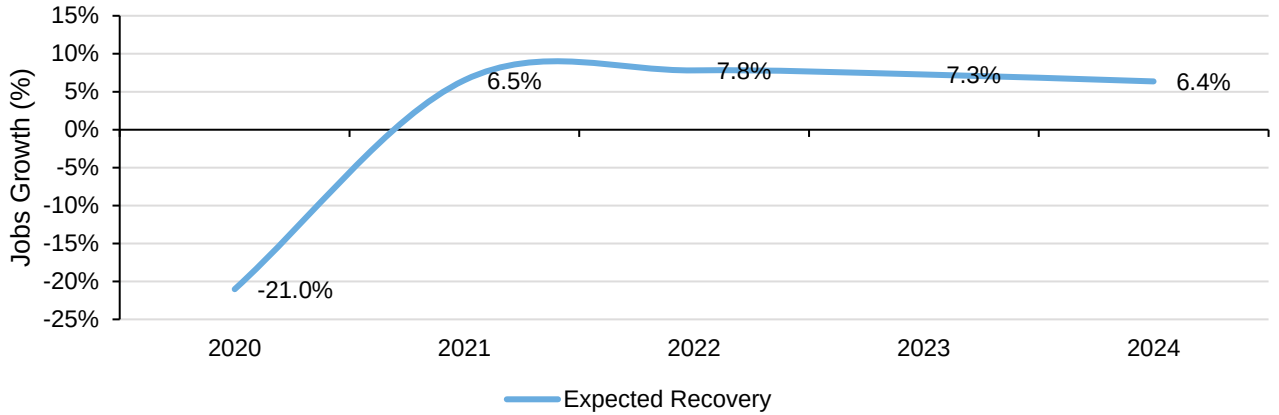
The recovery of the tourism sector is expected to return once borders fully reopen internationally and confidence in travel safety/certainty returns. A rebound is expected in 2022-2023 and sustainable levels reached in 2023-2024.

Central City Retail Jobs Forecasts Recovery



Source - City of Melbourne Population and Jobs Forecasts 2020-2040 SGS Economics and Planning.

Central City Education and Training Forecast Recovery



Source - City of Melbourne Population and Jobs Forecasts 2020-2040 SGS Economics and Planning.

TRANSPORT A KEY ENABLER OF RECOVERY

The transport network is tasked with facilitating access to and travel within the city by providing high-quality transport alternatives suiting a wide range of Central City visitors' needs and budgets. All transport plays a role in the economic life of the Central City. The vast majority of access to and around Melbourne's Central City is by sustainable modes (walking, cycling/scootering and public transport), as they are the most effective travel option in dense urban spaces - Refer to page 19 for more on this.

These modes play a significant role in supporting the Central City's recovery and Sections 4 and 5 of this report quantify the economic contribution of each mode and where the economic activity takes place.

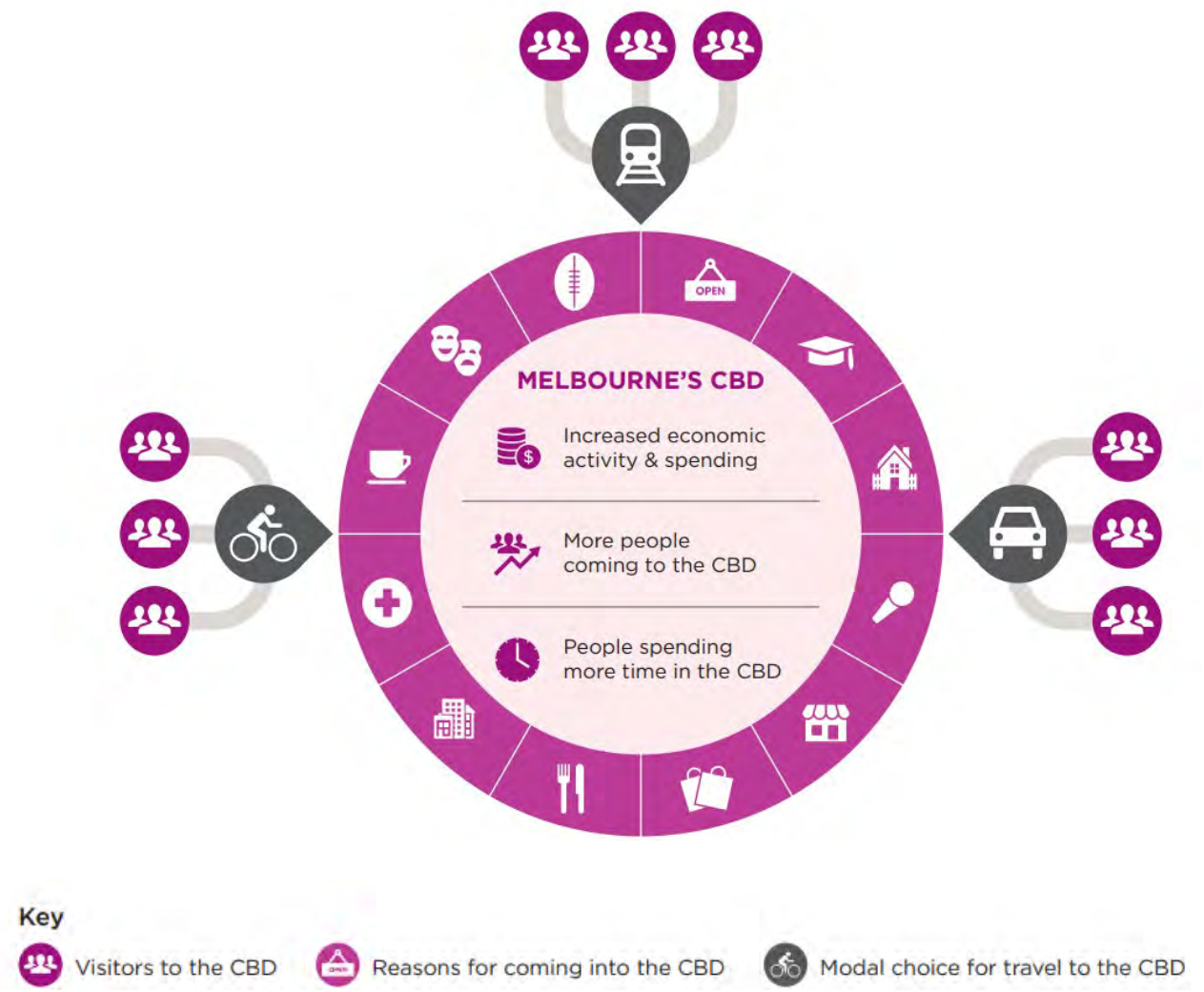
GROSS VALUE ADDED (GVA)

GVA is one way of measuring economic output to measure the contribution made to the economy by individual producers, industries, sectors or regions. In this study we have used GVA to measure the economic contribution of people using different modes of transport to access the Central City.

TRANSPORT ENABLES GVA

Transport is an enabler of economic growth within an area. Workers are the key underpinning of GVA and value creation in CBDs. Transport brings in the resources and products that are required to produce GVA. For this reason, journey to work data underpins the analysis of contribution to GVA, where profession GVA is apportioned by transport mode type per worker. This gives an estimate of the per-mode contribution to the economy that is enabled by different transport modes.

Transport In, Out and Within the Central City Enabling Recovery



Source - City of Melbourne and Deloitte, Independent Transport Review, 2021

ECONOMIC CONTRIBUTION OF TRANSPORT MEASUREMENT

02

MEASURING ECONOMIC CONTRIBUTION

DEFINING CUSTOMER-FACING AND NON-CUSTOMER FACING

Industry sectors have been broken into customer-facing and non-customer facing categories. These are used to consider the need for travel to and from the Central City as a necessary condition for the work/activity to take place. Customer-facing roles are reliant on a consumer being present in the place of operations, such as a retail store or a bank teller. The customer is defined as a shopper/user, as opposed to an individual who requires a service (such as someone requiring electricity servicing), which helps separate key worker and non-key worker positions.

ECONOMIC CONTRIBUTION OF CUSTOMER-FACING AND NON-CUSTOMER FACING ROLES

For customer-facing roles, the proportion of visitors by mode of transport has been used to apportion the Gross Value Added (GVA) contribution of each industry. For non-customer facing roles, the GVA value has been calculated based on the assumed number of days in the office. For the assumed proportion of work from home days, 30 per cent of the GVA has been attributed to the Central City, to reflect the ongoing costs and maintenance of maintaining the office/workspace and office services.

The lower GVA for non-customer facing roles also reflects the lower levels of incidental local spending in the economy that results from the working from home paradigm change (see **Page 10**). The onset of the Covid-19 pandemic resulted in the incidence of unprecedented and synchronised cyclical and structural shocks. In the event there are structural shifts in the relative GVA contributions of specific sectors, a permanent shift in GVA contributions to the City may result.

Customer-facing

- Accommodation & Food Services
- Retail Trade
- Education & Training
- Transport, Postal & Warehousing

Non-Customer Facing, in person

- Health Care & Social Assistance
- Electricity, Gas, Water & Waste Services
- Construction
- Information Media & Telecommunications
- Wholesale Trade
- Manufacturing
- Auxiliary Finance & Insurance Services

Non-Customer Facing, can work from home

- Public Administration & Safety
- Finance
- Mining
- Insurance & Superannuation Funds
- Administrative & Support Services
- Professional, Scientific & Technical Services
- Agriculture, Forestry & Fishing

BENEFITS OF CO-LOCATING IN THE CENTRAL CITY

TRIP PURPOSE AND GVA TO INDUSTRY SECTORS

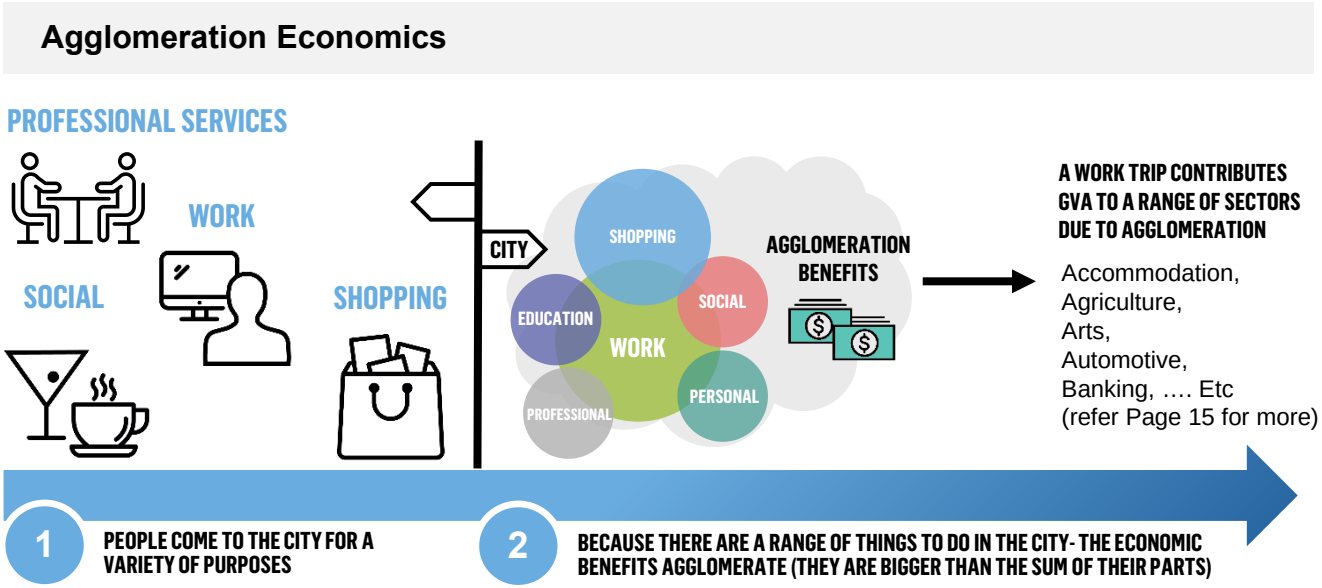
The economic value that people bring when they come to the Central City is spread across a range of industry sectors. A person who comes to the Central City for work doesn't just produce an economic relationship between themselves and the entity they are employed by, rather, there are a range of industries which benefit from this trip. For example - a worker may buy their lunch in the Central City during their lunch-break providing benefit to the

- Agricultural Sector as the raw ingredients for their lunch was grown on farms.
- Automotive Sector as the raw ingredients were delivered to the café by delivery van.
- Education Sector as the barista can pay her university fees.

AGGLOMERATION OF BENEFITS IN THE CENTRAL CITY

In the example above, there are benefits to the café being located close to workers. Similarly, there are benefits from educational institutions being located next to workers and cafes as students can be employed while they are studying. This relationship is known as Agglomeration Economics and describes the economic benefit of co-locating multiple businesses so that the economic benefits derived from this ecosystem are greater than would otherwise be derived were they not near one another. Trips within the central city are therefore extremely important for Agglomeration Economics to occur, however, are not included in the core scope of this analysis as they are challenging to measure.

The relationship between trip purpose, benefits to industry sector and agglomeration benefits is shown in the image on the right.



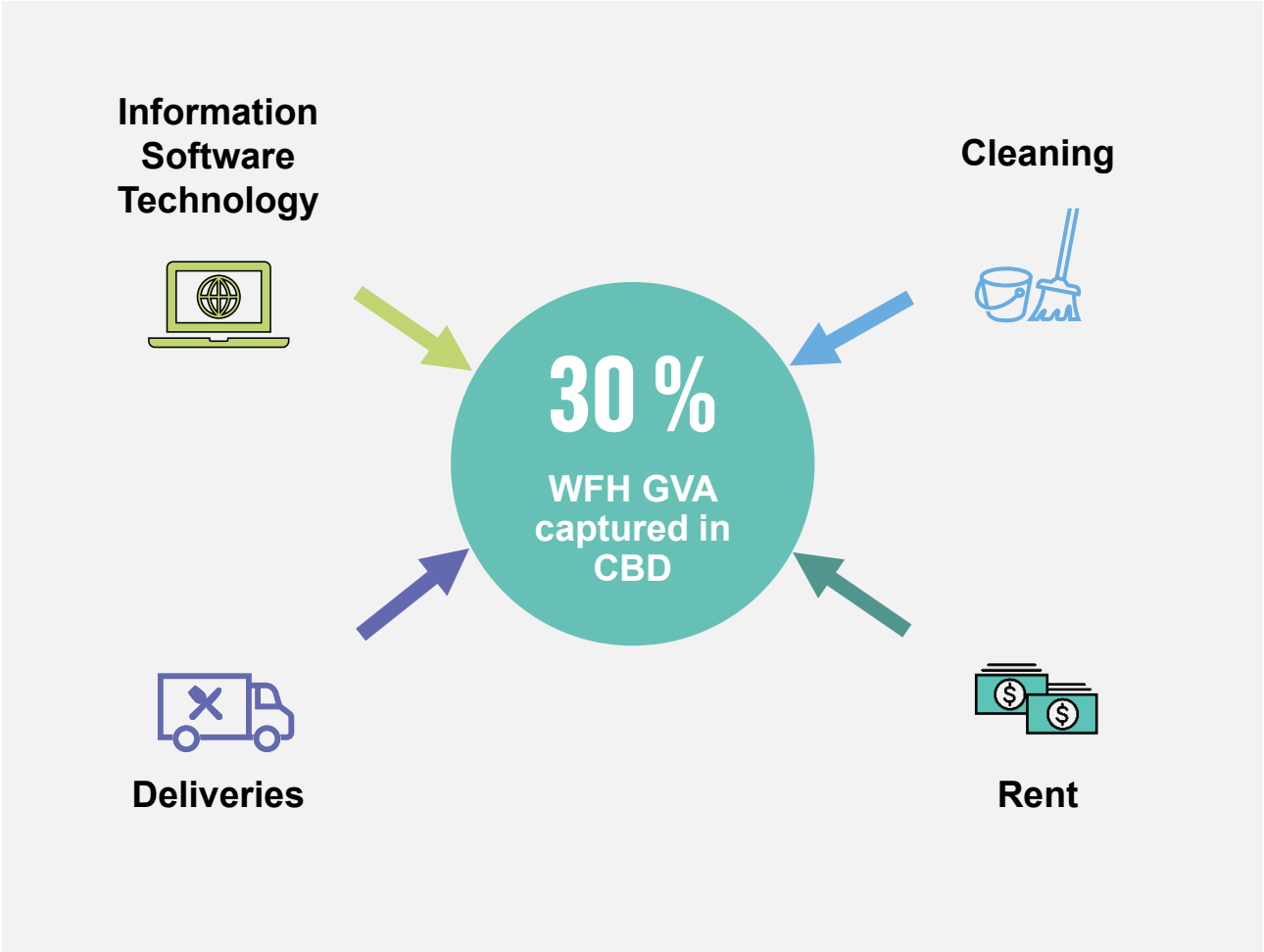
IMPACTS ON GVA OF COVID-19 AND RECOVERY

The Covid-19 pandemic has seen a significant change in the patterns of work. This impact has been particularly acute in metropolitan centres due to the emergence of work from home modes. Consequently assumed GVA contribution to the City of Melbourne has needed to be changed. This is due to the fact that the economic activity is no longer being geolocated in the CBD, but rather is also located in the outer suburbs.

We have assumed that 30 per cent of GVA contribution by workers in roles that can be done through a work from home mode is still captured in the CBD while working from home. This is because there is still activity related to rental payments, cleaning, Information Software Technology (IST) and delivery services that are being undertaken within the CBD.

Given the government requirements during Covid-19, it is assumed that jobs that can be done in a WFH model were completed entirely outside of the CBD. Consequently, 30 per cent of the GVA contribution is captured in a standard working week.

Post-Covid-19, a banded approach has been taken, given emerging trends that indicate between 2 and 4 days will be worked in offices across all industries. As a result, three working days in the week have been calculated on the 30 per cent GVA work from home assumption. This is the assumed norm in the recovery state, given it is anticipated that these working norms are likely to be permanent.



MODES OF TRIPS MADE TO THE CENTRAL CITY

03

WHY DO PEOPLE COME TO THE CENTRAL CITY?

TRIP PURPOSES

People come to the city for a broad range of reasons. The top three reasons people come to the city are for work (58 per cent), socialising (16 per cent) and shopping (six per cent). Together these trips account for a significant majority (80 per cent) of all trips to the city.

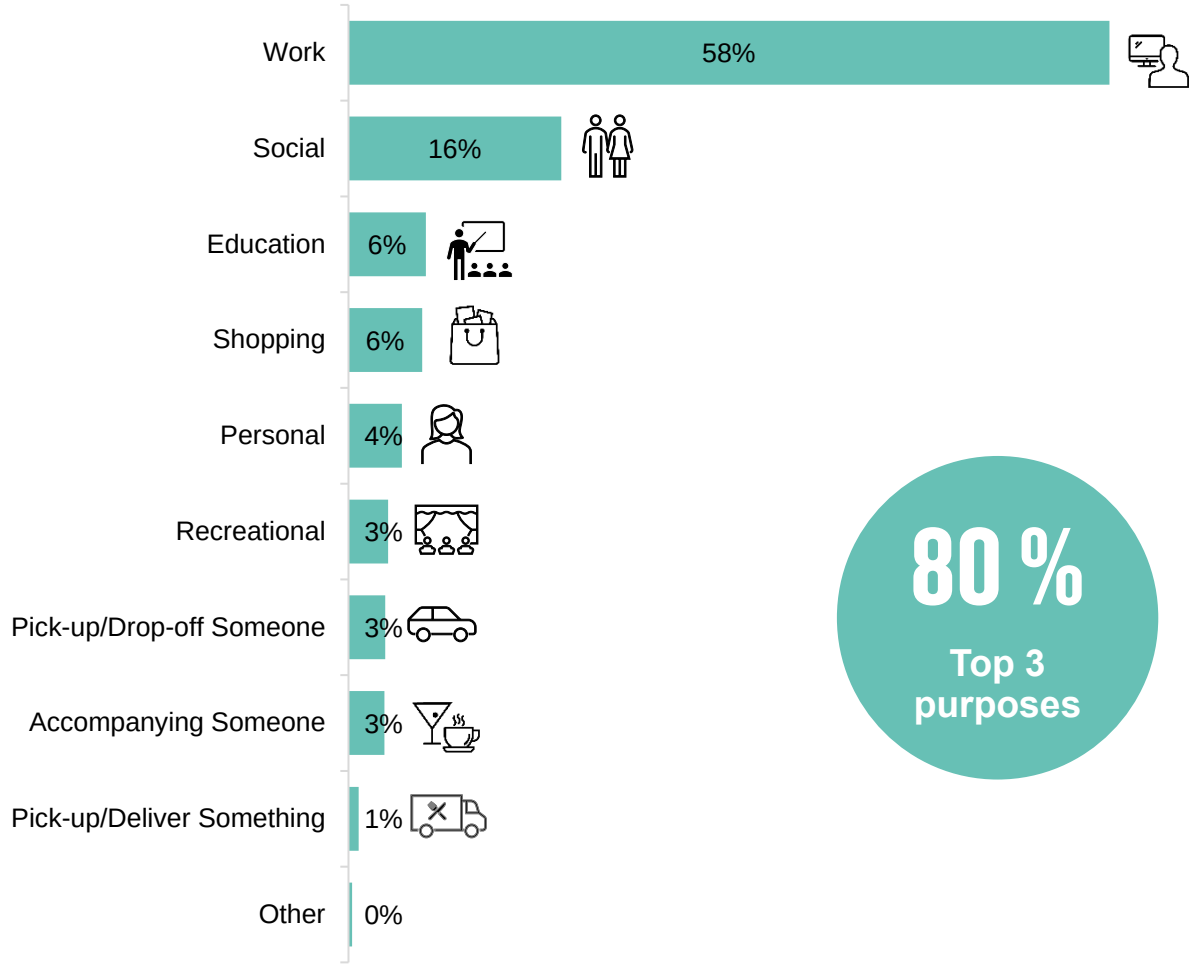
It is important to note that the VISTA data indicates a relatively low number of pick-up and delivery trips being made into Melbourne city. This is likely due to VISTA being a survey-based form of data collection, which delivery drivers are less likely to partake in.

INTERDEPENDENCIES BETWEEN TRIP PURPOSES

Understanding trip purpose matters as it can begin to develop an understanding of the ecosystem of a city's economy. As discussed on **Page 15**, there is an interdependency between businesses that co-locate together (agglomeration benefits). In the case of the Central City of Melbourne we can see that although half of the people come for work purposes, a reduction in this number (as indicated will result from long-term work-from-home trends on **Page 10**) will impact other trips. It is anticipated that this would be mostly felt in social and shopping trips.

It will be important for the City of Melbourne to support people to come back into the Central City for work as well as strengthen other sectors which are likely to be affected by work-from-home trends. This can be encouraged through the provision of events and city activation, as well as prioritisation of public transport access to the city based on each mode's relative economic contribution. Alongside this, it is important to ensure necessary car and freight access to the city, but not through the city.

Melbourne Central City – Trip Purposes



80 %
Top 3 purposes

Source – Based on VISTA, 2017-2018

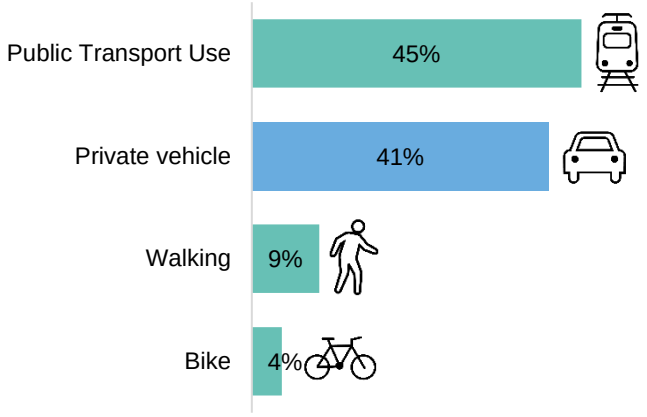
HOW DO PEOPLE COME TO AND MOVE AROUND THE CENTRAL CITY?

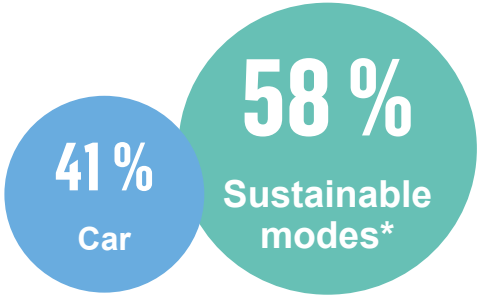
The majority of trips to and around the city are by sustainable modes (58 per cent and 94 per cent respectively). Sustainable modes include walking, cycling/scootering and public transport use. Walking is clearly a vitally important mode of transport for moving around the city.

Private vehicle trips, including car as driver, car as passenger, motorbike and taxi passenger, are a substantial proportion (41 per cent) of trips to the city but much fewer trips within the city (6 per cent). This data excludes business deliveries and collections made by trucks and vans to the Central City.

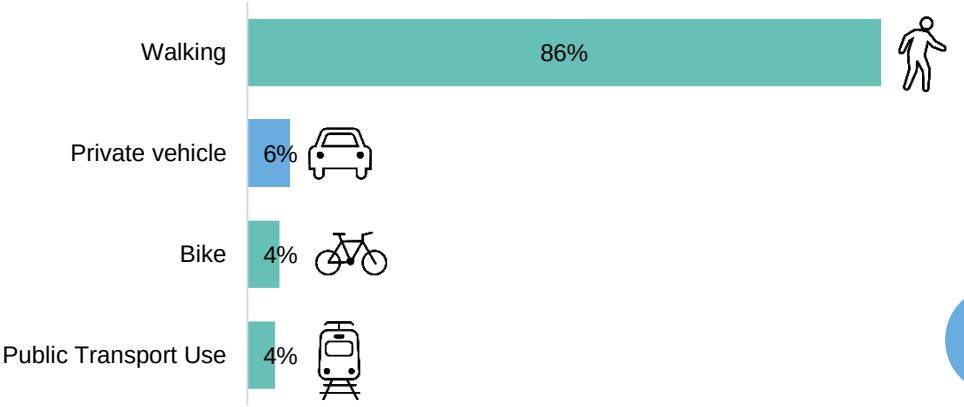
Note: 2 KM has been used as a proxy for the maximum trip length to occur within Central Melbourne, due to the lack of available data.

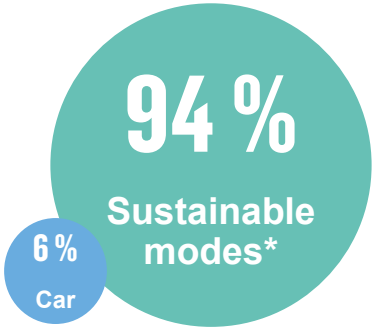
Movement to Melbourne Central City – Mode Split





Movement around Melbourne Central City – Mode Split





Source – Based on VISTA, 2017-2018

** Sustainable modes includes walking, cycling and public transport use (precludes car use)*

HOW AND WHY DO PEOPLE COME TO AND MOVE AROUND THE CENTRAL CITY?

TRIPS BY MODE AND PURPOSE – ACCESS TO THE CITY

When considering both how and why people travel to the city some key trends emerge including

- The highest proportion of walking trips occurs for recreational purposes, followed by picking up or delivering something.
- The highest proportion of public transport trips occurs for educational, followed closely by work-related trips.
- The highest proportion of car trips occurs for picking up and dropping off someone, followed by personal trips.
- The highest proportion of bike trips occurs for picking up or delivering something, followed by education.

TRIPS BY MODE AND PURPOSE – MOVEMENT AROUND THE CITY

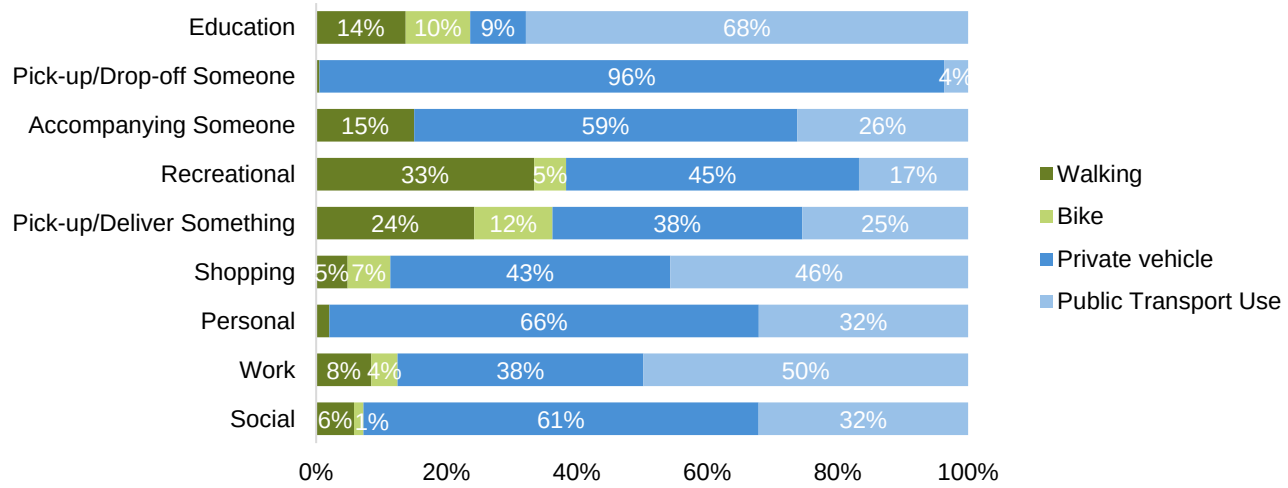
Active modes are seen to be the dominant forms of transport around the city, particularly walking.

EMPHASIS ON SUSTAINABLE MODES

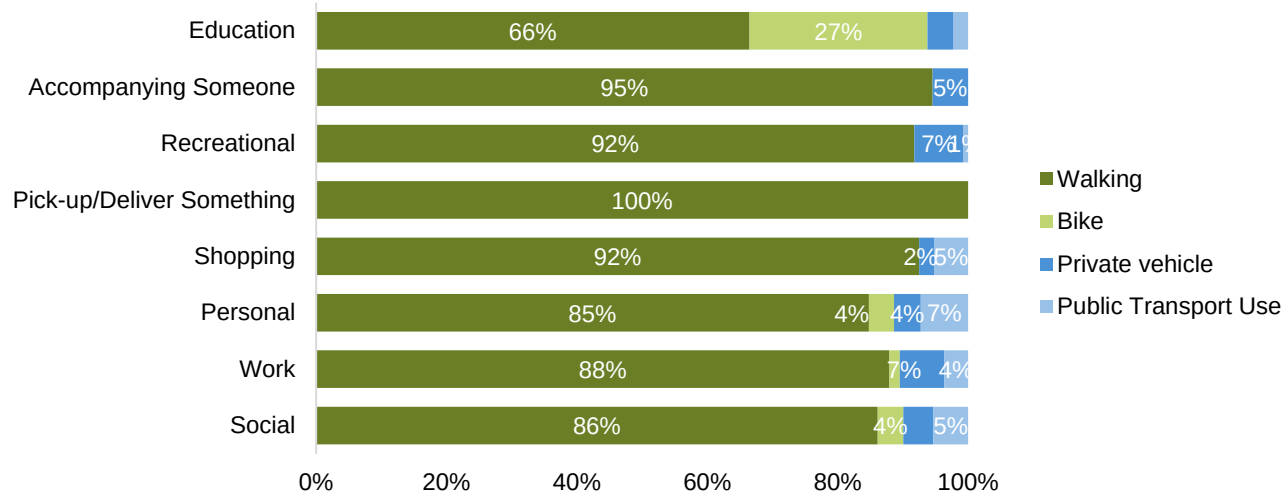
Walking, cycling/scootering and public transport modes are the most efficient way of moving large volumes of people in a space-constrained urban environment, such as the City of Melbourne. The degree to which the Council can influence the movement of more people within the available space will see more people being able to access the Central City.

Note: This data excludes business deliveries and collections made by trucks and vans to the Central City.

Movement to Melbourne Central City – Mode Split and Trip Purpose



Movement around Melbourne Central City – Mode Split and Trip Purpose



Source – Based on VISTA, 2017-2018

JOURNEY TO WORK MODE SHARE

Determining the economic contribution of each transport mode over three time periods (Pre-Covid in 2019, during Covid in 2021 and Covid Recovery in 2026) involved the use of Journey to Work Data, using the base year of 2016 (when the last ABS Census was taken). ABS Journey to Work provides detailed data that can be categorised according to multiple transport and industry groups, allowing for insightful comparisons between different modes of travel.

Significant transport changes have occurred since 2016 and will continue to occur including

- IMAP Bicycle Network Model, identifying a significant shift to cycling/scootering between 2019 and 2026 (with an assumed mode share of eight per cent in 2026).
- Introduction and legalisation (trial) of e-scooters in 2021, with approximately eight per cent of bicycle lane usage being e-scooters.
- The opening of Melbourne Metro and associated tram network changes forecasting a 3.5 per cent shift in mode share from 2026 towards public transport.
- Potential long term reductions in the number of days at work, with the ITR in line with other surveys capturing a return to the office of 3.3 days per week. A study undertaken by McKinsey & Company in 2020, revealed that the finance (76-86 per cent), management (68-78 per cent), professional (62-75 per cent), and information (58-69 per cent) sectors have the highest potential for remote work. Since these sectors also attract the majority of trips to the Central City (see **Page 28**), work from home continuation and uptake will continue to reduce the number of car trips to the Central City.

Scenario mode split for Journey To Work (2016 baseline = 100 per cent)*

Scenario	Train	Bus	Ferry	Tram	Taxi	Car	Truck	Motorbike	Bikes/ e-scooters	Walk
2016	53%	3%	0.01%	12%	0.2%	20%	0%	1%	3%	5%
2019	53%	3%	0.01%	12%	0.2%	19%	0%	1%	4%	5%
2021 Covid	36%	2%	0.01%	8%	0.2%	39%	0%	1%	4%	5%
2026 Recovery	56%	3%	0.01%	13%	0.2%	13%	0%	1%	7%	5%

*Note Excluding work from home and did not work

Growth in Journey To Work trips (2016 baseline = 100 per cent)

Scenario	Train	Bus	Ferry	Tram	Taxi	Car	Truck	Motorbike	Bikes/ e-scooters	Walk	Other	Worked at home or no work
2016	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2019	100%	100%	100%	100%	100%	96%	100%	100%	128%	100%	100%	100%
2021 Covid	68%	68%	68%	68%	100%	192%	207%	207%	148%	100%	100%	171%
2026 Recovery	105%	105%	100%	105%	100%	62%	207%	207%	241%	100%	100%	62%

Source – Based on City of Melbourne and Deloitte, Independent Transport Review, 2021, DoT PT Patronage, DoT SCATS, and Bicycle Sensors, McKinsey & Company What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries, 2020

CENTRAL CITY THROUGH TRIPS

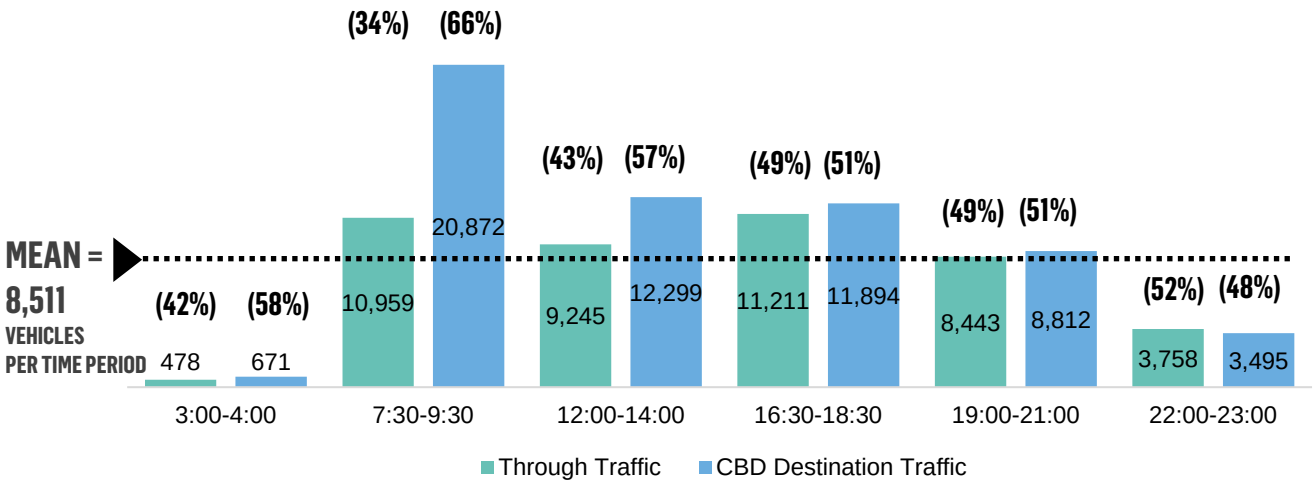
In addition to trips to the Central City, many vehicles pass through on their way to other destinations, otherwise known as a 'through trip'. These trips do not provide any economic contribution to the Central City, as no exchange of goods or services is associated with such trips. Through trips increase city congestion levels, and contribute to poor air quality and noise pollution. They often also make road space reallocation projects more difficult as decision makers see that there is demand for road space and there is often poor data on where vehicles are actually going.

Determining the proportion of through traffic and CBD destination traffic required input from the Austraffic Traffic Count OD Survey from 2018. This data provided traffic volumes for all vehicle types, as well as freight vehicle traffic.

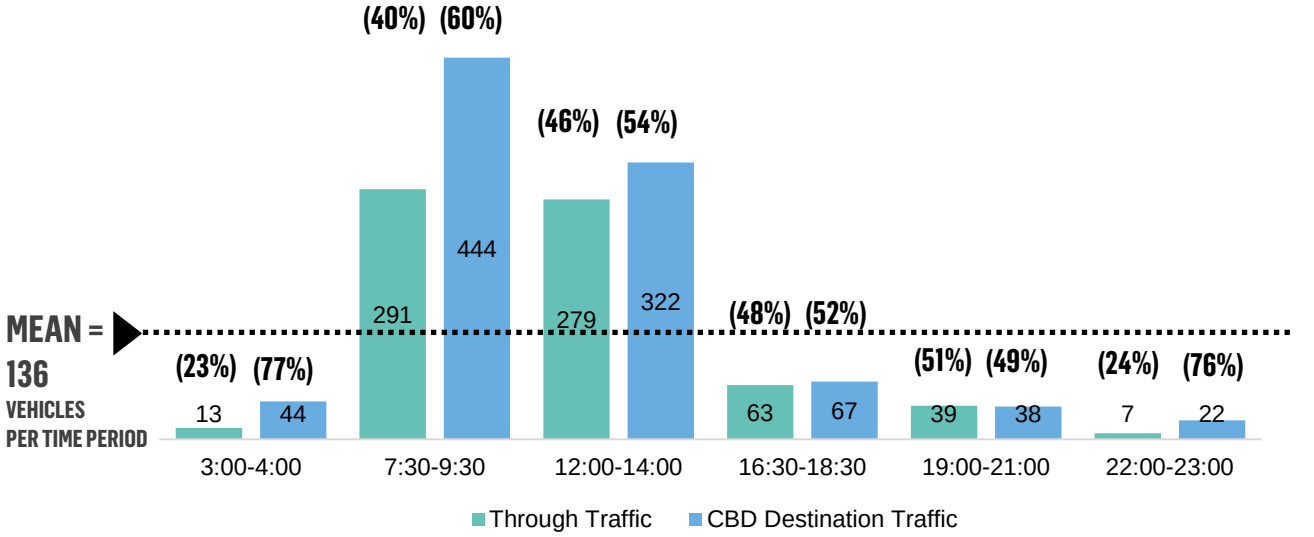
It is important that through trips are discouraged in the Central City, and there are a number of measures used by other international cities that, if appropriate, could be applied to Melbourne Central City

- Investigate a Central City congestion charge for through vehicles, which will re-direct through traffic to other roadways.
- Reducing car access through the Central City, by re-designating lanes for cyclists and other modes, thereby reducing the number of car lanes and making it less attractive as a through route.
- Increasing trip times for through traffic by implementing traffic calming measures such as lane narrowing, reducing speed limits, speed humps, part time street closures and reallocation of road space etc.

Through traffic vs CBD destination traffic – All vehicles



Through traffic vs CBD destination traffic – Freight



Source – Based on Austraffic CBD Traffic Count OD Survey 2018

ECONOMIC CONTRIBUTION BY MODE AND TYPE

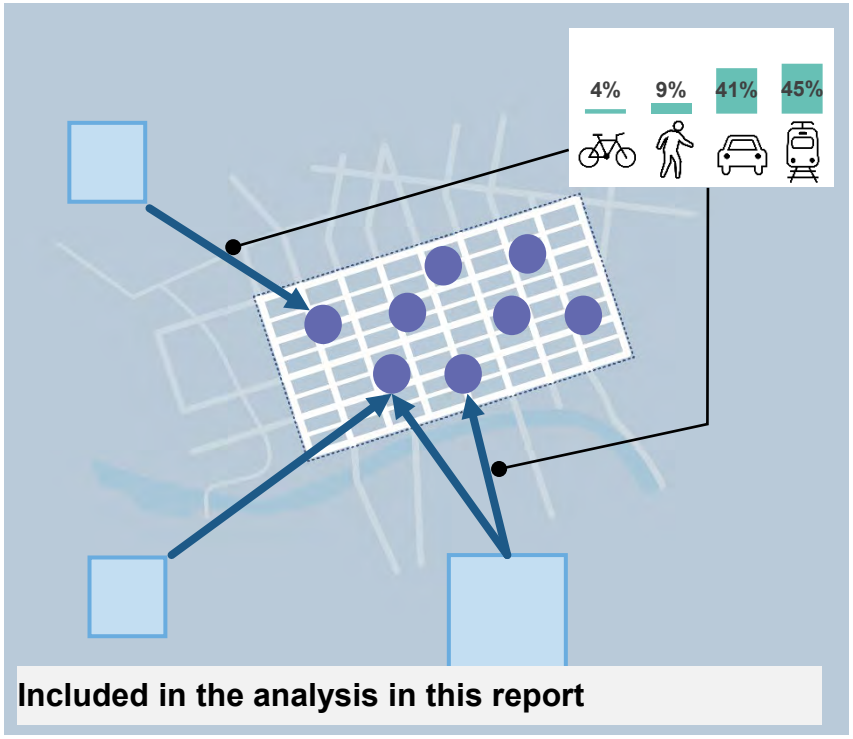
04

WHAT WE HAVE MEASURED WHEN WE CONSIDERED ECONOMIC CONTRIBUTION?

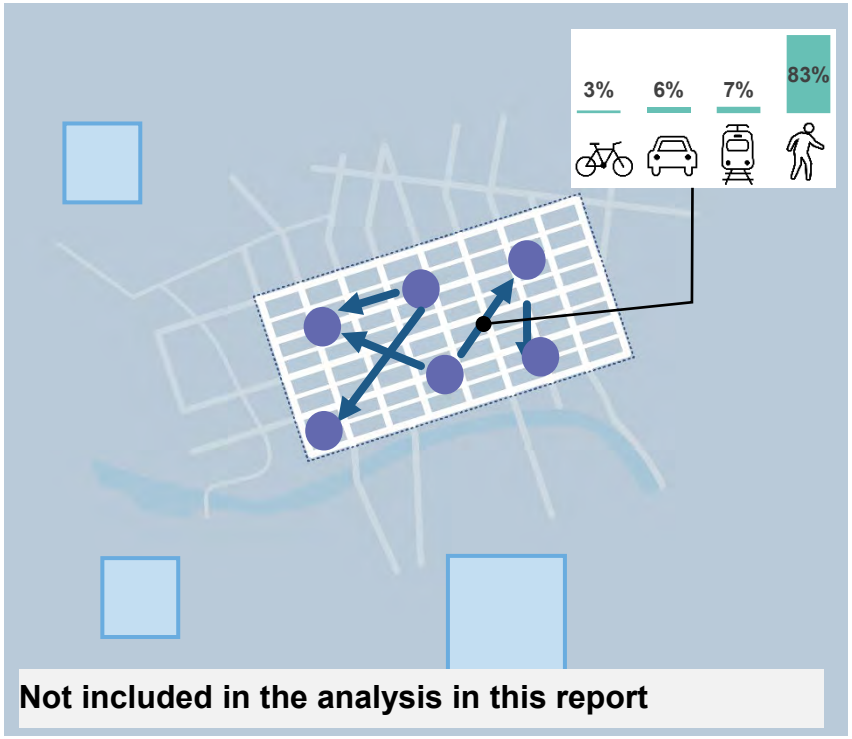
Internal trips around the Central City contribute a significant amount of GVA to the economy. These encompass trips which may take place over the course of a workday for example to buy lunch, purchase something from a shop, or visit a barber or hairdresser after work. These are potentially a significant source of economic activity, in addition to the economic activity that is derived from work. As shown on **Page 19** and on this page, the majority of internal trips around the City are walking trips (83 per cent). However, these trips cannot be captured in this project, as we are using GVA of work trips to the Central City and our data source (the ABS Journey to Work data) does not also capture the mode of travel used once at work.

The data in **Chapter 4** captures GVA based on the workers who support and create economic activity for all other trips and activities The role of walking for trips within the Central City is recognised as making a significant contribution to the economic life of the Central City. For example, the worker who wants to buy lunch, purchase something from a shop or get a haircut won't choose to do these things if they can't easily access them by foot from their place of work. However, the value of these activities is captured based on the workers who provide these services being able to access the Central City.

Trips ' To' Melbourne Central City (including Central City resident workers)



Internal Trips ' Around' Melbourne Central City (excluding Central City resident workers)



Source – Based on VISTA, Survey 2017-2018

WHAT IS THE ECONOMIC VALUE OF DIFFERENT WORKERS?

The city derives economic value from people visiting. The economic value is measured by GVA (see **Page 14** for more on GVA), which can be specified for different industries and evaluated for each individual worker.

This may be through things such as

- The money the worker spends on their lunch.
- Social/recreational activities such as visiting the gym or meeting friends after work.
- The rent that the workers' employer pays for their office space/retail space etc.
- The contractors that the workers' employer pays to maintain their building/shop.
- The foreign students that the worker in education brings into the country.
- Value added by company management based in the Central City (mining and public administration for example) where the income generation is located elsewhere, but the value is attributed locally. In addition, locating businesses within proximity allows for efficient business activity i.e. lawyers or accountants attending meetings etc.

Note: Mining and agriculture GVA per industry worker values are for office-based jobs in the Central City.

Annual GVA per industry worker

INDUSTRY	Average GVA per industry worker
Accommodation and Food Services	$63,048.58
Administrative and Support Services	$196,122.38
Agriculture, Forestry and Fishing	$180,128.10
Arts and Recreation Services	$89,196.05
Construction	$163,160.39
Education and Training	$114,012.45
Electricity, Gas, Water and Waste Services	$589,389.11
Financial and Insurance Services	$416,906.80
Health Care and Social Assistance	$92,356.05
Information Media and Telecommunications	$313,650.02
Manufacturing	$169,242.89
Mining	$1,063,315.71
Other Services	$100,839.18
Professional, Scientific and Technical Services	$151,463.27
Public Administration and Safety	$157,146.40
Rental, Hiring and Real Estate Services	$677,685.22
Retail Trade	$69,189.46
Transport, Postal and Warehousing	$156,068.11
Wholesale Trade	$209,212.59

Source – REMPLAN 2022, Based on ABS 2016 Census Place of Work Employment (Scaled), ABS 2018 / 2019 National Input Output Tables, and ABS June 2021 Gross State Product.

ASCRIBING GVA TO MODES OF TRAVEL

An important relationship exists between public transport and walking, wherein all public transport trips start and end with a walking trip. Therefore, the process of ascribing Gross Value Added to each transport mode has incorporated this trip context. For all public transport trips, the GVA has been apportioned based on the weighted average trip (crow flies) distance by industry type. These public transport modes and their average portions ascribed to walking are listed below

- Train, with average proportion ascribed to walking of 0.04.
- Bus, with average proportion ascribed to walking of 0.03.
- Tram, with average proportion ascribed to walking of 0.03.

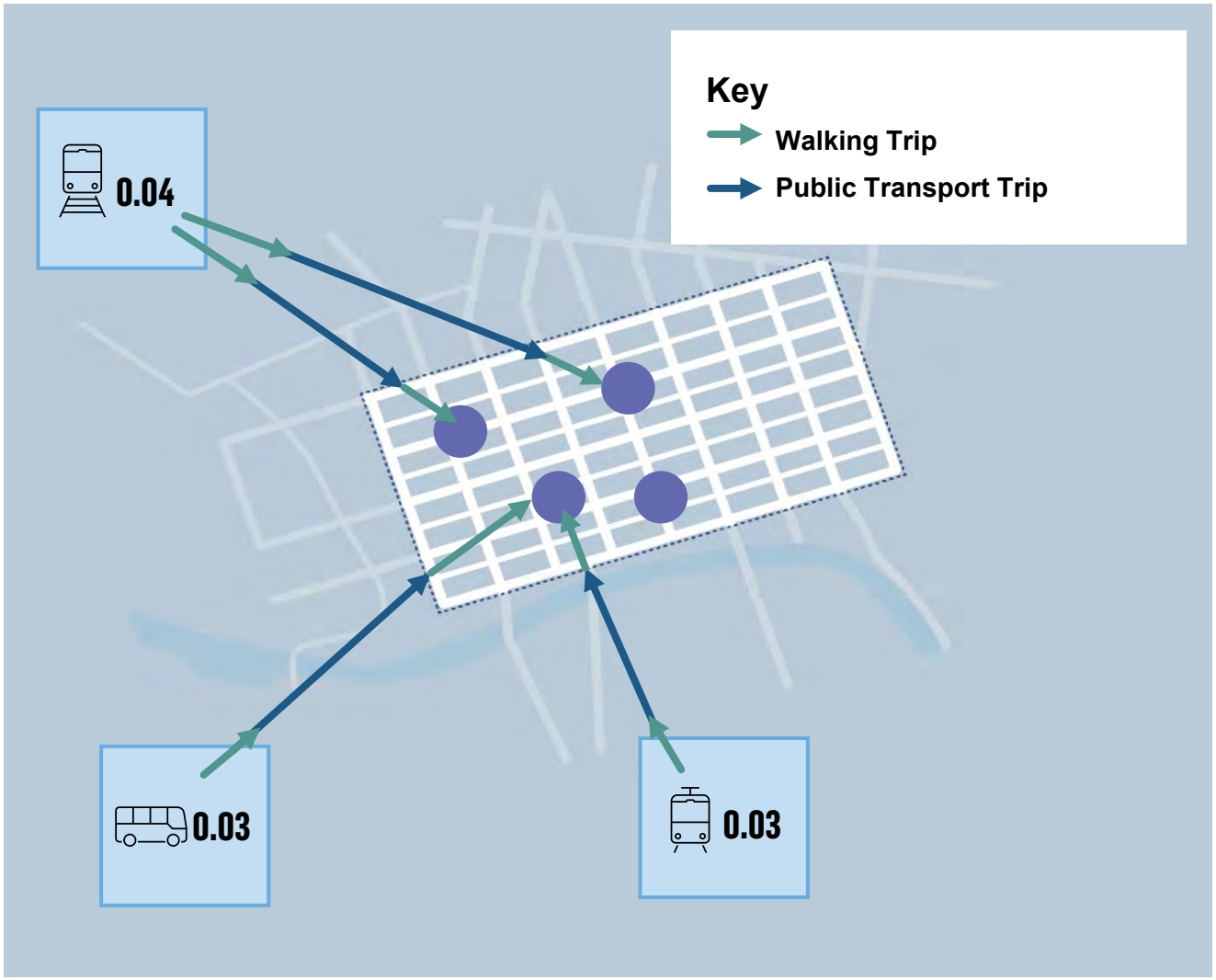
For trips that could be considered to be single-mode, no apportionment was ascribed.

- Walked Only.
- Cycling/scootering.

For trips in private vehicles, no apportionment was ascribed as it was assumed they would park/be dropped off in their closest possible location to their workplace.

- Car as driver.
- Car as passenger.
- Taxi.
- Truck.
- Motorcycle.

Proportion of trips ascribed to walking



Source – Based on VISTA, PWC and ABS

ECONOMIC ACTIVITY PRE, DURING AND IN COVID RECOVERY

CHANGES DURING COVID

During covid (in 2021) there was a drop in access to the Central City across all modes. Public transport saw the greatest decrease (76 per cent) as people avoided settings in which they were in close proximity to others. Car use experienced the lowest decrease during covid (28 per cent). This is likely in response to people feeling more comfortable in settings where they were isolated from others. In addition, the drop in overall access to the Central City meant there was less congestion, which acted as an incentive for car use.

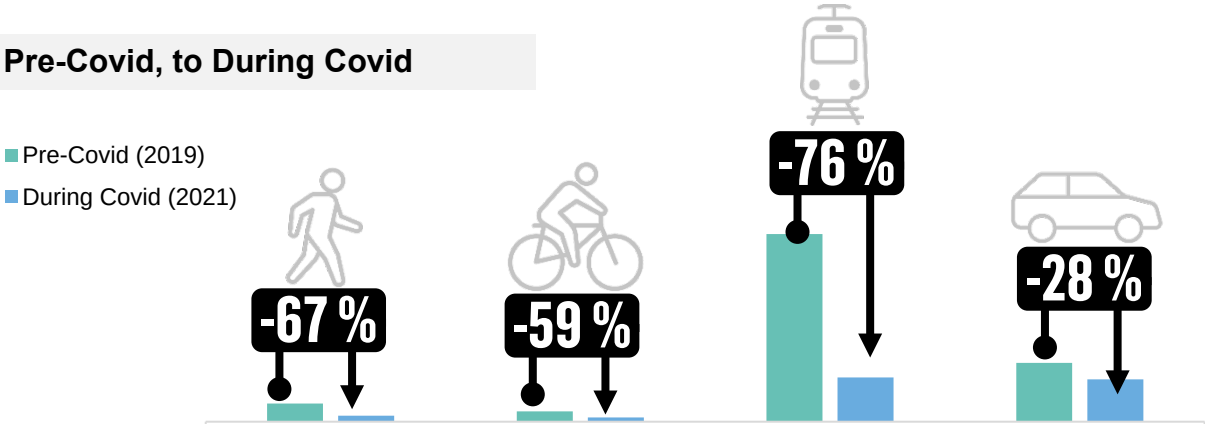
CHANGES EXPECTED DURING COVID RECOVERY

Comparing pre-covid (in 2019) to the Covid Recovery time period (2026) It is predicted that there will be a slight decrease in walking access to the Central City, as those within walking proximity to the Central City who are working in office settings undertake more working-from-home. The upswing in cycling and scootering (including partially in response to the e-scooter trial and mode shift identified in the IMAP Bike Plan) indicates significant growth in these modes. The significant decline in car use presents an opportunity to rethink street space allocation and re-purpose space for improved active transport and public transport.

Note these calculations are modelled using Journey to Work data.

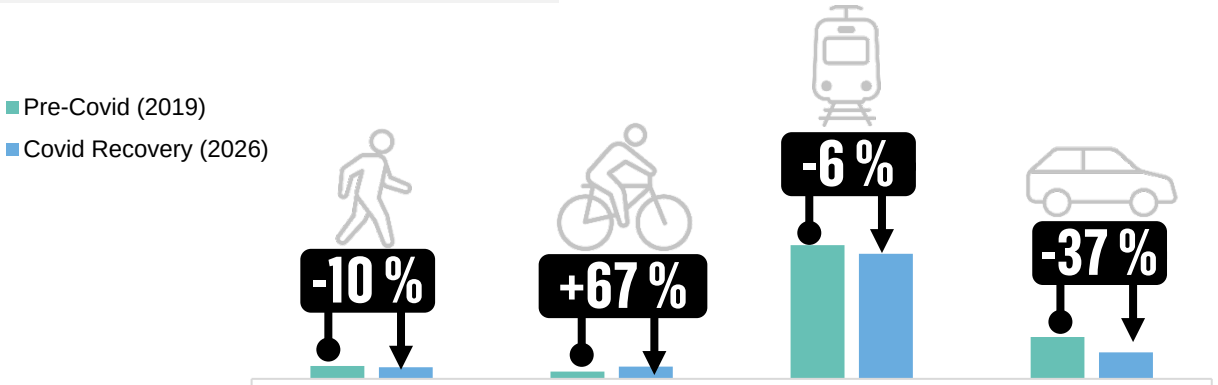
Economic Activity GVA ($M) by Mode travelled to the Central City

– Pre-Covid, to During Covid



	Walking	Cycling	Public Transport	Car
Pre-Covid (2019)	$3,660	$2,079	$37,825	$11,864
During Covid (2021)	$1,198	$851	$8,908	$8,510

– Pre-Covid, to Covid Recovery



	Walking	Cycling	Public Transport	Car
Pre-Covid (2019)	$3,660	$2,079	$37,825	$11,864
Covid Recovery (2026)	$3,280	$3,472	$35,370	$7,489

Source - Urbis based on VISTA, PWC and ABS
Note This analysis precludes GVA generated by trips within the Central City.

PRE-COVID ECONOMIC ACTIVITY BY MODE

PROPORTION OF ECONOMIC ACTIVITY DERIVED BY MODES

The majority (58 per cent) of economic activity is generated by people who use public transport to access the Central City. However, results from 2021 reveal a significant change in this proportional split during Covid (refer to **Page 29** for more discussion on this).

INDUSTRY SECTORS AND MODES

If the City of Melbourne was going to look at the top three industry sectors and mode combinations that were contributing the greatest amount of economic activity in their Central City, these would be

- People catching public transport and working in Financial and Insurance Services.
- People catching public transport and working in Professional, Scientific and Technical Services.
- People catching public transport and working in Information Media and Telecommunications.

All industries and modes are important to building the economic life of the city, as industry sectors work in a complex ecosystem that support each other (refer to **Page 15** on agglomeration benefits). Consideration should be given to the costs (including capital, operating and spatial costs) of providing infrastructure for each mode. The costs associated with providing road and parking infrastructure for the 40 per cent of people driving to the Central City (and deriving 21 per cent of economic activity) are likely to be much higher than other modes.

Note these calculations are modelled using Journey to Work data.

Pre-Covid (2019) - Economic Activity by Mode and Industry Sector ($M)

Industry Sector	Walking	Cycling/scootering	Public Transport	Car	TOTAL
Accommodation and Food Services	$183	$34	$726	$240	$1,183
Administrative and Support Services	$165	$56	$1,741	$479	$2,442
Agriculture, Forestry and Fishing	$1	$2	$25	$7	$35
Arts and Recreation Services	$22	$18	$160	$47	$247
Construction and Engineering	$24	$19	$373	$387	$802
Education and Training	$111	$74	$1,079	$215	$1,479
Electricity, Gas, Water and Waste Services	$229	$176	$2,896	$757	$4,058
Financial and Insurance Services	$1,053	$574	$12,775	$3,464	$17,865
Health Care and Social Assistance	$33	$19	$313	$117	$483
Information Media and Telecommunications	$376	$248	$4,123	$1,237	$5,984
Manufacturing	$17	$14	$192	$86	$310
Mining	$52	$28	$388	$131	$599
Personal and Other Services	$39	$15	$256	$102	$413
Professional, Scientific and Technical Services	$727	$448	$6,183	$1,766	$9,123
Public Administration and Safety	$251	$230	$3,074	$743	$4,298
Rental, Hiring and Real Estate Services	$194	$49	$1,891	$1,459	$3,593
Retail Trade	$75	$18	$607	$167	$866
Transport, Postal and Warehousing	$45	$45	$797	$352	$1,239
Wholesale Trade	$61	$12	$225	$109	$408
TOTAL	**$3,660**	**$2,079**	**$37,825**	**$11,864**	**$55,427**
TOTAL (per cent)	7%	4%	68%	21%	

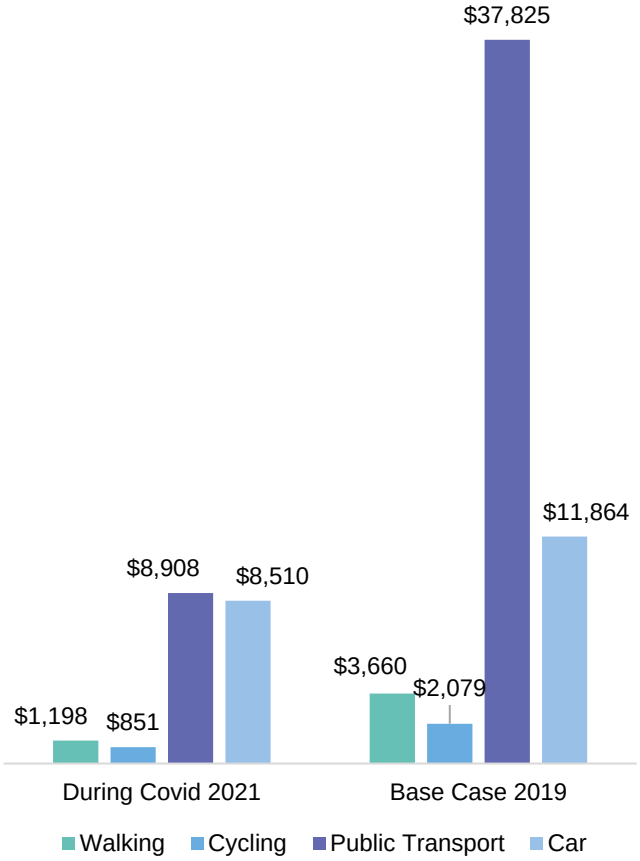
Source - Urbis based on VISTA, PWC and ABS

DURING-COVID ECONOMIC ACTIVITY BY MODE

CHANGES DURING COVID (2021)

During Covid, in 2021, economic activity decreased overall and there was a shift towards more economic activity being derived from people travelling by car.

Note these calculations are modelled using Journey to Work data.



During Covid (2021) - Economic Activity by Mode and Industry Sector $M)

Industry Sector	Walking	Cycling/scootering	Public Transport	Car	TOTAL
Accommodation and Food Services	$19	$4	$50	$49	$122
Administrative and Support Services	$51	$20	$362	$294	$726
Agriculture, Forestry and Fishing	$0	$1	$5	$4	$10
Arts and Recreation Services	$2	$2	$11	$9	$25
Construction and Engineering	$19	$18	$206	$634	$878
Education and Training	$11	$9	$75	$44	$139
Electricity, Gas, Water and Waste Services	$188	$168	$1,604	$1,235	$3,194
Financial and Insurance Services	$324	$205	$2,653	$2,116	$5,298
Health Care and Social Assistance	$10	$7	$65	$72	$154
Information Media and Telecommunications	$116	$89	$856	$757	$1,818
Manufacturing	$5	$5	$40	$53	$103
Mining	$16	$10	$81	$80	$187
Personal and Other Services	$12	$5	$53	$63	$134
Professional, Scientific and Technical Services	$223	$160	$1,284	$1,074	$2,742
Public Administration and Safety	$77	$82	$638	$455	$1,253
Rental, Hiring and Real Estate Services	$60	$18	$393	$896	$1,366
Retail Trade	$8	$2	$42	$34	$86
Transport, Postal and Warehousing	$37	$43	$442	$574	$1,095
Wholesale Trade	$19	$4	$47	$67	$137
TOTAL	**$1,198**	**$851**	**$8,908**	**$8,510**	**$19,465**
TOTAL (per cent)	6%	4%	46%	44%	

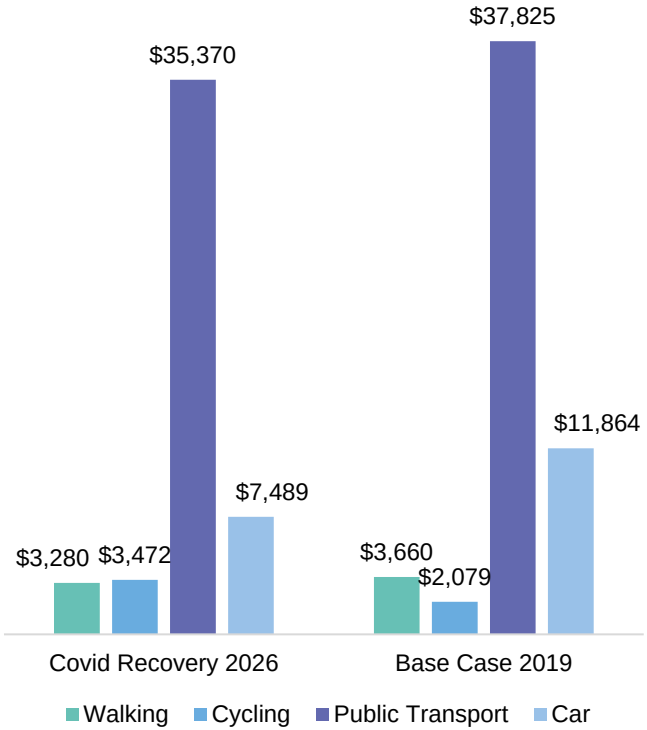
Source - Urbis based on VISTA, PWC and ABS

COVID-RECOVERY ECONOMIC ACTIVITY BY MODE

CHANGES DURING COVID RECOVERY

The Covid Recovery period, in 2026, represents a resetting of the 'new normal' for economic activity. There is an increase in public transport and active transport compared to pre-covid (2019) and a corresponding decrease in car access to the city as people favour other modes. This reduction in car access/demand represents an opportunity to rethink street space allocation and re-purpose space for improved active transport and public transport.

Note these calculations are modelled using Journey to Work data.



Covid Recovery (2026) - Economic Activity by Mode and Industry Sector $M)

Industry Sector	Walking	Cycling/scootering	Public Transport	Car	TOTAL
Accommodation and Food Services	$199	$69	$828	$186	$1,281
Administrative and Support Services	$136	$87	$1,513	$272	$2,008
Agriculture, Forestry and Fishing	$1	$3	$22	$4	$29
Arts and Recreation Services	$24	$36	$183	$34	$277
Construction and Engineering	$26	$39	$425	$287	$776
Education and Training	$120	$151	$1,230	$161	$1,662
Electricity, Gas, Water and Waste Services	$249	$360	$3,301	$573	$4,483
Financial and Insurance Services	$870	$895	$11,097	$2,016	$14,877
Health Care and Social Assistance	$36	$39	$357	$84	$517
Information Media and Telecommunications	$311	$387	$3,581	$725	$5,003
Manufacturing	$19	$29	$219	$63	$330
Mining	$43	$44	$337	$70	$494
Personal and Other Services	$33	$24	$223	$56	$335
Professional, Scientific and Technical Services	$600	$698	$5,371	$1,026	$7,694
Public Administration and Safety	$207	$359	$2,670	$435	$3,672
Rental, Hiring and Real Estate Services	$210	$101	$2,156	$1,032	$3,499
Retail Trade	$82	$36	$692	$129	$939
Transport, Postal and Warehousing	$49	$92	$909	$258	$1,307
Wholesale Trade	$67	$25	$256	$80	$428
TOTAL	**$3,280**	**$3,472**	**$35,370**	**$7,489**	**$49,612**
TOTAL (per cent)	7%	7%	71%	15%	

Source - Urbis based on VISTA, PWC and ABS

ECONOMIC CONTRIBUTION BY MODE

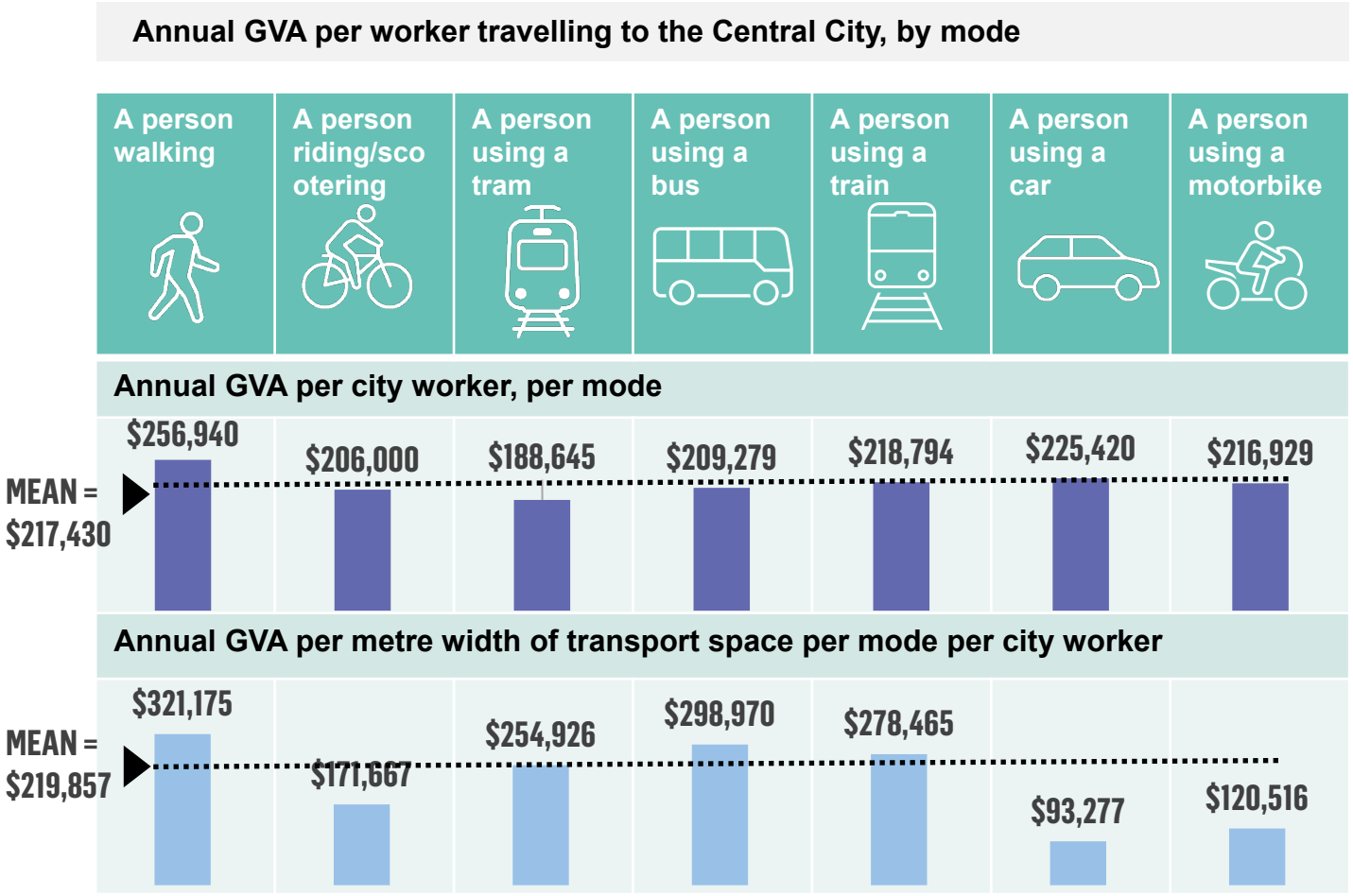
ANNUAL GVA PER WORKER TRAVELLING TO THE CENTRAL CITY

There is a broad spectrum of economic contributions made by different transport modes shown on this page. These have been calculated according to the type of work undertaken by people using different modes of transport in the Central City.

Each mode has a different spatial requirement for accommodating users. Active and public transport is far more space-efficient than car use, resulting in the road space used for car access providing a below-average return on investment compared to the use of public space for other modes.

Whilst all modes are important to the Central City economy, sustainable modes offer greater potential to bring more people into the city, and therefore should be prioritised. There are opportunities to increase the GVA contribution of sustainable modes through the provision of new trams, the Melbourne Metro project, and encouraging uptake in walking and cycling, all of which do not require any additional transport space. Increasing the GVA contribution of cars can only be achieved by reducing through traffic or demolishing buildings to allow for new roads to be built, both of which are complex to undertake in the Central City environment.

Note these calculations are modelled using Journey to Work data.



*Assumptions
Approximate road space per user (m)
Train 0.785714286
Bus 0.7
Ferry 2.083333333
Tram 0.74
Taxi 1.933333333
Car 2.416666667
Truck 2.666666667
Motorbike 1.8
Bike/e-scooters 1.2
Walk 0.8

Source - Urbis based on VISTA, PWC and ABS

CONCLUSION

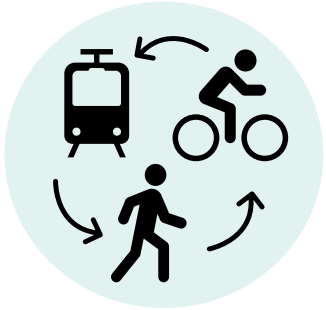
05

KEY FINDINGS

How and why do people come to the Central City?

The top three reasons people come to the city are for work (58 per cent), socialising (16 per cent) and education and shopping (six per cent). Most trips to the Central City are made by sustainable modes (58 per cent), of which public transport accounts for the largest portion of trips (45 per cent). The 'typical' Central City visitor is someone who has come for work via public transport. However, there are a myriad of reasons and modes used to access the Central City and each contribute to the economy to different degrees.

Refer to Pages 18-20.



When they're in the Central City, how do they get about?

Walking is an important mode of transport for moving around the city. Walking accounts for 86 per cent of trips within the Central City. Although, internal trips around the Central City contribute a significant amount of GVA to the economy they have not been measured as part of calculations in this study due to data limitations. It is recognised that walking trips within the Central City play a significant role in generating economic activity, and further analysis on such trips would be an insightful piece of work.

Refer to Pages 18-22.

How much economic contribution is made by each transport mode?

Two significant findings include public transports' overwhelming importance to the Central City economy and that walking to the Central City provides the greatest contribution compared to all other modes.
The space required for a pedestrian returns $321,175 p.a whereas the space required for a car returns $93,277 p.a in economic benefit.

Refer to Page 24-31.

How has Covid-19 changed things?

The Covid-19 pandemic has changed how the Central City functions, with hybrid work-from-home work schedules likely becoming a long-term trend. The downturn in public transport use experienced during Covid will swing strongly the other way with the Covid Recovery (2026) period seeing more people than ever using public transport, based on the assumption that concerns about Covid will reduce. Active transport is set to grow by 2026 also. There is likely to be a corresponding decline in car use.

Refer to Page 27-30.

KEY RECOMMENDATIONS

Attract workers back

Encouraging return to work in the Central City is vital for supporting the many businesses that rely on footfall past their premises. It is likely that there will remain a long-term working-from-home trend, but attracting back people to their offices as much as possible will provide economic flow-on more broadly. This could be achieved through the provision of events and city activation and prioritisation of public transport access to the city based on each mode's relative economic contribution.

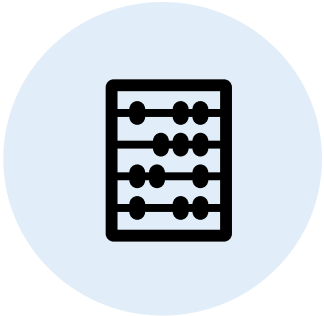
Emphasise active and public transport for Central City Access

Active and public transport have been shown to be the mainstays of access both to, and within the Central City. The City of Melbourne has a policy of supporting sustainable transport modes and should have comfort in knowing that in doing so they are supporting economic activity in the Central City. There will likely be further projects such as street/laneway pedestrianisation, and cycling/scootering encouragement programs and infrastructure development which will further support these endeavours.

Look for ways to remove through traffic from the Central City

Cars and trucks that have a destination in the Central City provide an economic contribution. However, cars and trucks that travel through the Central City without stopping inhibit these trips and provide no economic contribution to the Central City. These vehicles should be discouraged through an appropriate mechanism.
Other cities have achieved this by making travel through their central areas

- More expensive.
- Less convenient.
- Less time efficient.
- More circuitous.



Allocate road space based on its value to the Central City economy

People arriving by car do contribute to the Central City economy, however, the cost of providing for them (through land and infrastructure requirements) is far in excess of other transport modes which are more space-efficient and require less infrastructure. Council is encouraged to consider the value of road space and invest in space-efficient modes that will ultimately maximise visitation to the Central City.

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City of Melbourne COVID-19-response bike lane program – Update May 2022

Feedback and adjustment process

1. COVID-19-response bike lane program

In 2020, City of Melbourne announced it was fast-tracking the delivery of 40 kilometres of protected bike lanes and pedestrian improvements across the city. These lanes were part of the City of Melbourne Transport Strategy 2030 planned bicycle network, adopted by Melbourne City Council in 2019. The original program was to deliver the 50 kilometres on local roads over 10 years, but implementation was accelerated to improve safe travel options in a COVID-19 environment and encourage reactivation.

2. Approach to adjustments

The most important aim of making adjustments to the new protected bike lanes is to make the transport network as safe as possible for everyone in the city. Other aims are to maximise the ability of the new bike lanes to attract riders, to protect and improve public transport and pedestrian movements, to smooth traffic flow and to provide access to nearby activities including via parking and drop-off facilities.

Seeking and responding to customer feedback is a key aspect of the COVID-19-response bike lane program. Feedback is used to continuously monitor performance and identify where adjustments may be required. The main channel for receiving feedback is the project's Participate Melbourne webpage. Other feedback has been received through correspondence to Council.

3. Overview of feedback and changes

Since delivery commenced, a total of 1,146 submissions were received up to 1 March 2022:

- 728 (61%) expressed support for the program (up 1 percentage point since October 2021),
- 313 (26%) expressed opposition to the program (up 1 percentage point since October 2021),
- 151 neutral (13%).

Council officers continually review and analyse the feedback and make decisions about how to best address any issues raised. This could result in changes on the ground, review of designs or inputs to Council communications and messages to road and bike lane users.

More than 170 post-implementation adjustments or operational changes (+70 since October 2021) have been identified in response to more than 250 comments from the community (+50 since October 2021) and officer observations:

- More than 100 have now been completed (+40 since October 2021)
- More than 25 are scheduled to be delivered within the next 3 months.
- A further 35 are being investigated. Several of these require approval from - or delivery by - the Department of Transport.

4. Feedback still welcome

The City of Melbourne is keen to receive feedback on the COVID-19-response bike lane program in order to improve it as much as possible. The best way to provide feedback is via the Participate Melbourne website.
Officers continue to monitor responses to identify design improvements as projects are completed.

5. Examples of design improvements recently completed or upcoming

Examples of changes which have been identified in response to feedback include:

No.	Type of adjustment	Location	Outcomes	Image
1	Green treatment through intersections	Exhibition Street at Flinders Street (complete); Rathdowne Street at Victoria Street (complete); William Street at Flinders Street and La Trobe Street; and Swanston Street at Elgin Street (all proposed)	The green treatment alerts drivers that people on bikes are frequently present. This aims to reduce crashes between left turning cars and bikes travelling straight through, reducing costs to the community. This issue frequently raised by the community, having been identified in correspondence 49 times. The installations will be subject to a rigorous before and after evaluation. If demonstrated to be effective, it could be installed in additional locations.	
2	Zip-merge line marking improvement (upcoming)	Queens Bridge Street Northbound (for vehicles coming from Power Street)	Some drivers found the lane merge on Queens Bridge Street northbound to be confusing. Legibility of traffic lanes has been improved for drivers merging from two lanes to one.	
3	Install additional hook turns	Exhibition/Collins, Exhibition/Bourke (both complete)	Hook turns improve traffic flow by keeping the through lane clear, with all turning movements consolidated in the left lane. This prevents a situation where both lanes at a two-lane intersection are blocked because vehicles waiting to turn right are blocking the right lane and vehicles waiting to turn left are blocking the left lane. Hook turns also make intersections safer by reducing the number of conflicting movements in an intersection. Vehicles can only move through the pedestrian crossing once the lights turn green, significantly reducing the risk of hitting a pedestrian. Hook turns were originally developed to prevent right turning vehicles delaying Melbourne's centre-lane running trams. Their application to locations in without trams is a relatively recent innovation. The effect of this change will be assessed over time through observations, road safety performance and customer feedback.	

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No.	Type of adjustment	Location	Outcomes	Image
4	Remove rubber road hump	Bowen Cres and Park Street	A rubber road hump was installed to encourage drivers to make the northbound turn from Bowen Crescent to Park Street more slowly. Further analysis showed that the turning movements at this intersection is at an appropriate speed and so the road hump has been removed, providing drivers a smoother turning motion.	
5	New wayfinding signage and pavement decals	Canning Street / Rathdowne Street protected cycling corridor	New on-road decals have been installed to increase awareness of the upgraded connection from Canning Street into Rathdowne Street and Exhibition Street. This gives riders confidence that there are network changes providing a safer route.	
6	Resurfacing works	Whiteman Street	Repairs to road surface including pot holes to improve safety for people riding and driving.	

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No.	Type of adjustment	Location	Outcomes	Image
7	Improvements to access and sightlines	Swanston Street and Palmerston Street	Installation of 'keep clear' to improve safety for drivers exiting Palmerston Place onto Swanston Street. Updated line marking and parking signage to improve pick up/drop off access to childcare.	
8	Rationalise existing bollards and install additional access ramp	Nicholson Street and Rathdowne Street gates to the Royal Exhibition Building	These changes aim to improve bike permeability and accessibility for bike riders using Southern Drive (which runs east west immediately to the south of the Royal Exhibition Buildings). This makes better use of the off-road cycling route reducing pressure on the on-road network and encouraging more people to ride.	
9	Remove car parking	Exhibition Street between Flinders Lane and Collins Street northbound	Management is pursuing the removal of parking in this block as a way of smoothing northbound traffic movement. This will also allow two lanes of traffic to continue past Flinders Lane and up to Collins Street with the merge into one lane occurring north of Collins Street. Some left turning vehicles will leave the traffic stream at Collins Street helping to make the merge easier. Prior to implementation of this proposal management will engage with adjacent land occupiers and make an assessment of the usefulness of the parking.	
10	Remove on-road bike parking and replace with short term drop-off/pickup	Exhibition Street between Little Collins and Bourke Streets	Management is pursuing the removal of on-street bike parking in this location. In the original design, building security requirements meant that car parking was not provided. Subsequently, drop-off and pick-up access has been requested by users of adjacent buildings. This can be provided while maintaining security. Observations indicate the bike parking is not particularly well used and other bike parking is available in the immediate vicinity including off-street.	

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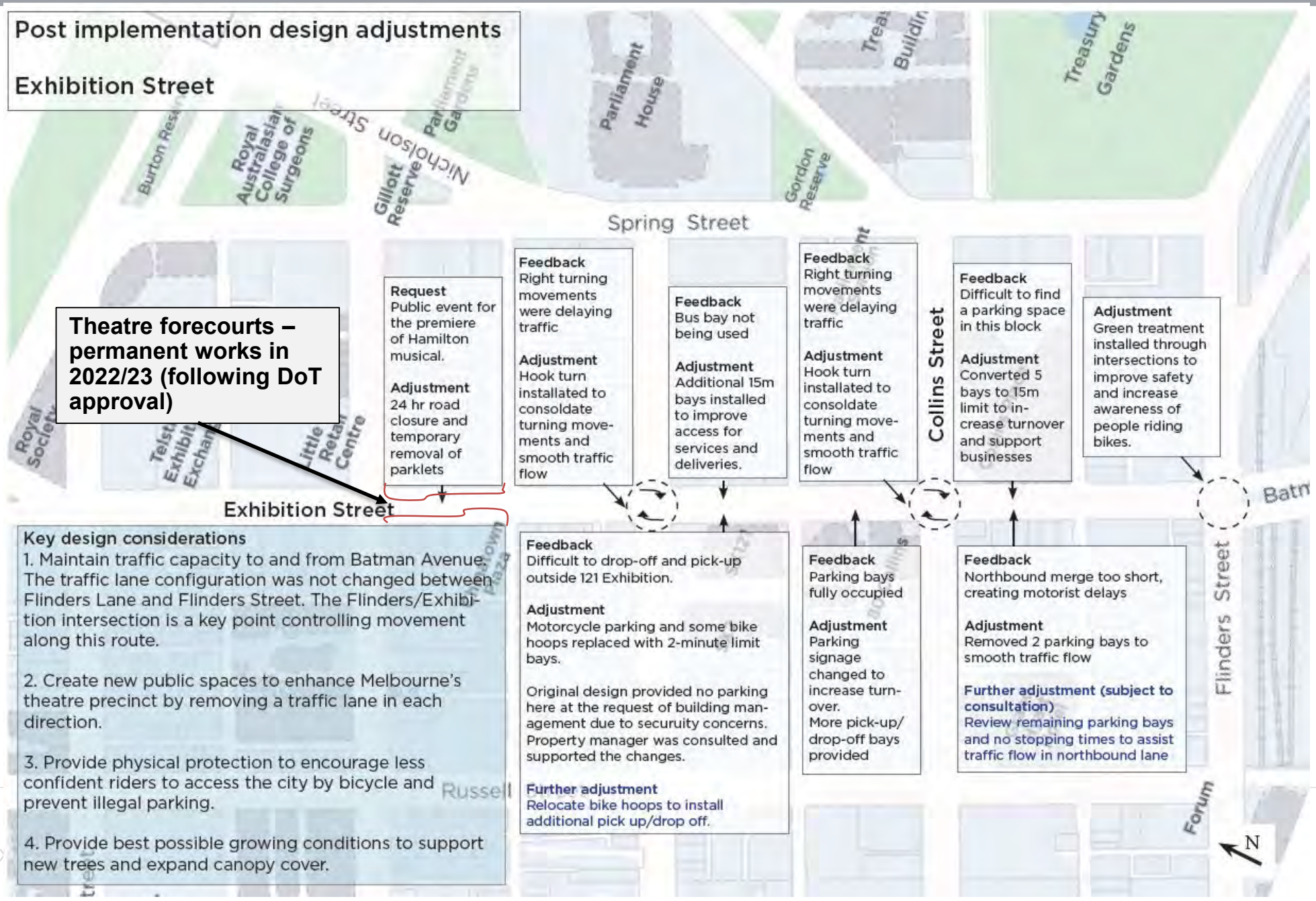
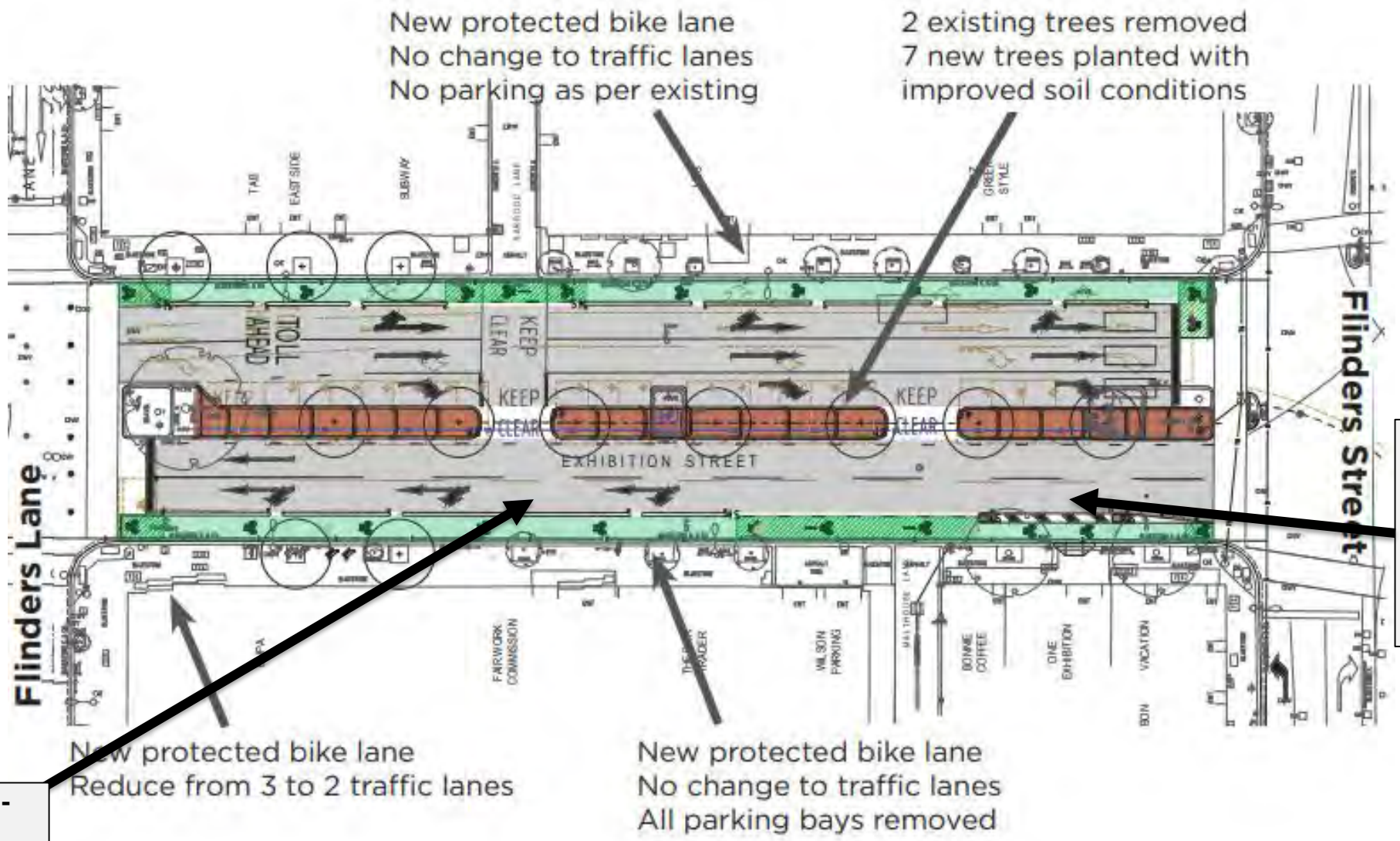

Post implementation design adjustments
Exhibition Street
Parliament House
Treasury Gardens
Spring Street
Collins Street
Flinders Street
Exhibition Street
Theatre forecourts – permanent works in 2022/23 (following DoT approval)
Request
Public event for the premiere of Hamilton musical.
Adjustment
24 hr road closure and temporary removal of parklets
Feedback
Right turning movements were delaying traffic
Adjustment
Hook turn installated to consoldate turning move-ments and smooth traffic flow
Feedback
Bus bay not being used
Adjustment
Additional 15m bays installed to improve access for services and deliveries.
Feedback
Right turning movements were delaying traffic
Adjustment
Hook turn installated to consoldate turning move-ments and smooth traffic flow
Feedback
Difficult to find a parking space in this block
Adjustment
Converted 5 bays to 15m limit to in-crease turnover and support businesses
Adjustment
Green treatment installed through intersections to improve safety and increase awareness of people riding bikes.
Feedback
Difficult to drop-off and pick-up outside 121 Exhibition.
Adjustment
Motorcycle parking and some bike hoops replaced with 2-minute limit bays.
Original design provided no parking here at the request of building man-agement due to securuity concerns. Property manager was consulted and supported the changes.
Further adjustment
Relocate bike hoops to install additional pick up/drop off.
Feedback
Parking bays fully occupied
Adjustment
Parking signage changed to increase turn-over.
More pick-up/ drop-off bays provided
Feedback
Northbound merge too short, creating motorist delays
Adjustment
Removed 2 parking bays to smooth traffic flow
Further adjustment (subject to consultation)
Review remaining parking bays and no stopping times to assist traffic flow in northbound lane
Key design considerations
1. Maintain traffic capacity to and from Batman Avenue. The traffic lane configuration was not changed between Flinders Lane and Flinders Street. The Flinders/Exhibi-tion intersection is a key point controlling movement along this route.
2. Create new public spaces to enhance Melbourne's theatre precinct by removing a traffic lane in each direction.
3. Provide physical protection to encourage less confident riders to access the city by bicycle and prevent illegal parking.
4. Provide best possible growing conditions to support new trees and expand canopy cover.
N



Clear lane Flinders St to Flinders Ln
(except one loading bay from 11am-2pm & 9-11pm)

There is no on-street parking northbound from Flinders to Flinders lane (original design)

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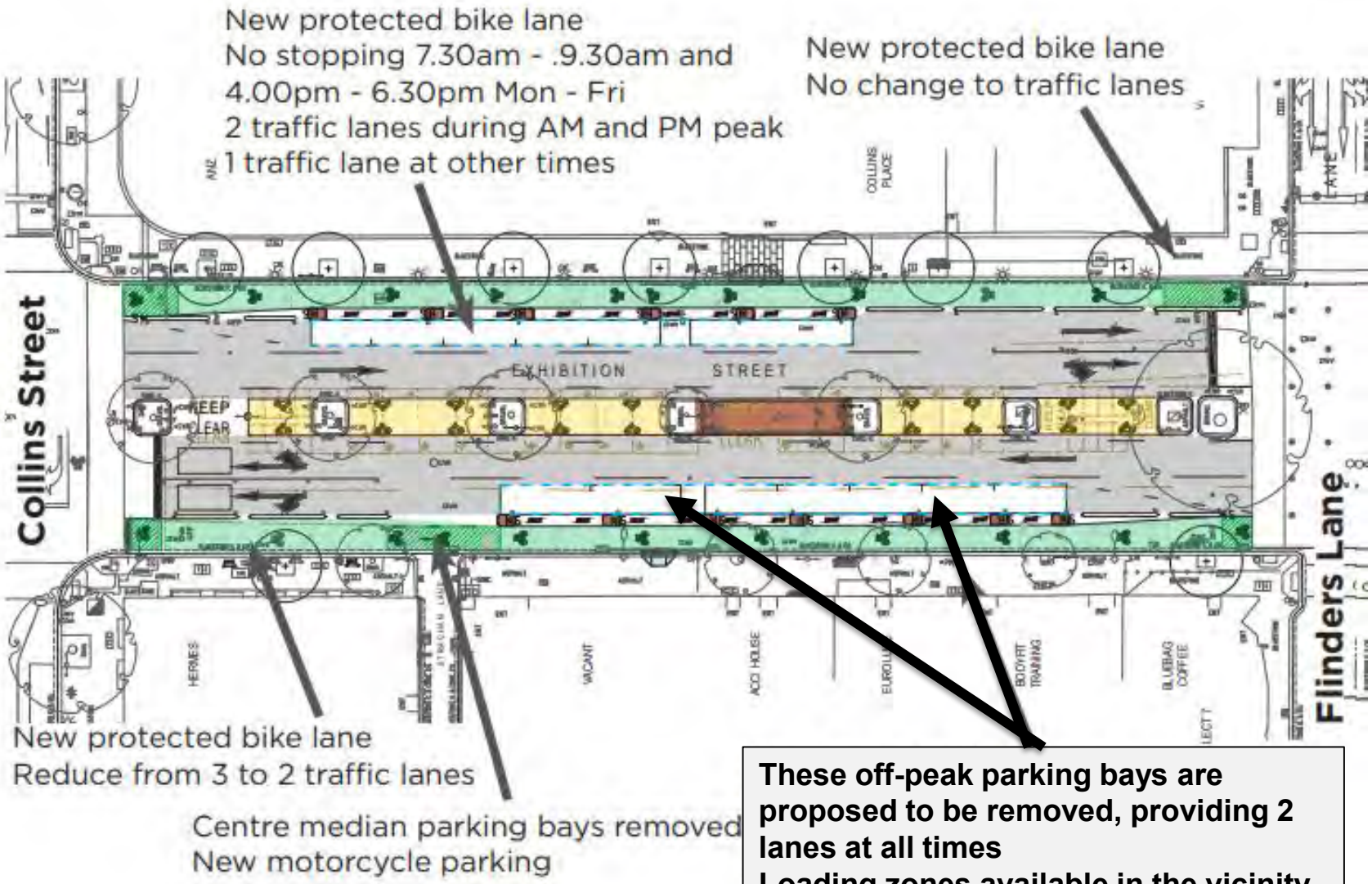
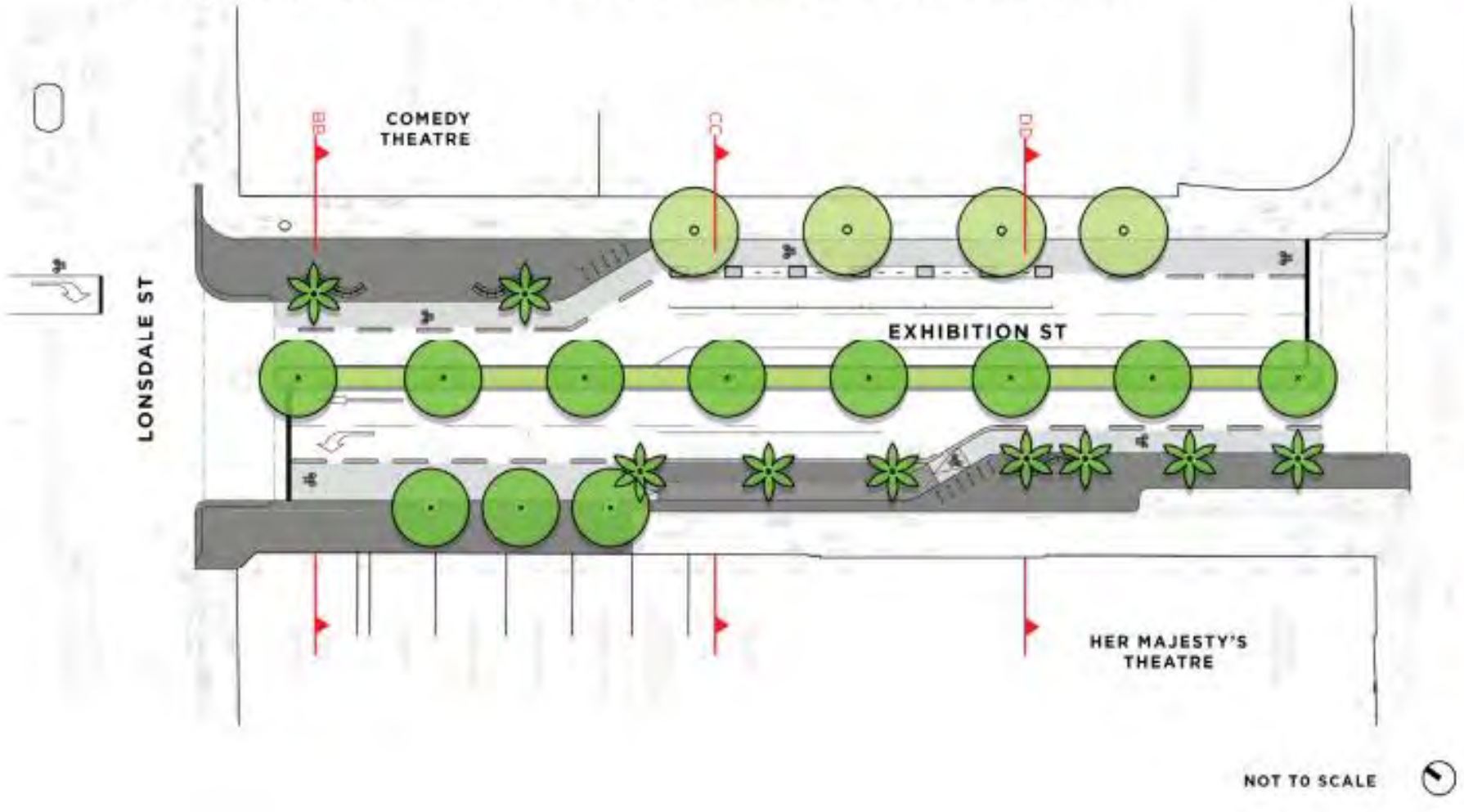


These off-peak parking bays are proposed to be removed, providing 2 lanes at all times
Loading zones available in the vicinity.

Enlargement Plan – Lonsdale Street to Little Bourke Street



COMEDY THEATRE 'PARKLET'
- footpath expansion
Image courtesy of Comedy Theatre

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Queens Bridge Street Case Study

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Queens Bridge Street

Queens Bridge Street

- As identified in the Transport Strategy, there was a need to improve safe cycling infrastructure across the river to the south.
- Queens Bridge Street was selected over Clarendon Street being an arterial road.
- Protected bike lanes were installed in May 2021 and have reduced traffic capacity.
- Concerns have been raised about slow journey times for motor vehicles, focused more on the southbound direction.
- Initially there was a substantial number of complaints. This has reduced.
- Officers are considering options to address the traffic congestion in the vicinity of Queens Street, Flinders Street and Queens Bridge Street.

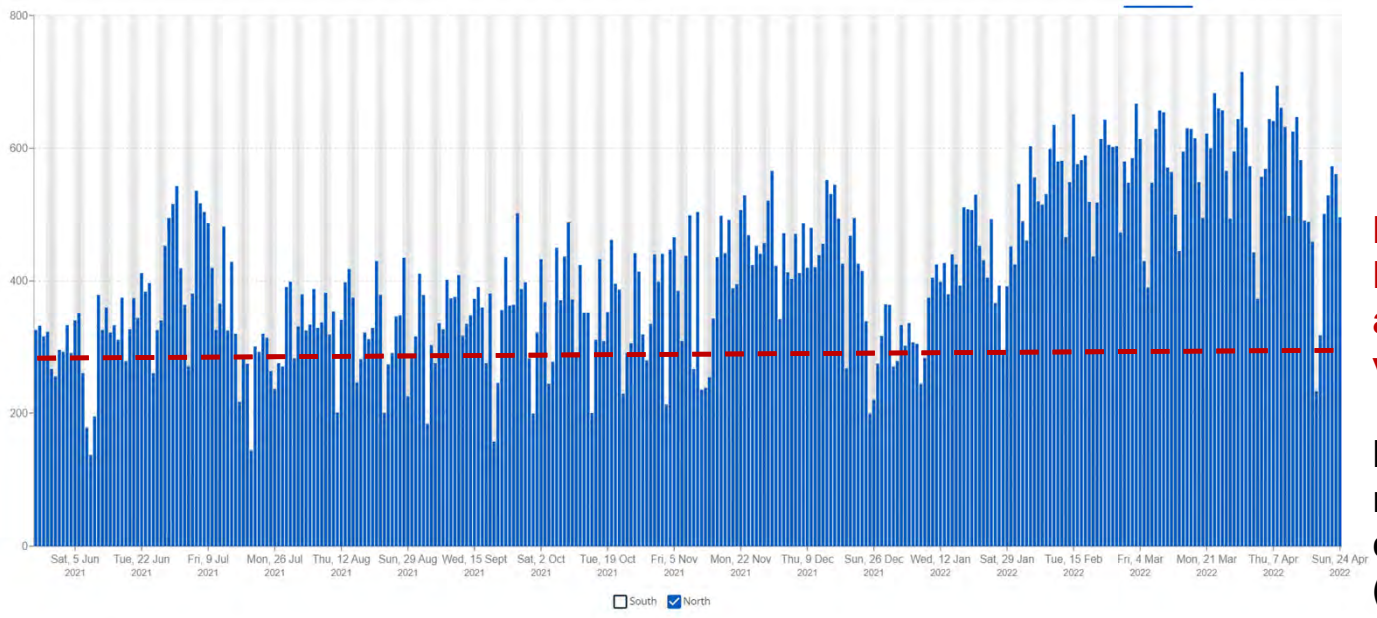
How are bike lanes performing?

Data collection shows strong growth in bike & e-scooter volumes on Queens Bridge Street since the protected bike lanes were installed in 2021

AM peak volumes are at 186% of the pre-covid baseline

This suggests the protected bike lanes are attracting new riders

Community feedback has included concern about traffic congestion and appreciation for the safer bike lanes



Pre-covid (2018) Northbound average daily volume = 285

March 2022 northbound daily average = 586 (+105%)

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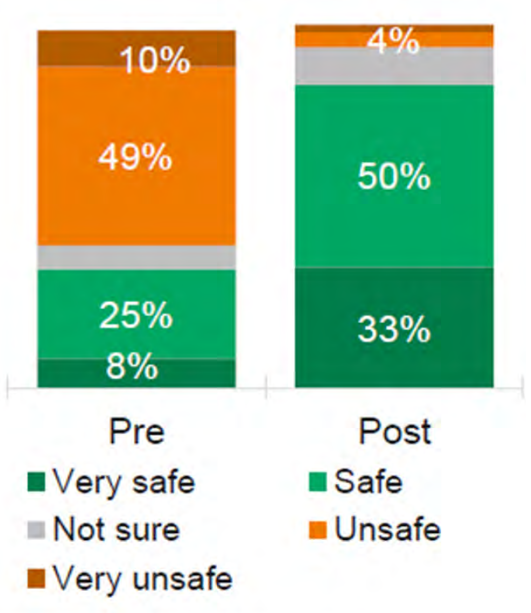
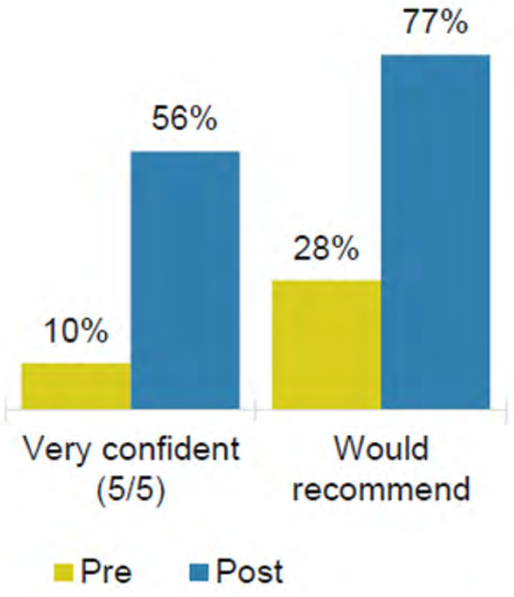
How are bike lanes performing?

The upgrade has significantly increased perceptions of safety, confidence in riding the route and likelihood of recommending the route to inexperienced riders.

Among riders interviewed on site:

- **71% said the upgrade increased their use of the route**
- **67% said the upgrade made them feel safer**
- **23% said the upgrade made them use the route more often**





Queens Bridge Street investigation

Investigation of Queens Bridge Street southbound adjustment – to improve travel time for drivers

Engineering considerations

- Vicroads minimum width for traffic lane on low-speed road is 3.0m
- CoM minimum width for protected bike lanes is 1.8m
- Orca separator kerb is 300mm wide
- Bridge is heritage listed
- Kerbs, poles and posts are very difficult to move. Structural assessment required.

Protected bike lane and 2 traffic lanes requires <u>8.1m width</u>

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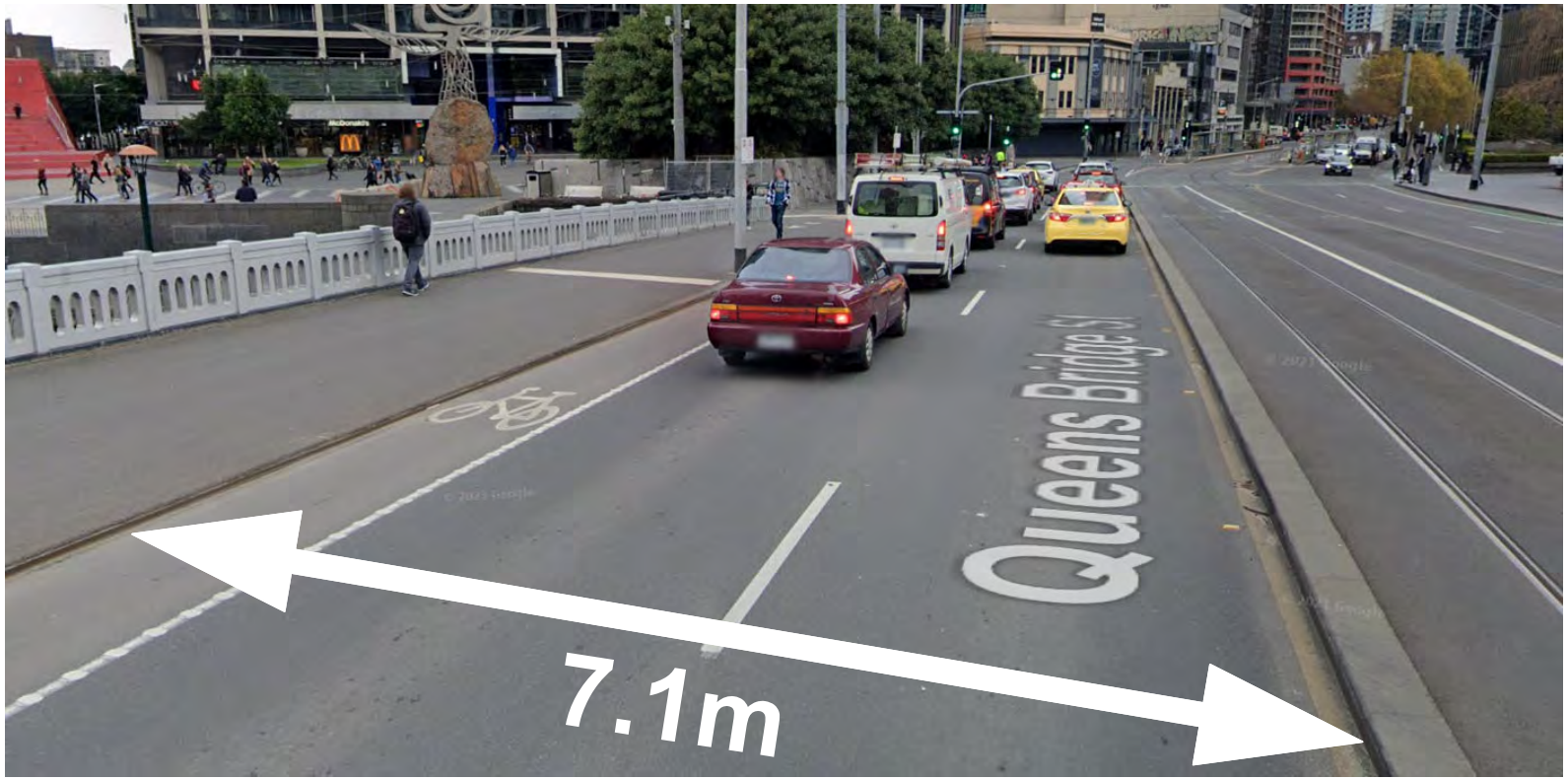
Queens Bridge Street – Under the viaduct

Conditions before bike lane upgrade (southbound):

Protected bike lane and 2 traffic lanes requires <u>8.1m width</u>

Queens Bridge Street – Over the bridge

Conditions before bike lane upgrade (southbound):



Protected bike lane and 2 traffic lanes requires <u>8.1m width</u>

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Queens Bridge Street – At the tram superstop

Conditions before bike lane upgrade (southbound):

Protected bike lane and 2 traffic lanes requires <u>8.1m width</u>

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Queens Bridge Street – North of Power Street intersection

Conditions before bike lane upgrade (southbound):

Protected bike lane and 3 traffic lanes requires <u>11.1m width</u>

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Queens Bridge Street

Summary of findings

- There is not enough road space to provide a protected bike lane and 2 traffic lanes (**8.1m** required)
- A lower quality alternative bike connection might be possible southbound from Flinders Street to the Southbank Promenade
    - This would create safety risks for pedestrians
    - Subject to detailed design and DoT approval
- This would shift the traffic bottleneck 190m to the south where the number of lanes reduces from 2 to 1
- As a result, travel time and congestion on the street is unlikely to improve. Complaints from pedestrians and bike riders are likely.
- There is no practical way to retain a protected bike lane and increase traffic capacity from the tram platform south to Power Street

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Alternative design option

- Officers workshopped alternative design options with DoT in 2021 in an effort to reduce congestion.
- The outcome was a proposal to install a southbound bus lane on Queen Street. It remains a potential option to improve the performance of the intersection.
- The proposal includes:
    - Reducing the number of southbound lanes on Queen Street from Flinders Lane to Flinders Street from two to one
    - Installing a widened footpath at the bus stop.
- Benefits of this proposal include:
    - Improvements to bus performance
    - Reducing the amount of traffic travelling from Queen Street via Flinders Street to Queens Bridge.
- This will have the effect of dispersing the southbound traffic onto the arterial road (King Street) sooner and providing a smoother flow from the Hoddle Grid to Southbank.
- DoT has previously approved the installation of the bus lane.

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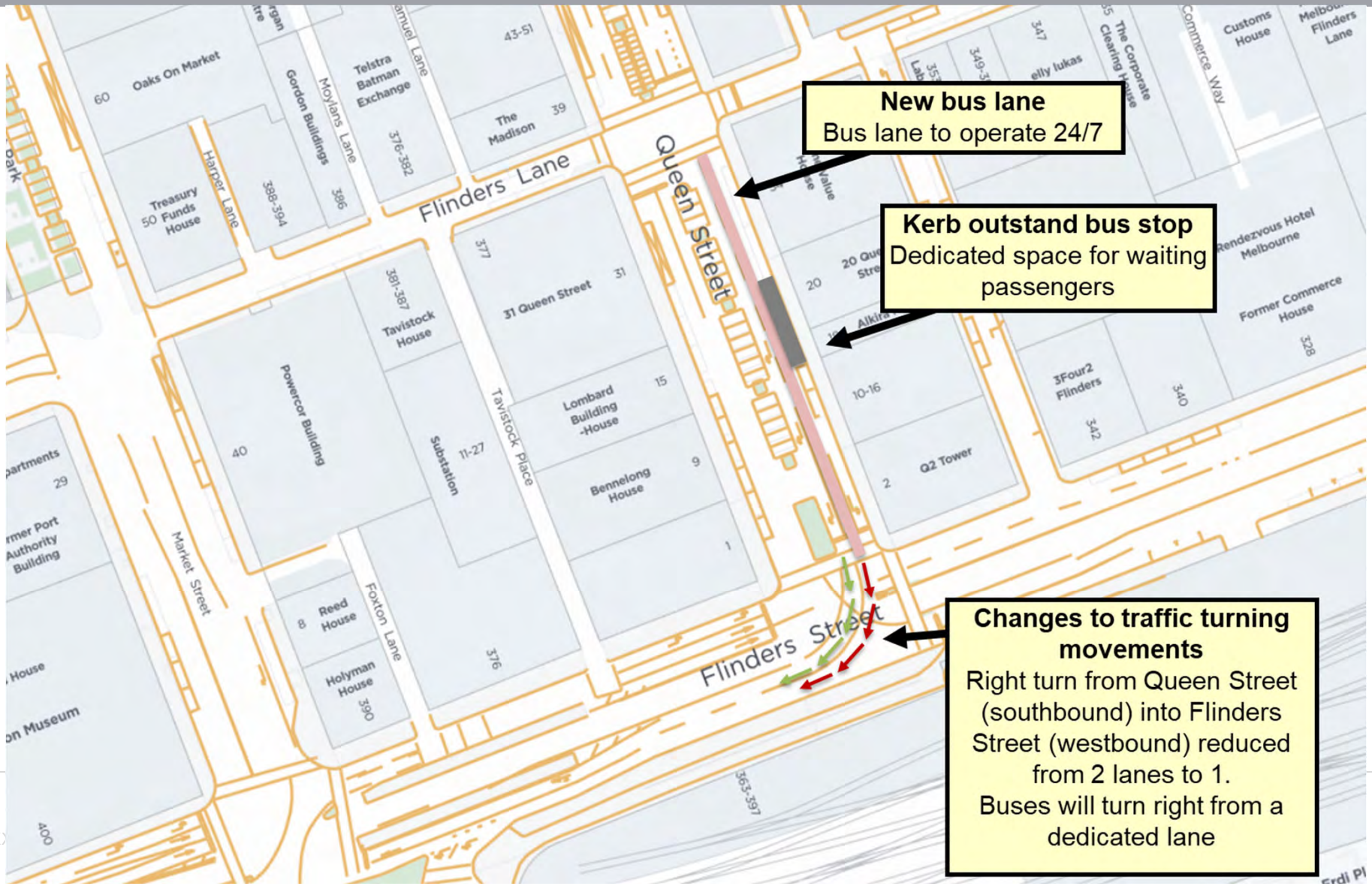
Queen Street bus lane option



Conclusion

Queens Bridge Street

- Officers continue to monitor the feedback and traffic conditions on the network.
- It is not possible to reinstate a second lane on Queens Bridge Street and retain a protected bike lane.
- The bus lane will benefit the city by improving public transport performance and help address congestion on Queens Bridge Street.

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Attachment 8

Map of priority walking, riding and driving routes