

10.3

QUEENS LANE TRAFFIC AND PARKING REVIEW

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1. PURPOSE

- 1.1 To present the findings of the independent traffic and parking assessment following a Council request made when Council endorsed Planning Application (909/2020) for 464-466 St Kilda Road on 8 December 2021.
- 1.2 Recommend initiatives that aim to reduce observed issues and improve safety along Queens Lane

2. EXECUTIVE SUMMARY

2.1 On December 8, 2021, in reviewing the planning report for the proposed redevelopment at 464-466 St Kilda Road, Council considered issues raised by community especially concerns over traffic conditions. Council approved the permit with the following action:

"Within 12 months of the issue of the planning permit, a report to be prepared for Council to assess the current function of Queens Lane, between Hanna Street and Kings Way, including recommendations as necessary regarding traffic movement and functionality".

- 2.2 Council commissioned a Traffic and Parking impact assessment which included:
 - Site investigations along Queens Lane during peak periods
 - Surveys of the existing traffic volumes and speeds on local streets
 - Surveys of the existing parking supply and demand on Queens Lane between Kings Way and Hanna Street
 - An analysis of the current and future traffic conditions and impacts
 - Development of options for potential traffic and parking management measures to mitigate the impacts and improve the safety and efficiency in the study area.
- 2.3 The analysis found that queuing during PM peak hours in Queens Lane on approach to Kings Way is primarily due to congestion on the wider arterial network with traffic flow from Queens Lane entering Kings Way restricted to a few vehicles every traffic signal cycle at the intersection of Kings Way and Queens Road.
- 2.4 As the volume of vehicles on Kings Way and other state managed arterial roads exceed capacity the investigation found that only comprehensive network improvements will address the traffic demand and flow and that there are limited options for Council to improve traffic flows.
- 2.5 Network improvements such as additional lanes and duplications of roads are not feasible in this area due to the built-up environment. Other options include DTP prioritising high demand intersection approaches by changing traffic signals and implementing turn bans during peak periods.



- 2.6 State projects such as St Kilda Road separated bike lanes and the Metro Tunnel Project, which includes Anzac Station in the Domain Precinct (currently ongoing), may have a positive but limited impact for a mode shift away from vehicles.
- 2.7 The Traffic and Parking Impact assessment recommend the following to help mitigate the observed issues:
 - 2.7.1 Improve compliance of the clearway and loading restrictions between Arthur Street and Kings Way
 - 2.7.2 Modify 'Keep Clear' line marking on Kings Way to allow more traffic from Queens Lane to turn when traffic along Kings Way is queued
- 2.8 In addition, to improve safety for all road users particularly pedestrians, the assessment recommended the installation of kerb outstands at Leopold Street and Arthur Street intersections with Queens Lane. This would increase safety by improving vehicle and pedestrian sightlines, lower vehicle speeds and shorten crossing distances and provide the opportunity for landscaping.

3. **RECOMMENDATION**

That Council:

- 3.1 Notes congestion at the intersection of Queens Lane and Kings Way has been a longstanding issue and that major changes to the arterial network of roads surrounding Queens Lane are required to address congestion issues within the lane. These are State owned and managed roads which Council has limited capacity to influence.
- 3.2 Endorses the following initiatives to be actioned along Queens Lane to help mitigate the observed issues where possible and improve safety of all road users:
 - 3.2.1 Increase parking enforcement to improve compliance of the clearway and parking controls between Arthur Street and Kings Way and request 'Tow-Away powers' be granted from the Department of Transport and Planning
 - 3.2.2 Seek approval from the Department of Transport and Planning to modify the 'Keep Clear' line marking on Kings Way to allow more traffic from Queens Lane to turn when traffic along Kings Way is queued. Implementation of any modification will be subject to Council's budget process.
 - 3.2.3 As part of the Council budget process, consider the installation of kerb outstands at Leopold Street and Arthur Street intersections with Queens Lane to increase safety by improving vehicle and pedestrian sightlines, lower vehicle speeds and shorten crossing distances and provide the opportunity for landscaping.

4. KEY POINTS/ISSUES

- 4.1 Queens Lane, between Hanna Street and Kings Way, is a Council managed road. It provides rear access to high rise developments along Queens Road and St Kilda Road.
- 4.2 The Design and Development Overlay (DDO26) manages the scale and impact of high-rise development along Queens Road and St Kilda Road. Between Kings Way and Arthur Street, the overlay allows buildings up to 65m.



- 4.3 DTP are reluctant to approve additional vehicle access to declared roads. As St Kilda Road and Queens Road are major arterial roads, new vehicle access from future development is likely to be via Queens Lane.
- 4.4 High-rise development in the area, has increased vehicle trips and congestion. This has increased community concerns about traffic conditions.
- 4.5 In 2016, Council conducted a comprehensive traffic study along Queens Lane in response to community concerns of alleged 'rat running' using Queens Lane to bypass the arterial network.
- 4.6 The traffic study found that Queens Lane was not be used as a "rat run" as Queens Lane also experiences a high level of delay. The key cause of queuing on Queens Lane is the restricted access to the arterial network. Queuing is common for minor roads attempting to join an at capacity arterial network especially during peak hours.
- 4.7 Network congestion and DTP prioritising traffic flow in the arterial network, means Queens Lane traffic entering Kings Way is restricted to a few vehicles every traffic signal cycle at the intersection of Kings Way and Queens Road.
- 4.8 In 2016/2017, following community consultation on various options, the following modifications were made at Queens Lane and Kings Way to improve traffic flow:
 - 4.8.1 The median closure on Kings Way at the Queens Lane intersection, banning right turn movements out of Queens Lane.
 - 4.8.2 Extension of the 'Keep Clear' marking within the Kings Way Carriageway.
 - 4.8.3 Removal of the one-way exit at the Kings Way intersection.
 - 4.8.4 Inclusion of left turn allowing traffic to enter and exit from Kings Way.
- 4.9 It was acknowledged at the time that these changes were unlikely to significantly improve queuing within Queens Lane, but they would simplify the intersection and improve road user safety.
- 4.10 On December 8, 2021, Council reviewed a planning report for the proposed redevelopment of 464-466 St Kilda Road. Council considered concerns raised by the community during the public consultation, especially concerns over traffic conditions, and resolved to approve the permit with the following action to be undertaken:

Within 12 months of the issue of the planning permit, a report to be prepared for Council to assess the current function of Queens Lane, between Hanna Street and Kings Way, including recommendations as necessary regarding traffic movement and functionality'

- 4.11 Resourcing constraints in 2022 meant that Council officers were not able to conduct the traffic review of Queens Lane within 12 months.
- 4.12 In 2023, Council engaged Trafficworks to assess Queens Lane, Melbourne. They used standard industry practice to collect the data including intersections turning movement counts, parking occupancy surveys and pedestrian counts. The report is Attachment 1. Key findings from the traffic impact assessment are as follows:
 - 4.12.1 Traffic flows along Queens Lane on approach to Kings Way experienced congestion and long queues during pm peak hours. This is mainly due to Queens Lane traffic attempting to join Kings Way and the surrounding arterial network that is already at capacity.



- 4.12.2 Other intersections between Hanna Street and Arthur Street perform satisfactorily with minimal delays and queues on approaches.
- 4.12.3 There are parking and loading issues along the west kerbside of Queens Lane, where vehicles park illegally during Clearway times or use the loading zone for non-loading purposes. This reduces the available road space and affects traffic efficiency.
- 4.12.4 Pedestrian activity is highest in the section of Queens Lane, between Arthur Street and Leopold Street. This warrants consideration of walking facilities and safety measures in this area.
- 4.12.5 The redevelopment of 464-466 Queens Lane is likely to add an additional delay of approximately 2 minutes at the Kings Way intersection.
- 4.13 State projects such as St Kilda Road separated bike lanes and the Metro Tunnel Project, which includes Anzac Station in the Domain Precinct (currently ongoing), provides opportunities for a mode-shift away from vehicles.
- 4.14 Wider network congestion is shown in the below aerial image captured during the afternoon peak on 13 September 2023. Arterial roads: Kings Way, Queens Road, St Kilda Road and Toorak Road all experience significant congestion.



Image 1. PM Peak at Queens Lane, St Kilda Road, and Kings Way

4.15 DTP prioritises vehicle movement on its arterial network over local streets. Proposals that prioritise local road traffic flow and negatively affect the arterial network are not supported by DTP unless they improve safety conditions.



TREATMENT OPTIONS

4.16 The traffic impact assessment considered but <u>did not</u> recommend the following options:

4.17 Signalise the Queens Lane / Kings Way intersection

There are two major intersections directly east and west of Queens Lane. Any capacity reduction to Kings Way from traffic signals, will impact the operation of these two intersections, which will have a follow-on impact on St Kilda Road and Kings Way (north). The downstream congestion on Kings Way limits the capacity of vehicles exiting Queens Lane meaning that signalisation is unlikely to reduce Queens Lane congestion. Any capacity gains could be outweighed by a potential increase in rat running along Queens Lane. This option is unlikely to be supported by DTP.

4.18 Convert Queens Lane between Arthur Street and Kings Way to One-Way

Converting Queens Lane between Arthur Street and Kings Way to One-Way means that traffic intending to head south or east, will need to head north along Queens Lane and turn onto Kings Way. Consequently, the additional traffic turning left at the Queens Lane / Kings Way will increase delays and queueing at this intersection.

4.19 Convert the Queens Lane / Kings Way intersection to One-Way

This option involves reverting this intersection approach to one way and converting the southbound lane into a third left turn lane to reduce queue length and marginally improve capacity for vehicles exiting Queens Lane. However, traffic that previously entered Queens Lane from Kings Way, would be diverted and head north on Queens Lane from the intersection of Arthur Street joining the existing queue and reducing traffic efficiency. In addition, the additional lane of traffic will obstruct sight lines to the adjacent lanes and increase the risk of cross traffic crashes at this intersection. Consequently, this option was discounted.

4.20 Modify the intersection of Queens Lane and Kings Way

The traffic impact assessment recommended Council consider modifying the intersection of Queens Lane and Kings Way as outlined in Image 2. to:

- 4.20.1 Remove the Keep Clear at the intersection.
- 4.20.2 Provide a single continuous left turn lane into Kings Way.
- 4.20.3 Modifying the south-east kerb to ensure vehicles turning left from Kings Way don't mount the kerb or encroach into the opposing lane. DTP has advised Council officers that they do not support the change as it would have a direct impact on the capacity of Kings Way and have wider network impacts.



Image 2. Queens Lane / Kings Way intersection modifications.



RECOMMENDED TREATMENTS

The following initiatives were recommended to improve Queens Lane's

4.21 Short Term Initiative

Improve compliance of the clearway and loading restrictions between Arthur Street and Kings Way through regular enforcement and modifying the clearway to include a tow-away zone.

4.22 Medium Term Initiative 1

Modify 'Keep Clear' line marking on Kings Way. This will allow more traffic from Queens Lane to turn when traffic along Kings Way is queued. Kings Way is a declared state arterial road and any changes, including amendments to the 'keep clear marking', require DTP approval.



Image 3. Keep Clear modification.

Medium Term Initiative.

4.23 Install Kerb outstands at Leopold Street and Arthur Street intersections with Queens Lane to improve safety for more vulnerable road users particularly pedestrians. Narrowing the intersection improves sight lines, shortens the walking distance, slows vehicle speeds for vehicle entry and egress at the intersection, improves walkability with new and upgraded ramps and provides opportunities for landscaping. This initiative will not adversely impact or improve traffic congestion in Queens Lane. Council officers can prepare options for improvements at these locations for consideration as part of Council's budget process.

KEY MESSAGES

- 4.24 Traffic congestion during peak periods has been a long-standing issue at the Queens Lane and Kings Way intersection for the properties with access to Queens Lane.
- 4.25 Major changes to the network of roads surrounding Queens Lane are required to address congestion issues within the Lane. These are State owned and managed roads which Council has limited capacity to influence.
- 4.26 The proposed initiatives aim to enhance traffic flow and improve the lane's overall safety and amenity but will ultimately not resolve the observed queuing.



5. CONSULTATION AND STAKEHOLDERS

- 5.1 This traffic assessment was conducted in response to community consultation on a planning permit for a residential property backing onto Queens Lane.
- 5.2 There has been no additional consultation undertaken as part of this assessment.
- 5.3 Engagement with affected community will be completed as part of the next steps of recommended initiatives.

6. LEGAL AND RISK IMPLICATIONS

- 6.1 As there are limited options for Council to pursue, Council faces a reputational risk if it implements minor changes to Queens Lane that fail to improve traffic flows during peak hours.
- 6.2 As Queens Lane is a local road, Council is responsible for the safety of road users.

7. FINANCIAL IMPACT

7.1 If Council proceeds with the initiatives recommended in this report, it will have the following financial impact:

Initiative	Estimated Cost
Improve Parking Compliance	Negligible- absorbed within operational budget.
Modify 'Keep Clear' line marking on Kings Way.	Approx. \$40k-80k Dependent on whether re- sheet is required. Council budget required.
Install Kerb outstands at Leopold Street and Arthur Street intersections with Queens Lane	Approx. \$250k-\$300k each. Council budget required.

8. ENVIRONMENTAL IMPACT

8.1 The installation of kerb extensions at the Leopold Street and Arthur Street intersections with Queens Lane provide opportunities for de-paving and improved landscaping, which can help reduce urban heat island affect.

9. COMMUNITY IMPACT

9.1 The recommended treatments will not resolve the network issues that cause congestion on Queens Lane but aim to help mitigate the observed issues where possible and improve safety.

10. ALIGNMENT TO COUNCIL PLAN AND COUNCIL POLICY

- 10.1 Integrated Transport Strategy (Move, Connect, Live 2018-2028) Our cities transport network, streets and places cater for our growing community.
 - 10.1.1 Outcome 1 Action 7: Deliver Local Area Traffic Management (LATM) treatments to deter through traffic and maintain safe vehicle speeds on local streets.
 - 10.1.2 Outcome 2 Action 15: Deliver pedestrian projects that create safe, high amenity walking routes and reduce barriers to crossing major roads.



11. IMPLEMENTATION STRATEGY

- 11.1 TIMELINE
 - 11.1.1 Seek Department of Transport and Planning (DTP) support for proposed initiatives.
 - 11.1.2 Develop project portfolio bid for consideration in the 2024/2025 budget.
- 11.2 COMMUNICATION
 - 11.2.1 All stakeholders affected by the proposed initiatives will be informed prior to construction.

12. OFFICER DIRECT OR INDIRECT INTEREST

12.1 No officers involved in the preparation of this report have any material or general interest in the matter.

ATTACHMENTS 1. Traffic and Parking Assessment