Response to Yarra Councillor questions



Route 96 Upgrade – stops 16 to 22

Public Transport Victoria (PTV) plans to upgrade tram stops 16 to 22 on Nicholson Street in the second half of 2019 as part of the Route 96 upgrade project to make it Melbourne's first fully accessible tram route.

70 per cent of the route is already serviced by accessible stops, and this next stage of upgrades will complete the project.

Yarra Council provided PTV with questions about the project on 25 January 2019 and the following information in response has been compiled by PTV with assistance from project design consultant Jacobs.

PTV is currently engaging with key stakeholders in relation to this project and will continue to work with the community, traders and Council as the project progresses.



Responding to Council's concern regarding central island platforms potentially extending boarding time due to the width of the platform

Central island platforms are typically 33m long x 4.4m wide* and are one of the most effective tram stop types for minimising boarding and disembarking time.

As the stops are level with the tram, the time to board a tram compared to the current stops, where passengers must step up on to a tram, is greatly reduced. The platforms also provide a larger waiting area than the current stops on Nicholson Street.

Easy access stops, while providing even access for passengers with accessibility requirements, have a longer boarding time than central island stops, as passengers are required to wait on the footpath and walk across the raised road area when the tram has come to a complete stop.

Road vehicles are required to stop behind a stationary tram at easy access stops until all passengers have cleared the shared traffic lane and tram boarding area and the tram doors are closed, which is not required at central island stops, where road traffic can continue to move while a tram is being boarded allowing more effective use of the road space.

*due to the limited road width at stop 22 at Brunswick Road, this stop is designed as a Central Offset Platform (typically 67m long x 3.1m wide). This stop will have two designated waiting areas at either side of the stop, separating northbound and southbound passengers. An example of this stop type is in operations in Flinders Street at Russell Street in Melbourne CBD.

Responding to Council's concern that central island stops could limit access from one side of the road to the other due to their length

The upgraded tram stop designs incorporate existing or new signalised pedestrian crossings at all stops, providing safe and direct access to either side of the Nicholson Street Activity Centre. Stop 22 (67m central offset stop) utilises the existing intersection crossing at Brunswick Road on one side, and the Capital City Trail signalised crossing on the other.

Responding to Council's concerns that central island stops:

- could prevent people from waiting for their tram on the footpath limiting their ability to window shop or order coffee while waiting for a tram.
- limit the scope to widen footpaths to support the activity centre, footpath activity and landscaping.
- are not as efficient as extending the footpath for an easy access stop, which could be used for waiting as well as a variety of economic uses.
- limit the possibility of a cycle path on Nicholson Street

Centre island platform stops have been selected for this section of Nicholson Street to minimise the removal of on-street parking spaces, keep traffic moving, and to provide the safest stop option for passengers in the busy Nicholson Village area.

It is not possible to install easy access stops in this area for a range of reasons, including the need to keep the footpaths clear for trader infrastructure – such as tables and chairs and retail displays – and maintain space on the footpath for pedestrians to access businesses.





All upgraded tram stops need to have seating, shelter, real time passenger information (visual and audio) and bins installed, which requires footpath space that is not available in this area, and a minimum amount of waiting area space is required at each accessible tram stop if it is to meet Disability Discrimination Act requirements.

It is not possible to widen the footpath on Nicholson Street while maintaining traffic flow, limiting car space removals and providing the required space for accessible tram stops – regardless of the stop type.

As multiple traffic lanes are currently in operation at intersections where tram stops are operational, an easy access stop would greatly reduce the traffic movements and increase traffic queuing, which could not continue to flow when a tram is at a stop.

Based on the current VicRoads-approved road configuration, it is not feasible for an easy access stop be located at an intersection with multiple traffic lanes adjacent to the tram stop. The Victorian Road Laws do not cater for multiple traffic lane vehicles stopping adjacent to an easy access tram stop.

For the sections of Nicholson Street where a single northbound lane is proposed, it remains unfeasible to install an easy access stop, as the pair stop on the southbound side maintains two lanes and the stops need to be consistent in type.

Under the roads classification for Nicholson Street, its defined as an arterial road with priority to trams. It is not classified as an on-road cycling route and no bike markings are provided on the road. VicRoads and the Bicycle Network have confirmed there is no intention for Nicholson Street to become a principal bicycle route.

All accessible tram stops – regardless of the stop type – are required to meet minimum widths and lengths. Due to the limited available road area in this section of Nicholson street, it is not possible to incorporate a cycle path if traffic flow is to be maintained.

The Route 96 project is providing enhanced bicycle access across Nicholson Street (east-west routes), including widening the signalised crossing point of the Capital City Trail at Nicolson Street.

Responding to Council's concern that centre island stops will mean more on-street parking space removals and affect access for disability by vehicles and vehicles needing to load and unload in the area

Centre island stops require fewer on-street car space removals than easy access stops.

The removal of some on-street car spaces is required at all upgraded stops to ensure traffic flow is maintained. In designing the accessible tram stops, vehicle and pedestrian use of the area was considered, and adjustments have been made where possible to minimise the loss of on-street parking.

Following traffic modelling, traffic has been taken down to one lane when passing northbound stops 16, 17 and 18 to maintain on-street car parking at these stops.

Responding to Council's concern that removal of parking to replace the lane with traffic next to the footpath undermines footpath trading activity and street dining, presents a greater risk of cars mounting the footpath and increases traffic noise and fumes, water splashing on pedestrians etc.





The proposed changes to the lane configuration when passing the upgraded tram stops is consistent with many other main roads in Melbourne, including Nicholson Street north of Brunswick Road during peak hour when clearways are in operation.

Easy access stops would also require traffic to move across to the lane immediately adjacent to the footpath.

Central island platform stops provide a designated area for pedestrians, with safety barriers separating them from vehicles.

This section of Nicholson Street has been assessed by the roads authority and road auditor and central island stops with the proposed lane configuration have been deemed the most appropriate stop upgrade type in this area.

In response to Council's communication to PTV that in light of the problems set out above, tram priority for route 96 requires a better design than central island tram stops. Needed is a design that supports and does not undermine the operation of an activity centre by creating the above problems.

In addition to the above responses to concerns, an options assessment for the most appropriate type of tram stop for Nicholson Street was undertaken during the Concept Design Development stage of the project in 2014. The assessment showed central island stops were the most appropriate tram stop type. This was supported by key stakeholders, including VicRoads.

Central island stops provide the safest level access tram stops for passengers to board and alight trams. Easy access stops are a compromised tram stop design to provide level access boarding for passengers when there is insufficient road width to accommodate central island stops.

A Monash University Study on "Accident Analysis and Prevention" conducted in 2015 found that there was an 86% improvement in the reduction in pedestrian involved injuries after platforms have been installed highlighting that platform stops have significant safety benefits for pedestrians as well as improving accessibility to the tram network.

In response to Council's communication that there are other options, such as footpath stops as per Swanston Street, or Victoria Street and that there are many examples of tram stops across Melbourne where passengers access the tram from the footpath by crossing 2 lanes of traffic.

There are no stops on Melbourne's tram network where passengers access the tram directly from the footpath by crossing two or more lanes of traffic.

The Victorian Road Laws do not cater for multiple traffic lane vehicles stopping adjacent to an easy access tram stop.

