

4.1 CHESTER STREET AND EATON MALL – PEDESTRIAN IMPROVEMENTS

Responsible Director: Deb Cailles

RECOMMENDATION

That Council:

- 1. Note findings regarding options to enhance the amenity and safety of pedestrians on Chester Street at Eaton Mall as detailed in this report.*
- 2. Note that introducing a pedestrian-only area on Chester Street at Eaton Mall is cost prohibitive at this time and further work is required to understand wider precinct implications.*
- 3. Note that the planned installation of road humps on Chester Street between Hanover Street and Station Street in 2021/22 utilising external grant funding will contribute to enhanced safety and amenity.*
- 4. Directs officers to commence preliminary planning and community consultation for a 20km/h Shared Zone trial on Chester Street at Eaton Mall and an area-wide 30kph speed limit in the area bounded by Warrigal Road, Atherton Road, Hanover Street and Portman Street.*

INTRODUCTION

To provide Council with the findings of an assessment of traffic options to enhance the amenity and safety of pedestrians on Chester Street, Oakleigh at Eaton Mall Council requested this report at its meeting in June 2021.

BACKGROUND

A traffic engineering feasibility report prepared by road safety consultant, Mr Robert Morgan, was noted by Council at its meeting on 29 June 2021. The Council resolution passing the assessment report requested that officers prepare a report for Council on traffic treatments that may enhance the amenity and safety of pedestrians on Chester Street at Eaton Mall.

Specifically, Council requested officers to consider ways to increase pedestrian-only footprint, including consideration of the potential to make an area of Chester Street a pedestrian-only area, the viability of severely speed limited 'shared zones' or the removal of non-essential car travel, and to consider both the need for potential land acquisition and/or capital works and opportunity for partnering with the Victorian Government.

This report sets out the findings of a desktop assessment of options undertaken by officers. The assessment was informed by a review of design

options alongside lessons from like-projects across Monash and best practice in metropolitan Melbourne. Each option was then assessed against the benefits sought and impacts.

DISCUSSION

In the context of a local road environment, it is widely recognised in national pedestrian design standards and guidelines that the top safety concerns and barriers to pedestrian safety typically centre on the following issues:

- a) aggressive driver behaviour (usually in terms of actual or perceived vehicle speeds);
- b) the volume of motor vehicles using the road (usually relative to the number of pedestrians or perceived function of the road); and
- c) achieving adequate or comfortable separation (or distance) from moving and parked vehicles.

In the case of Chester Street at Eaton Mall, aggressive driver behaviour is the predominant problem. Developing options which address this key issue, while also maintaining or making improvements to the other two was a critical part of the investigation.

It was also important to make the distinction between pedestrian safety and pedestrian convenience. Certain types of traffic treatments may result in very high levels of pedestrian safety but will result in some inconvenience to pedestrians, which was not deemed an acceptable outcome for options in this location.

Options

Four options were developed and assessed. They are:

Option 1: Pedestrian-only area. This option requires a road closure at 25 metres east and 33 metres west of Eaton Mall and the installation of a physical barrier at either end to prevent vehicle entry. To accommodate vehicle movement at either end of the closure, the road would need to be converted to two-way and a turning space installed (requiring property acquisition). Reconstruction of the roadway to convert it to a pedestrian space would be required (including removal of kerb and channel and streetscape work). The existing pedestrian crossing signals would need to be removed. The Department of Transport (DoT) approval would be required to install a road closure.

Option 2: Shared Zone trial. This option involves conversion of the speed limit to a 20km/hr shared zone - 25 metres east and 33 metres west of Eaton Mall - which legally gives pedestrians the right to share the road space with vehicles. It would require new signage, the installation of traffic calming measures (e.g. road cushions, linemarking) to be successful, and other interventions to signal a slow speed pedestrian environment (e.g. planters, graphics on street, bollards, existing pedestrian signalised crossing deactivated/covered). This option could be delivered as a lower-cost trial

with a view to making more extensive pedestrian improvements in the future (e.g. raised pedestrian threshold treatments). Implementation of a shared zone would require DoT approval.

Option 3: 30km/hr speed limit trial across Oakleigh Activity Centre. This option was identified as an opportunity to improve safety more broadly across the precinct in the area bound by Warrigal Road, Atherton Road, Atkinson Street and Portman Street. It would involve installation of new signage and possible linemarking and a communications program to support a trial. A speed limit change would require DoT approval.

Option 4: Installation of road humps along Chester Street. This option involves installation of road humps at intervals along Chester Street to reduce vehicle speed without changing the speed limit. This project is already externally funded and scheduled to be delivered this financial year. It does not require DoT approval.

Analysis of options

Option 1: Pedestrian-only area. Creating a pedestrian-only space via a road closure provides the highest level of service outcome for pedestrians in terms of safety, amenity, connectivity and convenience. It would also likely lead to a more traffic calmed environment on Chester Street by removing the opportunity for through traffic.

However there are significant trade-offs including a reduction of on-street parking, loading zones and removal of vehicular access - including bikes which would be required to dismount. A further investigation of the traffic impacts to the broader precinct would need to be undertaken to understand the transferral of traffic volumes to other streets.

In addition, a road closure would require Chester Street to be re-configured from one-way to two-way to allow vehicles to maintain property access and ensure vehicles can safely manoeuvre at either end of the road closure. To enable this, the road would need to be widened which will result in one side of parking to be removed. Property acquisition (or permit conditions applied to a future development application for property at the western end of the closure) and reconstruction of the road would need to occur at the western end of the closure to enable an appropriately sized vehicle turnaround area.

Delivering Option 1 is possible, however the cost would be significant and would need detailed planning for delivery in a future budget. It is recommended that a trial shared zone (Option 2) could offer many of the benefits of Option 1 at a lower cost and would enable testing of new conditions to inform a possible future permanent closure. A study for the precinct would also be recommended before a significant permanent change to the road conditions is made to ensure the changes match the desired place outcomes and maintain functionality of Chester Street.

Option 2: Shared Zone trial. The shared environment type treatment is becoming a more popular and accepted approach to dealing with the negative impacts of vehicles on streets. The approach involves creating an ambiguous environment which is less 'road like' which induces slower vehicle speeds and more careful driving.

There are varying types of shared environment treatments ranging from simply removing all road markings, to the introduction of placemaking features (i.e. plantings, road painting or changes in surface materials or colours to give the impression of vertical or horizontal traffic treatments without building them), to the introduction of formal traffic treatments such as shared zones (or the informal shared spaces) which combine a range of placemaking features.

Whilst becoming a more accepted approach to traffic calming and placemaking, shared environment treatments are still a relatively new concept in Melbourne. In Monash, the Glen Waverley Library Forecourt is a good example of a shared zone which is operating successfully. A shared zone is also to be installed on O'Sullivan Road, Glen Waverley this financial year.

These are examples of permanent shared zones constructed to function in this way. Retrofitting an existing road into a shared zone with low cost, temporary fixtures is more challenging and must be designed carefully to ensure the space no longer reads as a vehicle priority space. It has been done successfully in other parts of Melbourne and lessons should be taken from those trials to inform Option 2 should it be progressed.

Overall, Option 2 provides a good outcome for all road users, would mitigate the driver behaviour issues on Chester Street, could integrate other place needs (such as planting and dining) and if delivered as a trial could be a first step towards a more permanent future upgrade. It would be a less costly approach than Option 1, but more expensive than Option 3.

Option 3: 30km/h speed limit across Oakleigh Activity Centre. There is a significant and growing body of evidence that reducing speed limits creates safer streets with higher amenity. According to the World Health Organisation, a pedestrian in a collision with a motor vehicle has a 90% chance of survival when struck at 30km/h compared with a less than 50% chance of survival at 45km/h.

Many councils, including Monash, have been leaders in the move towards lower speed limits with the introduction of area wide of 40km/h speed limit on streets. However, many cities overseas have already moved towards 20m/h speed limits (or 32km/h) with industry research providing evidence that the introduction of 20m/h without physical traffic calming has in some

cities resulted in a significantly increased uptake in walking due to increased road safety and perception of road safety.

As with anything new, there is likely to be a range of hurdles to overcome in the move towards 30km/h streets in Oakleigh Activity Centre. As shown in recent examples locally and overseas, undertaking trials to study and demonstrate the benefits or impacts of localised or area-wide reduced speed limits is an effective first step in achieving authority approval and community support going forward.

In the first instance, the most appropriate location for a 30km/h trial would be the area of the Oakleigh Activity Centre bound by Warrigal Road, Atherton Road, Hanover Street and Portman Street that is extensively traffic calmed to ensure that no further speed mitigation measures would be required to support a trial.

While a reduction of the speed limit, does not give pedestrians priority or shared access to the road space (as per Options 1 and 2), it would improve safety and amenity of the precinct for pedestrians more generally at a very low cost. Option 3 could also be combined with any of the other options.

Option 4: Installation of road humps along Chester Street. Vertical traffic treatments such as road humps, road cushions and raised intersections are the most common types of physical traffic treatments found in Monash. These treatments tend to be popular with the community as they have been found to effectively reduce vehicle speed whilst they have limited impact on on-street parking.

In a Monash context, it has been found that different types of vertical treatments have varying outcomes on reducing vehicle speeds, whilst there has been a range of external considerations which have influenced the type of vertical treatment installed in Monash. It has generally been found that vertical traffic treatments tend to only have a short-term influence on reducing traffic volumes on local streets, with the traffic returning to preintervention levels over time. This is likely to be a reflection of local streets being an attractive and preferred alternative to congested main roads irrespective of the requirement to travel at lower speeds, as well as external factors such as increased population and car sales.

Delivery of Option 4 could be funded through the DoT Safer Roads program.

Ranking of options

Based on the above review of options, a ranking of traffic treatments against the key outcomes sought is provided at Table 1 for consideration.

Table 1 – Ranking of options

| | Option 1 – Pedestrian only area) | Option 2 – Shared zone) | Option 3 – 30km/hr area wide speed limit | Option 4 – Traffic calming (road humps) |
|--|--|-------------------------------|---|---|
| Pedestrian safety improved | ✓ ✓ ✓ | ✓ ✓ | ✓ ✓ | ✓ |
| Vehicle speed reduced | ✓ ✓ ✓ | ✓ ✓ | ✓ ✓ | ✓ |
| Enhanced urban amenity in precinct | ✓ ✓ ✓ | ✓ ✓ | ✓ | ✓ |
| Car parking retained | ✗ ✗ ✗ | ✓ ✓ | ✓ ✓ ✓ | ✓ ✓ ✓ |
| Loading zones retained | ✗ ✗ ✗ | ✓ ✓ | ✓ ✓ ✓ | ✓ ✓ ✓ |
| Enhanced conditions for cycling | ✗ ✗ | ✓ ✓ ✓ | ✓ ✓ | ✓ |
| Minimal disruption caused by works | ✗ ✗ ✗ | ✓ | ✓ ✓ | ✓ ✓ |
| Minimal <u>knock on</u> impacts to surrounding streets | ✗ ✗ ✗ | ✓ ✓ | ✓ ✓ | ✓ ✓ |
| Property acquisition not required | ✗ ✗ ✗ | ✓ | ✓ | ✓ |
| No DoT approval required | ✗ | ✗ | ✗ | ✓ |
| Cost efficient | ✗ ✗ ✗ | ✓ ✓ | ✓ ✓ ✓ | ✓ ✓ ✓ |
| | -12 | 18 | 20 | 19 |

POLICY IMPLICATIONS

There are no policy issues arising from the recommendations contained in this report.

SOCIAL IMPLICATIONS

There are no social issues arising from the recommendations contained in this report.

HUMAN RIGHTS CONSIDERATIONS

There are no apparent human rights implications under the Charter of Human Rights and Responsibilities Act 2006.

GENDER EQUITY ASSESSMENT

The grants and approval process with the DoT require applicants to address issues of gender inequity in their proposed initiative, ensuring that planning on this issue is addressed from the commencement of the project.

CONSULTATION

No external consultation has been undertaken in preparing this report.

FINANCIAL IMPLICATIONS

Option 1 would need a detailed study to understand the full cost, but would be in the order of millions of dollars if property acquisition is required. It is recommended the cost-benefit of such an investment would need to be tested carefully before committing, particularly given the alternative lower cost options which could deliver many of the benefits of this option and might be a more logical first step in terms of transforming the street.

Option 2, delivery of 20km/h shared zone trial, would cost in the order of \$80,000 to \$100,000 for a base level trial which could include design, application to DoT, road painting, planting, signage and other temporary installations. External funding would be investigated, however less likely of being received than Option 3. Should this option be progressed, funds would be sought from the 2022/23 budget.

Option 3, delivery of a 30km/h trial, would cost in the order of \$20,000 to \$25,000, with the higher end cost reflecting the replacement of signs to existing conditions if required. Included in this cost is design and DoT application process, some traffic calming measures as well as a communications program. Potential external funding sources include Transport Accident Commission safety grants. Any required officer time will be within existing operational budgets.

Option 4 funds are available in 2021/22.

CONCLUSION

While Option 1 offers superior pedestrian outcomes, the impact and cost of delivery are significant.

Options 2, 3 and 4 provide much improved pedestrian outcomes, will mitigate the core problem of vehicle speed and will have fewer impacts and cost implications.

Officers recommend options 2, 3 and 4.