

10.11.Grosvenor Lane - Pedestrian Safety and Shared Zone

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ATTACHMENTS: Nil

PURPOSE:

The purpose of this report is to address the concerns raised in the Notice of Motion 57/22 - Design of Grosvenor Lane, Neutral Bay that was adopted by Council at its 10 October 2022 meeting.

EXECUTIVE SUMMARY:

At its 10 October 2022 meeting, Council adopted the Notice of Motion 57/22 - Design of Grosvenor Lane, Neutral Bay which raised concerns about pedestrian safety in the laneway.

Grosvenor Lane is located within the busy Neutral Bay Shopping and commercial area. The section between Ben Boyd Road and Young Street currently works as a Shared Zone with a 10km/h speed limit, and vehicles must give way to pedestrians on any section of the roadway.

In 2018 Council engaged external design consultants to prepare a concept and a detailed design for community engagement and construction purposes, to change the laneway and improve the road environment for pedestrians, with the view to implement a shared zone. Previously the laneway had primarily been used as a truck delivery route to the nearby supermarket, as well as a service lane to the buildings that front Military Road. The laneway was also used as a 'rat run' from Ben Boyd Road to Young Street and then onto Military Road (now closed due to Young Street Road closure), and/or to access the residential areas of Cremorne.

In 2020 after community consultation and endorsement by Council's Traffic Committee, Grosvenor Lane between Ben Boyd Road and Young Street was converted from a 50km/h local street into a shared zone with a 10km/h speed limit.

The upgrade included new paving, planting, drainage, bollards, signage and lighting to meet Category 1 Shared Zone requirements, as well as a reduction in the speed limit and continuous pedestrian thresholds at either end of the shared zone that was recommended by the Shared Zone Technical Direction (TTD 2016/001).

Council's Traffic Engineers and Road Safety Co-ordinator have reviewed the existing conditions, and vehicle speed counts have been conducted in the laneway.

This report outlines what further measures Council can take to reduce speed in the lane and to address the concerns raised in the Notice of Motion 57/22 - Design of Grosvenor Lane, Neutral Bay.

Council is also currently running a road safety education campaign focusing on pedestrian safety in the laneway, which will run from November 2022 for a duration of six months.

FINANCIAL IMPLICATIONS:

The cost of installing the recommended Stage 1 Road Safety Education and signage treatments is around \$8,000 which will be allocated from the 2022-23 Traffic Facilities budget.

The cost of further road safety treatments and interventions such as those outlined in the Stage 2 Optional Road Safety Engineering Measures (if they are required) ranges from \$30,000 up to \$90,000 depending on the scale of infrastructure changes

The cost to do further speed and pedestrian counts is \$5,000.

RECOMMENDATION:

1. THAT Council undertakes the Stage 1 Road Safety Education and signage measures outlined in this report, which includes installing '10km/h' pavement stencils on the roadway at all entrances to the Grosvenor Lane Shared Zone and continues the current Education campaign in the laneway with banners for six (6) months, as outlined in this report.

2. THAT during the implementation of Stage 1 Road Safety Education and signage measures, further speed and pedestrian counts will be undertaken to monitor traffic speeds and pedestrian usage.

3. THAT a further report be brought back to Council in 6 months time which outlines the speed and pedestrian data that Council has collected, and to also recommends if any further interventions (such as those outlined in Stage 2 Road Safety Measures in this report) are required.

4. THAT Council notes speed data has been collected in Grosvenor Lane in August 2015, October 2020, December 2020 and October 2022. The number of trucks using Grosvenor Lane was also measured in 2022. The result of tube counts reveals that, since the implementation of the Shared Zone in 2020, there has been a significant reduction on the 85th percentile of vehicles' speed, from 36.5km/h in 2020 to 22.6km/h in 2022. This is still over the posted speed limit of 10km/h, but it should be noted that most cars travelling significantly over the speed limit are doing so late at night and early in the morning. It should also be noted that there are a significant number of trucks still using the laneway.

5. THAT Council notes a review of crash investigation data was conducted over the past 5 years 2018 to 2022 (most current data available). There was one crash in 2019 before the implementation of the "Shared Zone" with a single vehicle, non-injury crash, where a car ran into a parked car. There are no reported crashes with pedestrians or cyclists over a 10-year period in the laneway.

6. THAT Councils notes in June 2020 a Post-Construction Road Safety Audit for Grosvenor Lane was conducted by an external accredited auditor, when the entire length of the Lane

and Shared Zone was assessed. The site was observed during both daylight hours and after last light under clear weather conditions.

As part of the Post-Construction Audit various issues were outlined and then addressed by Council which included extra signage (especially on the speed limit), “give way to pedestrians” and “shared zone” signs, (which is over and above what is required in the TfNSW Technical Guidelines), reflectors, more lighting, and education of the community.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

2. Our Built Infrastructure

2.1 Infrastructure and assets meet diverse community needs

2.4 Efficient traffic mobility and parking

4. Our Social Vitality

4.1 North Sydney is connected, inclusive, healthy and safe

BACKGROUND

At its 10 October 2022 meeting, Council considered the Notice of Motion 57/22 - Design of Grosvenor Lane, Neutral Bay which raised concerns about pedestrian safety in the Laneway.

Council resolved:

1.THAT Council has concerns on the current design of Grosvenor Lane which, in both directions and at numerous points, directs pedestrians into the area and path used by vehicles.

2.THAT Council staff investigates and provide a report and recommendation to a Councillors briefing in November 2022 on the options of a redesign of Grosvenor Lane, with a view to make it safer for pedestrians.

The opportunity to convert Grosvenor Lane into a shared zone was first considered in the 2015 Neutral Bay and Cremorne Public Domain Upgrade Master Plan, reported to Council on 17 August 2015. This Master Plan was prepared by Oculus Consultants together with a working party comprising local residents, businesses, and relevant Council staff. The Master Plan identified a number of Public Domain improvement projects which would transform the then-dilapidated streetscape character of Neutral Bay into a more pedestrian-friendly and vibrant Village Centre.

The introduction of a Shared Zone was also identified in Council's Local Area Traffic Management Plan (LATM) for Zone 5. Item T.41 which noted that Grosvenor Lane between Ben Boyd Road and Young Street has 'high pedestrian activity but no footpaths'.

In 2018 Council engaged external design consultants to prepare a concept and a detailed design for community engagement and construction purposes. The design was prepared in accordance with the North Sydney Public Domain Style Manual and Codes and to meet the RMS Technical Direction for the Design and Implementation of Shared Zones including the Provision for Parking (TTD 2016/001). The concept and detailed design for the Shared Zone went to the 517th Traffic Committee meeting in June 2018, and were referred to the RMS for technical approval. The Traffic Committee meeting minutes were adopted by Council at its 25 June 2018 meeting, and RMS approval was subsequently granted 5 October 2018.

In addition, a Traffic Management Plan (TMP) outlining the traffic impacts of the proposal was conducted and approved by Council to implement the changes to the Lane and to install a Shared Zone in October 2018.

Previously, the laneway had been primarily used as a truck delivery route to the nearby Woolworths supermarket as well as a service lane to the buildings that front Military Road. The laneway was also used as a 'rat run' from Ben Boyd Road to Young Street and then onto Military Road (now closed due to Young Street Road closure), and/or to access the residential areas of Cremorne.

In consultation with Woolworths, Council reached an agreement to re-route the delivery trucks out of Grosvenor Lane in August 2019, which significantly reduced traffic congestion in the narrow laneway and also improved pedestrian safety. The restriction of the laneway to truck access was approved under delegation in September 2019, reported to the October 2019 Traffic Committee meeting, and adopted by Council at its 28 October 2022 meeting.

Council commenced detailed design for tender and construction in March 2019 and awarded a tender in August 2019 to commence the transformation of Grosvenor Lane between Ben Boyd Road and Young Street into a Shared Zone. The project was completed and opened in July 2020.

This project also complimented the Young Lane closure and upgrade which was completed by Council in 2015.



Young Lane Closure and Upgrade – completed in 2015



Young Lane Closure and Upgrade – completed in 2015

The upgrade of Grosvenor Lane included new paving, planting, drainage, bollards, signage and lighting to convert the laneway to meet Category 1 Shared Zone requirements, together with a reduction in the speed limit, and continuous pedestrian thresholds at either end of the shared zone that were recommended by the Shared Zone Technical Direction (TTD 2016/001) that was current at that time (from Transport for NSW (TfNSW) or previously known as RMS). Shared Zones are categorised as speed zones and approval must be obtained from TfNSW for implementations and must be in accordance with the Technical Direction.

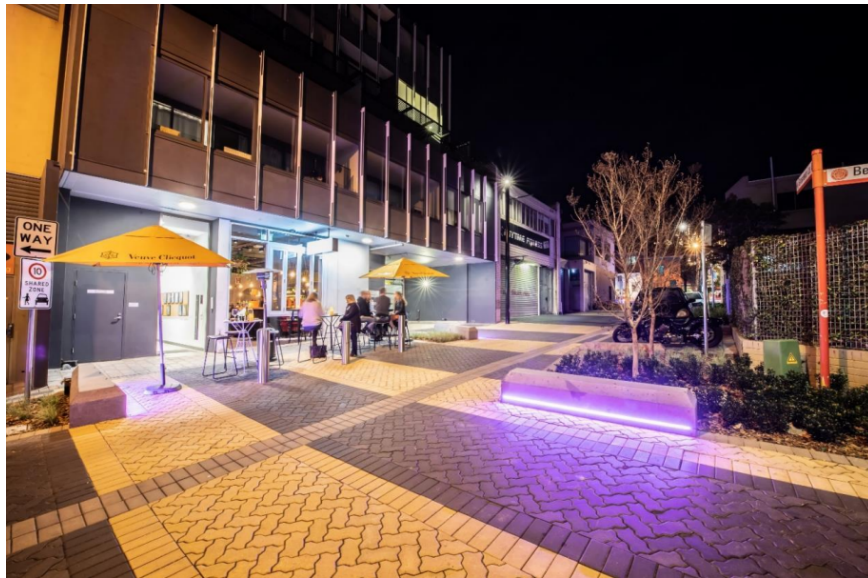
Before photos of Grosvenor Lane:





Photos after implementation of the Shared Zone in July 2020:





Road Safety Audit

Road safety audits are a TfNSW requirement for any new “Shared Zone” and provide a means of identifying and managing road safety risks in a Shared Zone scheme. The features provided in shared zones must be safe for all road users. In particular, the audit is required to identify issues pertaining to vehicle speeds, movements and pedestrian safety, and disability use.

In June 2020 a Post-Construction Road Safety Audit for Grosvenor Lane was conducted by an external accredited auditor, in which the entire length of the lane and Shared Zone was assessed. The site was observed during both daylight hours and after last light, under clear weather conditions.

The audit reviewed the level of risk associated with each finding and is based on a risk matrix approach which considers both the likelihood and consequence of an incident occurring as a result of any particular design component. Based on the risk level, strategies then need to be implemented to address safety issues.

As part of the Post-Construction Audit various issues were outlined and then addressed by Council which included extra signage especially on the speed limit, “give way to pedestrians” and “shared zone” signs, (which is over and above what is required in the TfNSW Technical Guidelines), reflectors, more lighting, and education of the community.

CONSULTATION REQUIREMENTS

Council consulted the community in 2015 as part of the Neutral Bay and Cremorne Public Domain Master Plan community engagement process, in June 2018 during the concept design formulation for a Shared Zone in Grosvenor Lane, and finally in 2020.

DETAIL

Shared Zones

Shared zones are defined under Rule 24 in the NSW Road Rules (2008). A shared zone is a road or network of roads or a road related area where space is shared safely by vehicles and pedestrians and where pedestrian priority and quality of life take precedence over ease of vehicle movement. Shared zones employ a range of regulatory and non-regulatory treatments to indicate a change in environment and priority.

Extract from the Shared Zone Technical Direction (TTD 2016/001)

The maximum speed limit is 10 km/h (close to the walking speed for most pedestrians), and drivers must give way to pedestrians at all times. Vehicles can only stop in a shared zone if they obey the parking signs and park in marked bays. Drivers travelling at lower speed are better able to control their vehicles and safely avoid impact with other road users. The introduction of a Shared Zone also improves accessibility for people who are visually impaired.

A shared zone should not look like a normal road environment and requires a self-enforcing road environment. Kerbs should generally not be provided in a shared zone, to ensure a discernible change in the environment from the surrounding roads, and to facilitate the ease of movement and indicate the priority for pedestrians, especially less mobile pedestrians.

Shared zones are a pedestrian-priority environment therefore pedestrian crossings and pedestrian fencing should not be required within the zone. Drivers must give way to pedestrians at all times in shared zones (NSW Road Rule 83). This is the reason a “Give Way to Pedestrians” (R2-10) sign must be installed below each “Shared Zone” (R4-4) sign at the entrance to the zone.

Carefully located landscape features and street furniture encourage lower speeds and enhance the experience for pedestrians. Examples of such features are bollards, architectural decorations, kerb build-outs, plantings, and lighting.

The current and existing features of Grosvenor Lane meet all of the TfNSW Technical Directions and Guidelines for a Category 1 Shared Zone. Council has exceeded these guidelines with extra signage and other measures that were implemented as a consequence of the post-construction road safety audit.

In the TfNSW publication reviewing shared spaces, it states that removing separation between travel modes (especially for people who walk/cycle and the separation between vehicles) encourages active transport use and demands people who operate vehicles to reduce speeds and negotiate intersections with greater care.

Applications of shared space designs (including shared zones) that can be constrained to 30km/hr (or less) creating lower speed environments for road users to interact, thus reduces the impacts of potential crashes. Furthermore, shared space safety design features such as the use of strategically placed vegetation or street furniture to create safe zones for vulnerable road users can calm vehicular traffic whilst also defining a place for people. This type of "people centric" road infrastructure also brings to attention the shared responsibility of road safety, as drivers, pedestrians, cyclists and other transport users are made more aware of all the other modes that are present on the road. (Archer, 2014).

Vehicle Speeds and Crash Report

In August 2015, October 2020, December 2020 and October 2022, speed counts were conducted and vehicle speeds were measured in Grosvenor Lane. The number of trucks using Grosvenor Lane was measured in 2022. There will also be speed counts in place during November 2022 to review if the road safety banners and road safety markings make an impact on driver behaviour and slow vehicles in the lane.

The results of the previous counts are shown in Table 1 below:

Table 1. Speed Counts – Grosvenor Lane

Timeline	Count Number	85%ile (km/hr)	Annual Average Daily Traffic (AADT)	Truck Movement
31/08/2015 (pre shared zone)	843	36.5	1602	-
23/10/2020 (post shared zone)	1115	25.4	1262	-
21/12/2020 (post shared zone)	1134	25.6	1111	-
19/10/2022 (post shared zone) Location 1	1190	25.8	1660	79
19/10/2022 (post shared zone) Location 2	1191	22.6	1472	98

Table 1: Speed counts conducted in Grosvenor Lane in 2015, 2020, 2022

The result of tube counts reveals that, since the implementation of the Shared Zone in 2020, there has been a significant reduction on the 85th percentile of vehicles' speed, from 36.5km/h in 2020 to 22.6km/h in 2022. This is over the posted speed limit of 10km/h, but most cars travelling significantly over the speed limit are doing so late at night and early in the morning. It should also be noted that there are still a significant number of trucks still using the laneway.

Pedestrians' perception that vehicles are speeding happens when pedestrians are closer to vehicles, when they feel more vulnerable.

As part of the review a crash investigation was conducted over the past 5 years 2018 to 2022 (most current data available), there was one crash in 2019 with a single vehicle, non-injury crash, when a car ran into a parked car. There are no reported crashes with pedestrians or cyclists over a 10-year period in the laneway.

Stage 1 Road Safety Education and Signage Measures

Using the model of a 'Safe Systems' approach to road safety by addressing safer people, safer speeds, safer vehicles and safer roads, means that to improve safety on local streets, a varied approach to road safety is needed, addressing all of these factors. Studies of Shared Zones and Shared Spaces have shown that it's not just one of these factors makes a roadway a safer environment, it's the use of multiple factors that can help.

To provide a safer road environment in Grosvenor Lane, the 'safer people' approach needs to be adopted. Ways to address this include educating the community about the correct behaviour and road rules in a shared zone, driver reminders about the road rules, and pedestrian reminders that they are in charge of their own safety, even if they have right of way. Any type of behavioural change or education needs to be over a long period and should be repetitive.

The Local Government Road Safety Program and the 2022-2023 North Sydney Road Safety Action Plan includes a project that aims to address pedestrian safety, especially in social and shopping hubs such as Neutral Bay. A grant from TfNSW was gained to address pedestrian safety via education, which involved the installation of banners, 'LOOK' pavement stencils in high pedestrian areas or places where pedestrians feel vulnerable, and social media posts.

The education campaign aims to remind drivers of the rules in a shared zone e.g. give way to pedestrians, reduce speed to 10km/hr, and to remind pedestrians to look for vehicles, and take accountability for their actions.



Design of pedestrian safety banner (L), and photo of current road safety banner in Grosvenor Lane (R)



*Current road safety banners along the length of Grosvenor Lane
- installed November 2022*

Starting in November, Council will be installing road banners in Grosvenor Lane to educate and/or remind drivers of the shared zone road rules. The banners will be placed in the lane for six-week intervals over a period of 6 months. This is considered to be an effective way to get drivers to pay attention to the banners and their content.

Speed and pedestrian counts and observations will also be conducted in Grosvenor Lane during the 6-month period, to measure the impact of the safety campaign and determine if a further reduction in vehicle speeds or behaviour is achieved. The pedestrian counts and observations will also consider previous pedestrian activity in the laneway, and will be treated like an Urban Movement study.

It is also recommended, to increase the amenity and safety of pedestrians and remind drivers of the speed limit, to install '10km/h' pavement stencils at all vehicle entrances to the Shared Zone. This isn't a requirement as part of a Category 1 Shared Zone but can be installed as an extra safety measure. This can help to increase driver knowledge but can have an opposite effect on pedestrians as they can become complacent that they have 'right of way' and assume that cars will only be doing 10km/h. For shared zones to work effectively, all road users must take responsibility for their actions and not make assumptions, hence the need for pedestrians education as well.

Concerns in regard to pedestrian safety at the intersection of Grosvenor Lane and Young Street were received from the community due to vehicles not stopping at the stop sign, and pedestrians feeling unsafe walking across the footpath. A white stop line was installed, which has improved the situation, with vehicles now stopping, thereby being more able to see give way to pedestrians. 'LOOK' stencils will be installed on the footpath at this intersection, to remind pedestrians to look for vehicles exiting the shared zone.

As part of the education campaign, social media posts on shared zones, road rules and pedestrian safety tips, will be posted on Council's Facebook page, information will be uploaded to Council's website, and will be published in Council community productions.

NSW Police will be notified through North Sydney Council's Traffic Committee, to assist with speeding and illegal driver movements.

A review will be completed of the speed counts before, during and after the banners and other pavement signage installations, as part of Education Stage 1 Road Safety Education measures. This will be reported to Council in 6 months' time.

Stage 2 - Optional Road Safety Engineering Measures

If the speed count data collected by Council during the 6-month period does not show a further reduction in speeding on the 85th percentile of vehicle speed (down from 22.6km/h), then a further review and investigation could be considered.

It should be noted that the current engineering design measures and narrowing of the lane meet and exceeded the TfNSW Design and Implementation of Shared Zones including the provision for parking (TTD 2016/001). With the proposed road safety measures, signage is also over and above what is needed in a Category 1 Shared Zone.

Speed Cushions

Installation of speed cushions/humps could be considered to slow vehicles in Grosvenor Lane. They need to be installed in such way that do not impose trip hazard to pedestrians, cyclists and other users. Access also needs to be provided on each side of the cushions/humps for cyclists, prams and wheelchair and can't be a hindrance for visually impaired pedestrians.

Raised threshold

A raised threshold could be installed at the intersection of Ben Boyd Road and Grosvenor Lane to indicate the change in driving environment.

Traffic Signs

All regulatory traffic signs have been installed in accordance with NSW Road Rules and the Technical Direction for Shared Zone. There is sufficient signage at the entrance and exit point of Grosvenor Lane, as well as appropriate repeater signage to indicate the road conditions to the road users. Further signage is not considered necessary for Grosvenor Lane.

Segregation of Pedestrians/Review of parking

A review of parking in the lane, with a view to creating a dedicated pedestrian path (separated by a fence or other physical structure down one side of the lane) could be considered in Grosvenor Lane between Young Lane and Young Street. Removal of the parking and creation of a dedicated pedestrian path could increase pedestrian safety.

However, the purpose of a shared zone is to share the street space between pedestrians, cyclists, and motorists. Furthermore, if parking was to be removed in this section, it would cause a net loss of 6 parking spaces. Parking is at a premium in the North Sydney Local Government Area (LGA), therefore it is not ideal to remove parking.

Given that Grosvenor Lane is one-way, motorists should be able to see and observe pedestrians and travel according to the environment. 'Give Way to Pedestrians' marking could be implemented at this section to further warn the motorists of pedestrian presence.

A further road safety audit could also be considered after implementation of Stage 1, before any engineering changes are considered, to ensure that TfNSW Technical Directions for Shared Zones are being complied with.

Summary

The current and existing features of Grosvenor Lane comply with the TfNSW Technical Directions and Guidelines for a Category 1 Shared Zone. Council has exceeded these guidelines with implementation of extra signage and other measures recommended in the post-construction road safety audit. With the implementation of 10km/h pavement stencils and Stage 1 Road Safety Measures, Council is following the Safe Systems approach to address all factors and working towards implementing the safest, self-enforcing road environment.

Council will monitor Stage 1 Road Safety measures to determine success in speed reduction.

If reduction in vehicles' speed is not achieved, a second road safety audit will be conducted by an external consultant for possible additional measures.