



Albert St & Victoria St, Brunswick East

Shared zones trial

Transport survey counts review

Moving safely in Moreland

The Council Plan 2021-2025 includes Theme 2: *Moving and living safely in Moreland*. The stated objective of this theme is “to contribute to health, safety, and security of everyone living in our diverse community and to increase safe, accessible, physically active and enjoyable ways to get around Moreland, especially via walking, cycling and public transport”.

Unlike most of Council’s infrastructure projects, the trials were designed as ‘learning through trial’ projects with community engagement based around the implemented trial rather than design concepts not yet installed.

Installing these trials using materials that could be modified or removed, meaning that changes to final designs could be made based on both feedback from the community and technical findings.

Background to Brunswick East shared zones trial

During the COVID-19 pandemic, there was an increase in the number of people using Moreland walking and cycling paths. To accommodate this, Council decided to invest an additional \$1.68 million walking and cycling improvements such as bike lanes and shared zones.

In total, 4 bike lane projects and 2 shared zone projects were endorsed by Council to be installed as trials in June 2021. All projects except the Albion Street bike lanes had been identified in Council’s adopted future capital works program, but were fast-tracked as part of our COVID-19 response. The Albion Street bike lanes were included in these trials as they formed part of the detour route needed due to the Level Crossing Removal (LXRP) works.



Figure 1: Elesbury Ave approach to Victoria St shared zone



Figure 2: Location of Trial shared zones

Trial shared zones in Brunswick East

In 2021 we installed two shared zones in Brunswick East as shown in Figure 2. These two shared zones are designed to encourage walking along Victoria Street and Albert Street, improve walking and riding access to Fleming Park, reduce rat-running and improve the East Brunswick Shimmy.

The shared zones in Albert Street and Victoria Street were both previously in Council's adopted action plan for the Brunswick Integrated Transport Strategy, and were fast-tracked as part of our COVID-19 response.

These two shared zones are designed to encourage walking and riding bicycles, create better access to Fleming Park and improve safety for all commuters in the area.

The shared zones are marked with colourful, line marked patterns on the road, tree planters, and wooden cable reels to emphasise that it is not a regular stretch of road. To accommodate this and

create safer entry points to the zones for pedestrians and people who are riding bikes, some parking was removed. Speed cushions are installed at the entry to these shared zones to slow traffic down to the desired speed of 20 km/h.

The design, and these additional safety provisions, aim to encourage walking and riding as a means of everyday transport. Additionally, the extra space for pedestrians along Victoria Street and Albert Street – both of which are principal pedestrian network routes for east west travel - facilitates social distancing, aiming to support local businesses, and improve physical and mental health, and safety for all commuters.

Benefits of shared zones

A shared zone is an area that all road users can use, but where vehicles and bike riders must give way to pedestrians. They have been located alongside Fleming Park with high numbers of pedestrians and bicycles crossing. The shared zones provide extra space for pedestrians, slow traffic at natural meeting points and allow

pedestrians to cross in locations and on angles they choose.

Shared zones reduce traffic on residential streets and assist in making the area safer for pedestrians and people who ride bikes, while still allowing vehicle access. They are a useful and effective means of making walking and riding bikes safer and less intimidating.

The Road Safety Road Rules (rule 83), state “A driver driving in a shared zone must give way to a pedestrian in that zone. For this rule, give way means a driver must slow down and, if necessary, stop to avoid a collision”.

The new speed limit for vehicles - including cyclists - within this shared zone is 20 km/h, to accommodate the potential need to give way at any time.

Trial objectives

The broad objective of the trial, given the strategic roles of these sections of Albert and Victoria Streets for pedestrians was to determine the pros and cons of shared zones as an approach to providing pedestrian priority.

This would be determined from a combination of community engagement and transport surveys, focusing on the experiences of people riding bikes, pedestrians, residents, other adjacent land users, local traffic and parking.

Community Engagement

Throughout the 12-month trial we engaged with the community at various points to understand community sentiment, identify potential improvements, and allow the community to make suggestions for improvements.

Reference is made to the separate community engagement report “Making Walking and Cycling in Moreland Safer” (D22/306962) which can be found on the Conversations Moreland webpage for these trials.

<https://conversations.moreland.vic.gov.au>.

Data Collection

Council monitored this trial with a survey of bikes, pedestrians and vehicles using these shared zones and surrounding streets. This was done with tube counters and cameras.

The remainder of this report is focused on the data collected before and during the trial and the conclusions that can be made.

Bike, pedestrian, and vehicle survey counts

Vehicle survey counts allow us to effectively track vehicle, pedestrian, and bike activity in an area. Council engaged an independent research company to undertake these surveys using two methods:

- Tube counters placed across the street identify the number, type, and speed of vehicles, and
- A camera identifies the number, direction and approximate age and gender of bike riders and pedestrians.

Council is provided the raw data from these counts and can compare information gathered during the trial periods and compare this to information before the trial infrastructure was installed.

Survey locations and data

Council undertook surveys of bikes, pedestrians, and vehicles across at the locations shown in Figure 3. Parking surveys were also undertaken in the shared zones and surrounding area during the same periods as shown in the plan below. Vehicle surveys were taken over a period of 7 days, commencing from first day of each survey period.



Figure 3: Transport survey locations for Trial shared zones, Albert St & Victoria St, Brunswick East

Potential considerations with the data and survey methodology

1. Weather observations

Short term changes in weather conditions can impact the number of people likely to participate in outdoor activities such as riding and walking. Historical weather observations are provided below for each of the survey periods:

Table 1: Weather observations from Essendon Airport, Bureau of Meteorology station number 86038

Survey period		Minimum temperature (C)	Maximum temperature (C)	Rainfall (mm)
December 2020 before trial, out of lockdown	Thursday, 3 Dec	9.4	25	0
	Friday, 4 Dec	10.2	24.4	0
	Saturday, 5 Dec	12.4	28.4	0
	Sunday, 6 Dec	12	21.6	0
September 2021 during trial, in lockdown	Thursday, 9 Sept	11.2	24.6	0
	Friday, 10 Sept	9.6	18.8	0
	Saturday, 11 Sept	12.1	22.9	0
	Sunday, 12 Sept	8.3	15.7	0
December 2021 during trial, out of lockdown	Thursday, 2 Dec	16.4	33	22.6
	Friday, 3 Dec	10.3	20.2	3.6
	Saturday, 4 Dec	9.8	19.4	0
	Sunday, 5 Dec	9.4	20.8	0
March 2022 during trial, out of lockdown	Thursday, 24 March	11.6	20.8	0
	Friday, 25 March	12.2	21.1	0
	Saturday 26 March	9.7	24.3	0
	Sunday, 27 March	11.2	29.1	0
June 2022 during trial, out of lockdown	Thursday, 16 June	9.3	14.2	0.2
	Friday, 17 June	9.9	13.9	9.6
	Saturday, 18 June	6	16.7	0
	Sunday, 19 June	2.5	15.5	0

2. Impact of Victorian Government Department of health restrictions (Melbourne lockdowns)

The first survey recorded in December 2020 was outside of Melbourne's lockdown with travel patterns and daily life gradually returning to normal including a return to work in the office. September 2021 was during Melbourne's 6th lockdown where there were only 5 reasons to leave home. The third and fourth surveys in December 2021 and March 2022 were outside of Melbourne's lockdown with travel patterns and daily life returning to normal including school in person and people beginning to return to work in the office.

Typically, lockdowns have seen fewer commuting trips for work or other purposes such as socialising and organised sport but have led to a greater number of recreational walking and riding trips in local areas. It is likely travel patterns and reasons for travel would change in and out of lockdowns.

3. Time of year

Time of year may also impact survey outcomes. Under normal circumstances, transport survey counts are not conducted during school holidays as traffic patterns are too irregular and would likely miss key user groups including and work-related commuting trips.

The Fleming Park sporting clubs likely generate times of peak-usage with visitors to the area at different times of the week and year due to the seasonality of sport.

Key findings – people walking

1. Pedestrian numbers have increased through both shared zones compared with background levels, with even representation from males and females

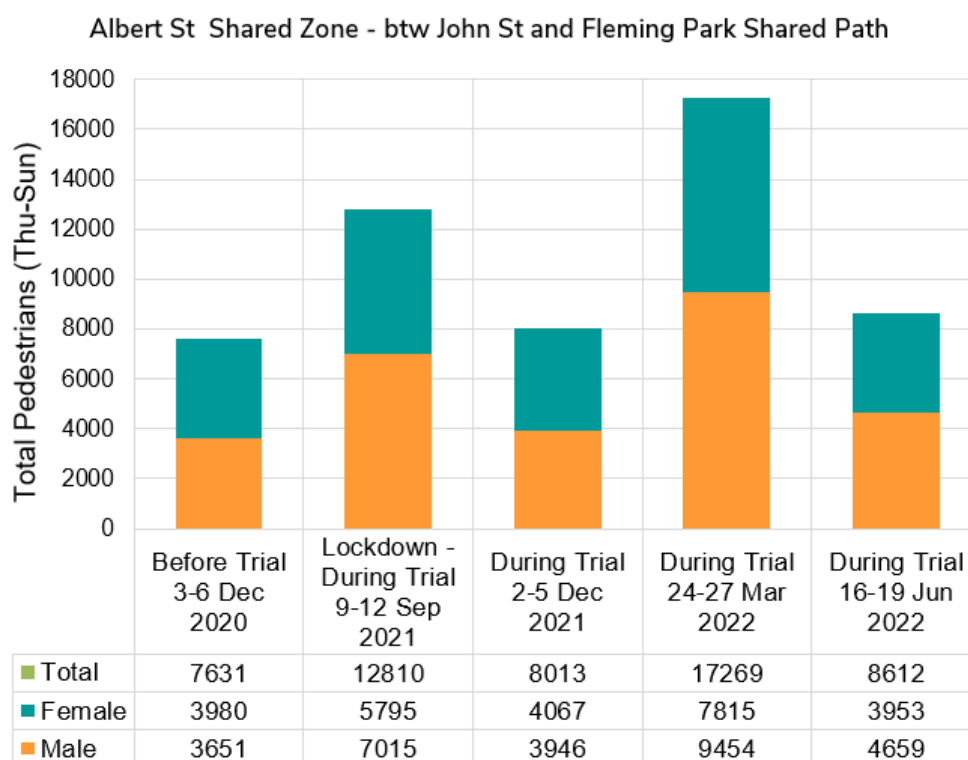
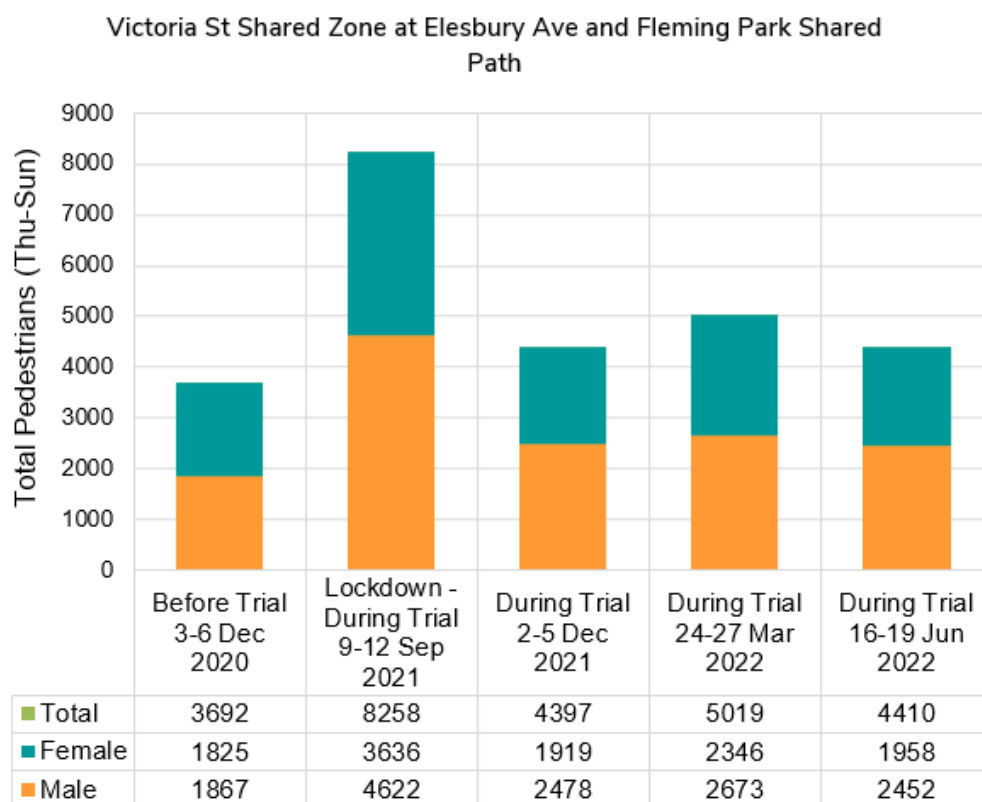


Figure 4: Breakdown of observed number of people out walking at both shared zones between December 2020, September 2021, December 2021, March 2022 and June 2022 survey periods, Thursday to Sunday.

A spike in pedestrian usage during Melbourne's 6th lockdown in September 2021 was observed in both shared zones as shown in Figure 4, with pedestrian numbers more than doubling in

Victoria Street. Pedestrian numbers in December 2021 are also higher than the pre-trial conditions. These numbers are likely to be lower than what they would otherwise have been given the inclement weather (hot and wet) on the first day of the Dec 2021 survey period (2 December 2021).

The increase in pedestrian numbers continued during the remainder of the trial in both shared zones. It is worth noting the significant peak in pedestrian numbers during the March 2022 survey in the Albert Street shared zone compared to Victoria Street. There was no event or sporting match at Fleming Park to suggest why this peak was so high on Albert Street. Rather, the John St/Albert St entrance to Fleming Park is closest to the playground, BBQ area and facilities that all have the potential to lead to multiple readings of the same pedestrians going back to Albert St and the parking and businesses there and may explain why pedestrian volumes were so high on this entrance to the park. Despite the colder temperatures in June 2022, there was still increases in people walking through the Victoria Street and Albert Street shared zones of 19.5% and 12.9% respectively compared to pre-trial conditions.

Figure 5 and Figure 6 show the comparison of pedestrian volumes during each survey period of numbers within the shared zone and at a nearby location. As shown in Figure 5, a comparison is made with pedestrian volumes counted on Victoria Street within the shared zone, at 93 Victoria Street just west of the shared zone. Counts were also conducted on Blyth Street just north of the shared zone as a comparator of an alternative walking route in the local area. Pre-trial counts show that the area of Victoria Street that became part of the shared zone had significantly more pedestrians than the other two sites counted.

The spike during Melbourne's 6th lockdown (September 2021) is significantly more pronounced in the shared zone than at the other two sites. For the remaining survey counts out of lockdown (Dec 2021, March 2022 and June 2022), the average pedestrian volumes were 25% higher than pre-trial conditions in the shared zone, and only 9.3% higher outside the shared zone at 93 Victoria Street at 1.5% higher at the nearby alternate route at Blyth Street.

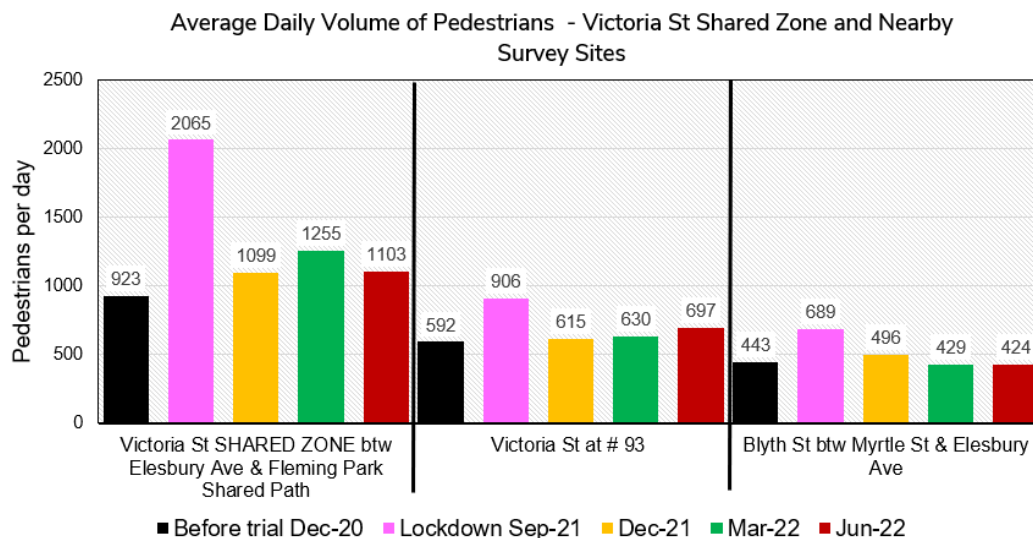


Figure 5: Victoria Street shared zones – pedestrian counts within the shared zone and nearby

Figure 6 shows a similar comparison of pedestrian usage in the Albert Street shared zone (east end and west end) compared to the next block of Albert Street to the west, and the alternative east west route of Glenlyon Road.

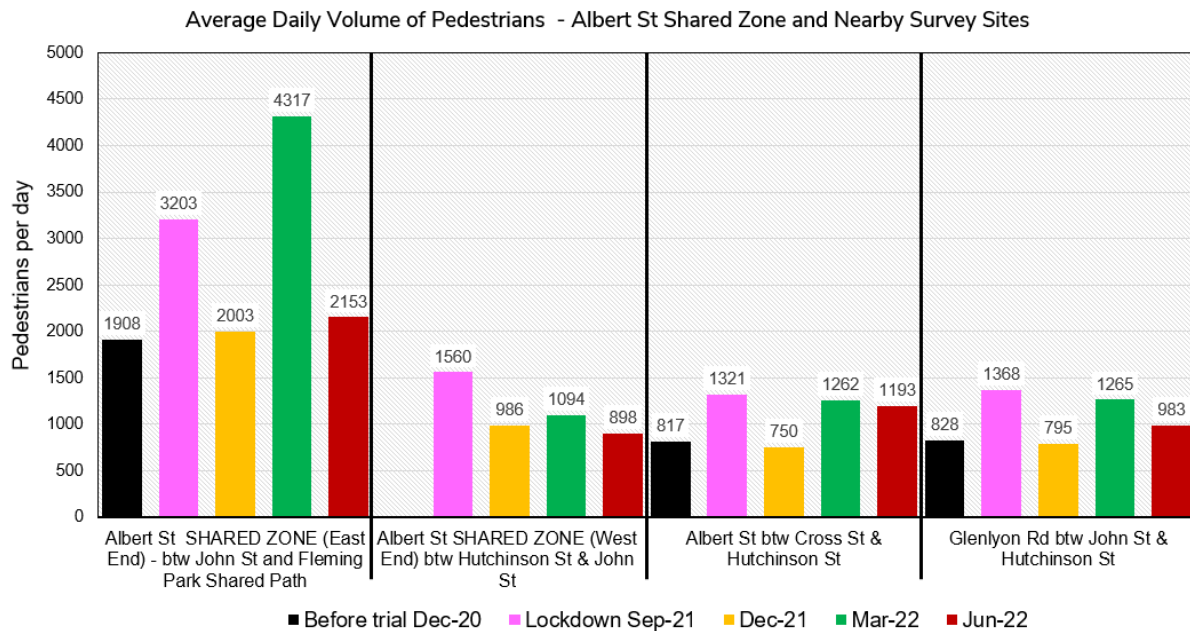


Figure 6: Albert Street shared zones – pedestrian counts within the shared zone and nearby

Albert Street at the western end of the shared zone had much lower pedestrian use than the east end at John Street likely due to the entrance to Fleming Park being opposite John Street. Whilst only pre-trial counts were undertaken at the eastern end of the shared zones, it is apparent that the trend of pedestrian volumes is similar across all four sites, namely: a peak during the September 2021 lockdown, Dec 2021 volumes being close to pre-trial numbers, and an increase in pedestrian volumes in March and June 2022 compared to pre-trial volumes. It is noted though that the increase in volumes in March 2022 in the shared zones is both significant in itself, and by comparison to the other sites surveyed.

The significant uptake in people walking in the shared zones between December 2020 and September 2021 and the 10 – 20 percent increase June 2022 despite the cooler temperatures indicates the program's success during COVID in encouraging more trips to be made by walking. The survey data collected indicates a greater number of people choosing to walk through the shared zones, a place where pedestrians have priority, than before the trial and compared to nearby locations.

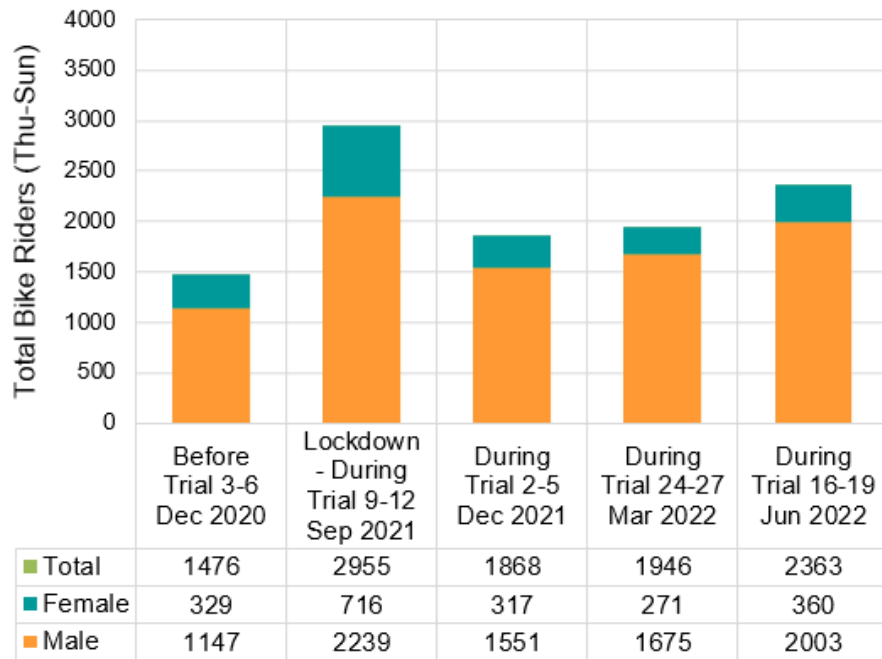
Key findings – bike riders

1. Cyclist numbers increasing through shared zones indicates bike riders are not discouraged by shared zones giving priority to pedestrians

Figure 7 shows the changes in bike ridership during the trials compared to pre-trial conditions in both shared zones. During all trial period surveys ridership figures were higher than pre-trial conditions.

The data shows that giving pedestrians right of way has not discouraged use by cyclists, who are likely also benefiting from reduced vehicular speeds.

Victoria St Shared Zone at Elesbury Ave and Fleming Park Shared Path



Albert St Shared Zone - btw John St and Fleming Park Shared Path

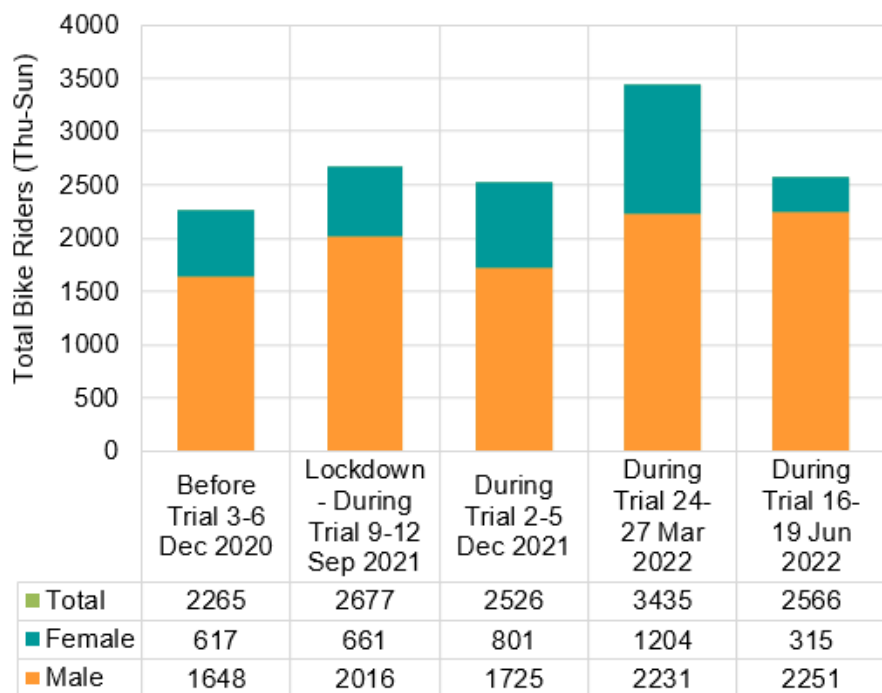


Figure 7: Changes in bike rider counts at the Victoria and Albert Street shared zones between December 2020, September 2021, December 2021, March 2022 and June 2022 for the survey periods Thursday to Sunday.

*Note: Gender split is estimated from video footage.

Key findings – motorised vehicles

2. Average daily vehicle numbers are generally reduced at both shared zones by June 2022 compared to before the trial (December 2020) without detrimental flow-on impacts to the surrounding local street network.

Vehicle volumes within the shared zones have been less than before the trial, with the slight exception of a minor increase counted in the Albert Street shared zone during March 2022. This March 2022 peak coincides with the peak in pedestrian volumes described previously.

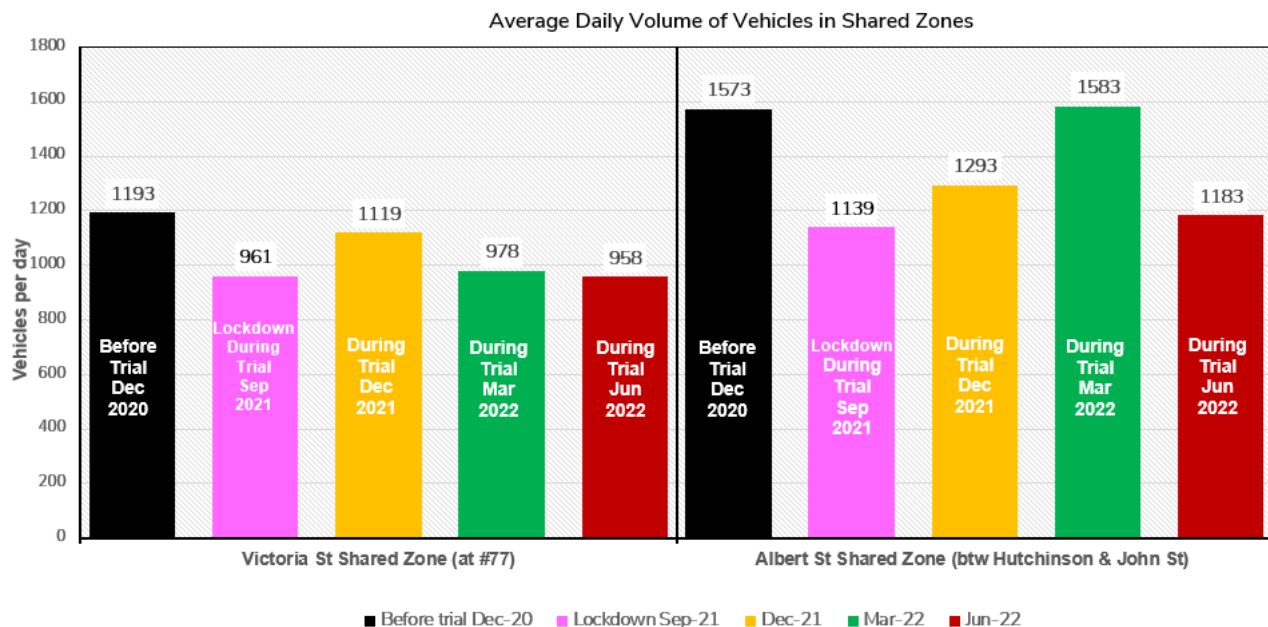


Figure 8: Average Daily Volume of Vehicles - Before trial (Dec 2020) and during trial (Sept 2021, December 2021, March 2022 and June 2022) – 7 days Thursday to Wednesday

When making changes to a local link, it is important to measure and consider the potential impacts across the surrounding network.

Figure 9 and Figure 10 show the average daily traffic volumes in the shared zones and surrounding streets. As shown in Figure 9, traffic volumes in the Victoria Street shared and all surrounding streets generally reduced or remain consistent during the trial period. The same is true for Albert Street as shown in Figure 10.

The data indicates that the introduction of the shared zones has not led to any significant increases to traffic volumes in the surrounding local roads throughout the trial period (which was a potential side effect of discouraging cut through traffic by installing the shared zones).

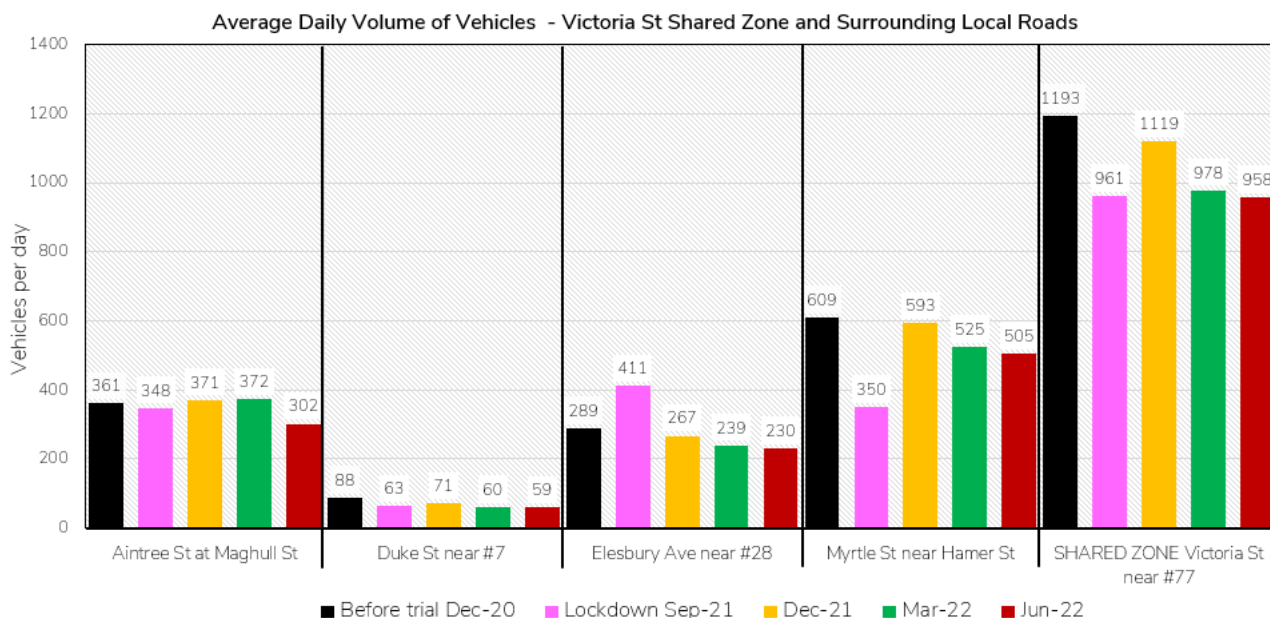


Figure 9: Average Daily Volume of Vehicles on Victoria Street and surrounding streets - Before trial (Dec 2020) and during trial (Sept 2021, December 2021, March 2022 and June 2022) – 7 days Thursday to Sunday

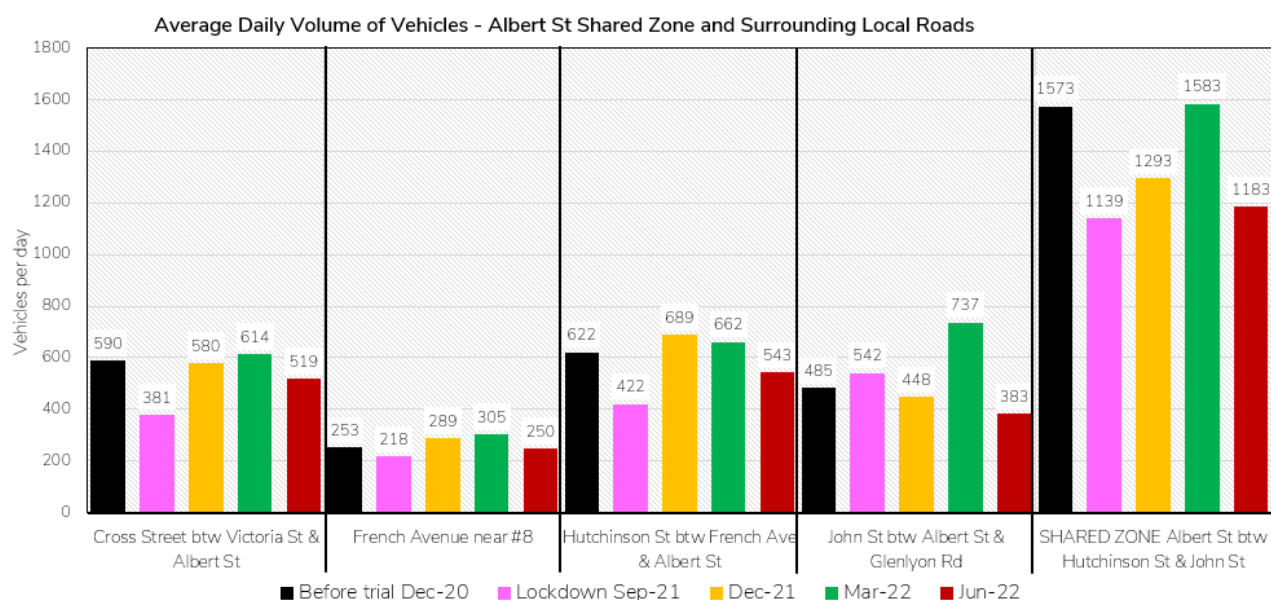


Figure 10: Average Daily Volume of Vehicles on Albert Street and surrounding streets – Before trial (Dec 2020) and during trial (Sept 2021, December 2021, March 2022 and June 2022) – 7 days Thursday to Sunday

3. **Vehicle speeds are on average 10km/h lower in the shared zone than immediately outside of it. Speeds in the shared zone are approximately 30km/h rather than the sign posted 20km/h.**

The local streets in and around the shared zones are mostly at 40 km/h. During the trial, the speed limits in the shared zones were lowered to 20 km/h.

Counts were collected to measure what is referred to as the '85th percentile speed'. This is a speed that refers to the maximum speed that 85% of all travellers are doing. In other words, 85% of all drivers are travelling at this speed or lower.

Figure 11 shows the 85th percentile speed counts done in and just outside the two shared zones.

The results for Victoria Street show that outside of the shared zone trial area, vehicle speeds were at 40 km/h before the trial and have reduced or remained similar during the trial. In the Victoria Street shared zone however, vehicles speeds have reduced considerably by an average of 10 km/h. It is noted that the speeds are closer to 30 km/h rather than the posted 20 km/h though in the shared

zone.

The results for Albert Street are similar in that outside the shared zone trial area, vehicle speeds were at 40 km/h before the trial and have reduced only slightly during the trial. In the shared zone however, vehicle speeds have reduced considerably by an average of 12 km/h. It is noted that the speeds are closer to 28-29 km/h rather than the posted 20 km/h though in the Albert Street shared zone.

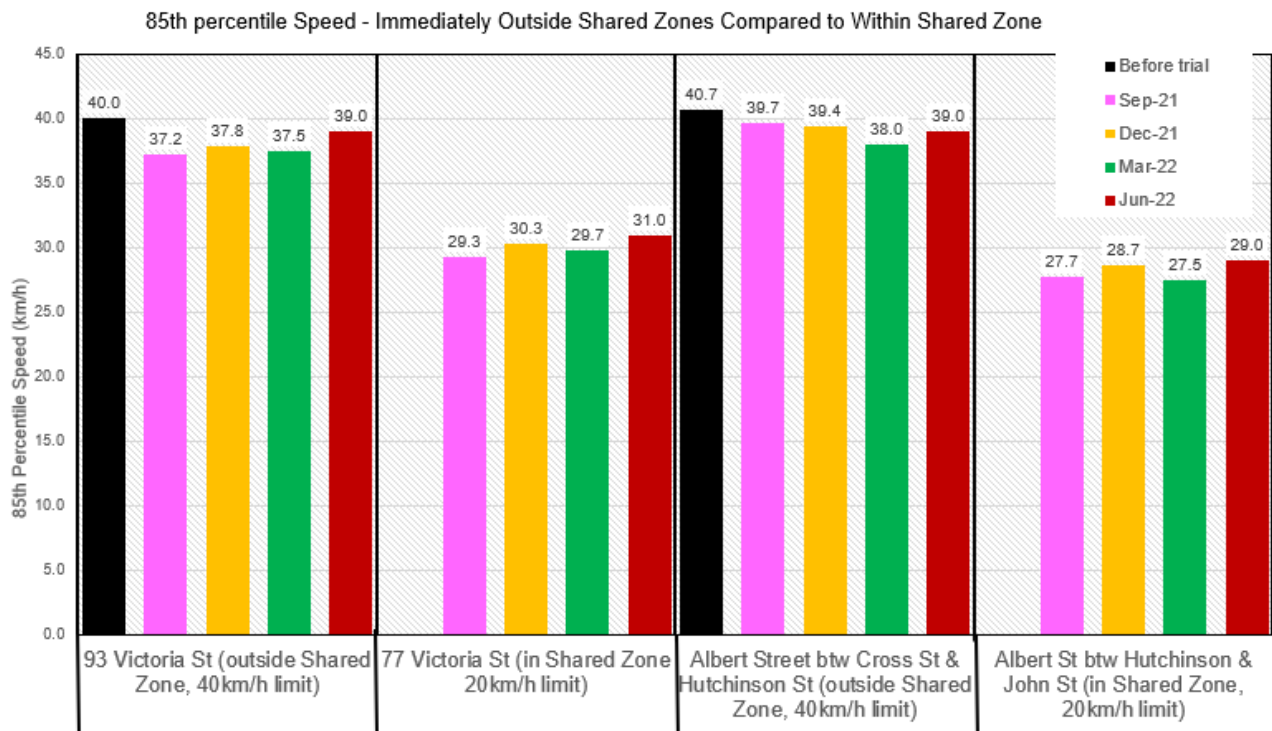


Figure 11: 85th percentile speed of Vehicles in and just outside of the shared zones and - Before trial (Dec 2020) and during trial (Sept 2021, December 2021, March 2022 and June 2022) – 7 days Thursday to Sunday

4. Parking occupancy has increased within the surrounding streets however it is still within acceptable ranges.

The Albert Street shared zone resulted in a loss of six bays on Albert Street (Elm Grove to Hutchinson Street) - 33 spaces to 27 spaces. In Victoria St, a reduction of three spaces was introduced (74 to 71 spaces) between Myrtle Street to Aintree Street. These reductions are present from the September 2021 survey onwards, and the background survey for comparison is the December 2020 survey.

Table 2: Breakdown of daily average and daily maximum percentage of car parking occupancy across parking survey area (refer Figure 2) between December 2020, September 2021, December 2021, March 2022 and June 2022 for the survey periods Thursday to Sunday

	Thursday Parking % occupancy		Friday Parking % occupancy		Saturday Parking % occupancy		Sunday Parking % occupancy	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max
December '20	60	72	64	73	61	70	62	71
September '21	66	70	65	69	66	69	67	69
December '21	66	72	67	73	66	71	67	73
March '22	71	74	71	75	70	74	71	74
June '22	75	79	75	81	77	82	75	80

In the area of the parking survey, an additional 11 parking spaces in Elm Grove were removed which was unrelated to the shared zone operations. This reduced the overall area capacity from 669 spaces

(as per Sep21 and Dec 21) to 658 spaces (Mar 22 and Jun 22).

As shown in Table 2, the shared zones and surrounding streets had a parking occupancy of approximately 72% before the trials were implemented, meaning that almost 30% of all parking spaces were vacant. During the trials, this remained steady and increased to 82 percent at its peak on Saturdays in June 2022. 82 percent is within the acceptable parking occupancy range and is considered to be a highly efficient use of parking. This data shows that parking is acceptable within the precinct since the introduction of the shared zones.

Summary of findings

Since the implementation of the shared zone trials, pedestrian numbers have increased and bike riding numbers have steadied or increased in both shared zones. This indicates that pedestrians are feeling safe in this zone and that indicates bike riders are not discouraged by shared zones giving priority to pedestrians.

There has been no significant change in the number of vehicles travelling through the shared zones, and vehicle speeds are 10 km/h lower in the shared zone than immediately outside of it.

Parking availability is within acceptable limits for the immediate areas surrounding the shared zones.