



Government of **Western Australia**
Department of **Transport**

Safe Active Streets Program:

VINCENT



Interim Evaluation Report – 2023



INDEX

What is the Safe Active Streets Pilot Program?	3
Why we collect data	4
City of Vincent, Safe Active Street.....	5
Safe Active Street Map.....	6
Evaluation process.....	7
Video surveys.....	7
Pneumatic tube counts	8
Key insights	9
Walking and bike riding activity	9
Vehicle volumes and speeds	11
Summary	13
Further information.....	13
Appendix.....	14
Average weekday and weekend walking activity	14
Average weekday and weekend bike riding activity	15
Daily average vehicle volumes	16
Daily average vehicle speeds.....	16



WHAT IS THE SAFE ACTIVE STREETS PILOT PROGRAM?

The Department of Transport’s (DoT) Safe Active Streets Pilot Program commenced in 2015, and since that time has seen the construction of 12 safe active streets across Perth and regional WA, with eight completed within the program period that will form part of the evaluation of the pilot program.

Developed in partnership with local government, safe active streets are active travel routes on quiet local streets, where speeds have been reduced to 30 km/hr to allow for a safer shared street space.

Other treatments such as narrowing road widths, slow points and intersection changes on the streets can help to create low speed residential precincts. With lower vehicle speeds, the streets aim to improve amenity for the community and are much safer for all users, such as people walking, bike riders of all ages and abilities and people driving.

Safe active street routes are also chosen as they form part of wider bicycle networks, connecting to off-road shared paths and linking community amenities such as schools, railway stations or shops.



WHY WE COLLECT DATA

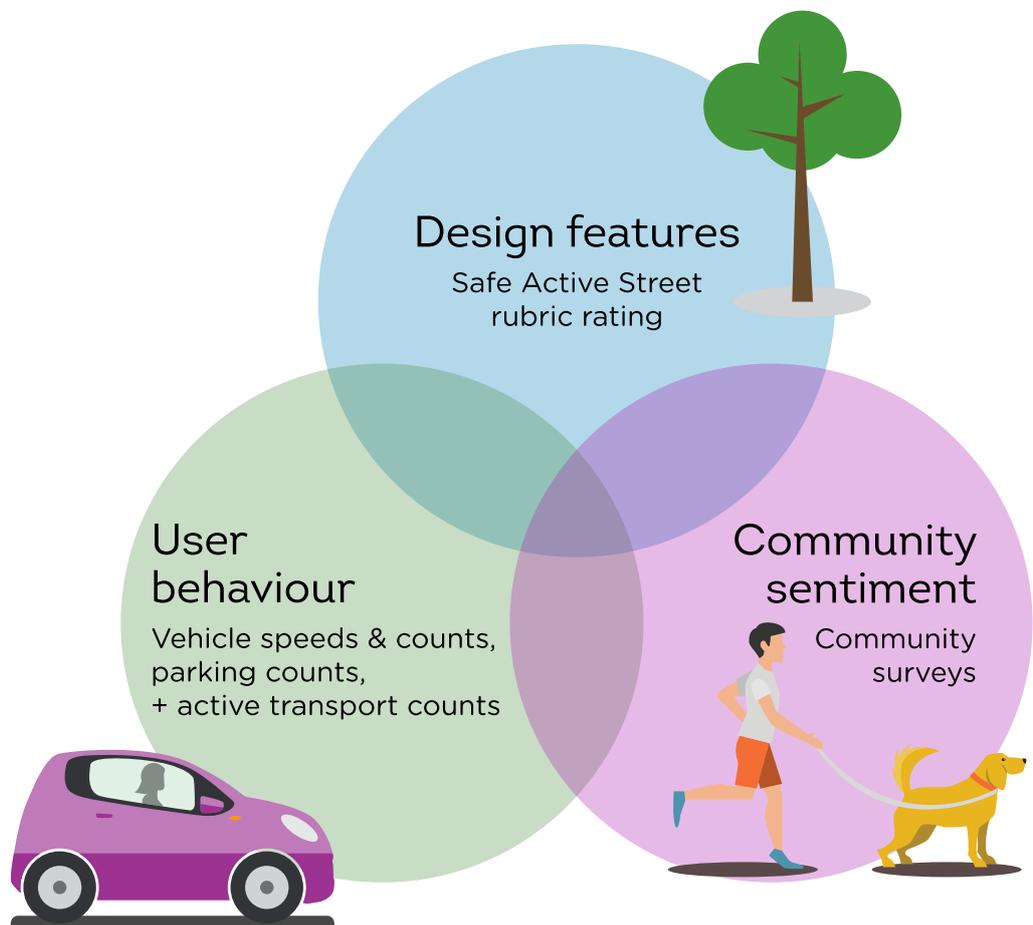
Collecting transport data helps us to better understand transport choices and behaviours. This insight assists us to guide infrastructure investment in local communities to support the growth of active transport.

Evaluation of the Safe Active Streets Pilot Program is being undertaken, including each of the eight projects involved.

Due to the complexity and differing treatments applied to each of the projects, the evaluation has been designed to collect and analyse data on three key components:

1. Design features
2. User behaviour
3. Community sentiment

The data presented in this interim evaluation report for the City of Vincent Safe Active Street discusses initial insights of the available data on design features and user behaviour. Community surveys are being undertaken which will provide additional insights on community perceptions about the safe active street. Further analyses of all data will also be undertaken and incorporated into the final evaluation report due in 2024.



CITY OF VINCENT, SAFE ACTIVE STREET

The City of Vincent Safe Active Street is a 3.1 km route which runs along Richmond Street (in the south), Bourke Street, along Scott Street and up to Shakespeare Street at the northern end.

The safe active street was completed in two stages. The first stage of the route starts at Green Street in Mount Hawthorn and connects to the Scarborough Beach Road separated bike lanes, which were installed by the City of Vincent in 2015. The second stage of the route continues south of Scarborough Beach Road, along Shakespeare Street and Scott Street, through to Richmond Street. It also includes a link to the Mitchell Freeway Principal Shared Path (PSP) via Bourke Street.



Project completion dates:

- **Stage 1:** Commenced in June 2016 and was completed in December 2016.
- **Stage 2:** Commenced in April 2018 and was completed in August 2018.



SAFE ACTIVE STREET MAP

Unique design features

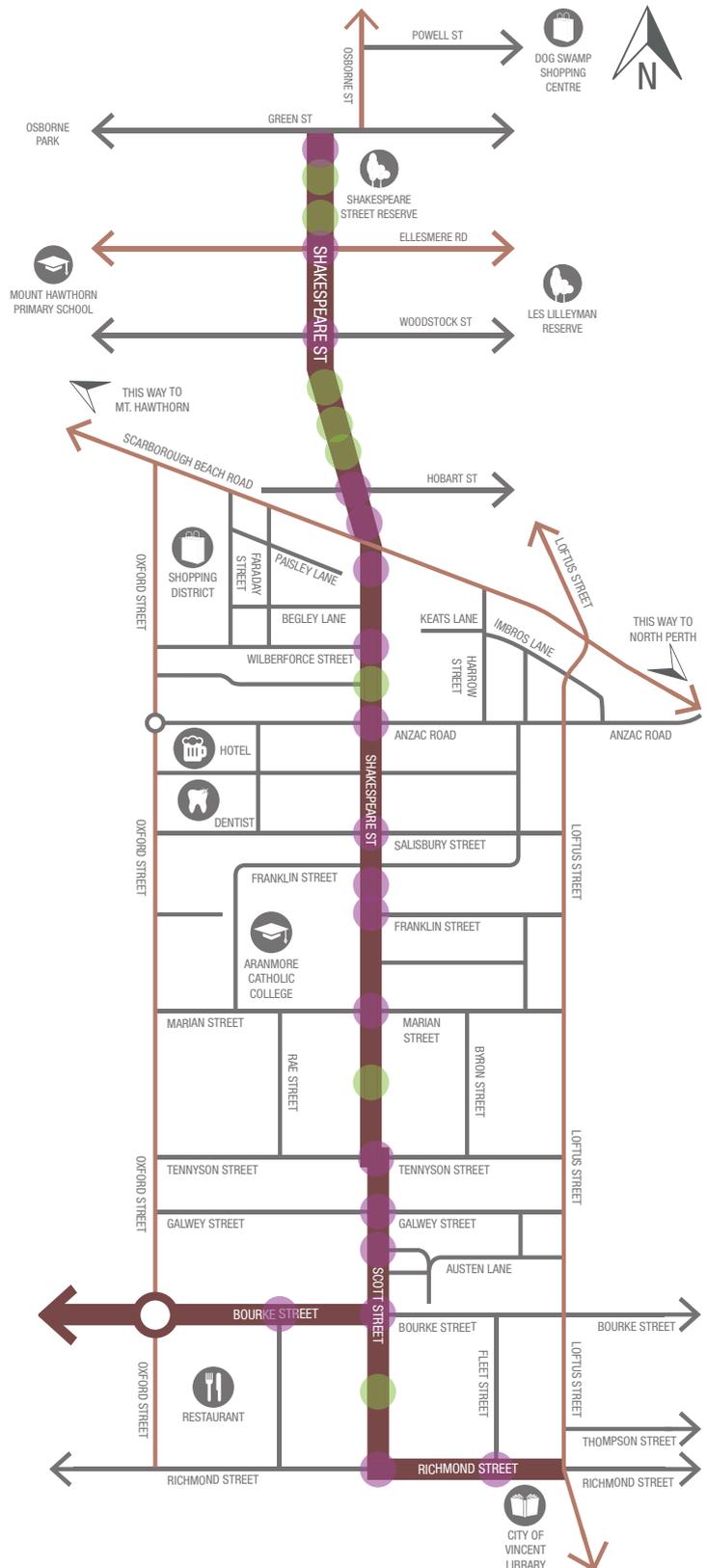
- Red asphaltting
- Raised plateaus
- On-street parking
- Slow points
- Priority change at intersections
- Tree planting
- Kerb reconstruction
- Bike repair stations
- Landscape enhancements

Key route destinations

- Aranmore Catholic College
- Mount Hawthorn Primary School
- North Metropolitan TAFE
- Leederville Oval
- Oxford Street shopping strip
- City of Vincent council offices
- City of Vincent Library
- Loftus Recreation Centre
- Connection to Mitchell Freeway PSP

Legend

- Raised plateau
- Slow point



EVALUATION PROCESS

Video surveys and pneumatic tube counters were used to collect pre and post construction measures of:

- Bike rider movements
- Vehicle traffic counts
- Vehicle traffic speeds
- Vehicle parking counts

VIDEO SURVEYS

Video surveys were conducted on the City of Vincent Safe Active Street, over different three-day periods between 6.00 am and 6.00 pm.

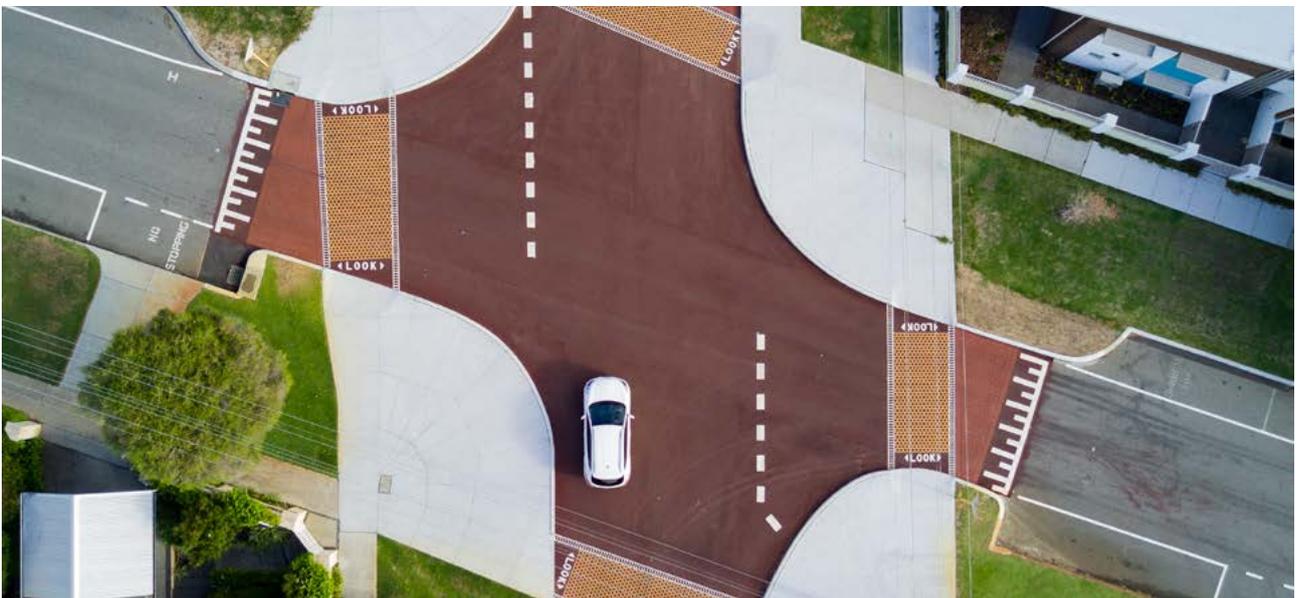
Video surveys involve placing video cameras at strategic locations to detect the movements of bike riders and people walking. Survey footage is then analysed to extract pedestrian and bike rider activity.

These surveys were conducted on the safe active street route and on adjacent intersections off-route to detect area wide trends. There are two comparable pre and post construction sites along the route for Stage 1 and five comparable pre and post construction sites for Stage 2 shown in



Data collection dates:

- **Stage 1:** Pre-construction – June 2016 and post-construction – June 2021
- **Stage 2:** Pre-construction – March/April 2018 and post-construction – March/April 2021



this report.

PNEUMATIC TUBE COUNTS

Pneumatic tube counters were placed at specific mid-block sections of road and at adjacent locations off-route to detect area wide trends.

Pneumatic tube counters involve rubber hoses being stretched across the road and connecting at one end to a data logger. Tube counters were used to detect vehicle traffic volumes and speeds. Vehicle volumes reflect the 85th percentile speed which is the speed at or below which 85 per cent of vehicles are travelling.

There is one comparable pre and post construction site for Stage 1 and four comparable pre and post construction sites for Stage 2 shown in this report. These include the vehicle volumes and speeds as an average across both weekdays and weekends.

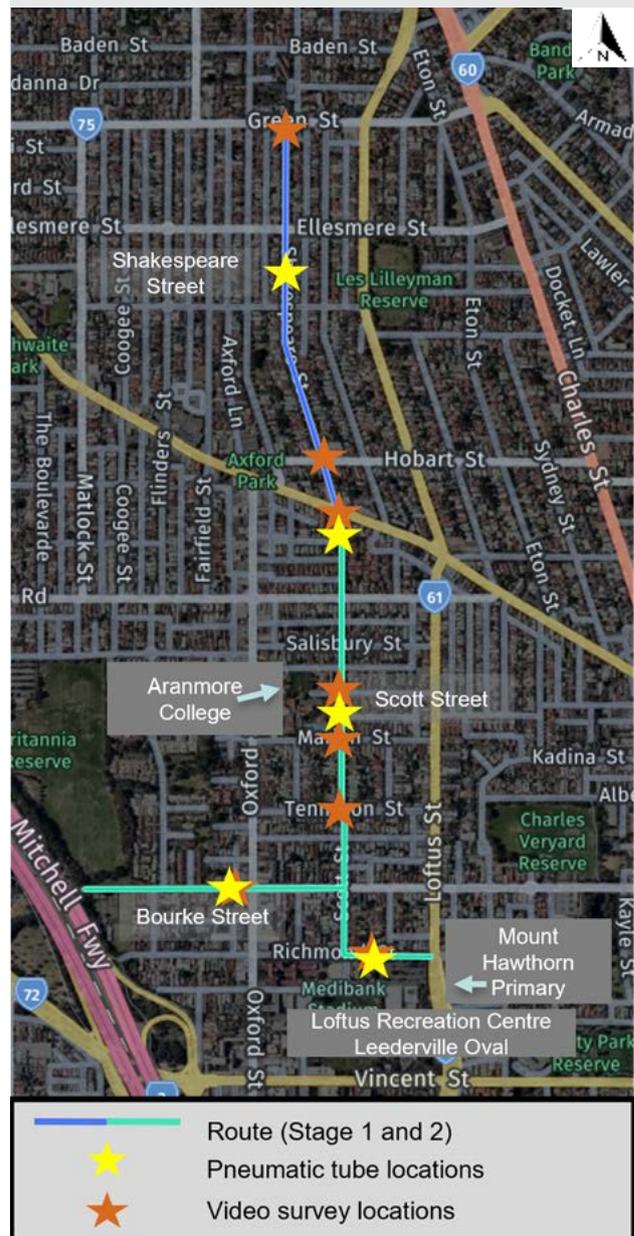
Tube counters were in place over a specified period on the Safe Active Street:

- **Stage 1:** June 2016 (pre-construction) and June 2021 (post-construction)
- **Stage 2:** April 2018 (pre-construction) and March/April 2021 (post-construction)



Both data collection methods enable DoT to observe changes in activity pre and post construction.

Route map with pneumatic tube counter and video survey locations



KEY INSIGHTS

Walking and bike riding activity



The number of people walking increased across all sites (along Stage 1 and 2) during the week, and at five sites (out of seven) on weekends.

- Large increases in walking activity were observed along the full length of the Stage 2 route, particularly during the week.
- The largest increases in walking activity were observed at Richmond Street, between Scott Street and Fleet Street (in Stage 2) on both weekdays and weekends, which could be attributed to visitors accessing the activity centres located at the northern end of the route, such as the City of Vincent council offices and Library, Leederville Oval, Loftus Recreation Centre and Mount Hawthorn Primary School.
- The only site along Stage 2 which did not see an increase was Bourke Street (west of Oxford Street) on weekends, however a large increase was observed during the week.
- Along Stage 1, increases were observed at both sites along Shakespeare Street during the week, at Green Street and at Hobart Street. On the weekend, an increase was seen at Shakespeare Street and Green Street, but not around Hobart Street.



Bicycle riding observed increases at all sites along Stage 1 and 2 of the safe active street during the week and on weekends.

- Increases in the number of people bike riding were seen across all sites along the route (Stage 1 and 2) on both weekdays and weekends.
- The largest increases were observed along Bourke Street (west of Oxford Street), which could suggest use of the route to access the Mitchell Freeway PSP.

The tables indicate the additional number of people walking and bike riding post construction.

Stage 1: Average weekday and weekend user behaviour

This data compares changes in activity from June 2016 to June 2021.

Comparable sites	Additional people walking		Additional bike riders	
	Weekday	Weekend	Weekday	Weekend
Stage 1: Shakespeare Street and Green Street	32	59	6	18
Stage 1: Shakespeare Street and Hobart Street	54	-3	17	26

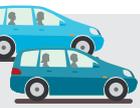
Stage 2: Average weekday and weekend user behaviour

This data compares changes in activity from March/April 2018 to March/April 2021.

Comparable sites	Additional people walking		Additional bike riders	
	Weekday	Weekend	Weekday	Weekend
Stage 2: Shakespeare Street and Franklin Street	381	114	4	20
Stage 2: Shakespeare Street and Marian Street	224	50	18	16
Stage 2: Shakespeare Street and Tennyson Street	77	57	29	19
Stage 2: Bourke Street (west of Oxford Street)	189	-34	33	69
Stage 2: Richmond Street between Scott Street and Fleet Street	776	219	16	10



Vehicle volumes and speeds



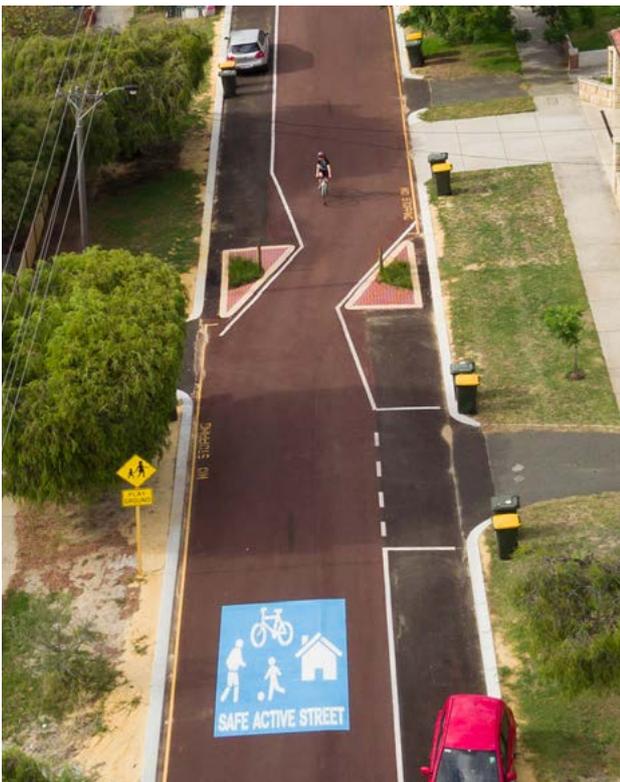
Vehicle volumes have declined at four sites (out of five) along the safe active street.

- A large decrease in vehicle volumes were observed at all sites since construction of Stage 1 and 2, except at Bourke Street (west of Oxford Street).
- Along Bourke Street and Richmond Street, there are high vehicle volumes, likely due to the connections to Oxford Street and Loftus Street. A decrease in vehicle volumes was observed along Richmond Street.
- At the counter site located on Shakespeare Street, south of Scarborough Beach Road, vehicle volumes have been reduced by around 212 vehicles per day. At Shakespeare Street, north of Marian Street, located near Aranmore Catholic College, vehicle volumes have reduced by around 142 vehicles per day.



A reduction in (85th percentile) vehicle speeds was observed at four sites (out of five) along the safe active street.

- The 85th percentile vehicle speeds were reduced at all sites along the route (Stage 1 and 2), except at Richmond Street, east of Scott Street (Stage 2).
- While a reduction in 85th percentile vehicle speeds have been observed at four sites (out of five) along the route, vehicle speeds could be further reduced to achieve an 85th percentile speed of 37 km/hr or below.



- Stage 1: The site located at Shakespeare Street between Ellesmere Street and Woodstock Street had a reduction in 85th percentile vehicle speeds, however could be further reduced as it remains above the target of 37 km/hr.
- Stage 2: The two sites located at the northern end of Stage 2, at Shakespeare Street south of Scarborough Beach Road and at Shakespeare Street north of Marian Street, have seen a large reduction in vehicle speeds, and are the only sites which had 85th percentile speeds below the target of 37 km/hr. Vehicle speeds could be reduced along Bourke Street, and particularly along Richmond Street, due to the location of Mount Hawthorn Primary School.

Daily average vehicle volumes (number of vehicles)

Comparable sites	Pre-construction	Post-construction
Stage 1: Shakespeare Street: Ellesmere Street and Woodstock Street	321	292
Stage 2: Shakespeare Street (south of Scarborough Beach Road)	696	484
Stage 2: Shakespeare Street (north of Marian Street)	704	562
Stage 2: Bourke Street (west of Oxford Street)	1,819	1,908
Stage 2: Richmond Street (east of Scott Street)	1,759	1,556

Daily average (85th percentile) vehicle speeds

Comparable sites	Pre-construction	Post-construction
Stage 1: Shakespeare Street: Ellesmere Street and Woodstock Street	49 km/hr	45 km/hr
Stage 2: Shakespeare Street (south of Scarborough Beach Road)	45 km/hr	36 km/hr
Stage 2: Shakespeare Street (north of Marian Street)	42 km/hr	36 km/hr
Stage 2: Bourke Street (west of Oxford Street)	46 km/hr	40 km/hr
Stage 2: Richmond Street (east of Scott Street)	32 km/hr	38 km/hr

Bold indicates a decrease in either volumes or speeds



SUMMARY

- Overall, the City of Vincent Safe Active Street has seen positive outcomes since construction of Stage 1 in 2016 and Stage 2 in 2018. There has been positive growth in the number of people using the route for both walking and bike riding.
- It is encouraging to see such large increases in walking activity, particularly along Stage 2. There were around 776 additional people walking along Richmond Street between Scott Street and Fleet Street.
- Although the increases in bike riding activity is lower compared to walking activity, it is encouraging to see increases in bike riding activity across the full length of the route, across both Stage 1 and Stage 2.
- The data suggests the route is being used by bike riders to access the Mitchell Freeway PSP and for people visiting the activity centres located at the southern end of the route.
- The positive impact of the current treatments is evident in the data, with decreases observed in vehicle volumes and speeds at most sites along the length of the route.
- While vehicle speeds have been reduced, these are still above the recommended target, particularly at the southern end, and could be further reduced. Vehicle speeds can increase as users become familiar with the route. As the safe active street has been around since 2016 (Stage 1) and 2018 (Stage 2), a radar speed messaging board could be considered for a short-term duration to highlight vehicle speeds and to further reduce 85th percentile speeds.
- The safe active street would benefit from upgrading to the new Main Roads WA safe active street pavement markings standards by installing the 30 km/hr roundels symbols on intersecting streets.
- Mount Hawthorn Primary School is a participating school in the [Your Move Schools Program](#) (since 2018). An increase in the proportion of students using active travel to school (walking and bike riding) increased from 45 per cent in Term 1 to 52 per cent in Term 4 (2019), which may be due to accessing the school via the safe active street. Leveraging the walking and riding activity generated through the school's Behaviour Change Program could also help encourage further use.
- Community perception data will help to ascertain the breadth and depth of positive or negative community sentiment for the City of Vincent Safe Active Street.
- The Safe Active Streets Pilot Program Evaluation Report will include statistical analyses of the full dataset and will be available in 2024.

FURTHER INFORMATION

More information on the Safe Active Streets Program can be found on the DoT website: www.transport.wa.gov.au



APPENDIX

Chart 1

Average weekday and weekend walking activity Pre and post construction (raw counts)



City of Vincent Safe Active Street

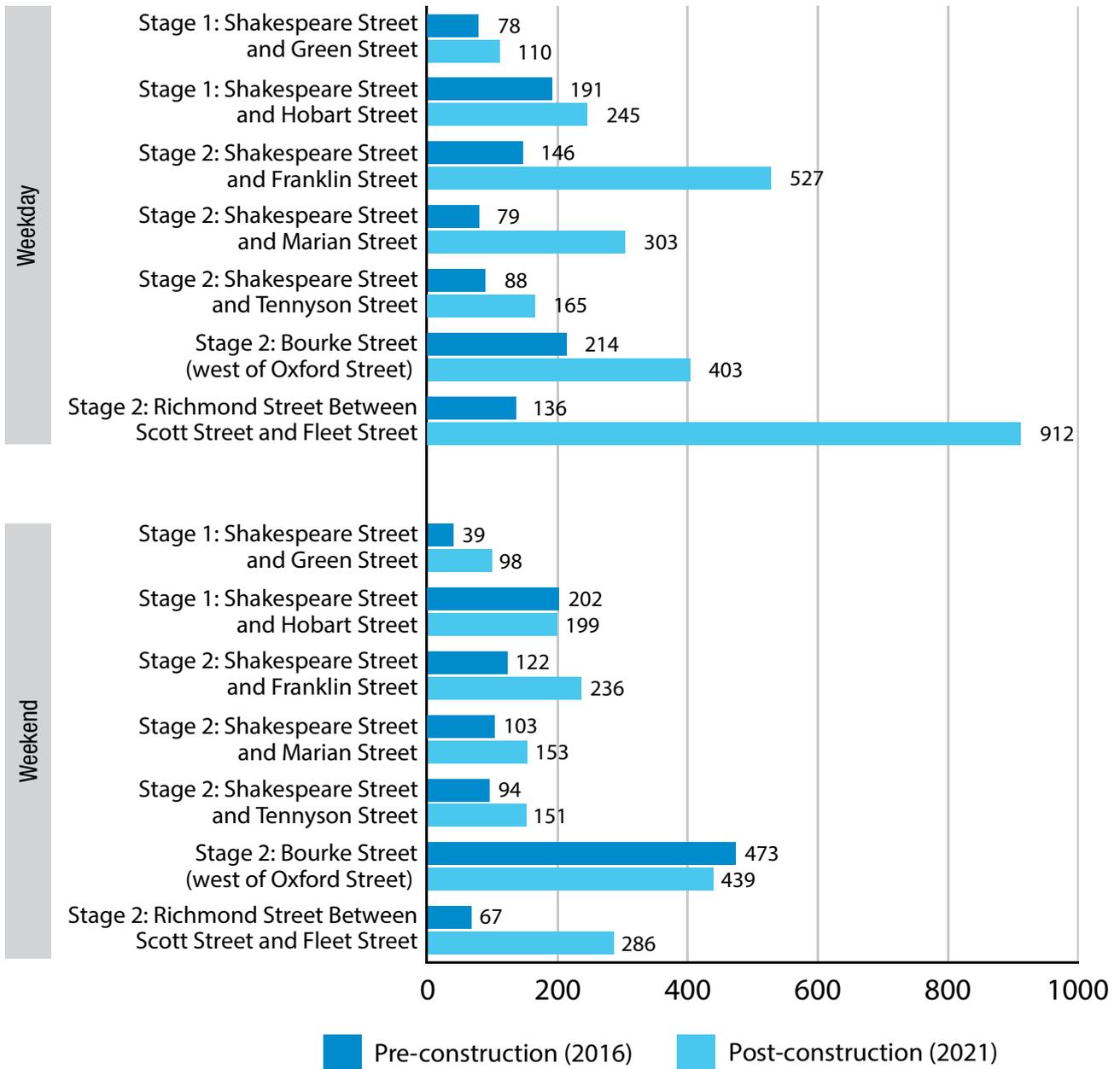


Chart 2

Average weekday and weekend bike riding activity Pre and post construction (raw counts)



City of Vincent Safe Active Street

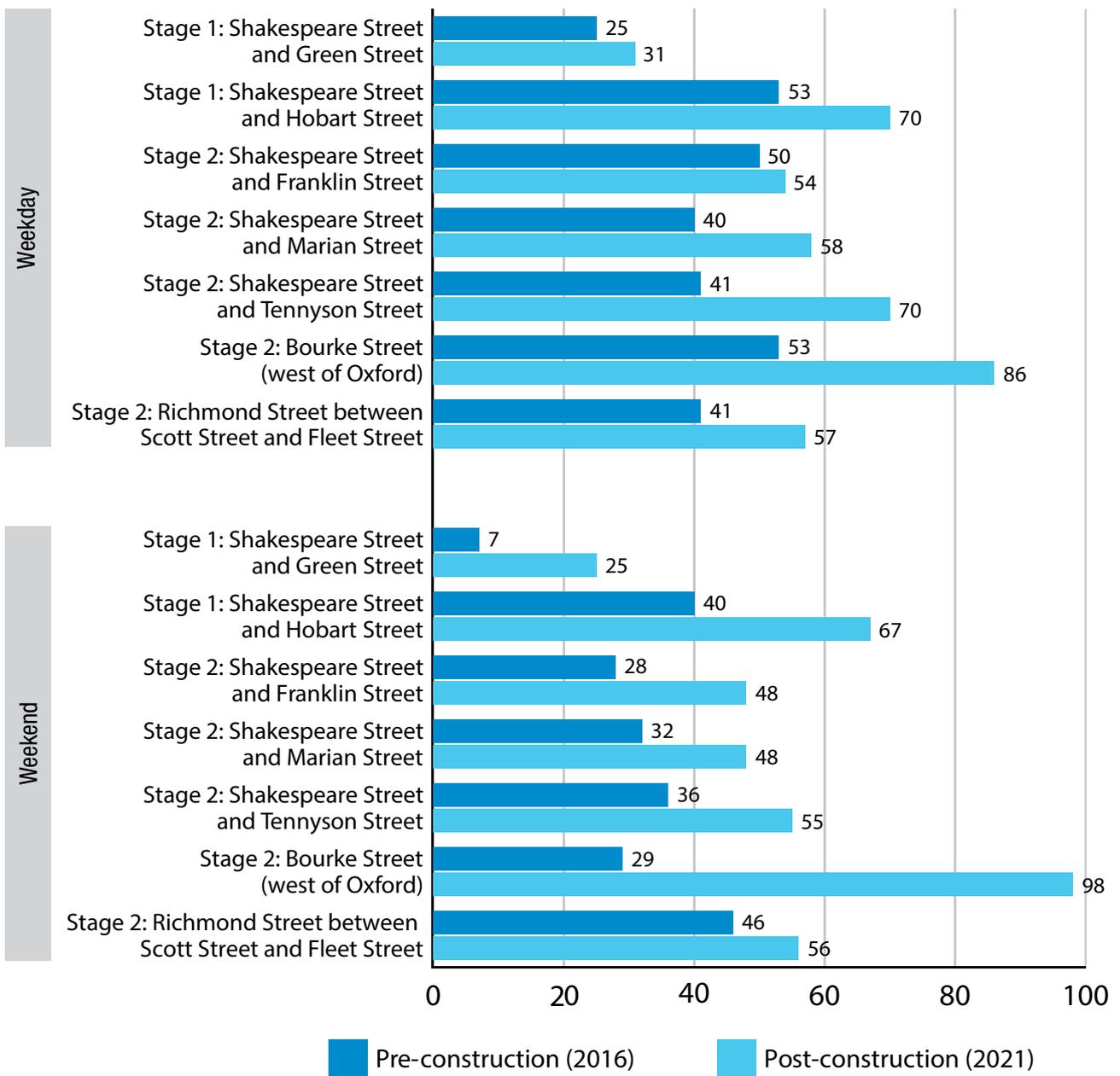


Chart 3

Daily average vehicle volumes
 Number of vehicles pre and post construction
 (across both weekends and weekdays)

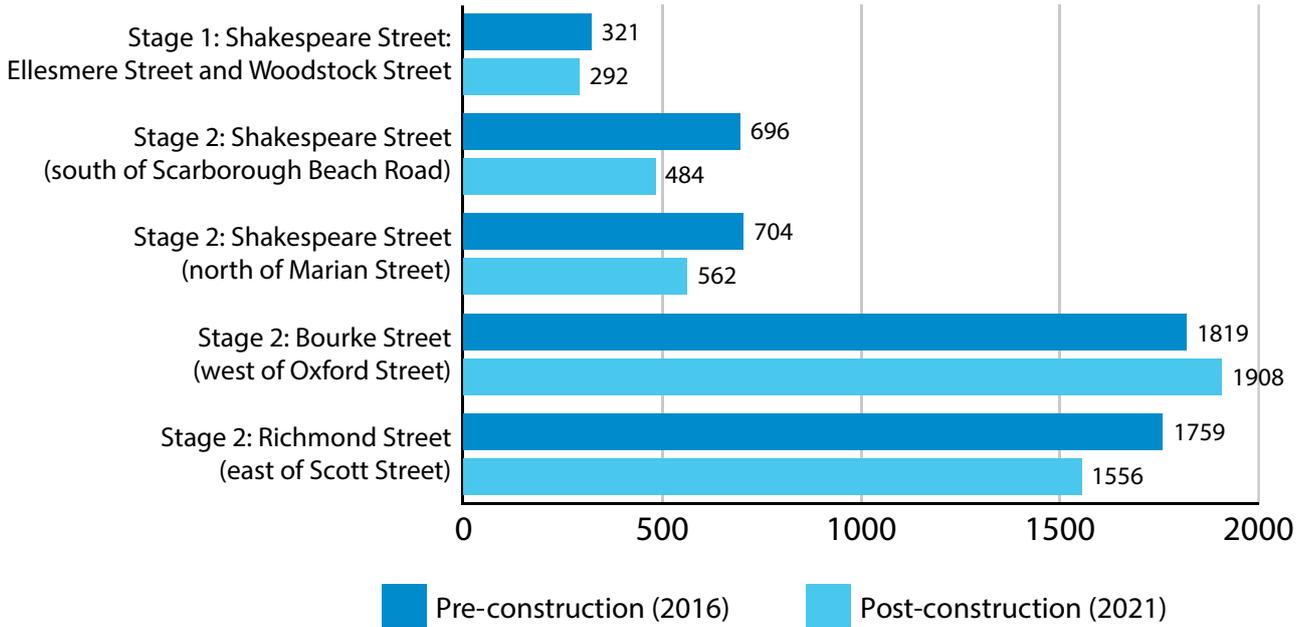
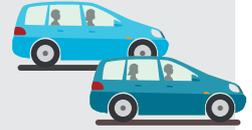


Chart 4

Daily average vehicle speeds
 85th percentile speeds pre and post construction



Department of Transport

140 William Street
Perth WA 6000
Telephone: 13 11 56
www.transport.wa.gov.au

This material is available in alternative formats upon request.

Disclaimer: The information contained in this publication is provided in good faith and believed to be accurate at time of publication. The State shall in no way be liable for any loss sustained or incurred by anyone relying on the information.

© Department of Transport, Western Australia 2023

