



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

Safe Active Streets Program:

GERALDTON



Interim Evaluation Report – 2023



INDEX

- What is the Safe Active Streets Pilot Program? 3
- Why we collect data 4
- City of Greater Geraldton, 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 12
- Further information 12
- Appendix 13
 - Average weekday and weekend walking activity 13
 - Average weekday and weekend bike riding activity 14
 - Daily average vehicle volumes 15
 - Daily average vehicle speeds 15



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

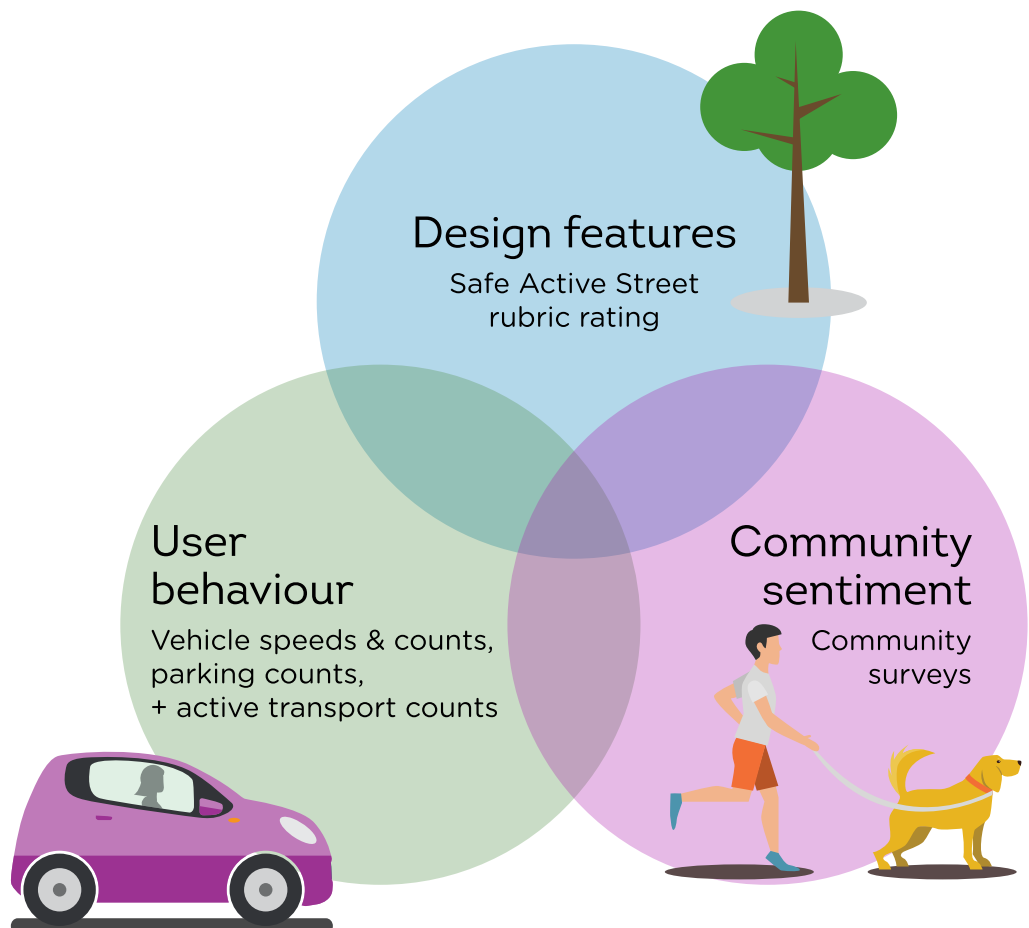
Collecting transport data helps us to better understand transport choices and behaviours. This insight assists us to guide infrastructure investment in local communities to support the growth of active transport.

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 Geraldton Safe Active Street discusses initial insights of the available data on design features and user behaviour. Community surveys have been 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 GREATER GERALDTON, SAFE ACTIVE STREET

The Railway Street Safe Active Street in Bluff Point Geraldton is a 1.92 km route which links people from Spalding Park Reserve in the north to St Lawrence’s Primary School in the south.

The route starts along a 500 m shared path from Spalding Park Reserve, which crosses the Chapman River and then connects to Railway Street, which heads south to St Lawrence’s Primary School and connects further south to the Geraldton commercial centre. This route also includes connections to Bluff Point Primary School to the west and the Spalding residential precinct to the east.



Project completion dates:

→ The project commenced in September 2021 and the route opened in August 2022.



This safe active street is the only regional site included in the Pilot Program.

SAFE ACTIVE STREET MAP




Unique design features

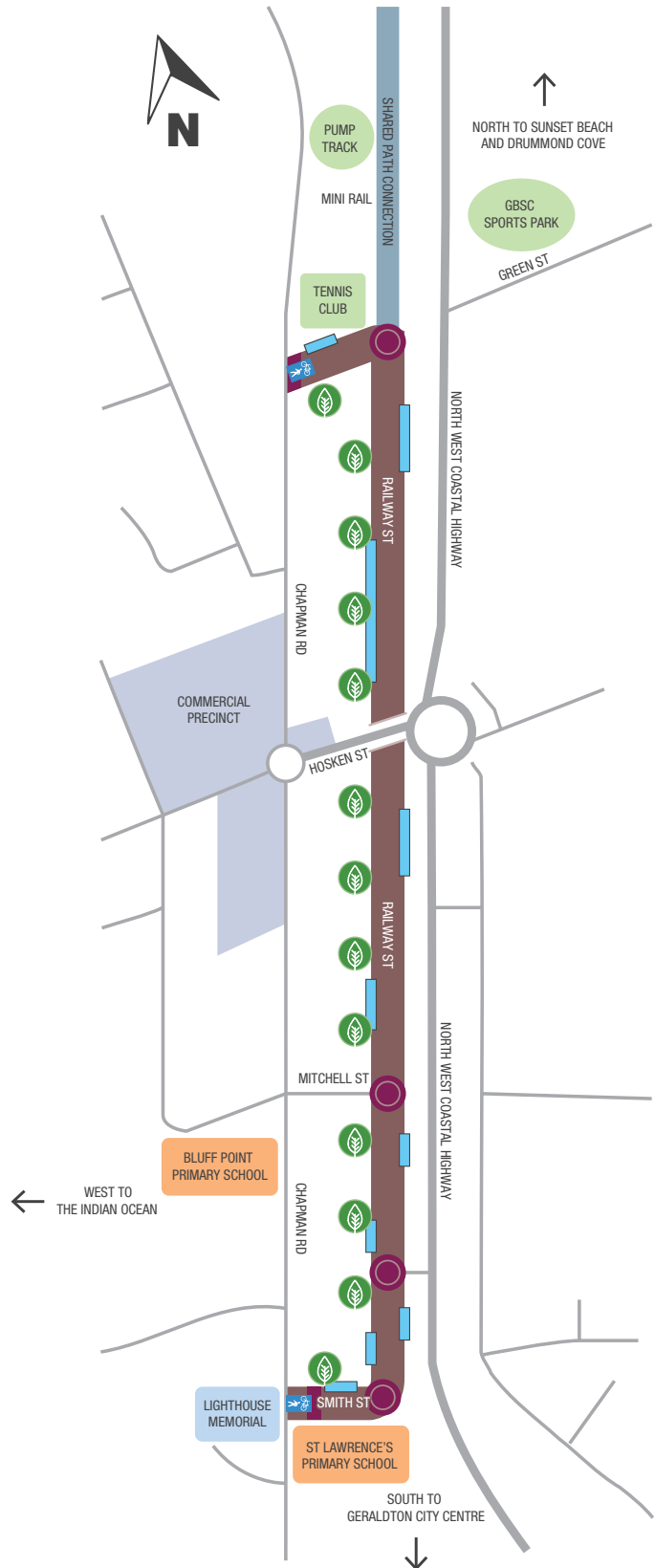
- Red asphaltting
- Reduced carriageway
- Raised plateaus
- On-street parking
- Tree planting
- Shared path connection

Key route destinations

- Spalding Park Reserve, tennis club and pump track
- St Lawrence's Primary School
- Lighthouse memorial
- Connections to Geraldton commercial centre, Bluff Point Primary School and Spalding residential precinct

Legend

-  Raised plateau
-  Slow point and parking bays
-  Tree planting



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 Geraldton 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 six comparable pre and post construction sites along the route shown in this report.



Data collection dates:

- November/December 2020 (pre-construction)
- November/December 2022 (post-construction)



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.

Tube counters were in place over a specified period in December 2020 and again in November/December 2022 to capture the pre and post construction counts. There are two comparable pre and post construction sites along the route shown in this report and include the vehicle volumes and speeds as an average across both weekdays and weekends.

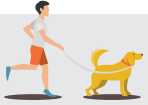
Route map with pneumatic tube counter and video survey locations



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

KEY INSIGHTS

Walking and bike riding activity



The number of people walking increased at five sites (out of six) on weekdays and on weekends.

- Increases in the number of people walking were seen across all sites along the route during the week and on weekends, except at the Chapman Road and Smith Street site. This could be due to the installation of parking bays and a new shared path that provides a safer route for children to access St Lawrence's Primary School.
- Walking activity at the Railway Street and Smith Street site remained unchanged on weekends.
- During the week, the largest increases in the number of people walking were observed around North West Coastal Highway, Hosken Street and Horan Street.
- Increases were also observed along Railway Street and Mitchell Street, and at Railway Street and Smith Street, which could suggest use of the route to access Bluff Point Primary School and St Lawrence's Primary School.
- On weekends, the largest increase in walking activity was observed at the northern end of the route, at Railway Street and Green Street, which may be attributed to people visiting the Spalding Park Reserve, tennis club and/or pump track activity centres.



Bicycle riding observed increases at all six sites along the safe active street on weekdays and on weekends.

- Increases in the number of people bike riding were seen across all sites along the route, with the largest increases during the week observed along Railway Street and Mitchell Street, and at Railway Street and Smith Street. Similarly, to the changes in walking activity, this could suggest use of the route to access Bluff Point Primary School and St Lawrence's Primary School.
- On weekends, increases were observed across all sites along the route, with the largest increases seen at the two ends of the route, which could be attributed to people riding to/from the Spalding Park Reserve or shared path at the northern end, and visitation to attractions such as St Georges Beach or Geraldton city centre at the southern end.



The tables indicate the additional number of people walking and bike riding post construction. This data compares changes in activity from November 2020 to November 2022.

Average weekday user behaviour

Increase in usage (additional numbers post construction)

Comparable sites	People walking	Bike riders
Railway Street and Green Street	12	16
North West Coastal Highway, Hosken Street and Horan Street	61	9
Railway Street and Mitchell Street	23	25
Railway Street and Railway Street crossover	8	18
Railway Street and Smith Street	37	28
Smith Street and Chapman Road	-15	26

Average weekend user behaviour

Increase in usage (additional numbers post construction)

Comparable sites	People walking	Bike riders
Railway Street and Green Street	28	32
North West Coastal Highway, Hosken Street and Horan Street	9	20
Railway Street and Mitchell Street	10	25
Railway Street and Railway Street crossover	5	19
Railway Street and Smith Street	0	20
Smith Street and Chapman Road	-7	33



Vehicle volumes and speeds



Vehicle volumes have declined at both sites along the safe active street.

- A large decrease in vehicle volumes were observed at both sites located at each end of the route.
 - Vehicle volumes are lower at the northern end of Railway Street (between Green Street and Chapman Road) and have decreased since construction of the safe active street.
 - At the southern end of Railway Street, vehicle volumes are higher, likely due to traffic visitation to St Lawrence’s Primary School. There has, however, been a large decrease in vehicle volumes observed along Railway Street between Smith Street and North West Coastal Highway.



A reduction in (85th percentile) vehicle speeds was also observed at both sites.

- The 85th percentile vehicle speeds at the northern end of Railway Street between Green Street and Chapman Road have seen a reduction to 38 km/hr post-construction, down from 45 km/hr before construction.
- Vehicle speeds along Railway Street, between Smith Street and North West Coastal Highway, have seen a reduction, however could be further reduced to achieve an 85th percentile speed of 37 km/hr or below.

Daily average vehicle volumes (weekdays and weekends)

Comparable sites	Pre-construction	Post-construction
Railway Street: Between Green Street and Chapman Road	166	66
Railway Street: Between Smith Street and North West Coastal Highway	965	681

Daily average (85th percentile) vehicle speeds

Comparable sites	Pre-construction	Post-construction
Railway Street: Between Green Street and Chapman Road	45 km/hr	38 km/hr
Railway Street: Between Smith Street and North West Coastal Highway	52 km/hr	47 km/hr

Bold indicates a decrease in either volumes or speeds

SUMMARY

- The Geraldton Safe Active Street has seen positive outcomes since its construction in 2022.
- It is worth noting the (post construction) data collection was conducted shortly after completion of the route and ongoing monitoring will identify longer-term trends. The number of additional users on the route so soon after completion suggests a positive outlook for the route, as usage and uptake is likely to continue to increase over time as awareness and adoption grows.
- The positive impact of the current treatments is evident in the data with decreases observed in vehicle volumes and speeds.
- There have been increases observed in the number people walking and riding along the route, and it is positive to see an increase in the number of people walking and bike riding around St Lawrence's Primary School and other key destinations located at northern and southern ends.
- Vehicle speeds have been reduced, however these could be further reduced, particularly at the southern end, to achieve an 85th percentile speed of 37 km/hr or below. As this section of the route has vehicles entering from the 60 km/hr North West Coastal Highway, sporadic police presence or the placement of a variable messaging board for a short-term period may encourage reduction in vehicle speed.
- Community perception data will help to ascertain the breadth and depth of positive or negative community sentiment for the Geraldton 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 Geraldton Safe Active Street

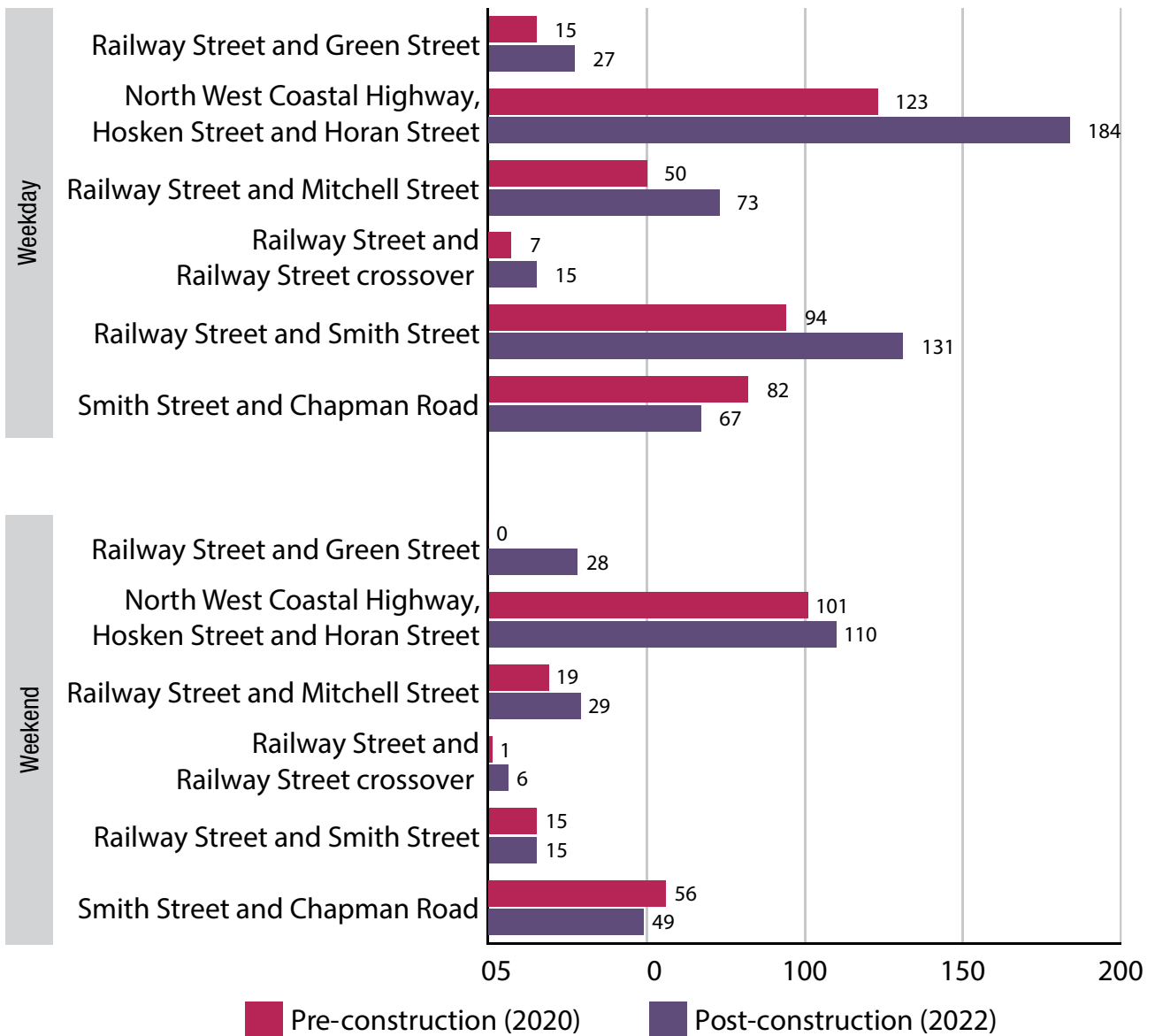


Chart 2

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



City of Geraldton Safe Active Street

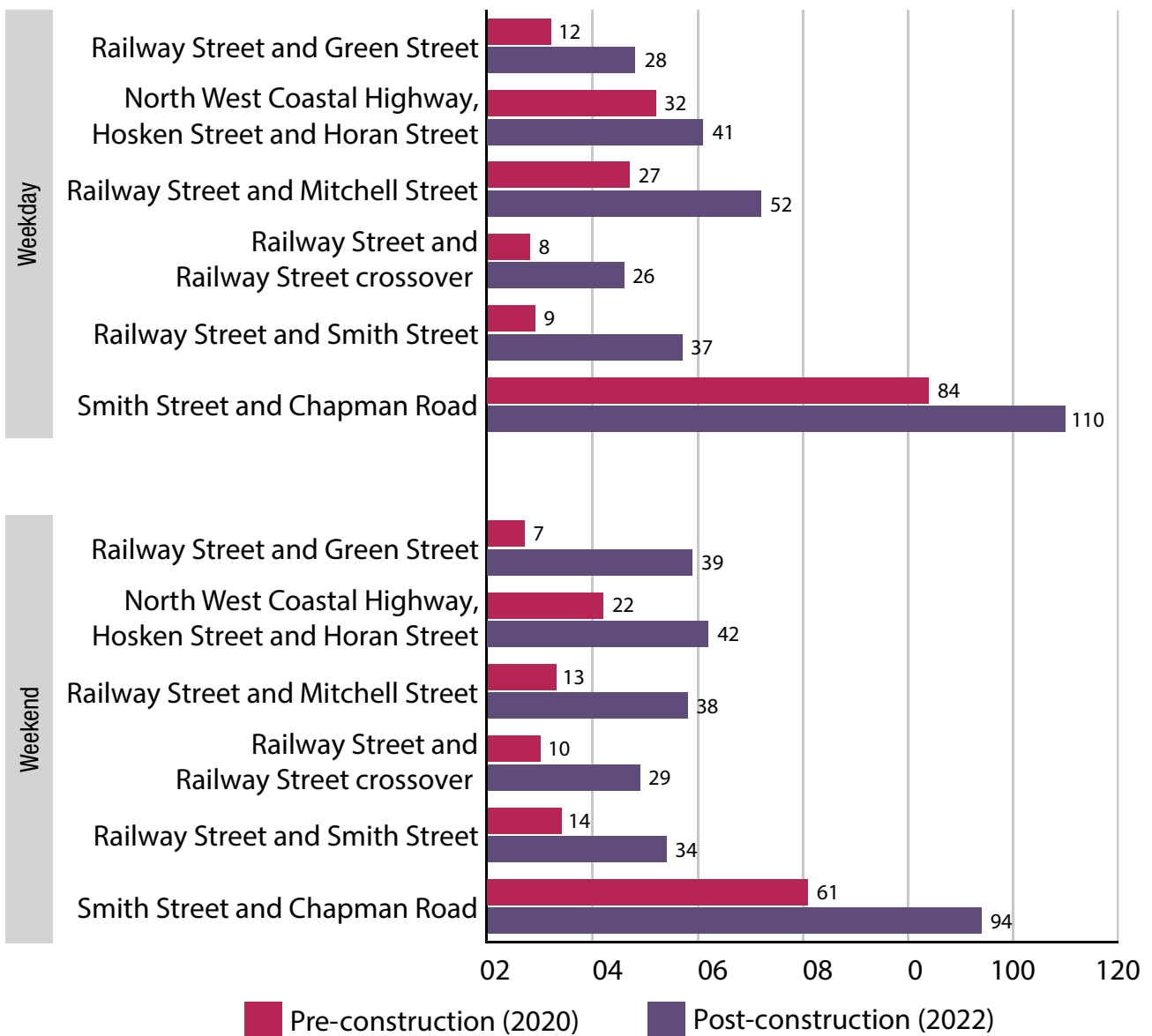


Chart 3

Daily average vehicle volumes

Number of vehicles pre and post construction
(across both weekends and weekdays)

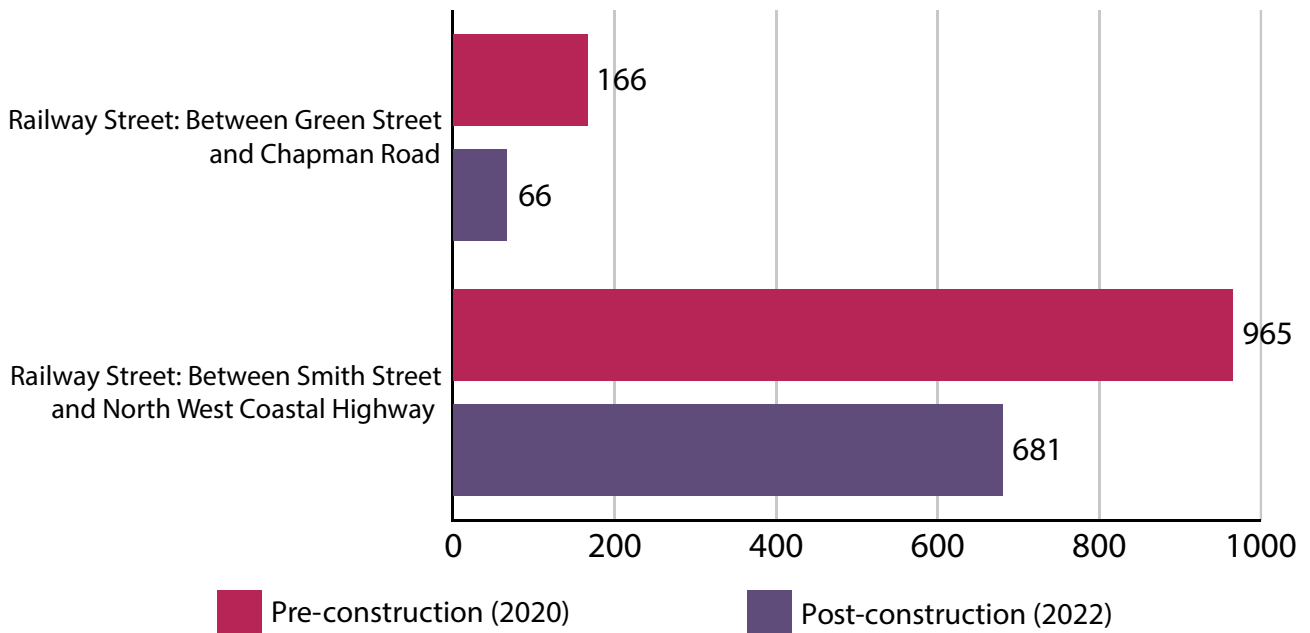
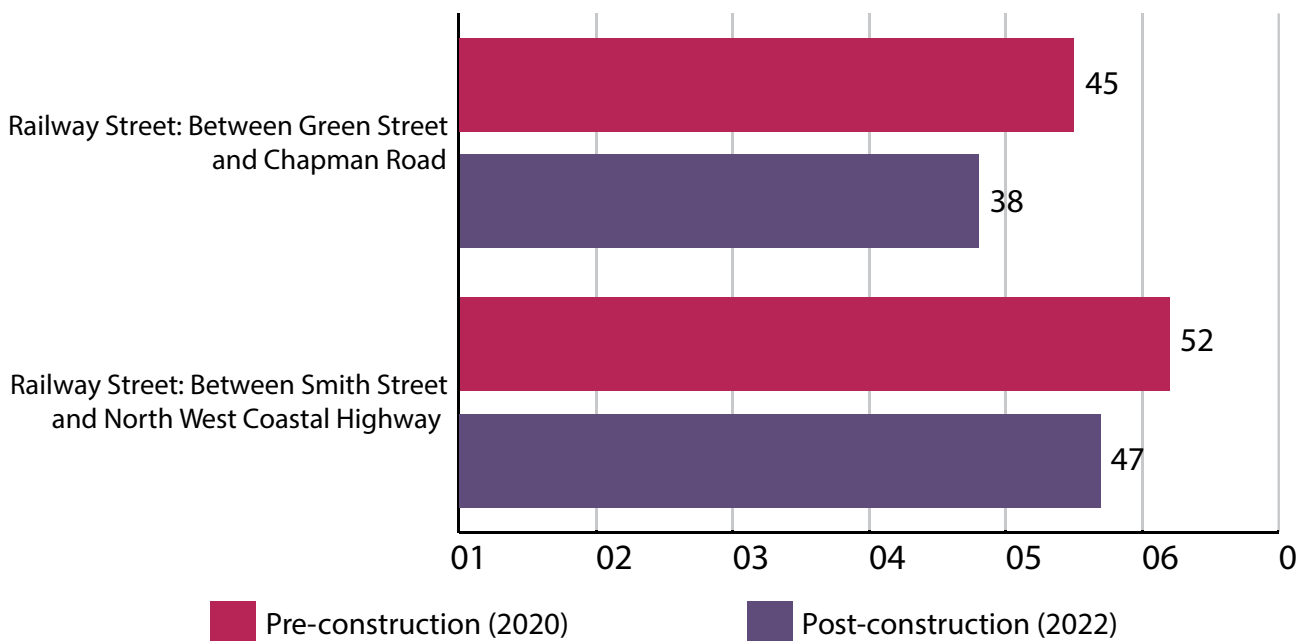


Chart 4

Daily average vehicle speeds

85th percentile speeds pre and post construction



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