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

Safe Active Street Program:

MELVILLE

Interim Evaluation Report – 2023

INDEX

We acknowledge the Traditional Custodians of this land and pay respect to the Elders past, present and future.

WHAT IS THE SAFE ACTIVE STREET PILOT PROGRAM?

The Department of Transport's (DoT) Safe Active Streets Pilot Program commenced in 2015, and since that time has seen the constructions 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/h 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 pedestrians, 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

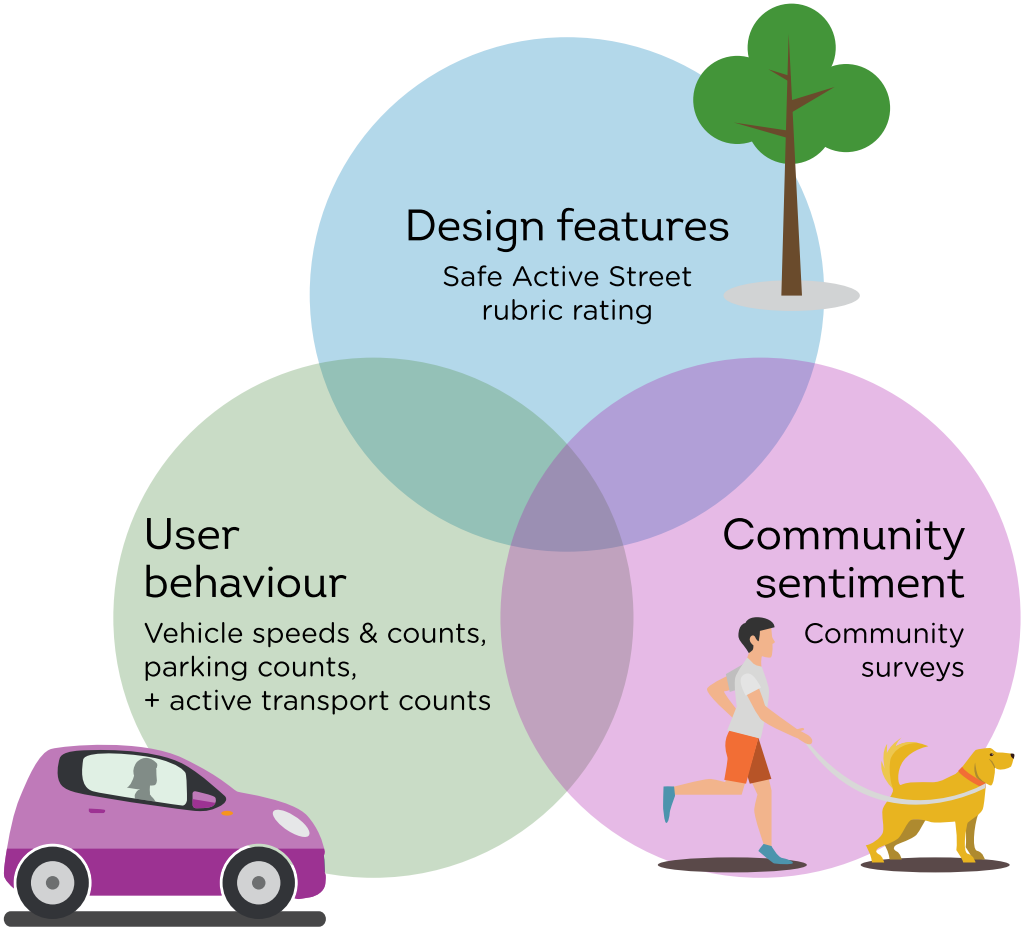
Collecting transport data helps us to better understand transport choices and behaviours. This insight assists us to guide infrastructure investment in local communities to support the growth of active transport.

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 Melville 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.

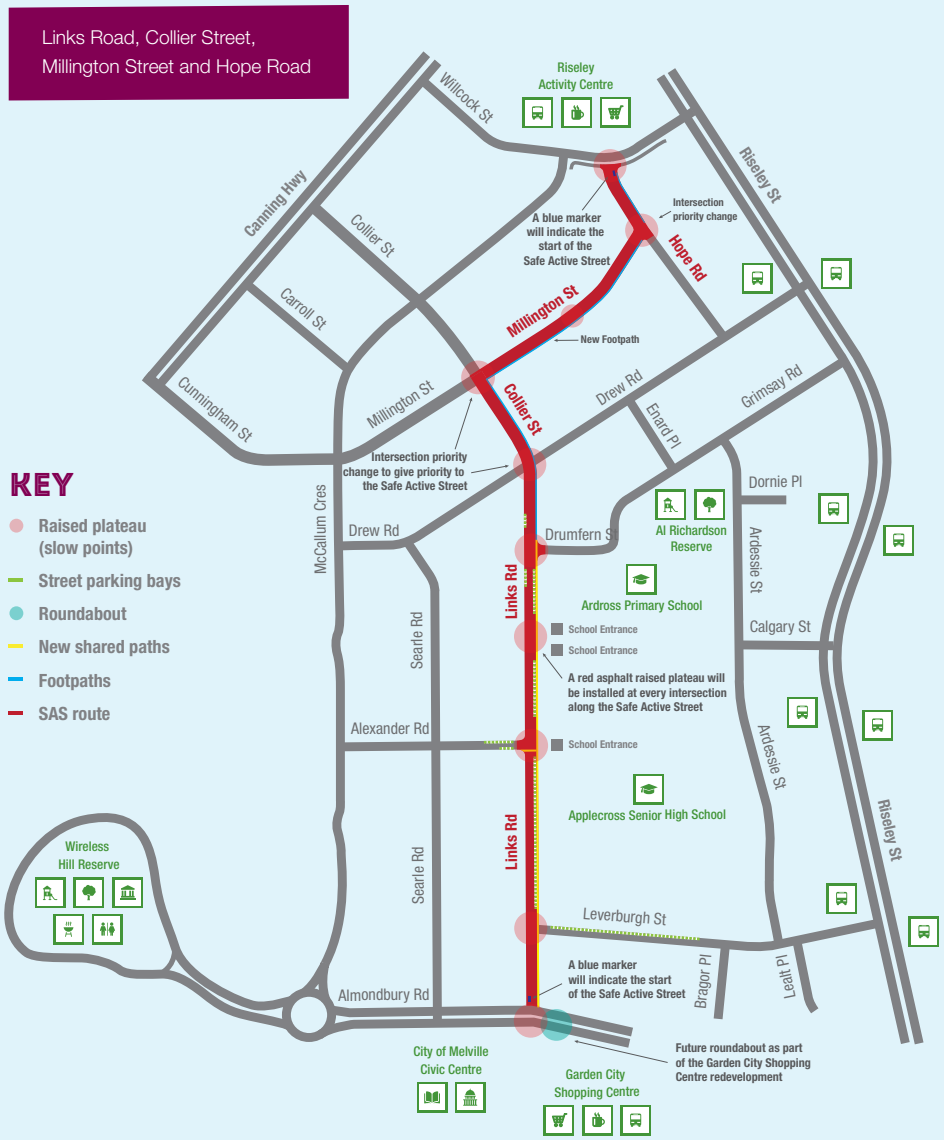


CITY OF MELVILLE, SAFE ACTIVE STREET

The City of Melville's Safe Active Street is a 1.16km route linking Westfield Booragoon Shopping Centre and Riseley Street Activity Centre, along Links Road, Collier Street, Millington Street and Hope Road, onto Willcock Street.

The project commenced in June 2018 and was completed in April 2022.

SAFE ACTIVE STREETS MAP



Unique design features

- Red asphalting
- Route priority
- Raised plateaus
- New and updated shared paths
- Kerb reconstruction
- Drainage works
- Tree plantings
- On street parking
- Safe active street line marking

Key route destinations

- Riseley Street Shopping Precinct
- Ardross Primary School
- Applecross Senior High School
- Westfield Booragoon Shopping Centre
- City of Melville Civic Centre

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

Data collection on the Melville Safe Active Street was undertaken in:

- May 2018 (pre-construction)
- May 2022 (post-construction)

VIDEO SURVEYS

Video surveys were conducted at strategic locations on the Melville Safe Active Street, over different three-day periods between 6:00AM and 6:00PM.

Video surveys involve placing video cameras at strategic locations to detect the movements of bike riders and pedestrians. 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 four comparable pre and post construction sites along the route shown in 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 percent of vehicles are travelling.

Tube counters were in place over a specified period in June 2018 and again in May 2022 to capture the pre and post construction counts.

There are four 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.

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

Pedestrian and bike rider activity

The number of pedestrians increased at all sites, with large increases seen at specific locations during the week.

- Pedestrian activity over weekdays had large increases at the northern end, possibly due to Riseley Activity Centre, and at the southern end likely due to the Westfield Booragoon Shopping Centre.
- Increases in pedestrian activity over the weekend, albeit smaller than weekdays, was observed across all sites.
- An increase in pedestrian activity is observed on Millington Street and Hope Road likely due to the new path connection.

Bicycle riding observed increases at three (out of four) sites along the safe active street, though growth was less than that of pedestrians.

- The largest increase was observed over weekdays at the Links Road and Alexander Road site which could suggest use of the route to access Ardross Primary School and Applecross Senior High School.
- A decrease in bike rider activity was observed on Links Road and Drumfern during the week which could be due to bike riders avoiding the traffic along the route around the primary school.
- Over the weekend, increases in bike riding activity was observed across all sites.

The tables below indicate the additional number of pedestrian and bike riders post construction. The number of additional users observed on the route so soon after completion suggests a positive outlook for the route. Usage and uptake is likely to continue to increase over time as awareness, trial and adoption of the route grows.

Average weekday user behaviour

Increase in usage (Additional numbers post construction)

Comparable sites	Additional Pedestrian	Additional Bike riders
Wilcock Street and Hope Road	185	1
Millington Street and Hope Road	65	15
Links Road and Drumfern Street	35	-15
Links Road and Alexander Road	218	56

Average weekend user behaviour

Increase in usage (Additional numbers post construction)

Comparable sites	Additional Pedestrian	Additional Bike riders
Wilcock Street and Hope Road	46	17
Millington Street and Hope Road	41	11
Links Road and Drumfern Street	52	22
Links Road and Alexander Road	40	21

Vehicle volumes and speeds

Vehicle volumes declined at the two sites along Links Road.

- Vehicle volumes significantly decreased at the two sites along Links Road, adjacent to Ardross Primary School and Applecross Senior High School.
- Vehicle volumes have remained similar along Millington Street, and an increase in the number of vehicle volumes was observed at Collier Street between Drew Road and Millington Street.

A large reduction in (85th percentile) vehicle speeds was observed across all comparable sites along the route.

- The 85th percentile vehicle speeds were reduced at all sites, suggesting the current treatments, including parking nibs, road humps and narrowed road with red asphalt are contributing to reduced vehicle speeds.
- Two out of the four sites achieved an 85th percentile speed of 37km/hr or below. Prior to construction this had not occurred at any of the sites.
- Vehicle speeds could be further reduced along Links Road between Drumfern Street and Alexander Road nearing the Ardross Primary school to achieve the target of 37km/hr.

Daily average vehicle volumes (number of vehicles)

Comparable sites	Pre-construction	Post-construction
Millington Street: Between Hope Road and Collier Street	225	231
Collier Street: Between Drew Road and Millington Street	313	392
Links Road: Between Drumfern Street and Alexander Road	1034	834
Links Road: Between Alexander Road and Almondbury Street	1161	1022

Daily average (85th percentile) vehicle speeds

Comparable sites	Pre-construction	Post-construction
Millington Street: Between Hope Road and Collier Street	49 km/hr	38 km/hr
Collier Street: Between Drew Road and Millington Street	39 km/hr	37 km/hr
Links Road: Between Drumfern Street and Alexander Road	52 km/hr	42 km/hr
Links Road: Between Alexander Road and Almondbury Street	55 km/hr	37 km/hr

SUMMARY

- It is worth noting the 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 speed data with large reductions in the 85th percentile vehicle speeds, and in the increase in the number of pedestrian and bike riders using the route.
- Where vehicle speeds are still well above the recommended target between Drumfern Street and Alexander Road, further treatments may need to be considered to further reduce 85th percentile speeds. However, it would be worth reassessing activity after a settling period once awareness and usage of the route grows.
- Activation through events or community engagement activities could encourage normalisation and community ownership of the Melville Safe Active Street, which may result in further growth of walking, running or bike riding along the route. Events or activities could be targeted for weekday bike riding or encouraging more children to utilise the safe active street to ride to school.
- The community perception data will help to ascertain the breadth and depth of positive or negative community sentiment for the Melville Safe Active Street.
- The Safe Active Street 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 Street Program can be found on the DoT website: www.transport.wa.gov.au

APPENDIX

Chart 1

Average weekday and weekend pedestrian activity

Pre and post construction (raw counts)

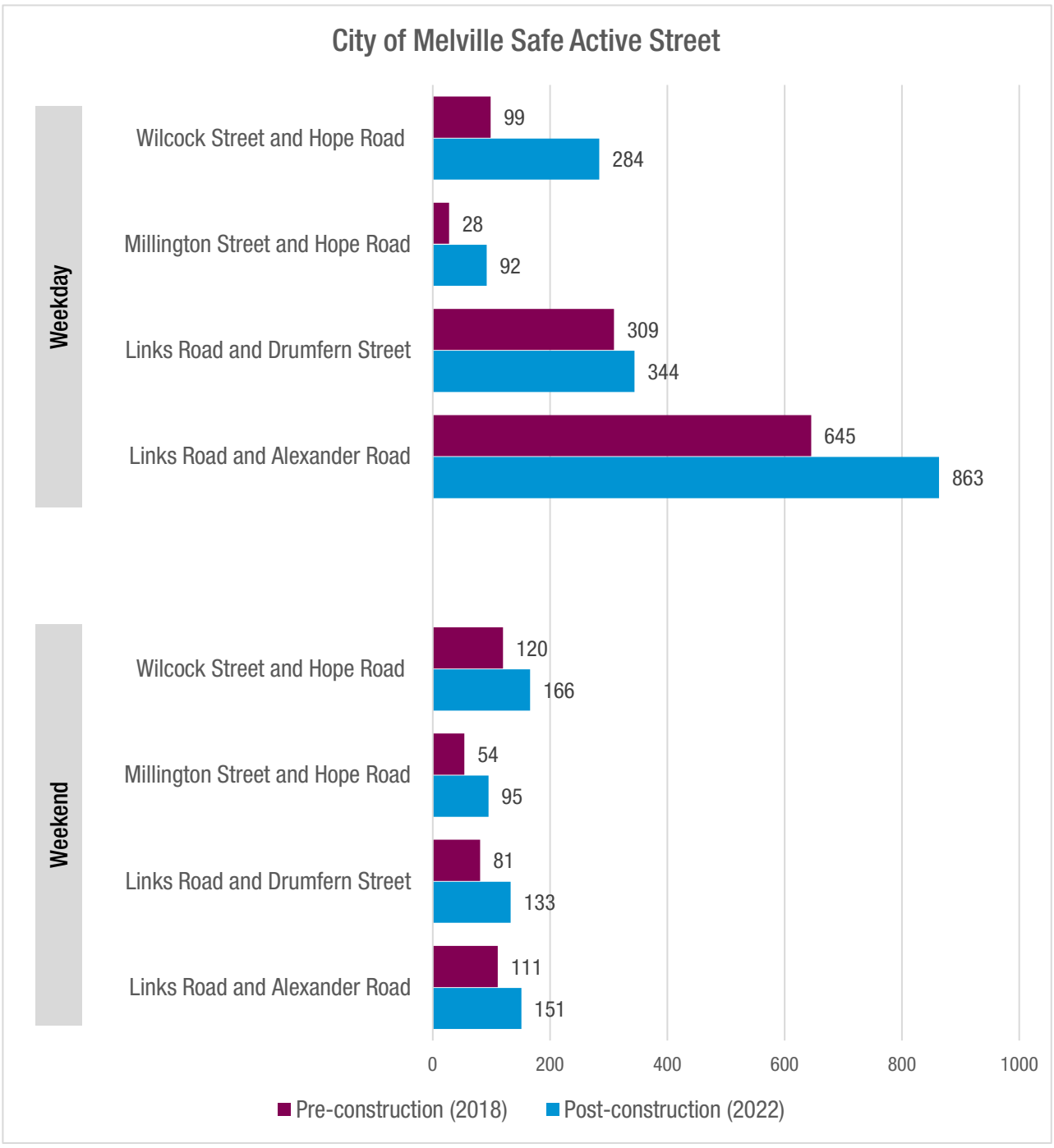


Chart 2

Average weekday and weekend bike riding activity

Pre and post construction (raw counts)

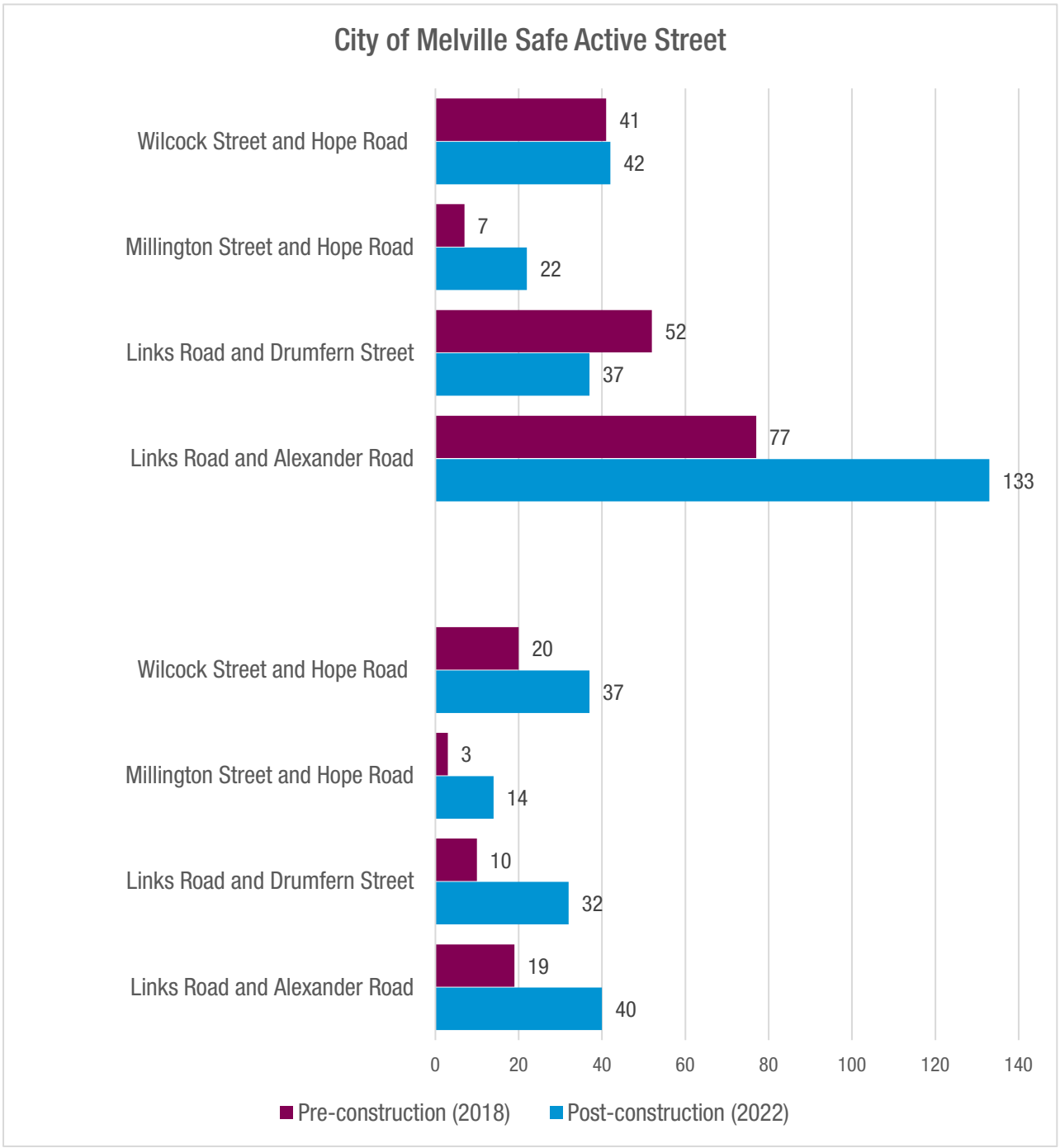


Chart 3

Daily average vehicle volumes

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

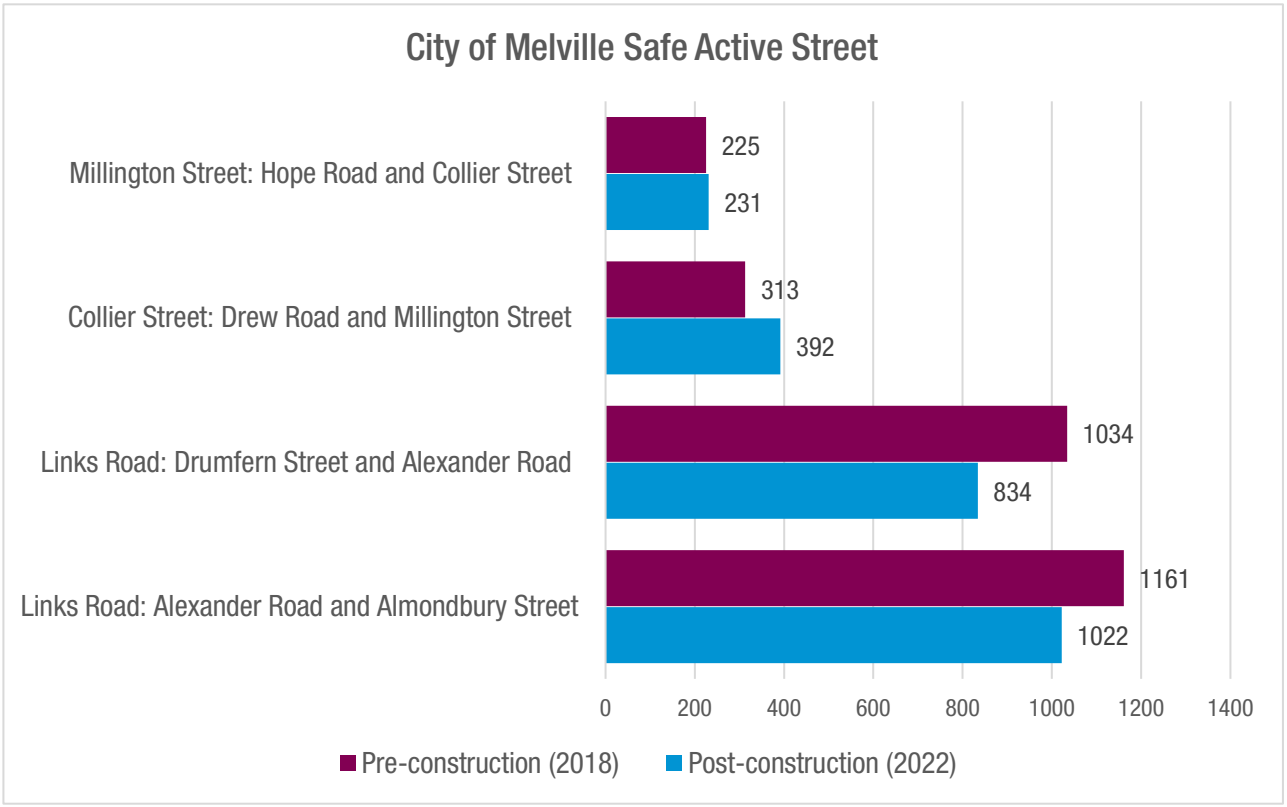
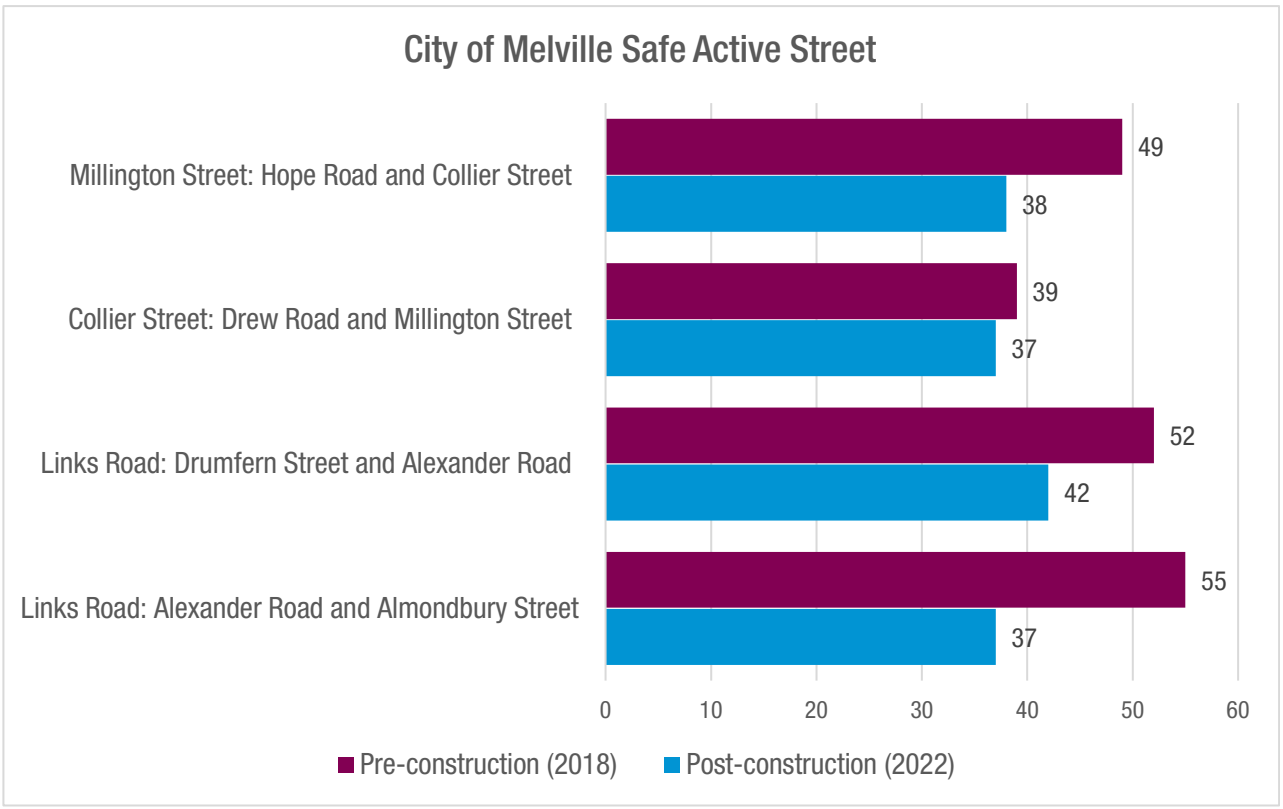


Chart 4

Daily average vehicle speeds

85th percentile speeds pre and post construction (across both weekdays and weekends)



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