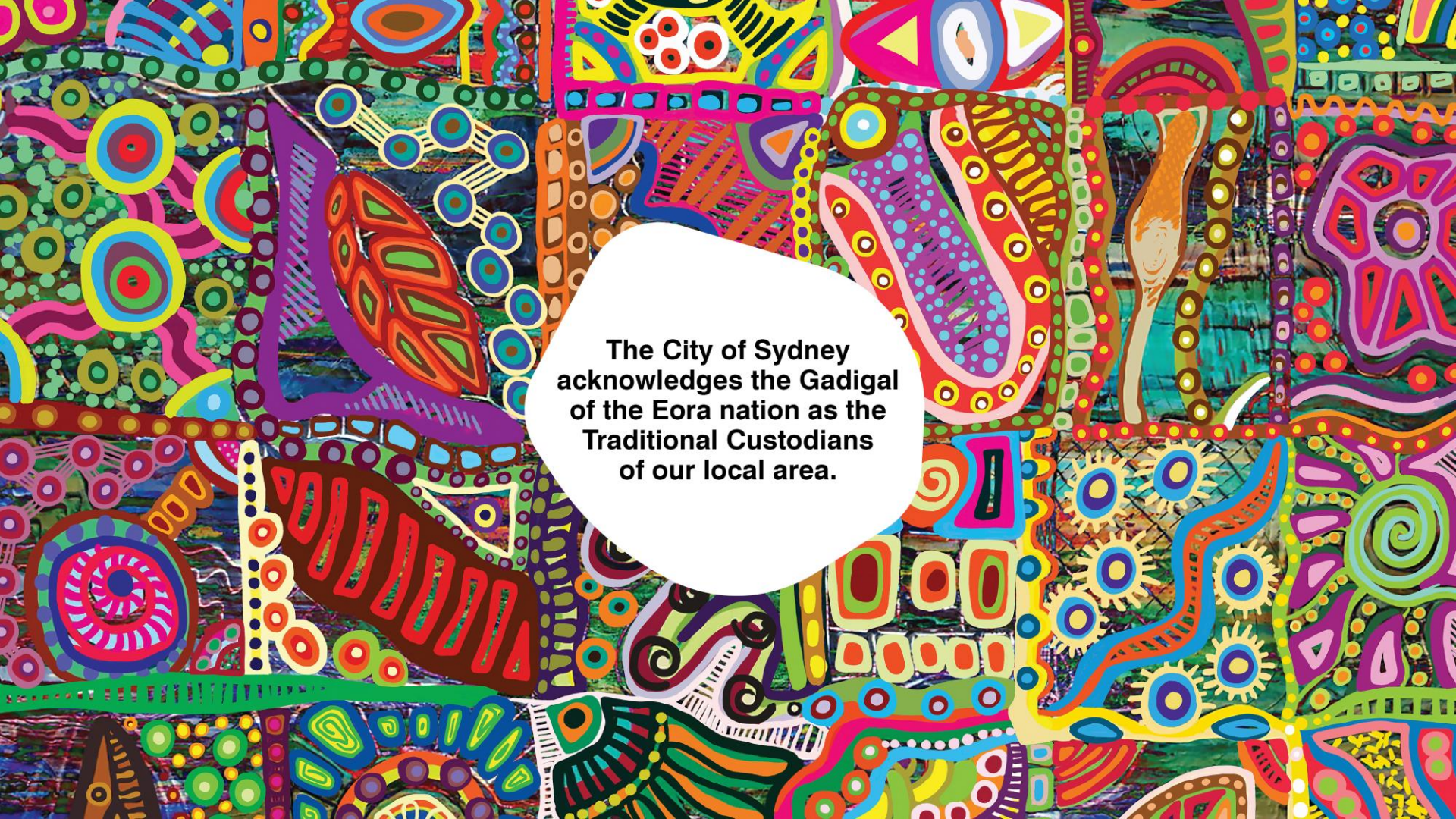


# Safe Speeds

The role of speed reduction and lower speed limits in reducing road trauma

August 19 AITPM



**The City of Sydney  
acknowledges the Gadigal  
of the Eora nation as the  
Traditional Custodians  
of our local area.**

# Agenda

1. Road trauma trends
2. Road Safety Strategies
3. Supporting evidence
4. Implementing the NSW Government Road Safety Strategy
5. Implementing the City's Road Safety Strategy
6. Conclusions



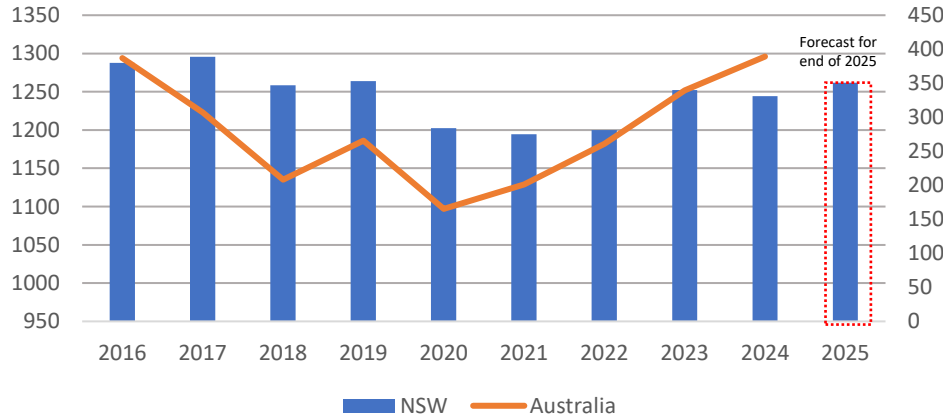
A photograph of a person wearing a white bucket hat and a dark jacket, carrying a green shopping bag, walking across a zebra crossing. In the background, there is a line of cars waiting at a traffic light, and a white truck is parked on the right side of the road. The scene is set on a city street with trees and buildings in the distance.

# Road Trauma: trends

# Australian and NSW Road trauma trends are not decreasing

Road trauma is trending upwards

Road deaths 2016-2024



## Road safety profile of NSW

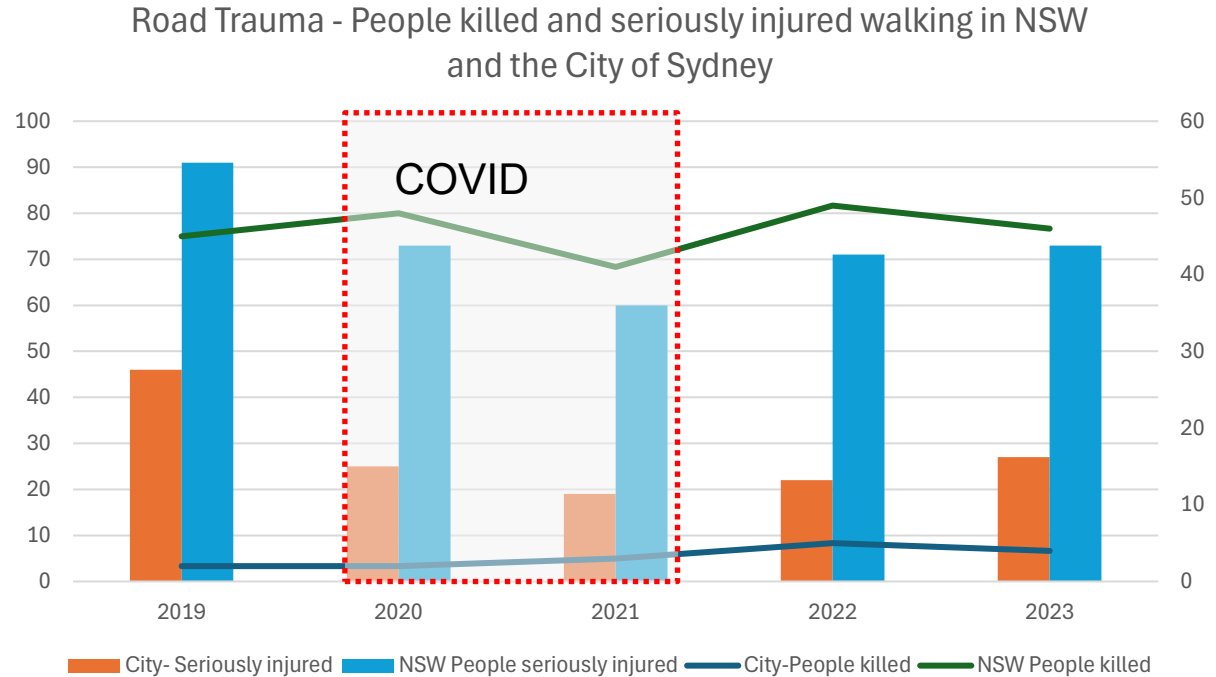
- 340 Fatalities
- 10695 serious injuries
- 26% of all serious injuries across Australia



# NSW and City of Sydney road trauma trends

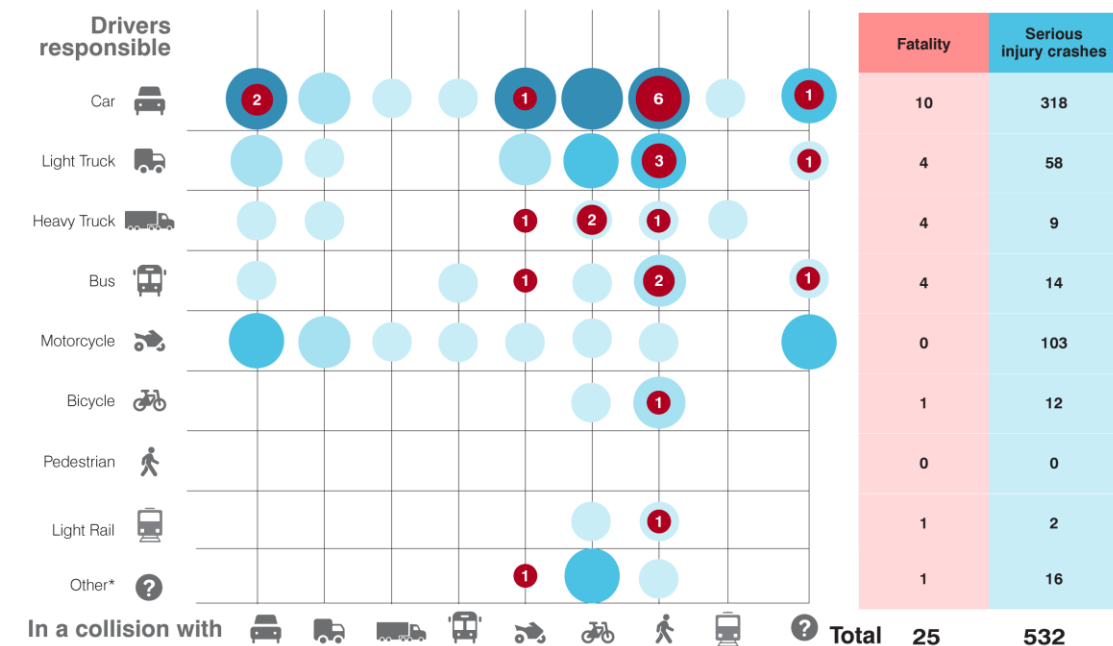
## People walking

- Road Trauma numbers have flatlined over the past 5 years
- More people walking are killed in the City of Sydney than any other LGA in NSW
- City has the second highest number of walking serious injuries in the NSW (After Canterbury Bankstown)



# Road trauma in the City of Sydney

Fatal and serious injury crashes in the City of Sydney LGA (2019-2023)

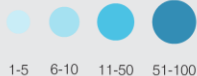


- People walking and riding are being killed by cars, trucks and buses
- Road trauma is the biggest killer of children
- Road trauma is preventable

Number of crashes involving fatalities



Number of serious injury crashes



Other\*: Unknown or other motor vehicle  
Source: SSA from TFNSW





# Road Safety Strategy in Australian, NSW and the City of Sydney

• Insert subtitle



# National Road Safety Strategy



Australian Government target by 2030 is to reduce fatalities by at least 50 % serious injuries by at least 30 %.



Zero deaths  
in city CBD  
areas

Zero deaths of children  
7-years and under



THEMES

Movement and Place



Zero deaths on all  
national highways and on  
high-speed roads covering  
80% of travel across the  
network



# NSW Road Safety Strategy

By 2030 reduce fatal injuries by 50% and serious injuries by 30%

Safe systems approach:

- **Safer roads** - significant investment in building “safer” roads
- **Safer people** – investment in road safety campaigns, training, road rules and Council Road safety officers
- **Safer vehicles** – ongoing research into safer vehicles and regulation of vehicles
- **Safe speeds** – speed zones reviewed consistent with speed zone guideline.



# NSW Government AusRAP risk assessment


## State Roads : 80% of State Roads rated 3 or more stars

### 1 & 2 Star Roads

☆☆☆☆☆☆

**Example One - Curving 100km/h low standard rural road**

Star Rating	Crash Risk
☆☆☆☆☆☆	Crashes likely to have very severe outcomes. More crashes relative to traffic volume.



**Roadside hazards:** Roadside trees and poles present a risk of severe impact

**Road road curvature:** Increased risk of lane departure (especially when curve is unexpected)

**Narrow lane width:** Road users have little space before leaving their lane

**Narrow shoulder:** Road user has little time to correct an error


**Speed management:** Higher speed increases crash likelihood and severity

### 3 Star Roads

★★★★☆☆

**Example Three - Medium standard divided semi-rural road**

Star Rating	Crash Risk
★★★★☆☆	Occasional crashes with very severe outcomes. Some crashes relative to traffic volume.



**Roadside hazards:** Roadside objects present a risk of severe impact or rollover

**Divided carriageway:** Risk of head-on collision is reduced (onset vehicles not contained)

**Good lane width:** Road users have a good amount of space to move within their lane

**Good delineation:** Audio tactile line marking alerts drivers and riders to lane departure


**Speed management:** Higher speed increases crash likelihood and severity

### 5 Star Roads

★★★★★★

**Example Five - High standard divided motorway**

Star Rating	Crash Risk
★★★★★★	Majority of crashes have less severe outcomes. Few crashes relative to traffic volume.



**Divided carriageway:** Risk of head-on collision is adequately mitigated

**Good road surface:** Smooth and high-grip surface helps drivers and riders keep control

**Wide shoulder:** Road user has time to correct an error before impacting a protective barrier

**Good lane width:** Road users have a good amount of space to move within their lane


**Roadside hazard:** Carriageway is contained so vehicles can't impact roadside hazards

### 1 & 2 Star Roads

★★★★☆☆

**Example Two - Low standard suburban arterial road**

Star Rating	Crash Risk
★★★★☆☆	Crashes likely to have severe outcomes. More crashes relative to traffic volume.



**Roadside hazards:** Roadside trees and poles present a risk of severe impact

**Intersection:** Turning vehicles are not protected from the traffic flow, increasing crash risk

**Medium lane width:** Road users have some space to move within their lane

**Adequate delineation:** Line marking present but degraded


**Speed management:** High for likely crash types that may result in serious injuries

### 3 Star Roads

★★★★☆☆

**Example Four - Medium standard connector road**

Star Rating	Crash Risk
★★★★☆☆	Occasional crashes with severe outcomes. Some crashes relative to traffic volume.



**Roadside hazards:** Roadside objects present a risk of severe impact

**Good delineation:** Audio tactile line marking alerts drivers to lane departure

**Good lane width:** Road users have a good amount of space to move within their lane

**Medium shoulder:** Road user has some time to correct an error


**Speed management:** Lower speed limit to improve safety

### 5 Star Roads

★★★★★★

**Example Six - High standard suburban arterial road**

Star Rating	Crash Risk
★★★★★★	Majority of crashes have less severe outcomes. Few crashes relative to traffic volume.



**Roadside hazard:** Hazards exist but with a lower speed limit they present lower risk of injury

**Good delineation:** Signage and line marking support road users to identify the raised pedestrian crossing

**Pedestrian crossing:** A raised platform crossing supported with fencing to channel pedestrians

**Separated bicycle lanes:** Separation of cyclists to vehicles

**Speed management:** Lower speed limit will improve safety

NSW Government is using the AusRap risk assessment framework to understand performance of the state road network



# City of Sydney Strategy

## Community Strategic Plan Vision: *a city for walking, cycling and public transport*



### 2050 Outcomes

**5.3** More people walk more, because walking is the most attractive and convenient choice for short trips in the local area

**5.4** More people ride more, because it is an attractive, convenient and safe option for everyday transport

### Action 15: Reducing vehicle speeds

*The City will continue to work with the NSW Government to implement lower speed limits on roads across the City of Sydney. The priority is to have maximum 40km/h limits on all City of Sydney streets as soon as possible. In the city centre and other areas of high people activity, we would seek to reduce vehicle speeds to 30km/h or lower.*



By Mid 2024 the City set 40km/h speed limits on all the roads it controls.

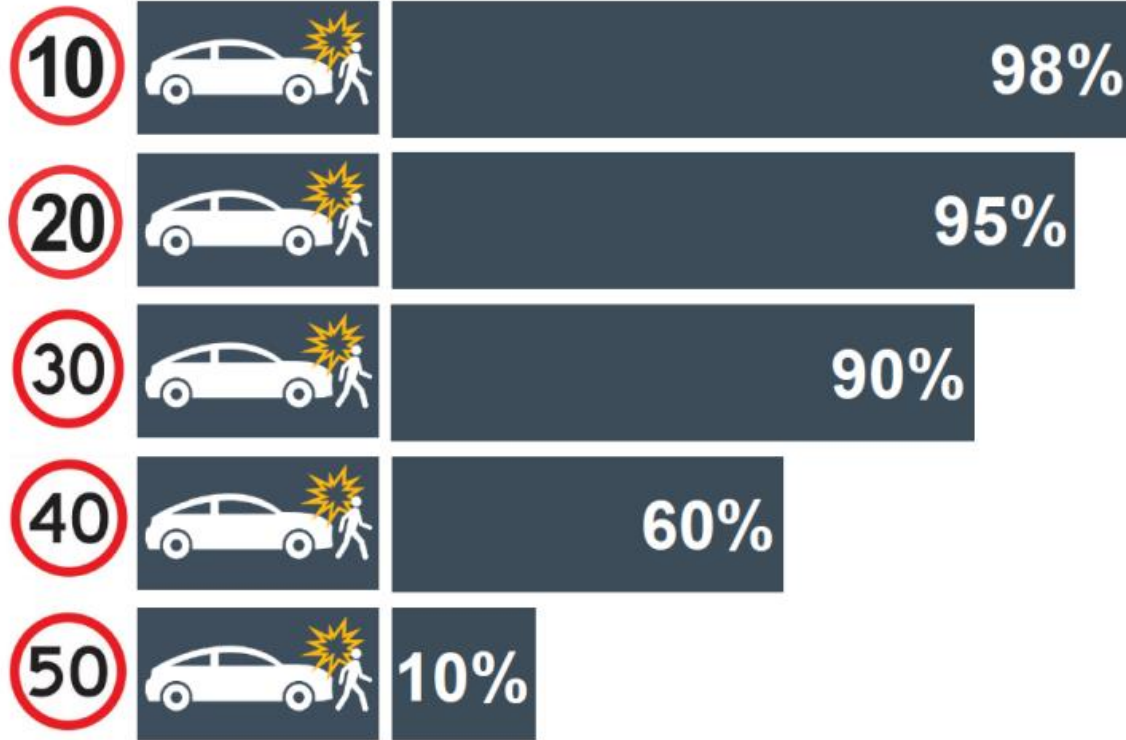
We are seeking TfNSW to set 40 km/h speed limit on all almost all state roads in our LGA (except motorways)



# Supporting evidence for reducing urban speed limits

# Chance of survival for pedestrians hit by a car

(Basic physics also applies to people inside a car)







# Implementing the Australian and NSW Road Safety Strategy

# Australian and NSW Road Safety Strategy

## Australian and NSW Government Investments

### NSW and Australian Government Budget - Road safety

“This Budget continues investing in road safety with **\$731.7 million** in 2025-26 jointly with the Australian Government. This will provide thousands of kilometres of line markings, school safety infrastructure and crash barriers. **\$1.2 Billion** will be spent by NSW Government over 4 years to 28-29.

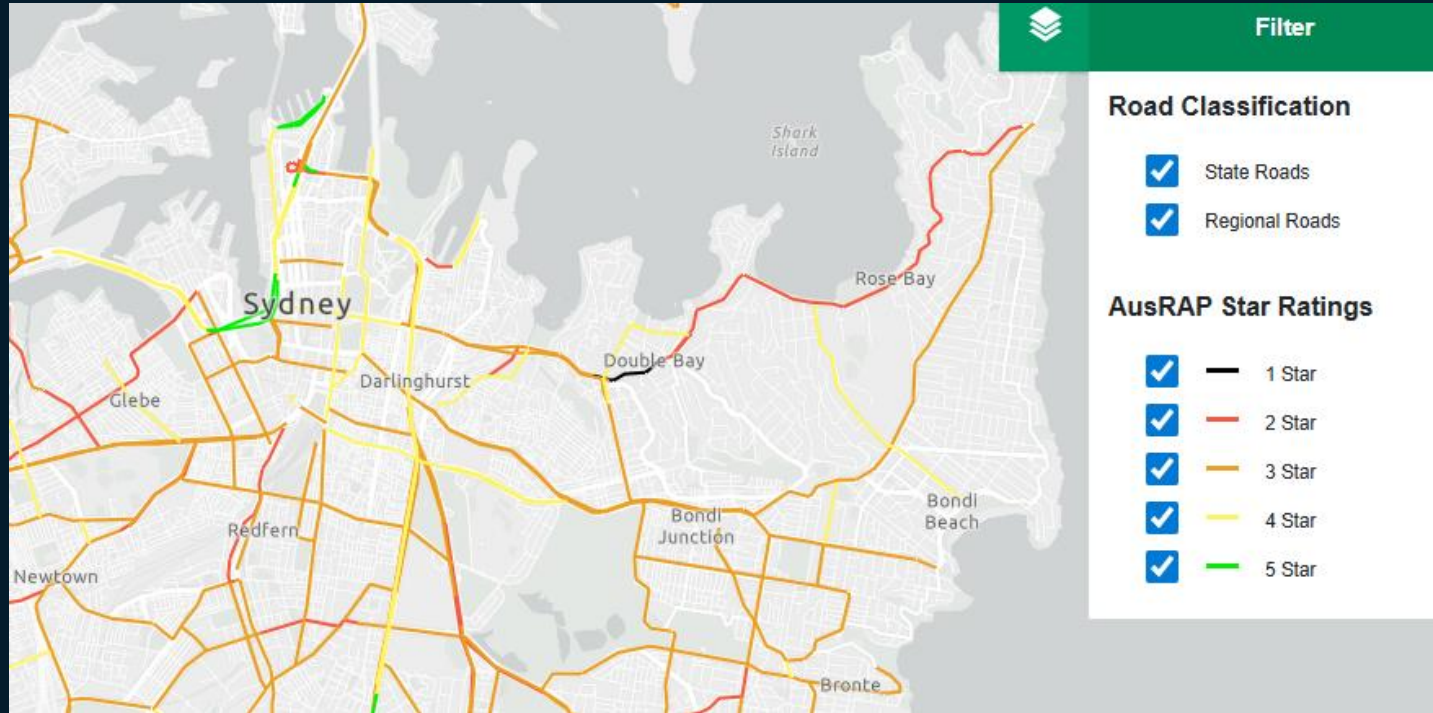
Budget estimates questions revealed:

- The NSW Speed zone review program budget is \$5 million
- TfNSW completed **324 speed zone review** to March 2024/25- **259 in rural areas** and **65 in urban areas**



# NSW Road Safety Strategy - AusRap assessment in the City

AusRap does not reflect road trauma risks for dense urban environments



NSW Government 3 Star AusRAP target has been achieved or exceeded in the City

People walking and riding are still being killed and injured





Implementing the City's road  
safety approach

# Implementing the City's road safety approach

## The City's safe systems approach

- Safer roads : Expensive - some investment Eg: raised pedestrian crossings , separated cycleways.
- Safer vehicles: No control
- Safer people: Limited control, some investment eg: City supports a small behaviour change program through Road Safety officers
- Safer speeds: No control. TfNSW control speed limits on all streets

**City advocates for reducing speed limits on streets because it is the least expense, fastest and most effective way to reduce road trauma – especially for people walking and riding.**

**Councils do not have sufficient funds to solve every road safety problem with a build solution.**



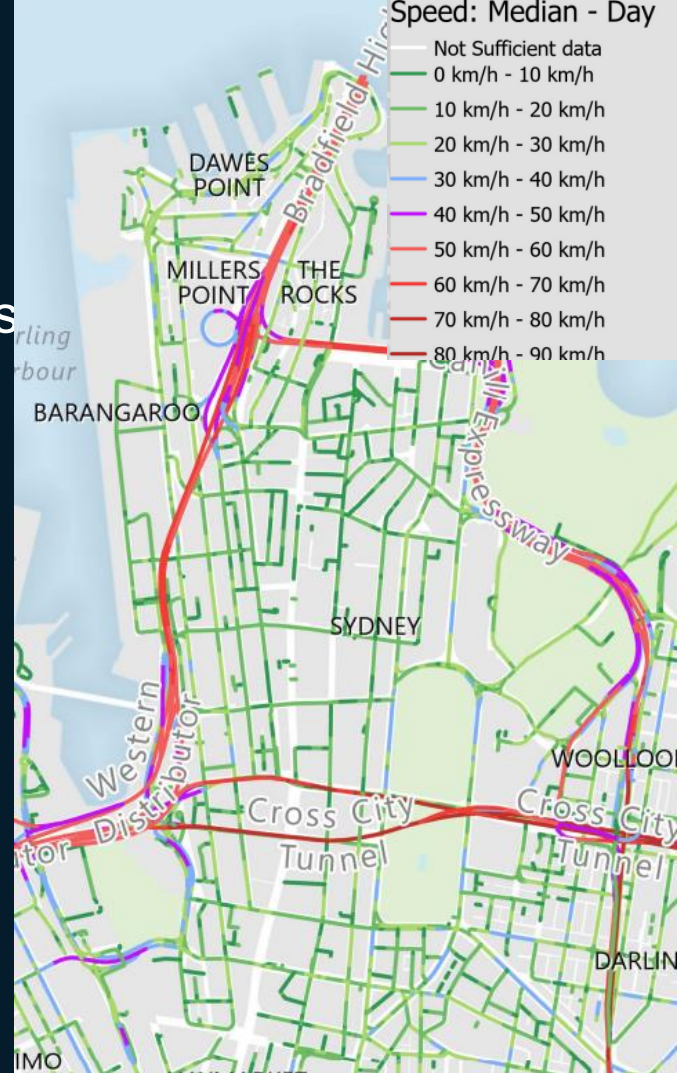
# City approach to implementing a road safety strategy

1. Build evidence about vehicle speed on City streets consistent with NSW speed zone guideline:

- across whole street network
- day, early evening and night speeds
- average and 85% percentile speeds

2. Develop speed maps and assess streets

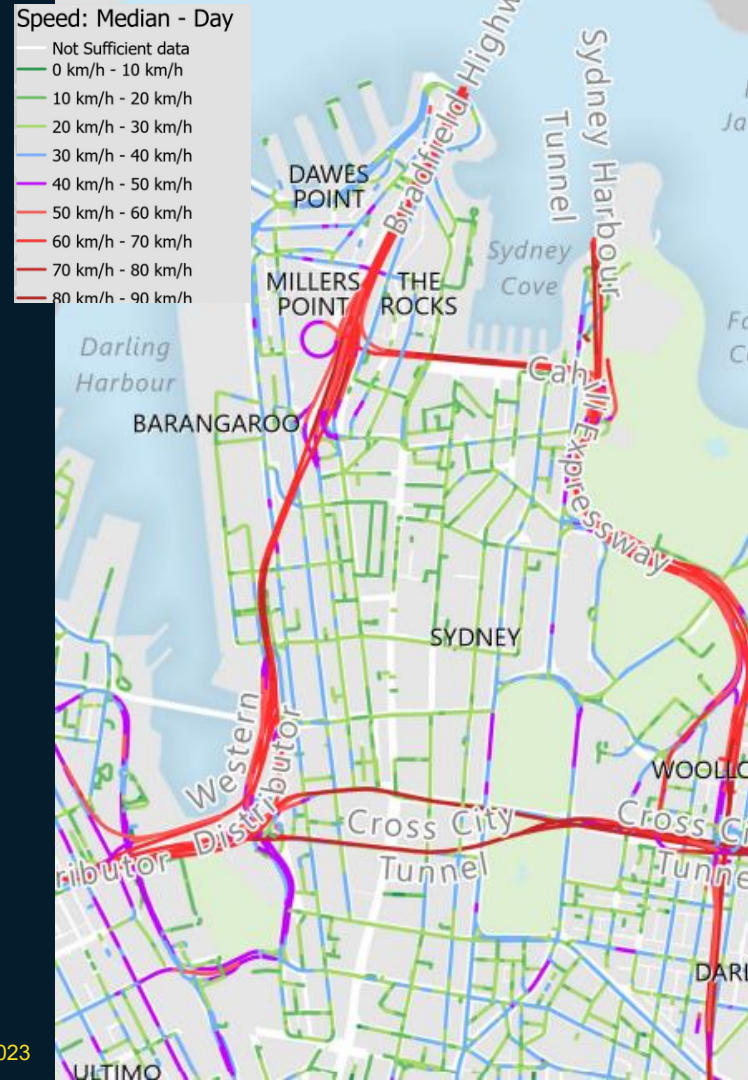
3. Influence TfNSW using evidence to reduce speed limits in CBD, other City centres and places of high pedestrian activity



# Insights from measuring daytime speeds

## 85<sup>th</sup> percentile day (7am – 7pm) speeds

- Analysis of existing vehicle speeds within the Sydney city centre High Pedestrian Activity Area (HPAA) for 2023 show that **the majority of streets within the HPAA currently have vehicle speeds 30km/hr or below.**

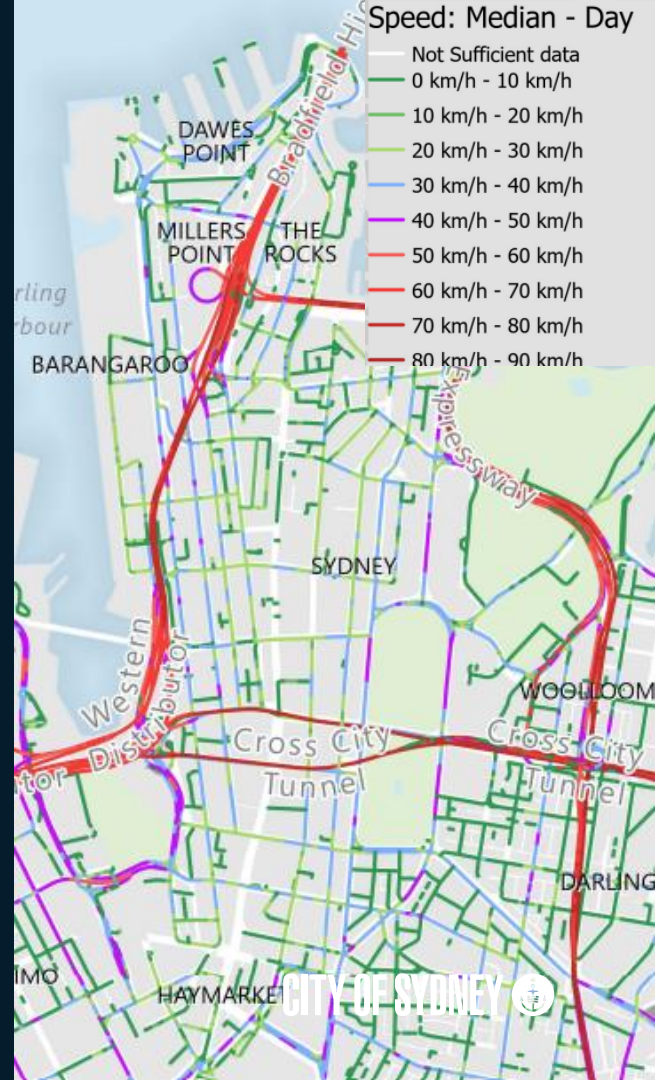




# Insights from measuring evening speed

## 85<sup>th</sup> Percentile evening (8pm–10pm) speeds

- On/off ramps to the Motorways, e.g.: Macquarie Street, show 85<sup>th</sup> percentile vehicles speeds of 40 km/hr to 50 km/hr.
- College Street, Elizabeth Street and Broadway show 40 km/hr to 50 km/hr speeds. These streets are all wide, straight streets, with minimal on street parking, long blocks between signals minimal signage and relatively low volumes of vehicles per lane.
- Wide sections of Sussex Street and Kent Street have pockets of vehicles traveling 40 km/hr to 50 km/hr .
- The median speed on these streets is 40 km/hr or below.



# Conclusions

The City will continue to advocate for lower speed limits in the City centre and on streets with high people activity because:



- Reducing speeds reduces the likelihood of crashes as well as the injury severity. Reducing speed limits is the fastest, most effective and least expensive way to reduce trauma.
- Evaluating street speed is now cost effective and robust
- Lowering speeds limits in City will impact a few vehicles, BUT will have overall benefits for people walking (and riding) by reducing kinetic energy across the whole road system, reducing trauma
- Other Cities have achieved Vision Zero eg: Helsinki, speed limits are 30km/h or less





# Questions ?

