

Absolutely Positively
Wellington City Council

Me Heke Ki Pōneke

Injuries from road crashes in Wellington city 2014-2023

26 September 2024



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Version	Date	Author	Approver
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Summary

- Over the last 10-years (2014-2023), 3986 people were injured in crashes on roads in Wellington city. The social cost¹ of these injuries was \$2.26 billion.
- Annual totals of injuries from road crashes on all roads in Wellington city have remained relatively stable over time, indicating desired improvements for safer streets have not been achieved.
- On average, 79% of injuries from road crashes occurred on city streets managed by the Council, and 21% occurred on state highways managed by the New Zealand Transport Agency.
- Overall, 57% of injuries from road crashes on city streets occurred on arterial streets.
- The reported number of deaths and serious injuries (DSI) have fluctuated over the last 10-years, with considerable decreases in DSIs on state highways from 2018.
- The 5-year rolling average of DSIs on Wellington city's urban street network (all roads) for the 10-year period shows a decrease from 2021. This decrease is in line with the Wellington Regional Land Transport Plan target to reduce DSIs by 40% by 2030.
- On average, over the last 5-year period (2019-2023), vulnerable road users² made up 29% of total injuries from road crashes and 46% of DSIs in Wellington city which shows that vulnerable road users are at more risk than their counterparts.
- Over the past 10-years, people walking or using bikes accounted for 32% of deaths, 43% of serious injuries, and 27% of minor injuries.
- Approximately three quarters of injuries from road crashes involving walkers occurred at intersections. Around two thirds of injuries from road crashes involving bike users occurred at intersections.

¹ Ministry of Transport. (2024): [Social cost of road crashes and injuries 2023 update](#)

² Vulnerable road users are defined by Crash Analysis System categories as pedestrians, wheeled pedestrians (wheelchairs, mobility scooters), and users of bikes, skateboards, and in-line skates.

Introduction

Providing safe streets is essential to make a transport network where even the most vulnerable road users³ feel safe and can confidently engage in activities like walking and biking to enhance their overall wellbeing and lifestyle. New Zealand's road safety strategy 2020-2030 (Road to Zero) has a vision for “a New Zealand where no one is killed or seriously injured in road crashes. This means that no death or serious injury while travelling on our roads is acceptable”.⁴

New Zealand experiences an alarming average of one fatality per day and one injury every hour on its roads, leading to profound and unacceptable repercussions for families, survivors, communities, and various sectors such as the economy and health system. This road toll is high compared to other developed countries, indicating the need for improvement. For example, in 2017, New Zealand had 7.9 road fatalities per 100,000 population, compared to 5 road fatalities for Australia and 2 for Norway (a country with a similar road network and population to New Zealand).⁵

This report primarily uses data from the New Zealand Transport Agency – Waka Kotahi's Crash Analysis System (CAS) to analyse and highlight trends in injuries from road crashes in Wellington city. Data is reported using calendar years 2014 to 2023. The analyses examine:

- total injuries from road crashes, categorised as fatal, serious, and minor injuries,
- social cost of injuries from road crashes,
- crash locations, reported separately for state highways, city streets (local roads), and arterial streets,
- injuries from road crashes for vulnerable road users, classified as pedestrians, wheeled pedestrians (wheelchairs, mobility scooters), and bike users, skateboards, and in-line skates, and
- injuries from road crashes that occurred at intersections, in wet conditions, and in dark conditions.

City context

Wellington, the capital city of New Zealand has an estimated population of 216,000 in 2023. Wellington city is expected to gain between 50,000 and 80,000 more residents by 2043, with the biggest share of this growth occurring in the central city⁶. Alongside this population growth, the city is also expected to see sustained growth in employment over the next 30 years, with operating as the primary employment centre for the wider region. This means that the city's transport network will need to accommodate thousands more people every day.

³ Vulnerable road users are defined by Crash Analysis System categories as pedestrians, wheeled pedestrians (wheelchairs, mobility scooters), and users of bikes, skateboards, and in-line skates.

⁴ New Zealand government. (2019). Road to Zero. New Zealand's Road Safety Strategy 2020-2030. https://www.transport.govt.nz/assets/Uploads/Report/Road-to-Zero-strategy_final.pdf

⁵ New Zealand government. (2019). Road to Zero. New Zealand's Road Safety Strategy 2020-2030. https://www.transport.govt.nz/assets/Uploads/Report/Road-to-Zero-strategy_final.pdf

⁶ Sense Partners. (2021): [Data downloads \(sensepartners.nz\)](https://www.sensepartners.nz/data-downloads)

Over the last decade (2014-2023), Wellington city has experienced an average annual employment growth of 2.1%.⁷ This average annual growth rate captures the downturn in employment growth over the 2020/21 period due in part to the COVID-19 pandemic restrictions. In 2023, employment growth in Wellington city was 3.8%, which was higher than in New Zealand (2.4%). Relative to the rest of New Zealand, Wellington city has a large proportion of public administration, safety, professional, scientific, and technical services workers (37.1%, compared to 14.1% nationally).

The amount of driving per person each year gives insight into trends in travel patterns, as well as the likely impact of future population growth on total travel demand.

Figure 1 shows trends in Vehicle Kilometres Travelled (VKT) per capita on all roads for Wellington city. In Wellington city, VKT per capita decreased by 10% between 2013/14 and 2022/23, while national VKT per capita (excluding Wellington city) remained steady over the same period (0.9% increase).

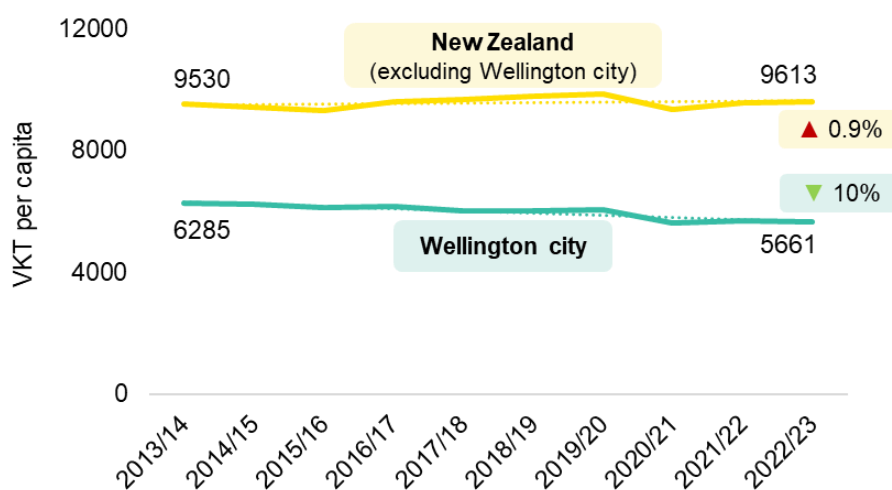


Figure 1. VKT per capita on Wellington city and New Zealand roads (city streets and state highways) since 2013/14.

Nearly 4000 people harmed resulting in a social cost over \$2000 million

There were **3986** reported injuries from crashes on Wellington city’s urban street network (all roads⁸) in the past 10-years (Table 1), resulting in a total social cost of **\$2261 million** (Table 2).

Table 1. Injuries from road crashes by severity in Wellington city, 2014 to 2023

	Fatal	Serious Injuries	Minor Injuries	Total
All roads	34	644	3308	3986
City Streets	22	511	2610	3143
State Highways	12	133	698	843

⁷ Infometrics. (2023): [Regional Economic Profile | Wellington City | Employment growth \(infometrics.co.nz\)](https://www.infometrics.co.nz/)

⁸ All roads include both city streets and state highways.

The average social cost per reported injury is taken from the most recent update from the Ministry of Transport in April 2024⁹ as shown in Table 2.

Table 2. Social cost of injuries from road crashes in Wellington city, 2014 to 2023

Injury Scale	Total Injuries	Social Cost Per Injury (\$)	Total Cost (\$)
Fatal	34	\$14,265,600	\$485,030,400
Serious Injuries	644	\$1,452,300	\$935,281,200
Minor Injuries	3308	\$254,300	\$841,224,400
Total Social Cost			\$2,261,536,000

In Wellington city, the reported annual number of injuries from road crashes on **all roads** fluctuated over the last 10-years with a slight decrease from 2018 (Figure 2).

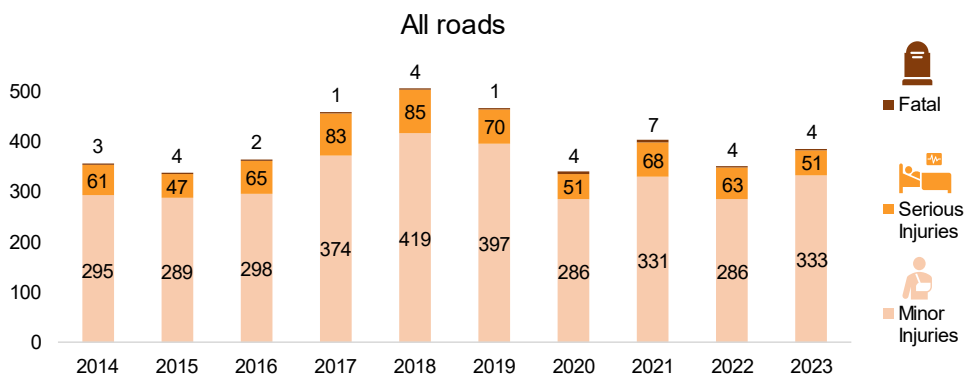


Figure 2. Annual number of injuries from road crashes in Wellington city (all roads), 2014 to 2023 (Source: CAS).

On average, between 2014 and 2023, 79% of injuries from road crashes occurred on city streets (Figure 3) and 21% occurred on state highways (Figure 4). City streets fall under Wellington City Council’s jurisdiction and offer the greatest potential for safety improvements.

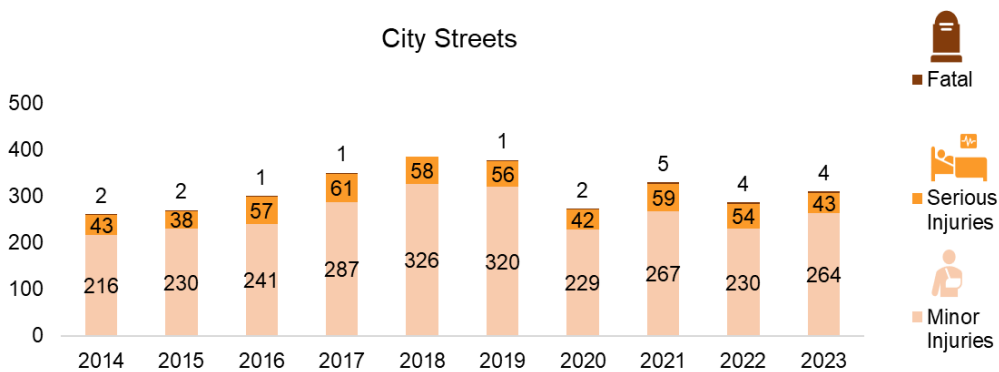


Figure 3. Annual number of injuries from road crashes on city streets in Wellington city, 2013 to 2022 (Source: CAS).

⁹ Ministry of Transport. (2024): [Social cost of road crashes and injuries 2023 update](#)

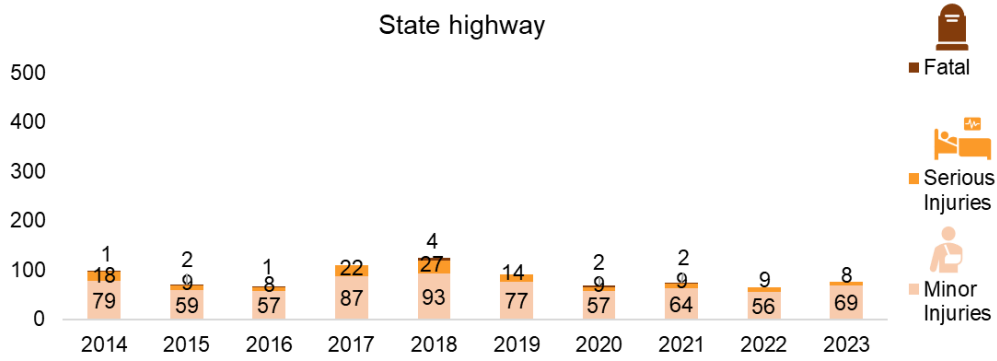


Figure 4. Annual number of injuries from road crashes on state highway in Wellington city, 2013 to 2022 (Source: CAS).

Mapping places where people were hurt

In Wellington city, injuries from road crashes between 2014 and 2023 occurred throughout the city's street network (Figure 5 and Figure 6).

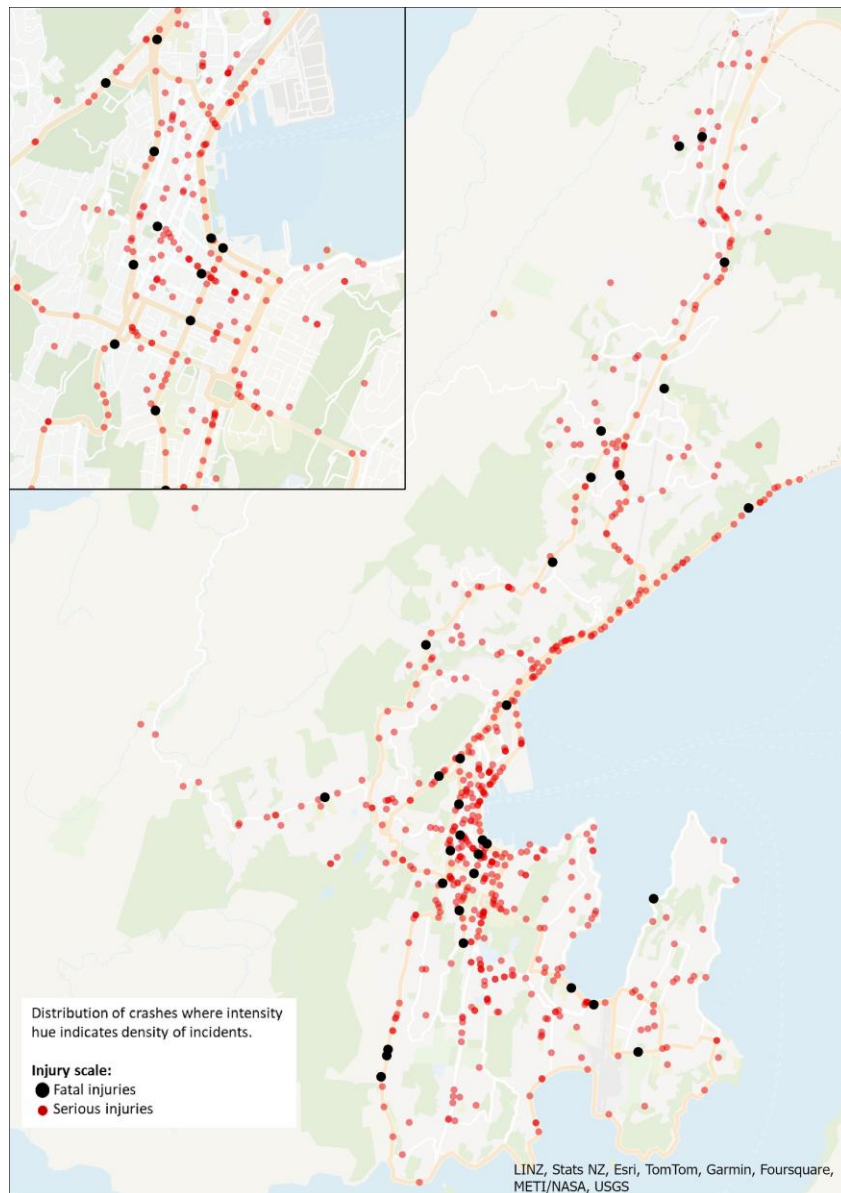


Figure 5. Location of deaths and serious injuries from road crashes in Wellington city, 2014 to 2023 (Source: CAS).

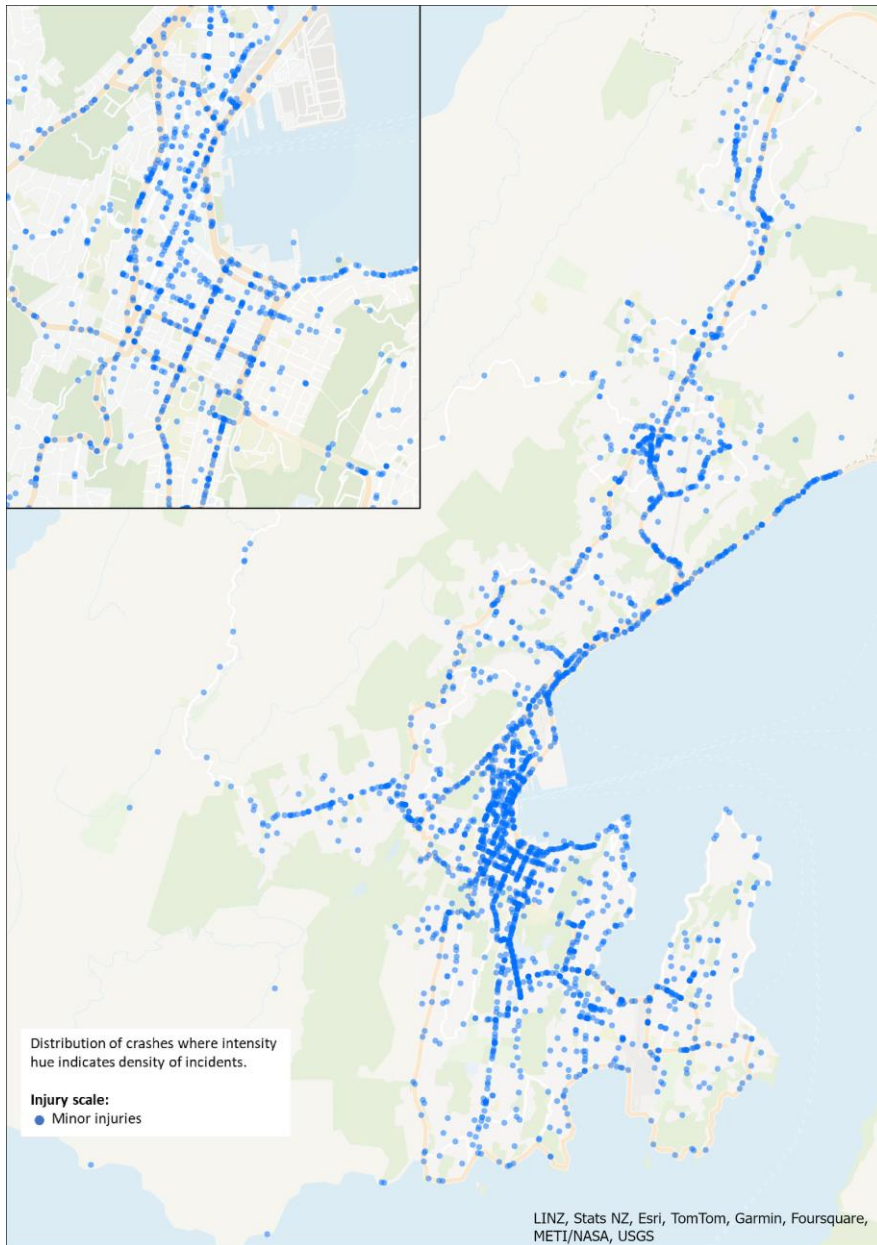


Figure 6. Location of minor injuries from road crashes in Wellington city, 2014 to 2023 (Source: CAS)

Injuries on busy city streets

Figure 7 shows the reported number of injuries from crashes that occurred on all city streets (including arterial streets¹⁰ in the city) and only on arterial streets in the city (excluding arterial streets on state highways). For 2019 to 2023, 57% of injuries on city streets occurred on arterial streets.

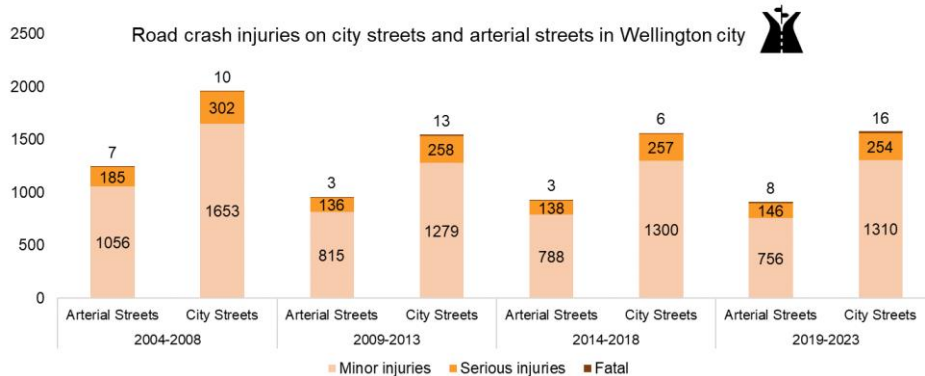


Figure 7. Number of injuries on arterial streets and city streets in Wellington city, five-year intervals from 2004 to 2023 (Source: CAS).

Figure 9 shows the distribution of crashes on arterial streets in Wellington city (excluding arterial streets on state highways) for the 10 years between 2014-2023. As reported by the Te Ringa Maimoa (Transport Insights) dashboard¹¹, over the 2018/19 to 2022/23 period, 62% of deaths and serious injuries (DSIs) on urban roads occurred on arterial streets (Figure 10).

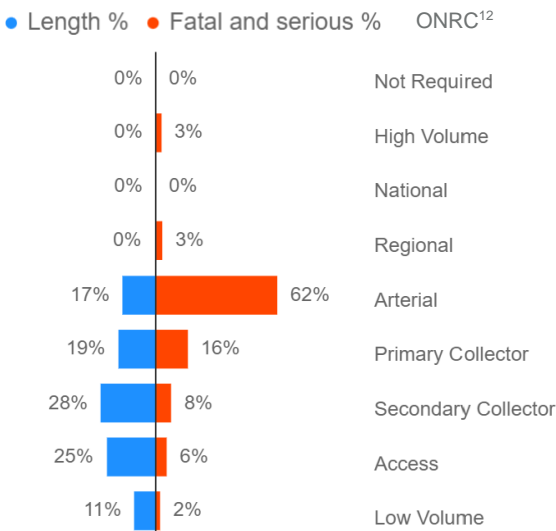


Figure 9. The distribution of DSIs on Wellington city urban roads (One Network Road Classification) between 2018/19-2022/23. Source: Te Ringa Maimoa (Transport Insights)

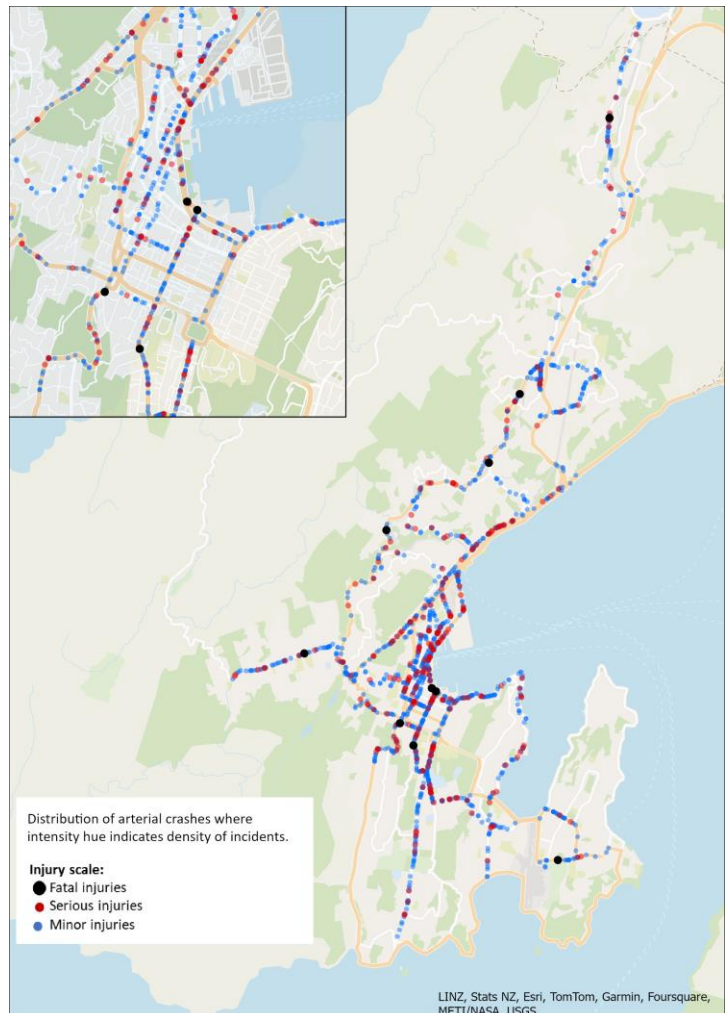


Figure 8. Locations of crashes on Arterial Streets in Wellington city (excluding state highways) (Source: CAS)

¹⁰ Arterial Street used in this report is the “Arterial Urban” identifier in the CAS database and excludes state highways.

¹¹ Te Ringa Maimoa (Transport Insights). (2023): [Transport Insights - Road Efficiency Group Te Ringa Maimoa](#)

¹² NZTA Waka Kotahi: [One Network Road Classification](#)

Deaths and serious injuries (DSIs)

In Wellington city, the reported number of DSIs have fluctuated over the past two decades (Figure 10). The number of DSIs in Wellington city was highest in 2008 and lowest in 2013. The 55 DSIs recorded in 2023 are in line with the long-run annual average DSIs since 2003.

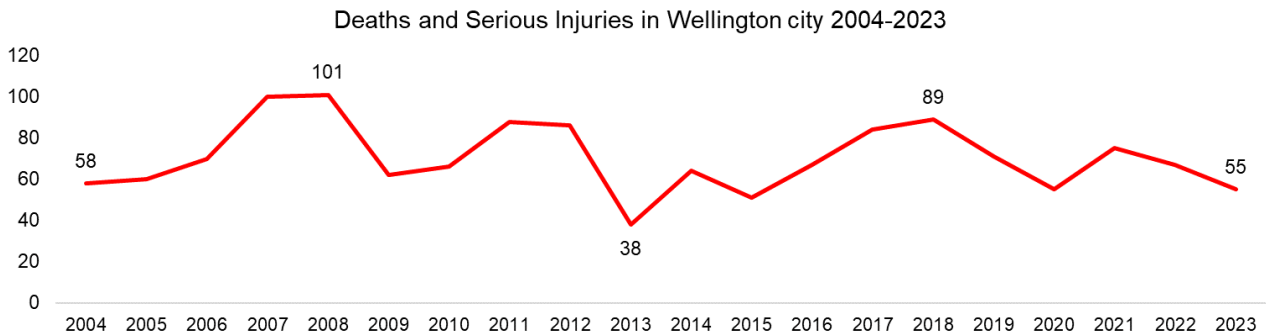


Figure 10. Deaths and serious injuries from road crashes in Wellington city (Source: CAS).

The proportion of crashes on city streets that resulted in DSIs has been increasing since 2018 but dropped back to 15% in 2023 (Figure 11). The proportion of DSIs on state highways decreased over the same period to a record low of 10%.

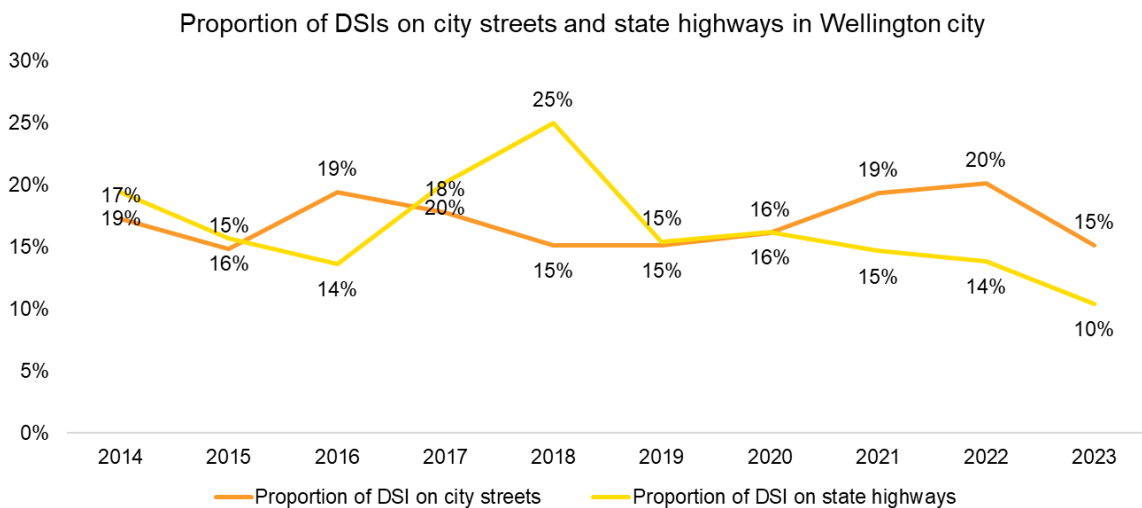


Figure 11. Proportion of DSIs from road crashes on city streets and state highways in Wellington city (Source: CAS).

Due to the relatively small number of DSIs occurring annually, a five-year rolling average of DSIs on Wellington city’s urban road network (all roads) for a 10-year period is considered. A five-year average smooths out annual fluctuations and reveals long-term trends.

The five-year rolling average increased from 2017 to 2021 and decreased slightly in 2022 and 2023 (Figure 12). The Wellington Regional Land Transport Plan (RLTP) 2021 has a headline target to reduce DSIs by 40% by 2030. For Wellington city, this means reducing the five-year rolling average of **75 DSIs in 2021** to **45 DSIs by 2030**. The number of DSIs in 2023 is in line with sought after safety improvements.

Deaths and Serious Injuries
Wellington city, 5-Year Rolling Average

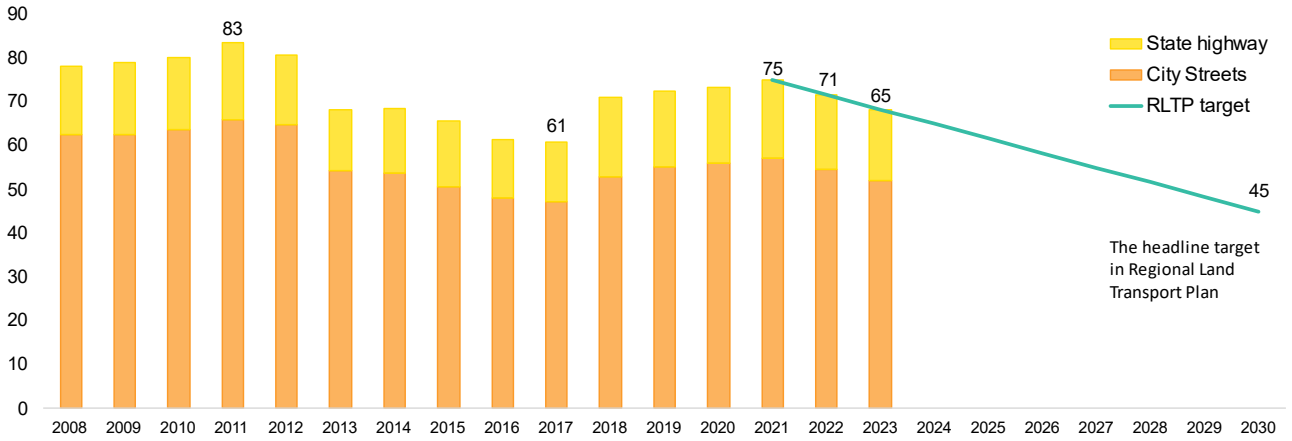


Figure 12. Five-year rolling average of deaths and serious injuries from road crashes in Wellington city (Source: CAS).

Note: The year presented on the x-axis is an average of the previous five years (e.g., 2008 displays the average number of DSIs that occurred in 2004 to 2008).



People walking and biking are overrepresented

While the total number of injuries from road crashes and the associated cost reveals an overall problematic safety story, looking at who is injured can help identify what needs to be changed about the transport system. Vulnerable road users are defined by Crash Analysis System categories as pedestrians, wheeled pedestrians (wheelchairs, mobility scooters), and users of bikes, skateboards, and in-line skates.

In the last 10 years (2014-2023), **1224** vulnerable road users were injured in crashes on Wellington city's urban street network (all roads), resulting in:

- **11** deaths,
- **287** serious injuries, and
- **926** minor injuries.

A further breakdown of these numbers can be seen in Appendix 1.

On average, over the last 5-year period (2019-2023), vulnerable road users made up **29%** of total injuries from road crashes and **46%** of DSIs in Wellington city (Figure 14, Figure 14 and Figure 15).

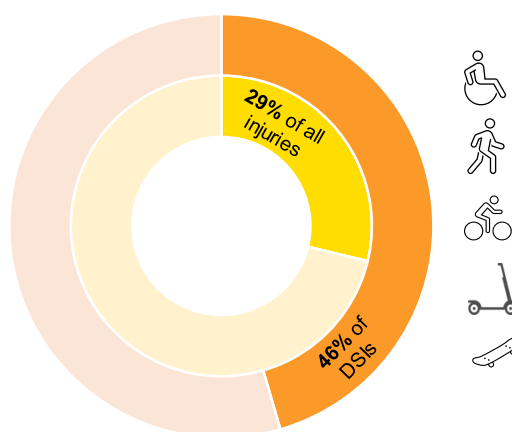


Figure 13. Five-year average proportion of injuries for vulnerable road users (2019-2023)

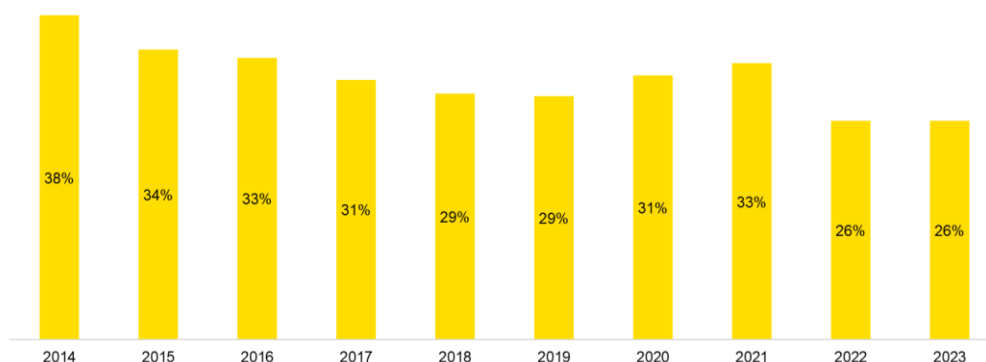


Figure 14. Proportion of injuries from road crashes for vulnerable road users in Wellington city (Source: CAS).

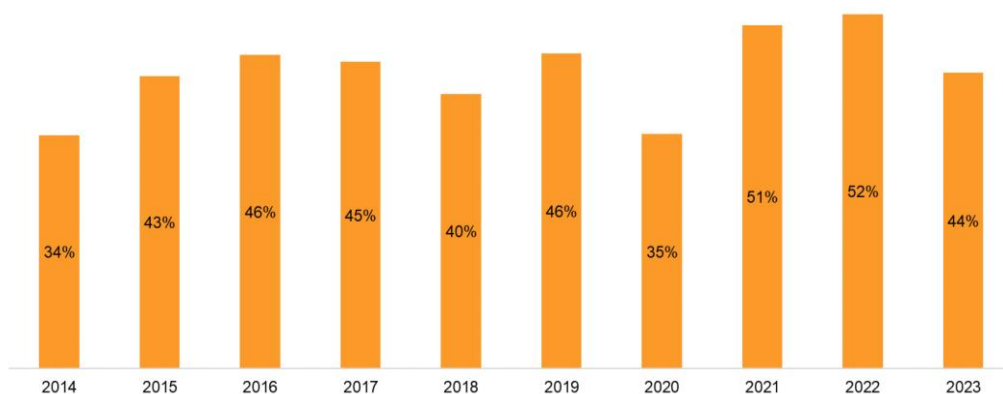


Figure 15. Proportion of DSIs from road crashes for vulnerable road users in Wellington City (Source: CAS).

Analysis of injuries from road crashes on all roads in Wellington city reveals that:

- Over the past decade (2014-2023), a total of 1192 injuries involving walkers and bike users (30% of all injuries from crashes during the same period) were reported from crashes on Wellington city streets and state highways (Figure 16).
- Among all injuries from crashes in Wellington city over the past 10-years (2014 to 2023), walkers and bike users accounted for **32%** of deaths, **43%** of serious injuries, and **27%** of minor injuries.

Injury types	Walkers			Bike users			All users		
	City Streets	State Highways	All roads	City Streets	State Highways	All roads	City Streets	State Highways	All roads
Fatal	7	2	9	1	1	2	22	12	34
Serious Injury	122	10	132	136	10	146	511	133	644
Minor Injury	461	24	485	400	18	418	2610	697	3308

Figure 16. Number of injuries by severity from road crashes on city streets and state highways in Wellington city for walkers and bike users, 2014 to 2023 (Source: CAS).



34 DSIs for older people over 10-years

The proportion of injuries that involved older road users (75 years and older) increased over the last 10 years, with greater increases in the proportion of DSIs compared to all injuries (Figure 17). An exception to these trends is the year 2020 which is likely related to the COVID-19 pandemic restrictions.

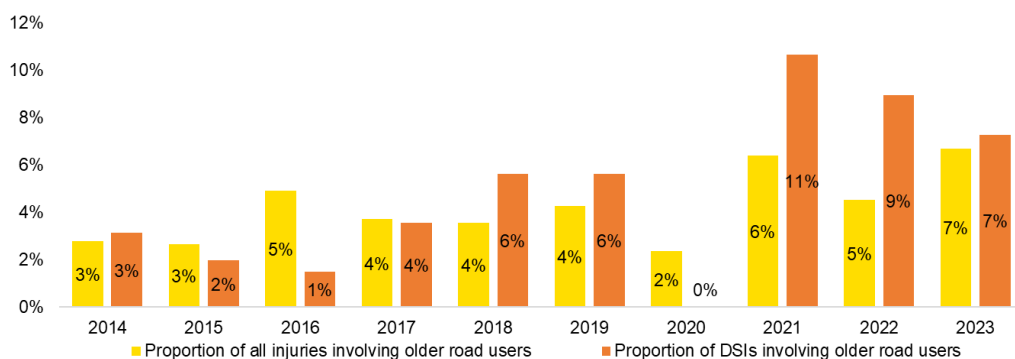


Figure 17. Proportion of injuries on all roads involving older road users, 2014-2023 (Source: CAS).

While there is an increasing trend in the number of DSIs involving older road users over the last 5 years compared to the previous period, the annual numbers are very small, likely to be somewhat variable, and should be interpreted with caution (Figure 18).

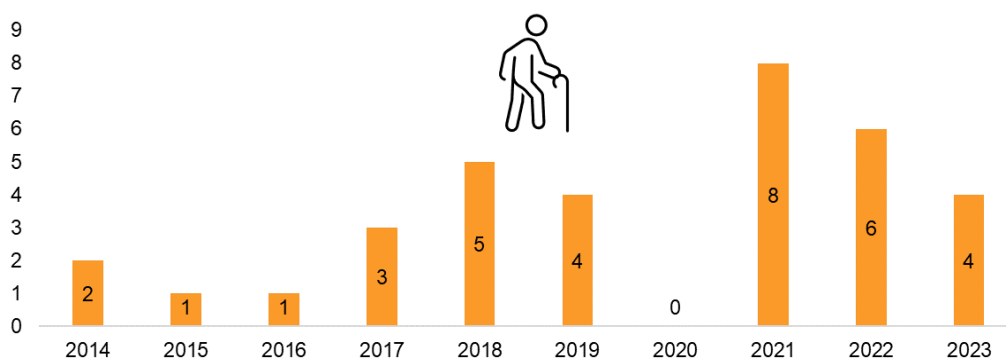


Figure 18. The number of DSIs involving older road users, 2014-2023 (Source: CAS).



More injuries at intersections for people walking and biking

Figure 19 and Figure 20 show the annual proportion of injuries from all road crashes that occurred at intersection¹³ and mid-block locations between 2014 to 2023 for walkers and bike users.

- Overall, the majority of injuries from road crashes occurred at intersections.
- The proportion of injuries at intersections for people walking (62%-84%) was higher than for bike users (58%-78%).

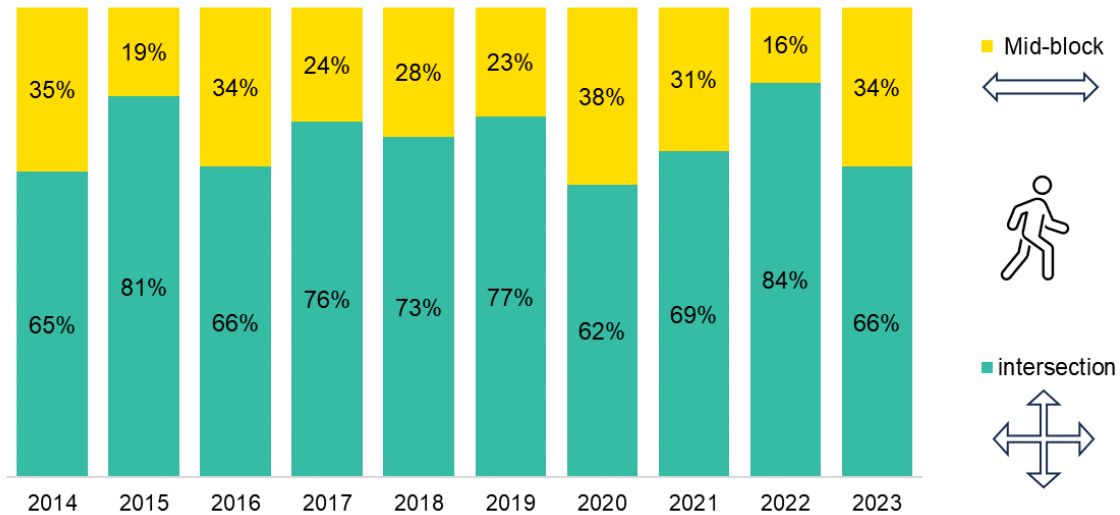


Figure 19. Annual proportion of pedestrian injuries from road crashes that occurred at intersections and mid-block (Source: CAS).

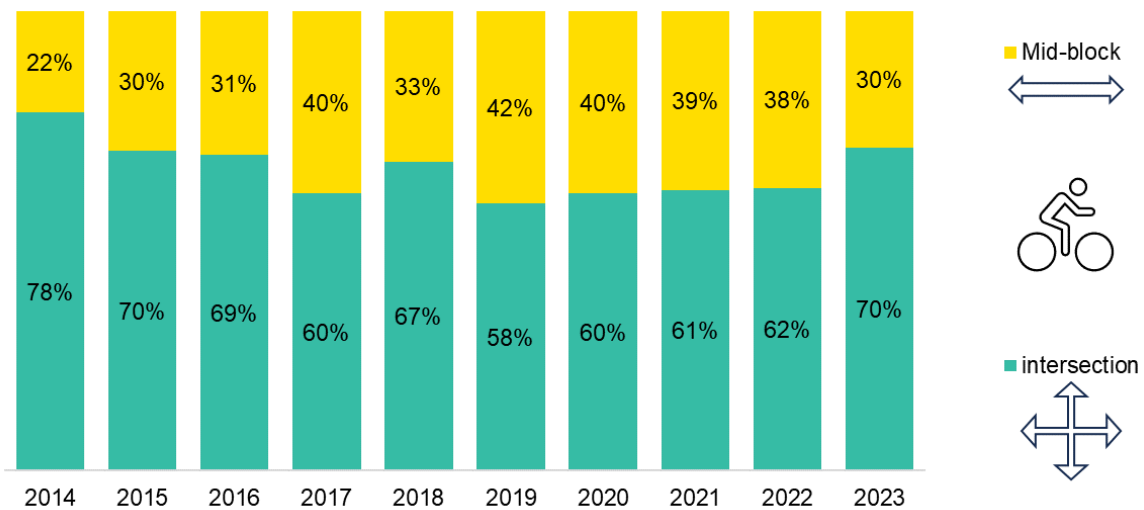


Figure 20. Annual proportion of bike user injuries from road crashes that occurred at intersections and mid-block (Source: CAS).

¹³ An intersection is calculated in the Enterprise Data Warehouse using the geospatial centreline. If the crash is calculated to be within 20 metres of two intersecting road segments, then the value is set to intersection, otherwise it is set to midblock. Source: NZTA Waka Kotahi.

- Between 2014 to 2023, approximately two thirds to three quarters of injuries from road crashes involving walkers and bike users occurred at intersections. The proportion of injuries at intersections during this period was higher for walkers compared to bike users (Figure 21).

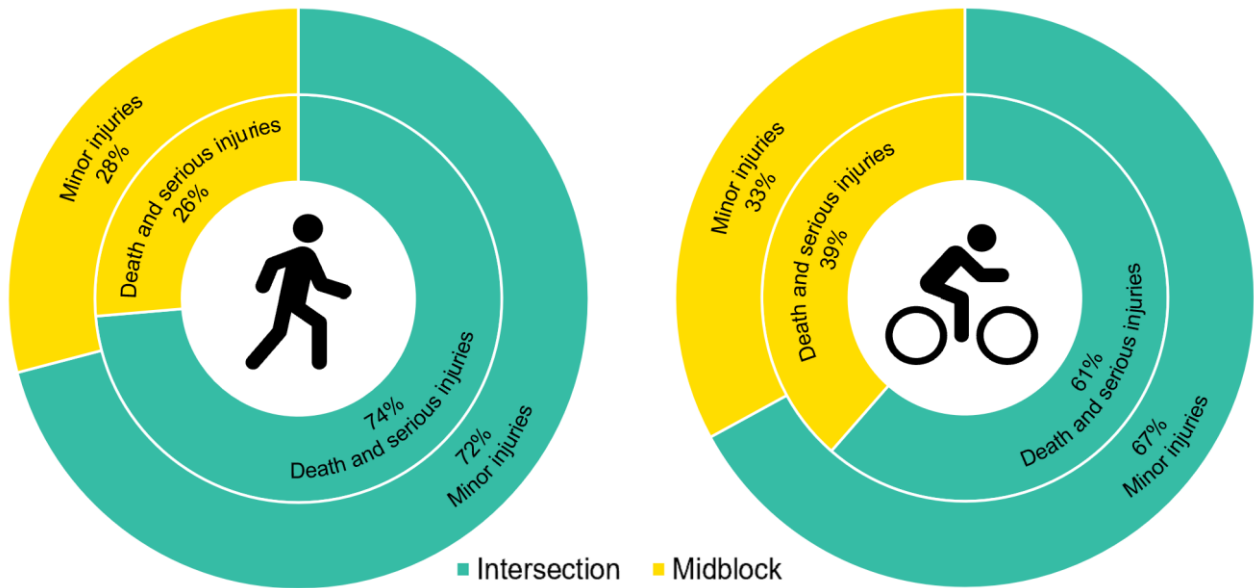


Figure 21. Proportion of injuries from road crashes at intersections and midblock in Wellington city for walkers and bike users, 2014 to 2023 (Source: CAS).



Injuries when it was wet

Most road crashes with injuries occurred during dry conditions. Figure 22 and Figure 23 show the annual proportion of all injuries and DSIs from all road crashes that occurred with wet surface conditions. Overall, 16%-27% of injuries from road crashes occurred when surface conditions were wet, with slight increases from 2019. Year 2022 showed the highest (worst) proportion of injuries from road crashes on record.

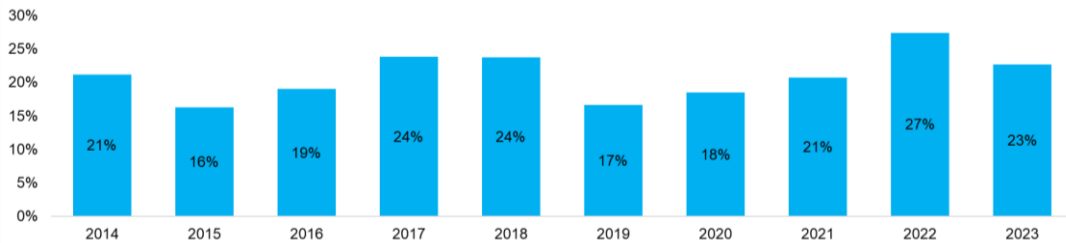


Figure 22. Annual proportion of all injuries from road crashes that occurred in wet surface conditions (Source: CAS).

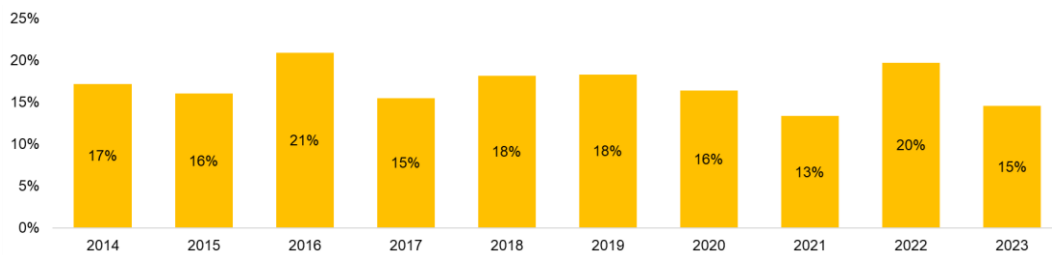


Figure 23. Annual proportion of DSIs from road crashes that occurred in wet surface conditions (Source: CAS).

Injuries when it was dark

Most road crashes with injuries occurred during daylight conditions. Figure 24 and Figure 25 show the annual proportion of all injuries and DSIs from all road crashes that occurred in dark conditions. Approximately one quarter of injuries from road crashes occurred in dark conditions. The proportion of injuries in dark conditions remained relatively stable over the last decade.

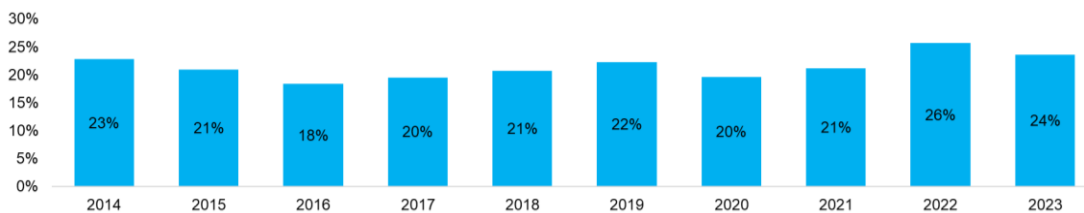


Figure 24. Annual proportion of injuries from road crashes that occurred in dark conditions (Source: CAS).

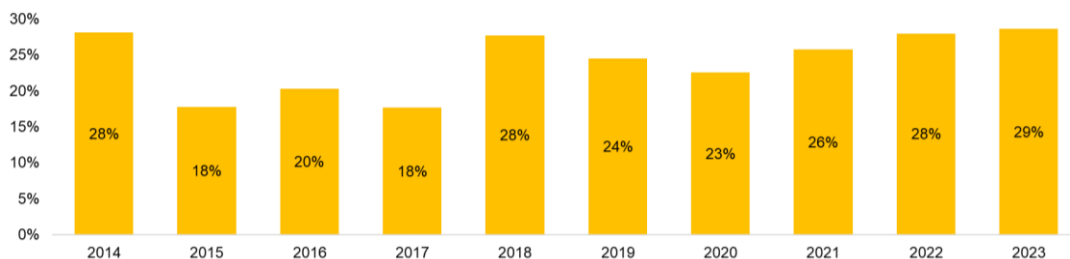


Figure 25. Annual proportion of DSIs from road crashes that occurred in dark conditions (Source: CAS).

Communities at Risk Register 2023

New Zealand Transport Agency (NZTA) – Waka Kotahi publishes the “Communities at Risk Register”¹⁴ every year. The register ranks New Zealand cities based on personal risk using fatal and serious crash data from CAS. Personal risk is a count of DSIs divided by distance or time travelled. The average annual DSI counts based on the latest available five-year data (2018-2022) are reported on the Risk Register report.

The calculation of exposure to risk (death or serious injury) is based on 100 million vehicle kilometres travelled (100MVKT) from the Road Assessment and Maintenance Management system (RAMM) and, for active road users (people walking and biking), millions of hours of travel (MHrs) from the Ministry of Transport’s ongoing Household Travel Survey. The Community at Risk Register has been developed to identify communities of road users that are overrepresented in terms of road safety risk. Appendix 2 of this report includes tables that compare DSIs in Wellington city with the national average and peer group cities¹⁵.

Wellington city has a higher level of personal risk (DSI/100MVKT) compared to peer group cities for crashes involving cyclists, motorcyclists, older road users, younger drivers, alcohol and/or drugs, speed (too fast for the conditions), distraction (crash factor: attention diverted), and occurrence at intersections (excluding open road intersections). See Appendix 2 for more details.

Figure 26 shows in Wellington city (blue lines):

- DSIs per 100,000 population is below the national average and peer group cities in 2023 (left graph),
- **personal risk** of DSIs per 100 million VKT decreased considerably in 2023 to below the national level and peer groups cities (centre graph), and
- **collective risk** is the crash density measured as the total number of DSIs per 1000 kilometres each year on the network which is well **above the national average** and above the average of peer group cities (right graph).

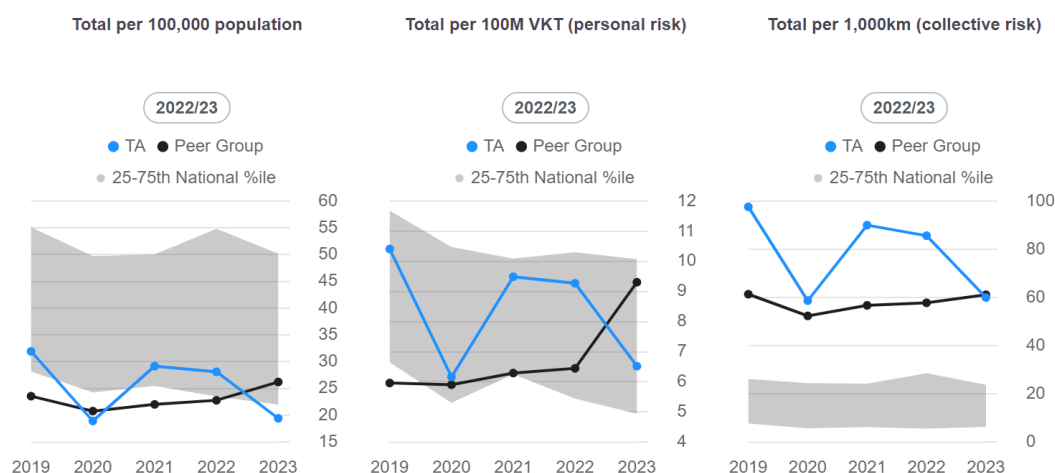


Figure 26. The total number of DSIs per 100,000 population, per 100M VKT, and per 1000km in Wellington city, peer group cities, and national average (Source: Te Ringa Maimoa (Transport Insights)).

¹⁴ New Zealand Transport Agency – Waka Kotahi. (2023): [Communities at risk register 2023 \(nzta.govt.nz\)](https://nzta.govt.nz)

¹⁵ A Peer Group is a pre-set group of Road Controlling Authorities (RCAs) which can be selected in comparative reporting. Hamilton, Hutt City, and Tauranga are the comparable peer group cities for Wellington city (Networks > 90% urban).

Figure 27 shows in Wellington city (blue lines):

- DSI risk for road users (excluding walkers and bike users)¹⁶, normalised by population, is well below the national average and slightly below the peer group cities (left graph),
- **DSI risk for biking**, normalised by population, is **well above the national average** and **above peer group cities** (centre graph), and
- **DSI risk for walking**, normalised by population, is **above the national average** and decreased in 2023 to **below peer group cities** (right graph).

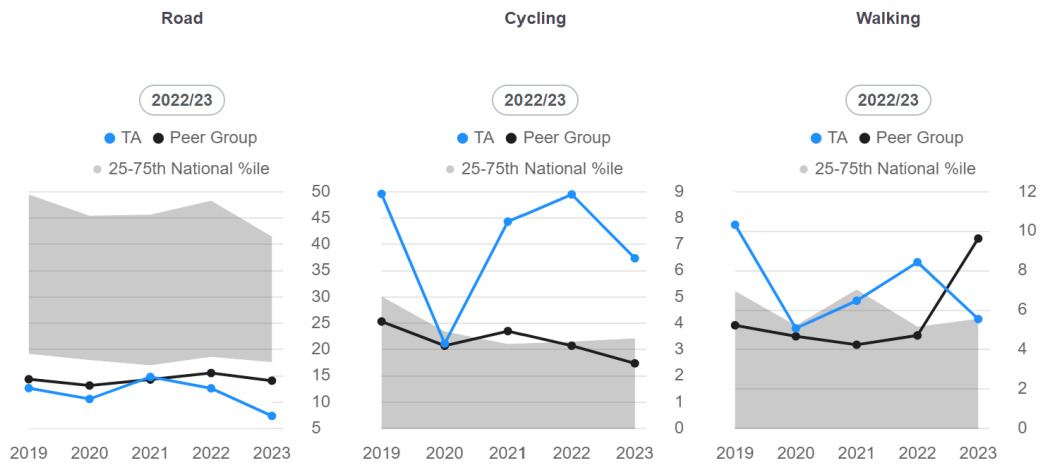


Figure 27. The number of DSIs involving road users, bike users, and walkers in Wellington city, peer group cities, and national average normalised by population (Source: Te Ringa Maimoa (Transport Insights)).



¹⁶ The total number of fatal and serious injuries each year on the Territorial Authority road network per 100,000 population not involving pedestrians or cyclists.

Measures of road safety risks

Infrastructure Risk Rating

Infrastructure Risk Rating (IRR) is a proactive method for assessing road safety risk developed by the New Zealand Transport Agency – Waka Kotahi. More than one fifth of Wellington city’s urban network has an IRR¹⁷ of high or medium-high (Figure 29). This results from a combination of eight attributes used to calculate IRR: land use, road stereotype, carriageway width, horizontal alignment, roadside hazards, intersection density, access density, and traffic volume.

Figure 30 shows the distribution of IRR in Wellington city and in the central city.

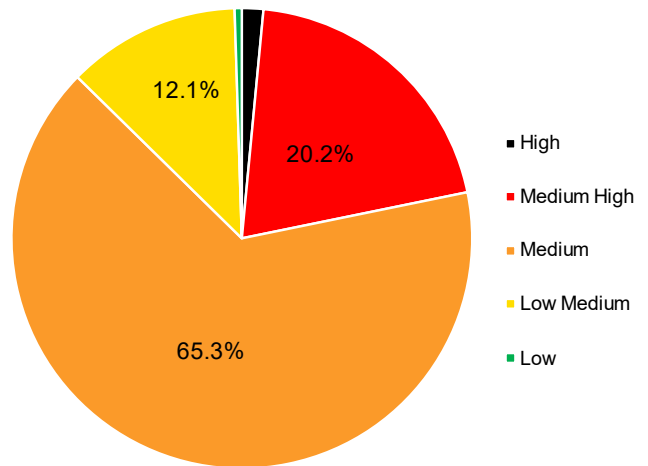


Figure 28. The proportion of the Infrastructure Risk Rating (IRR) bands in Wellington city urban network (Source: Te Ringa Maimoa - Transport Insights).

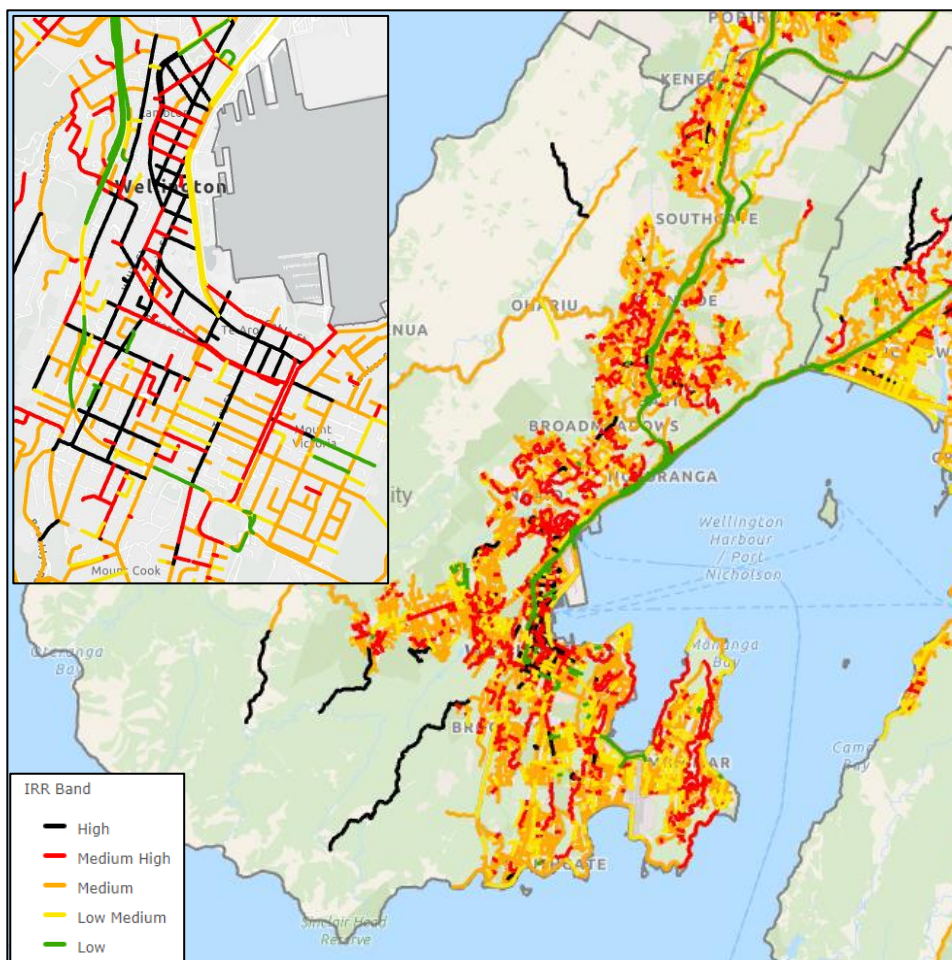


Figure 29. Distribution of Infrastructure Risk Rating (IRR) in Wellington city (Source: MegaMaps 2024).

¹⁷ IRR is based on the Star Rating approach of coding road and roadside features to model the underlying risk of a road section but requires fewer inputs. Source: New Zealand Transport Agency – Waka Kotahi. (2022): [Infrastructure Risk Rating Manual: Road to Zero edition 2022](#)

Collective Risk and Personal Risk

The NZ Transport Agency – Waka Kotahi provides Collective Risk and Personal Risk assessments using the MegaMaps dashboard¹⁸. These assessments are based on the latest data available in MegaMaps based on DSI crash data from 2017 to 2021.

Collective Risk is a measure of the total estimated DSI casualty equivalents per km for a road segment. Figure 31 shows the distribution of Collective Risk on the Wellington city road network including low, low-medium, medium, medium-high, and high level of risk.

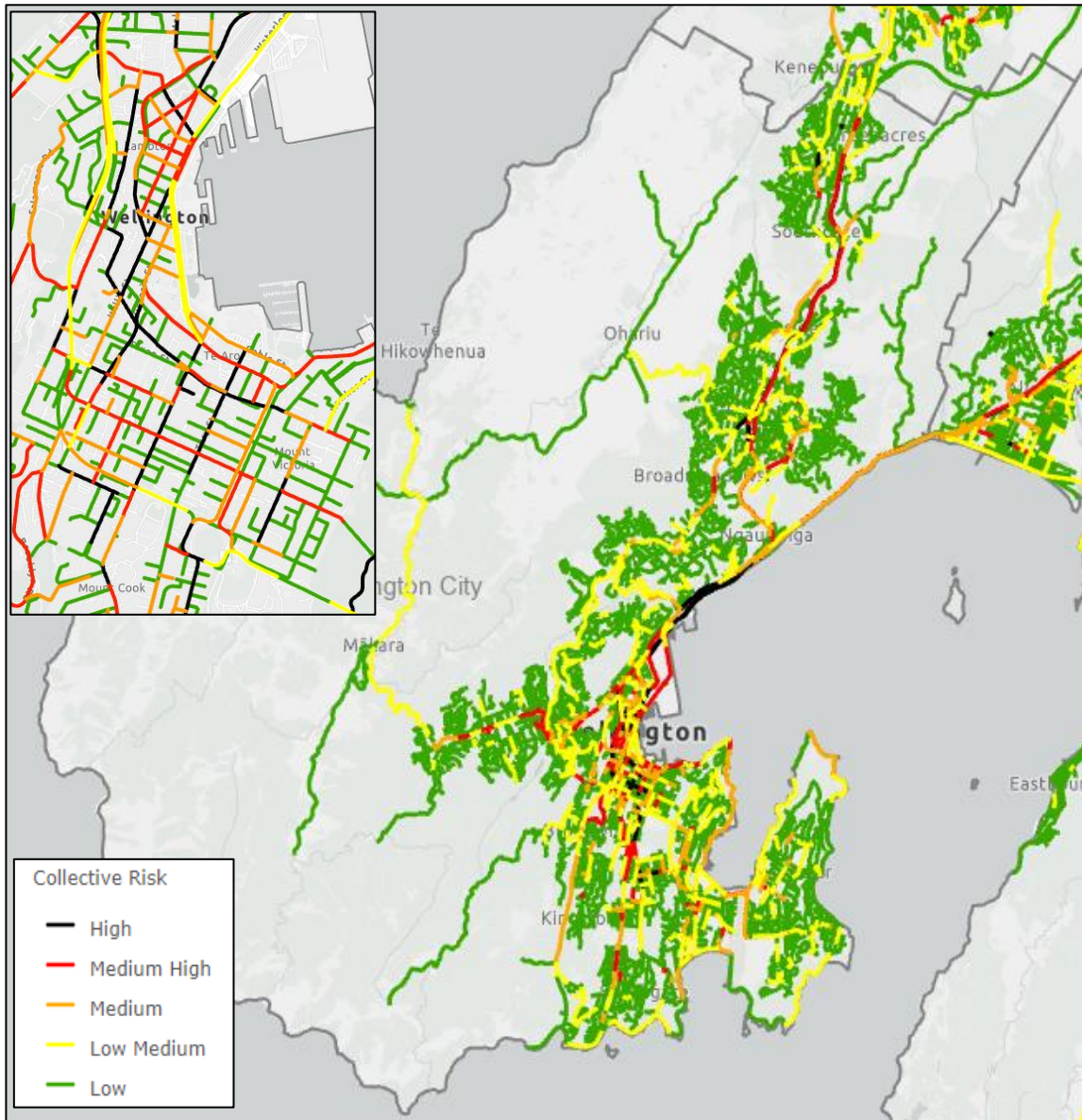


Figure 30. Distribution of Collective Risk in Wellington city road network (Source: MegaMaps 2024).

¹⁸ New Zealand Transport Agency – Waka Kotahi. (2024): [MegaMaps: user and interpretation guide](#)

Personal Risk is a measure of the risk of an individual dying or being seriously injured on a road segment. It is calculated by dividing Collective Risk by traffic volume exposure. Figure 32 shows the distribution of Personal Risk on the Wellington city road network including low, low-medium, medium, medium-high, and high level of risk.

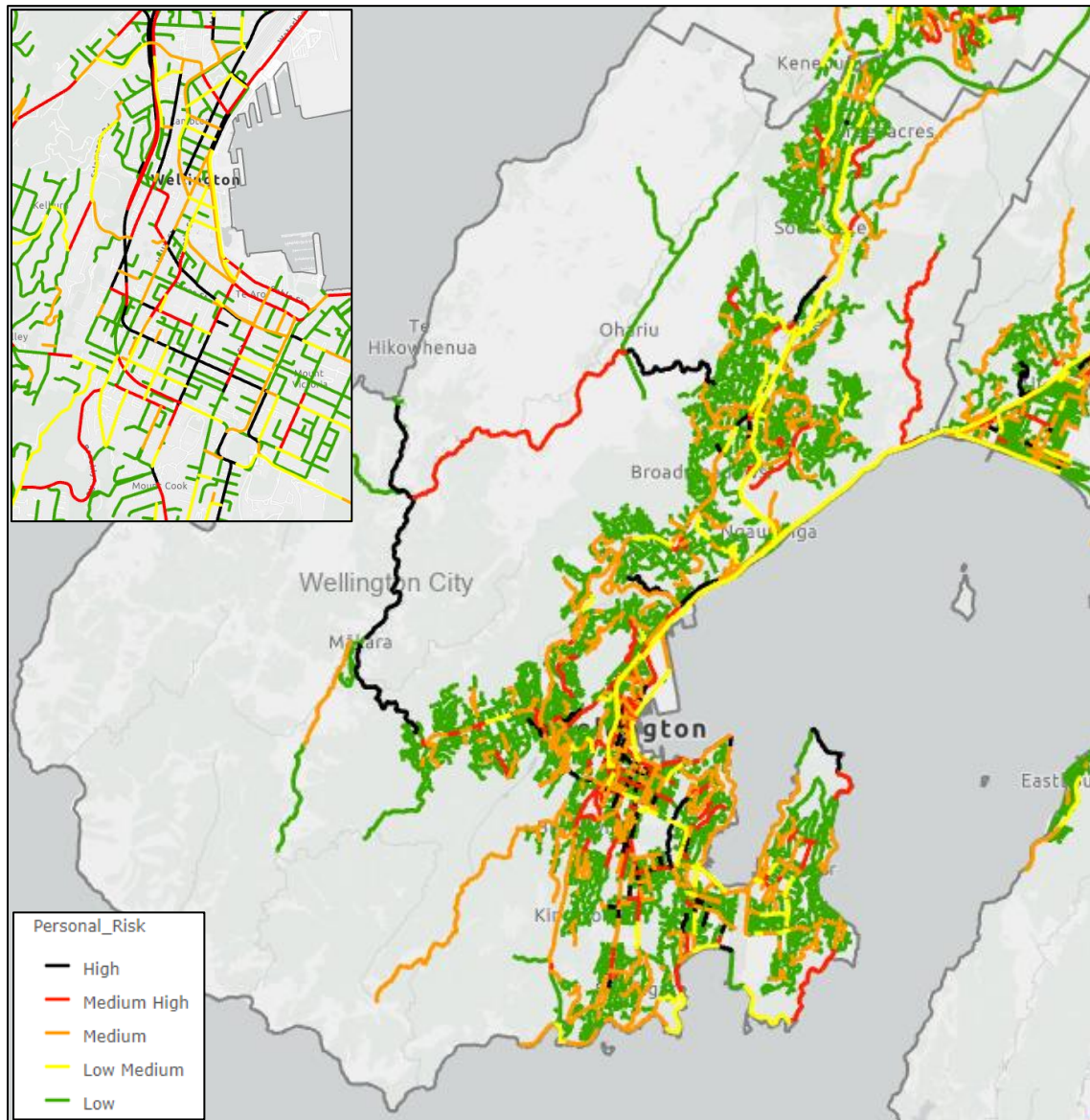


Figure 31. Distribution of Personal Risk in Wellington city road network (Source: MegaMaps 2024).

Locations with the highest levels of risk

The street segments with a high infrastructure risk rating and high or medium-high levels of Personal and Collective risks were identified using the MegaMaps dashboard. Table 3 shows the street sections, levels of risks, and DSIs over the latest decade 2014-2023.

Overall, 5.2 kilometres of streets have been identified as high risk when considering the three risk indicators.

These streets with high levels of IRR, Personal risk, and Collective risks are of concern. Not only does the infrastructure have several risk factors based on the IRR assessment, but the crash data also demonstrates unsafe outcomes are being experienced. Having high levels of both Personal and Collective risks means that the streets have relatively high levels of risks for all road users, regardless of traffic volumes.

However, due to low numbers of DSIs (Table 3), further investigations are needed to better understand the level of concern and to identify relevant interventions to improve safety outcomes in these places.

Table 3. Local street locations with high levels of IRR, Personal risk, and Collective risk.

Street	Section	Length (m)	IRR	Personal risk	Collective risk	DSIs 2014-2023
City centre sites						
Boulcott St	The Terrace - Willis St	400	High	High	Medium-High	2
Featherston St	Mulgrave St - Bunny St	350	High	High	High	4
Featherston St	Bunny St - Hunter St	700	High	Medium-High	High	3
Ghuznee St	Willis St - Victoria St	95	High	High	High	1
Ghuznee St	Victoria St - Marion St	260	High	Medium-High	Medium-High	1
Ghuznee St	The Terrace - Buller St	90	High	Medium-High	Medium-High	0
Taranaki St	Halleys Ln - Wakefield St	95	High	High	Medium-High	2
The Terrace	Bolton St - The Terrace-ramp to Boulcott St	650	High	High	High	4
The Terrace	Salamanca Rd - Everton Tce	400	High	Medium-High	Medium-High	4
Wakefield St	Taranaki St - Kent Tce	500	High	Medium-High	Medium-High	3
Willis St	Manners St - Mercer St	120	High	High	High	0
Webb St	Victoria St - Hopper St	300	High	High	Medium-High	1
Suburban sites						
Johnsonville Rd	Bill Cutting Pl - Broderick Rd	260	High	High	High	2
Main Rd	Surrey St - Lyndhurst Rd	450	High	Medium-High	High	4
Riddiford St	Green St - Rhodes St	500	High	High	High	3

Appendix 1: Injuries from Road Crashes over 10-years (2014 to 2023)

This appendix contains the detailed breakdowns of data across injury types and road user classifications. Table 4 shows data for injuries from crashes on city streets only. Table 6 shows data for injuries from crashes which occurred on city streets and state highways (all roads).

Table 4. Injuries from crashes on city streets (excluding state highways)

	Total Injuries		Fatal		Serious Injuries		Minor Injuries	
	n	%	n	%	n	%	n	%
Road user types	3143	100%	22	0.7%	511	16.3%	2610	83.0%
Pedestrian	590	18.8%	7	31.8%	122	23.9%	461	17.7%
Cycle	536	17.1%	1	4.5%	136	26.6%	399	15.3%
Bus	14	0.4%	0	0.0%	1	0.2%	13	0.5%
Car / Wagon	1207	38.4%	7	31.8%	107	20.9%	1093	41.9%
Moped	198	6.3%	0	0.0%	30	5.9%	168	6.4%
Motorcycle	347	11.0%	5	22.7%	90	17.6%	252	9.7%
SUV	86	2.7%	0	0.0%	8	1.6%	78	3.0%
Truck	25	0.8%	1	4.5%	1	0.2%	23	0.9%
Ute	23	0.7%	0	0.0%	0	0.0%	23	0.9%
Van	75	2.4%	1	4.5%	5	1.0%	69	2.6%
Wheeled pedestrian ^a	23	0.7%	0	0.0%	5	1.0%	18	0.7%
Skateboard, in-line skate	9	0.3%	0	0.0%	3	0.6%	6	0.2%
Other	9	0.3%	0	0.0%	3	0.6%	6	0.2%
Unknown	1	0.0%	0	0.0%	0	0.0%	1	0.0%

^a Wheeled pedestrian includes wheelchair and mobility scooters.

Injuries by four main road user types	Total Injuries		Fatal		Serious Injuries		Minor Injuries	
	n	%	n	%	n	%	n	%
Pedestrian	590	18.8%	7	31.8%	122	23.9%	461	17.7%
Cycle	536	17.1%	1	4.5%	136	26.6%	399	15.3%
Vehicle occupant ^b	1975	62.8%	14	63.6%	242	47.4%	1719	65.9%
Other ^c	42	1.3%	0	0.0%	11	2.2%	31	1.2%

^b Vehicle occupant includes 'bus', 'car/wagon', 'moped', 'motorcycle', 'SUV', 'truck', 'ute' and 'van' categories.

^c Other includes 'wheeled pedestrian', 'skateboard, in-line skate', 'other' and 'unknown' categories.

Social cost of injuries from crashes on city streets (excluding state highways)

Table 5. Social cost of injuries from road crashes on city streets in Wellington City, 2013 to 2022

	Total Injuries	Social Cost	Total Cost
Fatal	22	\$ 14,265,600	\$ 313,843,200
Serious Injuries	511	\$ 1,452,300	\$ 742,125,300
Minor Injuries	2610	\$ 254,300	\$ 663,723,000
Total Social Cost - City Streets			\$ 1,719,691,500

Table 6. Injuries from crashes on all roads (including state highways)

	Total Injuries		Fatal		Serious Injuries		Minor Injuries	
	n	%	n	%	n	%	n	%
Road user types	3986	100%	34	0.9%	644	16.2%	3308	83.0%
Pedestrian	626	15.7%	9	26.5%	132	20.5%	485	14.7%
Cycle	565	14.2%	2	5.9%	146	22.7%	417	12.6%
Bus	16	0.4%	0	0.0%	1	0.2%	15	0.5%
Car / Wagon	1756	44.1%	12	35.3%	173	26.9%	1571	47.5%
Moped	214	5.4%	0	0.0%	33	5.1%	181	5.5%
Motorcycle	469	11.8%	9	26.5%	125	19.4%	335	10.1%
SUV	115	2.9%	0	0.0%	11	1.7%	104	3.1%
Truck	35	0.9%	1	2.9%	2	0.3%	32	1.0%
Ute	33	0.8%	0	0.0%	0	0.0%	33	1.0%
Van	113	2.8%	1	2.9%	8	1.2%	104	3.1%
Wheeled pedestrian ^a	24	0.6%	0	0.0%	6	0.9%	18	0.5%
Skateboard, in-line skate	9	0.2%	0	0.0%	3	0.5%	6	0.2%
Other	10	0.3%	0	0.0%	4	0.6%	6	0.2%
Unknown	1	0.0%	0	0.0%	0	0.0%	1	0.0%

^a Wheeled pedestrian includes wheelchair and mobility scooters.

Injuries by four main road user types	Total Injuries		Fatal		Serious Injuries		Minor Injuries	
	n	%	n	%	n	%	n	%
Pedestrian	626	15.7%	9	26.5%	132	20.5%	485	14.7%
Cycle	565	14.2%	2	5.9%	146	22.7%	417	12.6%
Vehicle occupant ^b	2751	69.0%	23	67.6%	353	54.8%	2375	71.8%
Other ^c	44	1.1%	0	0.0%	13	2.0%	31	0.9%

^b Vehicle occupant includes 'bus', 'car/wagon', 'moped', 'motorcycle', 'SUV', 'truck', 'ute' and 'van' categories.

^c Other includes 'wheeled pedestrian', 'skateboard, in-line skate', 'other' and 'unknown' categories.

Social cost of injuries from crashes on all roads (including state highways)

Table 7. Social cost of injuries from road crashes in Wellington city, 2013 to 2022

	Total Injuries	Social Cost	Total Cost
Fatal	34	\$14,265,600	\$485,030,400
Serious Injuries	644	\$1,452,300	\$935,281,200
Minor Injuries	3308	\$254,300	\$841,224,400
Total Social Cost – All roads			\$2,261,536,000

Appendix 2: Summary tables from Communities at Risk Register 2023

Appendix 2 has summary tables from the Communities at Risk Register 2023 (using crash data to 2022). While the overall level of DSIs per distance travelled is in line with the national average, DSI statistics for some Wellington city categories are above our peer group cities which suggests we can do better.

Table 8: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering all road users

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
National	6	2762	No concern
Wellington city	6	71	No concern
Hamilton	5	59	No concern
Tauranga	4	46	No concern
Hutt City	4	31	No concern

Table 8 shows that Wellington city's DSIs normalised by distance travelled is in line with the national average but above the peer group cities. This aggregate statistic hides some important areas where Wellington city's performance is worse than the national average. However, caution is needed when interpreting these data because in most cases the number of DSIs is very small for Wellington city and peer group cities, particularly in the case of older road users. The following tables are arranged according to the highest level of concerns.

Table 9: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering older road users (those aged 75 years and older)

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
Wellington city	13	7	High*
Hamilton	10	6	No concern
Tauranga	8	3	No concern
National	7	251	No concern
Hutt City	6	7	No concern

* Based on very small numbers so this is an issue to monitor rather than a call to action.

Table 10: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering all intersections

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
Hamilton	2	27	High
Wellington city	2	27	Medium
Hutt City	2	13	No concern
National	2	768	No concern
Tauranga	1	15	No concern

Table 11: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering urban intersections

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
Wellington city	4	25	Near medium
National	3	521	No concern
Hamilton	3	22	No concern
Tauranga	2	14	No concern
Hutt City	2	10	No concern

Table 12: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering cyclist

Area	DSI/Mhrs	Annual average DSI of last 5 years	Level of Concern
Wellington city	8	17	Near medium
Hamilton	8	7	No concern
National	6	185	No concern
Tauranga	6	8	No concern
Hutt City	2	2	No concern

Table 13: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering motorcyclist

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
Wellington city	127	16	Near medium
National	108	528	No concern
Tauranga	106	13	No concern
Hamilton	89	10	No concern
Hutt City	83	6	No concern

The remaining indicators show Wellington city's performance to be in line or better than the national average.

Table 14: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering young drivers (of light vehicles aged 16-24 years)

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
National	12	695	No concern
Wellington city	10	16	No concern
Hamilton	9	17	No concern
Hutt City	7	6	No concern
Tauranga	6	9	No concern

Table 15: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering alcohol and/or drugs

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
National	1	448	No concern
Wellington city	1	7	No concern
Hutt City	1	5	No concern
Hamilton	1	6	No concern
Tauranga	0	5	No concern

Table 16: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering speed (too fast for the conditions)

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
National	1	660	No concern
Wellington city	1	15	No concern
Hutt City	1	8	No concern
Hamilton	1	12	No concern
Tauranga	1	11	No concern

Table 17: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering open road intersections

Area	DSI/100 MVKT	Annual average DSI of last 5 years	Level of Concern
Hamilton	2	5	High
National	1	247	No concern
Hutt City	1	3	No concern
Tauranga	0	1	No concern
Wellington city	0	1	No concern

Table 18: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering open road loss of control and/or head-on (speed zones >70km/h)

Area	DSI/100MVKT	Annual average DSI of last 5 years	Level of Concern
National	4	1,043	No concern
Hamilton	3	8	No concern
Hutt City	1	3	No concern
Wellington city	1	6	No concern
Tauranga	1	4	No concern

Table 19: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering pedestrian

Area	DSI/Mhrs	Annual average DSI of last 5 years	Level of Concern
Hamilton	4	14	High
Tauranga	3	8	No concern
National	2	314	No concern
Wellington city	1	17	No concern
Hutt City	1	6	No concern

Table 20: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering distraction (crash factor: attention diverted)

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
National	0	162	No concern
Wellington city	0	4	No concern
Tauranga	0	3	No concern
Hamilton	0	3	No concern
Hutt City	0	2	No concern

Table 21: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering fatigue

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
National	0	151	No concern
Hamilton	0	1	No concern
Wellington city	0	1	No concern
Tauranga	0	1	No concern
Hutt City	0	1	No concern

Table 22: DSIs/100M VKT, annual average DSI of last 5 years (2018-2022), and concern levels considering restraints (seatbelt not worn)

Area	DSI/100M VKT	Annual average DSI of last 5 years	Level of Concern
National	1	288	No concern
Hutt City	0	3	No concern
Wellington city	0	5	No concern
Hamilton	0	3	No concern
Tauranga	0	3	No concern

Absolutely Positively Wellington City Council

Me Heke Ki Pōneke

Citation: Wellington City Council. Injuries from road crashes in Wellington city 2014-2023. September 2024.

Report available from:

[wellington.govt.nz/parking-roads-and-transport/transport/transport-insights](https://www.wellington.govt.nz/parking-roads-and-transport/transport/transport-insights)