



ROAD CASUALTIES

In Bristol

2022

9 Children (15 years & under) Killed or Seriously Injured (higher by 3 from previous year)

21 Young Adults (16–24 years) Killed or Seriously Injured (higher by 4 from previous year)

15 Elderly Adults (60 years & over) Killed or Seriously Injured (higher by 6 from previous year)

71 Other Adults (25 to 59 years) Killed or Seriously Injured (higher by 11 from previous year)

946 Slight Injuries (higher by 119 from previous year)

6 Taxi occupants injured (lower by 5 from previous year)

6 Bus occupants injured (higher by 6 from previous year)

Casualty Total of 1,062 (higher by 143 from previous year)

Introduction

This report focuses on road collisions in Bristol that have been reported to the local police force and which resulted in either a fatality or a personal-injury (all referred to as casualties).

In 2022, there were **1,062** reported casualties (**including 8 fatalities**), this was 144 higher than the previous year. The annual change in road casualties when following the 3-year rolling average indicates that the long-term trend is still downward, as illustrated in Annex 2b.

The number of personal-injury road collisions in 2022 increased from the year before (from 836 to **932**), which is a rise of **11%**. The KSI severity rate of those collisions also rose from 10.8%, in 2021, to **11.9%**. This compares nationally with a rise in road collisions of only 5%, but a similar change in the KSI severity rate.

There were **116** KSI (killed or seriously injured) casualties reported in 2022, this was 24 more than the previous year and an increase of 26%. The annual change in KSI road casualties when following the 3-year rolling average suggests that the previous long-term downward trend has ended, and that an upward trend of unknown duration has begun, as illustrated in Annex 2a.

KSI casualties made up **10.9%** of the total number of reported casualties during the year. There were **8** fatal casualties – a level that is equal to the recent (2012 to 2021) long-term average for Bristol's roads of 8 deaths per year.

The overall casualties by age-group were as follows:

- Children – **75** (this included 0 fatality), which was 7.06% of the total number of casualties reported;
- Young Adults – **204** (this included 2 fatalities), which was 19.21% of the total number of casualties reported;
- Other Adults (25–59 yrs) – **691** (this included 3 fatalities), which was 65.07% of the total number of casualties reported;
- Elderly – **88** (this included 3 fatalities), which was 8.29% of the total number of casualties reported.

There were 4 casualties of unknown age.

Table 1: Casualties Summary

2022 (year)	KSI	Slight	All
Total	116	946	1,062
Pedestrians	30	164	194
Cycle users	30	214	244
Motorcycle users	20	155	175
Car & Taxi Occupants	18	328	346
Other road users ¹	18	85	103
Child Total	7	43	50
(Child pedestrians)	6	36	42
(Child cycle users)	1	7	8
Elderly Total	6	35	41
(Elderly pedestrians)	5	21	26
(Elderly cycle users)	1	14	15

¹ totals include 13 Scooter user KSI casualties and 66 Scooter user slight casualties.

There were 684 male casualties overall, which was 64% of the casualty total, and 378 female casualties overall, which was 36% of the casualty total. Male casualties formed 67% of the Killed or Seriously Injured casualty total, and female casualties formed 33% of the Killed or Seriously Injured casualty total.

Economic Cost of Collisions and Casualties

The estimated economic cost of a road collision is published annually by the Department for Transport in their Road Casualties Great Britain report – see table below showing figures based on 2022 prices. Using the figure for the ‘all injury’ collision type on Built-up roads of £101,489, the value of prevention of the 932 collisions in Bristol in 2022 is estimated at £94.59 million.

Table 2: Economic Cost of Collisions and Casualties by severity of injury and road class. Note: figures are in 2022 prices and are in pounds sterling

Accident Type	Built-Up Road (40mph and below)	Non Built-Up Road (above 40mph)	Motorway	All Roads
Fatal	2,430,395	2,607,534	2,642,629	2,527,520
Serious	280,754	314,379	322,177	289,949
Slight	27,639	34,187	39,660	29,127
All Injury	101,489	212,748	162,143	124,272
Damage Only	2,558	3,740	3,594	2,686

Summary/Overview of Road Casualty Trends (Table and Charts)

Table 3: Comparison of Collision and Casualty Data Since 2019

Injury Severity	Collisions/ Casualties	2019	2020	2021	3-year average (2019 to 2021)	2022	% Change from 3-year average
Fatal	Collisions	3	7	8	6	8	33.3%
Fatal	Casualties	3	7	8	6	8	33.3%
Serious	Collisions	74	51	82	69	103	49.3%
Serious	Casualties	80	53	84	72	108	50%
Slight	Collisions	895	596	746	746	821	10.1%
Slight	Casualties	1059	716	826	867	946	9.1%
Total	Collisions	972	654	836	821	932	13.6%
Total	Casualties	1142	776	918	945	1062	12.3%

Charts 1a and 1b (below/next page) illustrate that the risk of death or serious injury on our roads is not equally distributed. Indeed, it is the vulnerable road users, who themselves pose little risk to other road users, that disproportionately bear the brunt of the casualty burden.

Chart 1a: All casualties by road user group, 2020 to 2022 totals (3-year average).

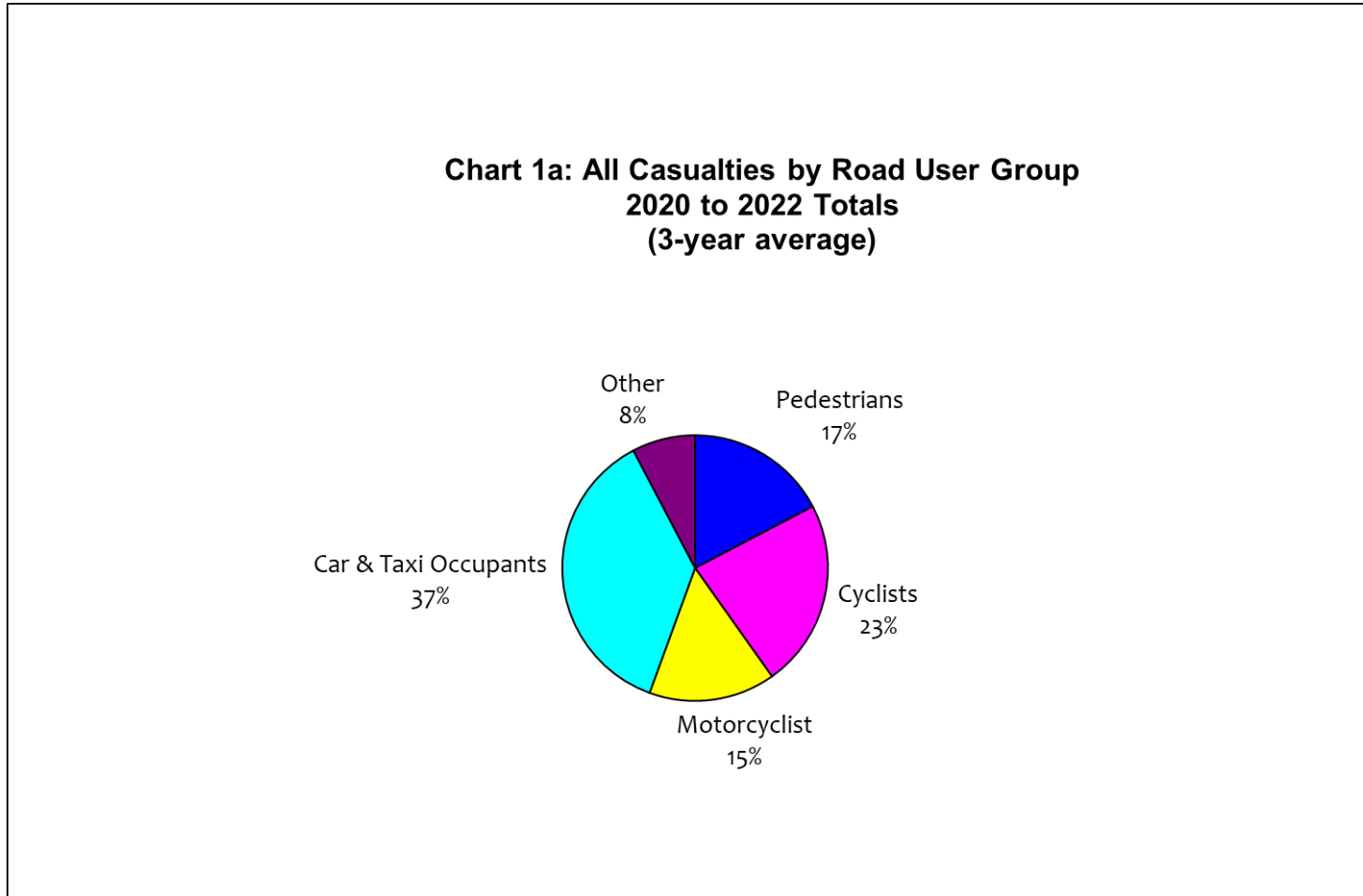


Chart 1b: KSI casualties by road user group, 2020 to 2022 totals (3-year average).

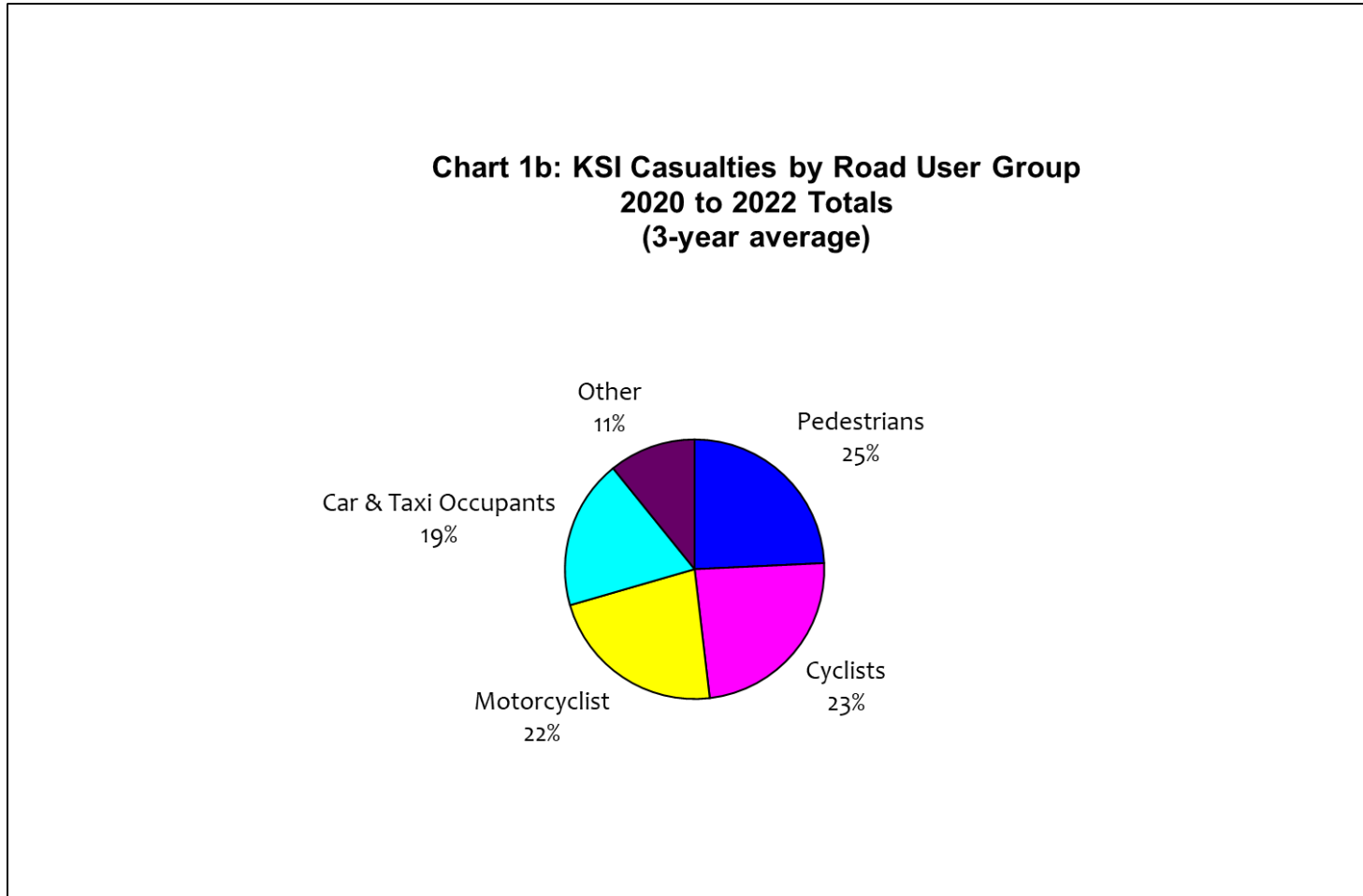


Chart 2a: Annual Change in Casualties by Road User Group, 2007 to 2022

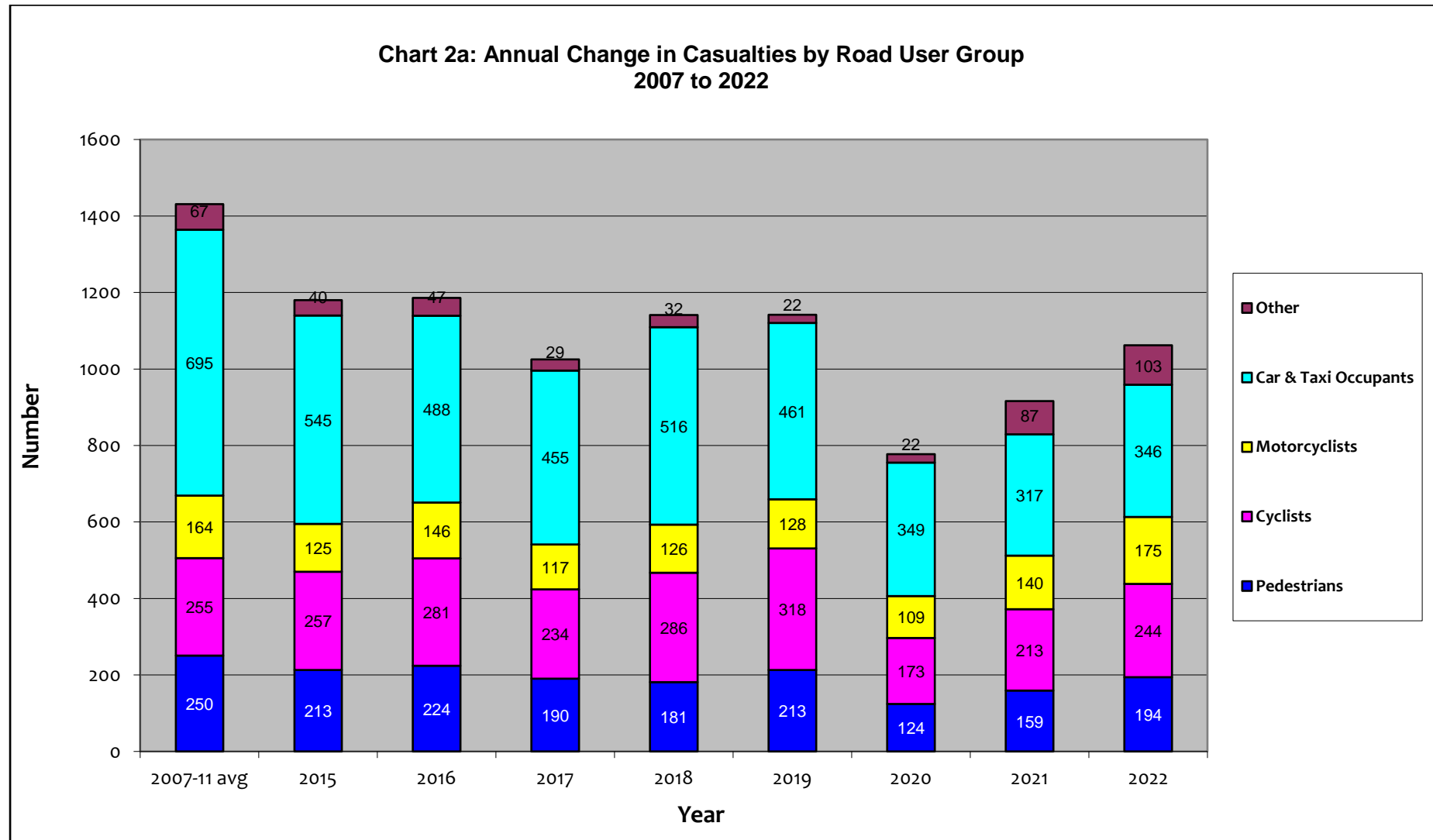


Chart 2b: Annual Change in KSI Casualties by Road User Group, 2007 to 2022

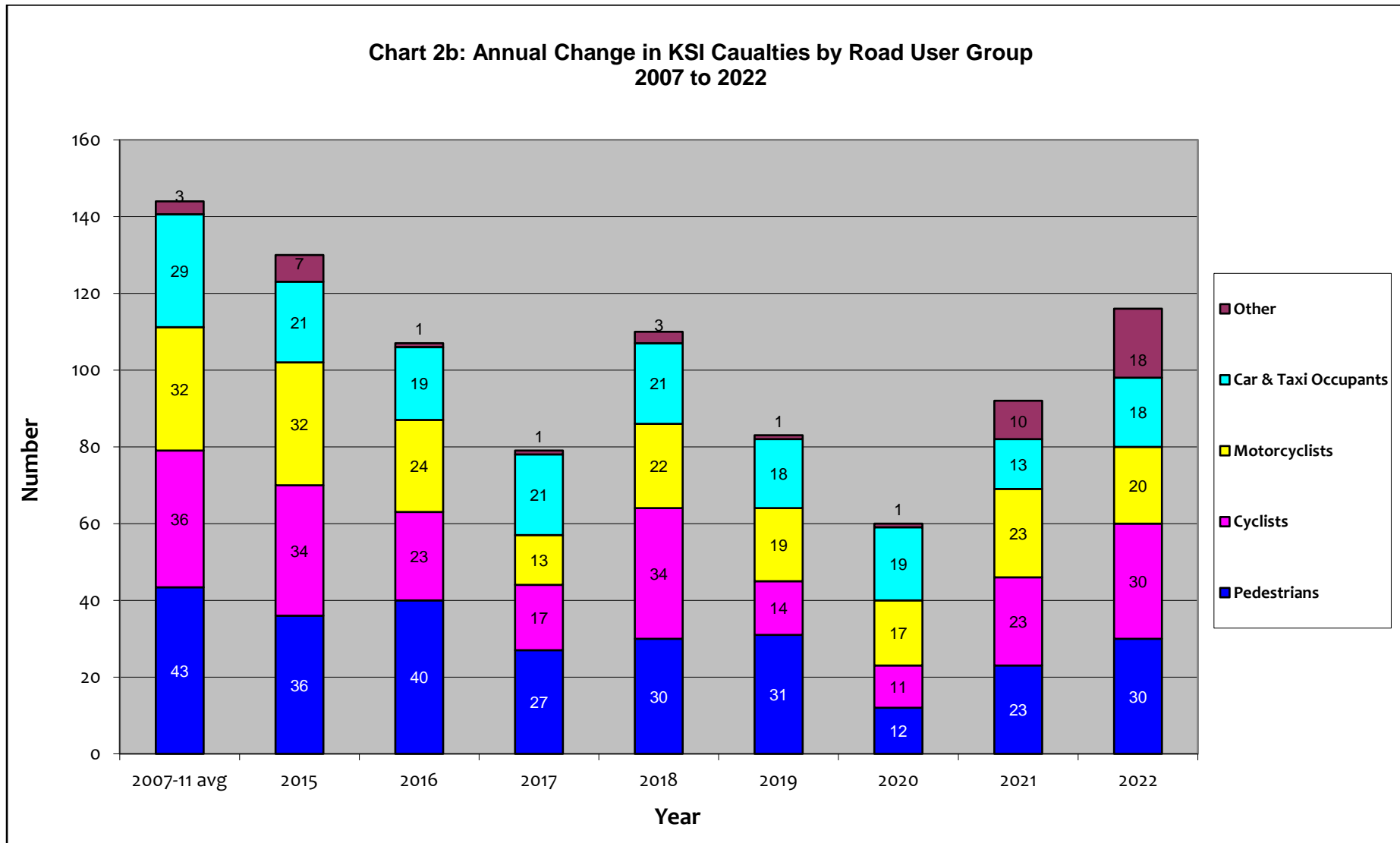


Chart 3a: Annual Change in Casualty Proportions for each Road user Group, 2007 to 2022

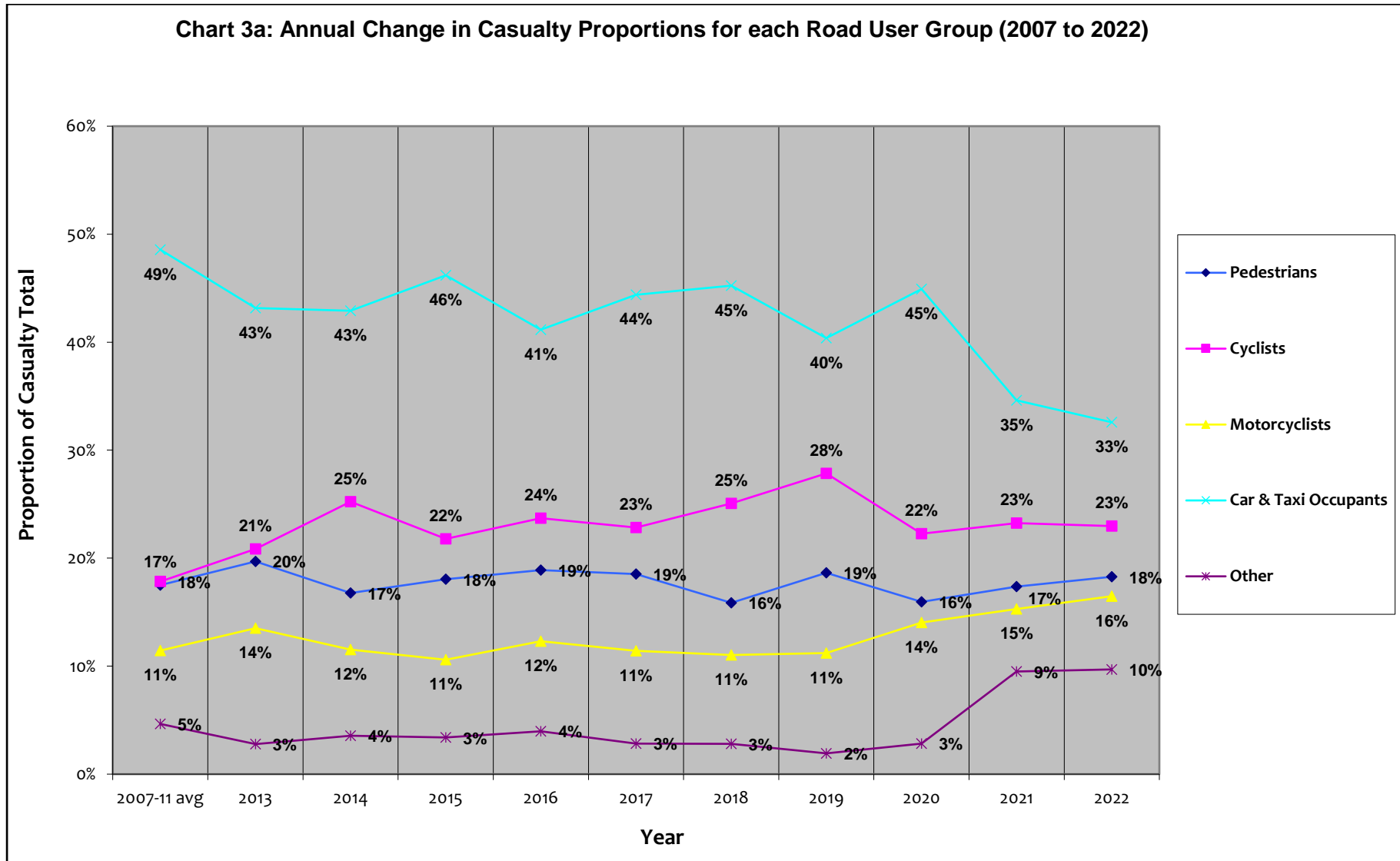
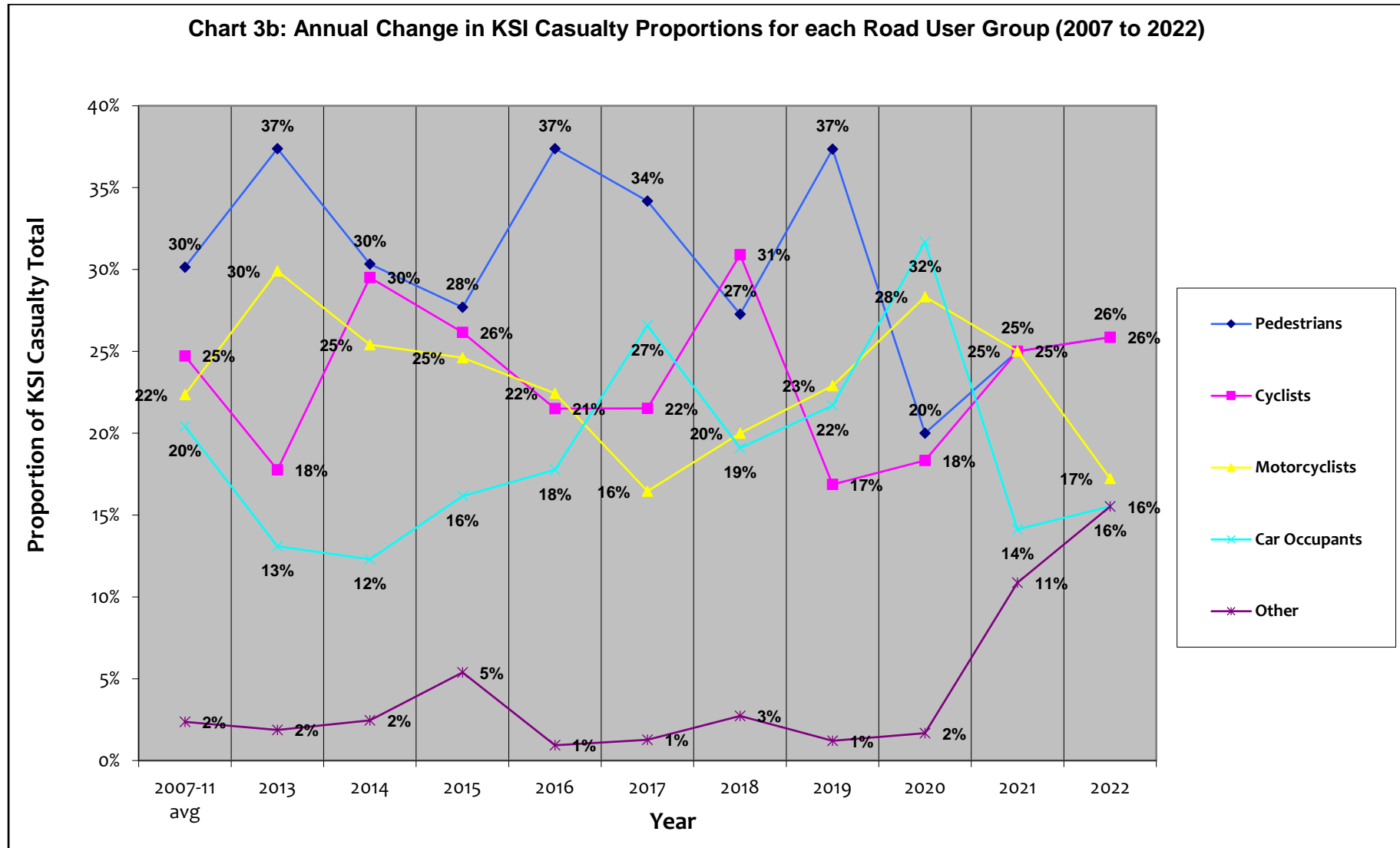


Chart 3b: Annual Change in KSI Casualty Proportions for each Road user Group, 2007 to 2022



Targets & Progress

The Charts below show the road collision and road casualty targets that have been set under the One City Partnership's Plan, ending in 2041, and the West of England Combined Authority's Joint Local Transport Plan (JLTP) 4, ending in 2036, which the City Council is now working towards.

One City Partnership Plan – a target of zero KSI road casualties by 2041 (see figure 1, below)

In 2022, the number of KSI casualties, at 116, was above the level of the trajectory leading towards achieving the target by 2041.

Joint Local Transport Plan 4 – a target of zero KSI road collisions by 2036 (see figure 2, below)

In 2022, the number of KSI collisions, at 111, was above the level of the trajectory leading towards achieving the target by 2036.

Joint Local Transport Plan 4 – vulnerable road user casualty proportion, child road user casualty proportion, and elderly (65+) road user casualty proportion by 2036 (see figure 3, below)

In 2022, the proportion of vulnerable road user casualties was 57.72%. This was above the benchmark level of 54.2% set by the target.

In 2022, the proportion of child road user casualties was **7.06%**. This was below the benchmark level of **7.15%** set by the target.

In 2022, the proportion of elderly road user casualties was **5.55%**. This was above the benchmark level of **5.44%** set by the target.

Figure 1: One City Plan (2018-41) – KSI Road Casualty target and progress

Bristol's Road Collisions & Casualties - Target and Progress
One City Plan (2018-41) - baseline year 2018
(n.b. Fatal is a subset of KSI)

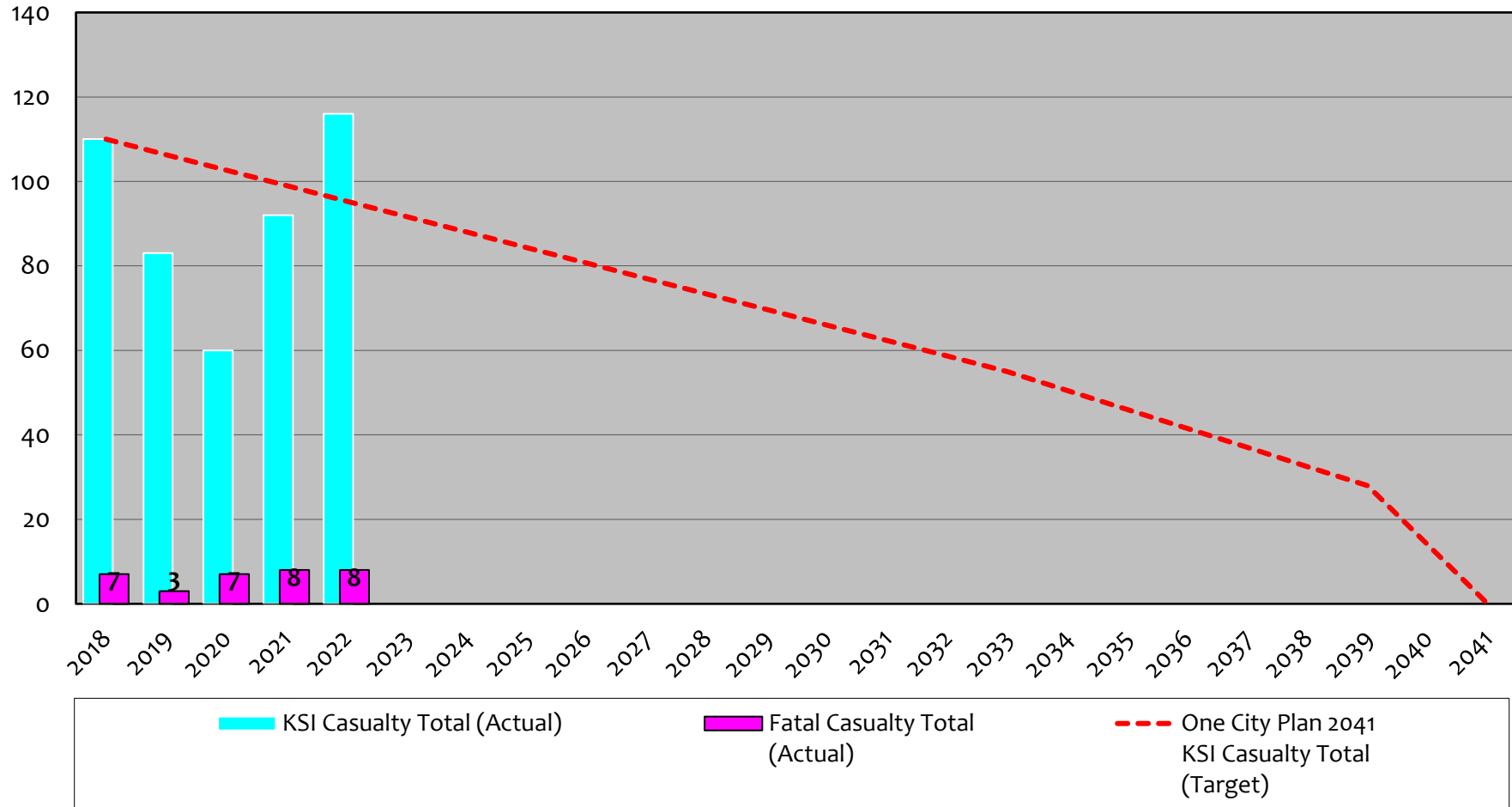


Figure 2: Joint Local Transport Plan 4 (2020-36) – KSI Road Collision target and progress

Bristol's Road Collisions & Casualties - Targets and Progress
JLTP 4 (2020-36) - baseline year 2017-19 avg
(n.b. Fatal is a subset of KSI; this target is shared between the member Authorities of the West of England Combined Authority)

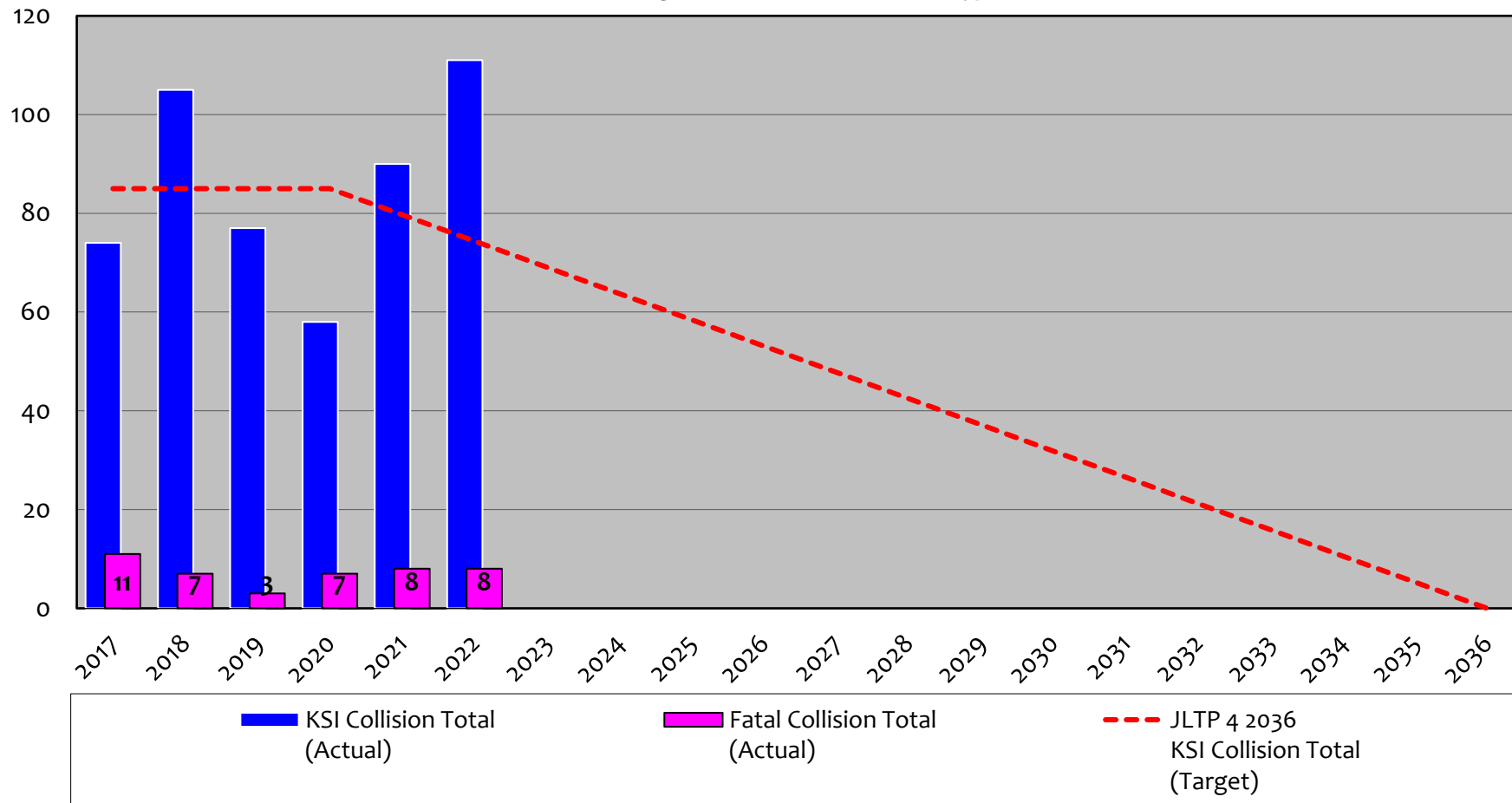
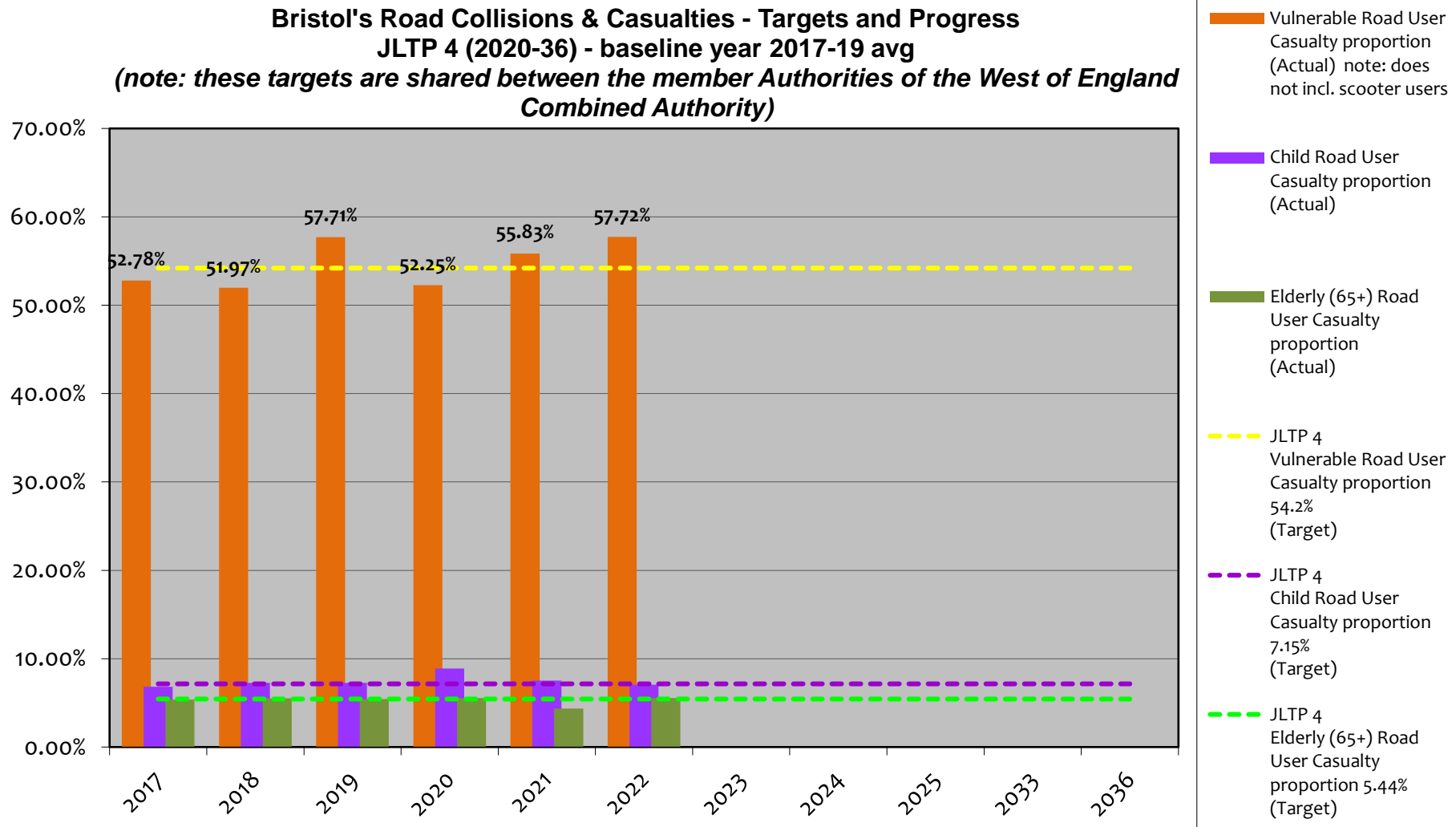


Figure 3: Joint Local Transport Plan 4 (2020-36) - Road Casualty Proportions targets and progress



Pedestrians

194 casualties (incl. 4 fatality)

There was an increase of 35 or **22%** in the total number of Pedestrian casualties from the year before, from 159 to **194**.

The proportion of Pedestrian casualties killed or seriously injured was **15.5%**, and Pedestrians made up **26%** of all the KSI casualties.

Based on the 2020–22 pedestrian casualty rates per 100 thousand of the population, the **most vulnerable** age–group for Pedestrian casualties is **10–14 year–olds**.

In 2022, males accounted for **58%** of all the Pedestrian casualties.

There were **42** Child Pedestrian casualties, an increase of 5 from the previous year, and children made up **22%** of the overall Pedestrian casualty total.

There were **26** Elderly Pedestrian casualties, an increase of 10 from the previous year, and the elderly made up **13%** of the overall Pedestrian casualty total.

191 or **97%** of the Pedestrian casualties were involved in a collision with a motorised vehicle (predominantly a passenger car), and of these, 8 (4%) were buses/coaches; 9 (5%) were motorcycles/mopeds; 17 (9%) were goods vehicles; 19 (10%) were motorised scooters. 3 or **1.5%** of the Pedestrian casualties were involved in a collision with a pedal cycle.

Historically, **over half** of collisions involving pedestrians occur within a 2.5km radius of the city centre.

Chart 4a: Child (<16 years old) Pedestrians

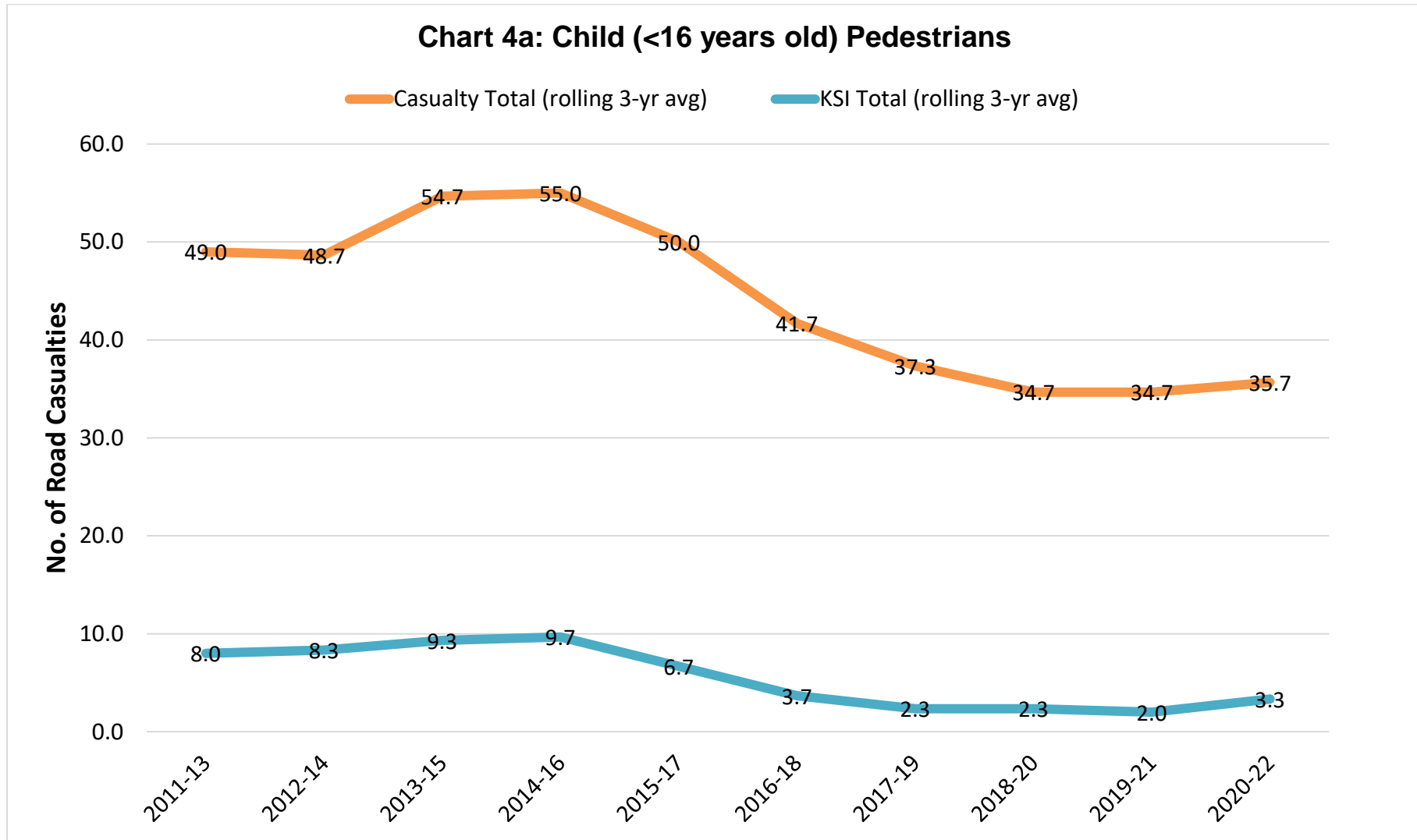


Chart 4b: Adult (>15 years old) Pedestrians

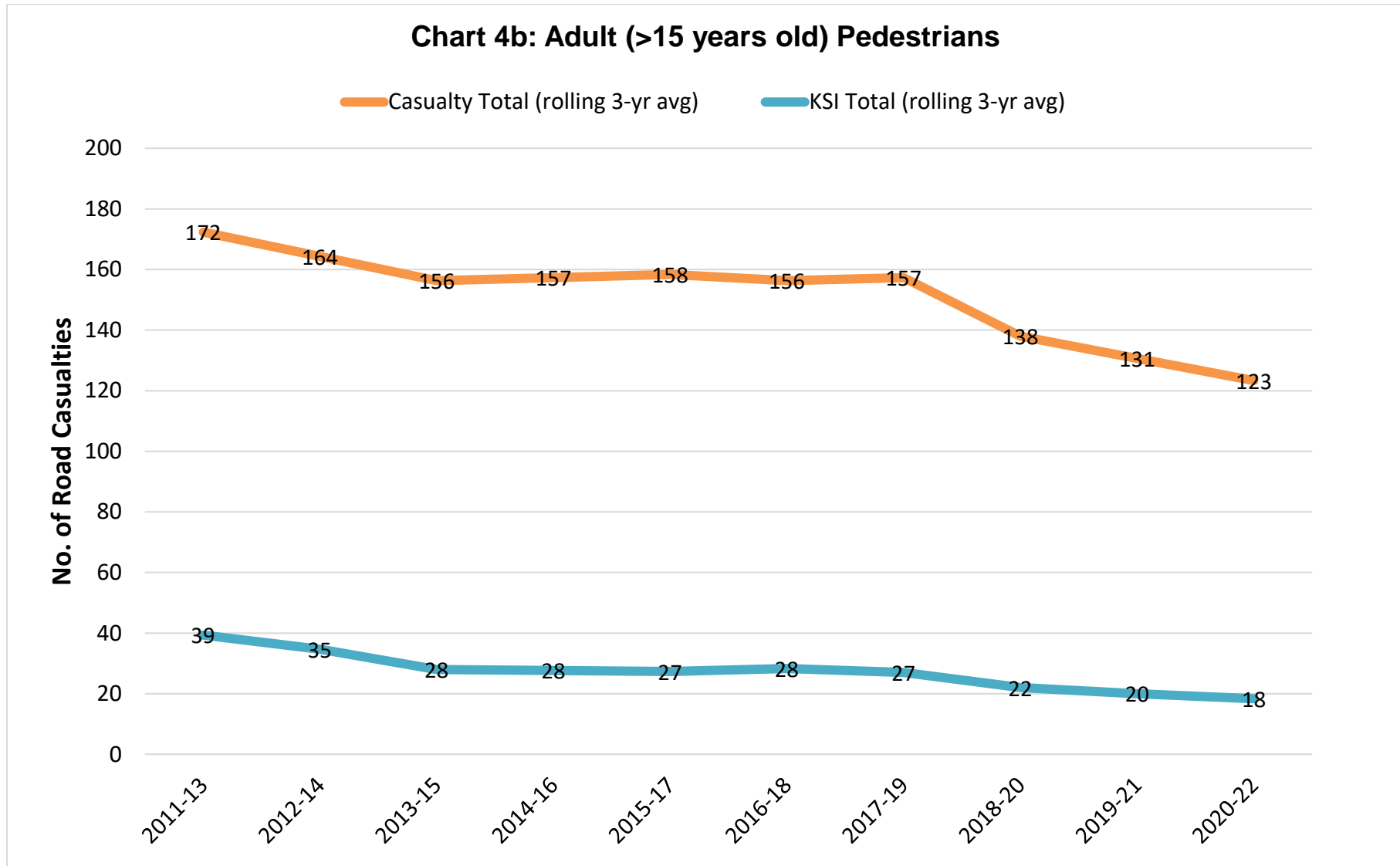
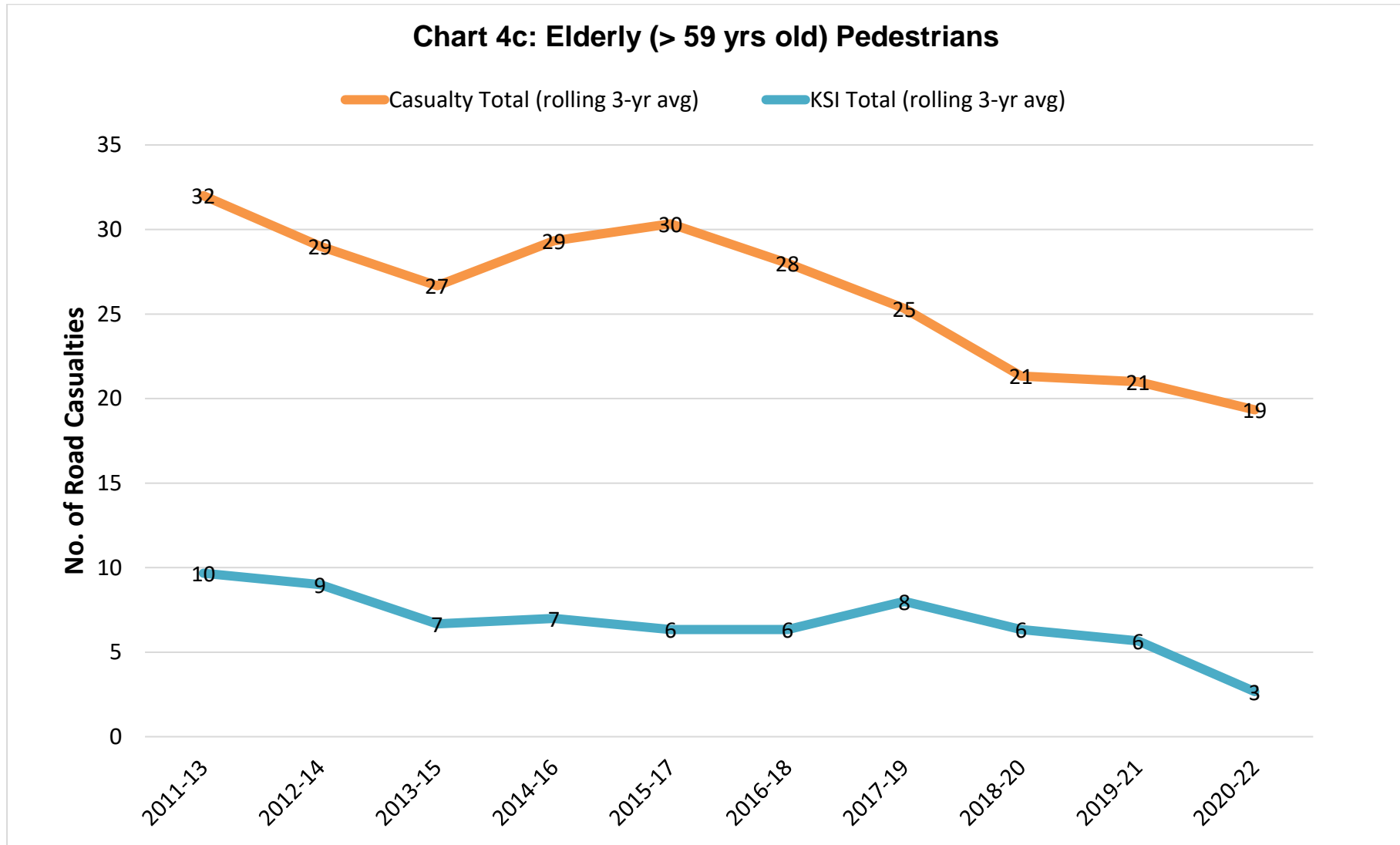


Chart 4c: Elderly (>59 years old) Pedestrians



Pedal Cycle Users

244 casualties (incl. 1 fatality)

There was an increase of 31 or **14.55%** in the total number of Cycle User casualties from the year before, from 213 to **244**. However, the overall number of casualties for this road user group remains historically low.

The proportion of Cycle User casualties killed or seriously injured was **12.3%**, and Cycle User casualties made up **26%** of all the KSI casualties.

Based on the 2020–22 cycle user casualty rates per 100–thousand of the population, the **most vulnerable** age–group for Cycle Users is **30–34 year–olds** (predominantly male).

Half of the Cycle user casualties, in 2022, were aged between 23 and 37 years of age.

In 2022, males accounted for **72%** of all the Cycle User casualties.

There were **8** Child Cycle User casualties, a decrease of 1 from the previous year, and children made up **3%** of the overall Cycle User casualty total.

There were **15** Elderly Cycle User casualties who made up **6%** of the overall Cycle User casualty total.

Historically, collisions that involve cycle users are predominantly with a passenger car. **Over half** of collisions involving cycle users take place at junctions.

Chart 5a: Child (<16 years old) Pedal Cycle Users

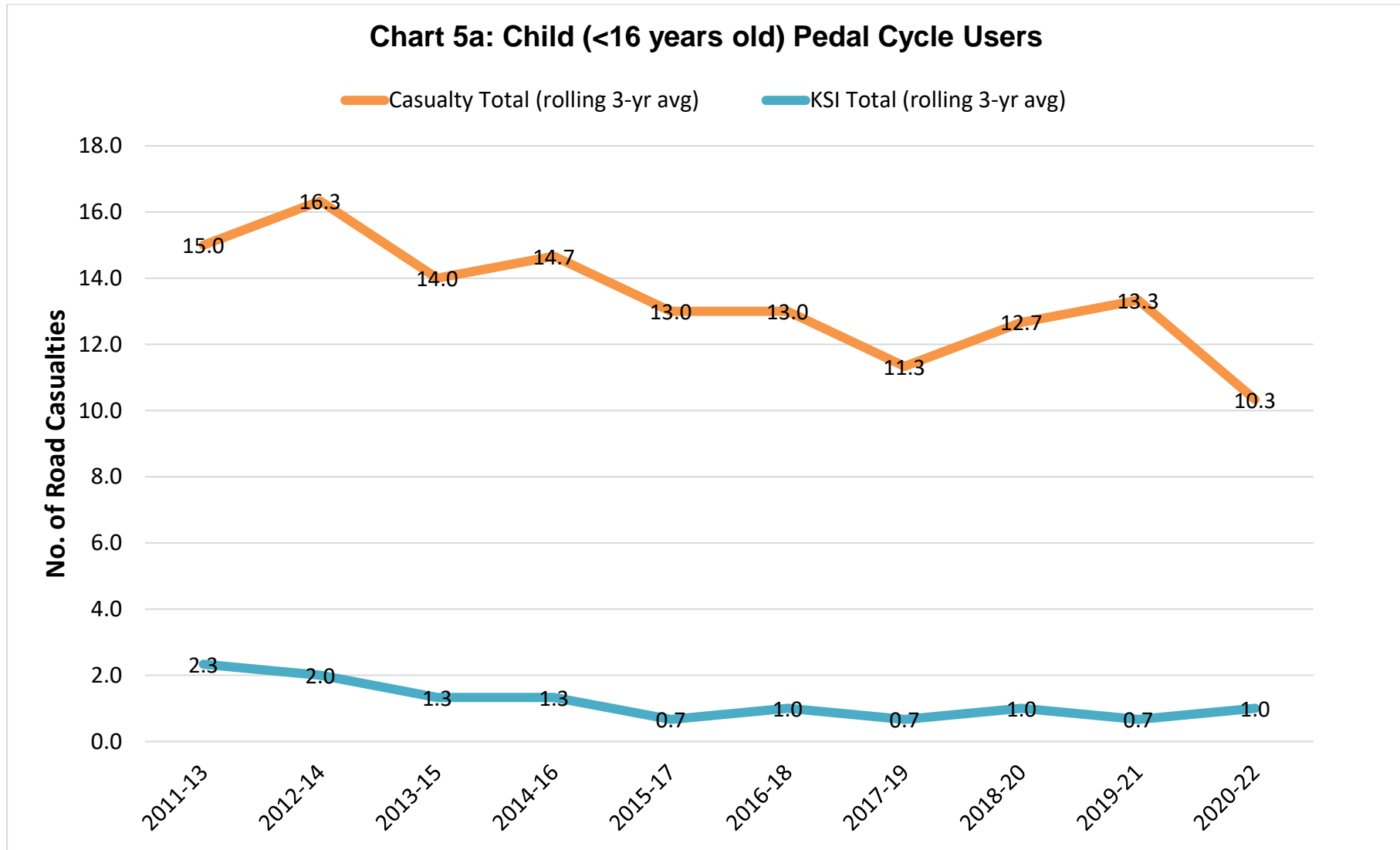
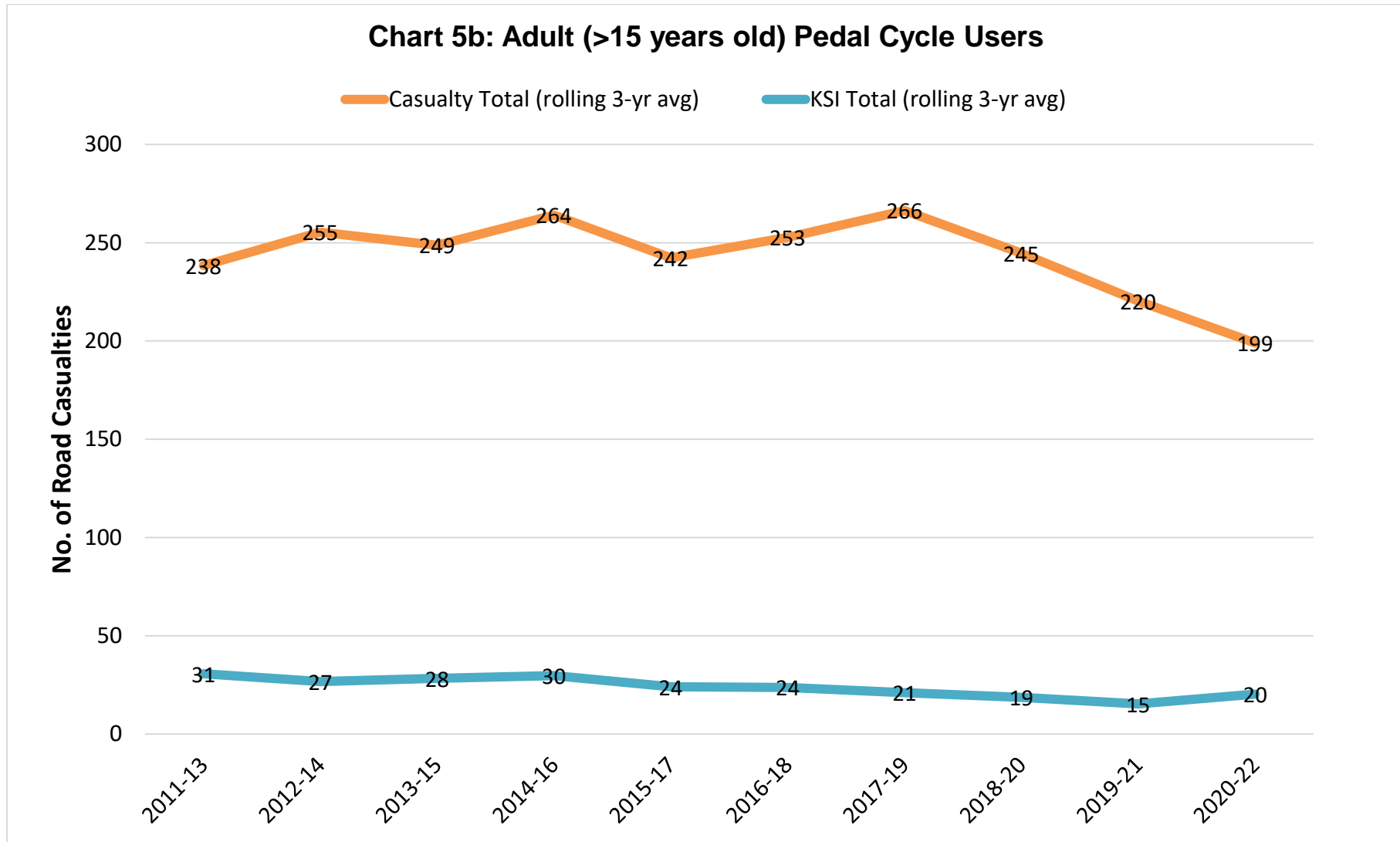


Chart 5b: Adult (>15 years old) Pedal Cycle Users



Motorcycle/Moped Users (a.k.a. Powered Two-Wheelers)

175 casualties (incl. 1 fatality)

There was an increase of 35 or **25%** in the total number of Motorcycle/Moped User casualties from the year before, from 140 to **175**. Moreover, the overall number of casualties for this road user group is historically high and is now at the highest level it has been since 2007.

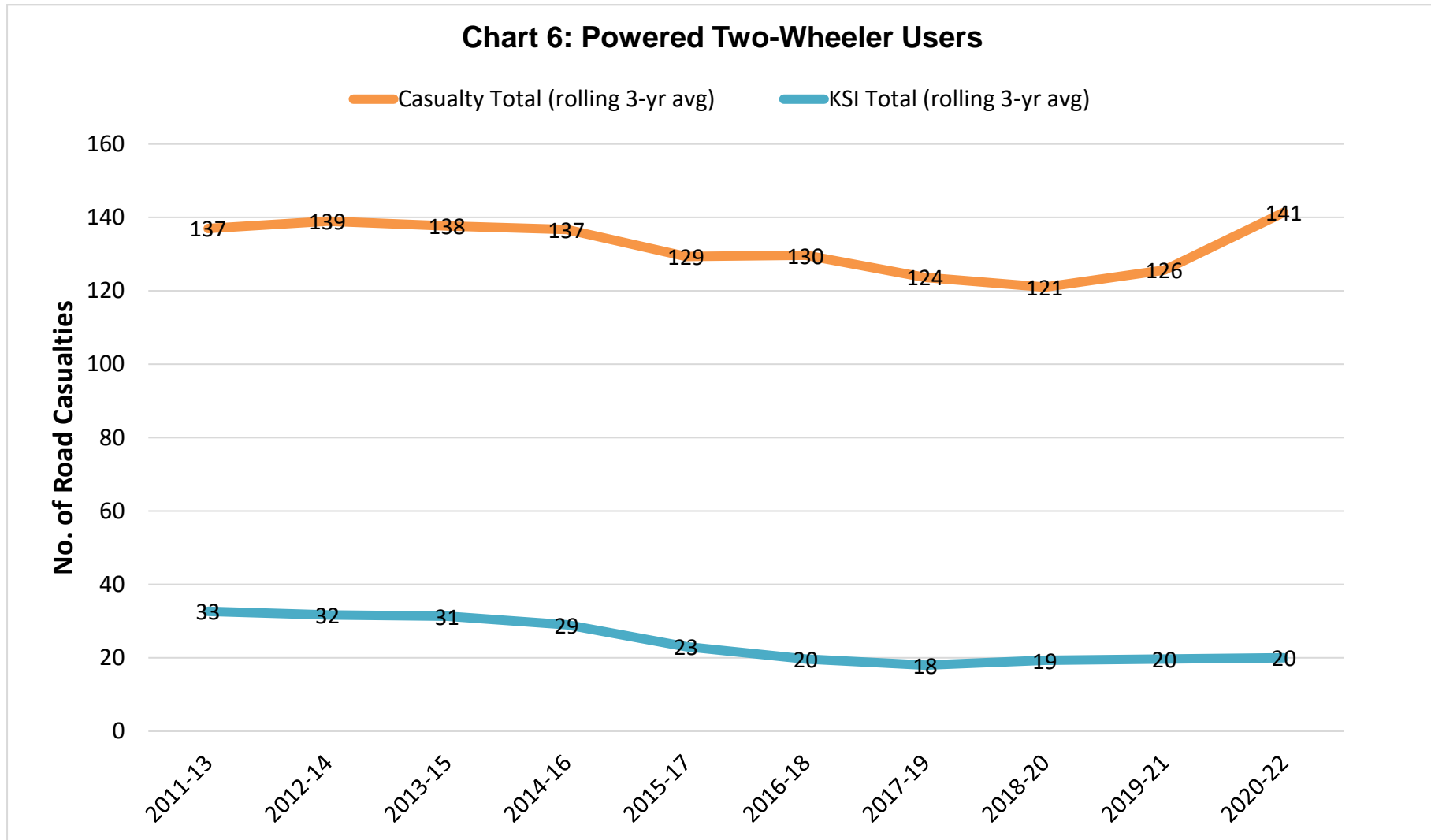
The proportion of Motorcycle/Moped User casualties killed or seriously injured was **11.43%**, and Motorcycle/Moped User casualties made up **17%** of all the KSI casualties.

Based on the 2020–22 motorcycle/moped user casualty rates per 100 thousand of the population, the **most vulnerable** age–group for Motorcycle/Moped Users is **30–34 year–olds** (predominantly male).

In 2022, males accounted for **84%** of all the Motorcycle/Moped User casualties. **54%** of the Motorcycle/Moped User casualties were under 33 years of age (predominantly male).

Historically, collisions that involve a motorcycle/moped user are predominantly with a passenger car. **Half** of collisions that involve a motorcycle/moped user take place at junctions.

Chart 6: Powered Two-Wheeler Users



Scooter Users (electric and other power types)

79 casualties (no fatalities)

The local trial of allowing e-scooter vehicles onto public roads in the West of England Combined Authority area, exclusively through participation in an approved rental scheme, began in the summer of 2020. However, the presence of e-scooters has also led to private owners of scooters (of various fuel types) to now use Bristol's public highway for journeys. Both types of scooter user are included in this analysis. 2021 was the first year in which a full year of data on this type of road user casualty was collected.

There was an increase of 16 or **25%** in the total number of Scooter User casualties from the year before, from 63 to **79**.

The proportion of Scooter User casualties killed or seriously injured was **16.5%**, and Scooter User casualties made up **11.2%** of all the KSI casualties.

Based on the 2022 overall casualty numbers, the **most vulnerable** age-group for Scooter Users is 22–24 year-olds (predominantly male).

In 2022, males accounted for **64%** of all the Scooter User casualties. **85%** of the Scooter User casualties were under 40 years of age (predominantly male).

Car Occupants (includes Taxis)

346 casualties (incl. 2 fatalities)

There was an increase of 29 or **9%** in the total number of Car occupant casualties from the year before, from 317 to **346**. However, the overall number of casualties for this road user group remains historically low.

The proportion of Car occupant casualties killed or seriously injured was **5.2%**, and Car occupant casualties made up **16%** of all the KSI casualties.

Based on the 2020–22 car-occupant casualty rates per 100 thousand of the population, the **most vulnerable** age-group for Car & Taxi Drivers is **40–44 year-olds**. While for Car & Taxi Passengers it is **15–19 year-olds**.

In 2022, 27–41 year-olds made up more than **one third** of the Car occupant casualties. **Half** of the Car occupant casualties were aged between 18 and 41 years of age.

Male and female casualties each made up around **half** of the Car occupant casualty total. However, males were slightly more predominant as Car Driver casualties whereas females were slightly more predominant as Car Passenger casualties.

There were 17 Child Car occupant casualties (all passengers), **3 more** than the previous year, and children made up **5%** of the overall Car occupant casualty total.

There were **36** Elderly Car occupant casualties, **5 more** than the previous year, and elderly casualties made up **10%** of the overall Car occupant casualty total.

Chart 7a: Child (<16 years old) Car & Taxi Passengers

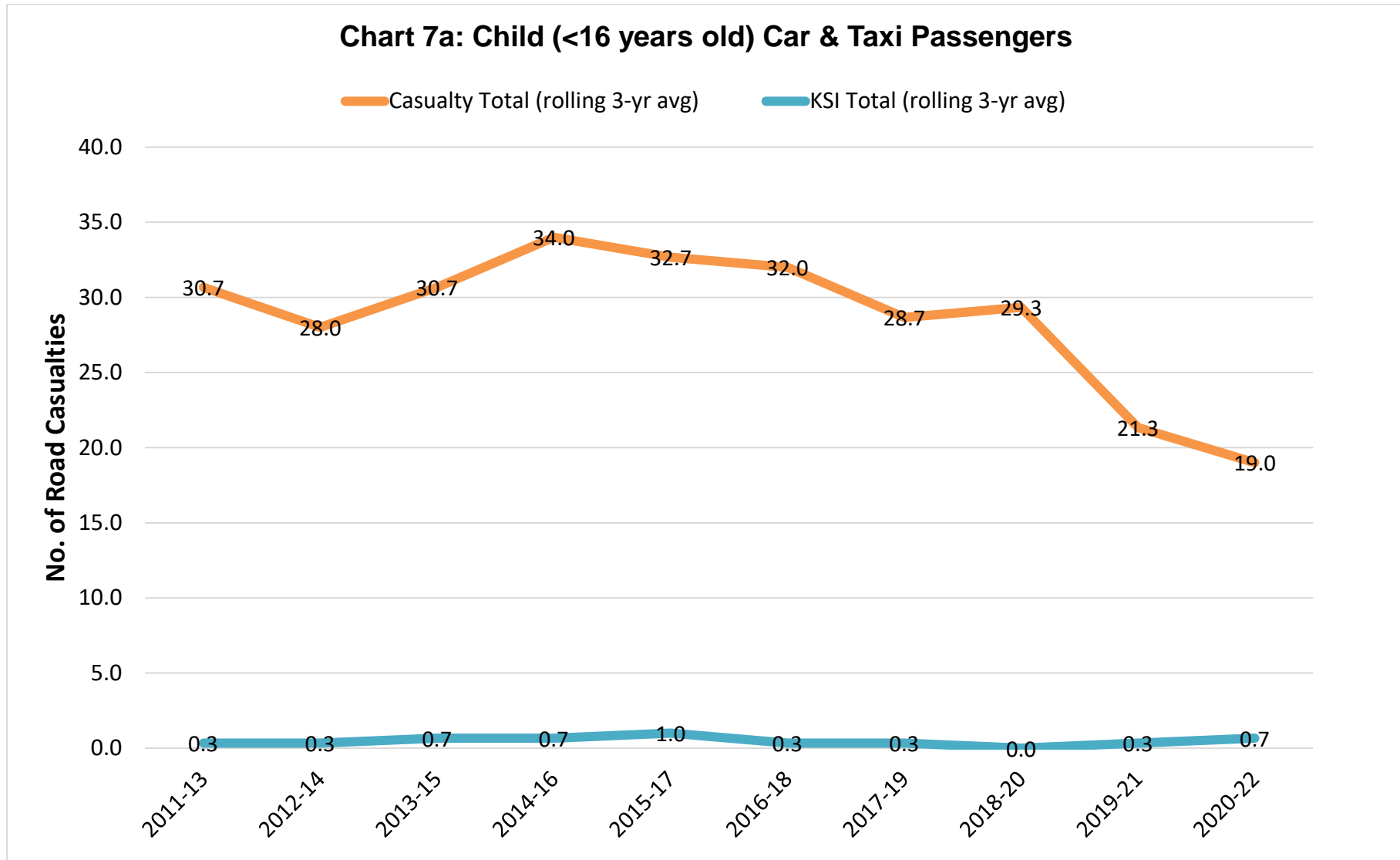


Chart 7b: Adult (>15 years old) Car & Taxi Passengers

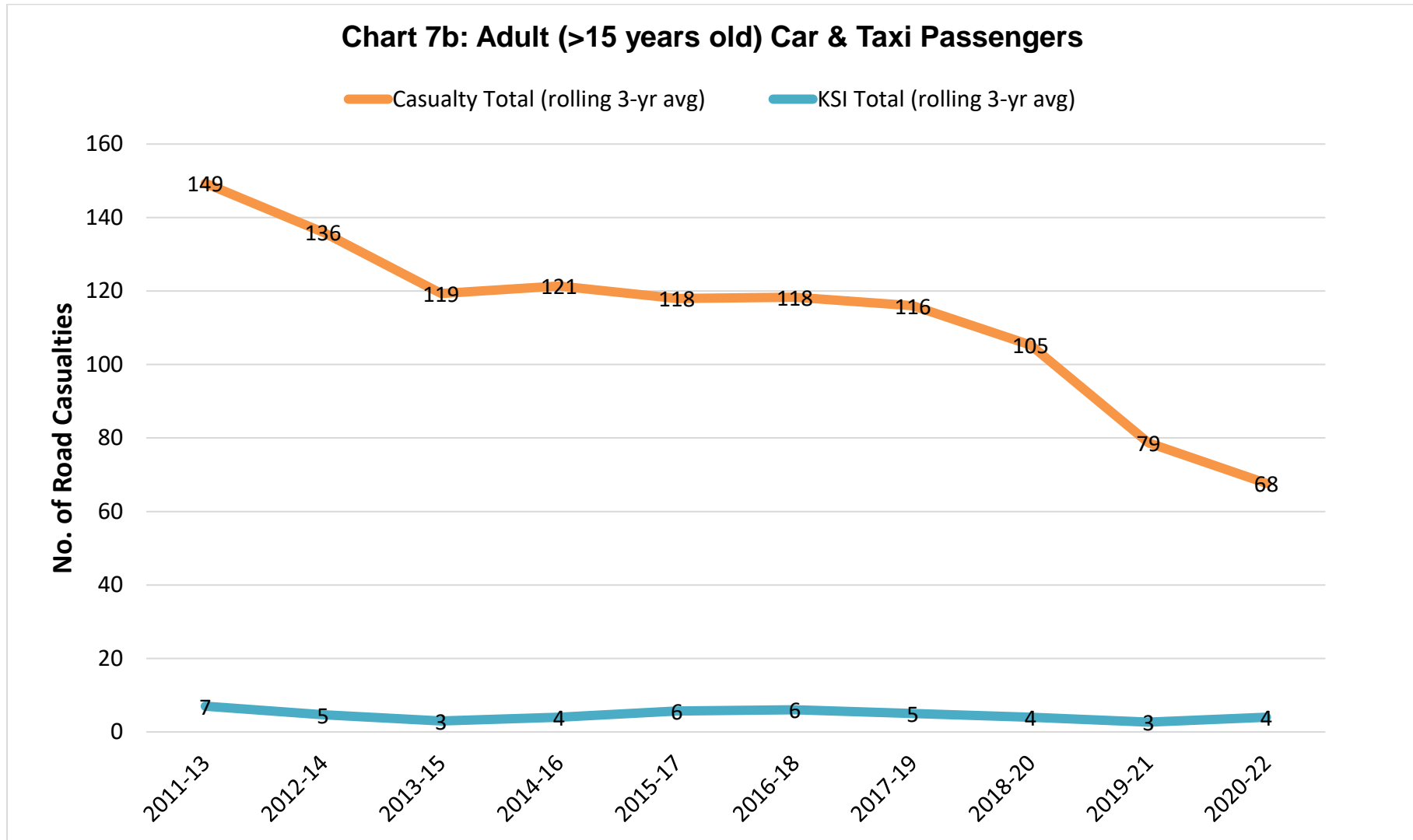


Chart 8a: Adult (>16 years old) Car & Taxi Drivers

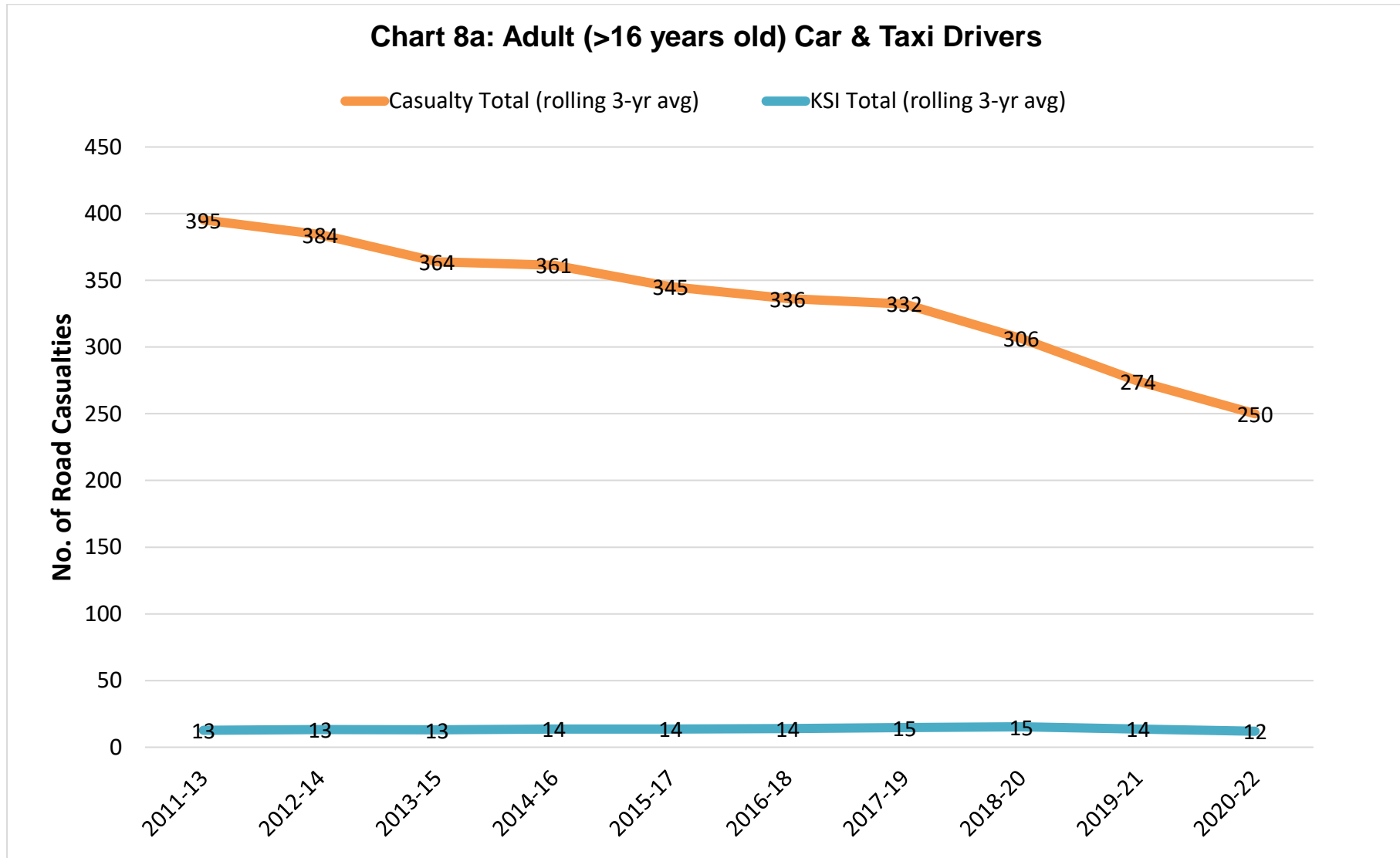
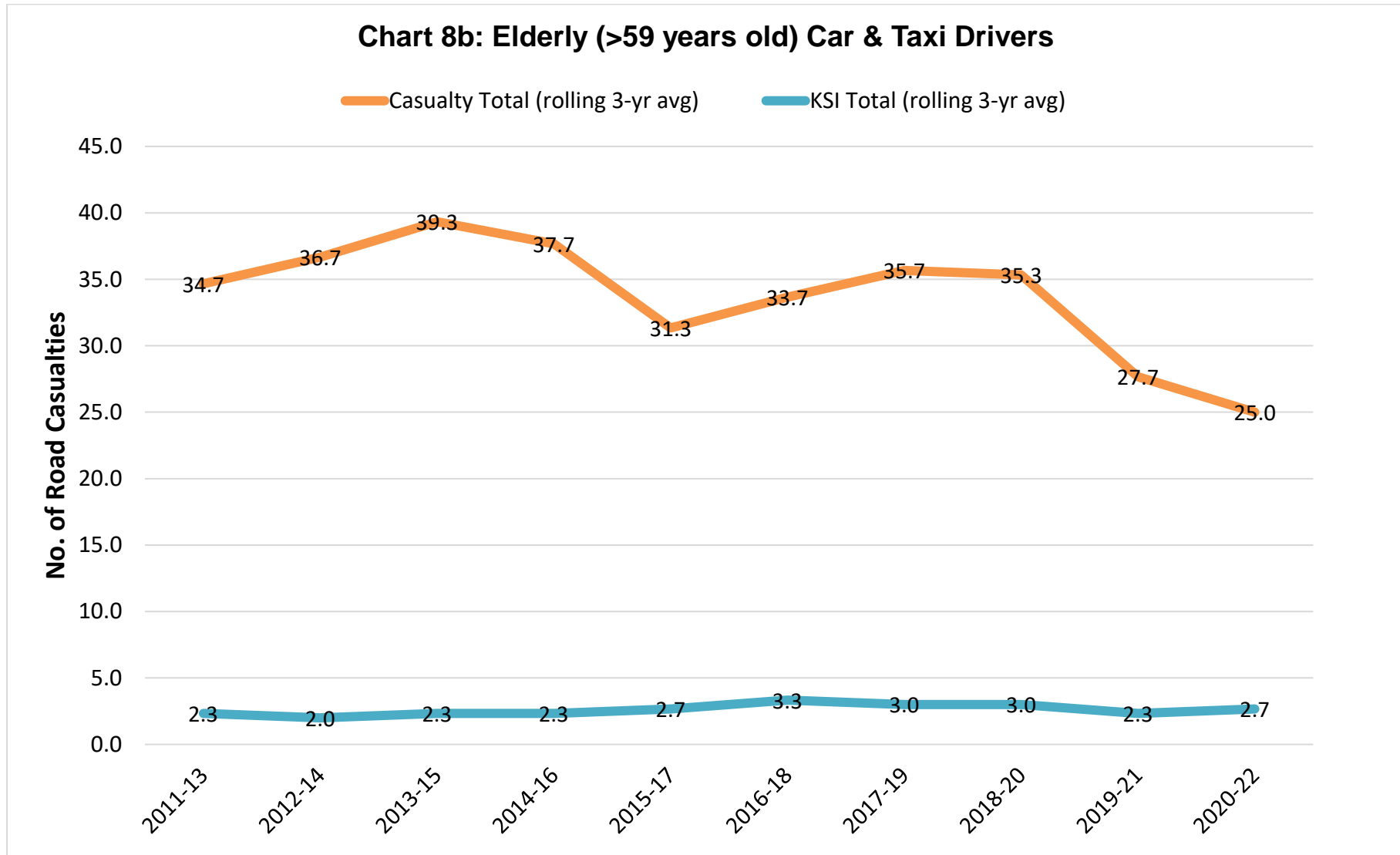


Chart 8b: Elderly (>59 years old) Car & Taxi Drivers



Annex 1a – Pedestrians: Road Casualty Age-Profile Table (2022)

Age Group	Fatal	Serious	Slight	Sub Total
0 - 4	0	1	6	7
5 - 6	0	1	2	3
7 - 11	0	3	8	11
12 - 15	0	1	20	21
All Children	0	6	36	42
16 - 16	0	0	4	4
17 - 20	0	1	7	8
21 - 30	1	5	33	39
31 - 40	1	7	26	34
41 - 50	0	2	22	24
51 - 60	1	1	20	22
61 - 70	0	3	9	12
71 +	1	1	5	7
All Adults	4	20	126	150
Age Unknown	0	0	2	2
All Ages	4	26	164	194
Expected number (per age group)	0.4	2.4	14.9	17.6

Annex 1b – Cyclists: Road Casualty Age-Profile Table (2022)

Age Group	Fatal	Serious	Slight	Sub Total
0 - 4	0	0	0	0
5 - 6	0	0	0	0
7 - 11	0	0	1	1
12 - 15	0	1	6	7
All Children	0	1	7	8
16 - 16	0	0	4	4
17 - 20	0	2	13	15
21 - 30	0	6	70	76
31 - 40	1	9	58	68
41 - 50	0	3	29	32
51 - 60	0	7	19	26
61 - 70	0	0	9	9
71 +	0	1	4	5
All Adults	1	28	206	235
Age Unknown	0	0	1	1
All Ages	1	29	214	244
Expected number (per age group)	0.1	2.6	19.5	22.2

Annex 1c – Powered 2-Wheelers & Combinations (Riders & Pillion Passengers): Road Casualty Age-Profile Table (2022)

Age Group	Fatal	Serious	Slight	Sub Total
0 - 4	0	0	0	0
5 - 6	0	0	0	0
7 - 11	0	0	0	0
12 - 15	0	0	2	2
All Children	0	0	2	2
16 - 16	0	0	1	1
17 - 20	0	2	16	18
21 - 30	1	3	51	55
31 - 40	0	7	46	53
41 - 50	0	1	25	26
51 - 60	0	4	9	13
61 - 70	0	1	5	6
71 +	0	1	0	1
All Adults	1	19	153	173
Age Unknown	0	0	0	0
All Ages	1	19	155	175
Expected number (per age group)	0.1	1.7	14.1	15.9

Annex 1d – 4-Wheeled Cars & Taxis (Drivers): Road Casualty Age-Profile Table (2022)

Age Group	Fatal	Serious	Slight	Sub Total
0 - 4	0	0	0	0
5 - 6	0	0	0	0
7 - 11	0	0	0	0
12 - 15	0	0	0	0
All Children	0	0	0	0
16 - 16	0	0	0	0
17 - 20	0	1	13	14
21 - 30	0	4	57	61
31 - 40	0	1	62	63
41 - 50	0	1	56	57
51 - 60	0	1	36	37
61 - 70	0	1	12	13
71 +	2	0	11	13
All Adults	2	9	247	258
Age Unknown	0	0	1	1
All Ages	2	9	248	259
Expected number (per age group)	0.2	0.8	22.5	23.5

Annex 1e – 4-Wheeled Cars & Taxis (Passengers): Road Casualty Age-Profile Table (2022)

Age Group	Fatal	Serious	Slight	Sub Total
0 - 4	0	0	2	2
5 - 6	0	0	1	1
7 - 11	0	0	7	7
12 - 15	0	1	6	7
All Children	0	1	16	17
16 - 16	0	0	5	5
17 - 20	0	0	6	6
21 - 30	0	3	22	25
31 - 40	0	2	14	16
41 - 50	0	0	7	7
51 - 60	0	0	3	3
61 - 70	0	0	5	5
71 +	0	1	2	3
All Adults	0	6	64	70
Age Unknown	0	0	0	0
All Ages	0	7	80	87
Expected number (per age group)	0.0	0.6	7.3	7.9

Annex 1f – PCV/Minibus/Motor Caravan/Tram/Light Rail (Drivers & Passengers): Road Casualty Age-Profile Table (2022)

Age Group	Fatal	Serious	Slight	Sub Total
0 - 4	0	0	1	1
5 - 6	0	0	0	0
7 - 11	0	0	1	1
12 - 15	0	0	0	0
All Children	0	0	2	2
16 - 16	0	0	0	0
17 - 20	0	0	0	0
21 - 30	0	0	1	1
31 - 40	0	0	0	0
41 - 50	0	0	1	1
51 - 60	0	0	0	0
61 - 70	0	1	0	1
71 +	0	1	0	1
All Adults	0	2	2	4
Age Unknown	0	0	0	0
All Ages	0	2	4	6
Expected number (per age group)	0.0	0.2	0.4	0.5

Annex 1g – All Goods Vehicles (Drivers / Passengers): Road Casualty Age-Profile Table (2022)

Age Group	Fatal	Serious	Slight	Sub Total
0 - 4	0	0	0	0
5 - 6	0	0	0	0
7 - 11	0	0	0	0
12 - 15	0	0	0	0
All Children	0	0	0	0
16 - 16	0	0	0	0
17 - 20	0	0	0	0
21 - 30	0	0	1	1
31 - 40	0	0	3	3
41 - 50	0	1	2	3
51 - 60	0	0	3	3
61 - 70	0	0	0	0
71 +	0	0	0	0
All Adults	0	1	9	10
Age Unknown	0	0	0	0
All Ages	0	1	9	10
Expected number (per age group)	0.0	0.1	0.8	0.9

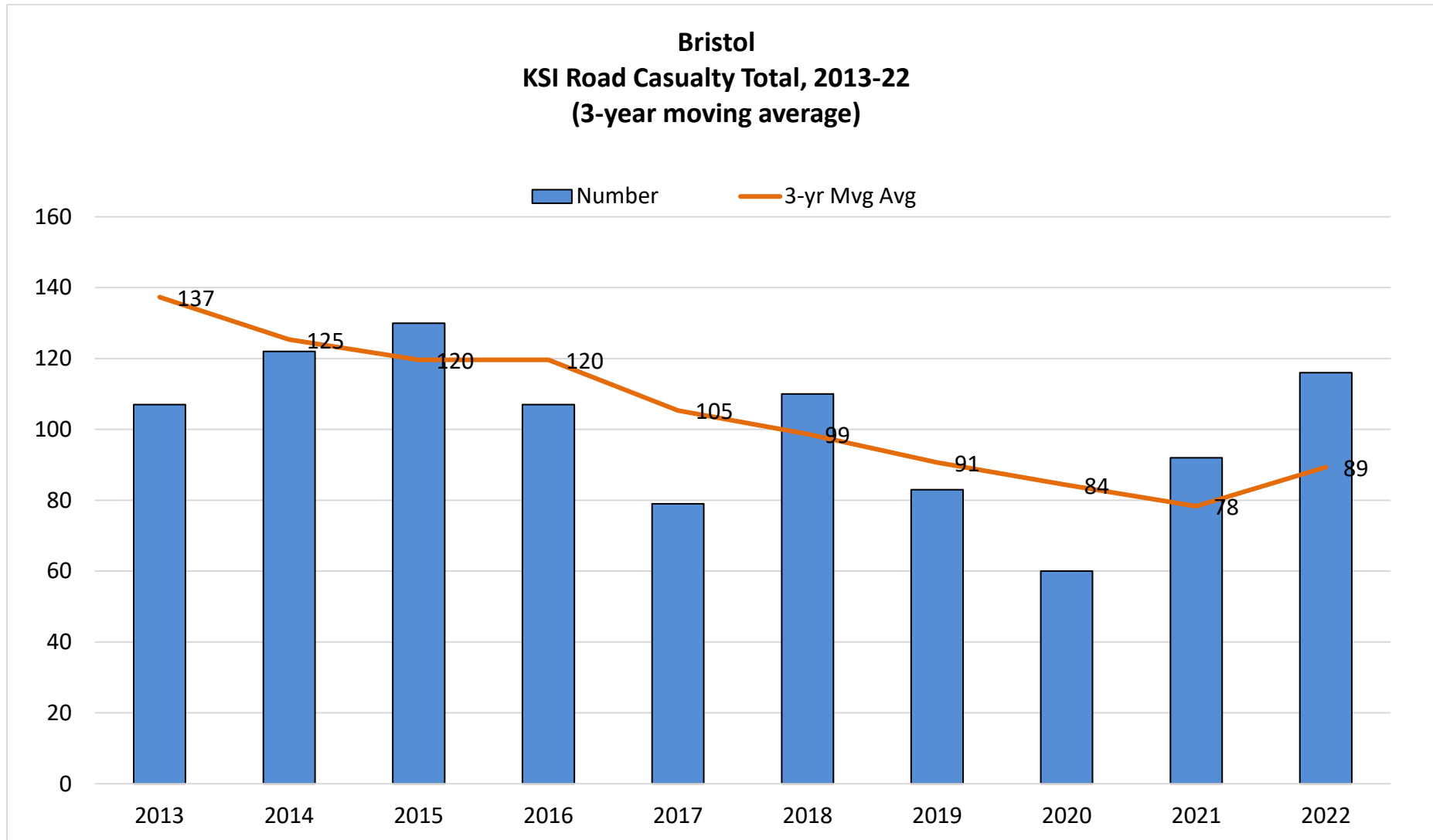
Annex 1h – Other Motor & Non-Motor Vehicles (Drivers / Passengers): Road Casualty Age-Profile Table (2022)

Age Group	Fatal	Serious	Slight	Sub Total
0 - 4	0	0	0	0
5 - 6	0	0	0	0
7 - 11	0	0	1	1
12 - 15	0	1	2	3
All Children	0	1	3	4
16 - 16	0	1	0	1
17 - 20	0	1	12	13
21 - 30	0	6	36	42
31 - 40	0	4	12	16
41 - 50	0	2	6	8
51 - 60	0	0	2	2
61 - 70	0	0	0	0
71 +	0	0	1	1
All Adults	0	14	69	83
Age Unknown	0	0	0	0
All Ages	0	15	72	87
Expected number (per age group)	0.0	1.4	6.5	7.9

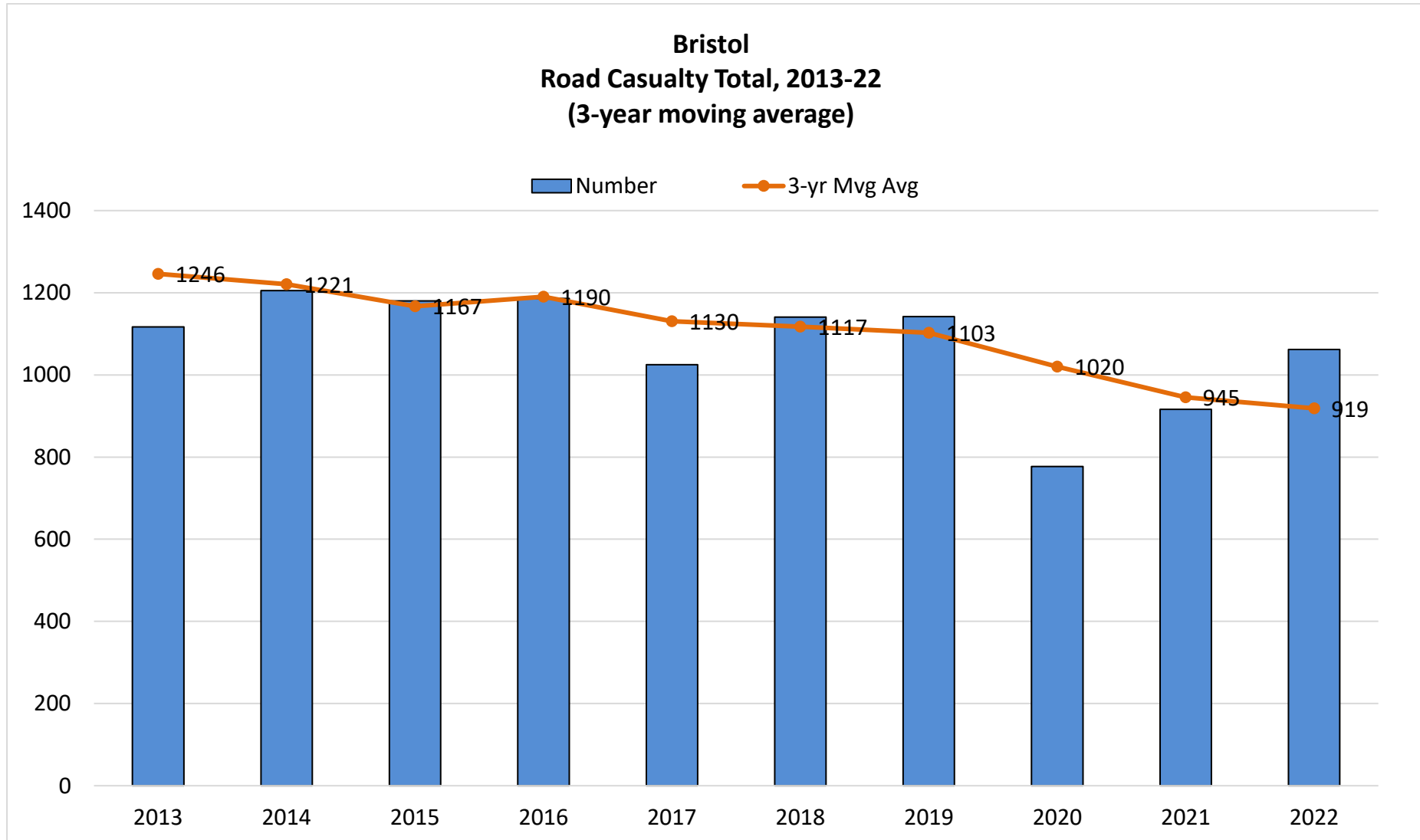
Annex 1i – All Road User Groups (Drivers/ Riders/ Passengers/ Pedestrians): Road Casualty Age-Profile Table (2022)

Age Group	Fatal	Serious	Slight	Sub Total
0 - 4	0	1	9	10
5 - 6	0	1	3	4
7 - 11	0	3	18	21
12 - 15	0	4	36	40
All Children	0	9	66	75
16 - 16	0	1	14	15
17 - 20	0	7	67	74
21 - 30	2	27	271	300
31 - 40	2	30	221	253
41 - 50	0	10	148	158
51 - 60	1	13	92	106
61 - 70	0	6	40	46
71 +	3	5	23	31
All Adults	8	99	876	983
Age Unknown	0	0	4	4
All Ages	8	108	946	1062
Expected number (per age group)	0.7	9.8	86.0	96.5

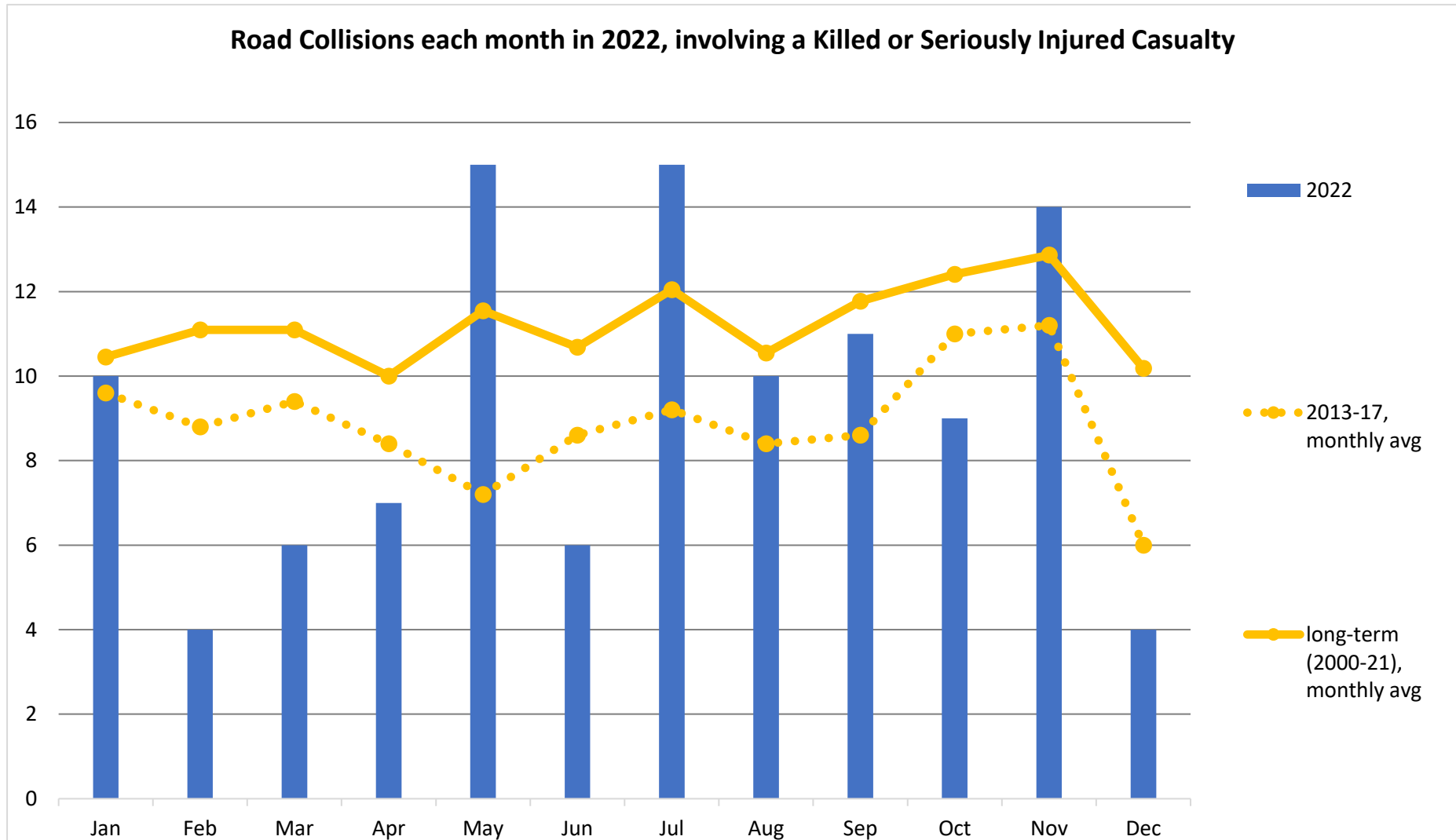
Annex 2a – Killed or Seriously Injured (KSI) Road Casualty change (3-year rolling average)



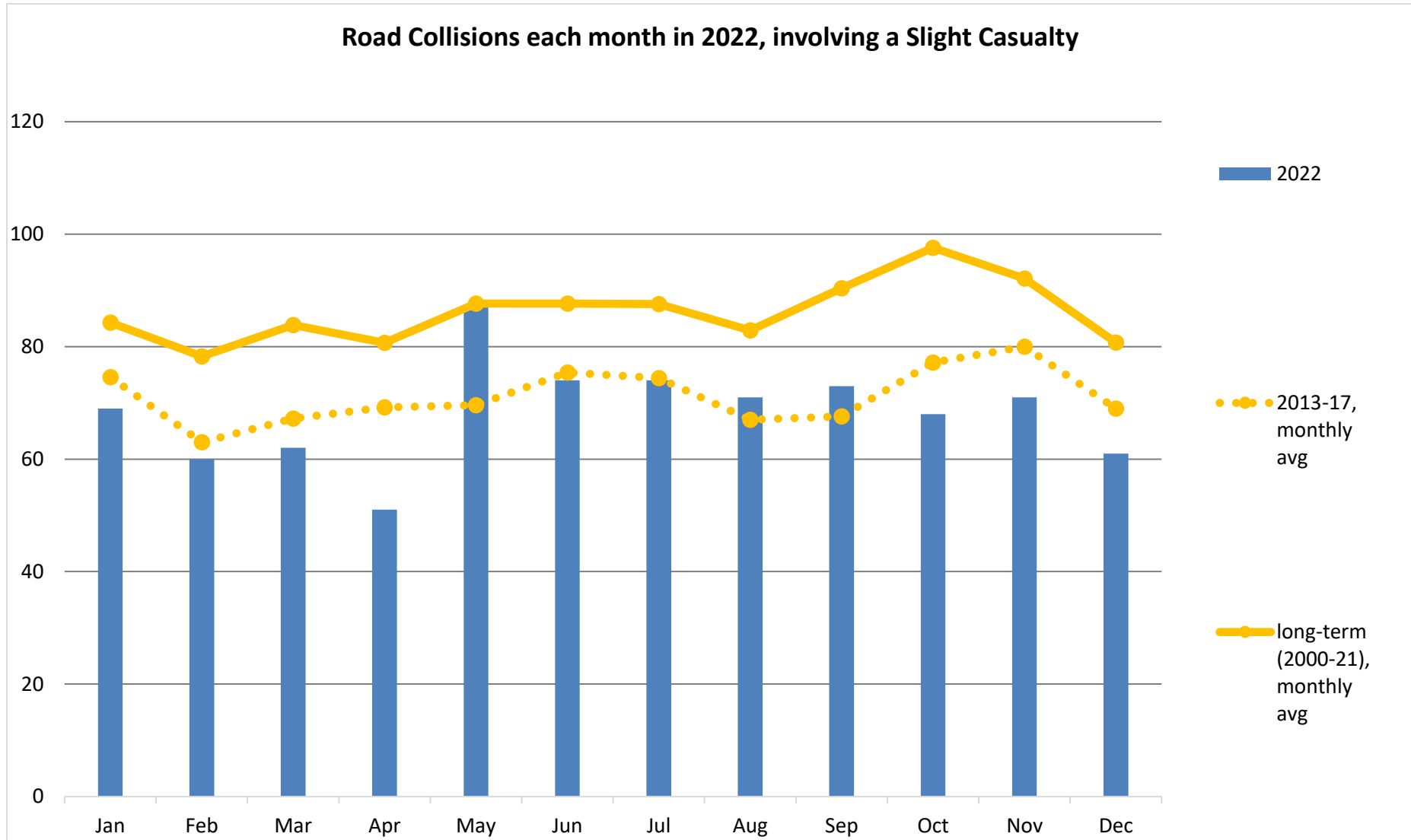
Annex 2b – All Severities of Road Casualty change (3-year rolling average)



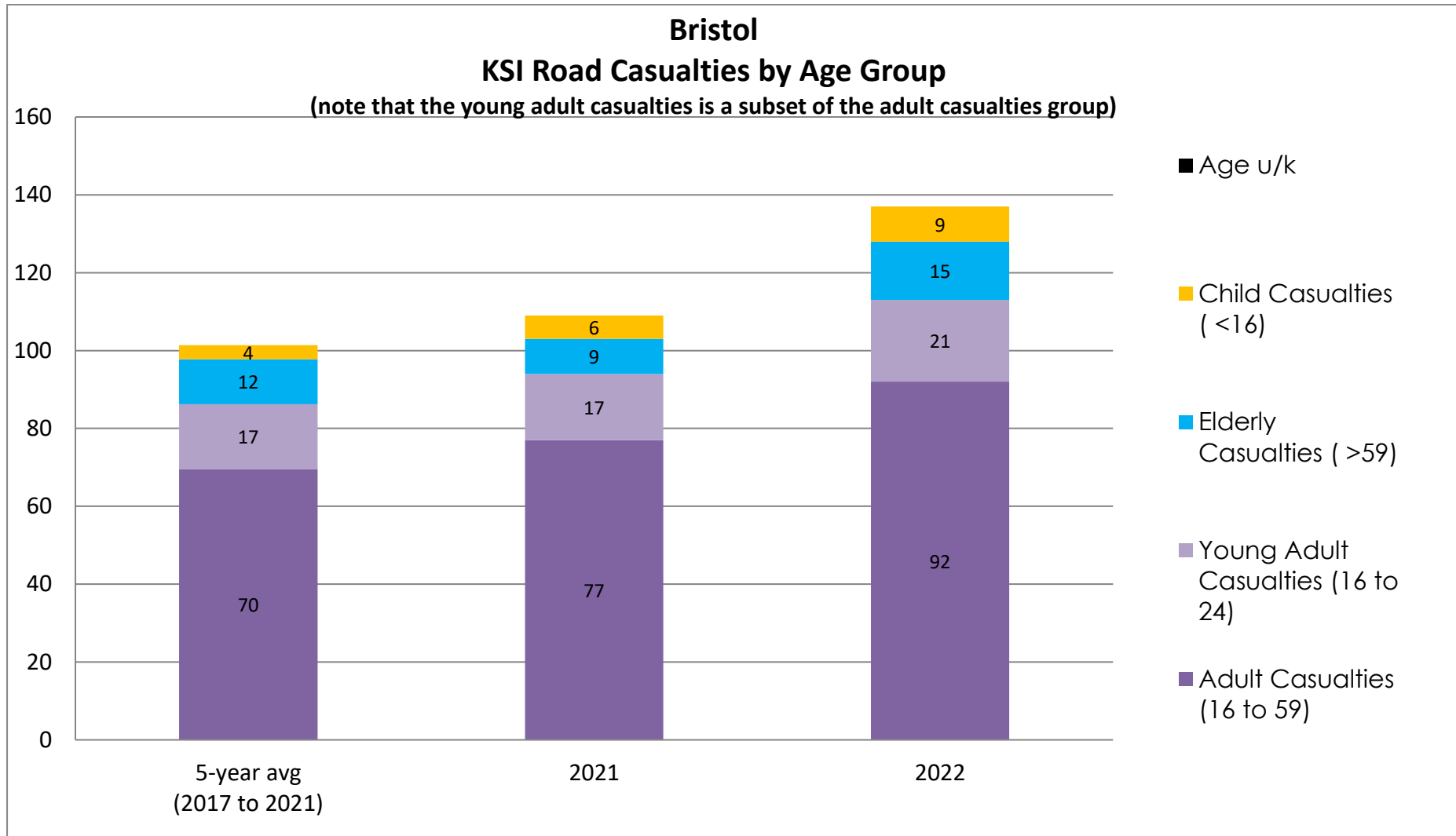
Annex 3a – Killed or Seriously Injured (KSI) Road Collisions each Month



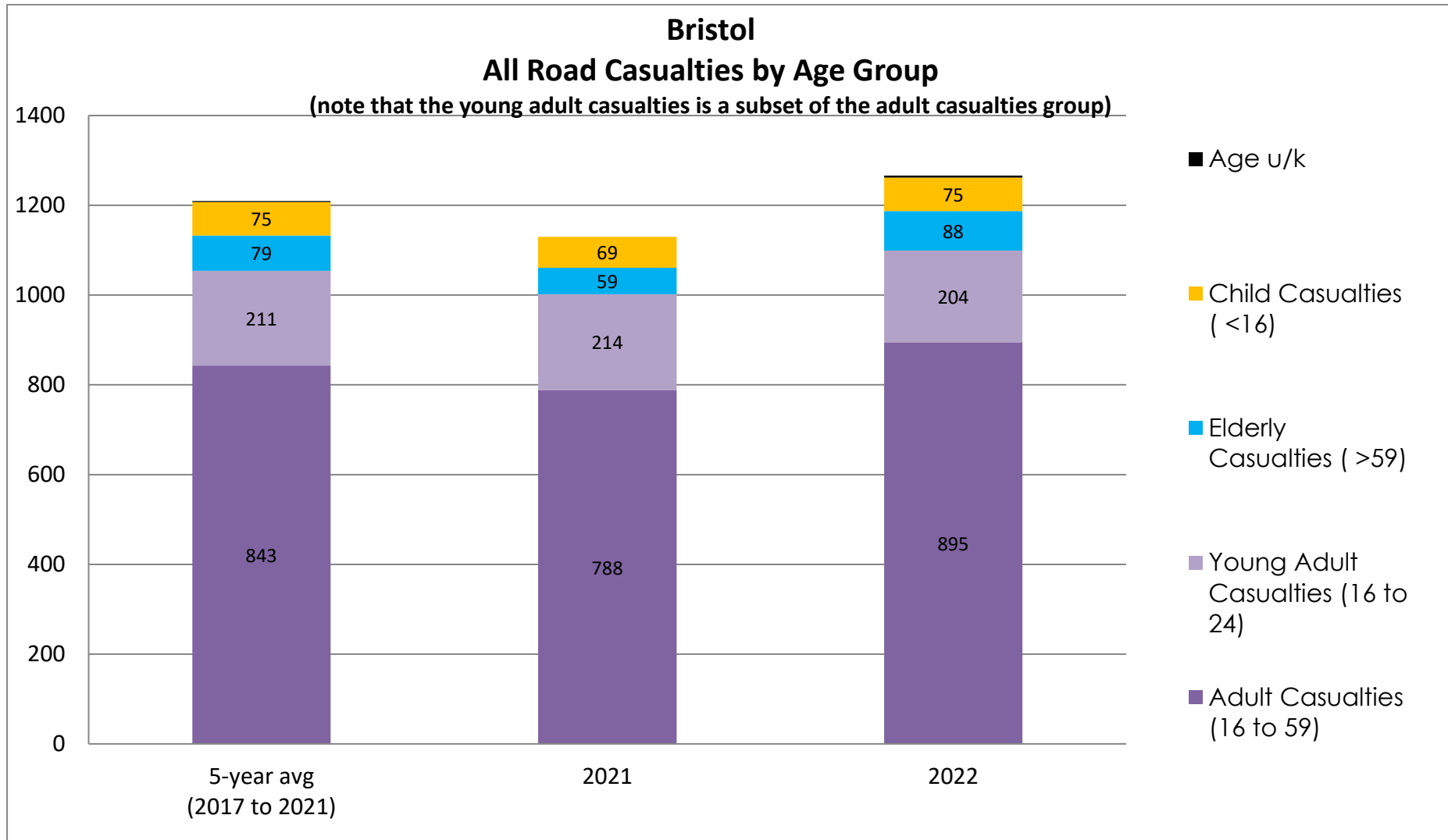
Annex 3b – Slight Road Collisions each Month



Annex 4a - Killed or Seriously Injured (KSI) Road Casualties by Age Group



Annex 4b - All Road Casualties by Age Group



Glossary

Adult age = 16 to 59

Child age = 15 and under

Young Adult age = 16 to 24

Other Adult age = 25 to 59

Elderly age = 60 and over

KSI = killed or seriously injured

P2W = powered two-wheelers (includes motorbikes, mopeds, motorcycle scooters, but not standing 'E-Scooters')

Standing-Scooter = commonly known as an 'E-Scooter', but can be powered by other fuel types

Vulnerable road user = pedestrians, pedal cycle users, powered two-wheeler users, and standing-scooter users

Useful Links

[Reported road casualties Great Britain, annual report: 2022](#)

[Reported road casualty statistics in Great Britain: interactive dashboard, from 2018](#)

[Road traffic statistics | Local authority: Bristol, City of](#)

[Road collision/casualty statistics – customisable download](#)

[Reported road collisions, vehicles and casualties \(GB\) – tables](#)

[Concern as casualty stats return to pre-pandemic levels | London Road Safety Council](#)