



Road Casualties

In Bristol

2019

- 2** Children (15 years & under) Killed or Seriously Injured (down↓ by 4 from previous year)
- 18** Young Adults (16-24 years) Killed or Seriously Injured (down↓ by 8 from previous year)
- 19** Elderly Adults (60 years & over) Killed or Seriously Injured (up↑ by 8 from previous year)
- 44** Other Adults (25 to 59 years) Killed or Seriously Injured (down↓ by 23 from previous year)
- 1,060** Slight Injuries (up↑ by 29 from previous year)
- 23** Taxi occupants slightly injured (up↑ by 7 from previous year)
- 15** Bus occupants slightly injured (down↓ by 2 from previous year)
- Casualty Total of **1,143** (up↑ by 2 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 2019, there were **1,143** reported casualties (**including 3 fatalities**), this was 2 more than the previous year. The annual casualty rate for all road users (based on the casualty total and the estimated miles travelled each year by motor vehicles) has fallen by **13%** since 2010. 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.

There were **83** KSI (killed or seriously injured) casualties reported in 2019, this was 27 less than the previous year and a decrease of 25%. The annual change in KSI road casualties when following the 3-year rolling average indicates that the long-term trend is still downward, as illustrated in Annex 2a.

KSI casualties made up **7%** of the total number of reported casualties during the year. There were **3** fatal casualties - a level that is below the recent (2009 to 2018) long-term average for Bristol's roads of 8 deaths per year.

The overall casualties by age-group were as follows:

- Children – **83** (this included 0 fatality), which was 7.33% of the total number of casualties reported
- Young Adults – **222** (this included 0 fatality), which was 19.33% of the total number of casualties reported
- Other Adults (25-59 yrs) – **739** (this included 0 fatality), which was 65% of the total number of casualties reported
- Elderly – **95** (this included 3 fatalities), which was 8.33% of the total number of casualties reported

There were 3 casualties (all slightly injured) of unknown age.

Table 1: 2019 - Casualties summary

2019	KSI	Slight	All
Total	83	1060	1,143
Pedestrians	31	182	213
Cycle users	14	304	318
Motorcycle users	19	109	128
Car & Taxi Occupants	18	443	461
Other road users	1	22	23
Child Total	2	81	83
(Child pedestrians)	2	37	39
(Child cycle users)	0	17	17
Elderly Total	19	76	95
(Elderly pedestrians)	14	17	31
(Elderly cycle users)	1	6	7

There were 721 male casualties overall, which was 63% of the casualty total, and 418 female casualties overall, which was 37% of the casualty total. Male casualties formed 65% of the Killed or Seriously Injured casualty total, and female casualties formed 35% of the Killed or Seriously Injured casualty total.

Economic Cost of Collisions and Casualties

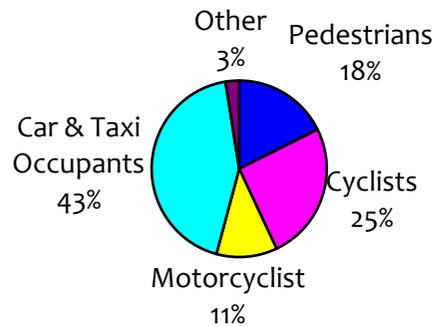
The estimated economic cost of a road collision is published annually by the Department for Transport in their Road Casualties Great Britain report – see table below showing figures based on 2018 prices. Using the figure for the ‘all injury’ collision type on Built-up roads of £80,823, the value of prevention of the 972 collisions in Bristol in 2019 is £68.56 million (note: an adjustment of -£10 million has been applied to the actual figure, because of the relatively low number of fatal and serious collisions in 2019).

Accident Type	Road Class			All
	Built-Up (40mph and below)	Non Built- Up (above 40mph)	Motorway	
Fatal	2,092,586	2,276,105	2,394,758	2,196,534
Serious	242,375	274,826	282,167	251,458
Slight	24,722	30,007	35,654	26,087
All Injury	80,823	162,786	120,223	98,232
Damage Only	2,226	3,254	3,127	2,344

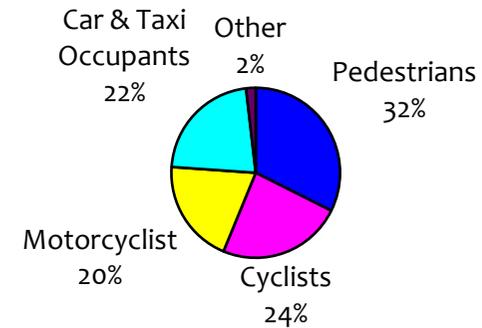
Table 2: Comparison of Collision and Casualty Data Since 2016

		2016	2017	2018	3-year average (2016 to 2018)	2019	% Change from 3-year average
Fatal	Collisions	4	11	7	7	3	-59.1%
	Casualties	5	12	7	8	3	-62.5%
Serious	Collisions	101	63	98	87	74	-15.3%
	Casualties	102	67	103	91	80	-11.8%
Slight	Collisions	906	784	842	844	895	6.0%
	Casualties	1079	946	1031	1019	1060	4.1%
Total	Collisions	1011	858	947	939	972	3.6%
	Casualties	1186	1025	1141	1117	1143	2.3%

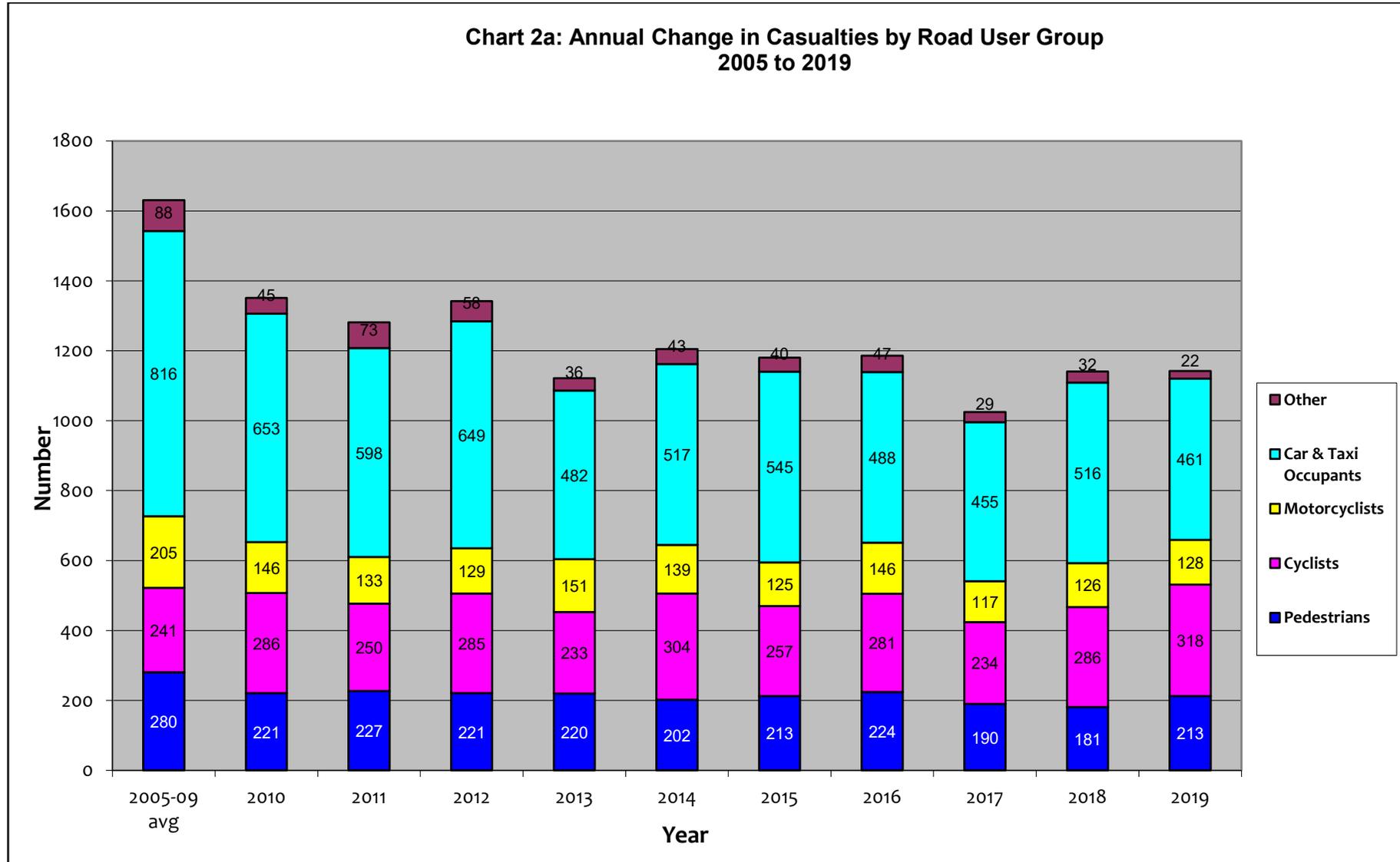
**Chart 1a: All Casualties by Road User Group
2017 to 2019 Totals
(3-year average)**

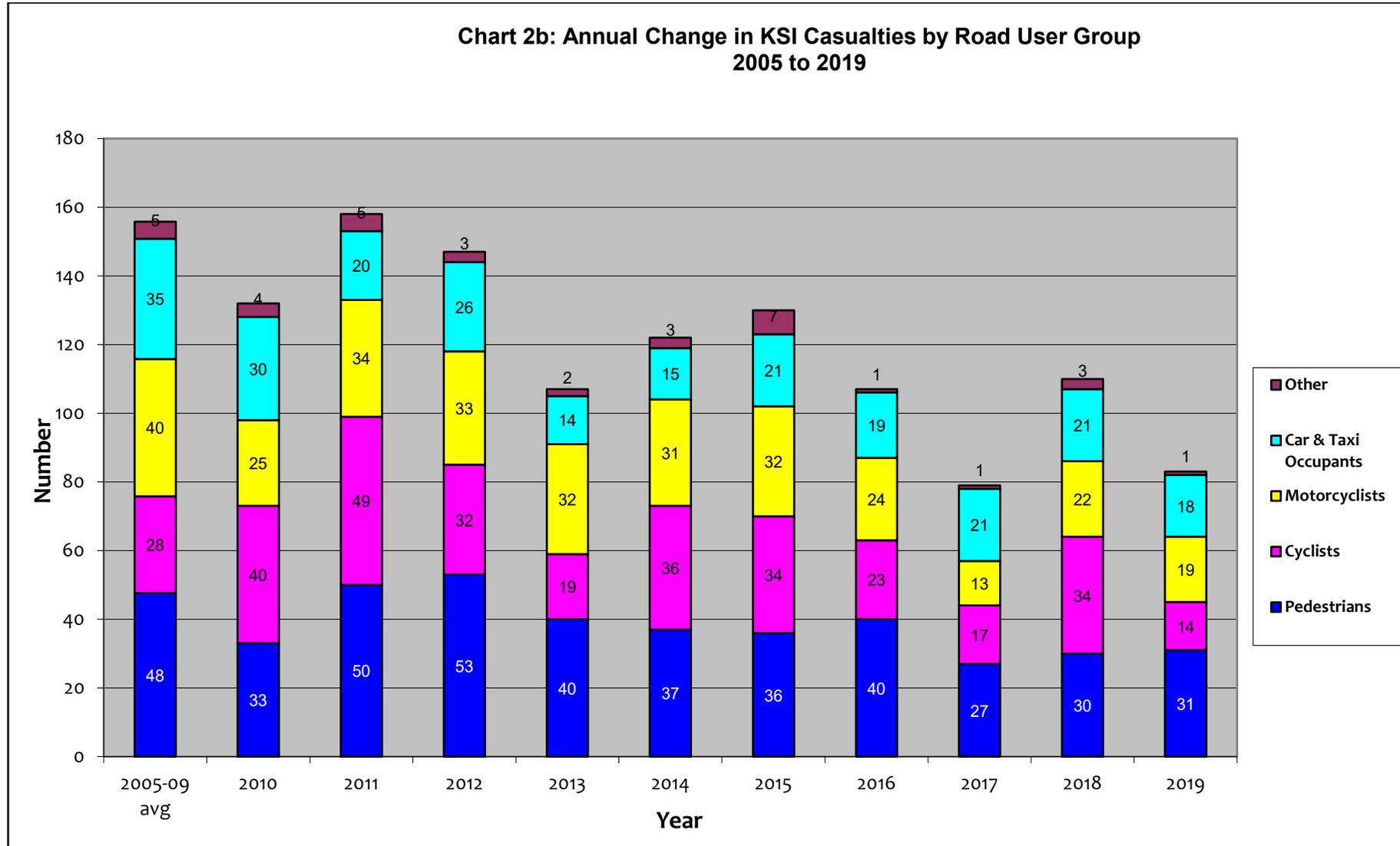


**Chart 1b: KSI Casualties by Road User Group
2017 to 2019 Totals
(3-year average)**

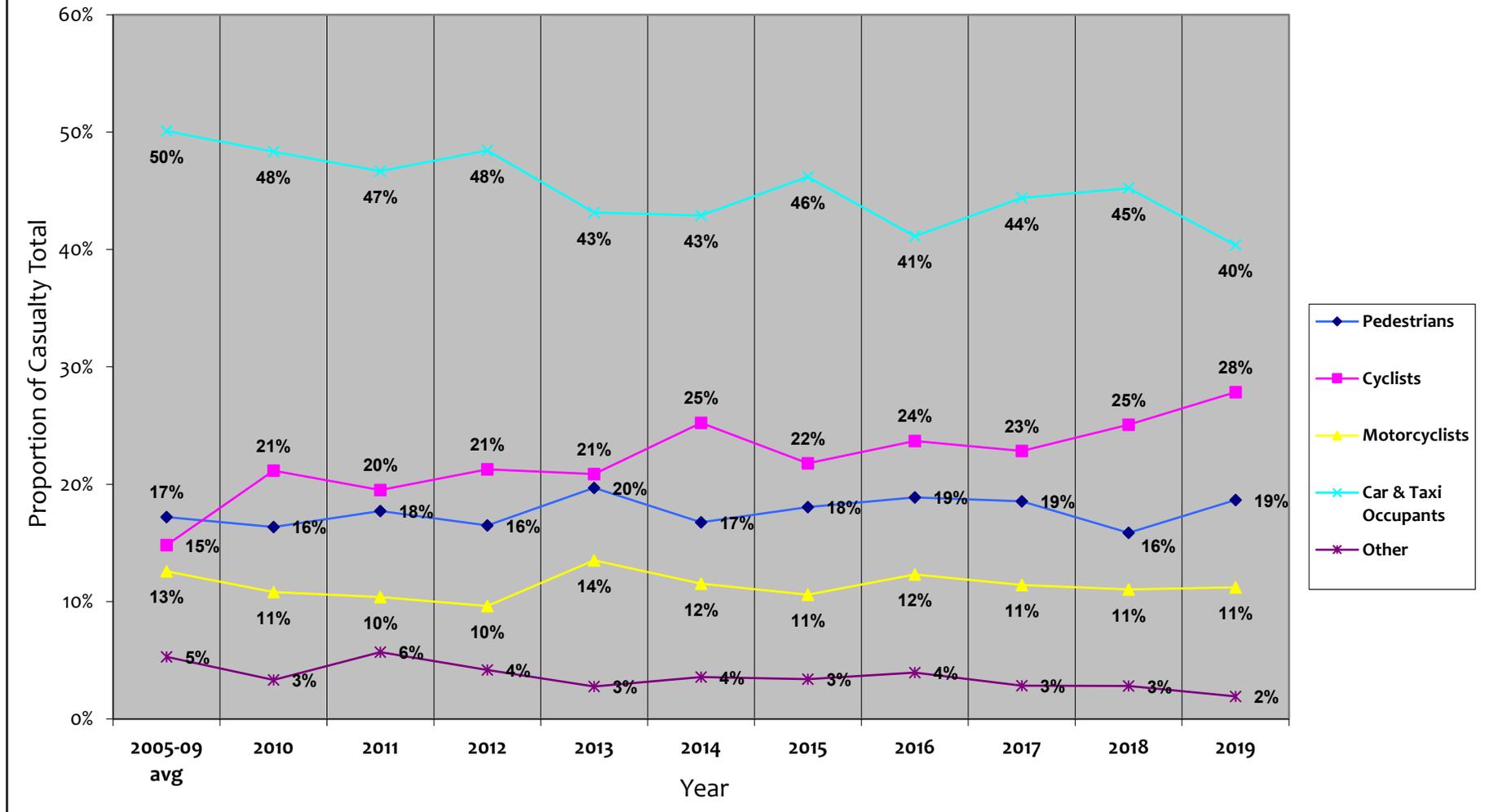


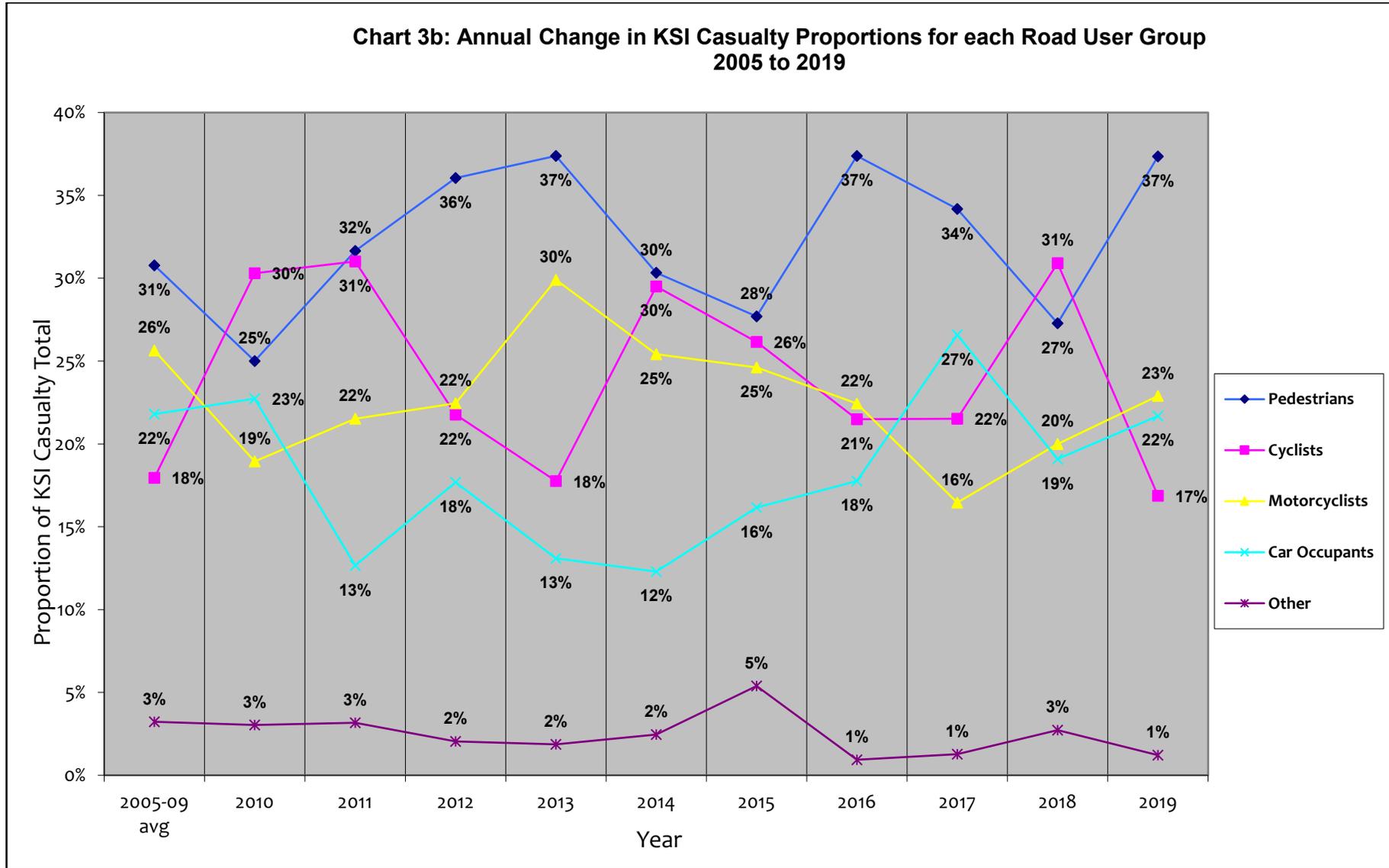
Charts 1a and 1b illustrate that the risk of death or serious injury on our roads is not equally distributed. Indeed, it is the vulnerable road users, who themselves pose little risk to other road users, that disproportionately bear the brunt of the casualty burden.





**Chart 3a: Annual Change in Casualty Proportions for each Road User Group
2005 to 2019**

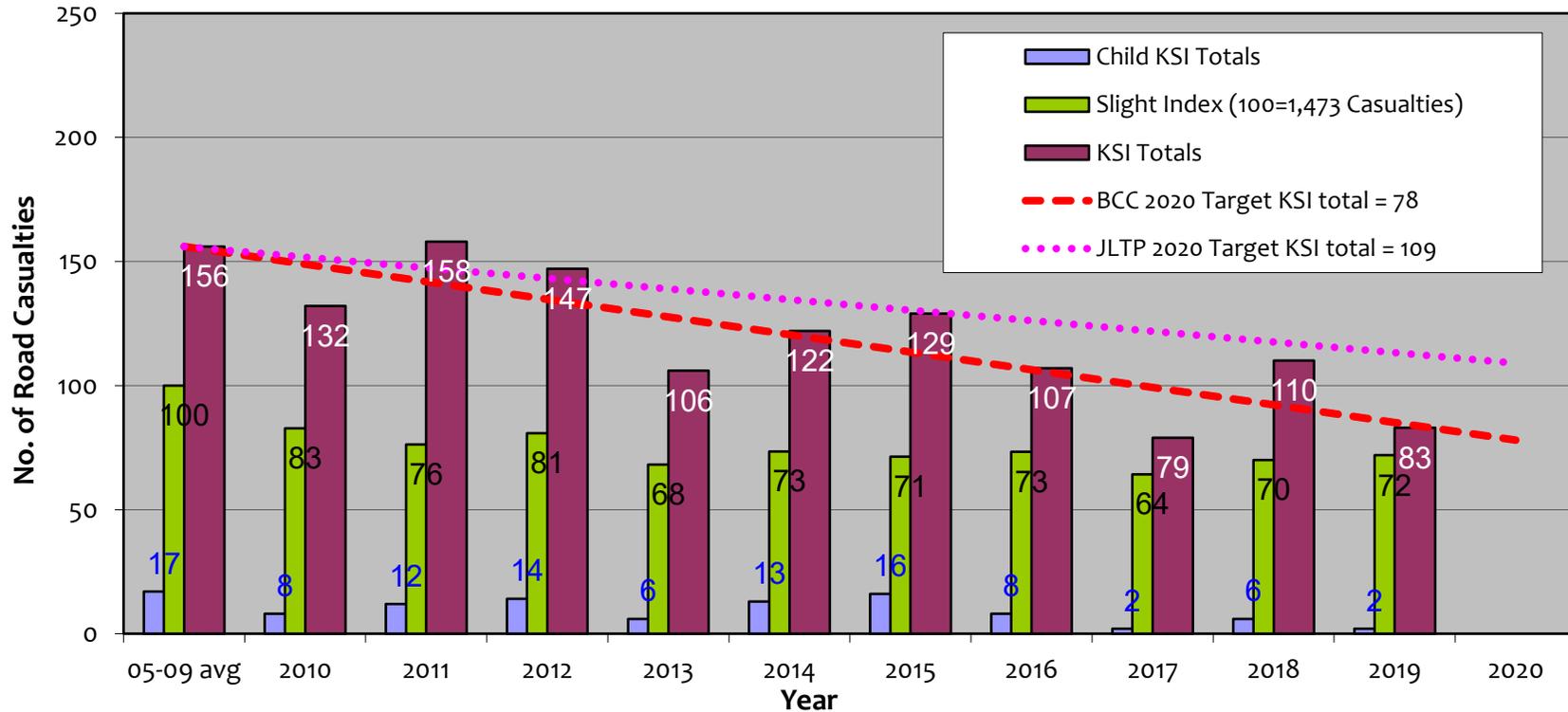




Targets & Progress

The Chart below shows the 2020 KSI-casualty targets, which the City Council is working towards. In 2019, the number of KSI casualties was below the level of the projection expected at this stage in order to meet the 2020 target that was set by the West of England's 3rd Joint Local Transport Plan. In addition, the number of KSI casualties was also below the projection level of the more ambitious 2020 target that the City Council independently set for itself in November 2015.

Bristol's 2020 Road Casualty Targets and Progress
 n.b. child KSI totals and Slight Index shown for information only



Pedestrians: 213 casualties (incl. 2 fatalities)

There was an increase of 32 or **18%** in the total number of Pedestrian casualties from the year before, from 181 to **213**.

The proportion of Pedestrian casualties killed or seriously injured was **15%**, and Pedestrians made up **37%** of all the KSI casualties.

Based on the 2017-19 pedestrian casualty rates per 100-thousand of the population, the **most vulnerable** age-group for Pedestrian casualties is **10-14 year-olds**.

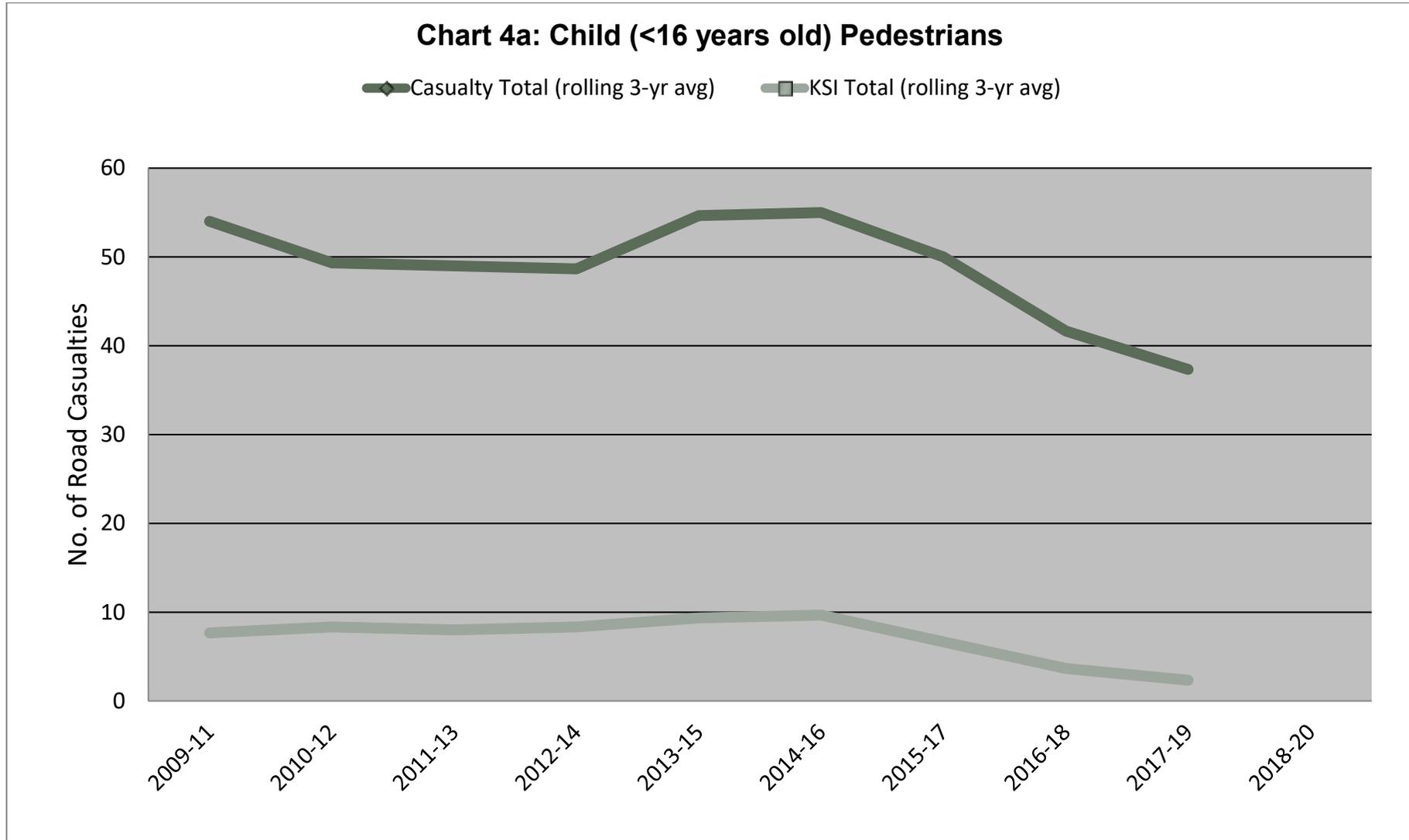
In 2019, males accounted for **57%** of all the Pedestrian casualties.

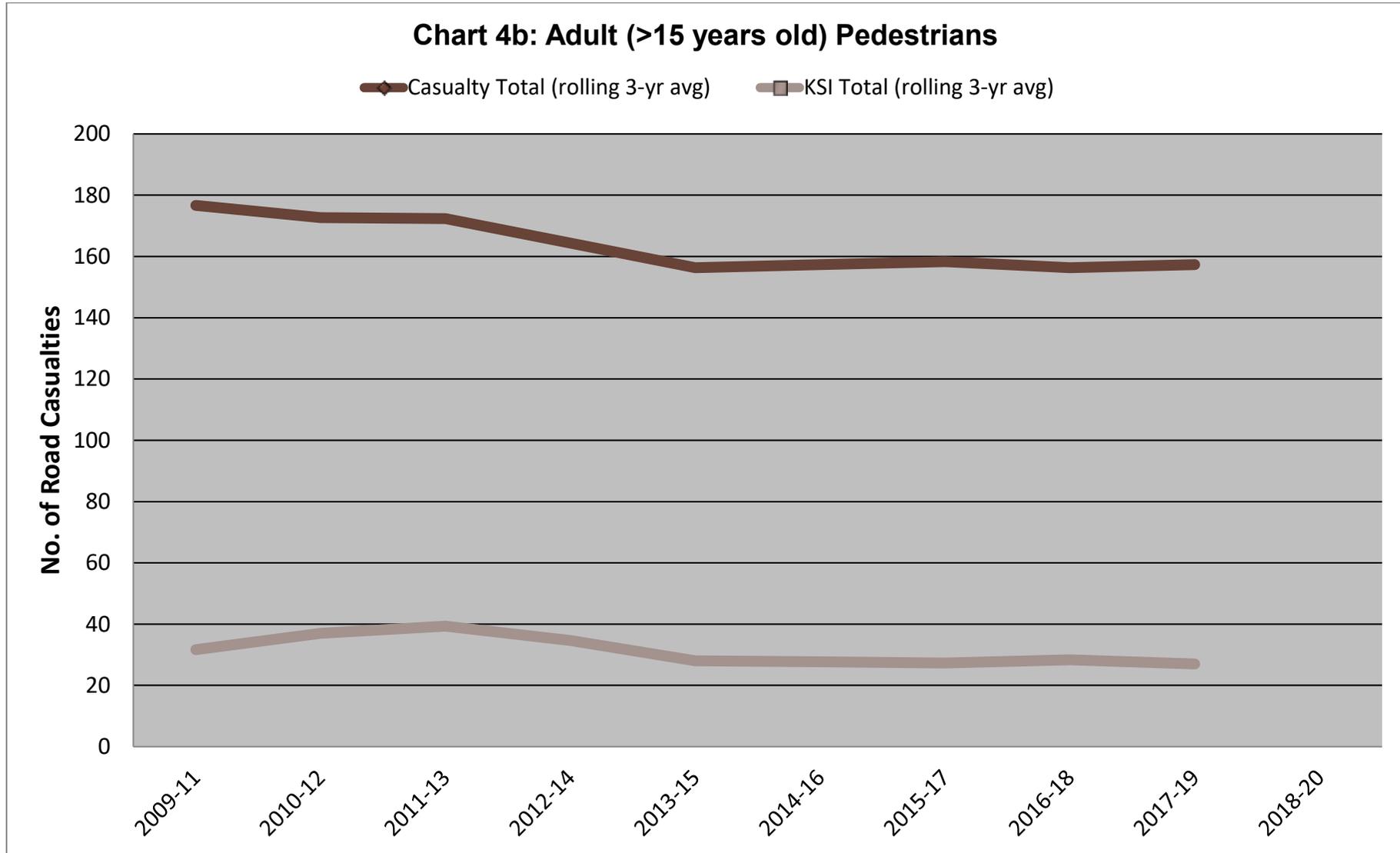
There were **39** Child Pedestrian casualties, 2 more than the previous year, and children made up **18%** of the overall Pedestrian casualty total.

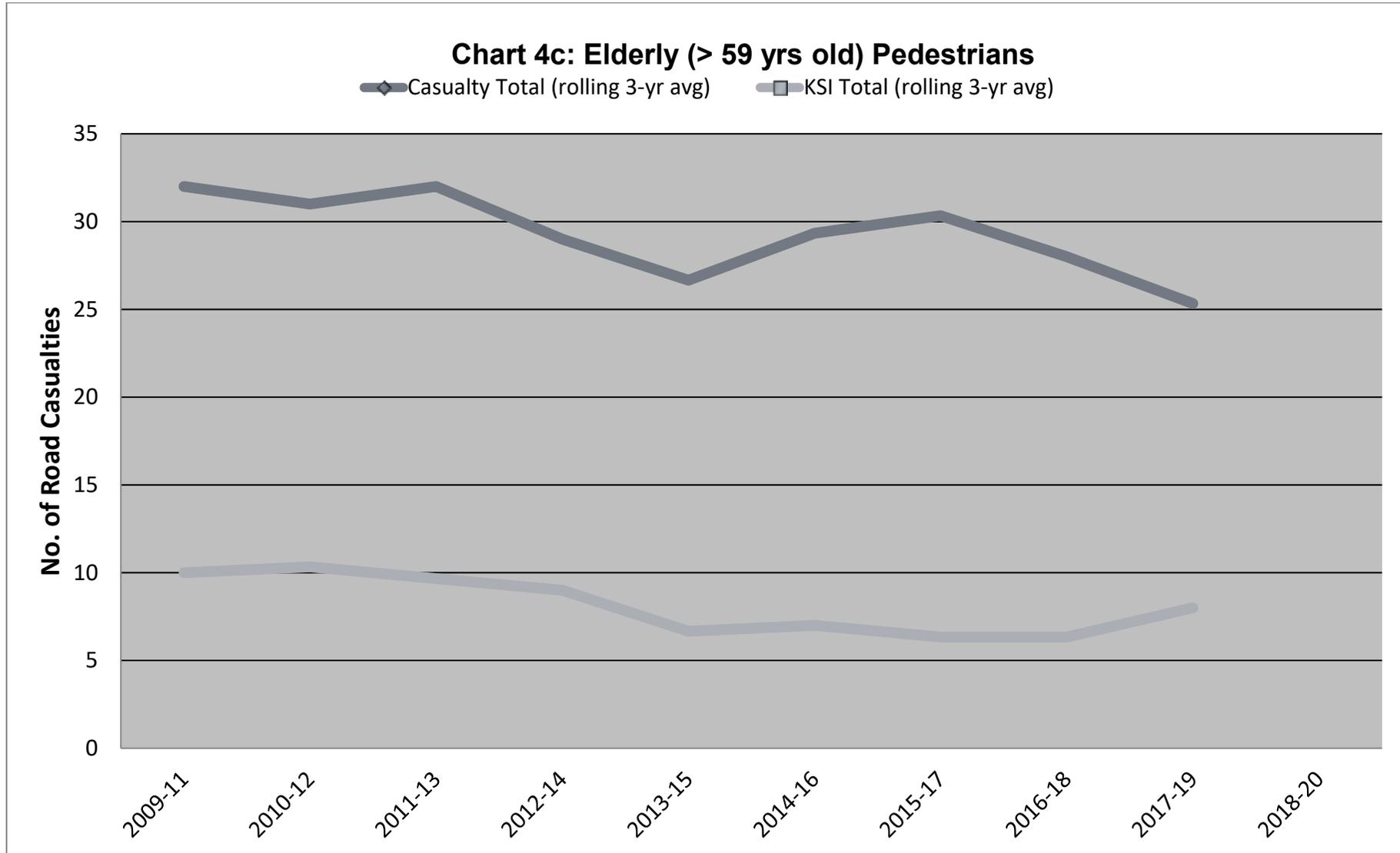
There were **31** Elderly Pedestrian casualties who made up **15%** of the overall Pedestrian casualty total.

206 or 97% of the Pedestrian casualties were involved in a collision with a motorised vehicle, and of these, 9 were motorcycles/mopeds. 3% or 7 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.







Cycle Users: 318 casualties (incl. 0 fatality)

There was an increase of 32 or **11%** in the total number of Cycle User casualties from the year before, from 286 to **318**. It is important to take into account that the level of cycling in the city has been increasing year upon year, so that the annual casualty rate for cycle users (based on the casualty total and the estimated miles travelled each year by bike) has fallen by **30%** since 2010.

The proportion of Cycle User casualties killed or seriously injured was **4.4%**, and Cycle User casualties made up **17%** of all the KSI casualties.

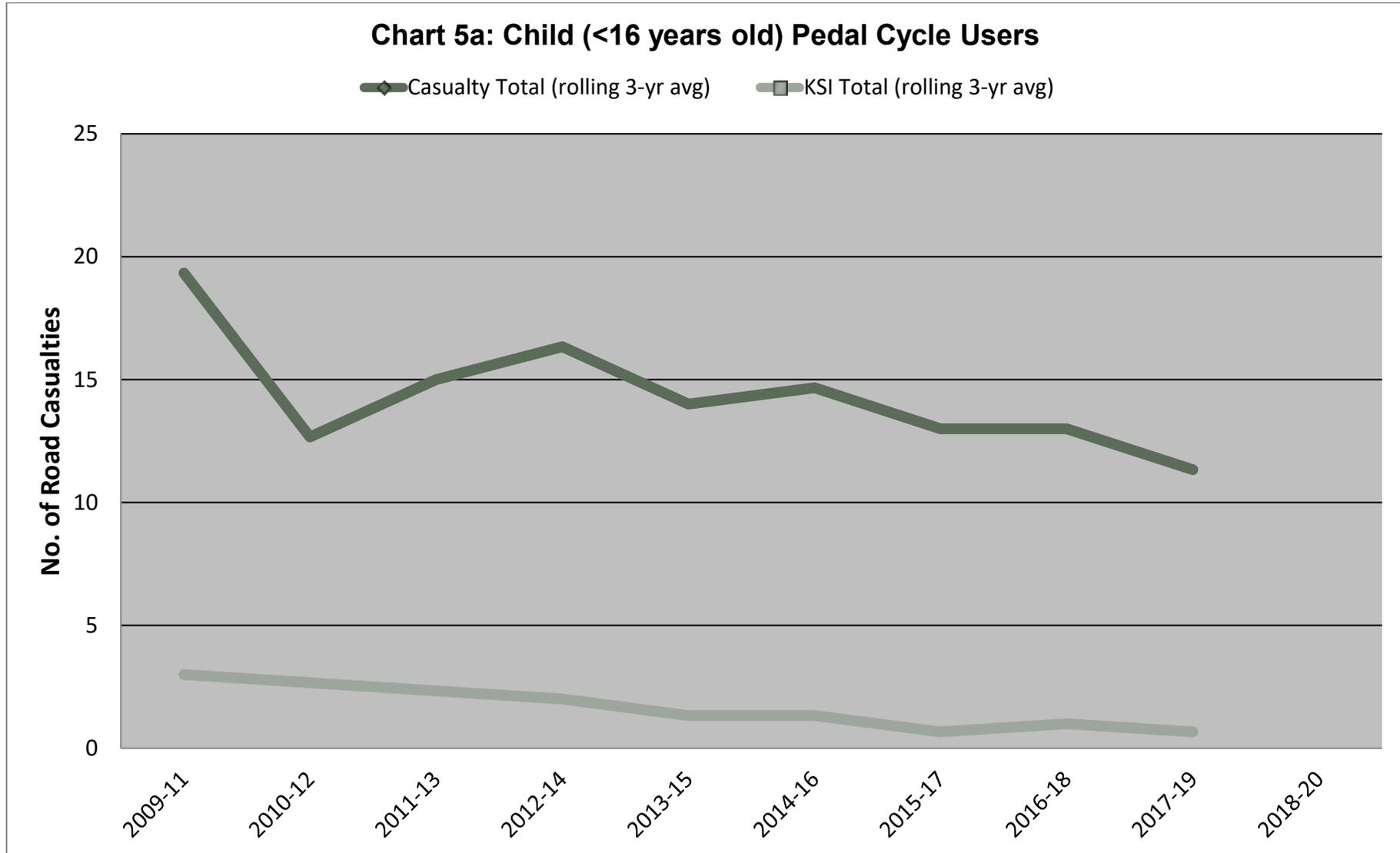
Based on the 2017-19 cycle user casualty rates per 100-thousand of the population, the **most vulnerable** age-group for Cycle Users is **25-30 year-olds** (predominantly male).

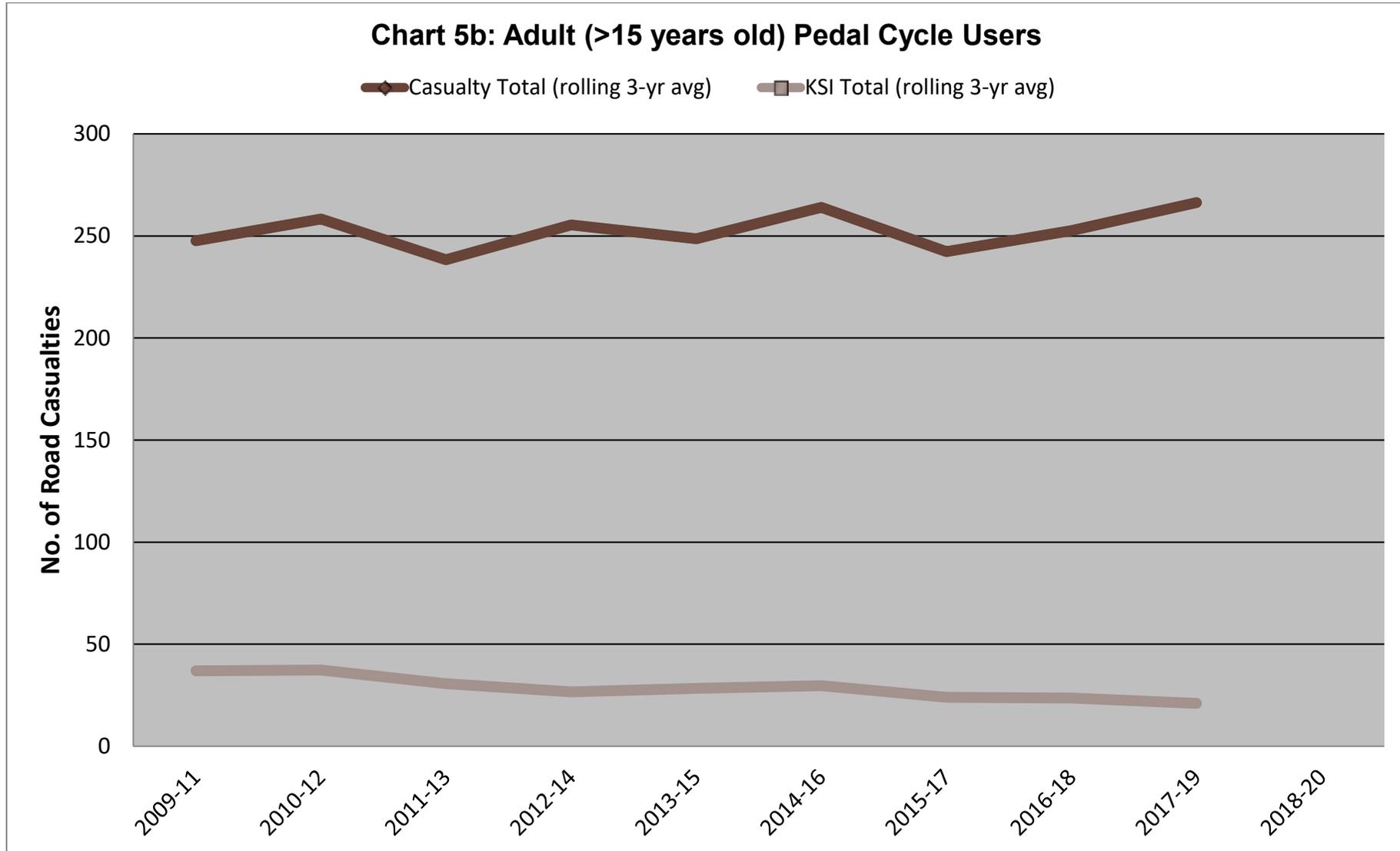
In 2019, males accounted for **73%** of all the Cycle User casualties.

There were **17** Child Cycle User casualties, an increase of 10 from the previous year, and children made up **5%** of the overall Cycle User casualty total.

There were **7** Elderly Cycle User casualties who made up **2%** of the overall Cycle User casualty total.

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





Motorcycle/Moped Users (a.k.a. Powered Two-Wheelers): 128 casualties (incl. 0 fatality)

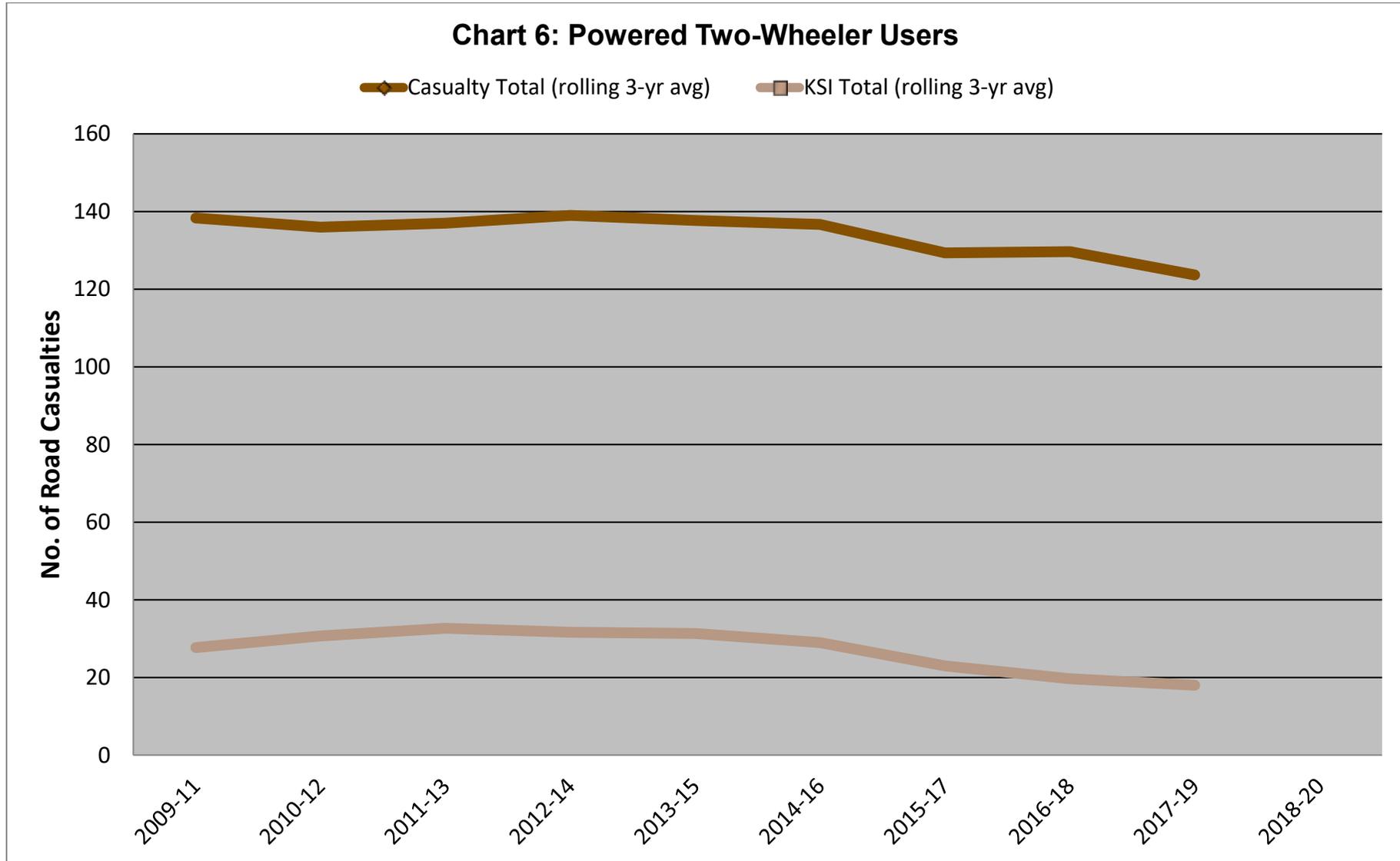
There was an increase of 2 or **2%** in the total number of Motorcycle/Moped User casualties from the year before, from 126 to **128**.

The proportion of Motorcycle/Moped User casualties killed or seriously injured was **15%**, and Motorcycle/Moped User casualties made up **23%** of all the KSI casualties.

Based on the 2017-19 motorcycle/moped user casualty rates per 100-thousand of the population, the **most vulnerable** age-group for Motorcycle/Moped Users is **16-19 year-olds** (predominantly male).

In 2019, males accounted for **84%** of all the Motorcycle/Moped User casualties. **48%** of the Motorcycle/Moped User casualties were under 30 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.



Car Occupants (includes Taxis): 461 casualties (incl. 1 fatality)

There was a decrease of 55 or **11%** in the total number of Car occupant casualties from the year before, from 516 to **461**.

The proportion of Car occupant casualties killed or seriously injured was **4%**, and Car occupant casualties made up **22%** of all the KSI casualties.

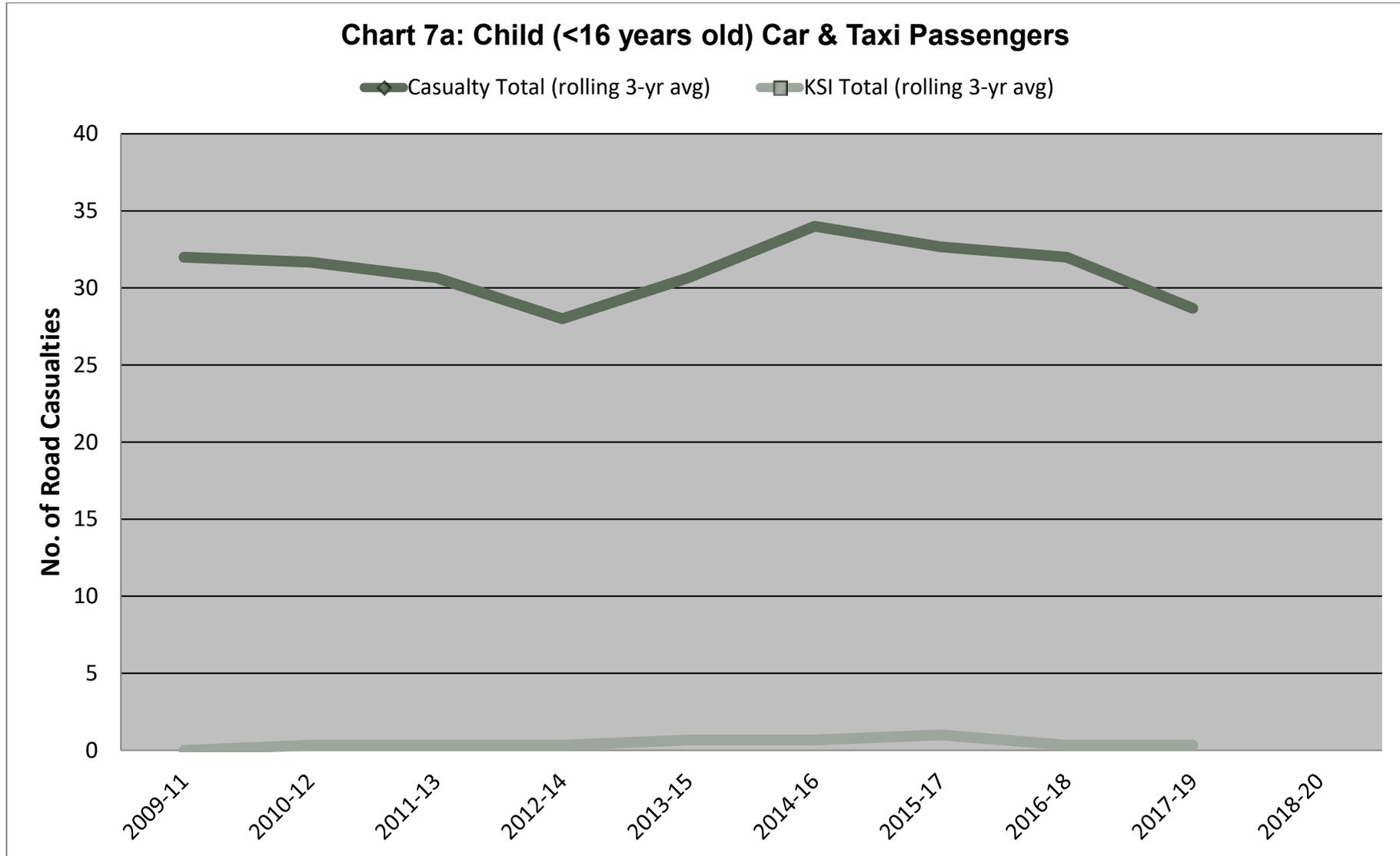
Based on the 2017-19 car-occupant casualty rates per 100-thousand of the population, the **most vulnerable** age-group for Car & Taxi Drivers is **30-49 year olds**. While for Car & Taxi Passengers it is **15-19 year olds**.

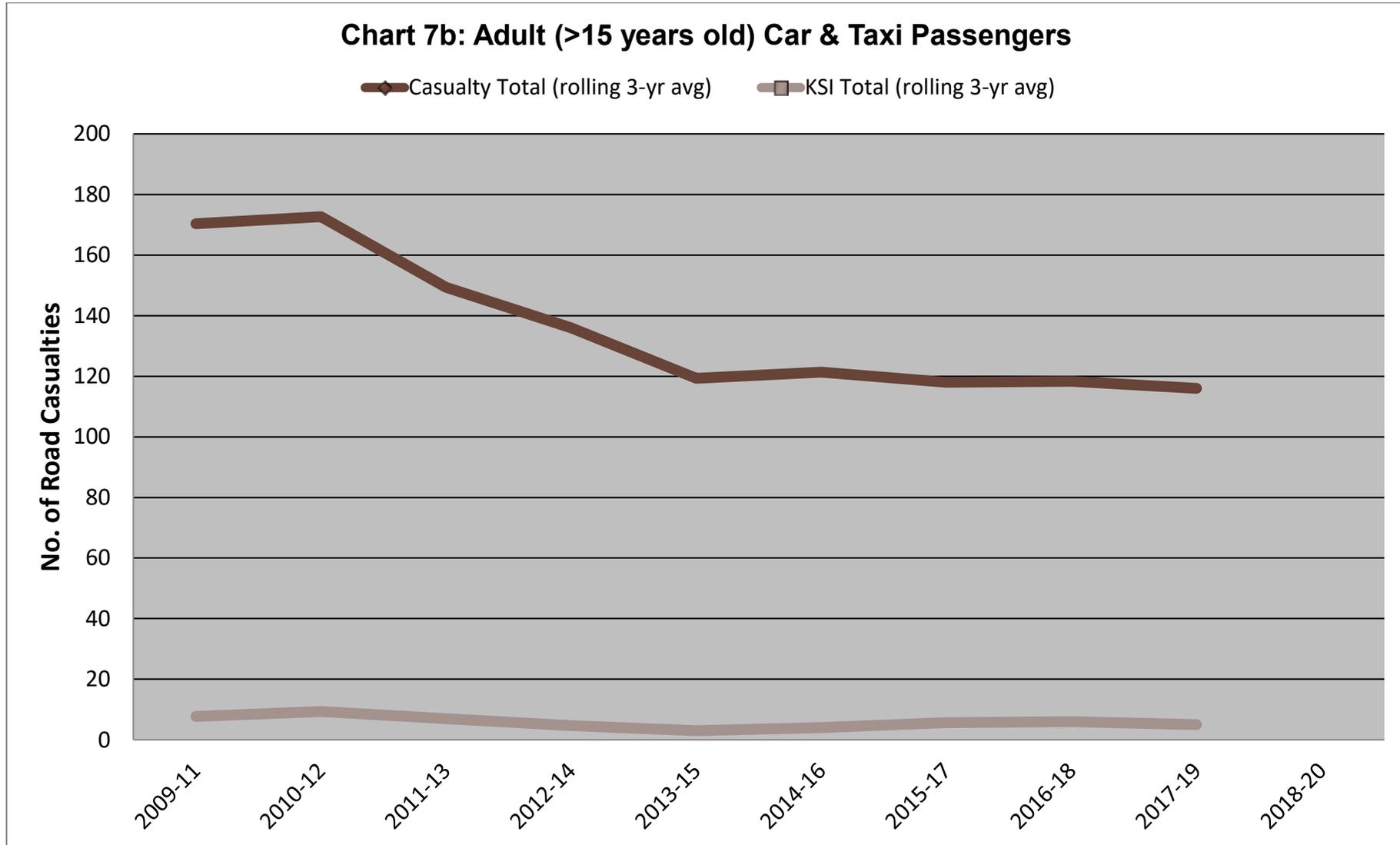
In 2019, 18-27 year olds made up **one quarter** of the Car occupant casualties. **Half** of the Car occupant casualties were aged between 18 and 35 years of age.

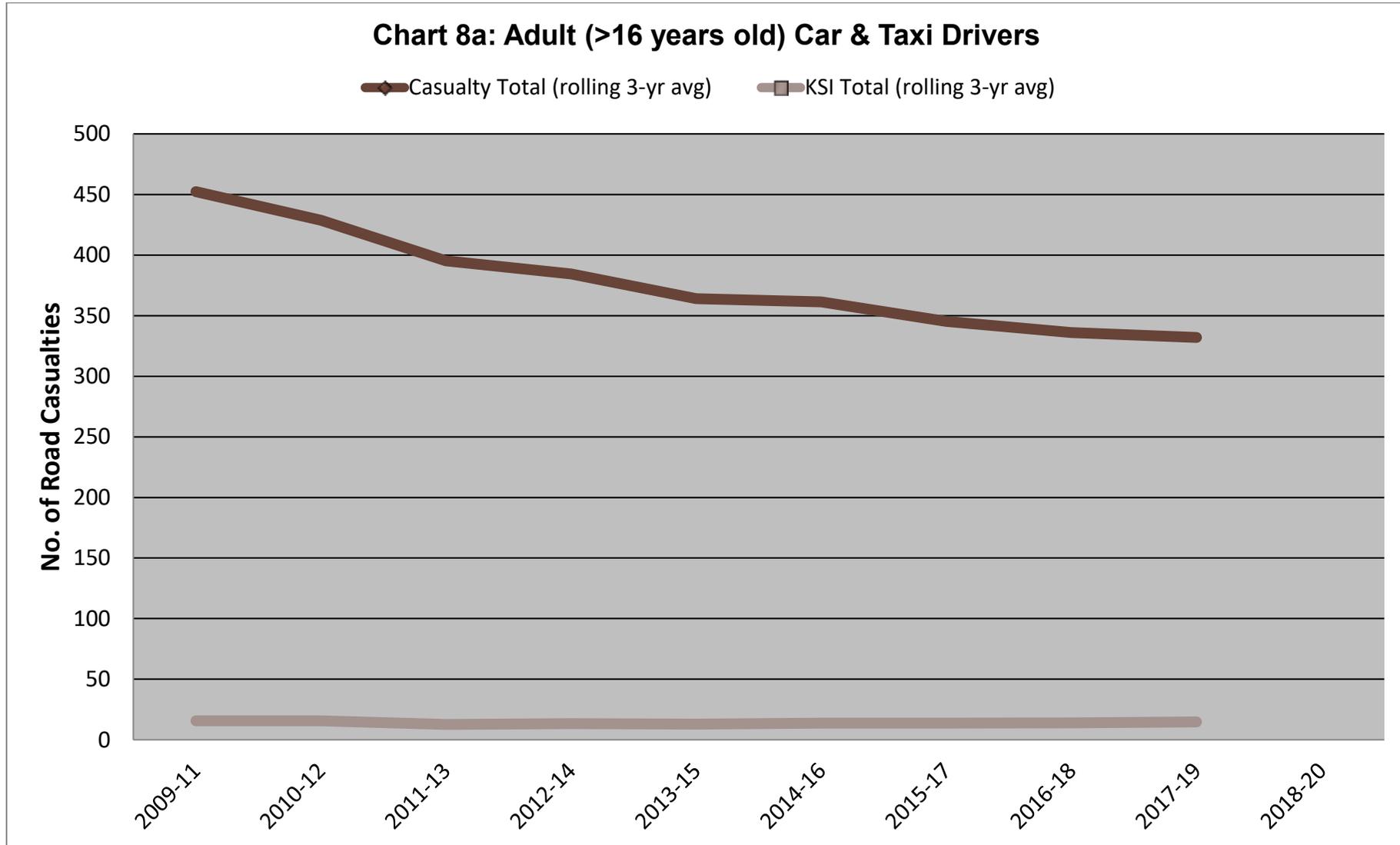
Male and female casualties each made up around **half** of the Car occupant casualty total. However, males tend to be more predominant as Car Driver casualties whereas females tend to be more predominant as Car Passenger casualties.

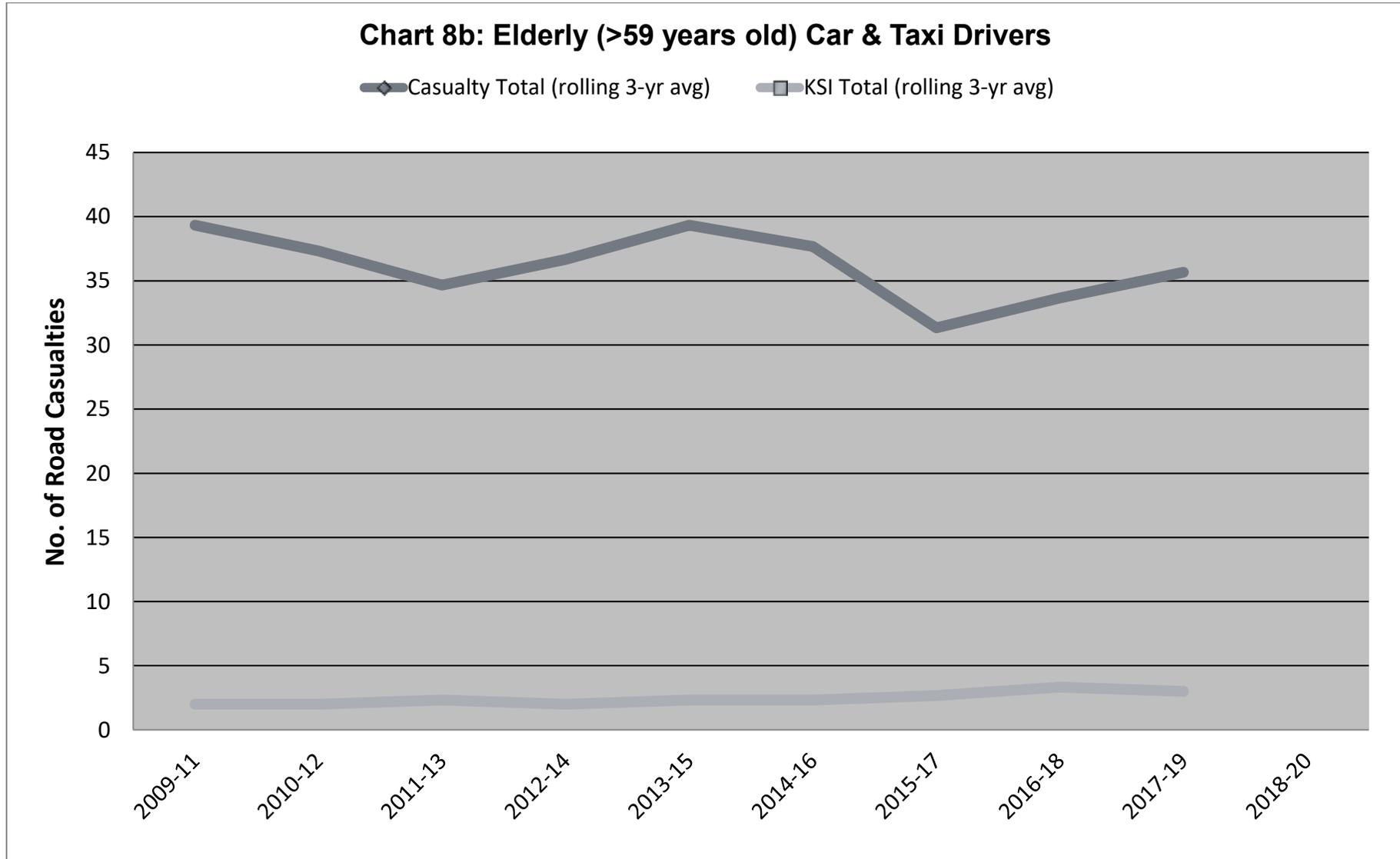
There were **24** Child Car occupant casualties (all passengers), **14 fewer** than the previous year, and children made up **5%** of the overall Car occupant casualty total.

There were **47** Elderly Car occupant casualties, **22 fewer** than the previous year, and elderly casualties made up **10%** of the overall Car occupant casualty total.









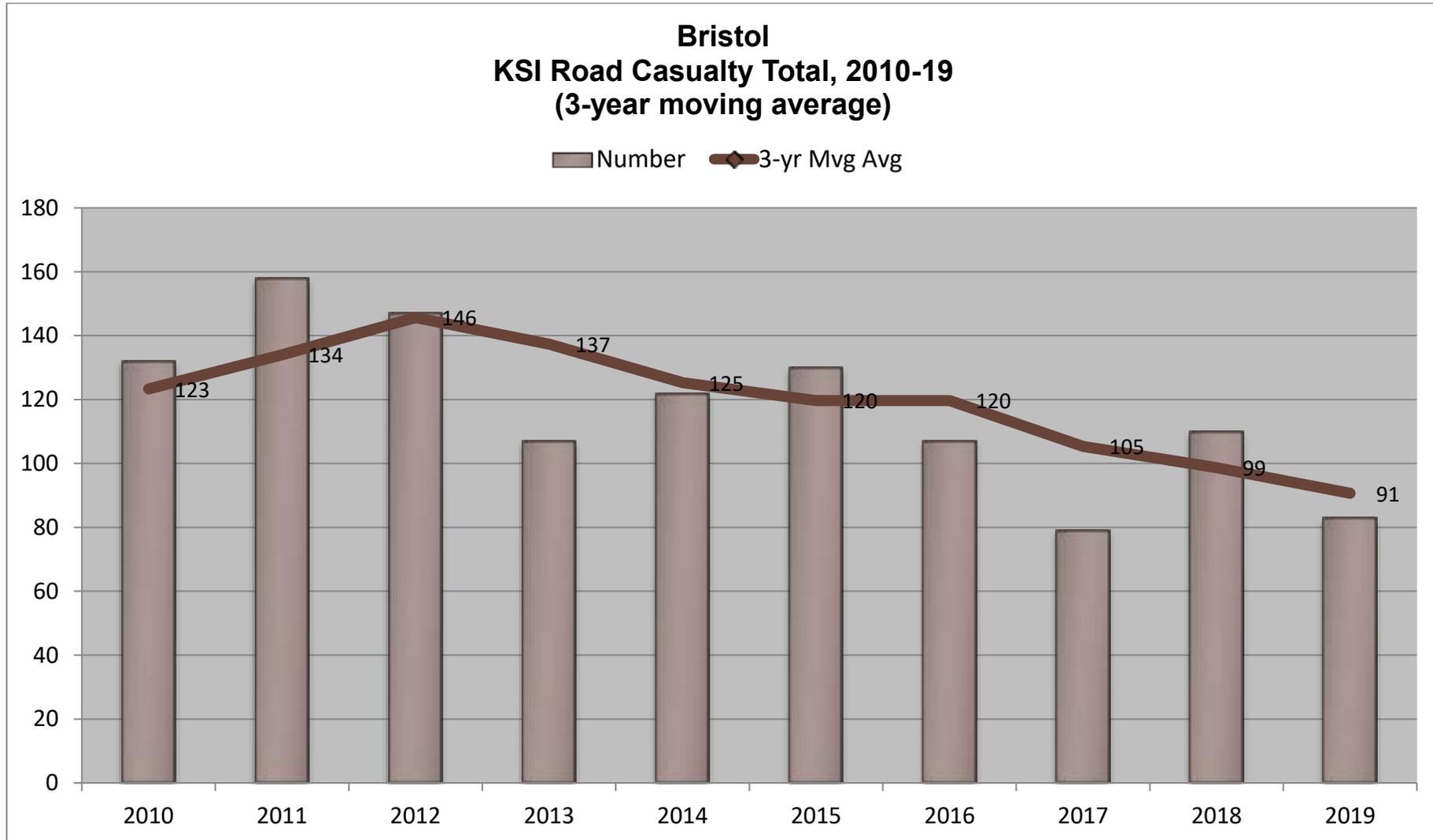
Annex 1 – Road Casualty Age-Profile Table (2019)

Age Group	CHILDREN				Total Children	ADULTS								Total Adults	Age Unknown	Total
	0 - 4	5 - 6	7 - 11	12 - 15		16 - 16	17 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 +			
Pedestrians																
Fatal	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
Serious	1	0	0	1	2	0	1	4	3	4	3	4	8	27	0	29
Slight	2	5	19	11	37	4	16	45	37	15	14	10	4	145	0	182
Sub Total	3	5	19	12	39	4	17	49	40	19	17	14	14	174	0	213
Cyclists																
Fatal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	1	6	4	0	3	0	0	14	0	14
Slight	0	0	2	15	17	3	16	101	92	39	29	6	0	286	1	304
Sub Total	0	0	2	15	17	3	17	107	96	39	32	6	0	300	1	318
Powered 2-Wheelers & Combinations : Riders & Pillion Passengers																
Fatal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	4	9	1	1	4	0	0	19	0	19
Slight	0	0	0	0	0	4	17	32	18	19	11	7	0	108	1	109
Sub Total	0	0	0	0	0	4	21	41	19	20	15	7	0	127	1	128
4-Wheeled Cars & Taxis : Drivers																
Fatal	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
Serious	0	0	0	0	0	0	0	7	4	2	1	0	1	15	0	15
Slight	0	0	0	1	1	0	21	86	79	57	40	17	15	315	1	317
Sub Total	0	0	0	1	1	0	21	93	83	59	41	17	17	331	1	333

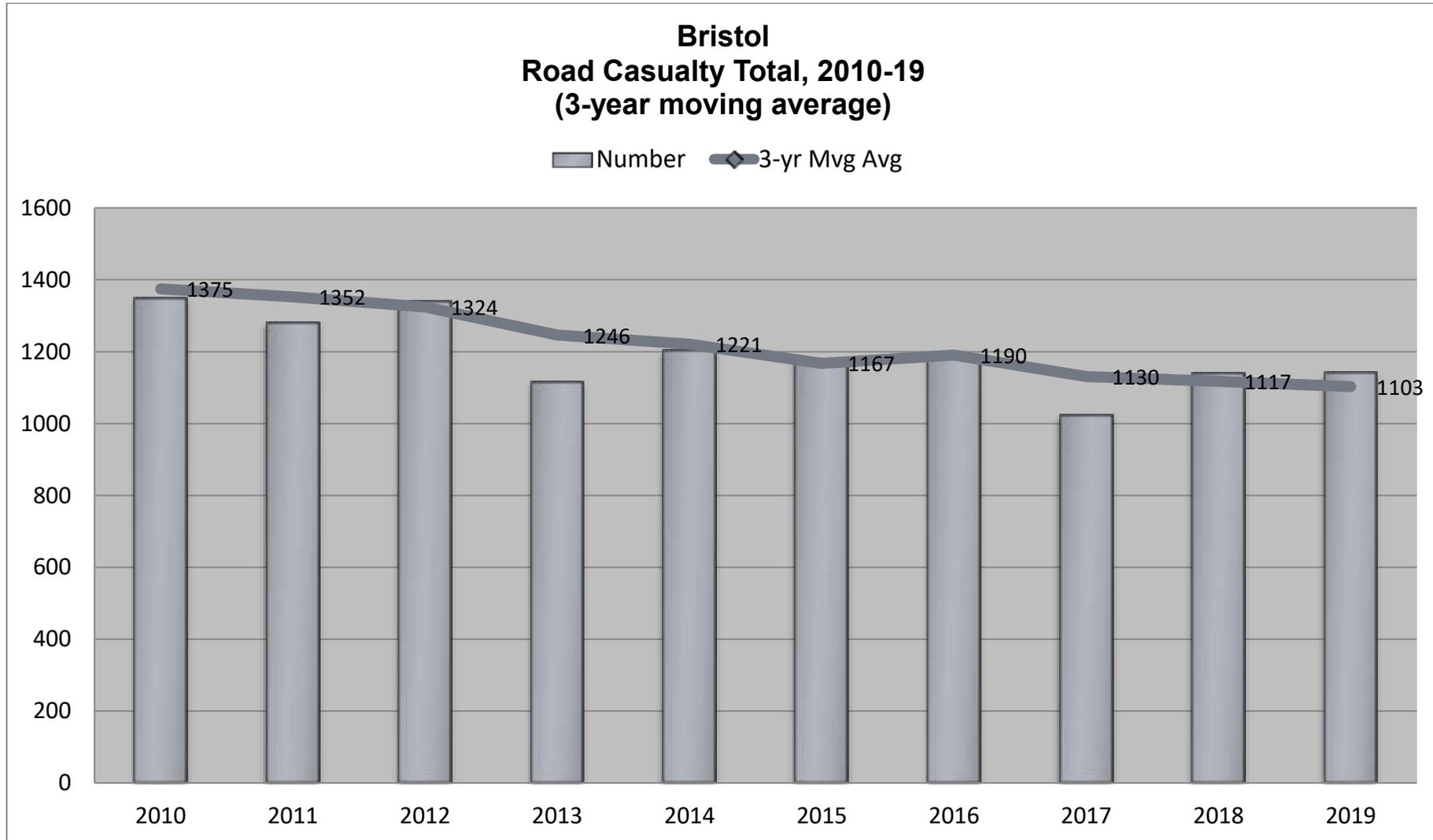
Road Casualty Review 2019

Age Group	CHILDREN				Total Children	ADULTS								Total Adults	Age Unknown	Total
	0 - 4	5 - 6	7 - 11	12 - 15		16 - 16	17 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 +			
4-Wheeled Cars & Taxis : Passengers																
Fatal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	2
Slight	4	3	10	7	24	3	13	33	26	8	10	6	2	101	0	125
Sub Total	4	3	10	7	24	3	13	33	26	9	10	6	3	103	0	127
PCV/Minibus/Motor Caravan/Tram/Light Rail : Drivers & Passengers																
Fatal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slight	0	1	0	0	1	0	6	5	1	0	2	0	0	14	0	15
Sub Total	0	1	0	0	1	0	6	5	1	0	2	0	0	14	0	15
All Goods Vehicles : Drivers / Passengers																
Fatal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1
Slight	0	0	0	0	0	0	1	2	1	0	0	0	0	4	0	4
Sub Total	0	0	0	0	0	0	1	2	1	0	1	0	0	5	0	5
Other Motor & Non-Motor Vehicles : Drivers / Passengers																
Fatal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Serious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slight	1	0	0	0	1	0	0	0	1	1	0	0	0	2	0	3
Sub Total	1	0	0	0	1	0	0	0	1	1	0	0	0	2	0	3
TOTALS																
Fatal	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	3
Serious	1	0	0	1	2	0	6	26	12	8	12	4	10	78	0	80
Slight	7	9	31	34	81	14	90	304	255	139	106	46	21	975	3	1059
Sub Total	8	9	31	35	83	14	96	330	267	147	118	50	34	1056	3	1142

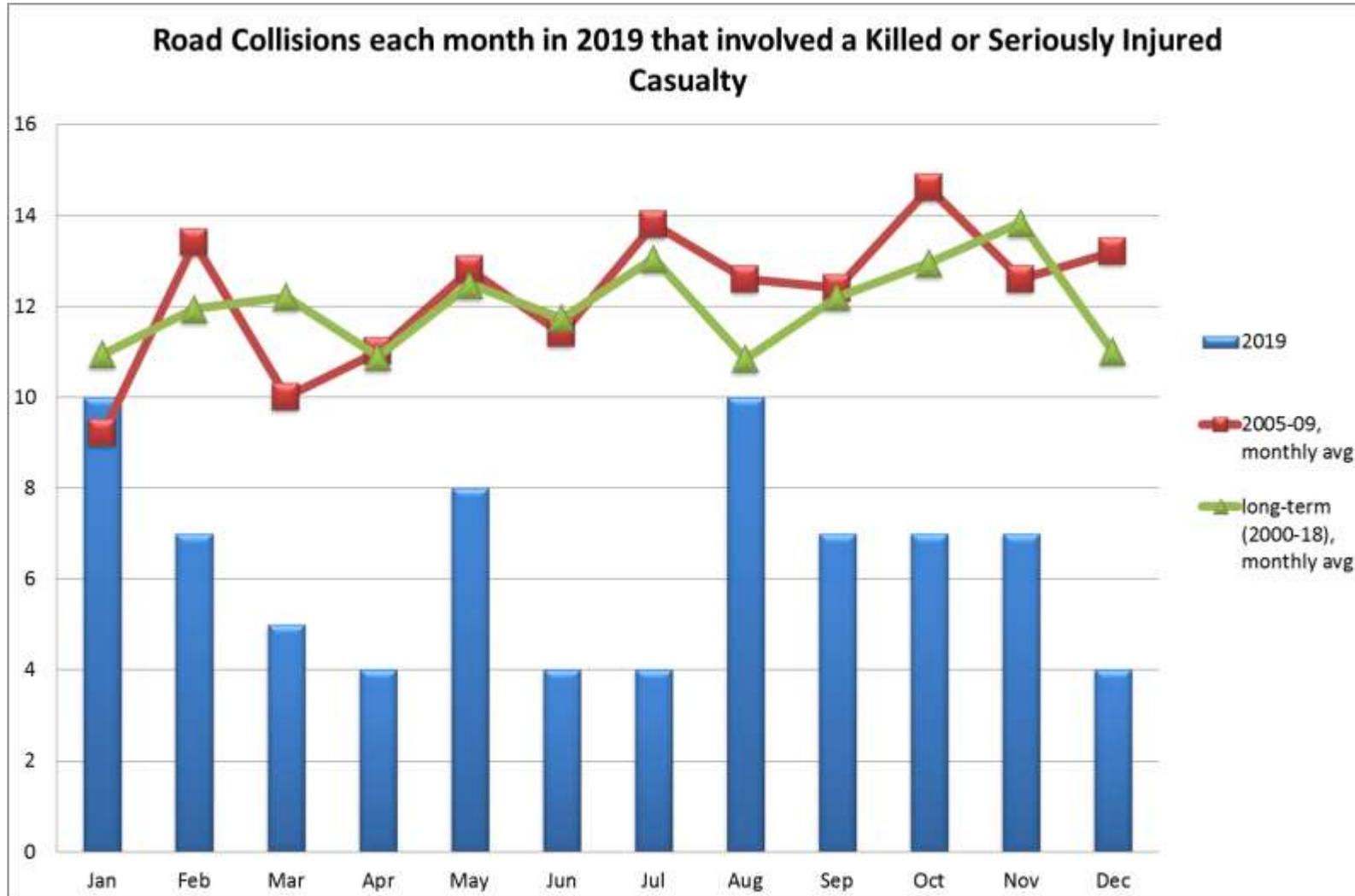
Annex 2a – Killed or Seriously Injured (KSI) Road Casualty change (3-year rolling average)



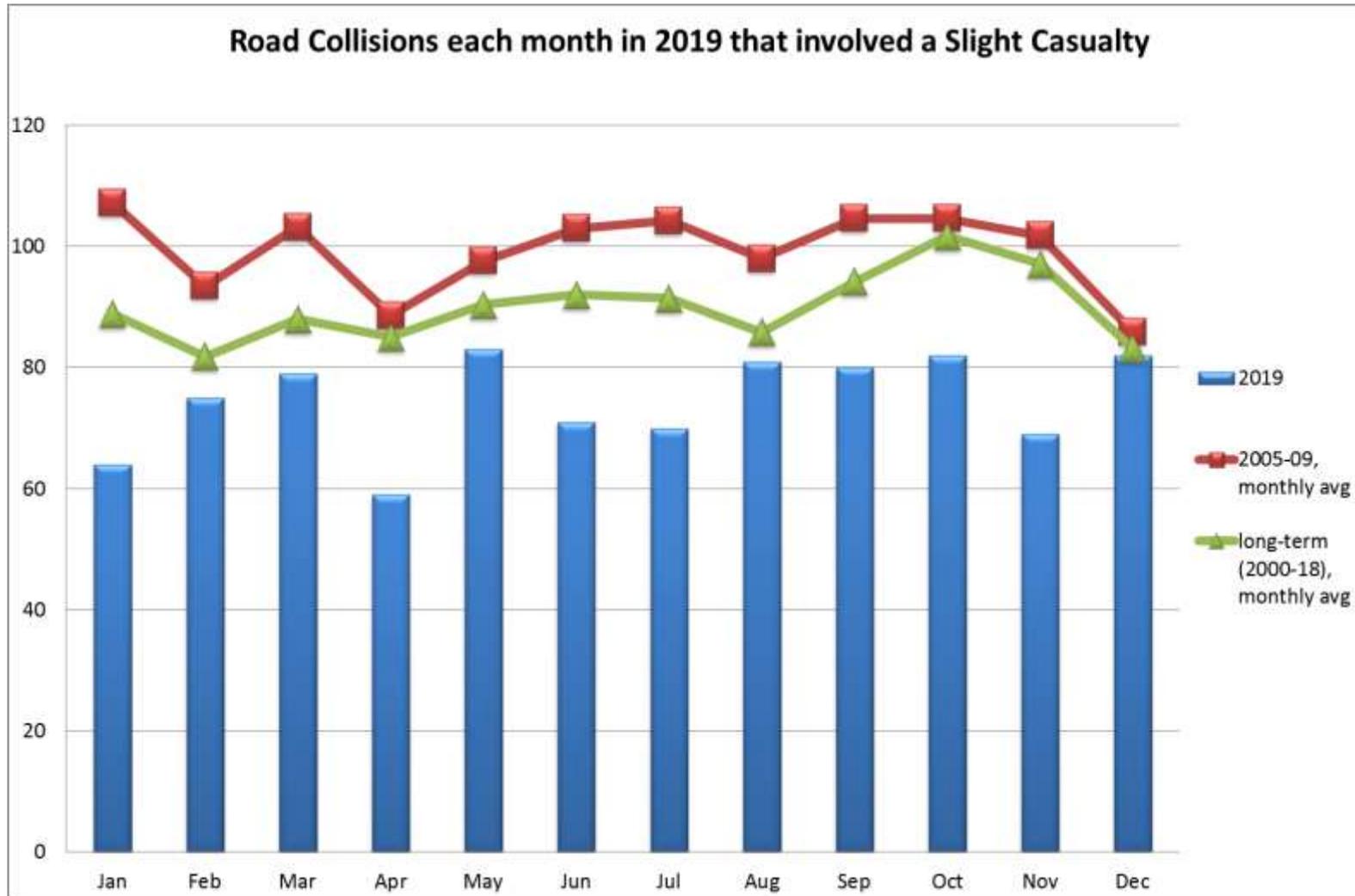
Annex 2b – All Severities of Road Casualty change (3-year rolling average)



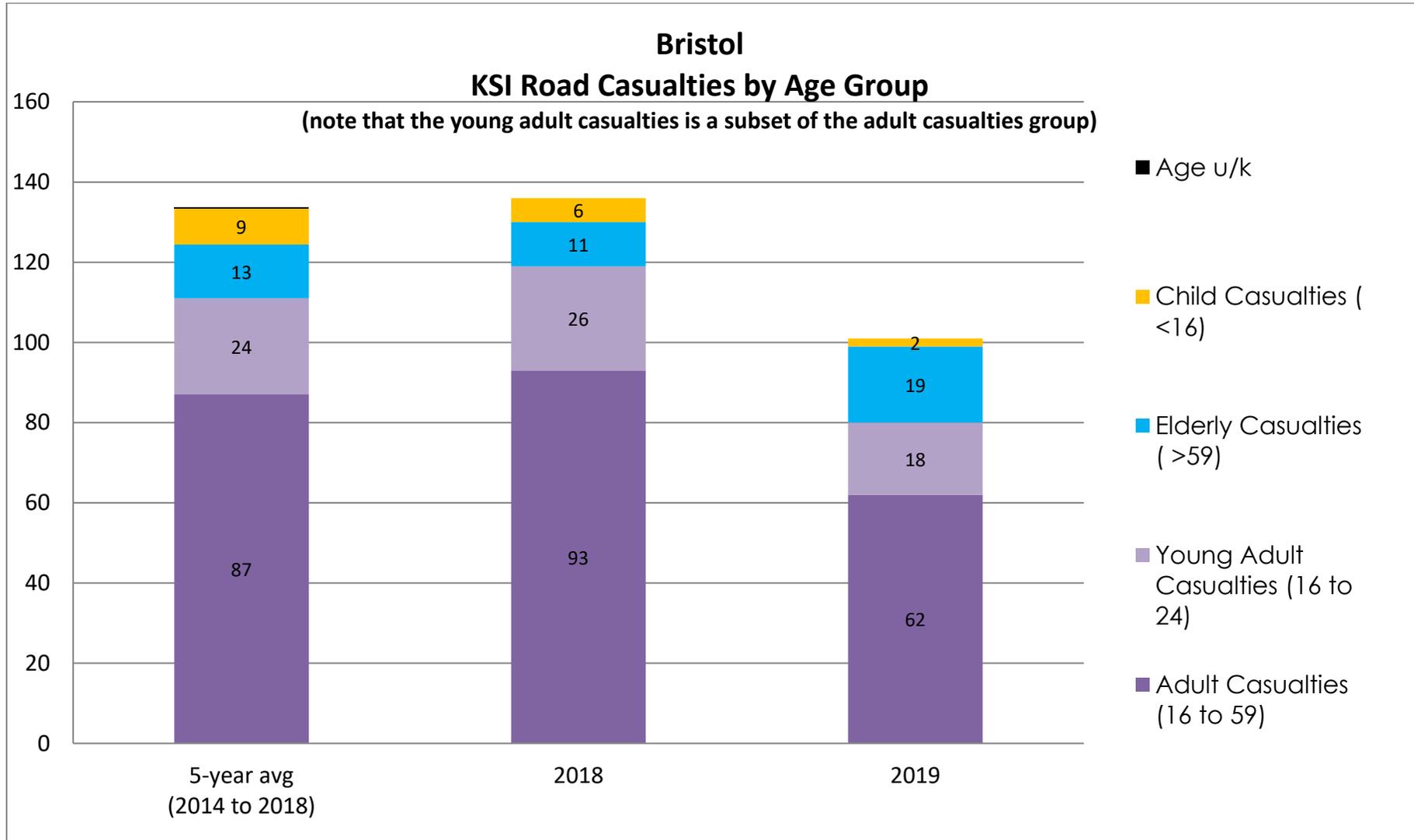
Annex 3a – Killed or Seriously Injured (KSI) Road Collisions each Month



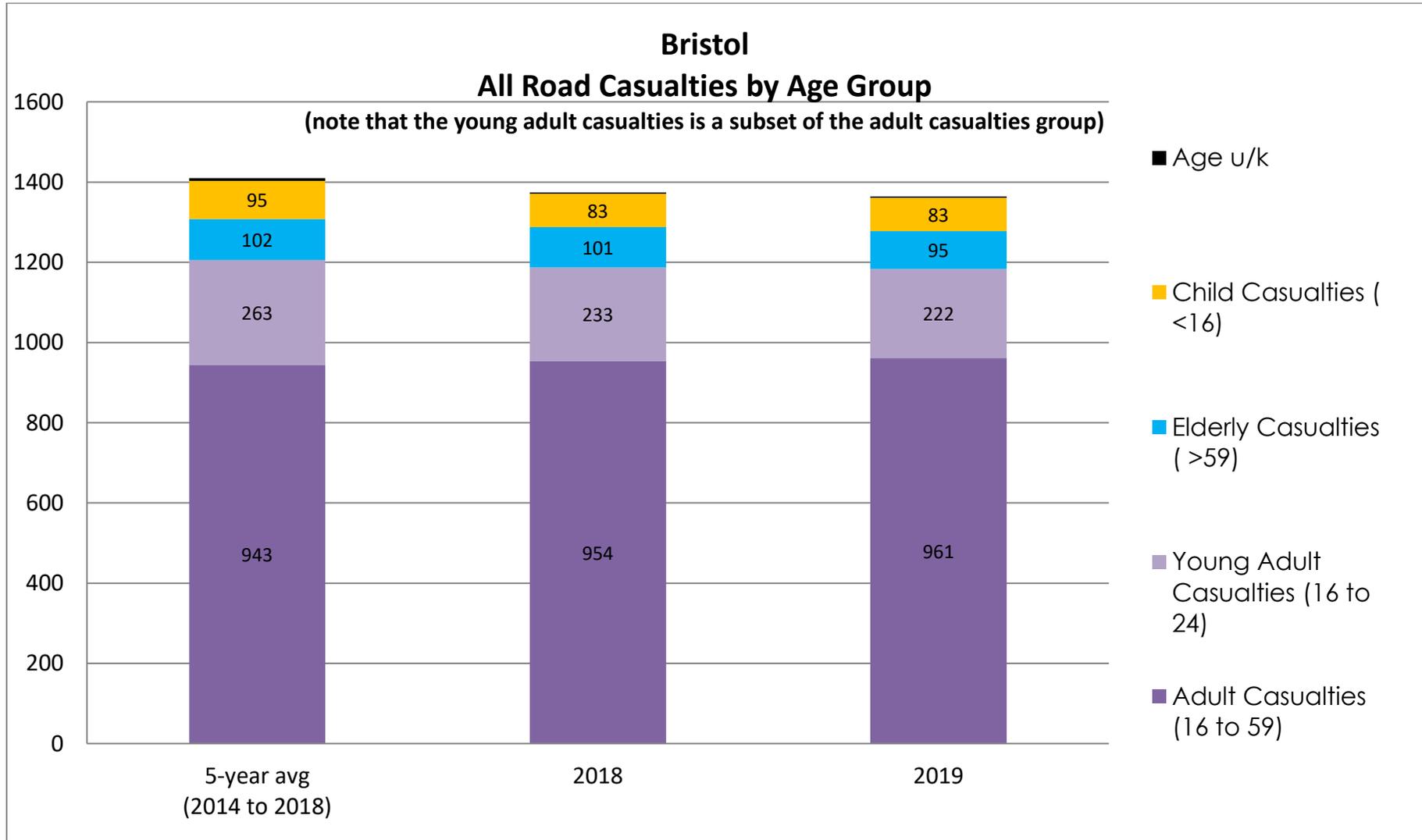
Annex 3b – Slight Road Collisions each Month



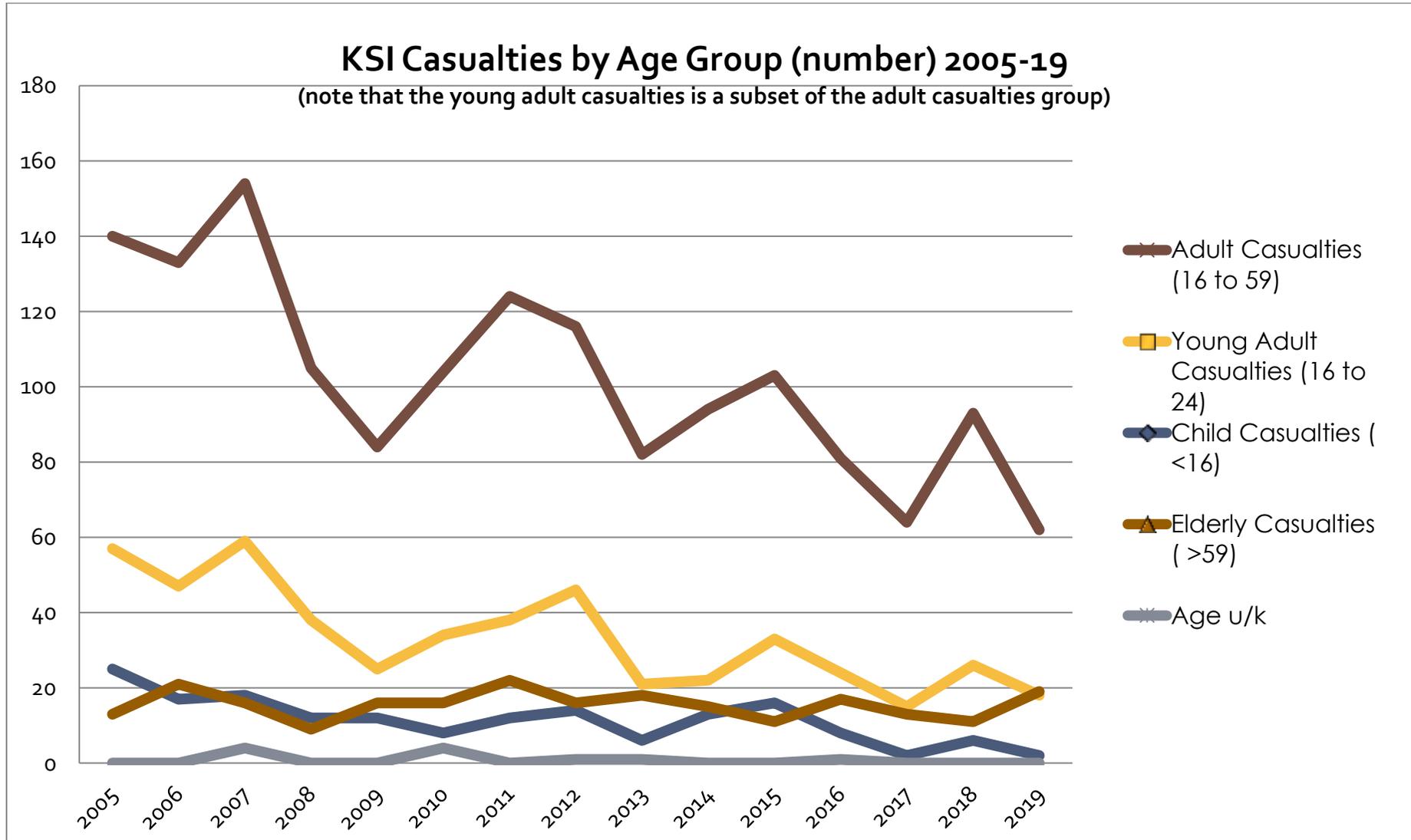
Annex 4a - Killed or Seriously Injured (KSI) Road Casualties by Age Group



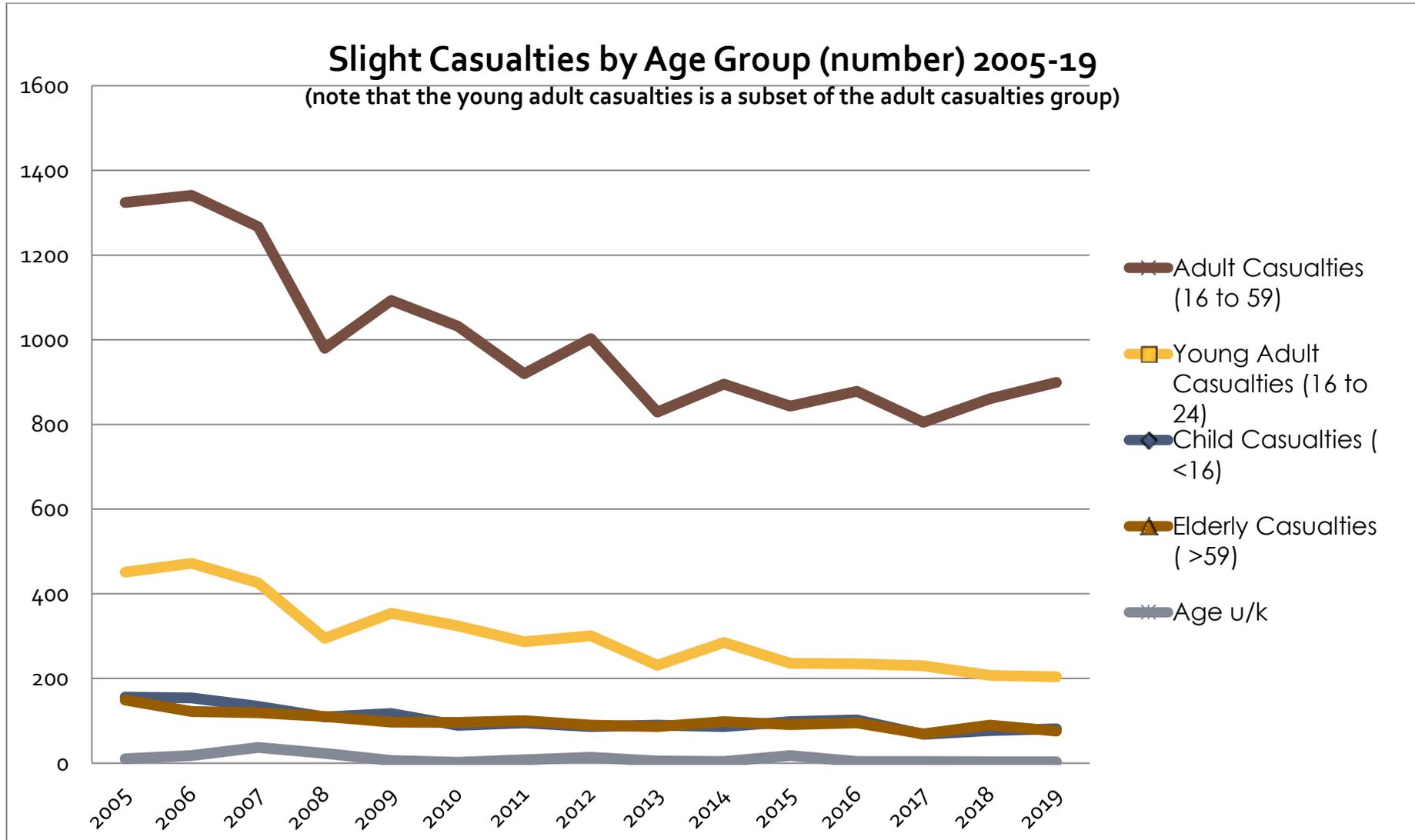
Annex 4b - All Road Casualties by Age Group



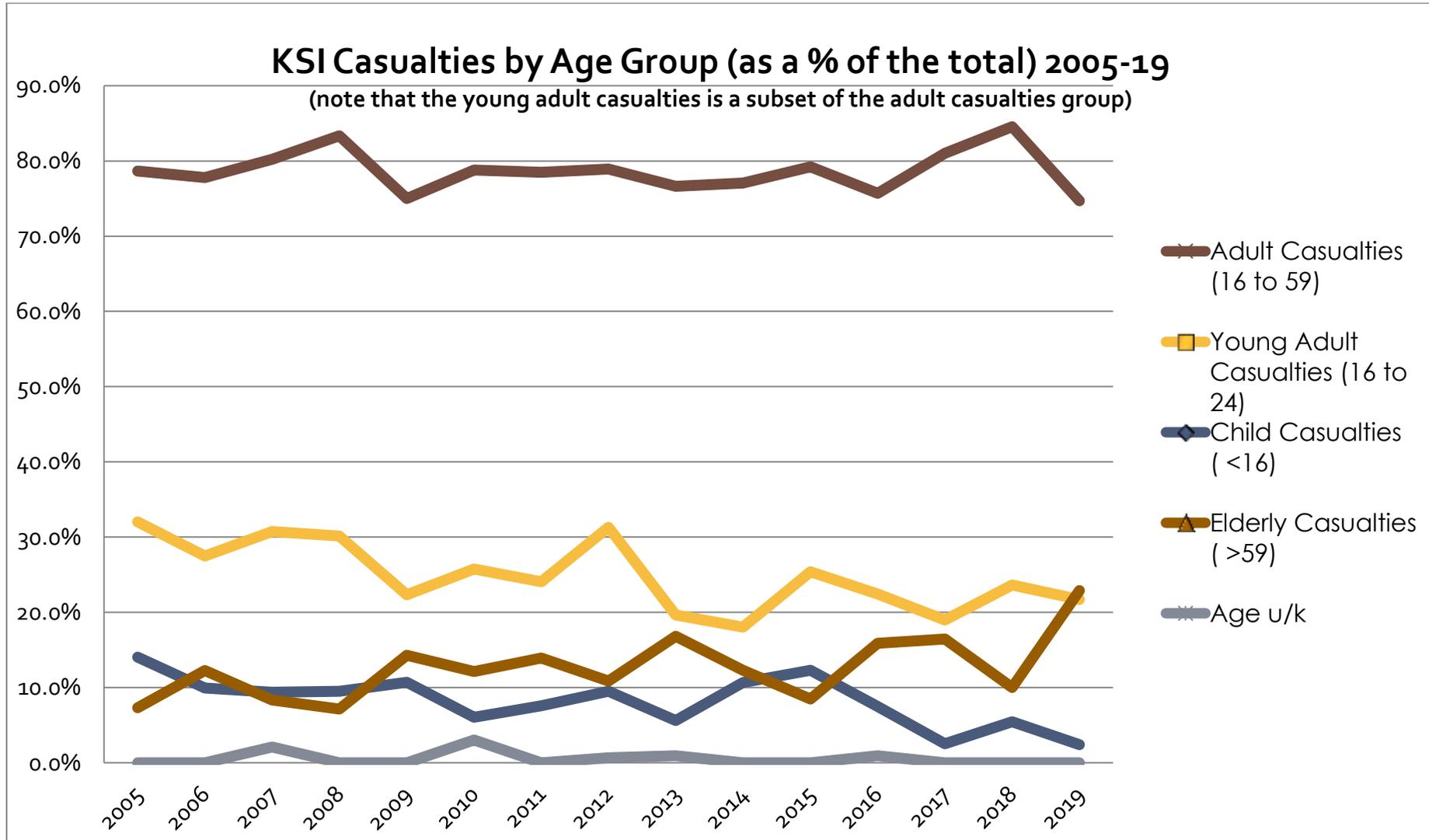
Annex 4c - Killed or Seriously Injured (KSI) Road Casualties by Age Group - timeline



Annex 4d - Slight Injury Road Casualties by Age Group - timeline



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



Annex 4f - Slight Injury Road Casualties by Age Group - timeline

