

Killed and Seriously Injured Casualties resulting from Collisions involving Young Drivers

Analysis note

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Using MAST Online to interrogate the STATS19 database 38 scenarios were investigated to calculate the number of killed and seriously injured (KSI) casualties resulting from collisions where young drivers (16-24 years) were involved between 2012 and 2014 in Great Britain. The absolute number and proportion of casualties in collisions where young drivers were involved were plotted in bar charts for:

- Total KSI casualties
- KSI casualties resulting from collisions where the driver of the related vehicle was male
- KSI casualties resulting from collisions where the driver was female (see Annex A).

Key Findings:

- The proportion of total KSI casualties resulting from collisions involving young drivers was 26%. For male and female drivers the proportion was 26% and 25%, respectively.
- These KSI rates were disproportionately higher than the proportion of licence holders in this same age group, over the same time period: 7% (DVLA, 2016).
- In 27 out of the 38 scenarios young driver involvement was disproportionate (greater than 26%).

KSI casualties in Great Britain, 2012-2014

- The highest proportions of KSI casualties resulting from collisions involving young drivers were linked to driving at night and at weekends with young passengers in the vehicles. The scenarios with the highest proportions of young driver involvement were:
 - 73% of KSI casualties on the road between the ages of 16 and 18 years occurred in collisions involving a young driver. This is the scenario with the greatest proportion of young drivers involved.
 - Passenger KSI casualties on Friday and Saturday nights between 9pm and 3am: 53%; 495 KSI casualties;
 - Driver KSI casualties on Friday and Saturday nights between 9pm and 3am: 42%; 790 KSI casualties;
 - KSI casualties aged 18 and under: 41%; 4,698 KSI casualties;
 - and KSI casualties on Friday and Saturday nights between 9pm and 3am: 38%; 1,465 KSI casualties.
- 13 of the scenarios tested had a proportion of young driver involvement at 30% or above.
- Young drivers were involved in motorcycle related collisions that resulted in 37% (6,393) of KSI casualties.

- Young drivers were involved in collisions resulting in 35% (3,680) of passenger KSI casualties.
- Young drivers were involved in collisions resulting in 33% (7,562) of KSI casualties, during hours of darkness.
- Young drivers were involved in collisions resulting in 29% (12,567) of KSI casualties, where there were multiple vehicles involved.
- Young drivers were involved in collisions resulting in 35% (3,675) of KSI casualties, where there was a bend ahead in the road.
- Between 2012 and 2014, there were 33,319 KSI casualties on rural roads, 29% of which resulted from a collision involving a young driver.

KSI casualties, by gender of young driver:

KSI casualties aged between 16 and 18 and passenger KSI casualties on Friday and Saturday nights were, again, the scenarios with the highest proportion of KSI casualties resulting from collisions which involved young drivers however there were differences by gender:

- The proportion of KSI casualties in collisions involving young drivers on Friday and Saturday nights were higher for female drivers (46%), than for male drivers (39%).
- KSI casualties resulting from collisions where the young driver was male accounted for almost 50% of KSI casualties under the age of 18 resulting from collisions where the driver was male.
- KSI casualties resulting from collisions involving a young driver were 3.7 times higher for male young drivers, than for female young drivers (see Annex B).

Young male drivers:

- Young male drivers were involved in motorcycle related collisions resulting in 38% (6,026) of KSI casualties. The young drivers involved in this type collision, resulting in KSI casualty, were almost always male (94%).
- Young male drivers were involved in collisions resulting in
 - 35% (6,158) of KSI casualties, during hours of darkness. Again, male young drivers accounted for almost all of this type of collision involving a young driver (see Annex C).
 - 34% (1,721) of passenger KSI casualties, on weekdays.
 - 28% (7,160) of KSI casualties, on rural roads.
 - 29% (1,894) of KSI casualties, when it was raining
 - 29% (9,768) of KSI casualties, where there were multiple vehicles involved.
 - 35% (2,914) of KSI casualties, where there was a bend ahead in the road. Male young drivers accounted for 79% of this scenario among young drivers (see Annex C).
 - 35% (2,829) of passenger KSI casualties.

Young female drivers:

- Young female drivers were involved in collisions resulting
 - 34% (1,384) of KSI casualties, during hours of darkness. 30% of KSI casualties, on rural roads (2,369).
 - 32% (1,918) of KSI casualties on roads with speed limits of 50mph and above – 95% (1,828) of which occurred on rural roads.
 - 30% (648) of KSI casualties when it was raining (648)
 - 28% (2,536) of KSI casualties, where there were multiple vehicles involved.

- 35% (758) of KSI casualties, where there was a bend ahead in the road (758)
- 37% (839) of passenger KSI casualties.
- 42% (267) of KSI casualties on Friday and Saturday between midnight and 3am.

Annex C shows the split between KSI casualties resulting from collisions involving young male and young female drivers. It is arranged by the smallest difference in the proportion between the genders of the driver.

Table 1: Scenarios with the largest proportions of KSI casualties resulting from collision involving young drivers, by gender between 2012 and 2014 in Great Britain.

Scenario	KSI casualties resulting from collisions involving a young male driver		Scenario	KSI casualties resulting from collisions involving a young female driver	
KSI casualties aged 16 to 18	3103	77%	KSI casualties aged 16 to 18	579	68%
Passenger KSI casualties on Friday and Saturday nights	400	54%	Passenger KSI casualties on Friday and Saturday nights	93	64%
KSI casualties is 18 or younger (includes children)	3,768	47%	KSI casualties on Friday and Saturday between 9pm and 3am	257	46%
Driver KSI casualties on Friday and Saturday nights	660	42%	Driver KSI casualties on Friday and Saturday nights	130	44%
KSI casualties in crashes between midnight and 5am	1,660	40%	KSI casualties in crashes between midnight and 5am	267	42%

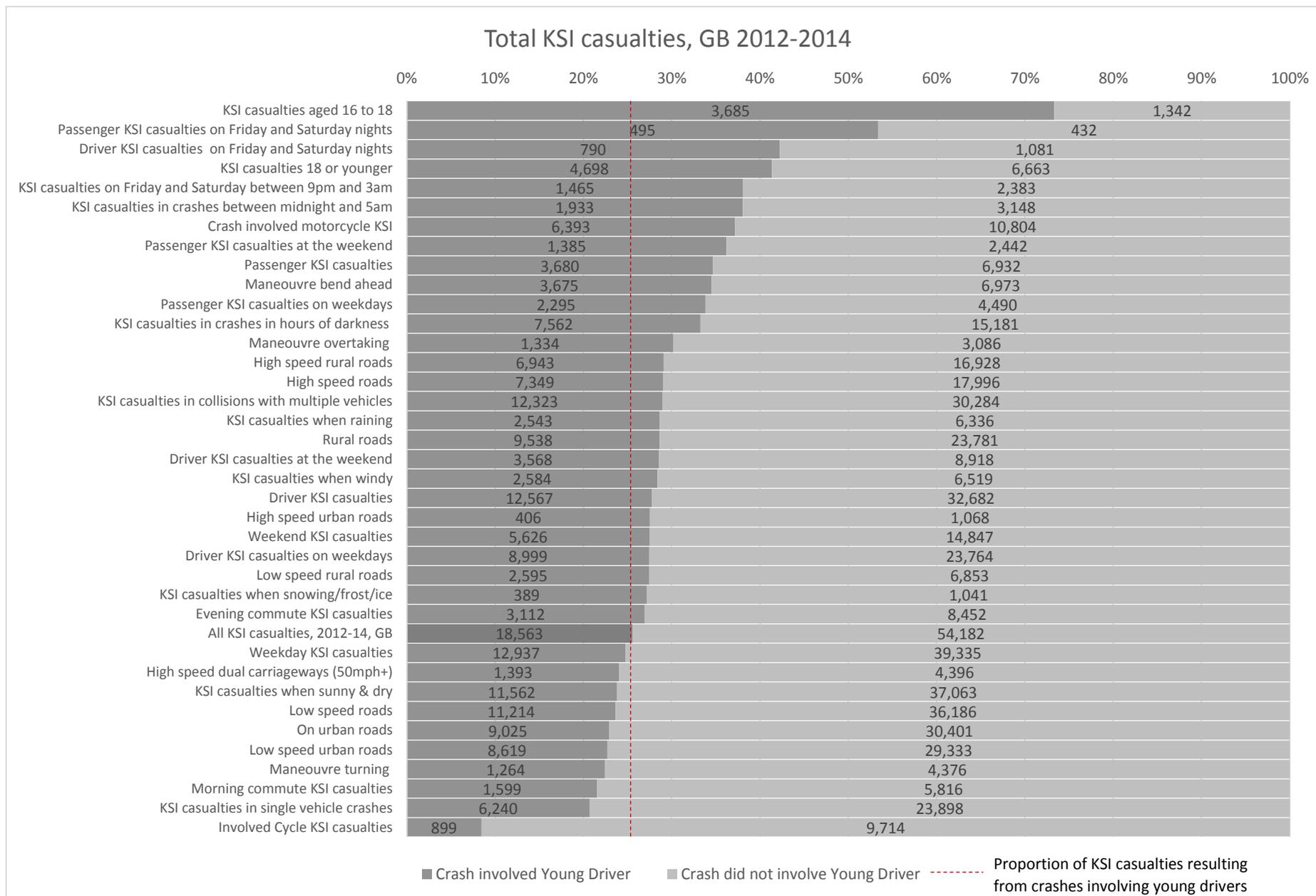
Table 2: Scenarios by highest scenarios by total KSI casualties by gender, 2012-2014, GB.

	Scenario	KSI casualties resulting from collisions involving a young male driver	Total KSIs	% involving a young male driver	Scenario	KSI casualties resulting from collisions involving a young female driver	Total KSIs	% involving a young male driver
1	Weekday KSI casualties	10,088	39,163	26%	Weekday KSI casualties	2,828	11,934	24%
2	KSI casualties when sunny & dry	9,296	37,334	25%	Low speed urban roads	1,475	10,669	14%
3	Low speed roads	9,172	35,932	26%	KSI casualties when sunny & dry	2,246	10,086	22%
4	Driver KSI casualties	10,122	35,849	28%	Low speed roads	2,016	9,851	20%
5	KSI casualties in collisions with multiple vehicles	9,768	33,221	29%	Driver KSI casualties	2,445	9,398	26%

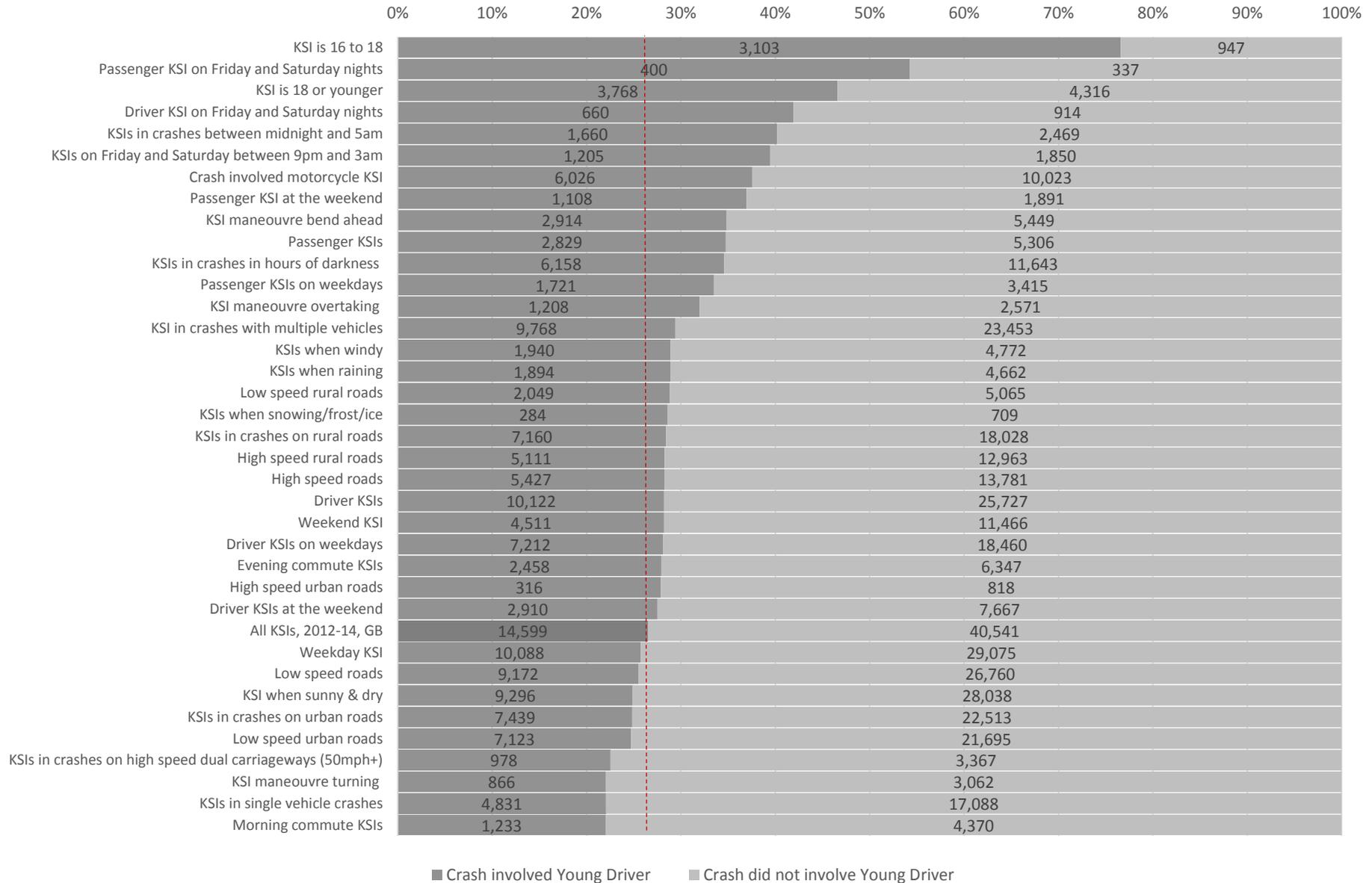
References:

DVLA (2016). *DRL0101 - Provisional and Full driving licences held, by age and by gender, Great Britain: DVLA driver licence data*. Available online: <https://data.gov.uk/dataset/driving-licence-data>

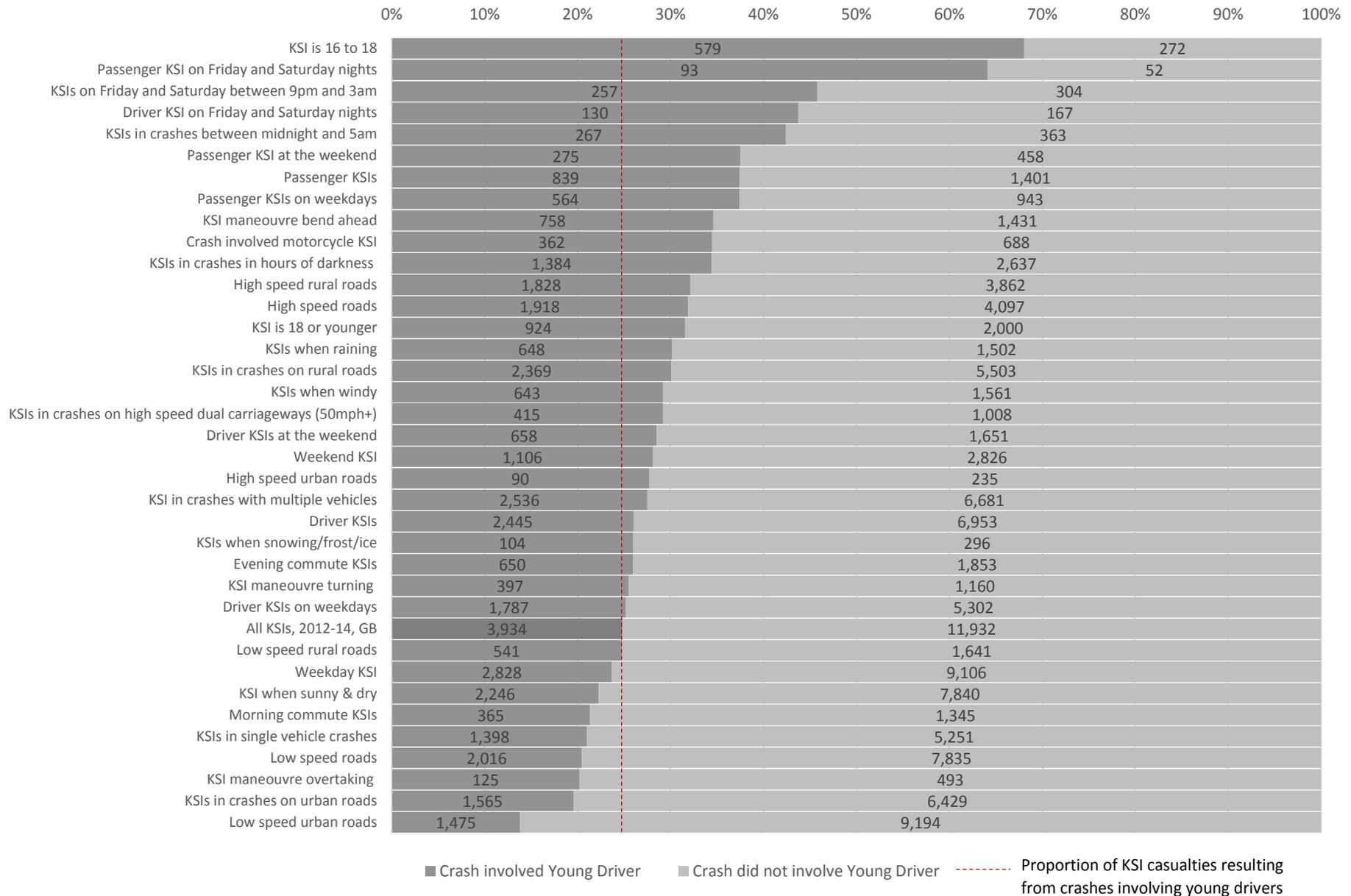
Annex A - Scenarios by proportion of KSI casualties resulting from collisions involving young drivers, GB, 2012-2014



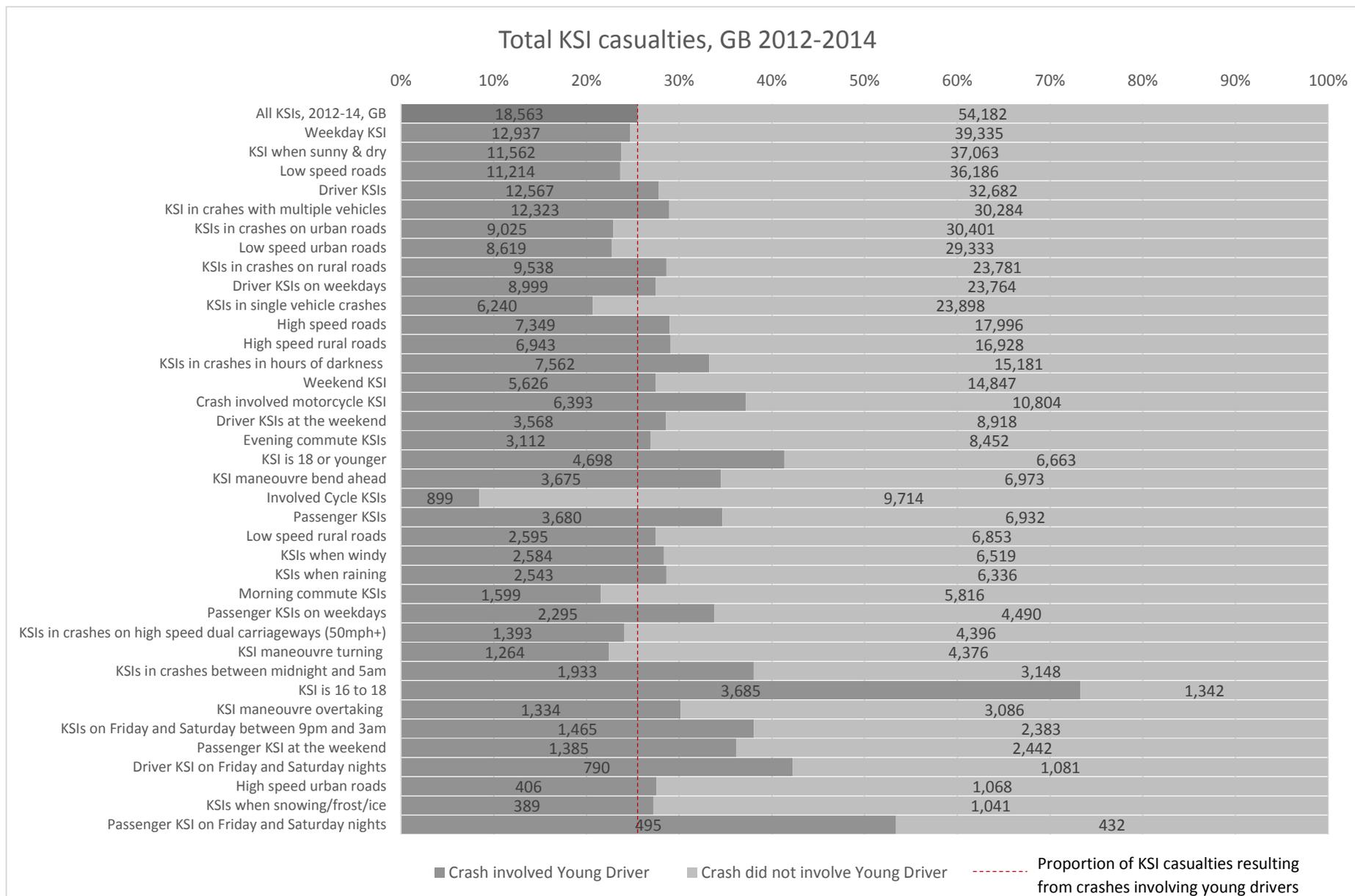
KSI casualties - young male drivers, GB, 2012-2014



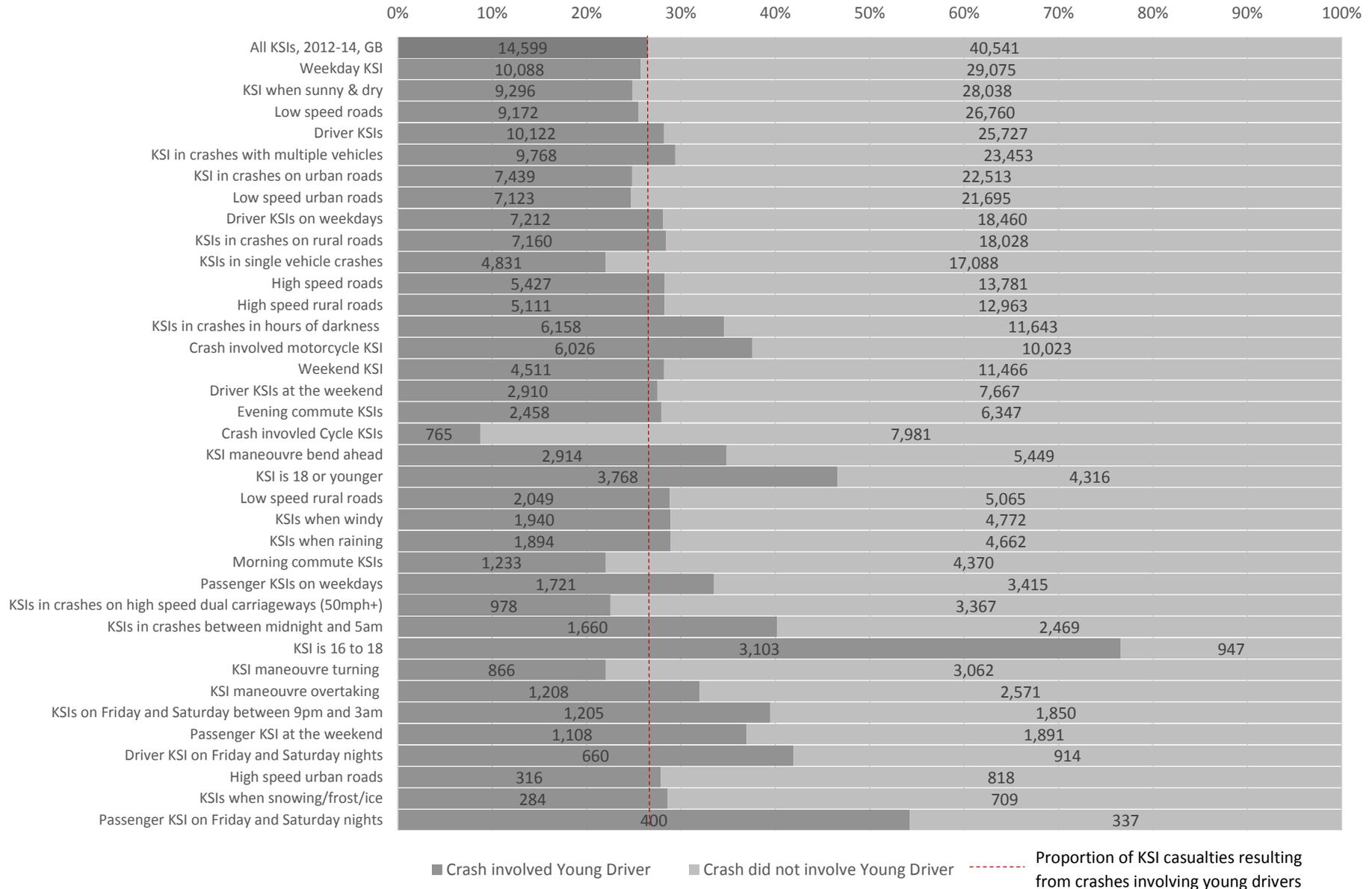
KSI casualties - young female drivers, GB 2012-2014



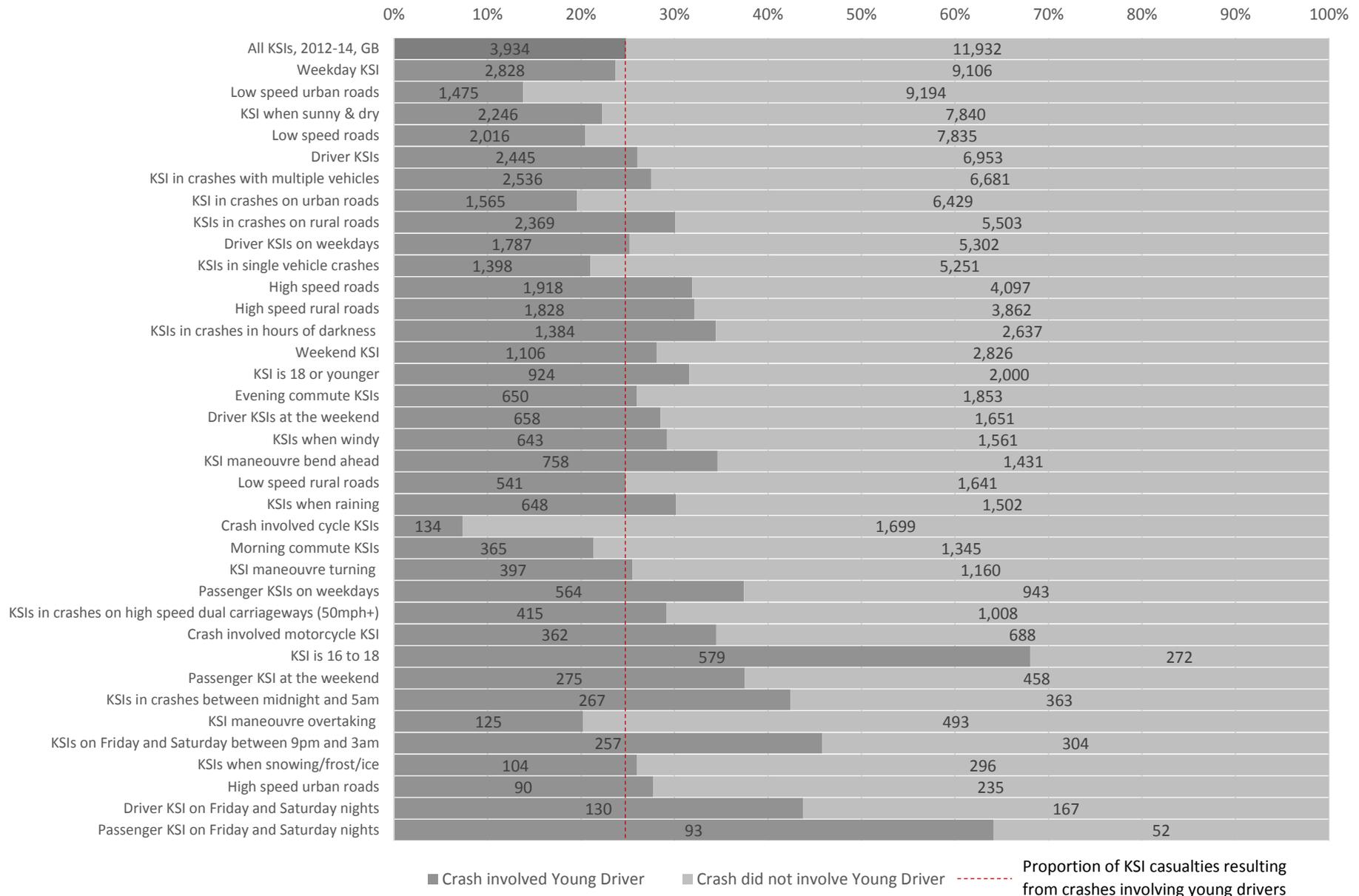
Annex B – MAST Scenarios by KSI casualties resulting from collisions which involved young drivers, GB, 2012-2014



KSI casualties - young male drivers, GB, 2012-2014



KSI casualties - young female drivers, GB 2012-2014



Annex C: Scenarios, by gender, ordered according to the smallest difference between the proportion of KSI casualties resulting from collisions involving young male and female drivers, 2012-2014. GB

