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Heavy Truck Crash Data Analysis Single Vehicle Crashes

RFAC Meeting

September 2011



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Purpose of Presentation



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1. Update of Heavy Truck Fatal Crash Trends in NSW and Australia
2. Characteristics of Single Vehicle Heavy Truck Crashes 2008 to 2010



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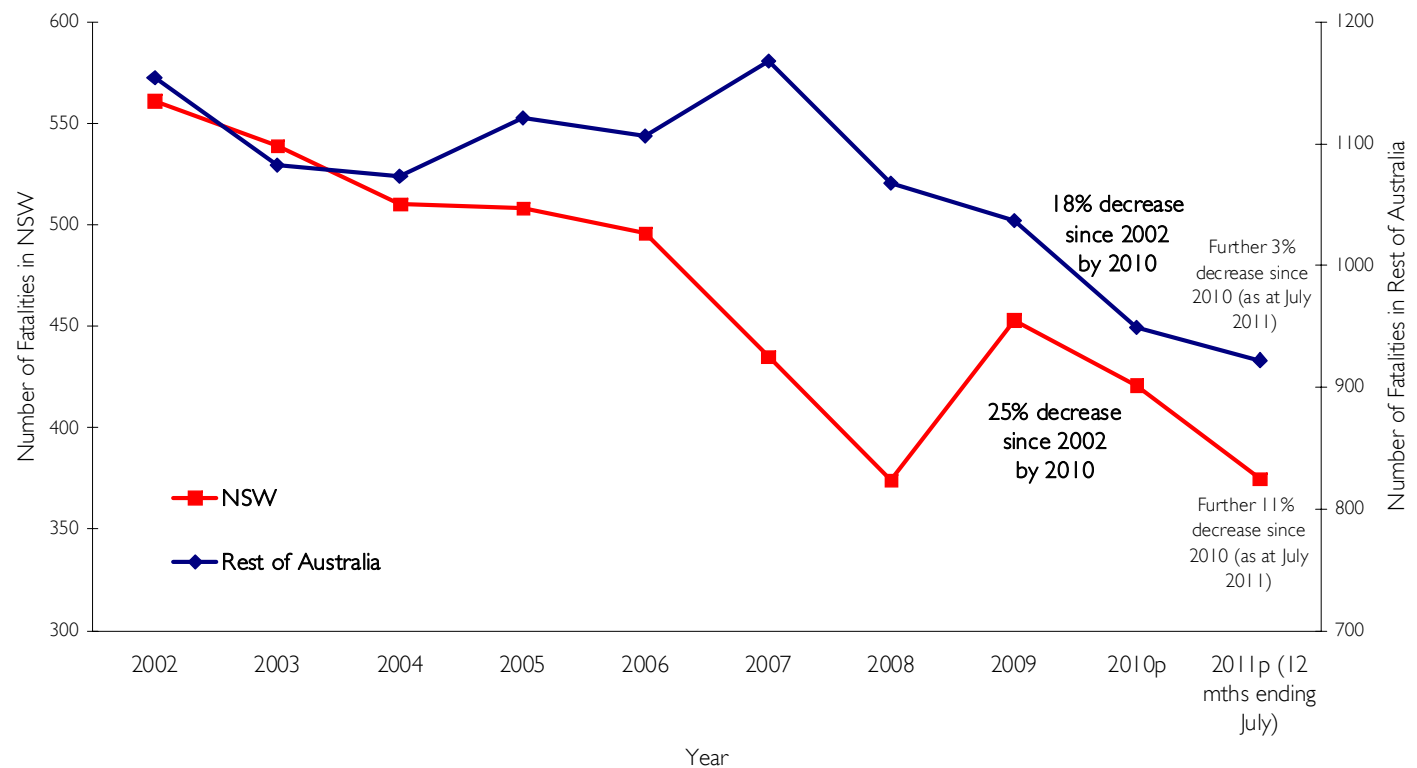
NSW v Rest of Australia 2002 to 2011p



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- NSW experienced impressive reductions in road fatalities between 2002 and 2010, whilst the Rest of Australia has decreased to a lesser extent over that period
- There were 421 fatalities on NSW roads in 2010 (provisional figure), 32 (7%) fewer fatalities than 2009 and the second lowest annual result since 1945
- The trends for 2011 (January to July only) show fatalities decreasing by 18% for NSW and 4% for the rest of Australia compared with the same period in 2010
- The NSW road toll for the 2010/11 financial year was also the lowest financial year result since 1933/34
- However, results for NSW since June 2011 have been disappointing – 73 fatalities for two month period July and August 2011, 23 (46%) more fatalities than for the same period in 2010

Trends in Road Fatalities, NSW vs Rest of Australia, 2002 to 2011p



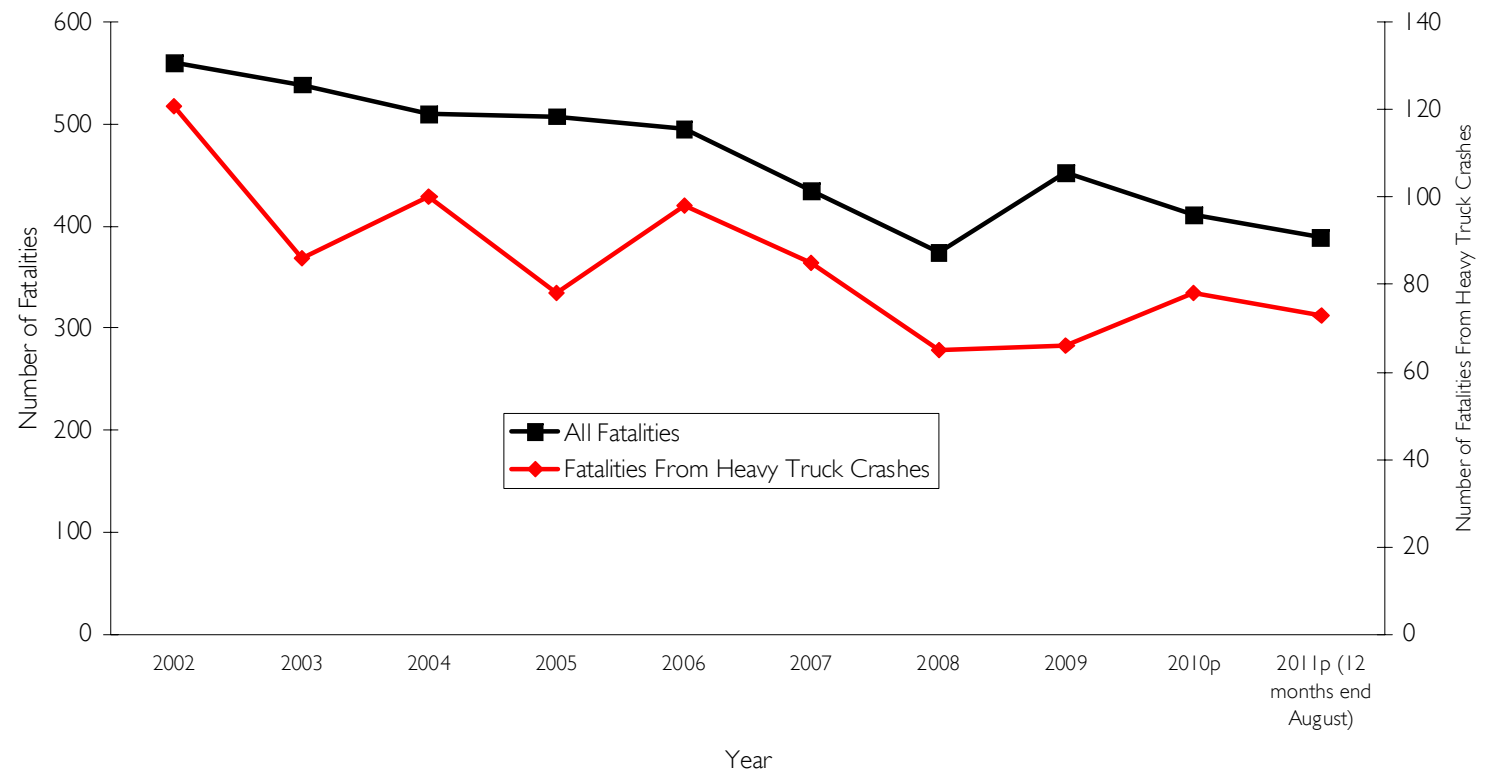
- Compared with percentage of NSW motor vehicle registrations and motor vehicle travel, heavy trucks are over-represented in NSW road fatalities

- However, trends for heavy truck crash fatalities since 2002 have been generally a little better than the overall road toll performance

- But the road toll decreased in 2010 by 7%, whilst heavy truck crash fatalities increased by 21%

- Trends so far for 2011 (up to the end of August) show overall fatalities and heavy truck crash fatalities still both decreasing

Trends in Road Fatalities, NSW,
All Fatalities v Fatalities From Heavy Truck Crashes, 2002 to 2011p





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Over-representation of heavy trucks in serious road trauma



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Heavy trucks are over-represented in serious road trauma in NSW

In 2010 heavy trucks

- Represented only 2.5 % of registered motor vehicles in NSW
- Accounted for 7% of all motor vehicle travel in NSW (*ABS SMVU 2008*)
- Crashes involving heavy trucks accounted for 17% of all fatalities on NSW roads in 2008, 15% in 2009 and 19% in 2010



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Heavy Truck Fatalities v All Fatalities in NSW



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Trends for Fatalities and Fatal Crashes in NSW, 2002 to 2010p & 2011p (12 months ending August)

Year	All Crashes		Heavy Truck Crashes			Heavy Truck as % of Total	
	Fatalities	Fatal Crashes	Fatalities	Fatal Crashes	Killed / Fatal Crashes	Fatalities	Fatal Crashes
2002	561	501	121	109	1.11	22%	22%
2003	539	483	86	69	1.25	16%	14%
2004	510	458	100	86	1.16	20%	19%
2005	508	459	78	70	1.11	15%	15%
2006	496	449	98	80	1.23	20%	18%
2007	435	405	85	78	1.09	20%	19%
2008	374	353	65	59	1.10	17%	17%
2009	453	408	66	51	1.29	15%	13%
2010p	411	371	78	64	1.22	19%	17%
2011p (12 months end August)	389	354	73	63	1.16	19%	18%

Note : 2010 provisional figure for total fatalities is 421 (figure as at 1 January 2011)

After a poor result in 2010 compared with previous years, the 2011p (12 months ending August) results show

- Only 6% decrease in heavy truck fatalities compared with 2010
- Heavy truck fatalities now accounted for around 19% of total fatalities



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Recent Trends for Heavy Truck Fatalities in NSW



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Trends For Fatalities From Heavy Truck Crashes in NSW, 2002 to 2011p

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
2002	6	7	9	10	13	14	8	8	14	8	14	10	121
2003	3	5	8	5	9	7	6	9	4	13	10	7	86
2004	4	14	11	9	2	10	2	12	8	9	12	7	100
2005	7	3	6	8	7	10	2	6	6	6	7	10	78
2006	18	7	7	10	3	10	4	6	3	11	12	7	98
2007	3	6	9	5	3	10	8	6	3	8	9	15	85
2008	8	3	5	1	4	8	6	7	6	8	4	5	65
2009	2	5	4	7	5	5	5	7	7	4	5	10	66
2010p	12	6	9	7	6	7	5	2	10	7	4	4	79
2011p	2	4	8	4	4	4	6	16					48

Note: 2011 data preliminary for the period 1 January to 31 August only

Since November 2010 monthly fatality totals have been relatively low (averaging around four fatalities per month)

But in August 2011 (up to midnight 31 August) there were 16 fatalities recorded for the month, the highest monthly total since January 2006



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2011 Progress

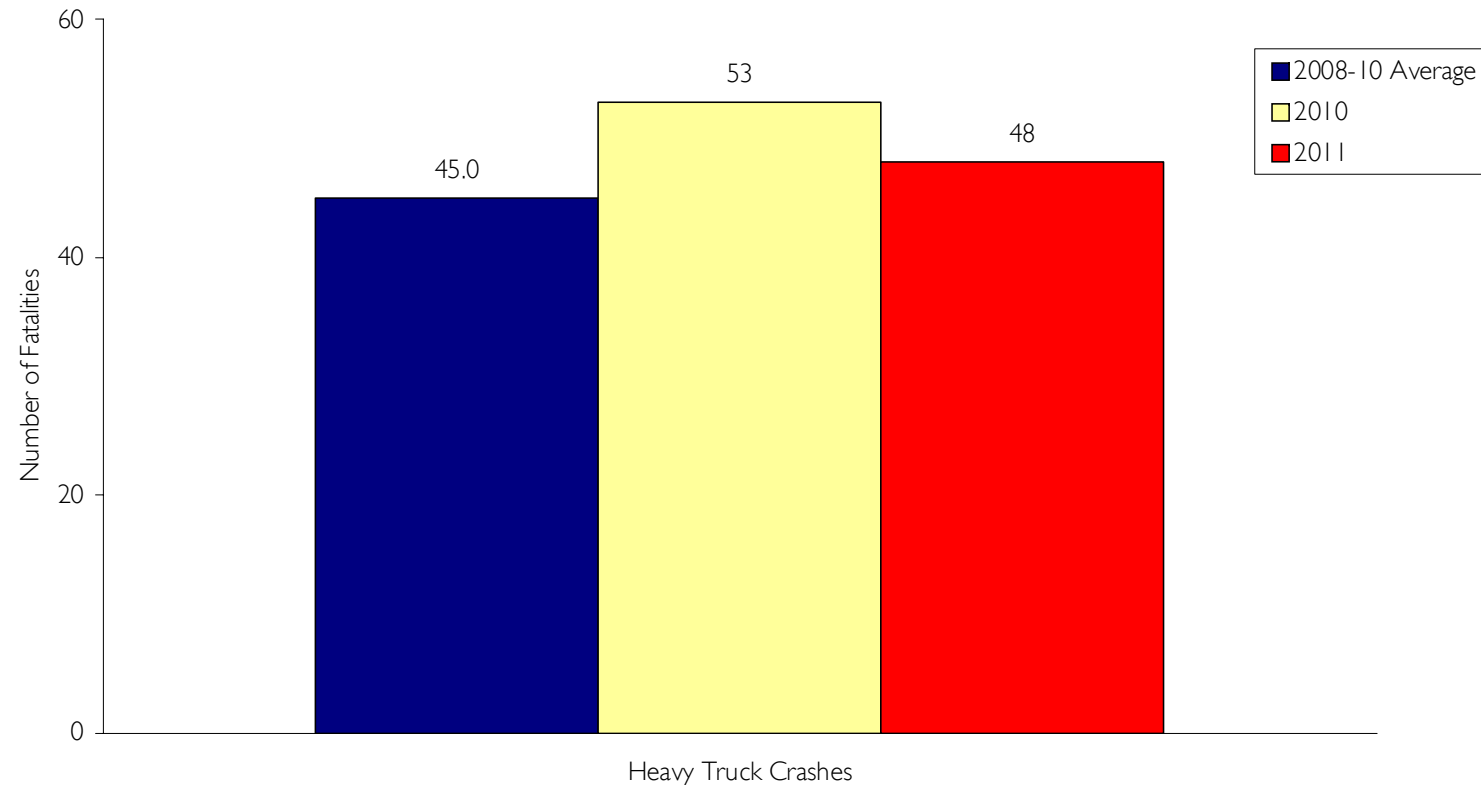
Fatalities From Heavy Truck Crashes



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- Fatalities from heavy truck crashes experienced increases in 2010
- However, there have been some improvements so far this year
- After the first four months of 2011 there had been 50% fewer fatalities than for the same period in 2010 and 26% fewer fatalities than the three year average (2008-2010)
- But by August, the January to August 2011 results are only down 9% on the same period 2010 and are now slightly higher (7%) than the three year average (2008-2010)

Number of Fatalities, Heavy Truck Crashes, NSW,
January to August Only, 2008-10 Average, 2010p, 2011p





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Fatalities From Heavy Truck Crashes in Australia

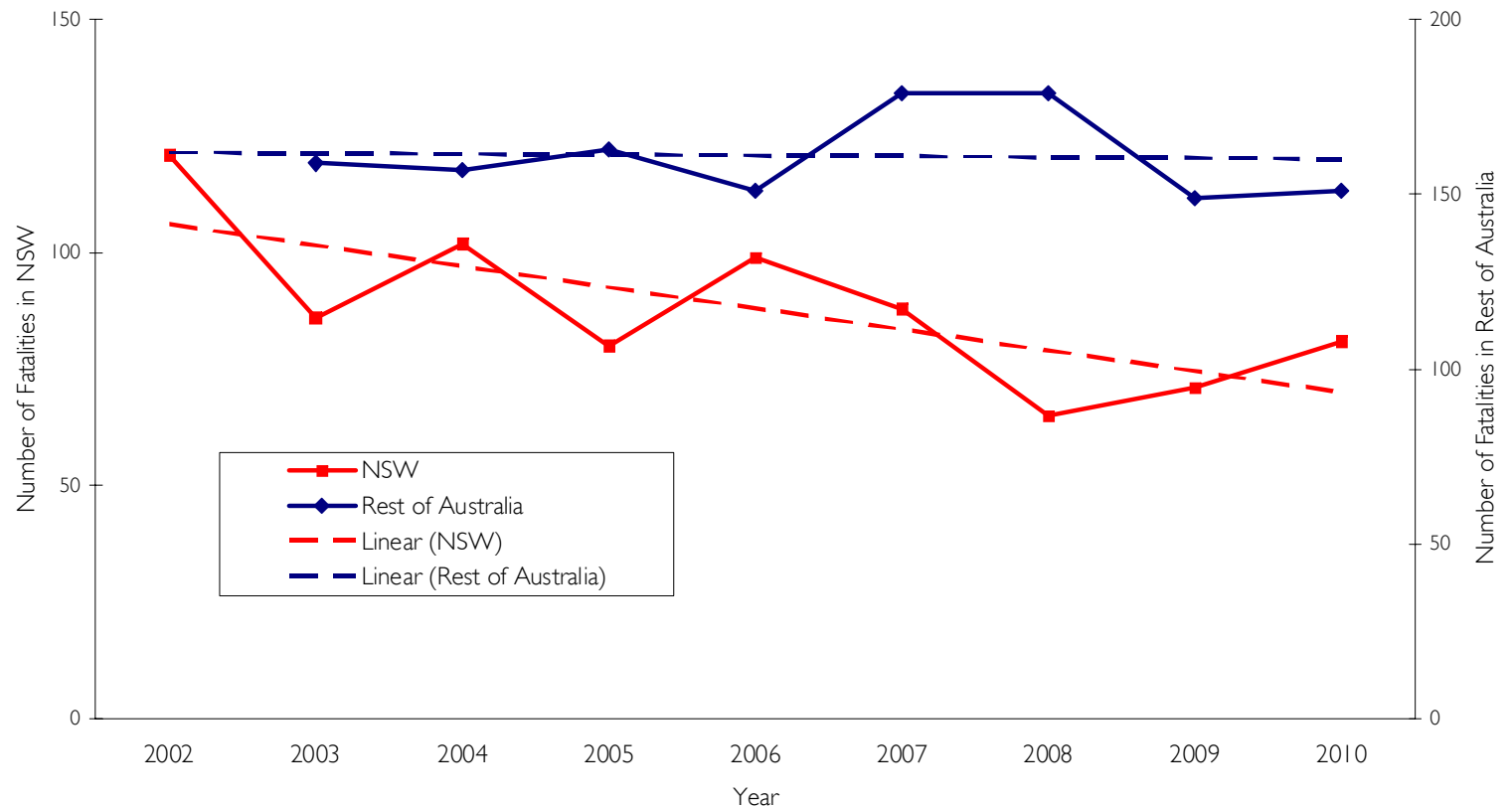


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- Latest National figures (BITRE published data) for the 12 months ending December 2010 show an increase for NSW and a smaller increase for the rest of Australia

- However, over the period 2002 to 2010 there is a decreasing trend for NSW whilst a relatively steady trend for rest of Australia

Trends in Fatalities From Heavy Truck Crashes,
NSW vs Rest of Australia, 2002 to 2010





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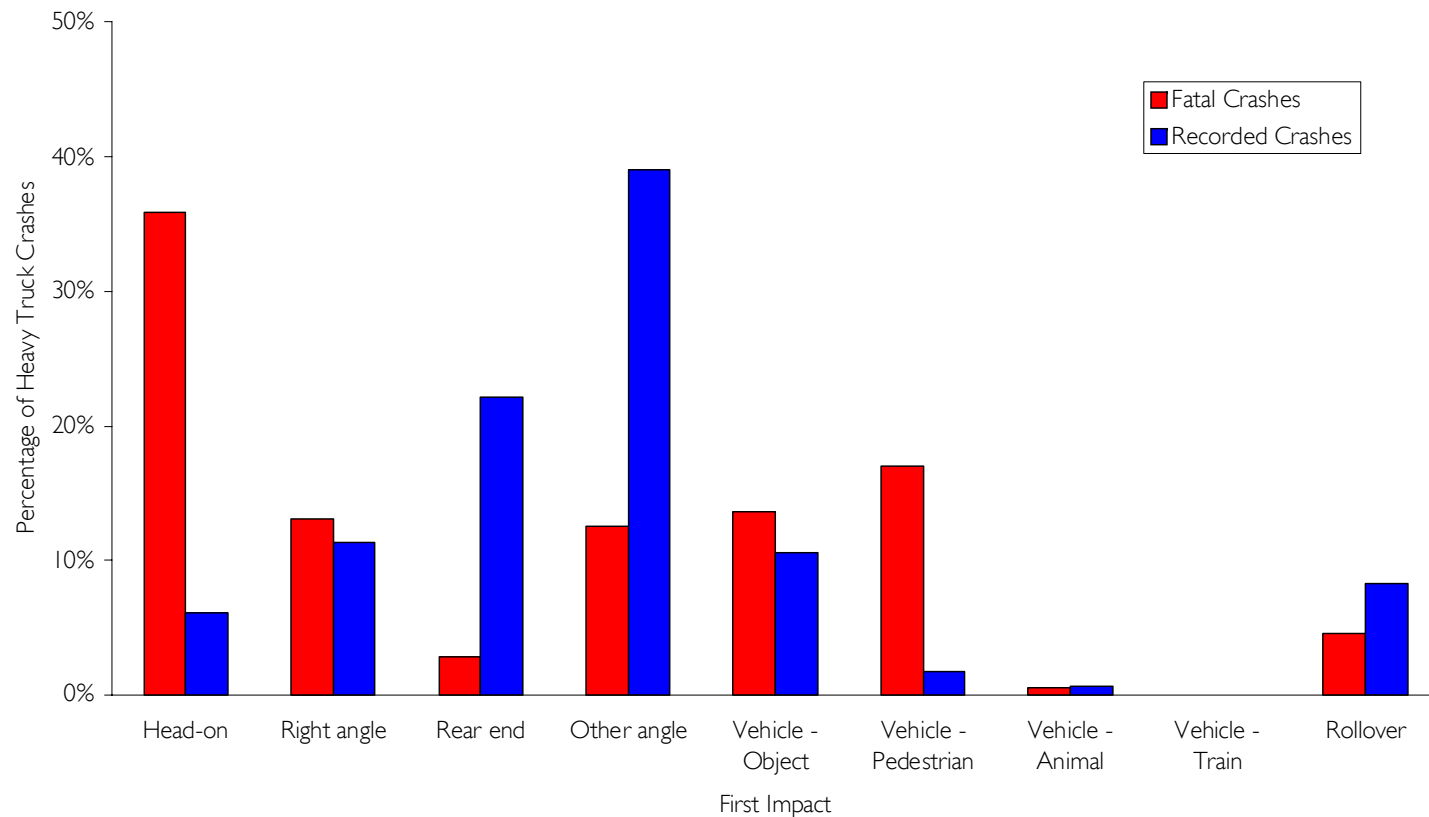
First Impact for Crash



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- The majority of heavy truck crashes involve multiple vehicles, largely either rear enders or other same direction
- Over-representation of pedestrian and head on (not overtaking) impacts for heavy truck fatal crashes

Heavy Truck Crashes, 2008 to 2010p, First Impact





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Heavy Truck Crashes

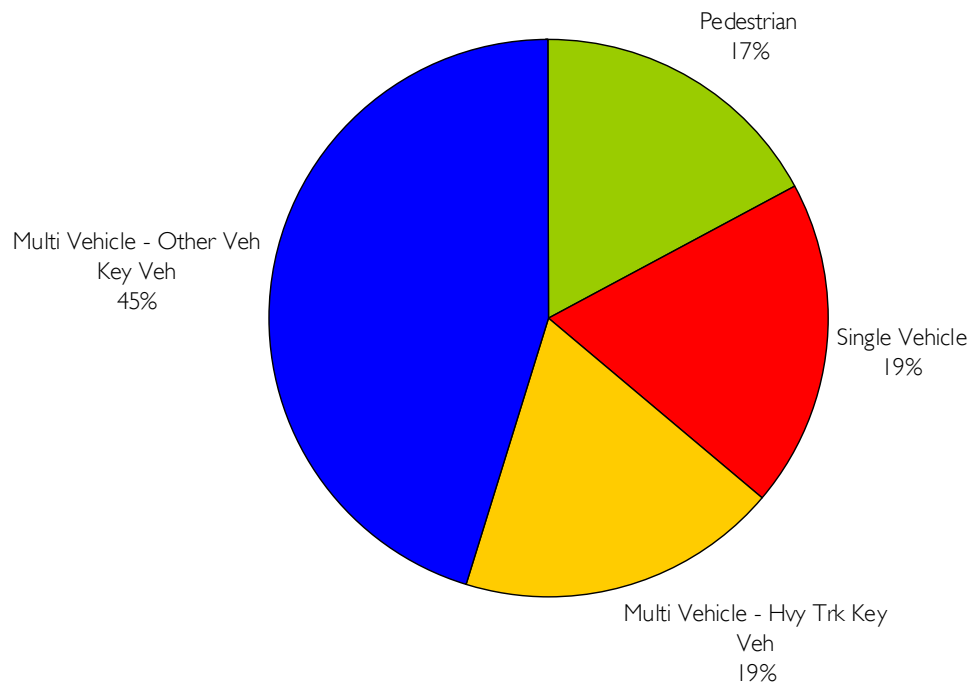
First Impact Crash Type



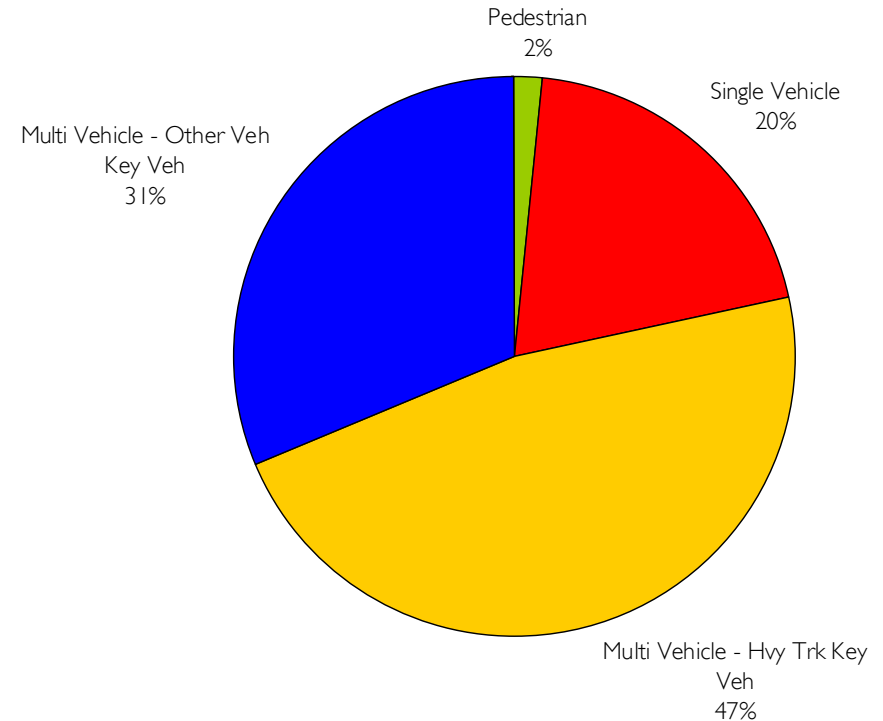
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- The majority of heavy truck crashes involve multiple vehicles (78%), where key vehicle status (fault) is skewed towards the heavy truck (47% v 31%)
- The majority of heavy truck fatal crashes also involve multiple vehicles (64%), but key vehicle status (fault) is skewed towards the other vehicle (45% v 19%)

Heavy Truck Fatal Crashes, 2008 to 2010p,
First Impact Crash Type x Key Vehicle Status



Heavy Truck Recorded Crashes, 2008 to 2010p,
First Impact Crash Type x Key Vehicle Status





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Heavy Truck Crash Trends Since 1996

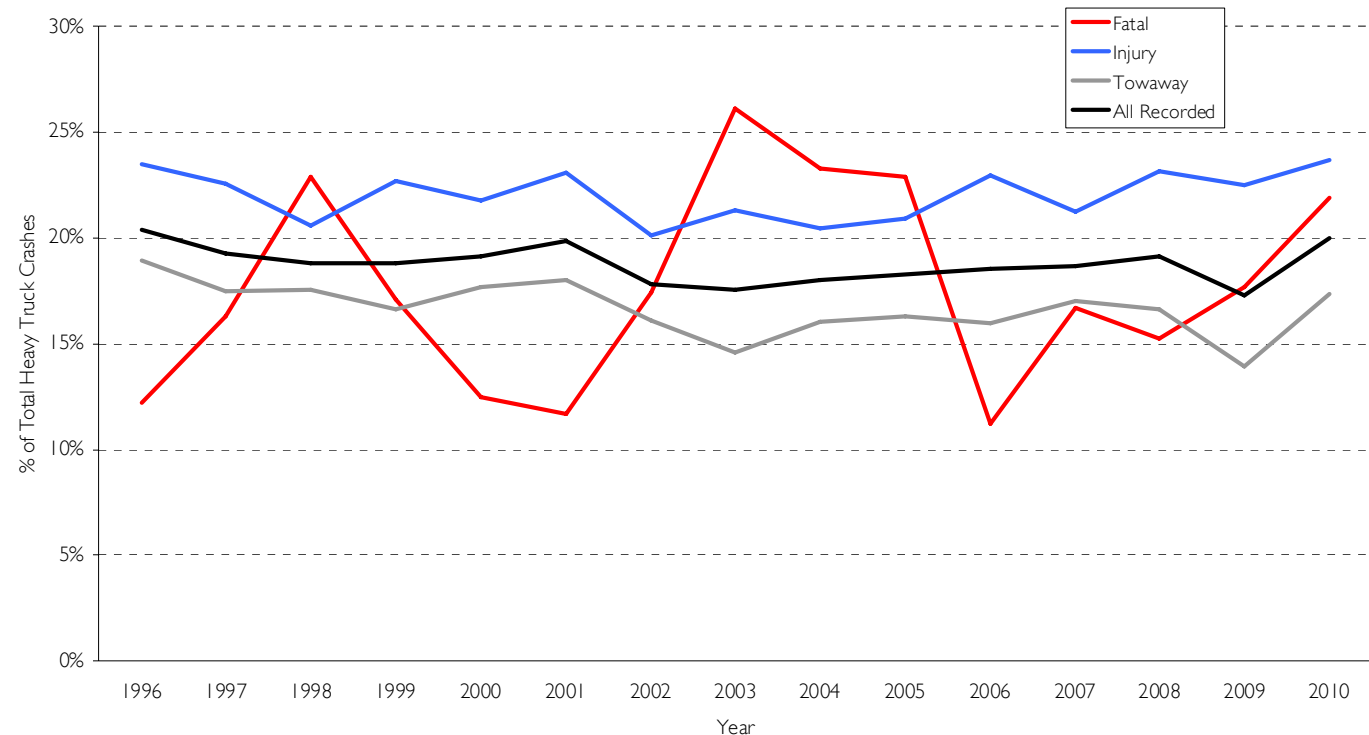
Prevalence of Single Vehicle Crashes



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- Since 1996, just under 20% of heavy truck crashes are single vehicle crashes, with a slightly higher percentage for injury crashes
- These percentages have remained relatively steady since 1996 but are slightly higher since 2002-2004
- Over the past five years there have been around 430 single vehicle heavy truck crashes per annum, of these between 9 and 14 are fatal crashes

Single Vehicle Heavy Truck Crashes (First Impact is Vehicle - Object or Rollover)
as Percentage of Total Heavy Truck Crashes, 1996 to 2010p





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Single Vehicle Heavy Truck Crashes in NSW 2008 to 2010p



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The following is an analysis of single vehicle heavy truck crashes (#vehicle-object or rollover first impact crashes where the heavy truck was the key vehicle)

The issues investigated included:

- Day of week, time of day
- Location characteristics
- Behavioural factors involved
- Vehicle factors involved
- Road environment factors

+Note : 2010 fatal crash data are preliminary and are subject to change – data as at 17 August 2011



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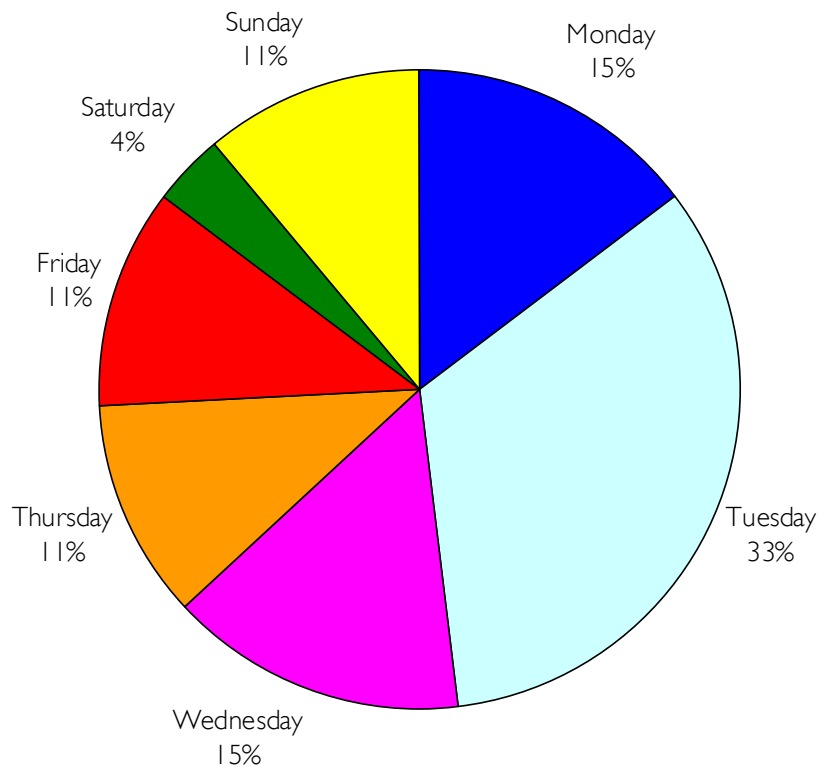
Day of Week



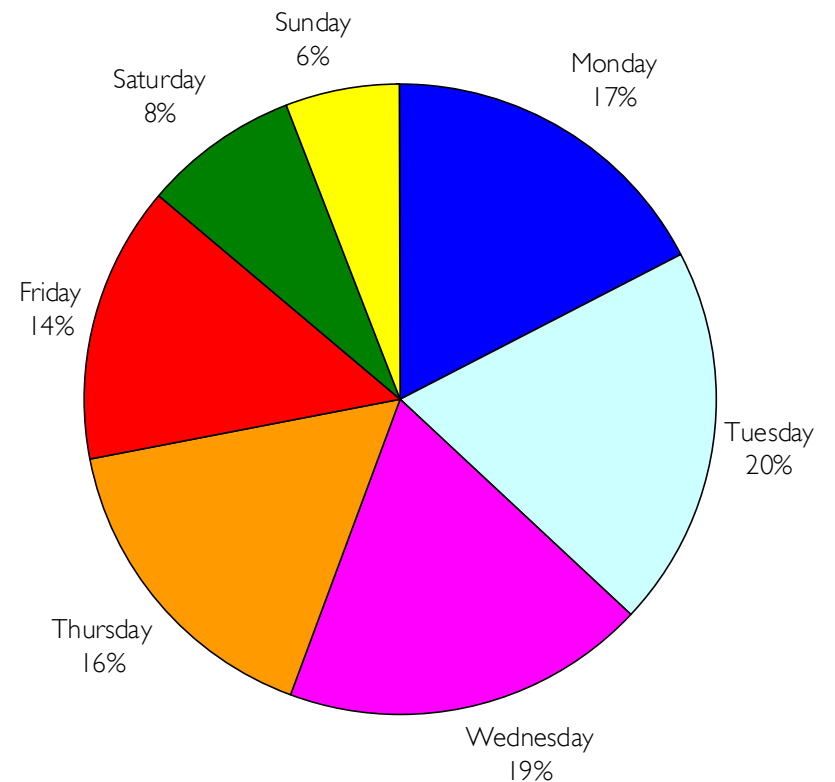
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- Single vehicle heavy truck crashes occur mostly during the weekdays, with crashes peaking on Tuesdays and Wednesdays (versus peaks on Thursday and Fridays for all heavy truck crashes)

Single Vehicle Heavy Truck Fatal Crashes, 2008 to 2010p, Day of Week



Single Vehicle Heavy Truck Crashes, 2008 to 2010p, Day of Week





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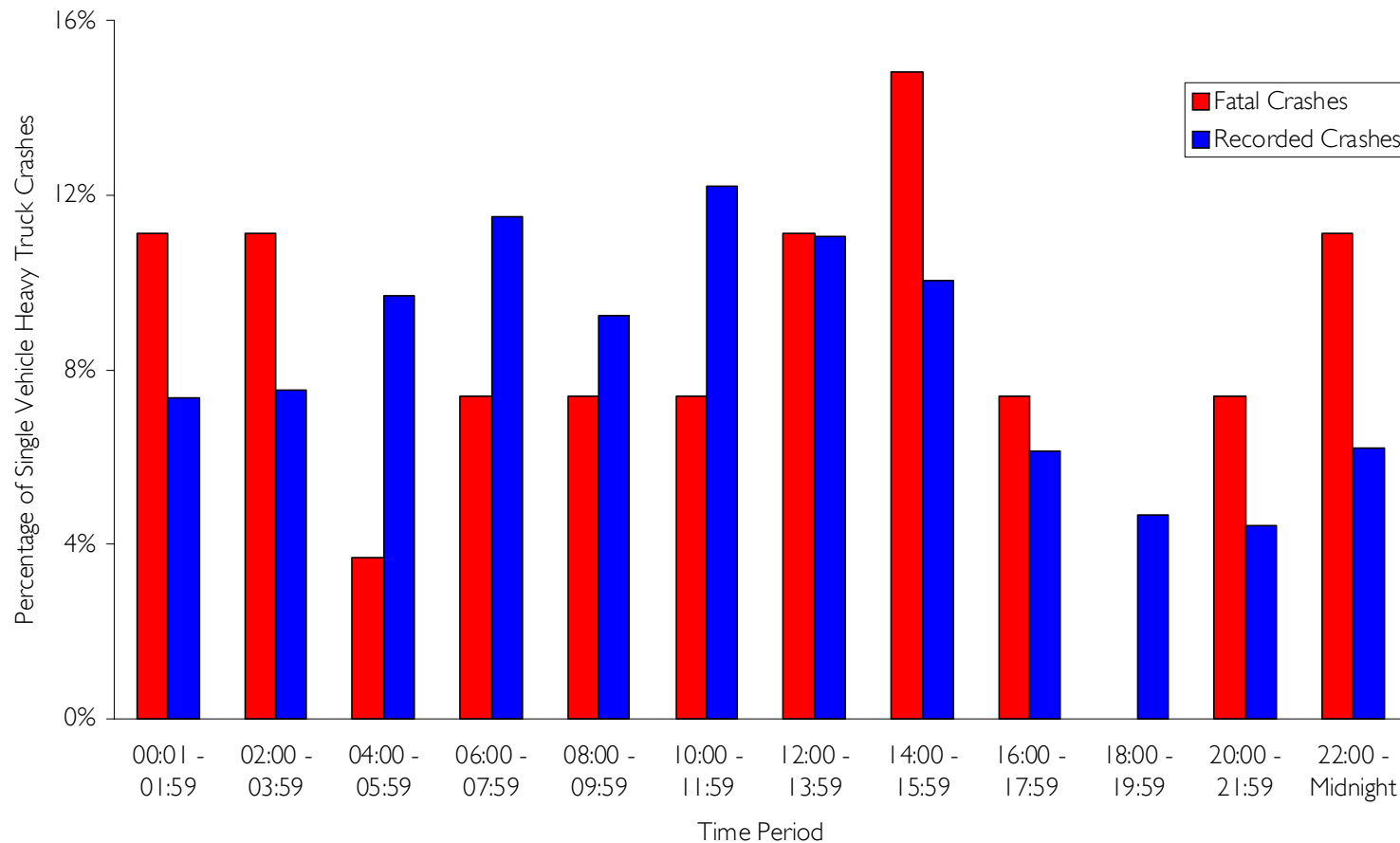
Time of Day



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- Single vehicle heavy truck crashes are highest between midnight and 4pm, but fatal crashes are more randomly distributed across time of day

Single Vehicle Heavy Truck Crashes, 2008 to 2010p, Day of Week





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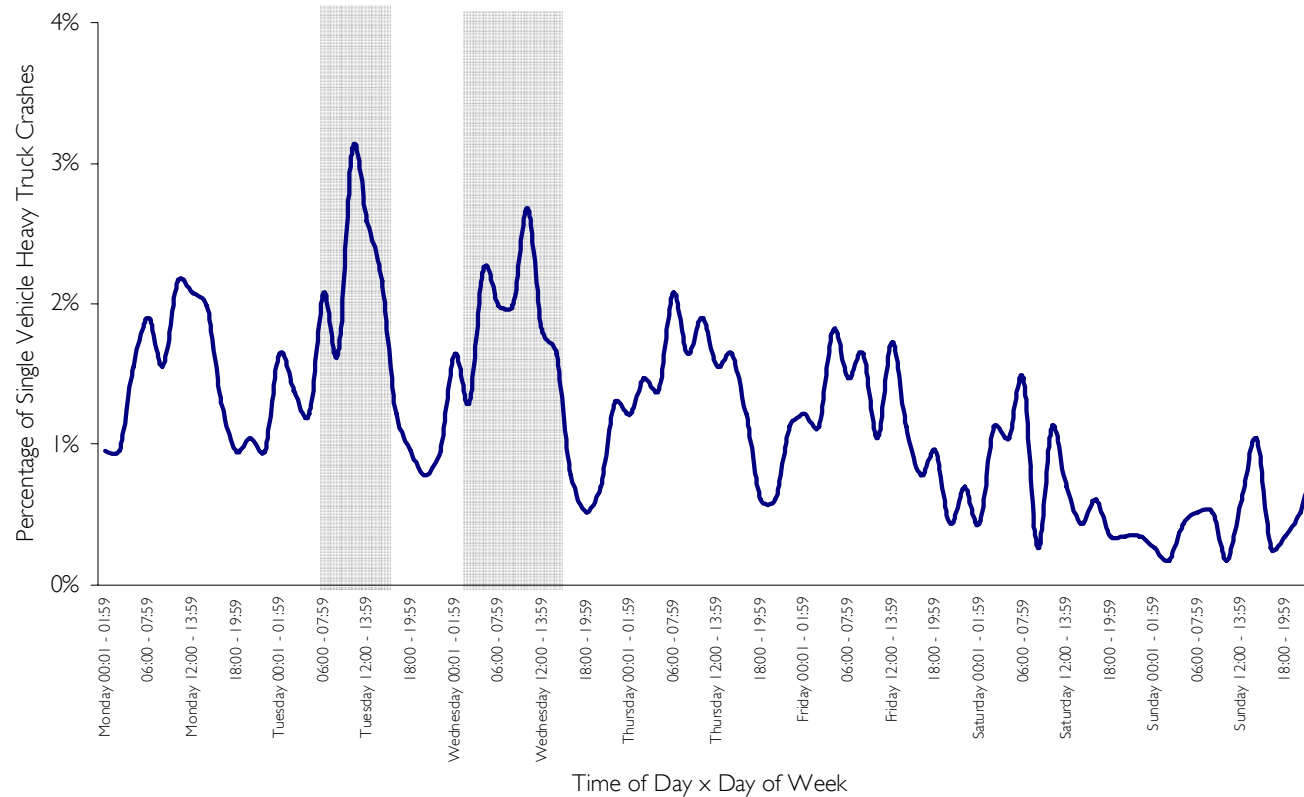
Time of Day x Day of Week



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- Single vehicle heavy truck crashes peaked on Tuesdays and Wednesdays from early morning to early afternoon

Single Vehicle Heavy Truck Crashes, 2008 to 2010p, Time of Day x Day of Week





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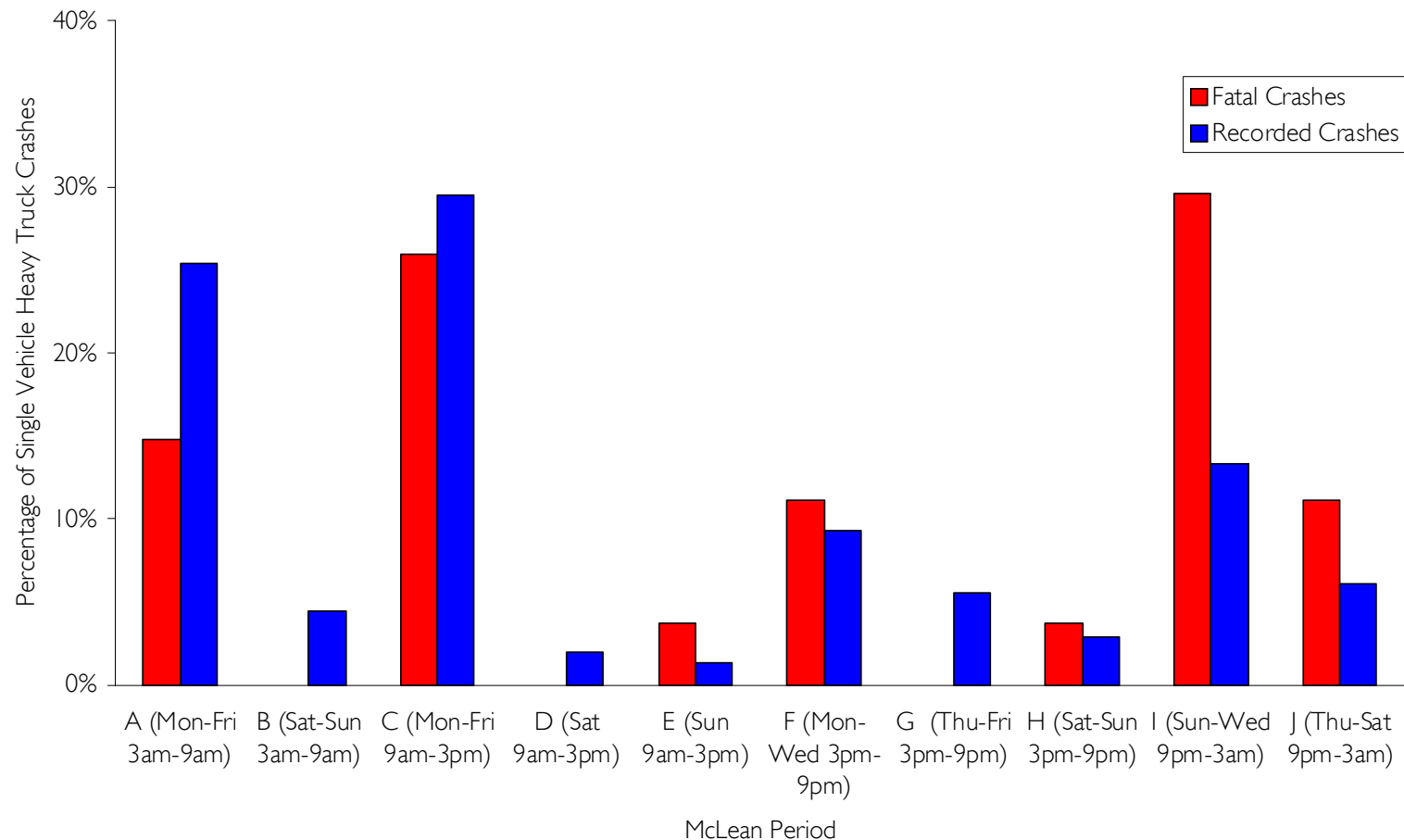
McLean Periods



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- Over half of all single vehicle heavy truck crashes occur in Periods A and C, but single vehicle heavy truck fatal crashes are highest during Periods I and C

Single Vehicle Heavy Truck Crashes, 2008 to 2010p, McLean Period





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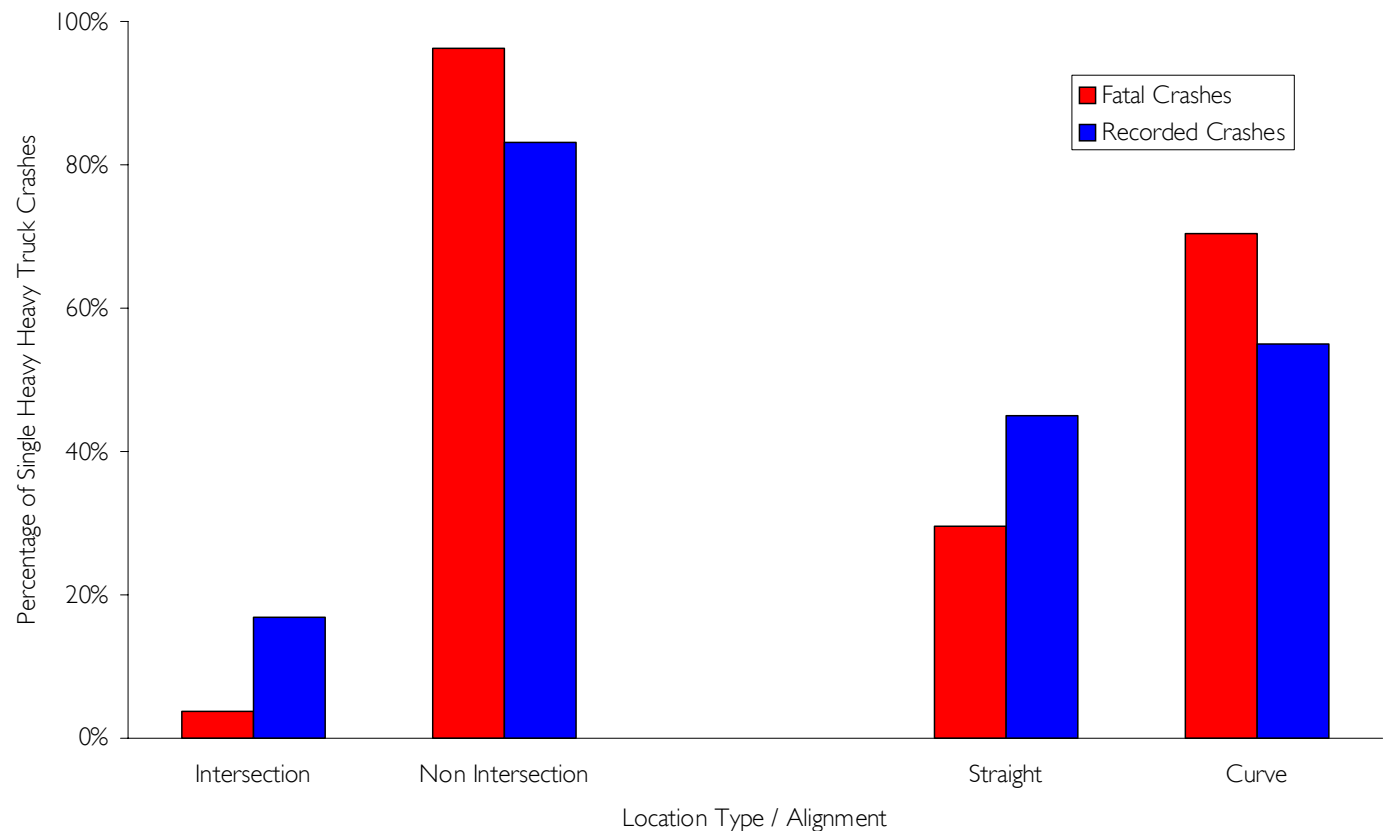
Location Type / Alignment



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- Single vehicle heavy truck crashes largely occur away from intersections and mostly on curves
- Single vehicle fatal heavy truck crashes are over-represented on curves
- More than one-third of single vehicle fatal heavy truck crashes and one-quarter of single vehicle heavy truck crashes were on wet roads

Single Vehicle Heavy Truck Crashes, 2008 to 2010p, Location Type / Alignment





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Vehicle Object Impacts

Type of Object in First Impact

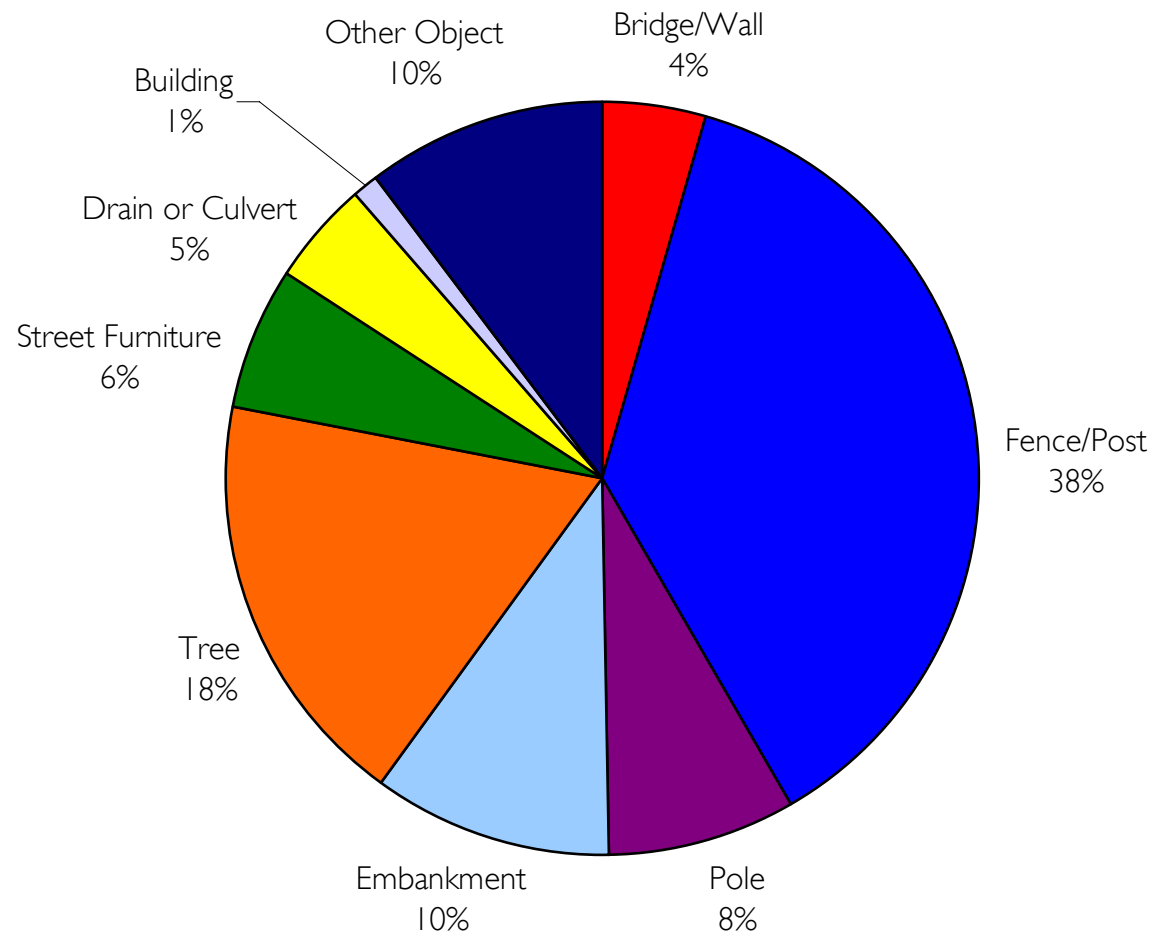


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Heavy Trucks in Single Vehicle Crashes, 2008 to 2010p,
Object in the First Impact

- Just over half (53%) of single vehicle heavy truck crashes involved an impact with a fixed object

- The common objects impacted in the first impact were fence / posts (including safety barriers) and trees





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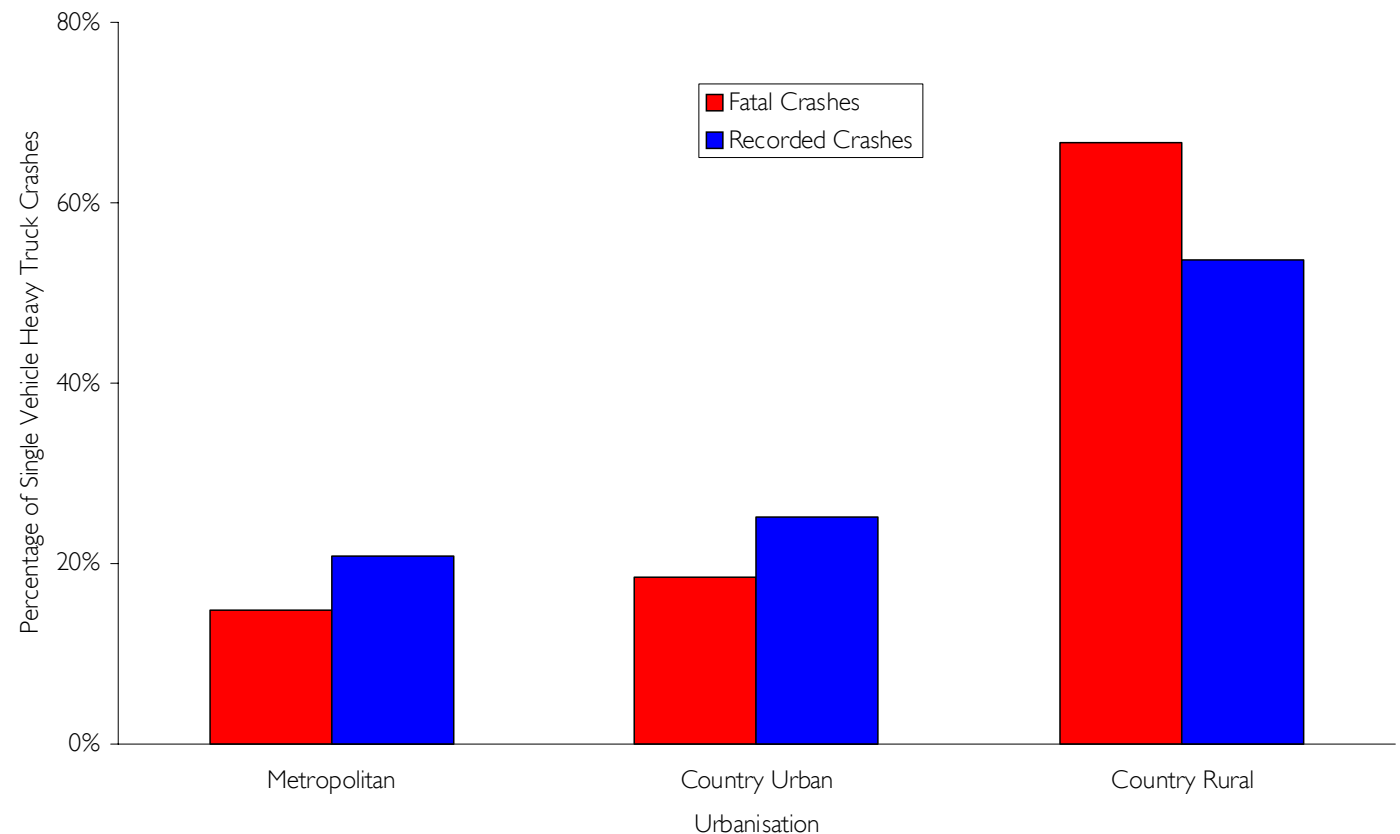
Urbanisation



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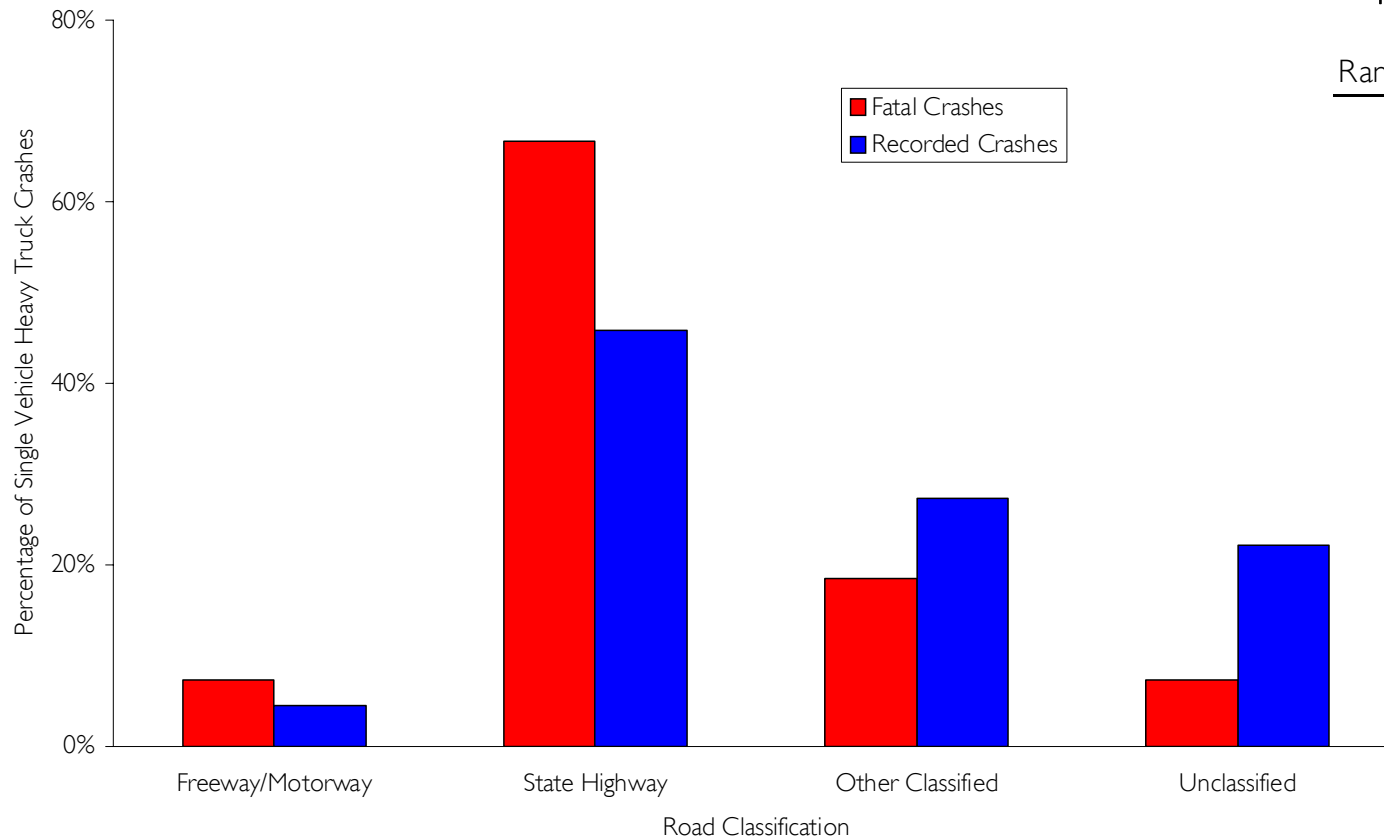
- The majority of single vehicle heavy truck crashes and single vehicle heavy truck fatal crashes occur on country rural roads
- This result is a significant contrast with heavy truck crashes generally where the majority of non fatal crashes occur on metropolitan roads

Single Vehicle Heavy Truck Crashes, 2008 to 2010p, Urbanisation



- As with all heavy truck crashes, single vehicle heavy truck crashes tend to occur on RTA classified roads, with the majority of single vehicle heavy truck fatal crashes occurring on State Highways

Single Vehicle Heavy Truck Crashes, 2008 to 2010p, Road Classification



Single Vehicle Heavy Truck Crashes on State Highways, 2008
Top 10 By Number of Fatal Crashes

Rank	Degree of crash	Fatal	All Recorded
1	Pacific	7	133
2	Hume	4	85
3	Newell	2	54
4	Great Western	2	31
5	New England	0	30
6	Princes	1	27
7	Sturt	1	22
8	Mitchell	0	21
9	Oxley	0	14
10	Mid Western	0	12



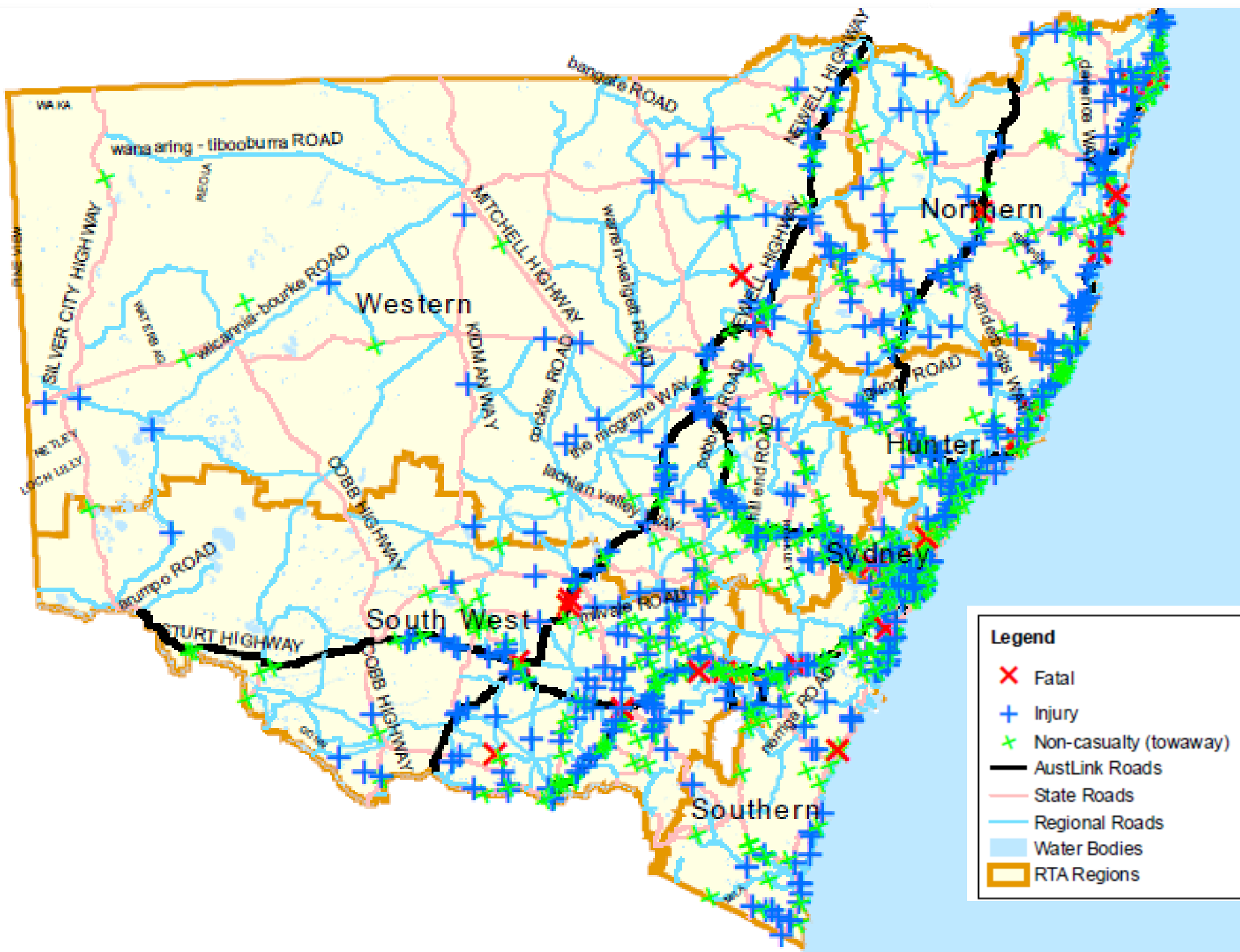
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Location of Single Vehicle Heavy Truck Crashes in NSW



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- Concentrations of single vehicle heavy truck crashes along the main heavy truck routes for NSW
- In particular, along the Pacific, Hume and Great Western Highways as well as the New England Highway in the Hunter RTA Region.



Legend

- ✕ Fatal
- + Injury
- + Non-casualty (towaway)
- AustLink Roads
- State Roads
- Regional Roads
- Water Bodies
- RTA Regions



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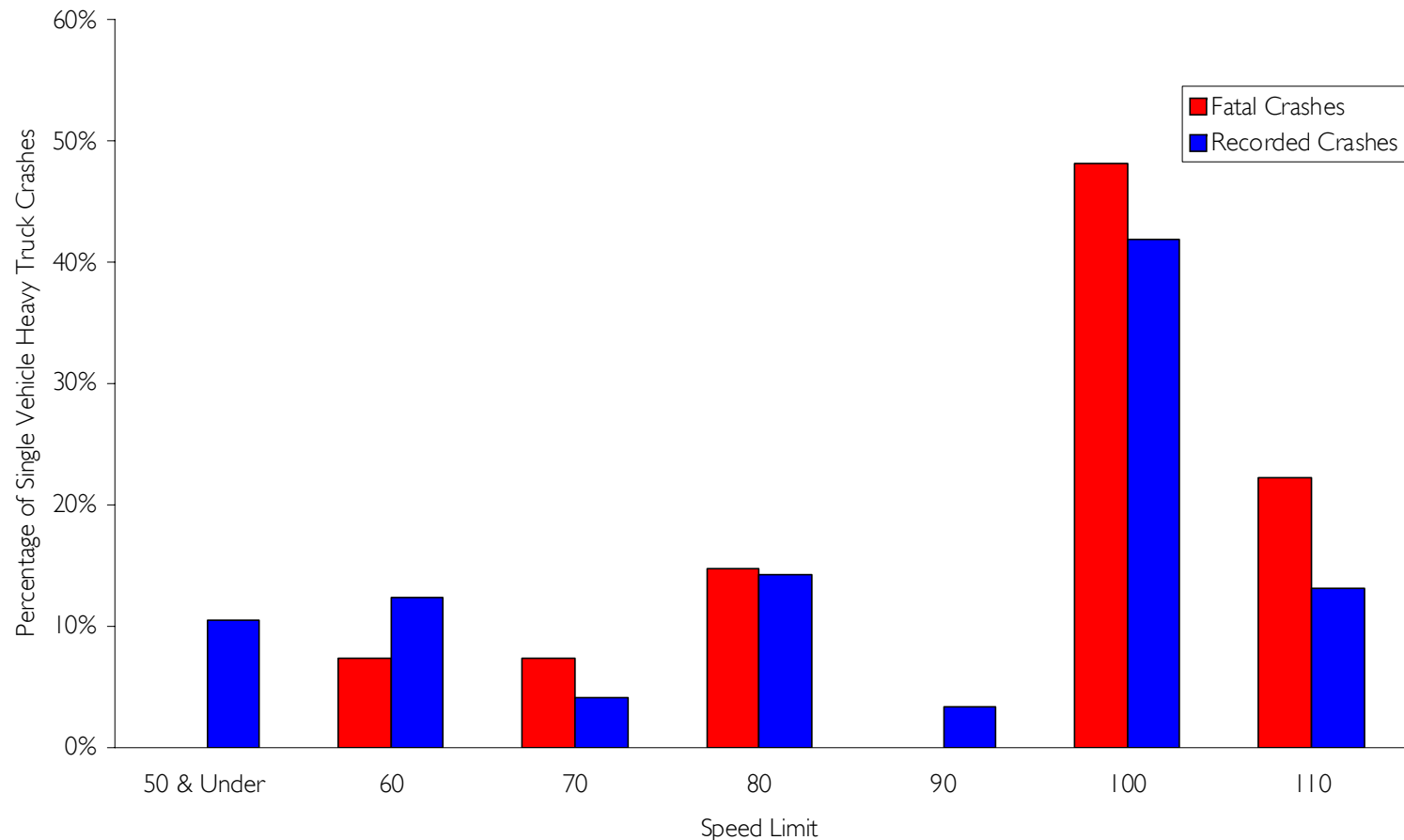
Speed Limit



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- Over half of all single vehicle heavy truck crashes occur in high speed zones (100 km/h or more), whilst more than two-thirds of all single vehicle heavy truck fatal crashes occur in those roads

Single Vehicle Heavy Truck Crashes, 2008 to 2010p, Speed Limit


















































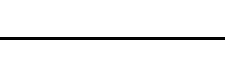
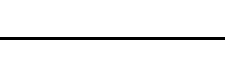
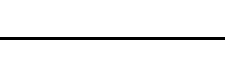

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Road User Movements



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- Almost 60% of single vehicle heavy truck crashes involve an off path on a curve road user movement
- The majority of single vehicle heavy truck crashes involve the heavy truck leaving the road on the left side
- One quarter (23%) involve off path to the left on a right hand curve, 20% involve off path to the left on a straight and another 8% involve off path to the left on a left hand curve

MANOEUVRING	OVERTAKING	ON PATH	OFF PATH, ON STRAIGHT	OFF PATH, ON CURVE OR TURNING	MISCELLANEOUS
 U-TURN 0	 HEAD ON REAR END SWEEP 0	 PARKED 0	 OFF CARRIAGEWAY TO LEFT 90	 OFF CARRIAGEWAY TO LEFT ON RIGHT BEND 119	 FELL INTRUSION VEHICLE 0
 U-TURN INTO FIXED OBJECT/ ROAD VEHICLE 1	 OUT OF CONTROL 2	 DOUBLE PARKED 0	 LEFT OFF CARRIAGEWAY INTO OBJECT/ PARKED VEH 143	 OFF CARRIAGEWAY LEFT ON LEFT BEND INTO OBJECT/ ROAD VEH 158	 LOAD ON ROADSIDE STRUCK VEHICLE 1
 LEAVING PARKING 0	 PULLING OUT 0	 ACCIDENT OR BROKEN DOWN 0	 OFF CARRIAGEWAY TO RIGHT 44	 OFF CARRIAGEWAY TO RIGHT ON RIGHT BEND 27	 STRUCK TRAIN / AIRCRAFT 0
 ENTERING PARKING 0	 OVERTAKE TURNING 0	 VEHICLE DOOR 0	 RIGHT OFF CARRIAGEWAY INTO OBJECT/ PARKED VEH 80	 OFF CARRIAGEWAY RIGHT ON LEFT BEND INTO OBJECT/ ROAD VEH 31	 PARKED VEH RUN AWAY INTO OBJECT/ ROAD VEH 16
 PARKING VEHICLES ONLY 0	 CUTTING IN 0	 PERMANENT OBSTRUCTION ON CARRIAGEWAY 1	 OUT OF CONTROL ON CARRIAGEWAY 42	 OFF CARRIAGEWAY TO RIGHT ON LEFT BEND 51	 PARKED VEH RUN AWAY INTO VEHICLE 0
 REVERSING 0	 PULLING OUT REAR END 0	 TEMPORARY ROADWORKS 7	 OFF END OF ROAD/T INTERSECTION 8	 OFF CARRIAGEWAY TO RIGHT ON LEFT BEND INTO OBJECT/ ROAD VEH 72	 STRUCK WHILE BOARDING OR ALIGHTING VEHICLE 0
 REVERSING INTO FIXED OBJECT/ ROAD VEHICLE 3		 STRUCK OBJECT ON CARRIAGEWAY 20		 OFF CARRIAGEWAY TO LEFT ON LEFT BEND 27	
 EJECTING FROM DRIVEWAY 0		 ANIMAL (NOT HORSE) 0		 OFF CARRIAGEWAY TO LEFT ON LEFT BEND INTO OBJECT/ ROAD VEH 59	
 FROM FOOTPATH 0				 OUT OF CONTROL ON CARRIAGEWAY 132	OTHER 0
 OTHER MANOEUVRING 0	 OTHER OVERTAKING 0	 OTHER ON PATH 22	 OTHER STRAIGHT 1	 OTHER CURVE 0	UNKNOWN 0



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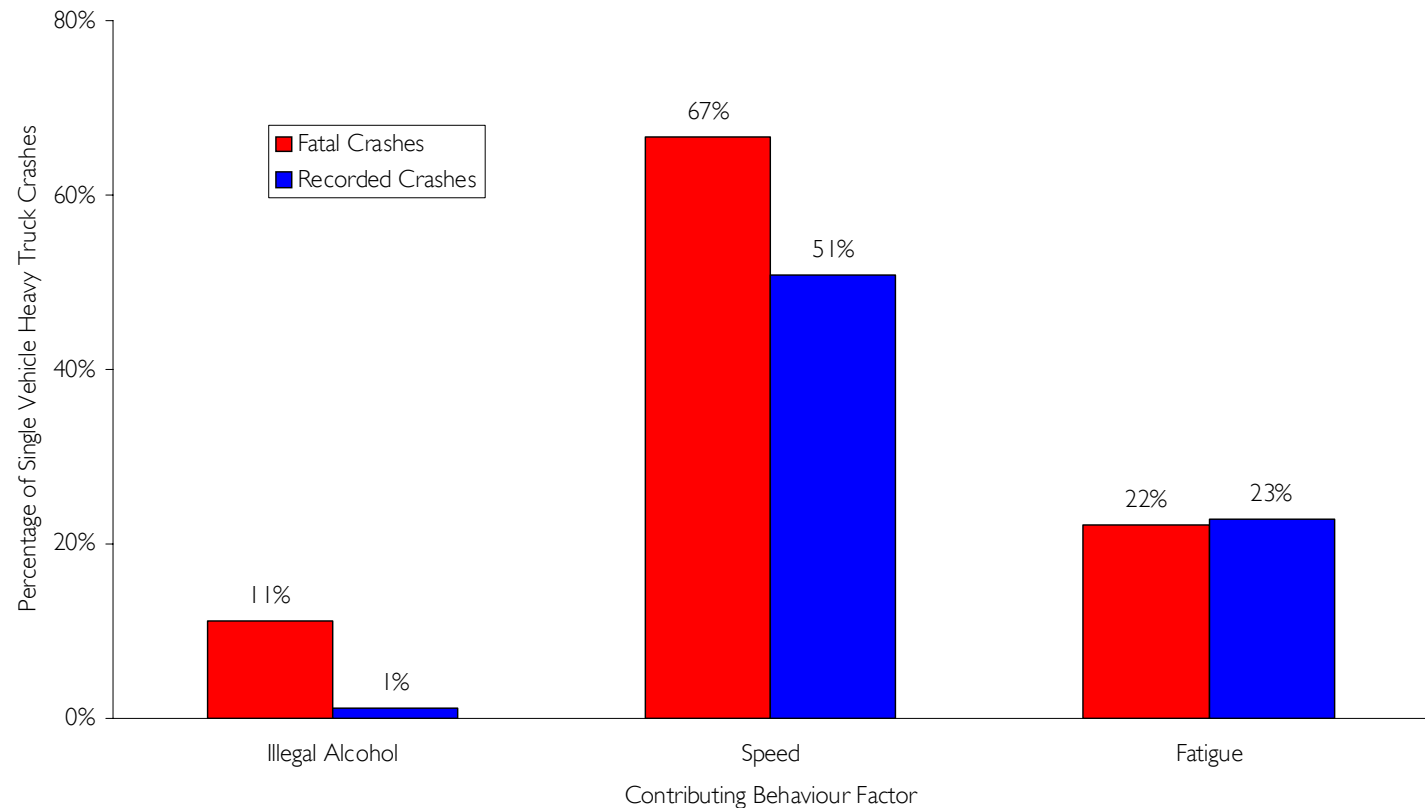
Contributing Behaviour Factors



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- Compared with all heavy truck crashes, speed and fatigue are over-represented in single vehicle heavy truck crashes
- Compared with single vehicle heavy truck crashes, speed and illegal alcohol are present at higher levels in single vehicle heavy truck fatal crashes

Single Vehicle Heavy Truck Crashes, 2008 to 2010p, Contributing Behaviour Factors





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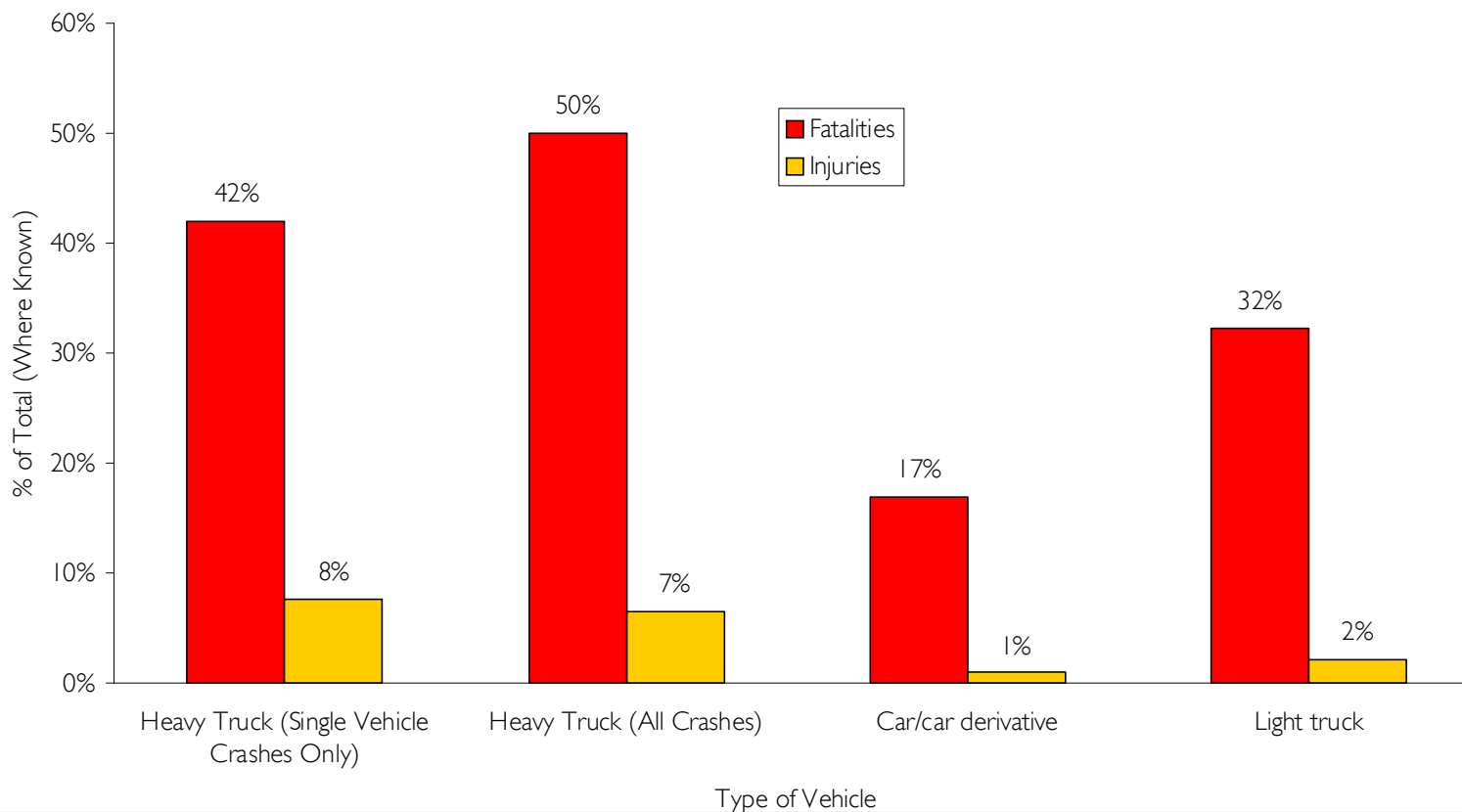
Driver Casualties Restraint Non Usage



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- Nearly half of heavy truck drivers killed and one in thirteen injured in single vehicle heavy truck crashes are not wearing an available restraint – similar levels to all heavy truck crashes
- Heavy truck driver casualties have much higher levels of non usage compared with car drivers and light truck drivers

Percentage of Driver Casualties Not Wearing An Available Restraint, 2008 to 2010p,
Degree of Casualty, Type of Vehicle





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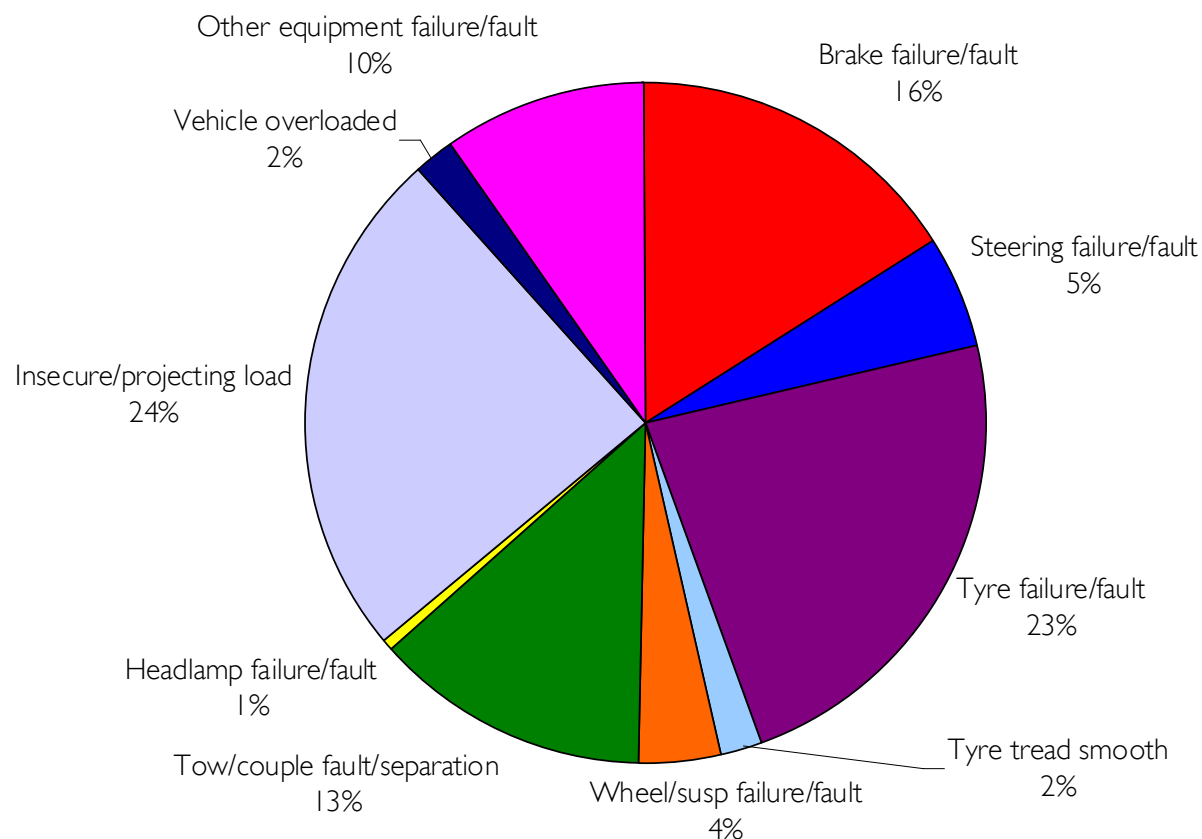
Equipment Factors for Heavy Trucks Involved in Single Vehicle Crashes



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- One in seven (14%) of heavy trucks involved in single vehicle heavy truck crashes had an equipment failure recorded for that heavy truck
- The most common equipment failures recorded were tyre failure or insecure/projecting load

Heavy Trucks in Single Vehicle Crashes with Equipment Failure, 2008 to 2010p,
Type of Vehicle Equipment Failure





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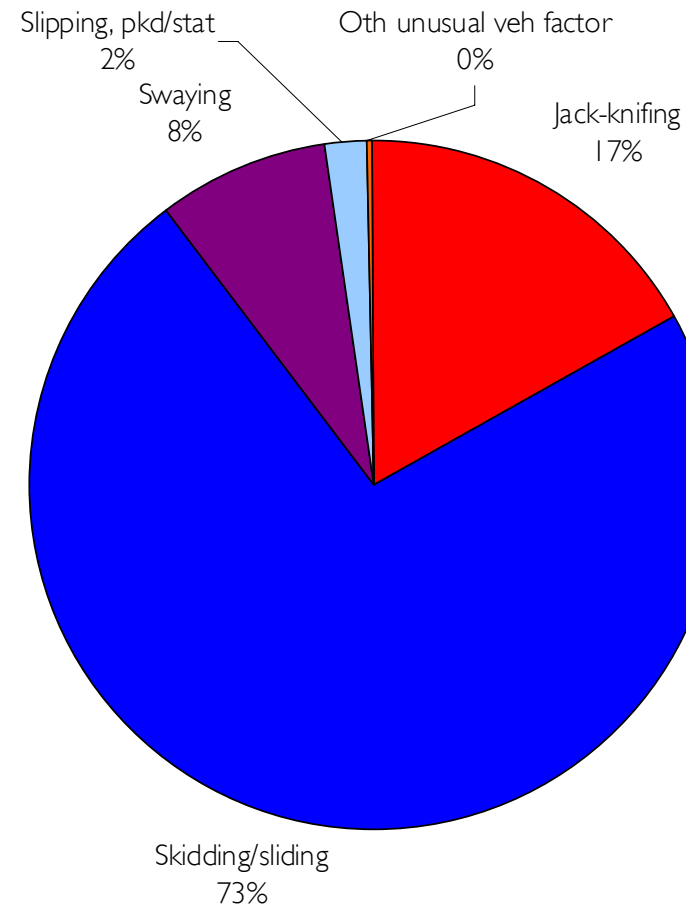
Unusual Factors for Heavy Trucks Involved in Single Vehicle Crashes



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- One in four (28%) of heavy trucks involved in single vehicle heavy truck crashes had an unusual factor recorded for that heavy truck
- The most common unusual factor recorded was skidding / sliding

Heavy Trucks in Single Vehicle Crashes with Unusual Factor, 2008 to 2010p,
Type of Unusual Factor





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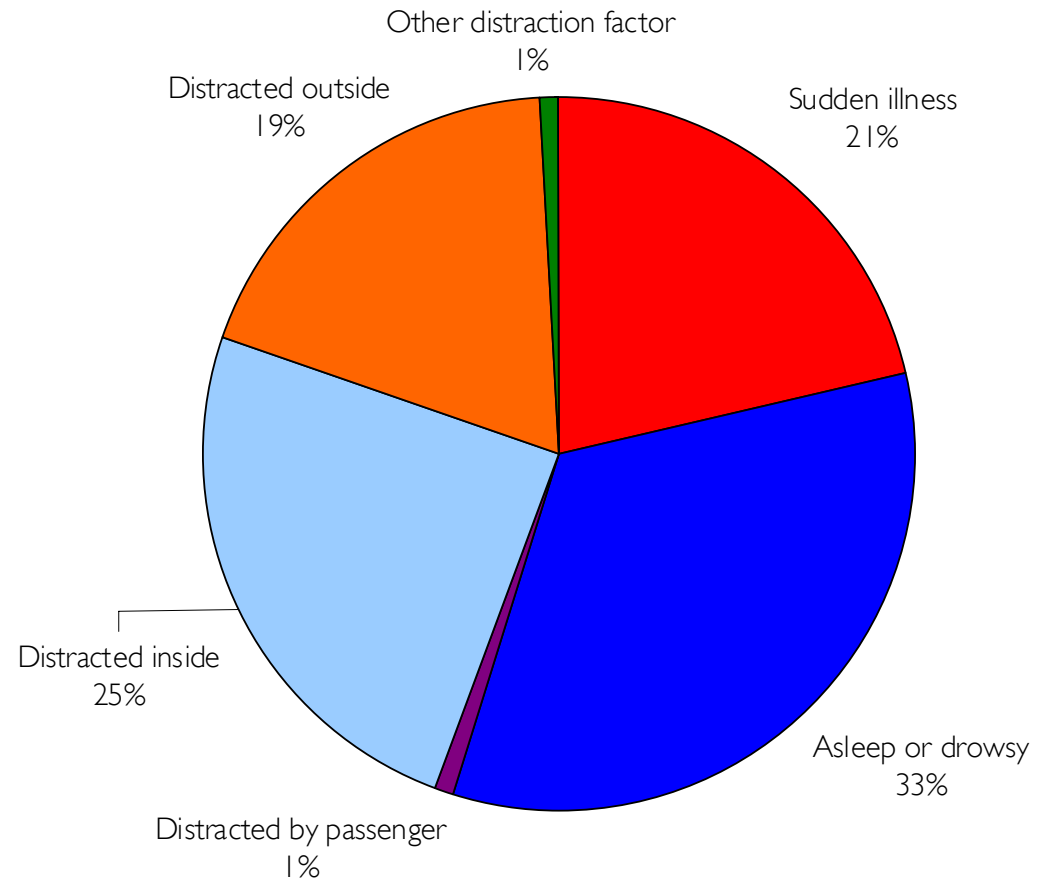
Distraction Factors for Heavy Trucks Involved in Single Vehicle Crashes



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- One in nine (11%) of heavy trucks involved in single vehicle heavy truck crashes had a distraction factor recorded for that heavy truck
- The most common distraction factor recorded was asleep / drowsy followed by distraction inside the vehicle and then sudden illness

Heavy Trucks in Single Vehicle Crashes with Distraction Factor, 2008 to 2010p,
Type of Distraction Factor





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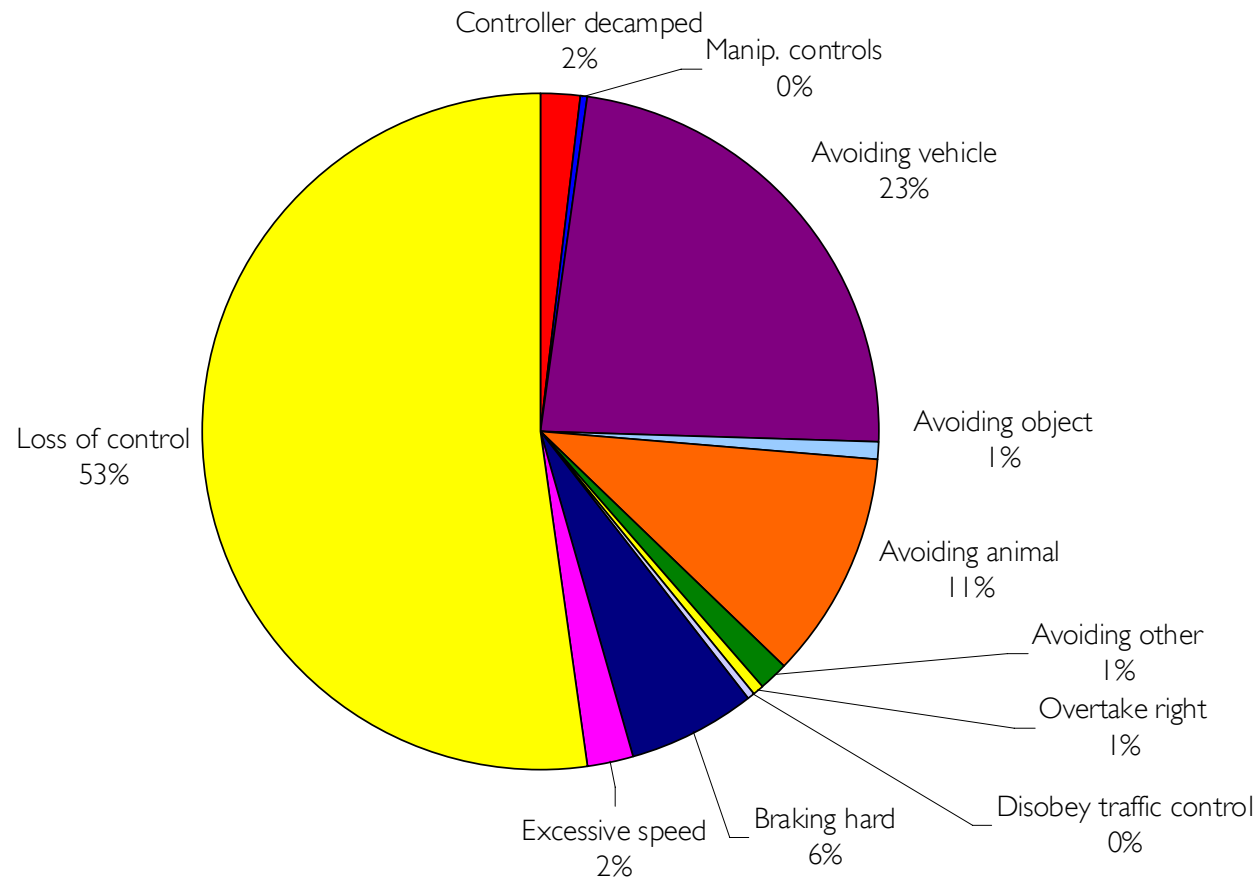
Driver Errors for Heavy Trucks Involved in Single Vehicle Crashes



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- One third (32%) of heavy trucks involved in single vehicle heavy truck crashes had a driver error recorded for that heavy truck
- The most common driver error recorded was loss of control, but note that a further third of driver errors involved “avoiding another vehicle” or “avoiding an animal”

Heavy Trucks in Single Vehicle Crashes with Driver Error Factor, 2008 to 2010p,
Type of Driver Error Factor





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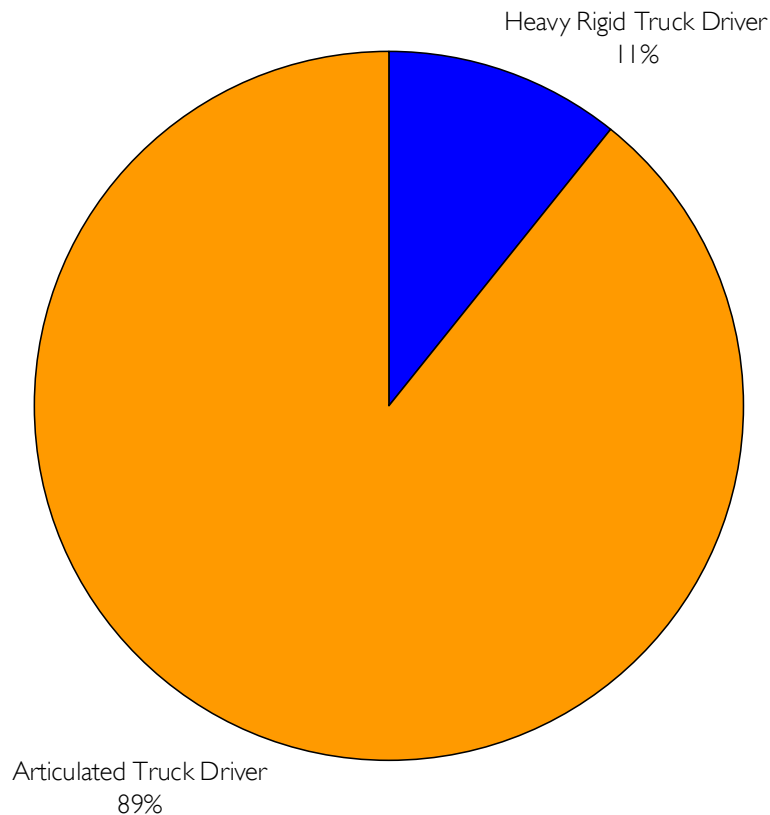
Motor Vehicle Controllers Involved – Type of Vehicle



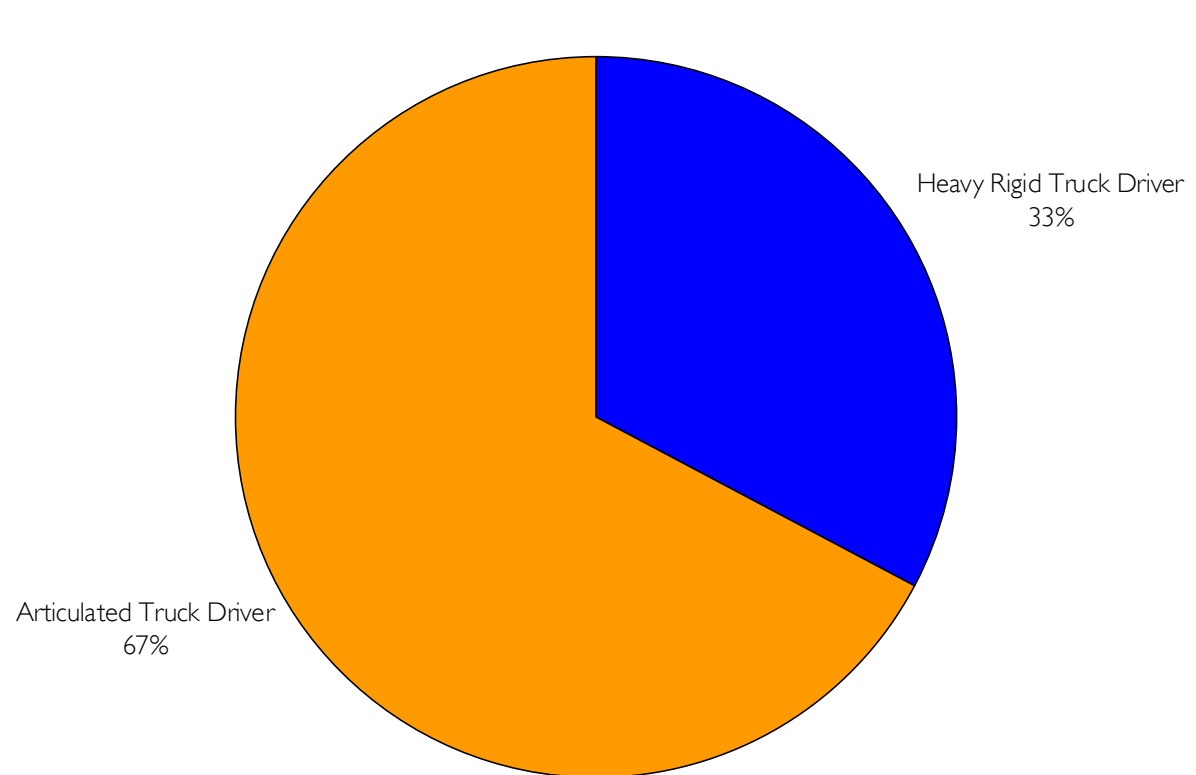
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- Unlike all other heavy truck crashes, the majority of heavy trucks involved in single vehicle heavy truck crashes are articulated trucks

Heavy Vehicle Drivers Involved in Single Vehicle Heavy Truck Fatal Crashes,
2008 to 2010p, Type of Motor Vehicle



Heavy Vehicle Drivers Involved in Single Vehicle Heavy Truck Crashes,
2008 to 2010p, Type of Motor Vehicle





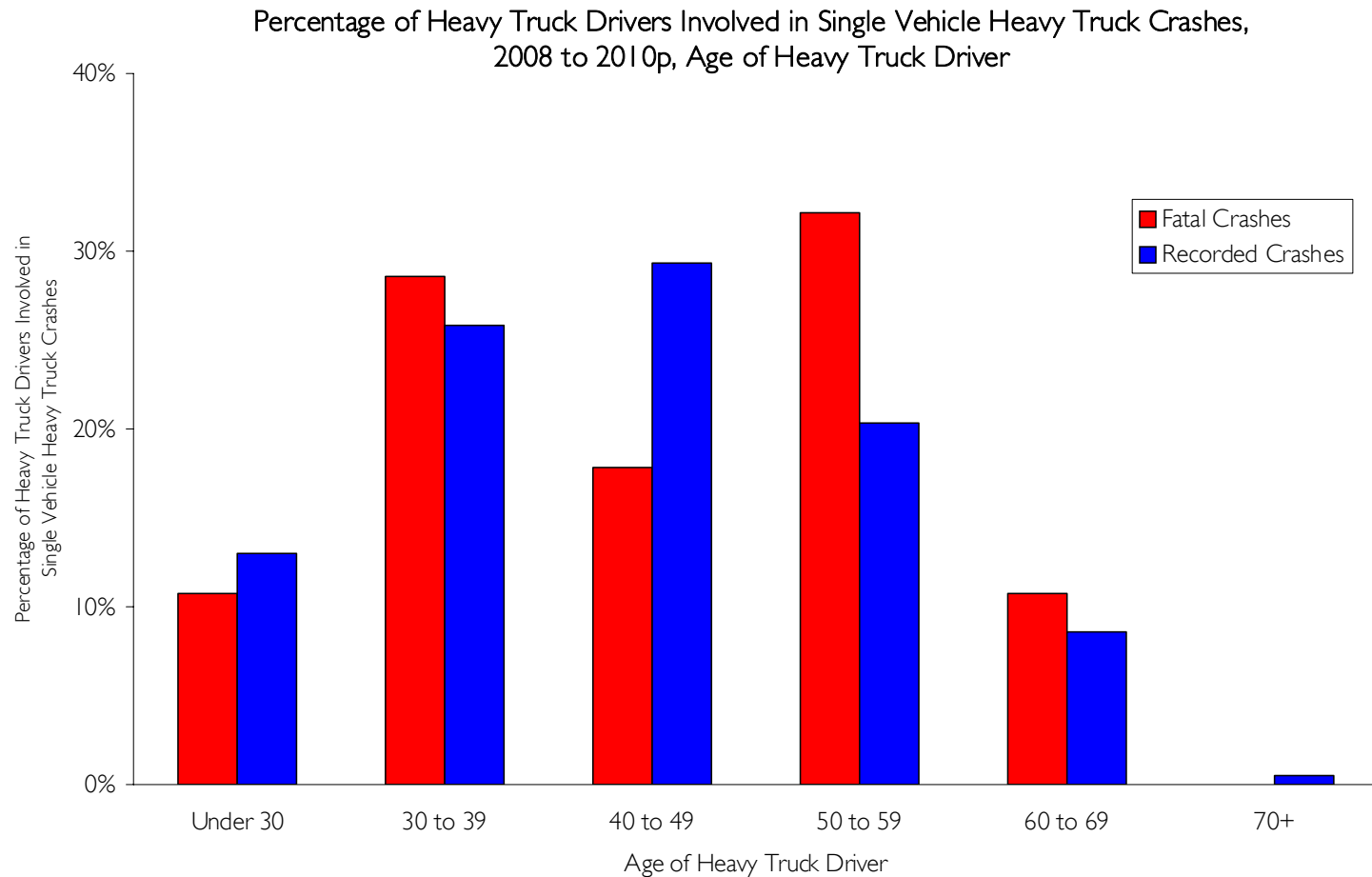
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Heavy Truck Drivers Involved – Age of Driver



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- Age of heavy truck driver involved in single vehicle heavy truck crashes is similar to that for other heavy truck crashes





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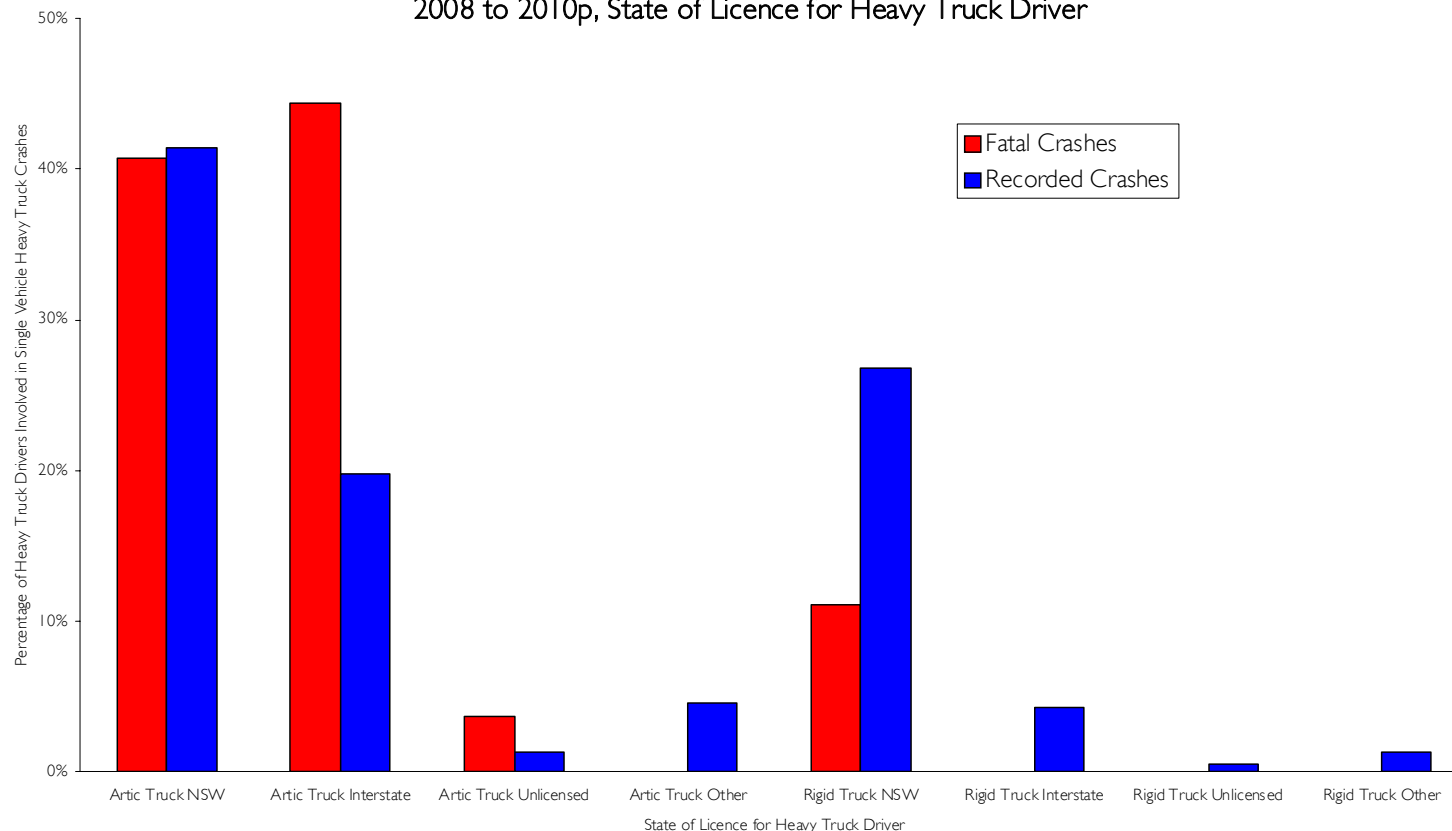
Heavy Truck Drivers Involved – State of Licence



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- Compared to all heavy truck crashes, interstate drivers of articulated trucks are over-represented in single vehicle heavy truck crashes, particularly in fatal crashes
- However, NSW licence holders still account for two-thirds of all heavy truck drivers involved in single vehicle heavy truck crashes

Percentage of Heavy Truck Drivers Involved in Single Vehicle Heavy Truck Crashes,
2008 to 2010p, State of Licence for Heavy Truck Driver





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Summary of Results



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Single vehicle heavy truck crashes accounted for almost 20% of all heavy truck crashes during the three year period 2008 to 2010.

Compared with heavy truck crashes generally, these single vehicle heavy truck crashes were more likely to involve

- articulated trucks
- high speed rural State Highways
- early morning to early afternoons on Tuesday and Wednesday
- curves, particularly off road to the left side of the road, as well as wet road surface
- behavioural factors such as speed or fatigue (asleep / drowsy), as well as driver distraction inside the vehicle and sudden illness
- vehicle factors such as tyre failure, insecure load or skidding
- driver errors such as loss of control or avoiding another vehicle or an animal



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Characteristics of Heavy Truck Crashes in NSW 2008 to 2010p



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- There were a total of 6,603+ heavy truck crashes recorded in NSW over the three year period 2008 to 2010p
- Of these 6,603 crashes, 176 were fatal crashes and 2,573 were injury crashes, resulting in 211 persons killed and 3,260 persons injured
- Crash data analysis investigated issues such as
 - Day of week, time of day
 - Crash impact type
 - Location characteristics
 - Factors involved (by type of vehicle involved)

+Note : 2010 fatal crash data are preliminary and the 2010 non fatal crash data are incomplete at this time - as such these data are subject to change – data as at 14 May 2011



NSW Centre for
Road Safety

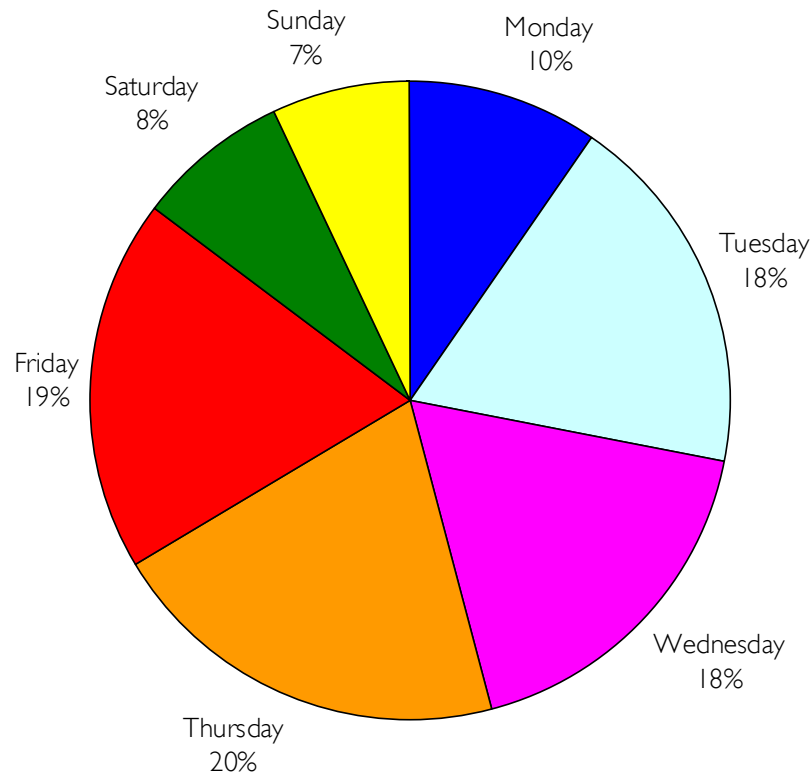
Day of Week



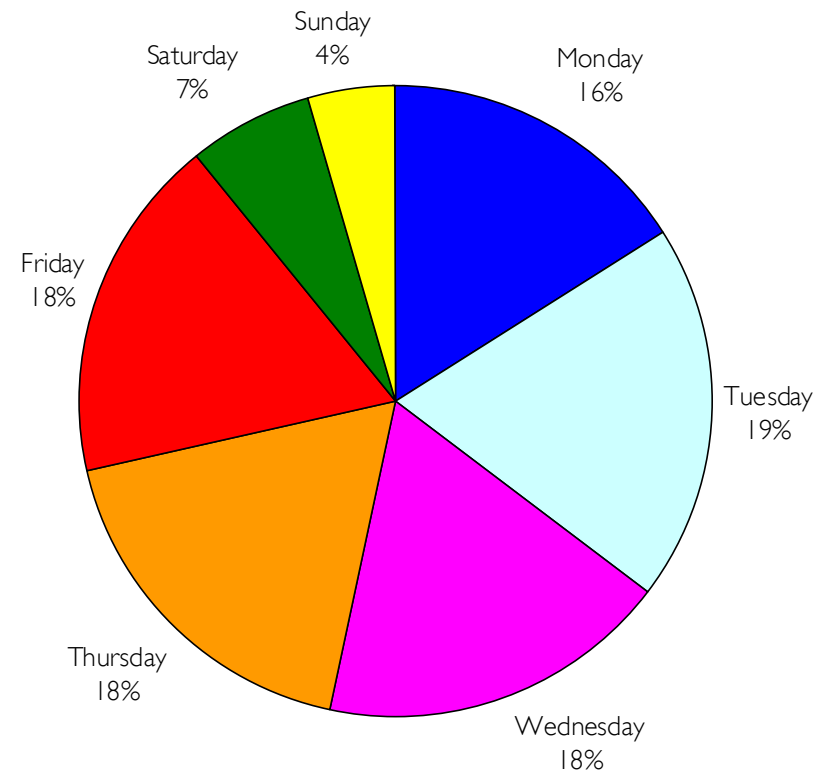
Transport
Roads & Traffic
Authority

- Heavy truck crashes occur mostly during the weekdays, with fatal crashes peaking on Thursdays and Fridays

Heavy Truck Fatal Crashes, 2008 to 2010p, Day of Week



Heavy Truck Crashes, 2008 to 2010p, Day of Week





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Road Safety

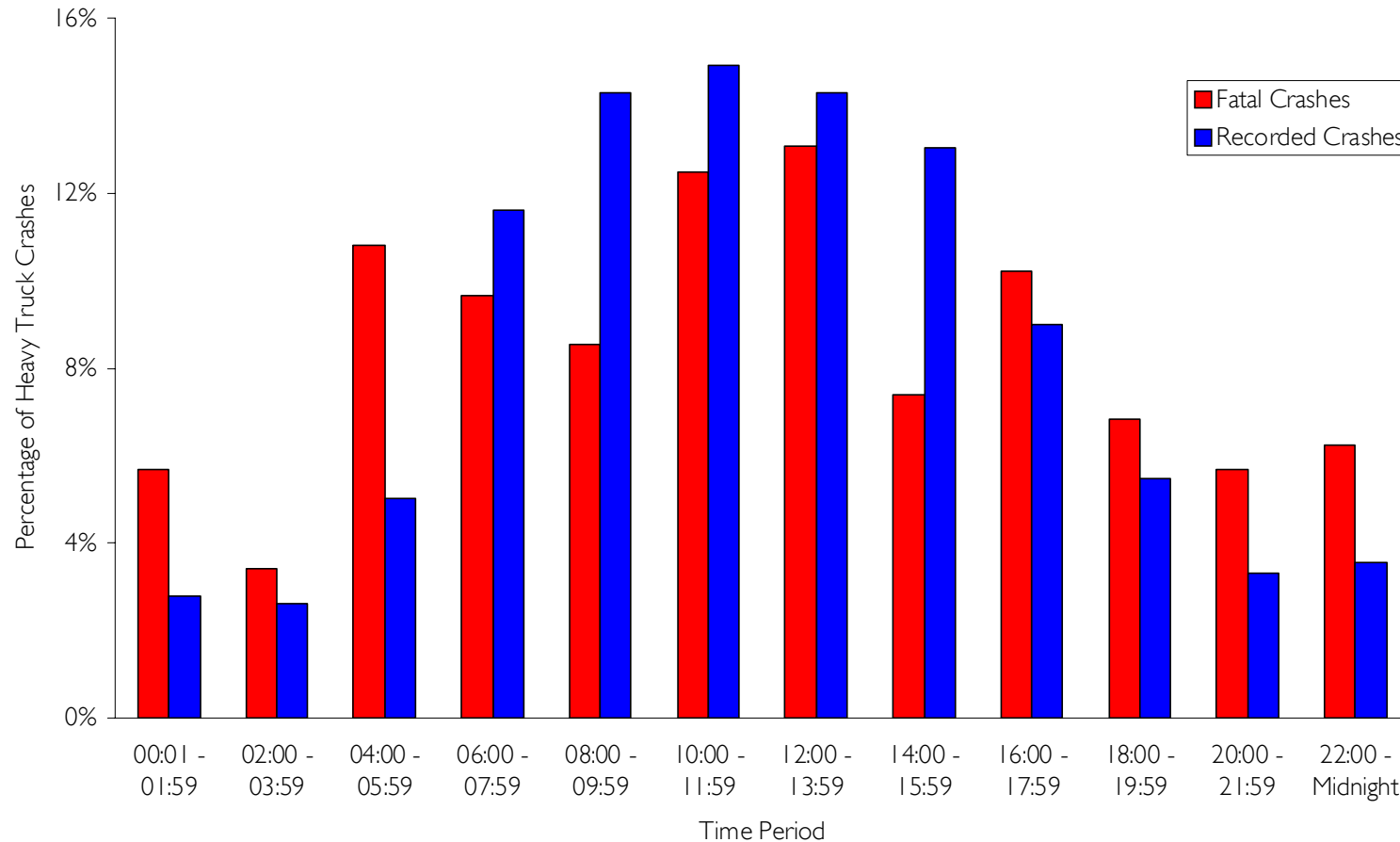
Time of Day



Transport
Roads & Traffic
Authority

- Heavy truck crashes peak between 6am and 4pm, but fatal crashes are over-represented during late evenings and early mornings

Heavy Truck Crashes, 2008 to 2010p, Day of Week





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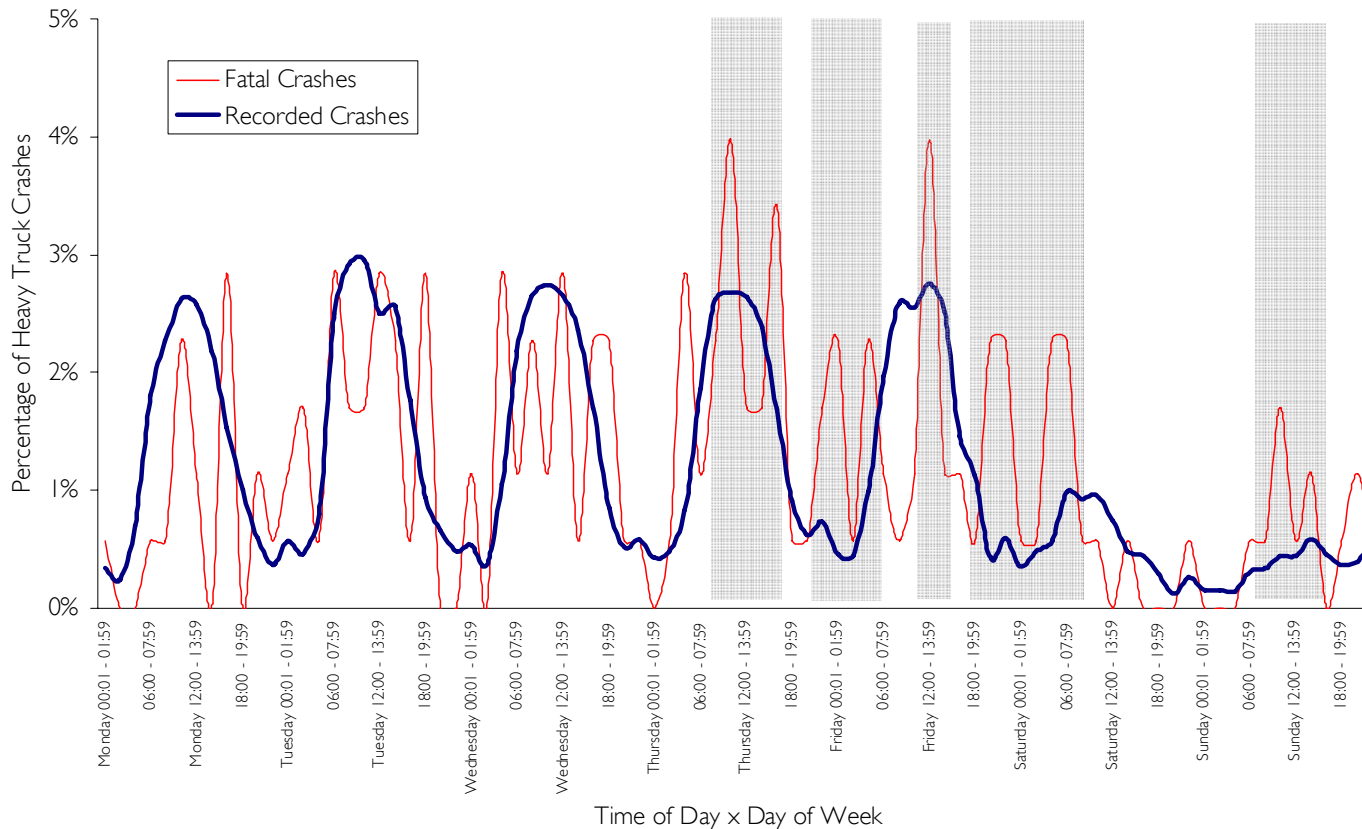
Time of Day x Day of Week



Transport Roads & Traffic Authority

- Weekday pattern for all recorded heavy truck crashes is clear
- Over-representation of fatal heavy truck crashes during late nights, early mornings. Also note Thursday daytime, Friday evening to Saturday early morning and Sunday daytime

Heavy Truck Crashes, 2008 to 2010p, Time of Day x Day of Week





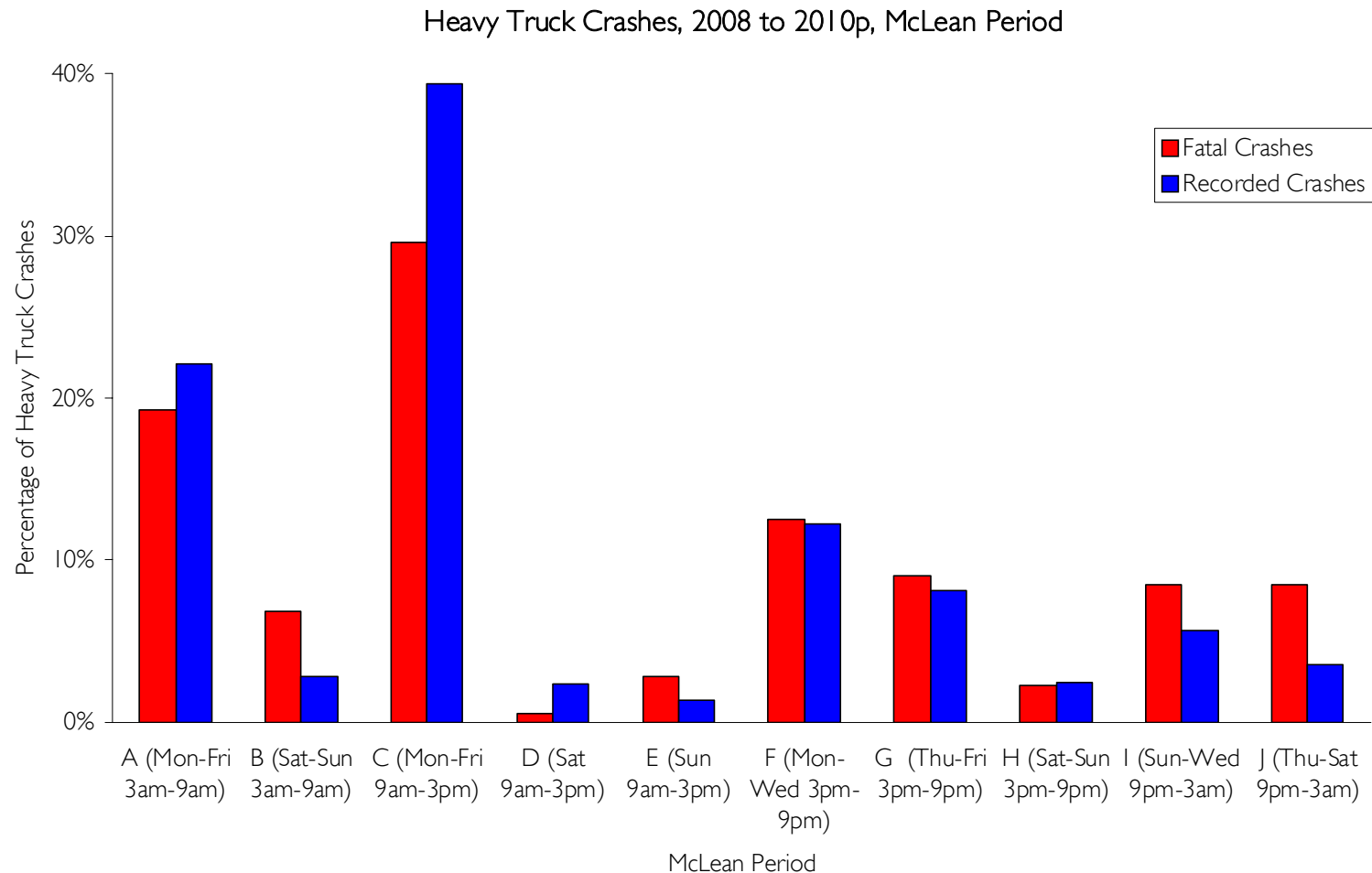
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McLean Periods



Transport
Roads & Traffic
Authority

- Similarly, nearly 40% of heavy truck crashes occur in Period C, but heavy truck fatal crashes are over-represented during Periods B, I and J





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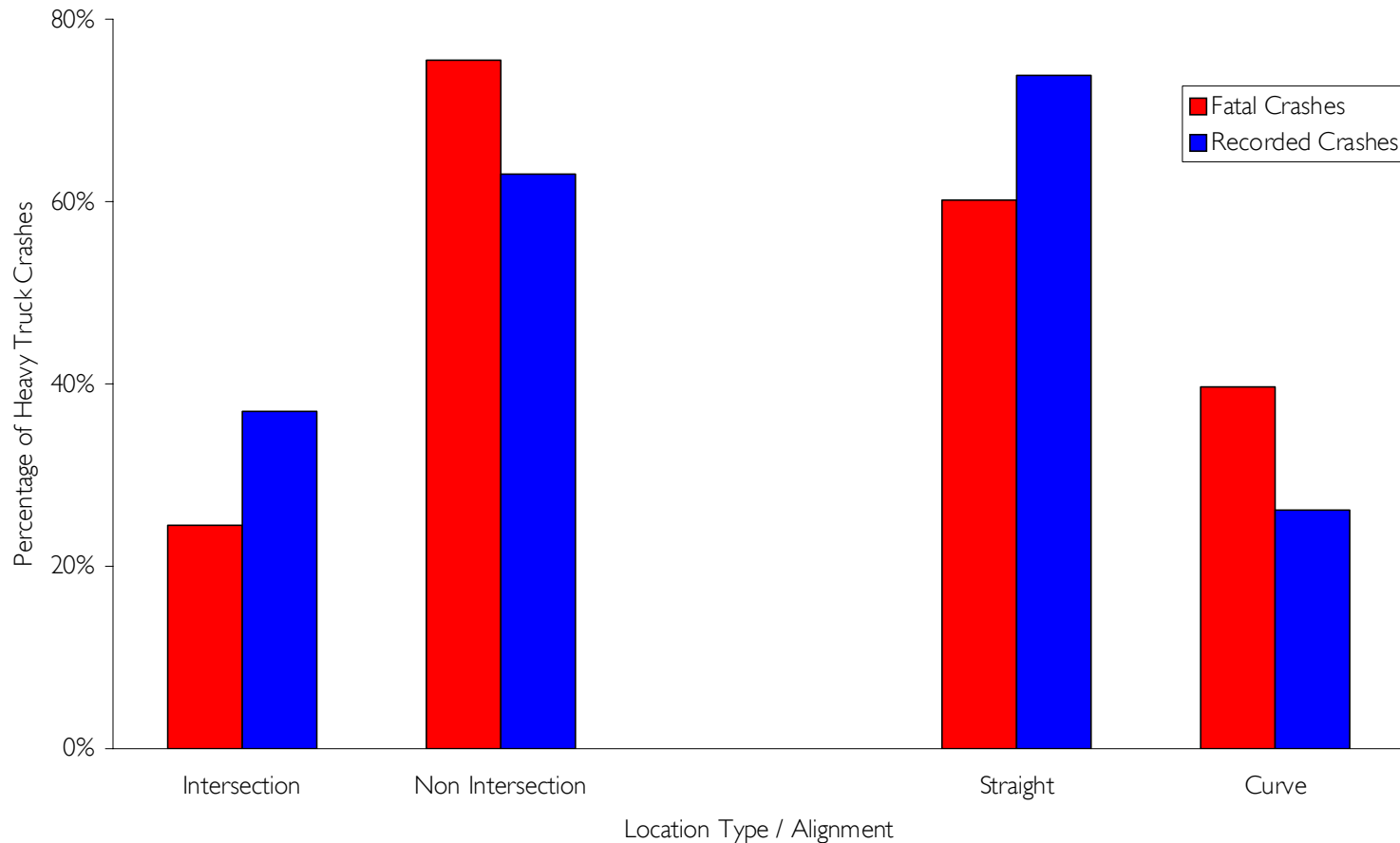
Location Type / Alignment



Transport
Roads & Traffic
Authority

- Heavy truck crashes occur mostly away from intersections and on straight roads
- Fatal heavy truck crashes are over-represented on curves

Heavy Truck Crashes, 2008 to 2010p, Location Type / Alignment





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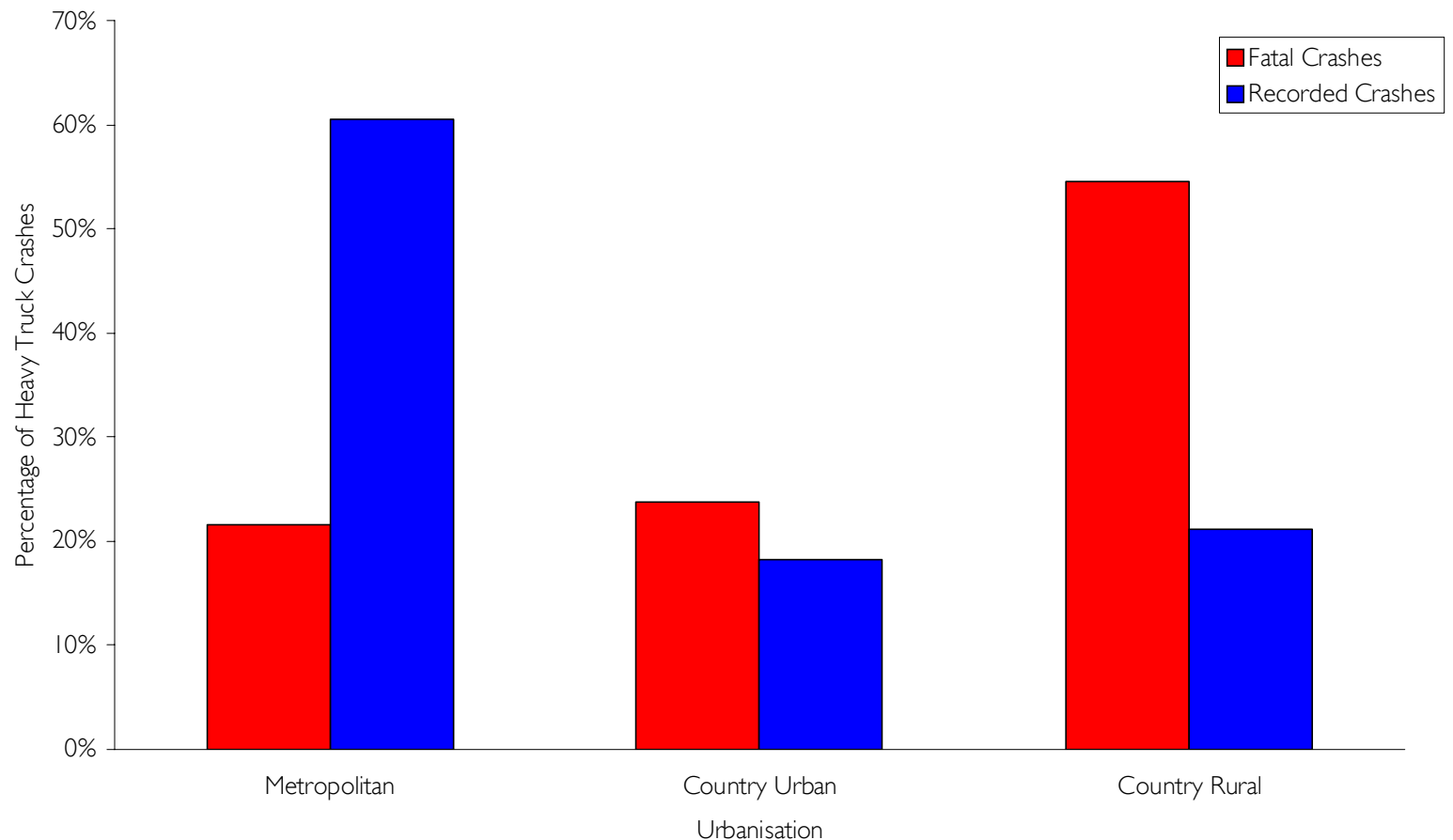
Urbanisation



Transport
Roads & Traffic
Authority

- The majority of heavy truck crashes occur on metropolitan roads, but the majority of heavy truck fatal crashes occur on country roads, particularly country rural roads

Heavy Truck Crashes, 2008 to 2010p, Urbanisation





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Road Safety

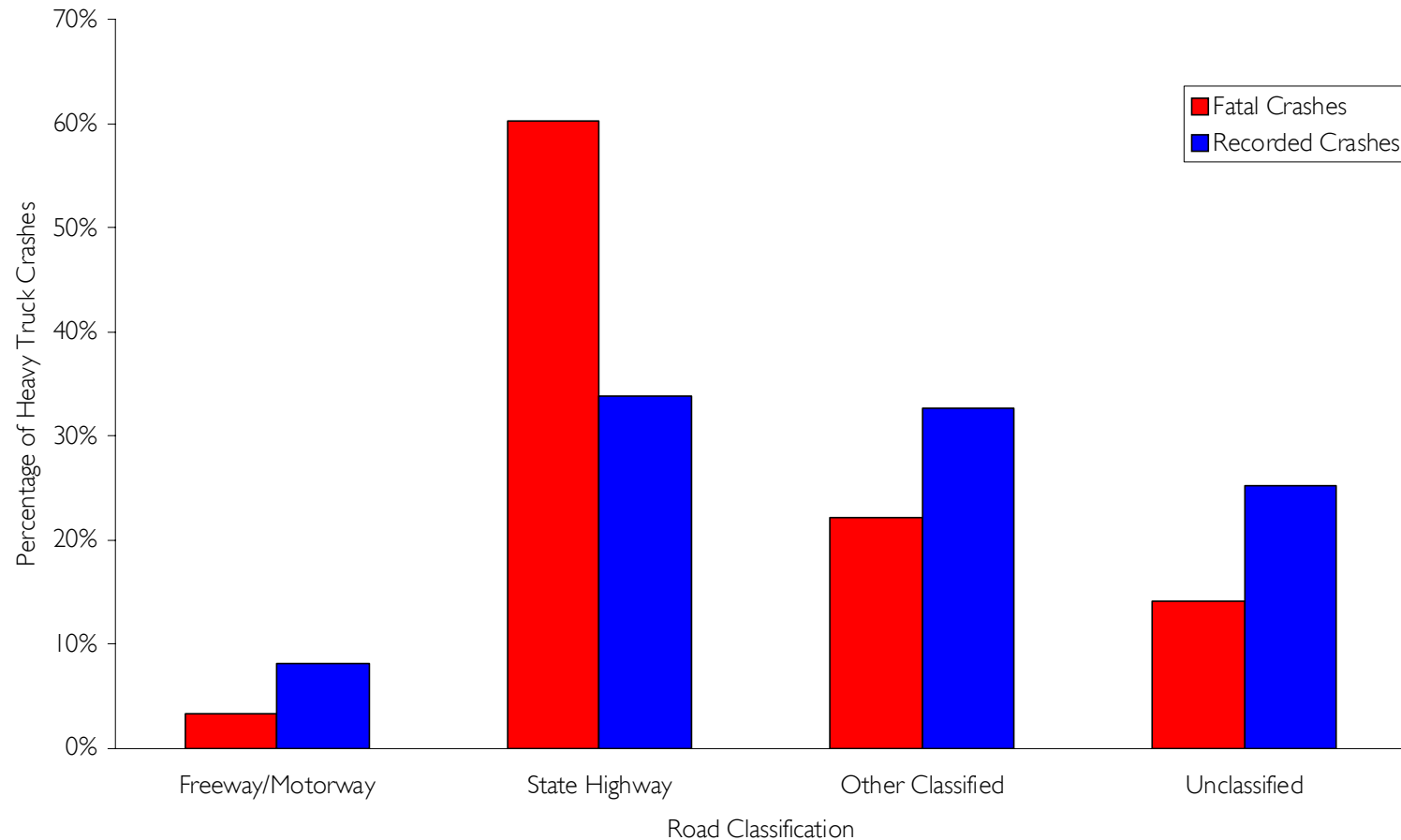
Road Classification



Transport
Roads & Traffic
Authority

- Heavy truck crashes tend to occur on RTA classified roads, with the majority of heavy truck fatal crashes occurring on State Highways

Heavy Truck Crashes, 2008 to 2010p, Road Classification





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State Highways



Transport
Roads & Traffic
Authority

- Pacific and Hume Highways are the highways with the highest numbers of heavy truck fatal crashes and heavy truck crashes – not surprising given they are the major freight corridors for NSW

Heavy Truck Crashes on State Highways, 2008 to 2010p Top 10 By Number of Fatal Crashes

Rank	Degree of crash	Fatal	All Recorded
1	Pacific	34	531
2	Hume	14	396
3	New England	12	135
4	Newell	11	118
5	Great Western	8	270
6	Sturt	7	56
7	Mitchell	5	48
8	Princes	3	194
9	Mid Western	3	19
10	Oxley	2	33



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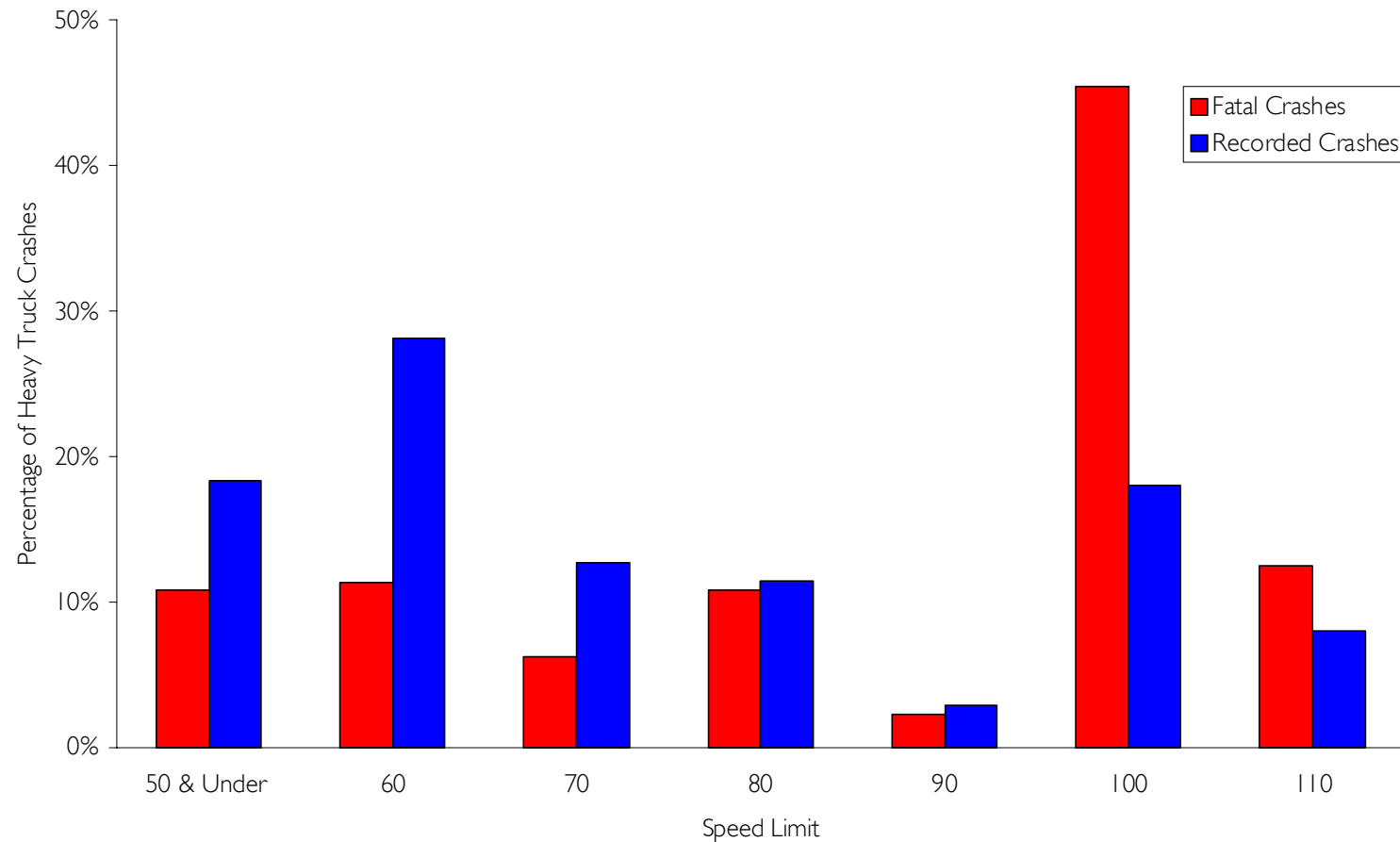
Speed Limit



Transport
Roads & Traffic
Authority

- Almost half of all heavy truck crashes occur in low speed zones (60 km/h or less), but more than half of all heavy truck fatal crashes occur roads with 100 km/h plus speed zones

Heavy Truck Crashes, 2008 to 2010p, Speed Limit





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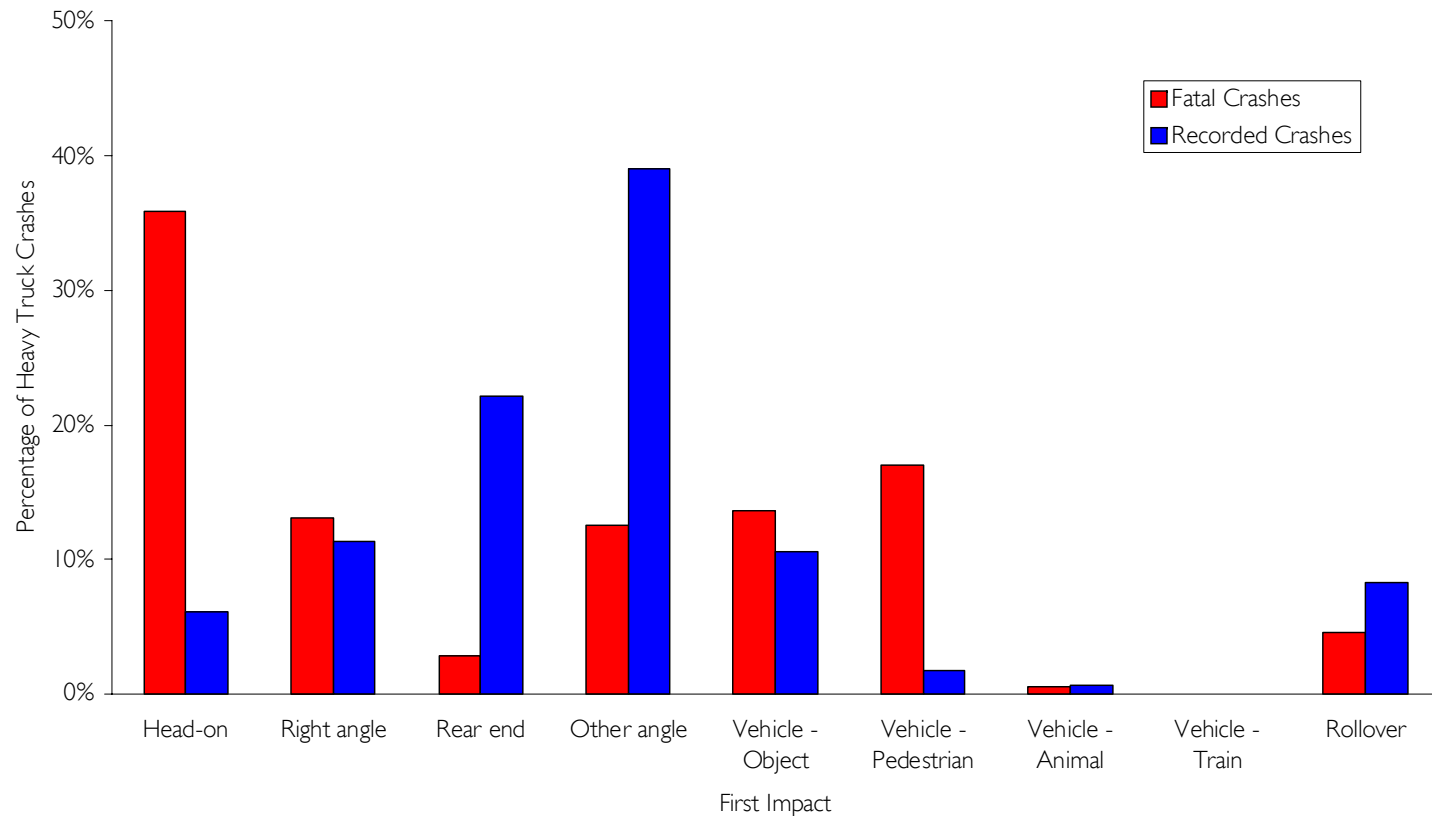
First Impact for Crash



Transport
Roads & Traffic
Authority

- The majority of heavy truck crashes involve multiple vehicles, largely either rear enders or other same direction
- Over-representation of pedestrian and head on (not overtaking) impacts for heavy truck fatal crashes

Heavy Truck Crashes, 2008 to 2010p, First Impact





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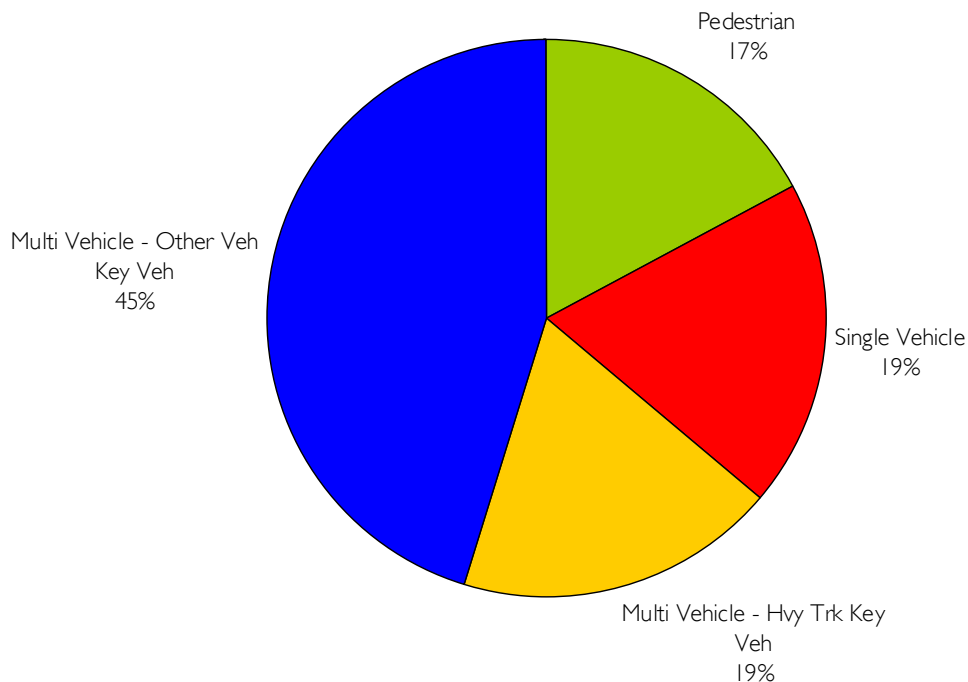
Heavy Truck Crashes First Impact Crash Type



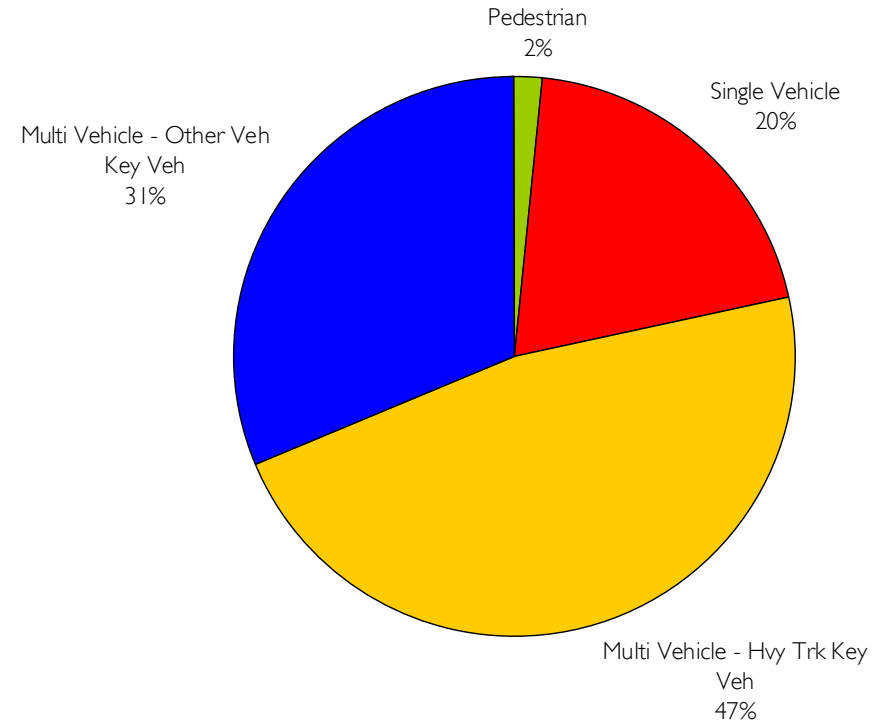
Transport
Roads & Traffic
Authority

- The majority of heavy truck crashes involve multiple vehicles (78%), where key vehicle status (fault) is skewed towards the heavy truck (47% v 31%)
- The majority of heavy truck fatal crashes also involve multiple vehicles (64%), but key vehicle status (fault) is skewed towards the other vehicle (45% v 19%)

Heavy Truck Fatal Crashes, 2008 to 2010p,
First Impact Crash Type x Key Vehicle Status



Heavy Truck Recorded Crashes, 2008 to 2010p,
First Impact Crash Type x Key Vehicle Status





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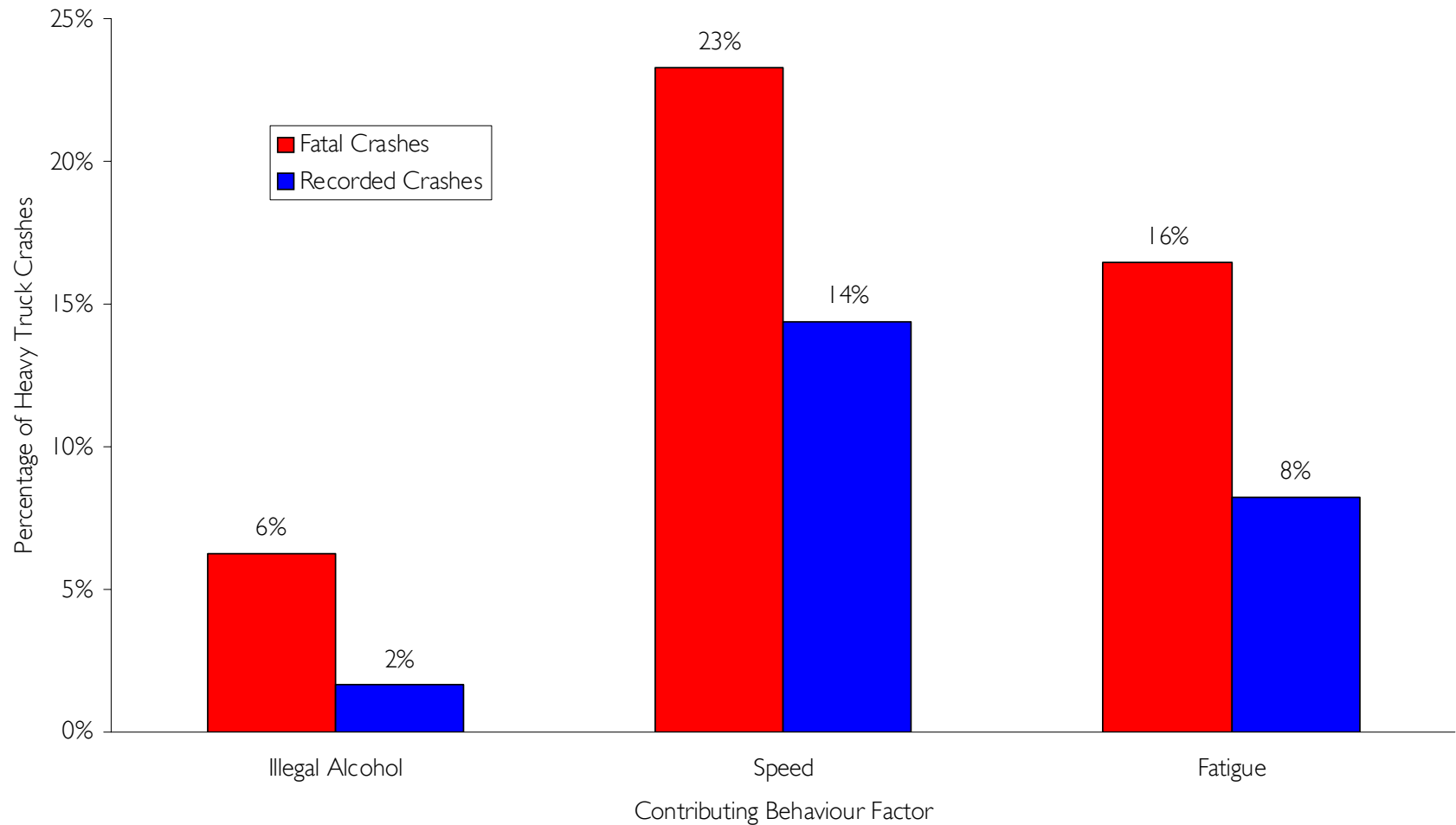
Contributing Behaviour Factors



Transport
Roads & Traffic
Authority

- Compared with all heavy truck crashes, speed, fatigue and illegal alcohol are over-represented in heavy truck fatal crashes

Heavy Truck Crashes, 2008 to 2010p, Contributing Behaviour Factors





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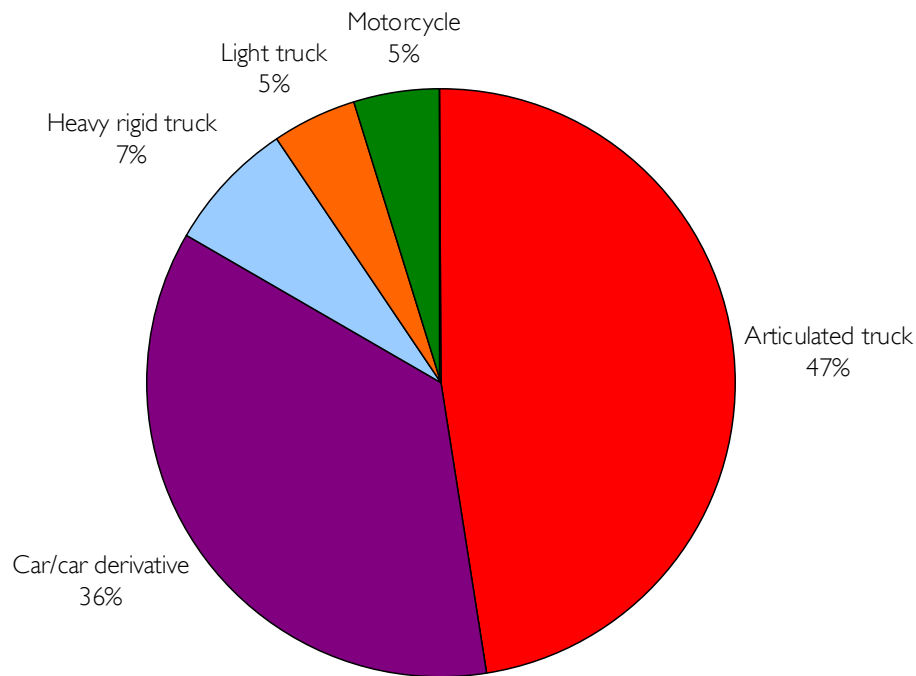
Speed Involvement



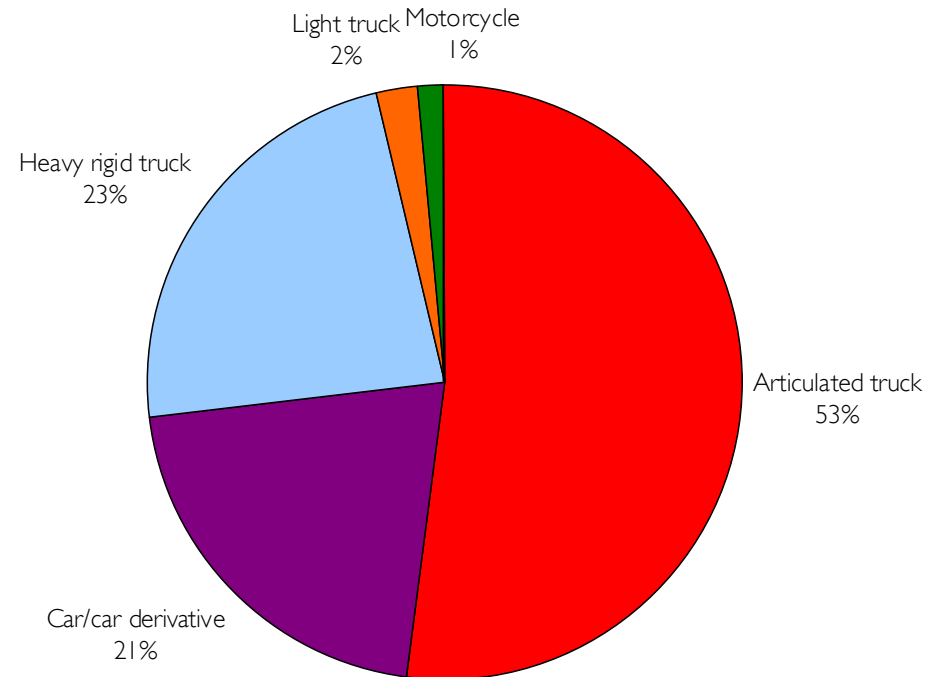
Transport
Roads & Traffic
Authority

- The majority of speeding vehicles in speed related heavy truck crashes are heavy trucks, particularly articulated trucks

Speeding Vehicles in Heavy Truck Fatal Crashes, 2008 to 2010p,
Traffic Unit Type



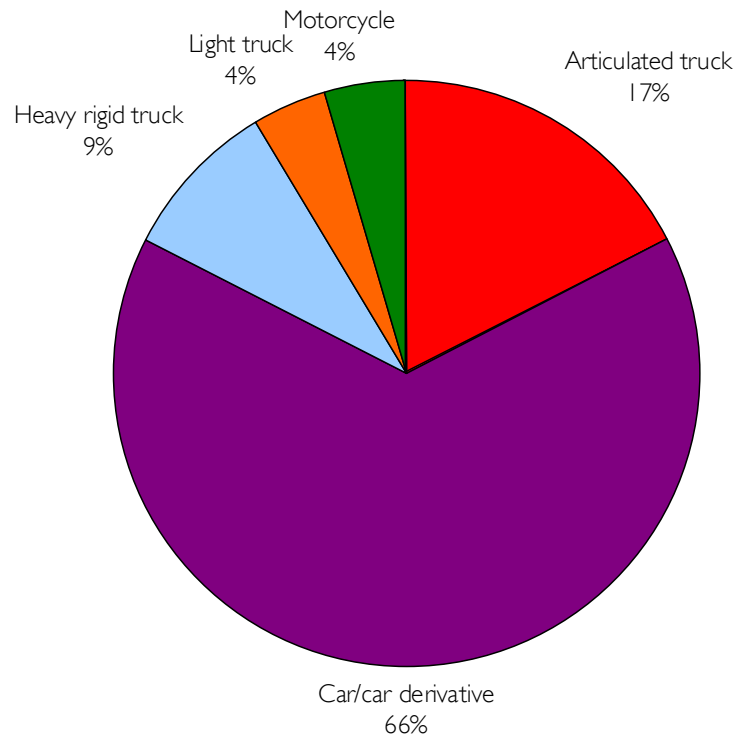
Speeding Vehicles in Heavy Truck Crashes, 2008 to 2010p,
Traffic Unit Type



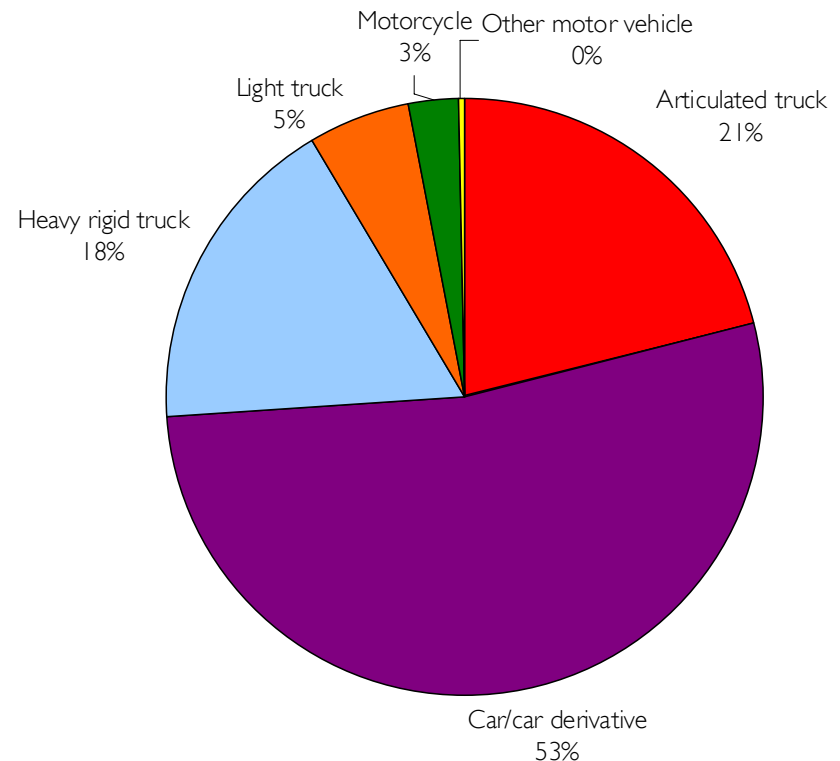
Speed Involvement in Vehicle – Vehicle First Impact Crashes

- However, in two vehicle crash impacts which are speed related the majority of the speeding drivers were from cars / car derivatives

Speeding Vehicles in Vehicle - Vehicle First Impact Heavy Truck Fatal Crashes,
2008 to 2010p, Traffic Unit Type



Speeding Vehicles in Vehicle - Vehicle First Impact Heavy Truck Crashes,
2008 to 2010p, Traffic Unit Type





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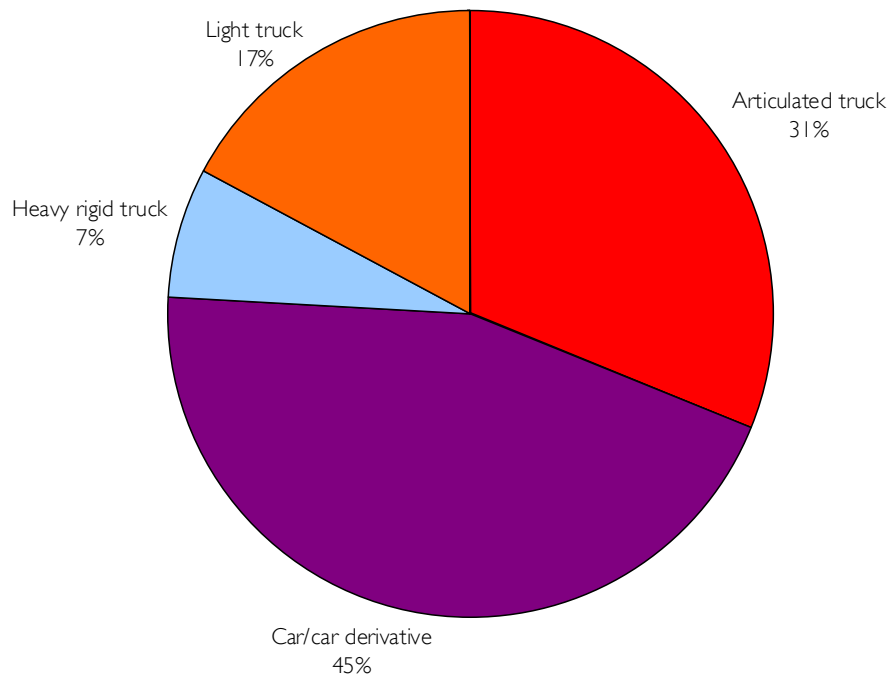
Fatigue Involvement



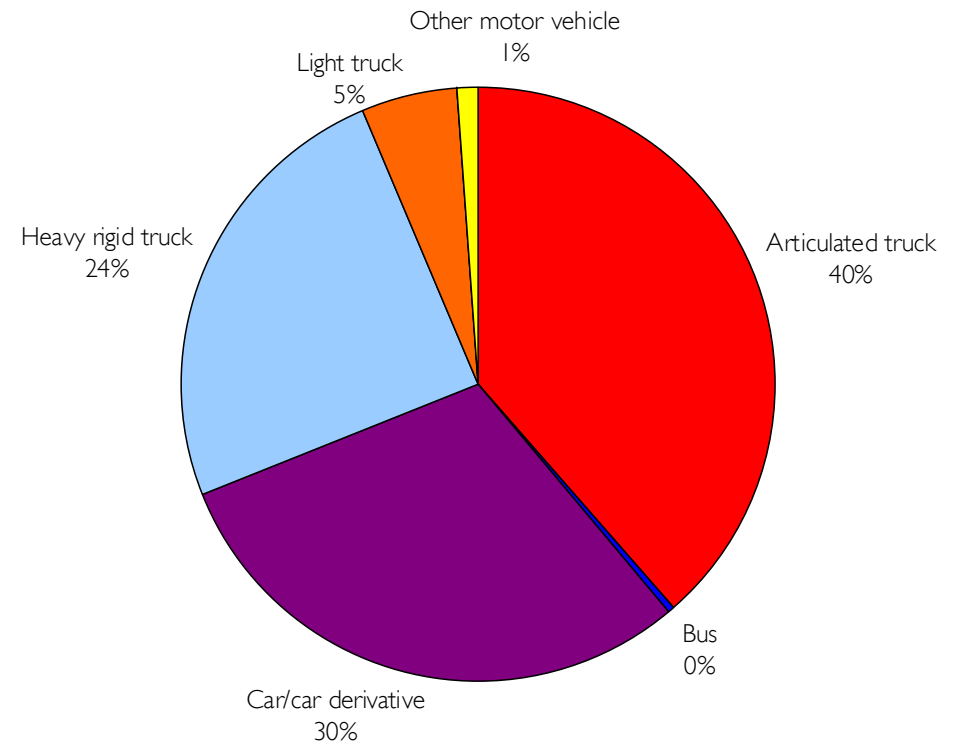
Transport
Roads & Traffic
Authority

- In fatal heavy truck crashes, the largest percentage of fatigued drivers were car drivers, but heavy truck drivers comprised the majority of fatigued drivers in all fatigue related heavy truck crashes

Fatigued Controllers in Heavy Truck Fatal Crashes, 2008 to 2010p,
Traffic Unit Type



Fatigued Controllers in Heavy Truck Crashes, 2008 to 2010p,
Traffic Unit Type





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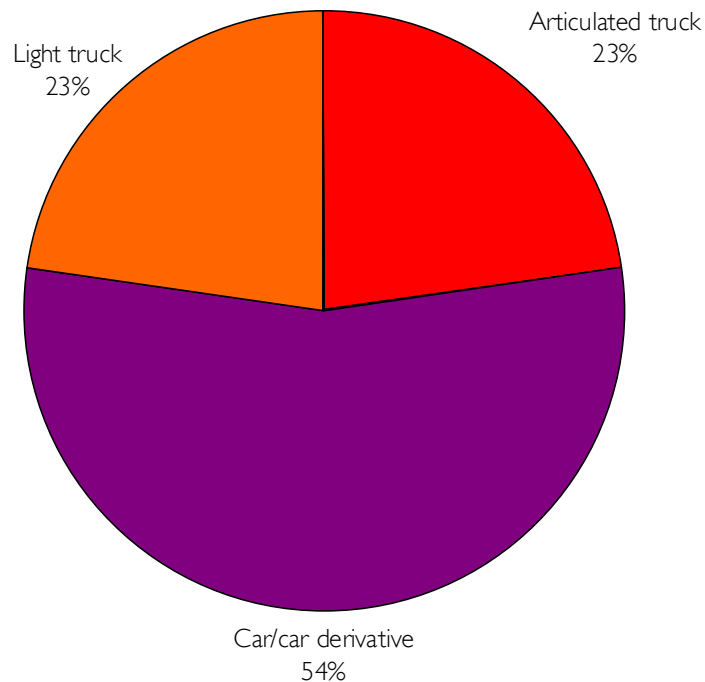
Fatigue Involvement in Vehicle – Vehicle First Impact Crashes



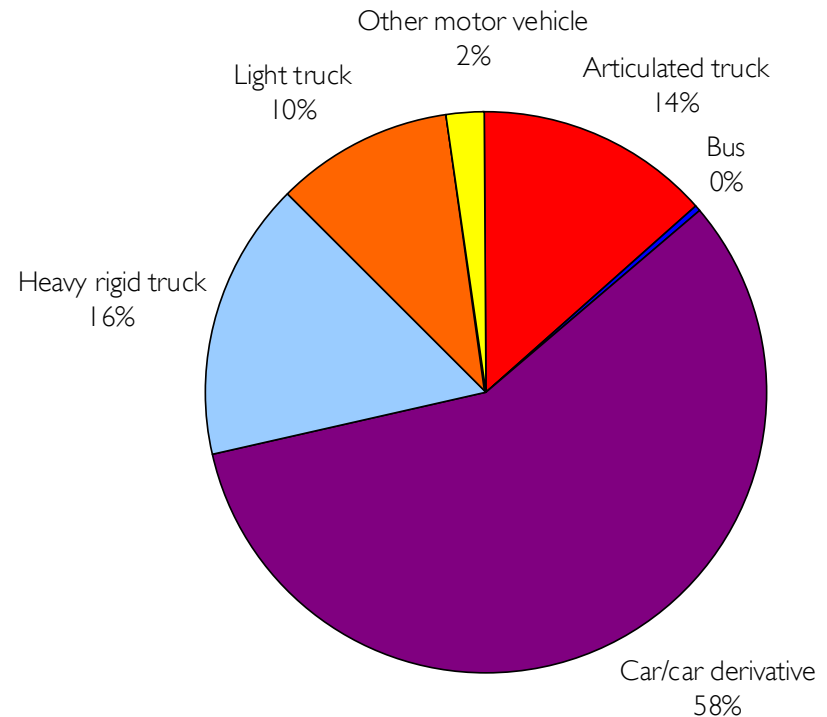
Transport Roads & Traffic Authority

- However, in two vehicle crash impacts which are fatigue related, the majority of the fatigued drivers were from cars / car derivatives

Fatigued Controllers in Vehicle Vehicle First Impact Heavy Truck Fatal Crashes, 2008 to 2010p, Traffic Unit Type



Fatigued Controllers in Vehicle Vehicle First Impact Heavy Truck Crashes, 2008 to 2010p, Traffic Unit Type





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Road Safety

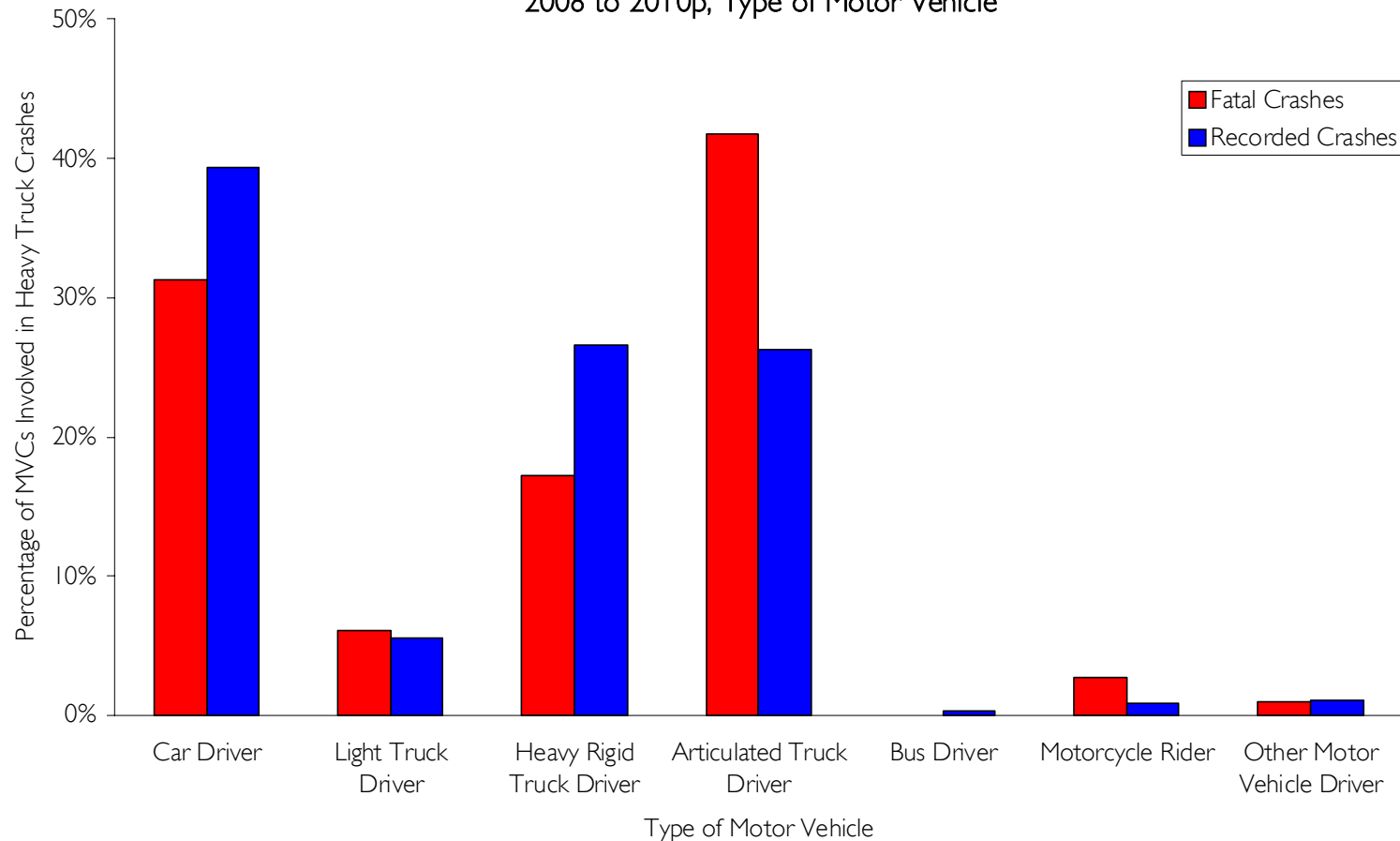
Motor Vehicle Controllers Involved – Type of Vehicle



Transport
Roads & Traffic
Authority

- The number of articulated trucks versus heavy rigid trucks is similar for all heavy truck crashes, but articulated trucks outnumber heavy rigid trucks by two to one in fatal crashes

Percentage of Motor Vehicle Controllers Involved in Heavy Truck Crashes,
2008 to 2010p, Type of Motor Vehicle





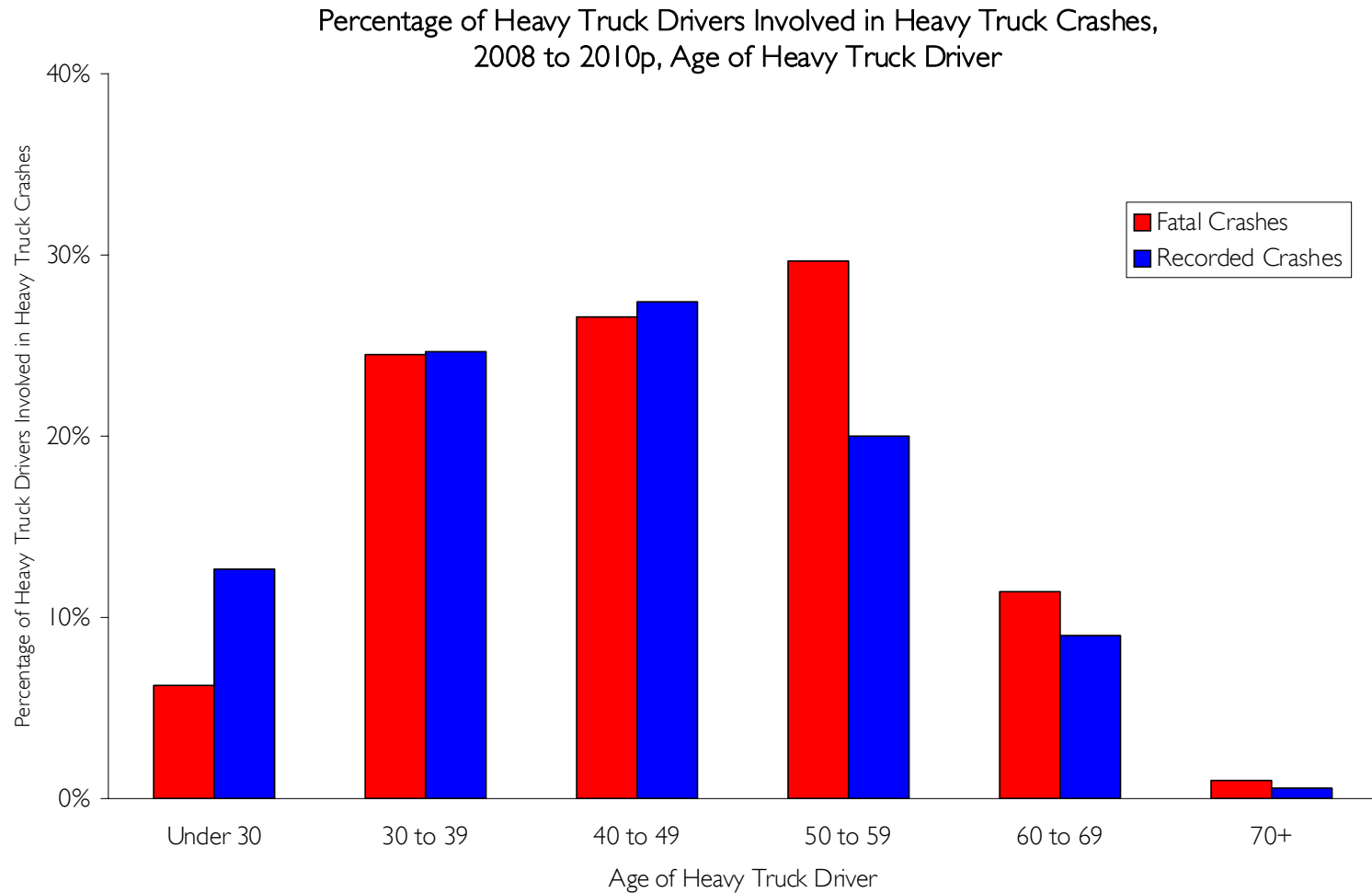
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Heavy Truck Drivers Involved – Age of Driver



Transport
Roads & Traffic
Authority

- Slightly older demographic for heavy truck drivers involved in fatal crashes





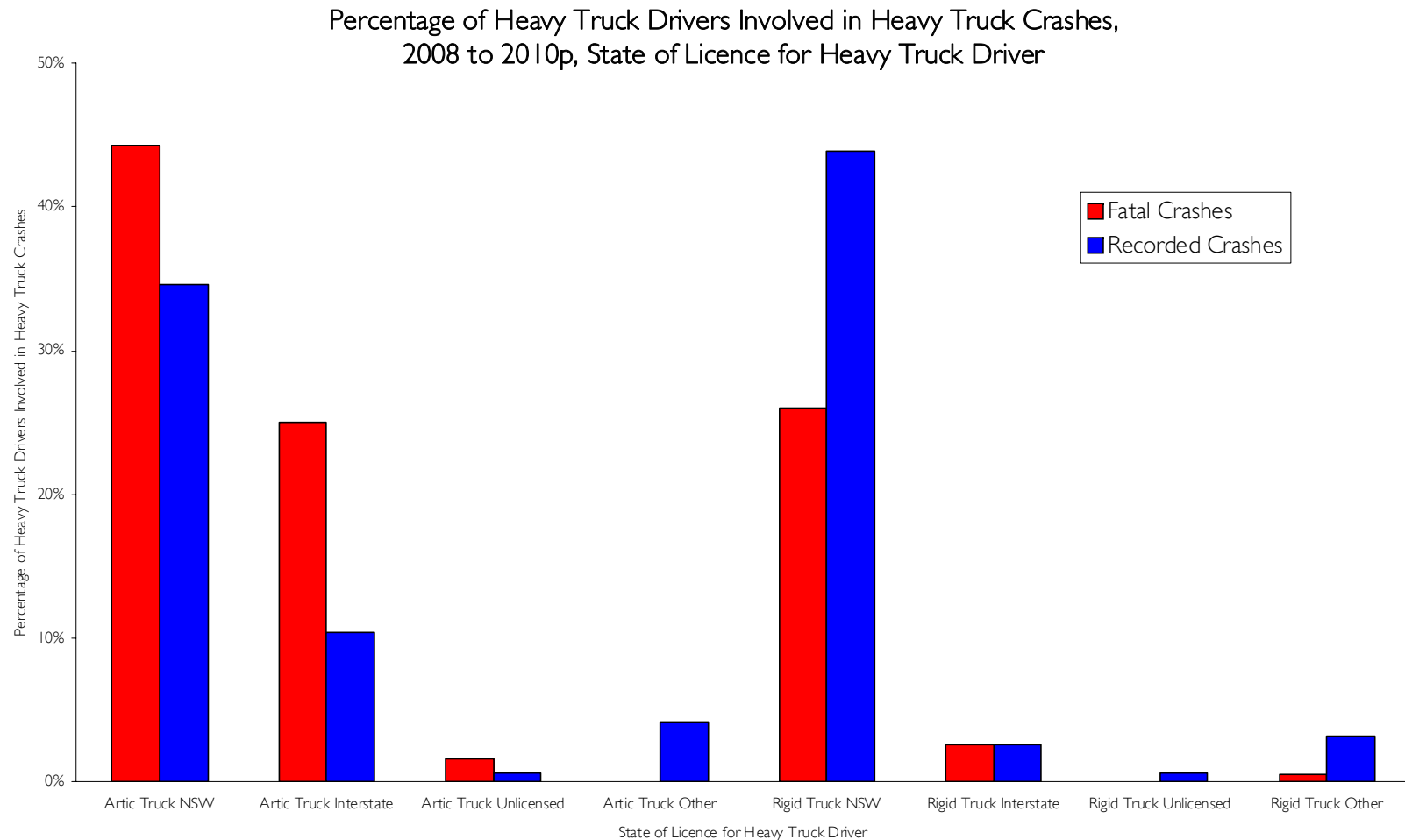
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Heavy Truck Drivers Involved – State of Licence



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Authority

- Relatively high proportion of interstate drivers of articulated trucks involved in fatal crashes





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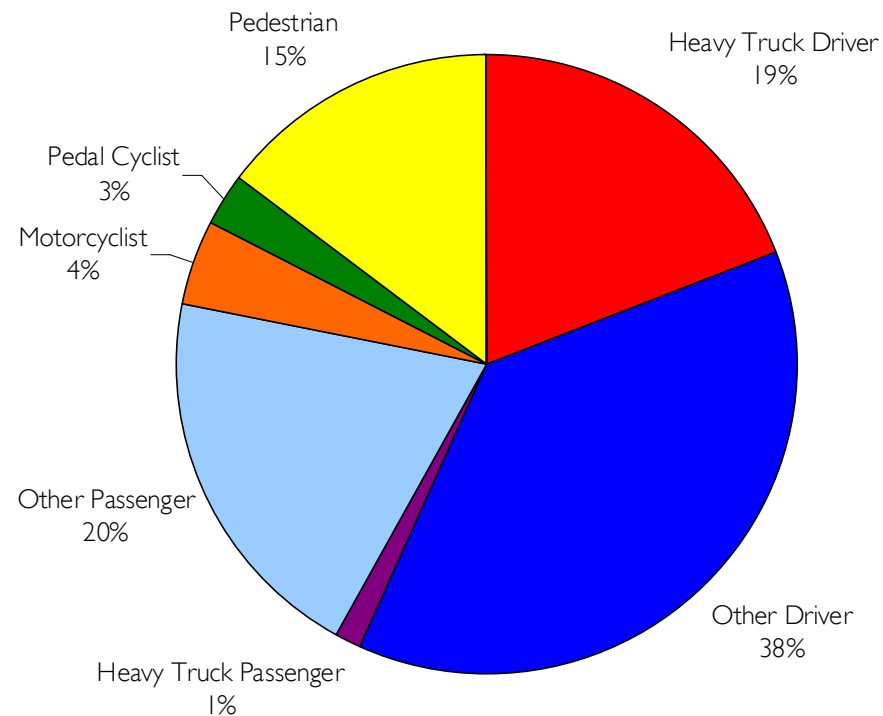
Fatalities From Heavy Truck Crashes



Transport
Roads & Traffic
Authority

- The majority of fatalities from heavy truck crashes are occupants of other vehicles
- Pedestrians also account for nearly one in six fatalities

Fatalities From Heavy Truck Crashes, 2008 to 2010p,
Class of Road User x Traffic Unit Type





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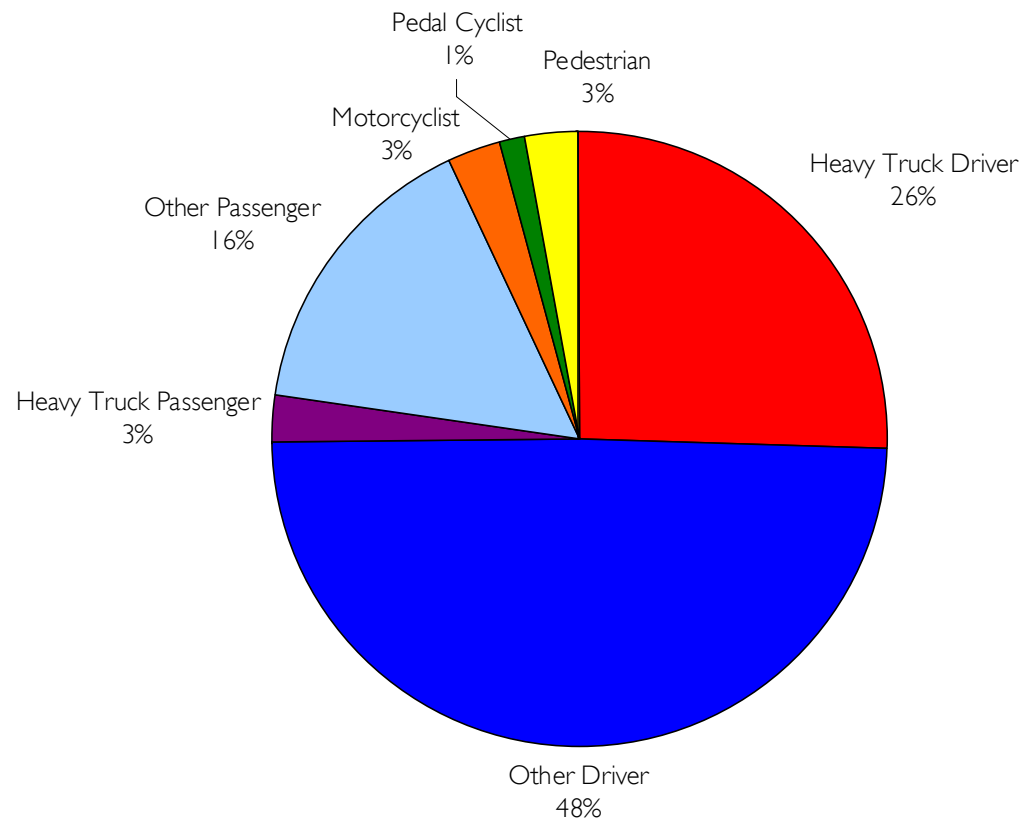
Injuries From Heavy Truck Crashes



Transport
Roads & Traffic
Authority

- Similarly the majority of injuries from heavy truck crashes are occupants of other vehicles
- Heavy truck occupants now account for more than one quarter of all injuries

Injuries From Heavy Truck Crashes, 2008 to 2010p,
Class of Road User x Traffic Unit Type





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Driver Casualties Restraint Non Usage



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Roads & Traffic
Authority

- Almost half of heavy truck drivers killed and one in fourteen injured are not wearing an available restraint
- Heavy truck driver casualties have much higher levels of non usage compared with car drivers and light truck drivers

Percentage of Driver Casualties Not Wearing An Available Restraint, 2008 to 2010p,
Degree of Casualty, Type of Vehicle

