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TMR00419: Low-Level Speeding Research

Dr Steve O'Hern

Professor Max Cameron

Sujanie Peiris

Associate Professor Stuart Newstead

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EXECUTIVE SUMMARY

It is well recognised that vehicles travelling above the posted speed limit have a heightened casualty crash risk. Excessive travel speeds are also associated with high crash severities, exposing vehicle occupants and vulnerable road users to greater risks of serious injuries.

The Queensland Department of Transport and Main Roads (TMR) invited the Monash University Accident Research Centre (MUARC) to provide research on crash risk associated with low-level speeding in Queensland.

The overall objective of this project was to provide TMR with relevant information to advise education, engineering and enforcement strategies targeted towards low-level speeding throughout Queensland.

The research presented in this report, builds on the work initially conducted by Kloeden and colleagues. To date, the speed-risk curves developed in Kloeden et al. (1997) and Kloeden et al. (2001), which aim to quantify the relationship between free travelling speed and the risk of being involved in a casualty crash, have contributed greatly towards the understanding of, and approach to, addressing low-level speeding in Australia.

Building on the work of Kloeden and Holman (2011), estimated the “Population Attributable Risk Fraction” (PARF) associated with each illegal speed range. The PARF is the fraction of the [total] population of casualty crashes (in the analysed speed zone) that are attributable to the component of the relative risk exceeding one for the crash risk in the speed range. In essence, the attributable fraction is the proportion of crashes that are estimated to result from the *increase in risk* due to the speeding in the specific range

This report presents an analysis of the prevalence of passenger vehicle motorist and heavy vehicle driver speeding across speed zones in Queensland and estimates of the PARF for passenger vehicle motorists, stratified using spatial and temporal variables.

The prevalence of low-level speeding was measured using probe data provided by HERE technologies. The data covers over 900,000 links across the Queensland road network. The speed observations were binned to provide estimates of the proportion of vehicles travelling in 10km/h speed ranges, with a specific focus on vehicles travelling between 1 to 10km/h above the speed limit, which for this analysis was classified as low-level speeding.

In general, the findings indicate a high level of speed compliance observed across the Queensland road network in all speed zones. Speed compliance was greatest in 50km/h and 70km/h speed zones and motorists were least compliant in 40km/h and 80km/h speed zones. The majority of non-compliant (speeding) passenger vehicle motorists and heavy vehicle drivers were found to engage in low-level speeding, travelling 1 to 10 km/h over the speed limit, with over half of non-compliant motorists exceeding the speed limit by 1 to 5km/h. Extreme speeding (i.e. 31 km/h above the speed limit) was found to be rare, representing less than 1% of all speeding.

PARF analyses of passenger vehicle motorists indicated a protective effect, or a decrease in attributable casualty crashes, when travelling 1 to 10km/h below the speed limit. The highest fraction of casualty crashes due to low-level speeding occurred in 40km/h zones. Despite the low proportion of vehicles engaging in high-level speeding, a high proportion of these crashes were attributable to speeding. Further analyses included in the report stratified findings based on a range of spatial and temporal variables to provide greater specificity of the prevalence and crash risk associated with low-level speeding across Queensland.

If interventions are being considered to improve crash risks related to speeding, then efforts should be expended on targeting low-level speeding across the network, particularly in 40 km/h zones and 80 km/h zones, where the fraction of casualty crashes attributable to speeding are noticeably higher than speeding in other speed zones. Further, eliminating speeding during the hours of 7:00pm to 6:00am should be a focus due to the comparatively higher levels of non-compliance noted in the speed data during these hours.

Future research could consider undertaking in-depth crash investigation in Queensland, including for heavy vehicles, to provide updated speed risk curves. Such curves would be of great value to determine the risks associated with speeding across the speed zones, given the fleet of vehicles in Queensland.

At a more basic level, continuous monitoring of speeding trends, as currently undertaken by TMR and HERE technologies, is essential for developing effective anti-speeding interventions. While consistent and accurate methods should continue to be employed for this purpose, recommendations are made to ensure that data collection using the speed probe data is expanded to capture a larger sample of motorists, with current estimates suggesting less than 5% of the vehicle fleet are captured using the probe data.

At present, given the high casualty crash risks associated with low-level speeding, and the high proportion of vehicles engaging in low-level speeding across the network (both passenger vehicle motorists and heavy vehicle drivers), particularly in more remote areas of Queensland, interventions which target low-level speeding should be a priority if greater speed compliance across the Queensland road network is to be achieved. This research has demonstrated that the majority of drivers most likely believe that low-level speeding is acceptable despite it presenting high risks associated with being involved in a casualty crash. Speed reduction interventions which target low-level speeding, particularly during evening and night hours across the Queensland road network are encouraged.

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1 INTRODUCTION

The Queensland Department of Transport and Main Roads (TMR) invited the Monash University Accident Research Centre (MUARC) to provide research on crash risk associated with low-level speeding in Queensland.

The overall objective of this project is to provide TMR with relevant information to advise education, engineering and enforcement strategies targeted towards low-level speeding throughout Queensland. As such, the specific objectives of this project are:

- Identify research on low-level speeding to inform Queensland road safety programs;
- Quantify the extent of low-level speeding in Queensland;
- Provide estimates of the proportion of crashes likely to be attributable to low-level speeding;
- Identify locations and sub-groups of the population to target with low-level speeding campaigns;
- Provide recommendations to address low-level speeding risk and crashes; and
- Highlight further research opportunities.

This document commences with an overview of the literature associated with the quantification of the effects of speeding (Sections 2 and 3). Section 4 discusses the proposed methodology for estimating the Population Attributable Risk Fractions (PARF) associated with low-level speeding in Queensland, while Section 5 presents an analysis of PARF for low-level speeding in Queensland. The report concludes with a discussion of the characteristics of drivers in speed ranges (Section 6) and a discussion of the implications of this research (Sections 7 and 8).

2 LITERATURE REVIEW

It is well recognised that vehicles travelling above the posted speed limit have a heightened casualty crash risk. Excessive travel speeds are also associated with high crash severities, exposing vehicle occupants and vulnerable road users to greater risks of serious injuries. While the general relationship between speed and kinetic energy (KE) is acknowledged, often expressed as a function of half the mass (m) of the object and the square of the object's velocity (v), ($KE = \frac{1}{2}mv^2$), exactly how this translates to injury outcome in the event of a crash is less well understood. That is, while the transfer of KE to the occupant or road user in an impact is finite, the biomechanical tolerances of humans vary. When forces beyond those tolerable to the human occur, this results in serious or fatal injuries (Corben et al. 2004).

Corben and colleagues (2010) note that the two methods for managing the transfer of kinetic energy in the event of a collision involve either preventing the occurrence of a collision in the first place, or via the management of energy transfer if an impact does occur. This requires understanding two types of risk associated with speed:

1. Risk of a crash (of any severity, varying from property damage only to fatal) associated with travel speed
2. Risk of injury (by severity, from minor to fatal) in a crash, associated with impact speed (which may be less than pre-crash travel speed).

Impact speed, mean travel speed, and individual driver's speed are three separate measures of velocity which contribute to road trauma. While these measures can be quantified, or at least estimated, our knowledge of how they manifest during a crash and what effect they have on the risk of crash involvement or risk of injury in a crash is limited, further complicated by human behaviour, occupant anthropometry and vehicle design. Several attempts have been made by researchers, with varying degrees of success, to quantify the relationships between travel speed and crash risk, and impact speed and injury risk. The validity of these relationships to accurately predict crash or injury risk, and their applicability to vehicles today, is questionable. Careful consideration needs to be given to how these risk relationships were developed and how they can be applied to current data, including Queensland's speed and crash data with respect to current fleet information.

2.1 CRASH RISK ASSOCIATED WITH TRAVEL SPEED

Travel speed is often considered to be the core of the road safety problem, estimated to be an essential contributory factor in approximately 30% of fatal crashes (van Schagen & Elvik 2018). Several researchers to date have attempted to quantify the relationship between vehicle travel speed and crash risk using various techniques. For such attempts, either the individual speed of vehicles or the average speed of vehicles along a section of road have been used as a measure to relate travel speed to crash risk.

2.1.1 INDIVIDUAL VEHICLE SPEED

An early study by Fildes et al. (1991) linked covertly measured vehicle free-speed data (i.e. speed of vehicles with a minimum of four seconds clear headway) to self-reported crash involvement. In doing so, the authors estimated a relationship between speed and crash risk of drivers on urban and rural roads. An exponential relationship between travel speed and crash rate was demonstrated to exist on urban roads (60 km/h) and rural roads (100 km/h), with the function being steeper in the latter setting. While Fildes et al. (1991) found an increased crash involvement when there was high variance from the mean traffic speed, the findings were not consistent with previous U-shaped variance hypotheses around the mean travel speed which otherwise suggested that an increased crash risk also existed for those travelling at speeds markedly lower than the mean rural traffic speed (Solomon 1964).

In 1998, in a similar study based on self-reported crash involvement, Maycock and colleagues measured the speeds of 6,435 vehicles with a laser radar and placed the vehicles into one of five equal percentile bands based on the traffic speed distribution (i.e. above the 85th percentile, between the 70th and 85th percentile, around the median speed, between the 15th and 30th percentile, and below the 15th percentile). Drivers were then sent a

questionnaire about their historical crash involvement (3 years prior). Maycock et al. (1998) found a relationship between the self-reported crash liability of drivers, the individual vehicle speed which drivers chose to drive at and the mean speed. The authors concluded that crash involvement was also related to age, annual mileage and driving experience. Using predicted speed as an explanatory variable in the crash 'model' which the researchers developed, they suggested that as a rule of thumb, a 1% change in an individual driver's choice of speed was associated with a 13.1% change in that driver's crash liability.

A year later, this relationship was recalculated by Quimby et al. (1999), who obtained unobtrusive speed measurements of a sample of free-flowing vehicles (i.e. vehicles which had more than a three second headway between themselves and the vehicle in front) on a variety of roads, excluding motorways. Again, using an in-depth questionnaire posted to motorists (of which 5,080 valid responses were returned) and predicted speeds as an explanatory variable in the model of crash involvement, the relationship developed by the authors suggested that a 1% change in a driver's choice of speed was associated with a 7.75% change in crash liability. The main difference between these predictions was likely due to the fact that Quimby et al. (1999) used the free-flowing, or unimpeded traffic speed in their calculations. It is noteworthy that these studies were heavily reliant on self-reported data and at times, the availability of only a small number of survey responses. Further, due to the power functions on which the models were developed, Aarts & Van Schagen (2006) note that the suggested rules of thumb are likely to be applicable for only small increases or decreases in speed, but not for larger ones.

2.1.2 CASE-CONTROL METHODOLOGY

Case-control methodology is also often employed to investigate the relationship between crash risk and travel speed. In such studies, the estimated pre-crash travel speeds of vehicles involved in crashes (i.e. 'case vehicles') are linked to speeds of vehicles which are not involved in a crash (i.e. 'control vehicles'), but which are driven under comparable conditions. Using data collected mainly from 1995-1996, Kloeden et al. (1997) linked 151 crashed vehicle cases (on metropolitan South Australian roads with a 60 km/h speed limit) to 604 control vehicles. The pre-crash travel speed of the 151 crashed vehicles was calculated using various techniques, and the case and control vehicles were matched for factors such as location and travel direction, time of day, weather and vehicle type. Using this data, Kloeden et al. (1997) developed speed-risk curves to quantify the relationship between free-travelling speed and the risk of being involved in a casualty crash. Using the 151 crash cases (based on an "ambulance transport" inclusion criteria, of which 82% were treated at hospital, with 26% admitted) and the 604 controls, the researchers quoted that 'in a 60 km/h speed limit area, the risk of involvement in a casualty crash doubles with each 5 km/h increase in travelling speed above 60 km/h'.

The authors went on to provide crash-risk relationships on rural roads in 80-120 km/h zones, again using a case-control methodology (data collected from 1998-2000) to establish the relationships between speed and casualty crash risk (Kloeden et al. 2001). In the latter study, 83 crash cases were linked to 10 control vehicles each ($n =$

830 in total). Comparatively, it was found that the increase in crash rate related to increases in speed was greater on urban roads than rural roads.

The research by Kloeden et al. (1997a, 2001) has influenced speed policy throughout Australia, however Cameron (2013) identified limitations with the research, including that the definition of 'casualty crashes' analysed by Kloeden and colleagues in the urban study (1997) varied from that used in the rural study (2001), i.e. "treated at, or admitted to hospital [46%], or fatally injured [23%]". Cameron also highlights the wide confidence limits associated with the urban crash risk curves at high speeds in 60 km/h zones. Further, Cameron (2018) notes that the relative risk relations for Kloeden et al. (1997a, 2002) casualty crashes are based on a case-control analysis which did not remove confounding effects, such as driver age, gender and other potential factors. Further to this, changes to the vehicle fleet since when the data for the study was collected (i.e. 1995 – 1996) have been drastic and vehicle safety has improved significantly since, which calls into question the ability of the risk curves to accurately predict casualty crash likelihood on our roads today.

Cameron (2013) estimated the relative crash frequencies using the confidence limits for the relative risks on urban 60 km/h roads proposed by Kloeden et al. (1997). The concept of 'population attributable risk' (discussed in greater detail in Section 3) was used to estimate the fraction of crashes attributable to speeding in each illegal speed range in Perth and Queensland. While the results of Cameron (2013) showed that the estimated attributable fraction of casualty crashes was higher for speeds above 80 km/h than for speeds between 60-70 km/h, he noted that the results needed to be interpreted with care due to the wide confidence limits associated with the curves generated by Kloeden et al. (1997) applicable to high speeds. Analysis by Cameron (2013) suggested that the relative number of casualty crashes associated with speeds above 80 km/h on 60 km/h roads was at least as great as the number associated with illegal speeds in the 60-70 km/h range. Cameron suggested that new research be undertaken to improve the reliability of Kloeden's curves for predicting the contribution of low and high-level speeding.

2.1.3 AVERAGE VEHICLE SPEED AT ROAD SECTIONS

When not using individual vehicle speed to relate to crash risk, researchers can also use average speed at a road sectional level. That is, the average traffic speed at a specific road can be related to the crash rate at a road to determine the relationship between driving speed and crash rate. Methods employed for this analysis include before-and-after studies and cross-sectional studies. Nilsson's (1982) benchmark study, which looked at the before-after safety effects on Swedish rural roads due to changes in the speed limit from 110 km/h to 90 km/h and vice versa, provides such an example. Using roads with an original (unchanged) speed limit of 90 km/h with similar characteristics to the changed sections as control locations, Nilsson found that a speed limit reduction was accompanied by a reduction in average speed, as well as a reduction in the number of police reported crashes. Nilsson adapted the kinetic energy formula, eliminating the effects of mass, and used relative speed

change to describe the number of police reported crashes due to changes in speed. Specifically, Nilsson suggested the following relationship:

$$A_2 = A_1 \left(\frac{v_2}{v_1} \right)^2$$

According to this relationship, the number of police reported crashes (A_2) was roughly equal to the number of police reported crashes before the speed limit change (A_1), multiplied by the average speed (v_2) along the section of road after the speed change, divided by the average speed (v_1) along the section of road before the speed change, squared.

Subsequently, Nilsson (1982) suggested that the number of severe crashes would occur more often with an increase in speed, as opposed to a greater number of crashes in general, approximated by using an increased power of his original function to calculate the change in severe injury and fatal crashes. Based on empirical data of the effects on crashes after a speed limit change on Swedish roads, Nilsson suggested an increased power of the original function to approximate the number of severe injury crashes (I) and fatal injury crashes (F):

$$I_2 = I_1 \left(\frac{v_2}{v_1} \right)^3$$

$$F_2 = F_1 \left(\frac{v_2}{v_1} \right)^4$$

The increased power of the functions described by Nilsson (2004), includes an indication of the increase in braking distance to avoid a crash when driving at higher speed. These relationships were based on data related to speed changes on motorways and rural roads. It was later demonstrated by Nilsson (2004) and Elvik et al. (2004) using a regression meta-analysis which included a large number of before-and-after and cross sectional studies, that the outcomes related to speed limit changes could be described by the three power functions. The researchers noted that the relationship between changes in speed and changes in road trauma can be adequately described in terms of the simple power model, in which the relative change in the number of crashes or crash victims is a function of the relative change in the mean speed of traffic, raised to an exponent. These exponents are presented below (Table 1), with the researchers noting that the relationships held true for all speeds in the range between about 25 km/h and about 120 km/h.

Nilsson's research has since been questioned and more recent and applicable relationships between mean speed of traffic and road safety have been developed (Elvik et al. 2004, Elvik 2009, Cameron & Elvik 2010, Elvik 2013, Elvik et al. 2019). Elvik (2013) suggests that the relationship between speed and road safety depends not only on the relative change in speed, but also on the initial speed of vehicles.

Table 1: Exponents which summarise the effects of changes in speed using the Power Model, Elvik et al. (2004) pg. 98

Crash severity	Exponent
Fatalities	4.5
Fatal crashes	3.6
Seriously injured road users	3.0
Serious injury crashes	2.4
Slightly injured road users	1.5
Slight injury crashes	1.2
Injured road users (severity unspecified)	2.7
Injury crashes (severity unspecified)	2.0
Property-damage-only crashes	1.0

Applying a more recent empirical update using a greater amount of data from urban roads, Elvik (2009), Cameron & Elvik (2010) and Elvik (2013) demonstrated that a more accurate relationship between speed and crashes depended on the initial speed of vehicles, and further, that in urban areas speed changes have a smaller effect on injury crashes than non-urban roads. According to the more recent analysis by the researchers, crash risk is not only dependant on the relative change in speed, as suggested by Nilsson's Power Model, but other factors. Further, it is suggested that the speed-crash relationship could be better described by an exponential function for rural roads.

Summarised, the effects on road safety of changes in speed are found to vary depending on initial speed. According to Elvik (2009), changes in speed have a smaller effect at low speeds than at high speeds. Thus, a reduction in the average speed by 10% (say from 50 km/h to 45 km/h), will have a smaller effect on injurious crashes on urban roads than a reduction in the average speed by 10% on higher speed signed roads (say from 100 km/h to 90 km/h). Research by Cameron & Elvik (2010), Elvik (2013), Viallon & Laumon (2013), Elvik (2009) and Elvik et al. (2004) should be investigated for a more thorough analysis of injury risks associated with road trauma.

The previous studies which have investigated the relationship between travel speed and crash risk all suggest that vehicles with higher travel speeds have a larger individual crash risk than vehicles that travel slower. Either using a power function to describe this relationship (Maycock et al. 1998, Quimby et al. 1999), or an exponential function (Fildes et al. 1991, Kloeden et al. 1997, Kloeden et al. 2001), the implications are similar. While increases in crash risk associated with increased speed are further exaggerated on rural roads compared to urban roads using the exponential functions, significant differences between the studies and data collection methods and the influence of coincidental factors are likely to account for differences in the relationships proposed (Aarts & Van Schagen 2006).

The work by Elvik (2009) described the relationship between average speed and road trauma in terms of the power function and suggested that changes in speed affect severe crashes to a greater extent than less severe crashes. Table 2 describes the power for different crash severities, based on empirical data from 115 studies containing 526 results from crashes on rural and urban roads.

Table 2: Summary estimates of exponents for the Power Model of the relationship between changes in speed and changes in road safety on rural and urban roads, obtained from Elvik (2009). pg. 58

Summary estimates of exponents by traffic environment						
	Rural roads/freeways		Urban/residential roads		All roads	
Accident or injury severity	Best estimate	95 % confidence interval	Best estimate	95 % confidence interval	Best estimate	95 % confidence interval
Fatal accidents	4.1	(2.9, 5.3)	2.6	(0.3, 4.9)	3.5	(2.4, 4.6)
Fatalities	4.6	(4.0, 5.2)	3.0	(-0.5, 6.5)	4.3	(3.7, 4.9)
Serious injury accidents	2.6	(-2.7, 7.9)	1.5	(0.9, 2.1)	2.0	(1.4, 2.6)
Seriously injured road users	3.5	(0.5, 5.5)	2.0	(0.8, 3.2)	3.0	(2.0, 4.0)
Slight injury accidents	1.1	(0.0, 2.2)	1.0	(0.6, 1.4)	1.0	(0.7, 1.3)
Slightly injured road users	1.4	(0.5, 2.3)	1.1	(0.9, 1.3)	1.3	(1.1, 1.5)
Injury accidents – all	1.6	(0.9, 2.3)	1.2	(0.7, 1.7)	1.5	(1.2, 1.8)
Injured road users – all	2.2	(1.8, 2.6)	1.4	(0.4, 2.4) #	2.0	(1.6, 2.4)
PDO- accidents	1.5	(0.1, 2.9)	0.8	(0.1, 1.5)	1.0	(0.5, 1.5)

Recently, Elvik, Vadeby, Hels and van Schagen (2019) re-examined the relationships between travel speed and casualty crash risk based on the data collected by Kloeden et al. (1997a, 2001). They tested the applicability of exponential functions found by Elvik (2013) connecting crashes of motorists to mean speeds, but applying the functions to individual speeds. In summary, they stated that a simple exponential function of travel speed provides adequate estimates of crash risk compared with the exponential quadratic functions of Kloeden et al. (2001, 2002).

2.1.4 QUALIFICATIONS OF RESEARCH ON TRAVEL SPEEDS AND ROAD TRAUMA

Consideration should always be given to the scientific rigor behind any study which specifies a relationship between crash risk and travel speed (or even injury risk and impact speed). The definition of the data used in the analysis, the sampling methods employed, weighting procedures and the confidence limits placed on the results need to be reviewed thoroughly before accurate conclusions are drawn. When it comes to developing relationships between crash risk and travel speed, the applicability of the research to the current environment given the changes in the vehicle fleet over decades should always be questioned (Aarts & Van Schagen 2006, Richards & Cuerden 2009, Richards 2010, Jurewicz et al. 2016). The year of manufacture of a vehicle (along with driver sex, age and vehicle size) for example, has been shown to be a significant predictor of both crash involvement and serious injury risk (Thomas 2013).

2.2 INJURY RISK ASSOCIATED WITH IMPACT SPEED

Just as researchers attempt to quantify a relationship between vehicle speed and crash risk, several studies have explored the relationship between impact speed and risk of injury. References related to the risk of injury (or fatality) as a function of impact speed date back as early as 1958, when Moore, from Cornell University documented the frequency of dangerous and fatal injuries sustained during automotive collisions and plotted these risks against travelling speed and impact speed (Moore, 1958). Since then, the risk of injury (either severe or fatal) related to impact speed has been studied not only under controlled environments (such as sled tests), but also using real-world data and computer aided technology. However, such studies have often only examined injury risk in relation to specific body parts such as the neck or head.

The prediction of injury risk or injury severity to vehicle occupants generally, or pedestrians, due to varying automotive impact speeds, has been a topic of great interest. A significant focus to date has been on the effects of impact speed on injury risk to vulnerable road users since these individuals (including pedestrians, cyclists and moped riders) are largely unprotected in the event of a collision with a passenger vehicle or larger truck. In a somewhat dated study, Ashton and Mackay (1979) reported a number of relationships between vehicle speed and survival chance for pedestrians involved in vehicle-pedestrian injury impacts (Figure 1). They used weighted data obtained from at-the-scene pedestrian crash studies (which included non-injury, injury and fatal data collected from 334 crashes involving 359 pedestrians), conducted at the Accident Research Unit, University of Birmingham (Ashton et al. 1977).

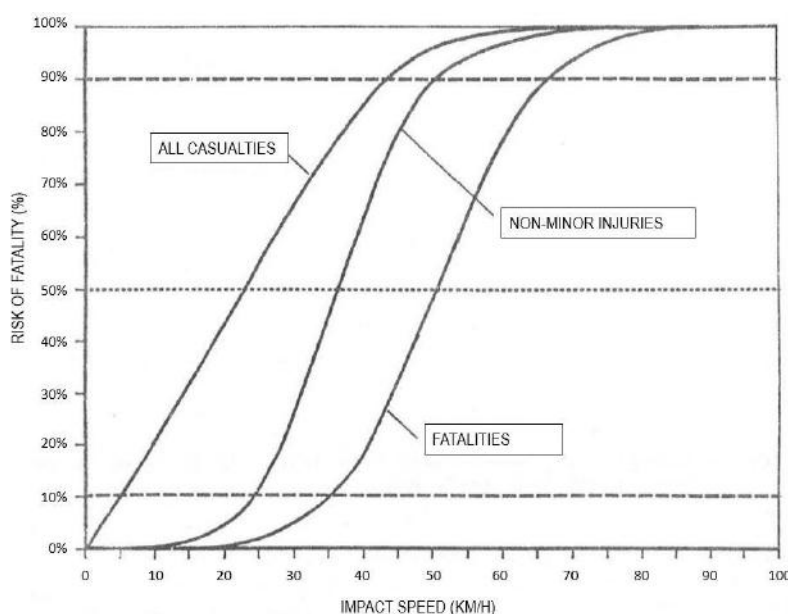


Figure 1: Impact speed distributions for pedestrians struck by fronts of cars or car derivatives. Image modified from Ashton and Mackay (1979), Pg. 41

According to the curves presented above, the following fatality risks apply to pedestrians struck by the front of a passenger vehicle (Table 3).

Table 3: Fatality risk to pedestrians struck by the front of a passenger vehicle at speed, cited by van Schagen & Elvik (2018)

Speed at which pedestrian is struck (km/h)	Risk of fatality (%)
32	5
48	45
64	80

Several studies have since been conducted and today, the curves by Wramborg (2005) for example, are often referred to when discussing policy-driven decisions regarding speed limit setting. Wramborg's curves portray fatality risk to pedestrians, as well as to vehicle occupants in side and frontal impacts (see Figure 2). According to the probability curves presented by Wramborg, a 10% chance of a fatal outcome exists:

- For a pedestrian struck by a vehicle that is travelling at 30 km/h
- For a vehicle occupant in a side collision who is struck by a vehicle that is travelling at 50 km/h
- For a vehicle occupant in a frontal collision who is struck by a vehicle that is travelling at 70 km/h

It is unclear if the crashes being referred to by Wramborg (2005) are those which involve two moving vehicles or those which involve a single vehicle that has been struck by one moving vehicle. It is equally unclear if collision speed refers to the impact speed of the bullet vehicle or the closing speed of two moving vehicles. Further, it is unclear how the curves by Wramborg were developed, or which sources of data were used to generate the relationships. Despite this, a number of messages from the curves have been used to justify policy-driven decisions regarding speed limit setting.

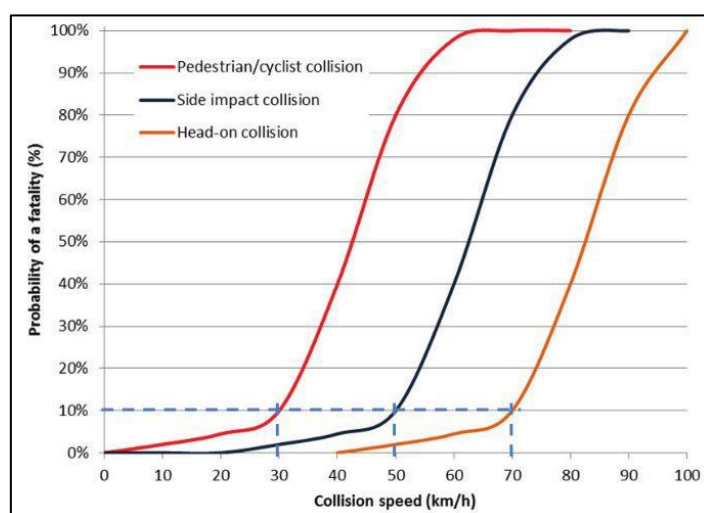


Figure 2: The three fatality-risk vs collision speed curves generated by Wramborg (2005) and redrawn by Jurewicz et al. (2016) (image obtained from Jurewicz et al., 2016., pg. 3)

Tingvall and Haworth (1999), six years prior to Wrangborg's (2005) publication, refer to these speeds [30/50/70 km/h] as being definitive injury thresholds. That is, the authors state that "the human tolerance for a pedestrian hit by a well-designed vehicle will be exceeded if the vehicle is travelling at over approximately 30 km/h", and later that "the inherent safety of well-designed vehicles can be anticipated to be a maximum of 70 km/h in frontal impacts, and 50 km/h in side impacts" (Tingvall & Haworth, 1999. p. 4). It is therefore arguable that Wrangborg's charts were possibly created to justify a prior policy decision regarding speeds in Sweden.

Indeed, Johansson (2004), in a PhD dissertation, notes that Wrangborg's (2005) pedestrian risk curve was based on pedestrian fatality data published by Teichgräber (1983), Ashton (1982) and Waiz, Hoefliger, and Fehlmann (1983). Rosen and Sander (2009) note that the data from these three studies are potentially too old (i.e. Ashton uses pedestrian crash data from the 1960s and 1970s) and fail to give a fair description of the total population of crashes due to sample biases (i.e. the inclusion of only highly injurious impacts). Accordingly, Rosén et al. (2011) notes that Wrangborg's curves are likely to be biased towards severe injury crashes, fail to use modern analysis methods and fail to reflect results from modern pedestrian friendly vehicle designs. Other researchers have since questioned the scientific validity of Wrangborg's curves and its use when justifying policy-based decisions that affect road safety in Australia today, arguing that Wrangborg's survival curves are potentially simplistic and out of date.

More recently, Rosén and Sander (2009), derived a risk function for adult pedestrians hit by the front of passenger vehicles using the largest in-depth, pedestrian crash study available at the time (German In-Depth Accident Study, 1999-2007). Although an injury likelihood was reasonably dependant on speed, their results demonstrated a lower fatality risk for pedestrians struck by a vehicle at speed than generally reported in the traffic safety literature. The authors explained that the discrepancy was likely explained by sample bias towards severe injury crashes used in earlier studies. Rosén and Sander (2009), found that the fatality risk for pedestrians struck at 50 km/h by the front of a vehicle was more than twice as high as the risk when struck at 40 km/h, and more than five times higher than the risk of a fatality when struck at 30 km/h (Figure 3).

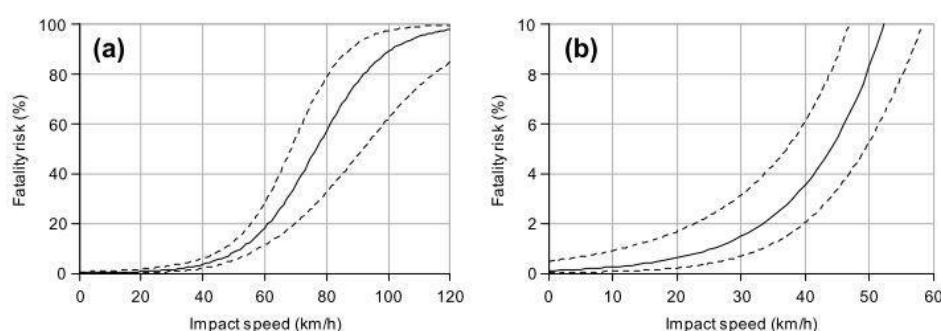


Figure 3: (a) The fatality risk as a function of impact speed for adult pedestrians hit by the front of a passenger vehicle. The dotted curves show approximate 95% confidence limits. (b) Zoomed in view of the risk curve (i.e. 0-60 km/h). Image obtained from Rosén & Sander (2009), pg. 6

Although it is not the aim of this study to investigate pedestrian risk curves, it is worth acknowledging that other similar pedestrian injury/fatality risk verses collision speeds have been produced and critiqued by multiple authors (Rosén & Sander 2009, Rosén et al. 2011, Stigson et al. 2012, Tefft 2013, Kröyer et al. 2014, Kröyer 2015). Rosén et al. (2011) discussed the use of pedestrian injury data in over three decades of research and the evolution of more accurate pedestrian survival curves over time. Recently, Cuny et al. (2018) presented a new set of pedestrian injury risk curves (for fatal, severe and slight injuries), based on a French crash analysis database of real-world, police-reported, vehicle-to-pedestrian frontal collisions. The authors noted that injury probabilities were modelled using a polytomous CLOGLOG regression model depending on the squared impact speed and the confidence intervals were calculated using bootstrap methods, based on a 20,000 samples simulation (see Figure 4).

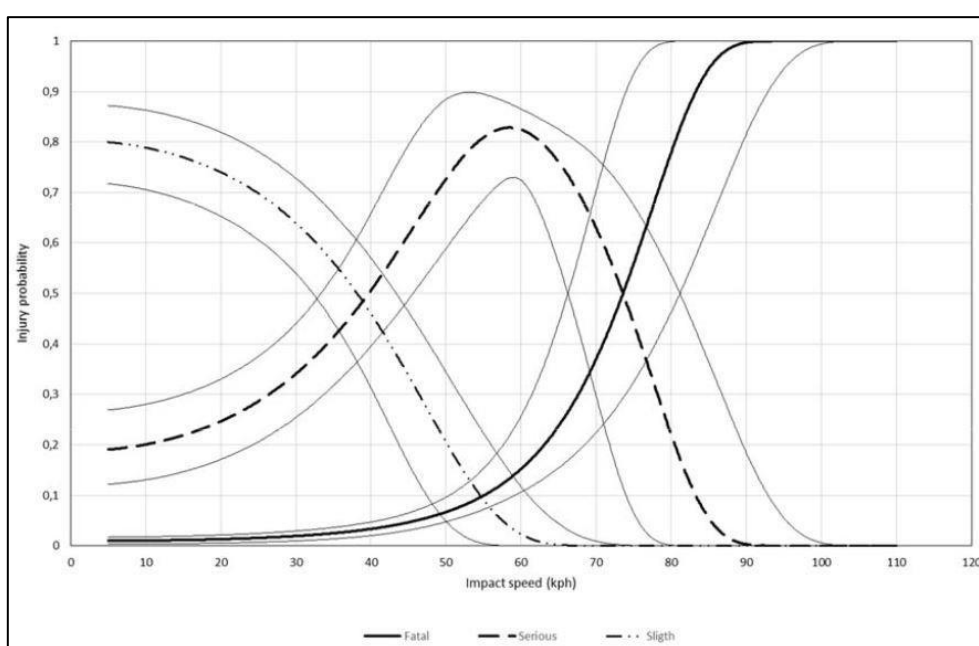


Figure 4: Injury risk curves as a function of impact speed for injured pedestrian in vehicle-to-pedestrian frontal collisions.

The authors demonstrated that their model showed a sharp increase in the risk of fatal injury for pedestrians struck at a 70 km/h impact speed, with the risk of fatal injury reaching 50% at 73 km/h. According to the risk curves, the maximal risk of severe injury was reached at 60 km/h impact speed, after which point, the risk of a fatality increases.

Richards and Cuerden (2009) recalibrated occupant curves for frontal and side impacts using delta-V (i.e. change in the velocity of a vehicle during the crash) as a measure of impact speed. The authors looked at the relationship between speed and injury severity for vehicle drivers who were belted during impacts with other vehicles and generated curves which show the risk of belted vehicle drivers being killed or seriously injured in a vehicle crash. The data was obtained from two studies, one of which included 64 fatally injured and 463 seriously injured belted drivers in frontal impacts with another vehicle, as well as 21 fatally injured drivers and 75 seriously injured belted drivers in side impacts with another vehicle (on the struck side), and from a second study, which

included 76 slightly injured vehicle drivers in frontal impacts, and 21 slightly injured drivers in side impacts with another vehicle (on the struck side). The data was weighted to the number of casualties in the national database and the speed-injury curves for fatal injury and killed or serious injury (KSI) were fitted using logistic regression and confidence intervals drawn (see Figure 5, Figure 6). The 'W' in these figures represents the risk of fatality estimates from Wramborg (2005) for drivers of vehicles involved in frontal impacts with other vehicles (Figure 5) and for drivers involved in a side impact with another vehicle (Figure 6).

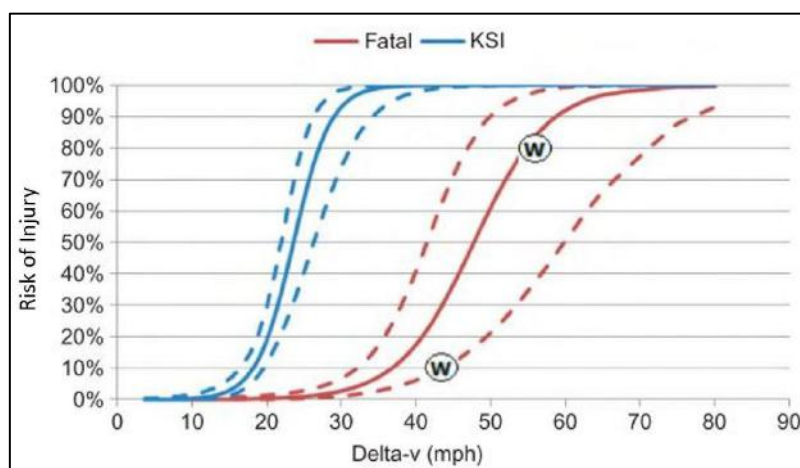


Figure 5: Speed injury risk curve for vehicle drivers in frontal impacts with other vehicles, research by Richards and Cuerden, 2009

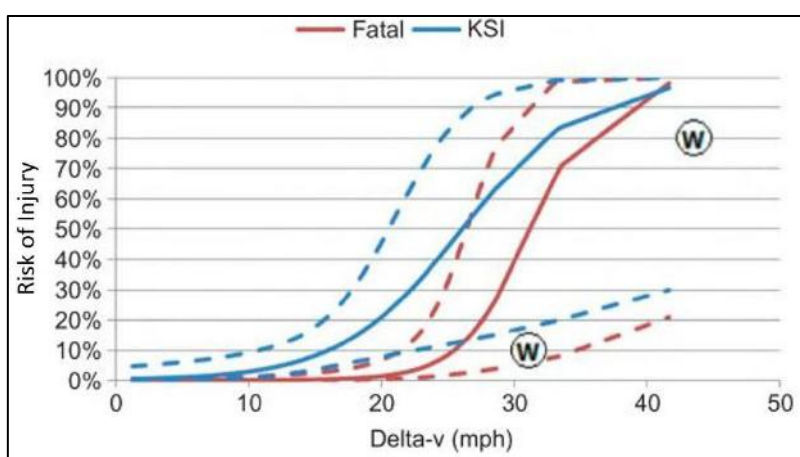


Figure 6: Speed injury risk curve for vehicle drivers in side impacts with other vehicles, research published by Richards and Cuerden, 2009

Other researchers have investigated the risk of injury compared to age and gender (Evans 1988, Zador 1991, Zhang et al. 1998, Zador et al. 2000, Evans 2001), as well as the risk of injury with respect to vehicle type (Lefler & Gabler 2004, Paulozzi 2005, Chang & Yeh 2006, Tefft 2013). Mackie Research (Scott & Mackie 2018) completed a literature review and compared numerous studies to generate a more 'amalgamated' set of speed risk curves based on those already published by various other researchers. Mackie Research placed less

emphasis on earlier research due to changes to the vehicle fleet, emergency care in recent years and earlier bias towards high severity crashes. They noted that most datasets available for use have fewer data points at higher speeds (i.e. above 80 km/h) and so decreasing confidence intervals at high speeds need to be noted. The researchers 'overlayed' severe and fatal pedestrian injury risk curves, severe and fatal side impact injury risk curves and severe and fatal head-on impact injury risk curves from 13 different studies. Scott and Mackie note that their figures showing various curves overlayed (see Figure 7) are intended to summarise the known data for impact speed and risk of serious and fatal injuries. They continue, emphasising that true variability of circumstances possible in crash situations are not represented by the curves (i.e. anomalies in the data such as where pedestrians are killed by buses travelling at 30 km/h, or where elderly people are more vulnerable to impacts than middle aged men/women).

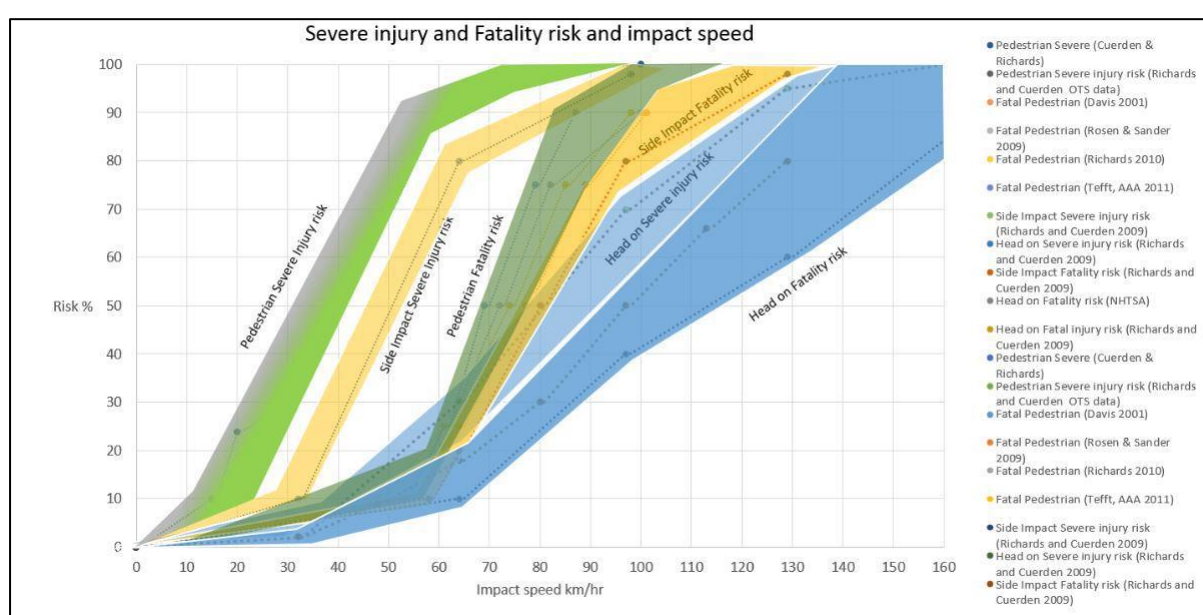


Figure 7: Combined severe injury and fatality risk curves, obtained from Scott and Mackie, 2018, pg. 7

In relation to pedestrian impacts, side impacts and head-on collisions involving passenger vehicles, the risks of injury and injury severity typically increase with increasing speed. Despite this, literature suggests that survivability has improved over time for any given speed with the benefits largely due to crashworthiness of vehicles and advanced driver assist technologies. This however, poses a challenge when it comes to communicating the benefits of safer or lower speeds.

2.3 CHANGES TO THE VEHICLE FLEET

Attempts to quantify changes to the Australian vehicle fleet have been made by several researchers to date. Newstead et al. (2004) used records of drivers involved in crashes in New South Wales and Victoria (1987-2000) and Queensland and Western Australia (1991-2000) to examine the composition of vehicles involved in crashes. Changes to the vehicle fleet mix were considered when determining a 'Total Safety Index' (i.e. average risk of death or serious injury amongst motorists or unprotected road users in crashes involving light passenger

vehicles). Safety improvements of up to 26% were predicted if the crashworthiness and aggressivity ratings of all vehicles in a fleet were equal to that of the best vehicle when the study was conducted.

In 2008, Newstead et al. found that the average crashworthiness of a vehicle improves with year of manufacture. The findings imply that drivers of newer vehicles are less likely to be killed or seriously injured post-collision, compared to their counterparts in older vehicles. The authors suggest that the rate of serious and fatal crashes increases by 2.53% per year with vehicle age. Anderson et al. (2009) used the crashworthiness (the rate of serious and fatal crashes per crash of any severity) and the age of passenger vehicles to characterise the crashworthiness of the South Australian registered passenger vehicle fleet, compared to fleets in other jurisdictions, to conclude that there would be a "modest but measurable road safety benefit associated with reduction of the vehicle fleet age" (Anderson, 2009, p . 346).

These findings are consistent with changes to vehicle standards and more stringent safety measures introduced since the mid-1990's. Frontal airbags for example, have been a standard inclusion in all new vehicles since 1998, with dual-stage airbags standard since 2007. Torso-protecting side airbags, anti-lock brakes (ABS), traction control, electronic stability control (ESC) and an array of collision avoidance systems including forward-collision warning, automatic emergency braking, pedestrian detection, adaptive cruise control, blind-spot warning systems, rear-cross traffic alerts, lane departure warning, lane keep assist, active head restraints and parking assist systems are now optional extras or standard inclusions in many new vehicle models which contribute towards crash avoidance. Together, these safety features have enhanced vehicle safety and influence crash likelihood when travelling at a given speed (Carsten & Tate 2005, Erke 2008, Jamson et al. 2008, Strandroth et al. 2012, Fildes et al. 2015, Kusano & Gabler 2015, Harper et al. 2016, Dutschke et al. 2017).

3 QUANTIFICATION OF THE EXTENT OF LOW-LEVEL SPEEDING

3.1 ATTRIBUTION OF CRASHES TO RANGES OF SPEEDING

Estimates of the relative risk of a casualty crash related to the individual travel speed of vehicles provide a valuable link between speed observations and crashes in the same road environment. It is possible to predict the crashes associated with each speed range on a road, and thus consider countermeasures focused on the speeds that make the highest contribution to road trauma. Estimation of the fraction of crashes attributable to speeding in each illegal speed range was first demonstrated in Australia by Holman (2011).

In that study, Holman (2011) used Kloeden et al.'s (2002) relationship with absolute speed in conjunction with speed observations from 60 km/h speed zones in Perth during 2010. He estimated the "Population Attributable Risk Fraction" (PARF) associated with each illegal speed range, i.e. the fraction of crashes in 60 km/h speed zones attributable to the *increased* risk due to speeding. Table 4 (solid borders), which has been extracted from Holman (2011), shows the calculations, followed by definitions of the symbols used in the heading of each column.

Table 4: Calculation of population attributable risk for speeds in 60 km/h zones in Perth during 2010

Speed of vehicle	P	v	RR	PAR	p*RR	>60 km/h p*RR %
<60 km/h	0.534	60*	1.0	0.00	0.534	NA
60-69 km/h	0.396	65	1.8	0.16	0.713	46.3%
70-79 km/h	0.062	75	7.6	0.20	0.471	30.6%
80+ km/h	0.008	85	44.4	0.16	0.355	23.1%
Total	1.000	NA	NA	0.52	2.073	100.0%

Definitions and formulae

p = proportion of total vehicles travelling in this speed interval in 2010.

v = mid-point of this speed interval in km/h. *Exactly the legal limit of 60 km/h is used as the baseline for risk assessment.

RR = incidence rate of [casualty] crash at speed v relative to the legal speed limit of 60 km/h = $\text{Exp}[-0.822957835 - 0.083680149*v + 0.001623269*v^2]$ as estimated by Kloeden et al (2002).

PAR = population attributable risk in this speed interval = $p*(RR - 1)/(\sum p*(RR - 1) + 1)$ = proportion of [casualty crashes] attributable to speeding in this speed interval. (Walter 1976).

The rationale for the concept of PAR associated with crash risk factors is outlined by Elvik (2008). Its calculation for each level of a polytomous risk factor (as is the speed range factor used in Table 4) is defined by Walter (1976), who also suggests labelling the result as the “attributable fraction” of crashes associated with speeding in the specific speed range. In essence, the attributable fraction is the proportion of crashes that are estimated to result from the *increase in risk*, relative to that at 60 km/h, due to the speeding in the specific range. Some crashes apparently associated with speeding may be due to other factors that are present at legal as well as illegal speeds, and that the speeding may only add to that inherent risk.

Also shown in Table 4 (cells with dashed borders) is the expected relative crash frequency (p*RR). With this approach, it would be concluded that about twice the proportion of expected crashes *associated with speeding* lies in the 60-69 km/h range (46%) compared with the proportion above 80 km/h (23%). However, the PAR fractions estimated by Holman (2011) suggest that the fraction of casualty crashes *attributable to speeding* in 60 km/h zones is about the same for 60-69 km/h and above 80 km/h (0.16 or 16% in each case). The PAR fraction of crashes estimates the proportion of crashes due to speeding (for each speed range) in the most appropriate way.

3.2 USE OF KLOEDEN ET AL.’S MODELS OF RELATIVE RISK OF CASUALTY CRASHES

Holman’s (2011) analysis made use of Kloeden et al.’s (2002) relationship connecting the relative risk (RR) of a casualty crash with the free-speed (v) of individual vehicles travelling in 60 km/h speed zones:

$$RR_1(v) = \exp(-0.822957835 - 0.083680149*v + 0.001623269*v^2) \quad (\text{Equation 1})$$

Kloeden et al. (2002) also found a second relationship connecting relative risk with the difference (D) between free-speed (v) and the mean speed (m) at crash locations in urban areas:

$$RR_2(v) = \exp(-0.1133374*D + 0.00281717*D^2) \quad (\text{Equation 2})$$

where $D = (v - m)$. RR_2 takes value 1 when $v = m$.

If Equation 2 needs to represent relative risk of absolute speed (not speed difference) in urban speed limit zones other than 60 km/h, it needs to be rescaled to take value 1 at the speed limit, as RR_1 does (Cameron 2015).

$$\text{Rescaled } RR_2(v) = RR_2(v) / RR_2(\text{limit} - m).$$

In related research, Kloeden et al. (2001) found a relationship connecting risk with the difference (D) between free-speed (v) and the mean speed (m) at crash locations in rural speed zones from 80 to 110 km/h:

$$RR_3(v) = \exp(0.07039*D + 0.0008617*D^2) \quad (\text{Equation 3})$$

RR_3 also takes value 1 when $v = m$, so again needs to be rescaled like RR_2 to take value 1 at the speed limit if needed to represent relative risk of absolute speed in rural speed limit zones.

If p is the proportion of the total speed observations at a given speed, then $p*(RR(v)-1)$ is the contribution of that speed to the total attribution of all speeds to crashes. Speeds below the limit make a negative contribution using this model (i.e. they contribute to the prevention of crashes that would otherwise be expected if those vehicles travelled at the speed limit).

The sum of the $p*(RR(v) - 1)$'s for speeds, v , below the limit represents the contribution of speeds below the limit to reducing crashes that complements the contribution of speeds above the limit to increasing crashes. This is illustrated in Figure 8.

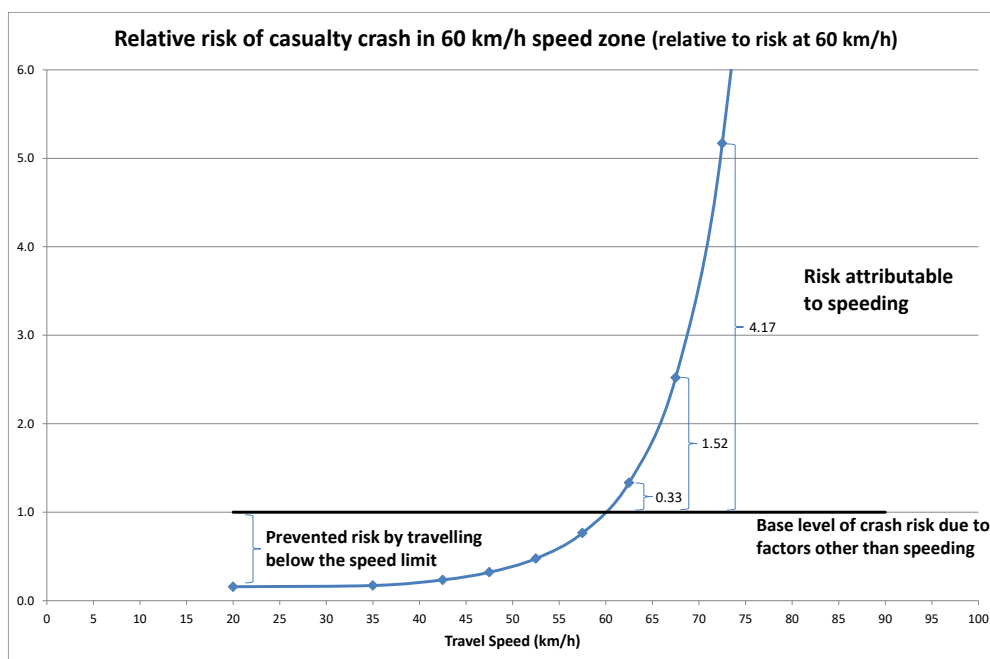


Figure 8: Kloeden et al.'s (2002) relative risk function, showing the component of risk attributable to speeding and the risk prevented by travelling below the speed limit

3.3 ELVIK ET AL.'S (2019) MODELS OF CRASH RISK FOR INDIVIDUAL SPEEDS

Following a series of studies re-assessing Nilsson's (2004) Power Model relating changes in the rate of crashes (at each injury severity level) with changes in mean travel speeds, Elvik (2013) proposed some exponential models linking crashes to mean speeds. Unlike Nilsson's model, the exponential model does not depend on the base mean speed when estimating the effect of a speed change. It better explains effects on urban roads, where the applicability of Nilsson's model has been questioned (Cameron & Elvik 2010). Elvik (2013) found that the coefficient of travel speed in the exponential model is substantially higher for fatal crashes than injurious crashes, reflecting the greater effect of mean speed changes on crashes with higher injury severity outcomes.

Elvik et al. (2019) updated his previous estimates of the exponential model to only include studies using crash data from 2000 to account for the effects of improved vehicle safety systems since the earlier studies he had considered in Elvik (2013). He concluded that the best current estimates of the mean speed coefficient in the exponential model are 0.08 for fatalities and 0.06 for injury crashes. Note that these estimates are applicable to relationships connecting fatal and injury crashes with mean travel speed, an aggregate measure of the travel speeds of groups of drivers, not the travel speed of individual drivers as with Kloeden et al.'s (2001, 2002) models shown in Equations (1) to (3) above.

In the same paper, Elvik et al. (2019) considered some exponential models of crash risk related to individual driver speeds, based on the data analysed by Kloeden et al. (1997a, 2001) and a preliminary Adelaide study by Moore et al. (1995). Following a critique of Kloeden et al. (1997a) by Hauer (2004), Elvik et al. used the Kloeden et al. data to measure casualty crash risk in each speed range by (number of crash cases)/(number of cases plus controls). Kloeden et al. (1997a) had effectively measured casualty crash risk by cases/controls and then rescaled this risk for each speed range so there was a relative risk of 1 at the speed limit. The effect of this is that Elvik's crash risk is bounded by 0 and 1, whereas Kloeden's is not, as will be shown below.

The exponential model fitted by Elvik et al. (2019) to their casualty crash risk is a linear function of the individual driver's travel speed, then exponentiated. This compares with the exponentiated quadratic function fitted by Kloeden et al. (2002) to the same urban crash and control speed data. Another way of looking at this is that the natural logarithm of casualty crash risk is a simple linear function, $A + B.v$, in the model fitted by Elvik et al. (2019), whereas it is a quadratic function, $A + B.v + C.v^2$, in Equation (1) above.

The key parameter in Elvik et al.'s (2019) exponential model of casualty crash risk is B , which the authors estimated in two ways using Kloeden et al.'s (1997a, 2001) data, either weighted or unweighted. From Kloeden et al.'s urban crashes and control speeds, they estimated B to range from 0.052 to 0.069. From Kloeden et al.'s (2001) rural crashes and control speeds, the estimate of B ranged from 0.026 to 0.030. Each had a small standard error of the estimate which was statistically significant.

3.4 RE-ANALYSIS OF KLOEDEN ET AL.'S (1997) URBAN CRASH AND CONTROL DATA

Table 5 shows the numbers of crash cases and controls in the speed ranges analysed by Kloeden et al. (1997a) in their urban 60 km/h speed limit study. Kloeden et al.'s estimates of relative risk and their confidence limits are also shown in Table 5 and Figure 9.

Table 5: Table 4.3 from Kloeden et al. (1997a)

Travelling Speed and the Risk of Involvement in a Casualty Crash Relative to Travelling at 60 km/h in a 60 km/h Speed Limit Zone

Nominal Speed	Speed Range	No. of Cases	No. of Controls	Relative Risk	Lower Limit*	Upper Limit*
35	33-37	0	4	0	-	-
40	38-42	1	5	1.41	0.16	12.53
45	43-47	4	30	0.94	0.31	2.87
50	48-52	5	57	0.62	0.23	1.67
55	53-57	19	133	1.01	0.54	1.87
60	58-62	29	205	1.00	1.00	1.00
65	63-67	36	127	2.00	1.17	3.43
70	68-72	20	34	4.16	2.12	8.17
75	73-77	9	6	10.60	3.52	31.98
80	78-82	9	2	31.81	6.55	154.56
85	83-87	8	1	56.55	6.82	468.77
-	88+	11	0	infinite	-	-
Total		151	604			

* 95% confidence limits of the estimated relative risk

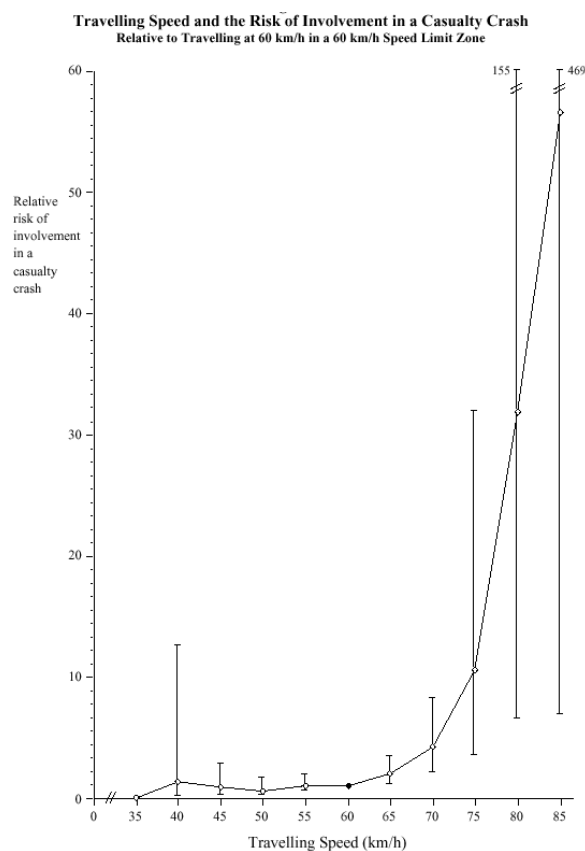


Figure 9: Figure 4.3 from Kloeden et al. (1997a)

Figure 10 shows the estimated casualty crash risks calculated by Elvik et al. (2019) and effectively calculated by Kloeden et al. (1997a) before rescaling to relative risks compared with the risk at the 60 km/h limit.

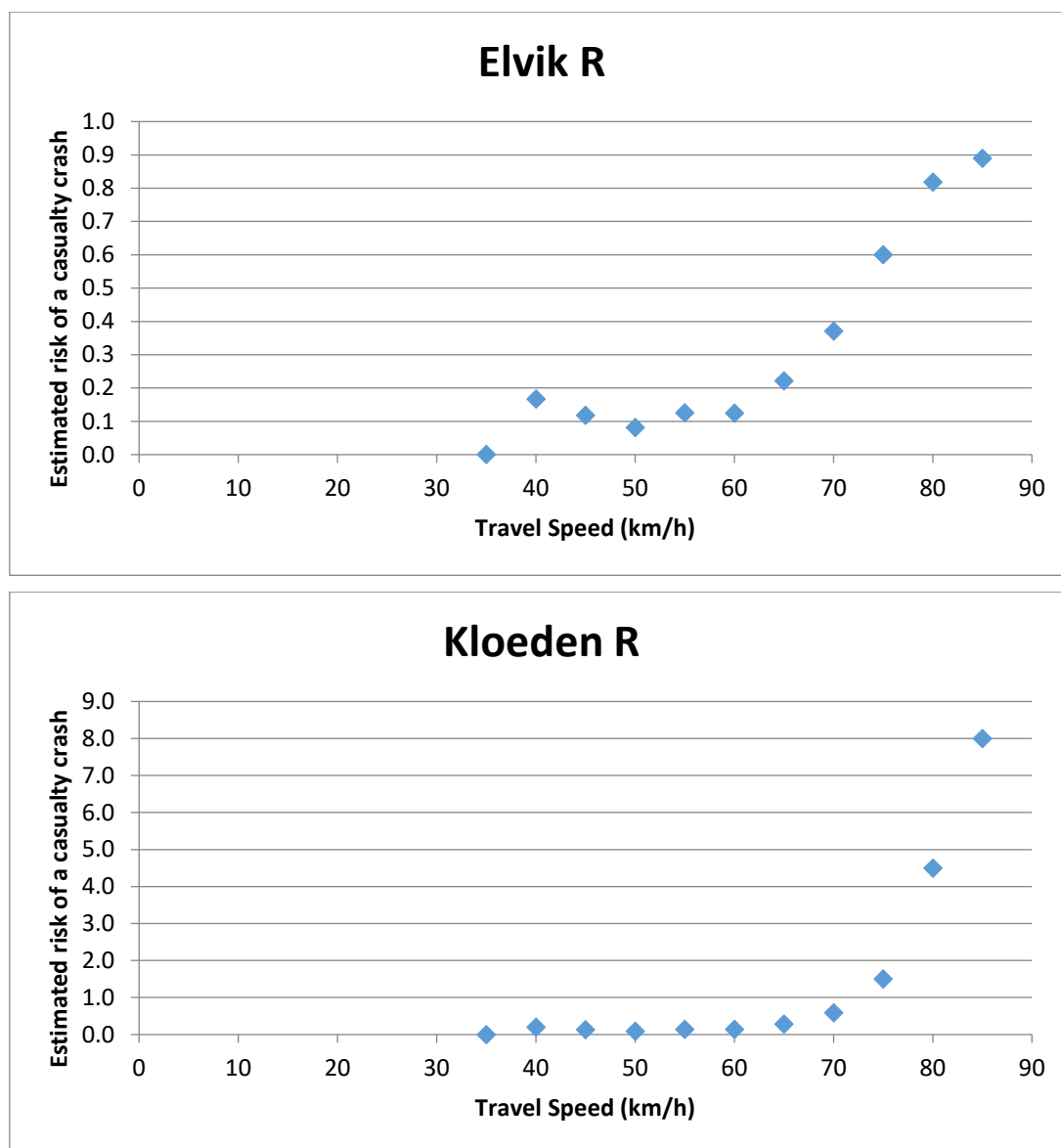


Figure 10: Elvik and Kloeden’s estimated risks of a casualty crash versus travel speed on 60 km/h limit roads

The natural logarithms of Elvik and Kloeden’s estimated risks are shown in Figure 11. A linear regression fitted to Elvik’s risk R logged shows an estimated coefficient of travel speed as 0.0515, corresponding to Elvik et al.’s (2019) unweighted estimate of the coefficient B in their simple exponential linear function model. Elvik et al. did not consider an exponential quadratic function of speed, but Figure 11 shows that this function would fit the data better as indicated by the higher proportion of the variation in logged risk explained (i.e., R^2) by the quadratic function ($R^2 = 0.91$) compared with the linear function ($R^2 = 0.79$).

A similar conclusion is reached from the fitting of linear and quadratic functions to Kloeden's risk R logged, also shown in Figure 11. The quadratic function of travel speed explains nearly all of the variation in Kloeden's R logged ($R^2 = 0.98$) and compares favourably with the linear function ($R^2 = 0.79$). This quadratic function can be compared with that fitted by Kloeden et al. (2002) in their re-analysis of the same data, but note that the estimated quadratic in Figure 11 has a much larger coefficient of v^2 than that in the re-analysis (Equation 1).

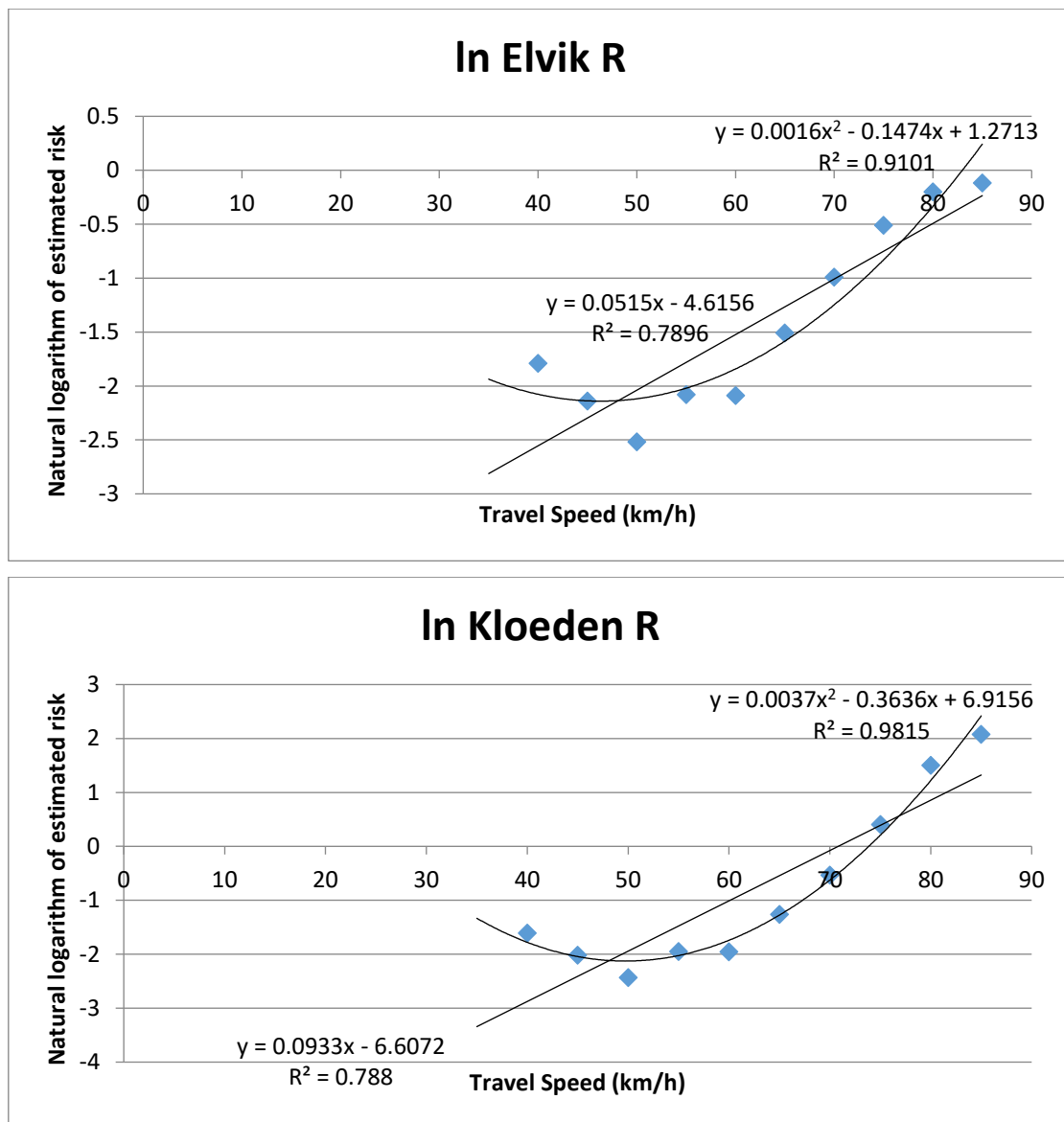


Figure 11: Natural logarithms (\ln) of Elvik and Kloeden's estimated risks of a casualty crash on 60 km/h limit roads

A characteristic of Elvik's risk R , both in raw or logged form, is for its increase to diminish as travel speed rises above 70 km/h (see Figure 10 and Figure 11). This suggests that there may be an upper boundary or asymptote for casualty crash risk as measured in the way Elvik et al. (2019) has chosen. Such an upper limit is not so apparent in the case of Kloeden's risk R , but Cameron (2015) hypothesised that such a limit must exist and imposed caps on Kloeden et al.'s (2001, 2002) relative risk functions at the higher speed levels analysed.

To test this hypothesis, a cubic function of travel speed was fitted to Elvik's risk R logged (Figure 12). This fitted the data better ($R^2 = 0.99$) than the quadratic function ($R^2 = 0.91$). While this functional form may not be the most realistic representation of an upper limit to casualty crash risk at higher speeds, it does not support the unlimited increase in risk implicit in the exponential linear and quadratic models fitted in Figure 11.

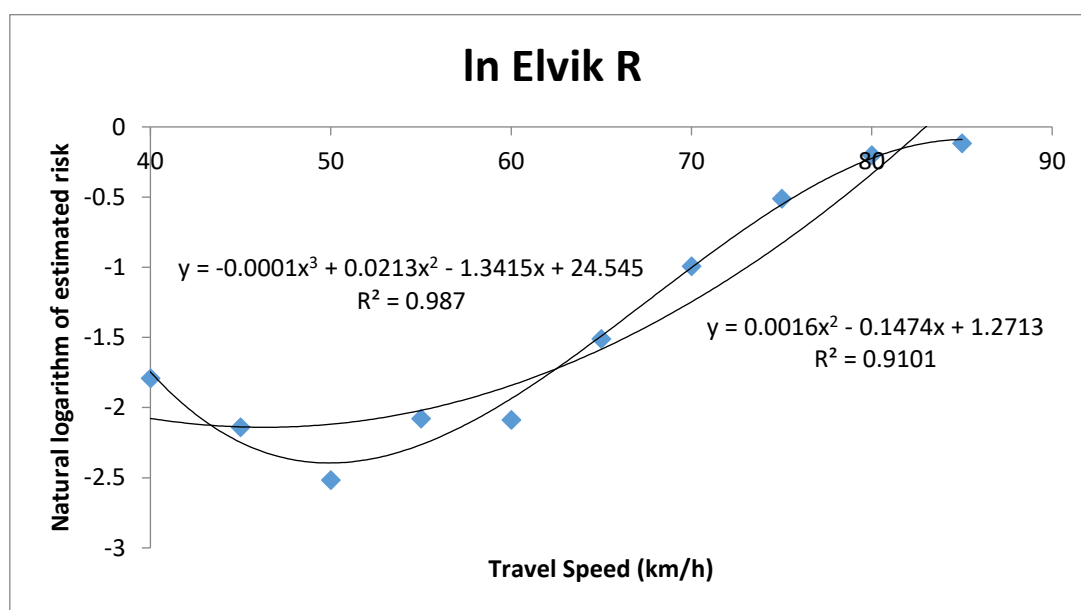


Figure 12: Quadratic and cubic functions fitted to natural logarithms (\ln) of Elvik's estimated risks of a casualty crash

3.5 RE-ANALYSIS OF KLOEDEN ET AL.'S (2001) RURAL CRASH AND CONTROL DATA

To fit Elvik et al.'s (2019) simple exponential model to the individual motorists' travel speeds on rural roads they extracted the data shown in

Table 6 from Kloeden et al.'s (2001) report, presumably Appendix B. The case and control numbers in columns 2 and 3 do not correspond exactly with Figures 3.1 and 3.3 in Kloeden et al. (2001), presumably because Elvik et al. (2019) have chosen different speed groups and the nominal speed (mid-mark) to represent each group.

Table 6: Cases and controls extracted by Elvik et al. (2019) from Kloeden et al. (2001) and calculated risk estimates

Speed [nominal]	Cases	Controls	Total	Elvik risk R	Kloeden risk R	Kloeden relative risk RR
35	0	2	2			
45	1	25	26	0.038	0.040	0.431
55	4	68	72	0.056	0.059	0.634
65	7	111	118	0.059	0.063	0.680
75	9	162	171	0.053	0.056	0.599
85	14	151	165	0.085	0.093	1
95	12	139	151	0.079	0.086	0.931
105	7	117	124	0.056	0.060	0.645
115	21	44	65	0.323	0.477	5.148
125	3	9	12	0.250	0.333	3.595
155	5	2	7	0.714	2.500	26.964
Total	83	830				

As with their analysis of the urban cases and controls, Elvik et al. (2019) measured casualty crash risk at each speed level by (number of crash cases)/(number of cases plus controls). To maintain consistency with the urban comparative analysis (Section 3.4), we define a 'Kloeden' measure of casualty crash risk as cases/controls. The two measures of casualty crash risk are shown in Figure 13.

Kloeden et al. (2001) did not estimate the relative risk of a casualty crash in each rural speed range in a similar way as Kloeden et al. (1997a) as shown in

Table 6. First, because the crash cases occurred in many rural speed limit zones, they focused on the difference between the case travel speed (v) and the average speed (m) of the 10 control vehicles surveyed for each case at the same location and time of day a few weeks later. Second, an exponential quadratic function of $D = (v - m)$ was developed to estimate the relative risk of a casualty crash, relative to the risk at the average speed, as shown in Equation 3 in Section 3.2. Elvik et al. (2019) pooled all the cases and controls across the rural speed limit zones (see

Table 6) and ignored Kloeden et al.'s (2001) normalisation achieved by subtracting the average control speed from each case's travel speed.

Figure 13 shows the estimated casualty crash risks calculated by Elvik et al. (2019) and also the Kloeden-based estimates as defined here. A simple exponential model of travel speed has been fitted in each case. The estimated parameter $B = 0.0255$ when fitted to Elvik's R corresponds to that estimated by Elvik et al. (2019) from the data in

Table 6 unweighted.

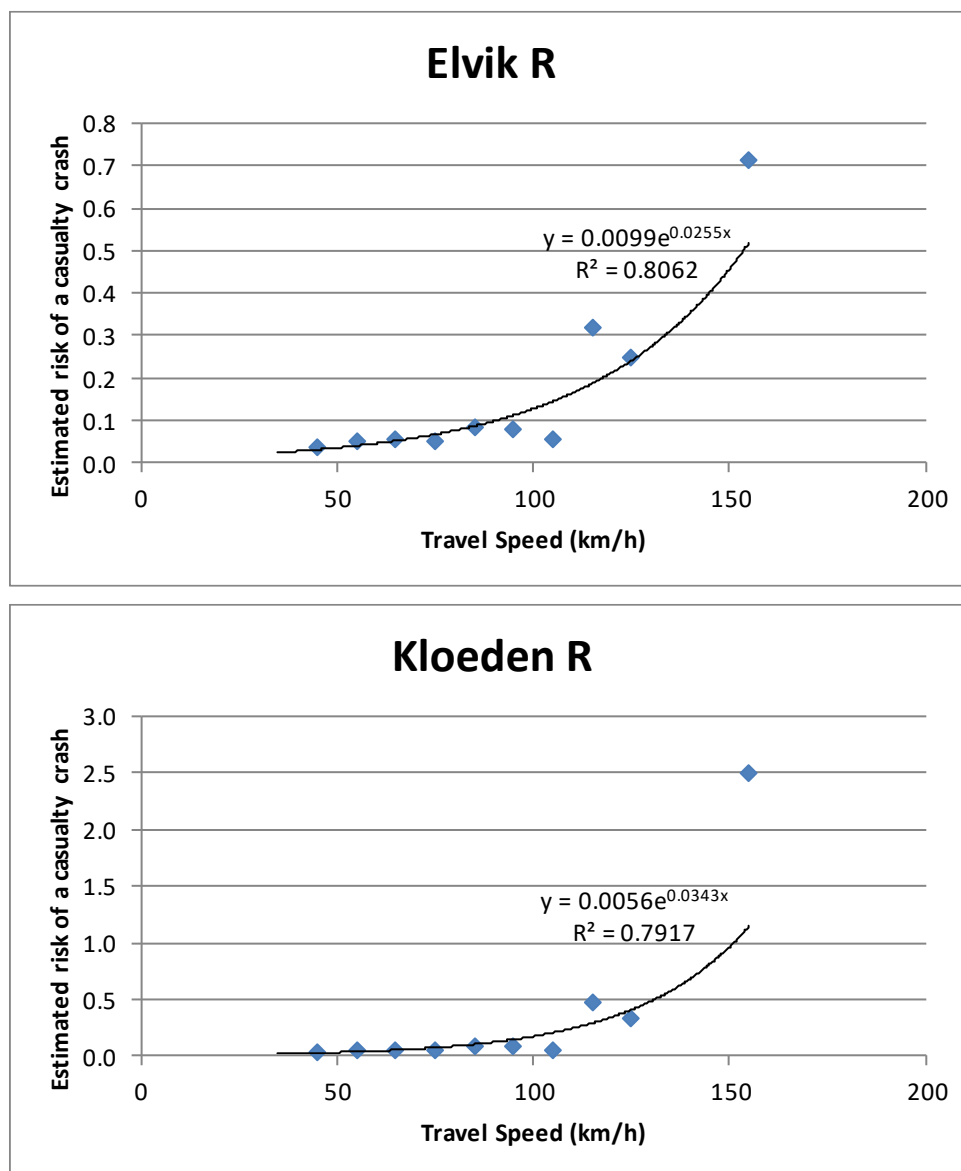


Figure 13: Elvik and Kloeden's estimated risks of a casualty crash versus travel speed on rural roads

The natural logarithms of the Elvik and Kloeden estimated risks are shown in Figure 14. The linear models fitted to the logged risks correspond directly to the exponential models fitted in Figure 13. Neither of the models fit the data well, especially at higher speeds, and explain at most about 80% of the variation in risk.

Figure 14 shows that an exponentiated quadratic function would fit Elvik's risk better ($R^2 = 0.86$) than a simple exponential model ($R^2 = 0.81$). An exponentiated quadratic function would also be a better fit to the Kloeden estimated risks as defined here ($R^2 = 0.99$) than a simple exponential model ($R^2 = 0.79$).

Unlike the findings from the re-analysis of Elvik et al.'s (2019) estimated risk on 60 km/h roads, there is no indication that their estimated risk on rural roads has an upper limit or asymptote as travel speed increases.

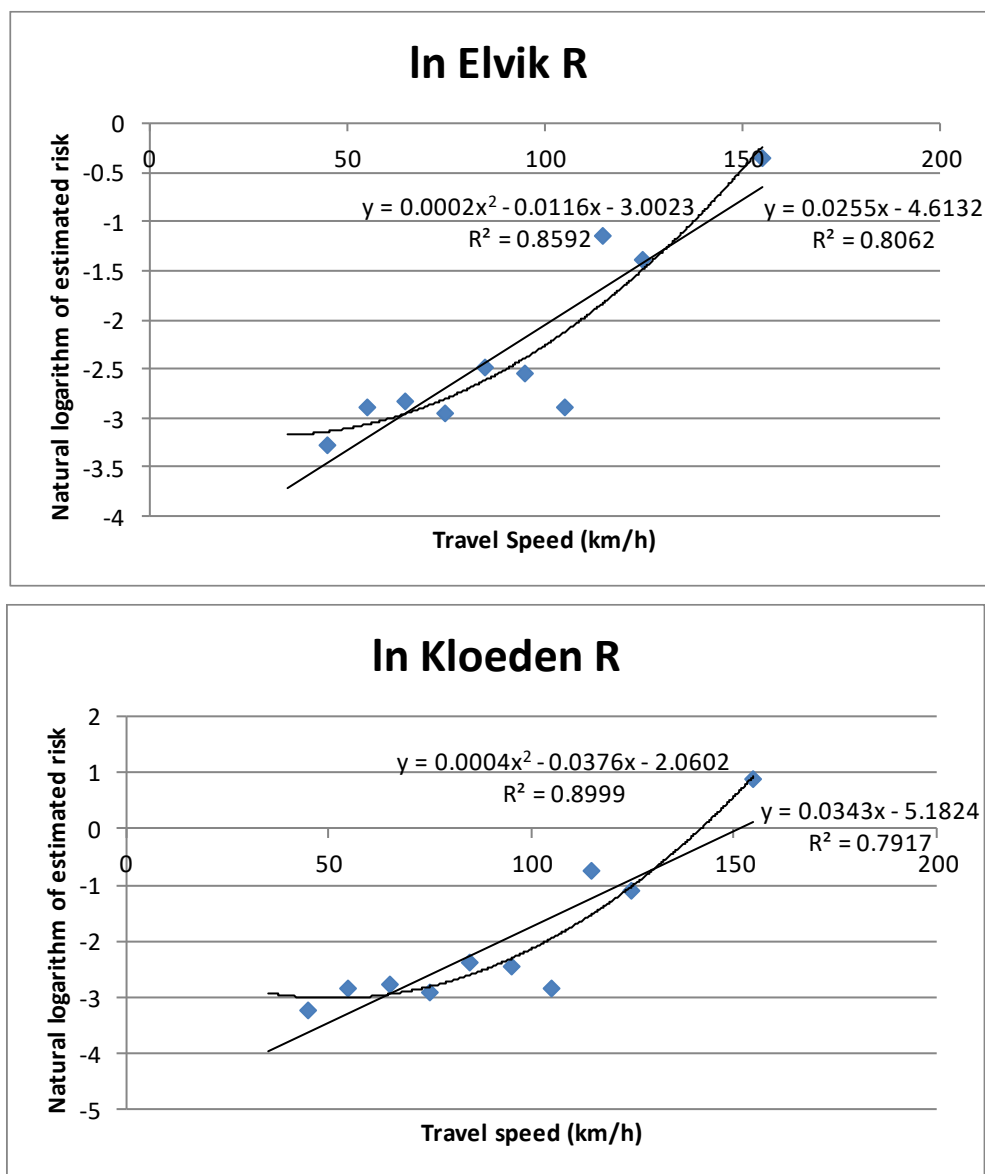


Figure 14: Natural logarithms (ln) of Elvik and Kloeden's estimated risks of a casualty crash on rural roads

3.6 CONCLUSIONS FROM RE-ANALYSIS OF KLOEDEN ET AL (1997, 2001) DATA

The following conclusions were reached from Elvik et al. (2019) and the above re-analysis of Kloeden et al.'s (1997a, 2001) crash cases and control data regarding models of casualty crash risk:

- Elvik et al.'s (2019) exponentiated linear function of travel speed does not adequately represent variations in casualty crash risk on urban or rural roads
- An exponentiated cubic function of travel speed provides a highly representative model of Elvik's casualty crash risk estimates on urban roads

- Exponentiated quadratic functions of travel speed provide good representation of both the Elvik and Kloeden casualty crash risk estimates on rural roads, with the model for the Kloeden risk being marginally superior.

In practice, the population attributable risk estimate requires only the relative risk of a casualty crash in each speed range, relative to the risk at the speed limit. Figure 15 shows the logged relative risk on urban roads, relative to 60 km/h, based on Elvik’s risk, and the fitted cubic function. The function developed by Kloeden et al (2002), i.e. Equation (1) above, is also shown for comparison.

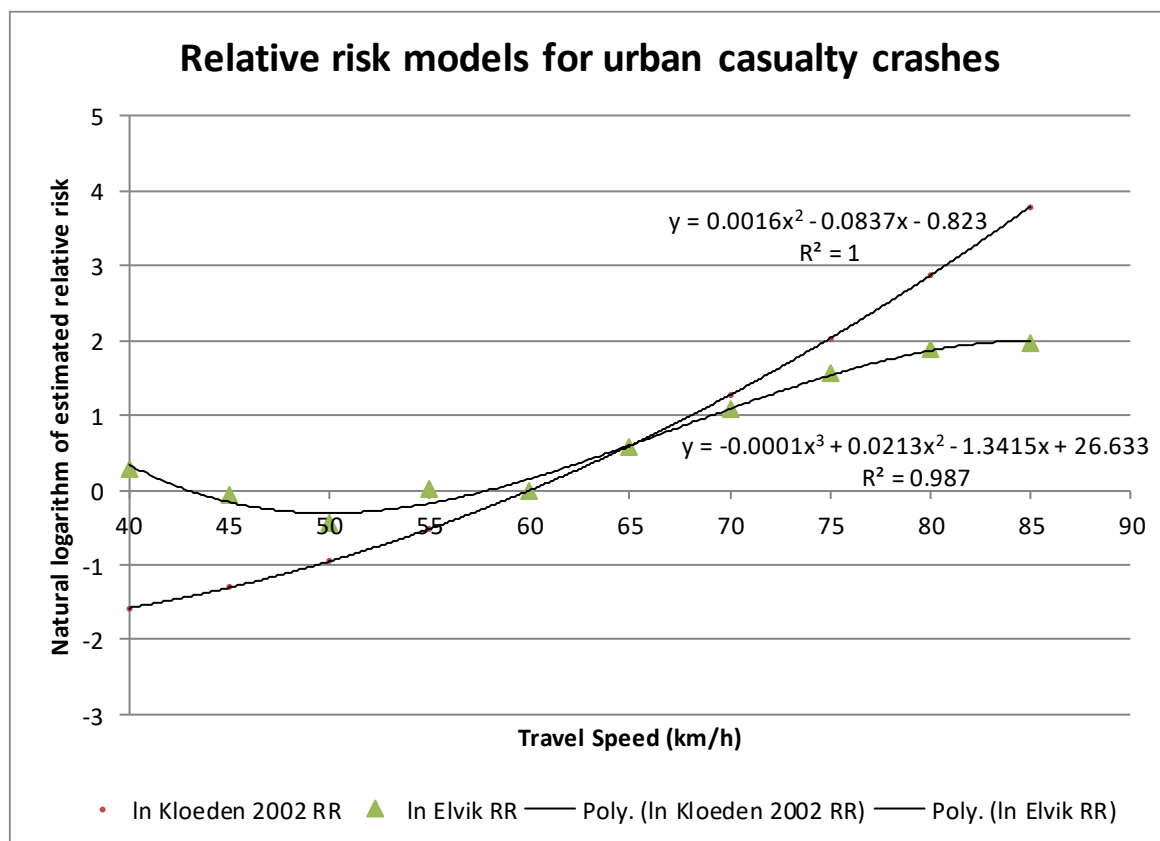


Figure 15: Natural logarithms of Elvik casualty crash risk relative to 60 km/h on urban roads. Estimated from raw data in Kloeden et al. (1997) and as developed by Kloeden et al. (2002)

Figure 16 shows the logged relative risk on rural roads, relative to 85 km/h, based on Kloeden risk, and the fitted quadratic function. The reference speed of 85 km/h was chosen because of its proximity to the average speed of 83.3 km/h found in the 830 control vehicles surveyed by Kloeden et al. (2001). Also shown for comparison is the function developed by Kloeden et al. (2001), i.e. Equation (3) above, for travel speeds relative to a mean speed of 85 km/h.

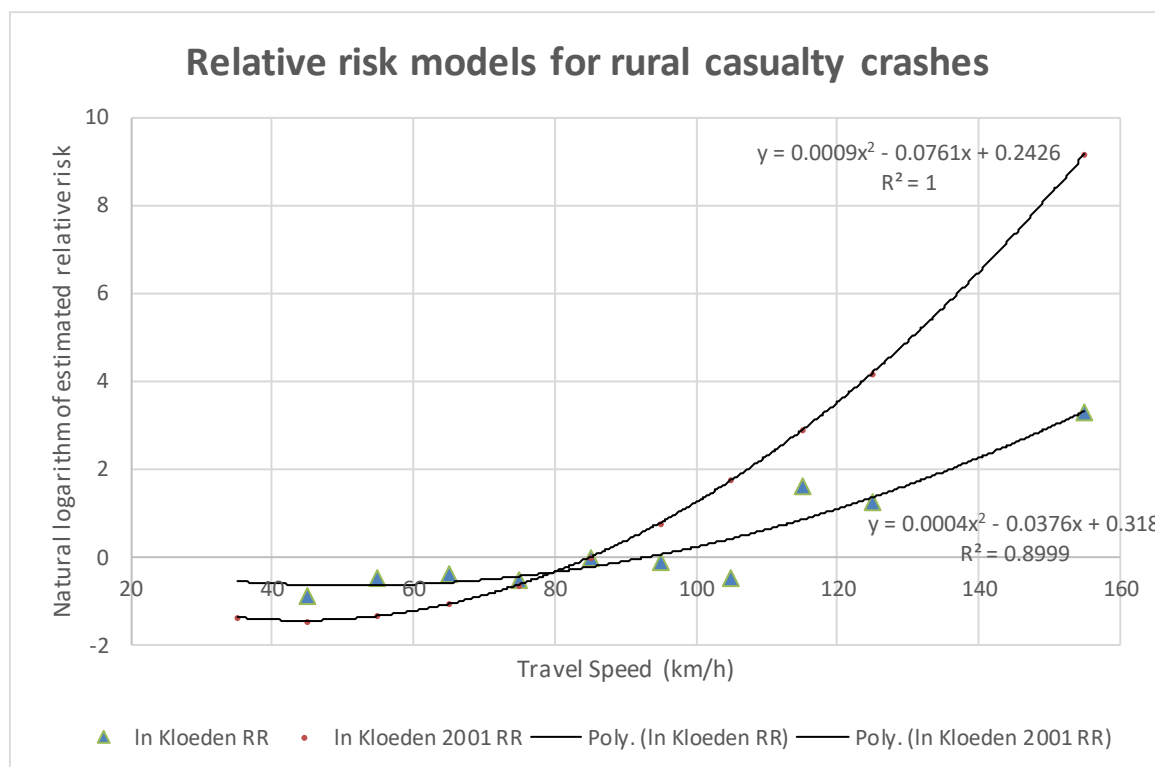


Figure 16: Natural logarithms of Kloeden casualty crash risk relative to 85 km/h on rural roads. Estimated from raw data and as calculated by Kloeden et al. (2001)

3.6.1 GENERAL MODEL

A simple model of the risk of a severe injury crash at a given travel speed $R(I, \text{ given } v)$, presuming crash risk and severity are independent measures, is:

$$R(I, \text{ given } v) = \text{Crash Risk (given } v) \cdot \text{Injury Risk (given crash at } v)$$

The known risk relationships are generally for:

1. Casualty crash risk related to an individual motorists' travel speed (on urban and rural roads, but not by crash type)
2. Severe injury risk (fatal, serious) of [generally] injured occupants or pedestrians, related to impact speed in various crash types
3. Impact speed related to travel speed, for given crash types and configurations of impacts.

Thus, the simple model could be rephrased as:

$$R(I, \text{ given } v) = \text{Casualty Crash Risk (given } v) \cdot$$

$$\text{Severe Injury Risk (given type of casualty crash at impact speed = function}(v))$$

The models of casualty crash risk related to travel speed in Sections 3.2 to 3.5 above are all related to crashes of any type, except for crash types more frequent on urban and rural roads, respectively. If it can be assumed that the urban and rural models represent the probability of crashing in general, and the probability is not selective of the crash type, then the crash risk models could have general applicability.

If $E(\text{crash type})$ is the proportion of casualty crashes of each type (i.e. the exposure of injured occupants or pedestrians to the risk of severe injury in the given crash type), then aggregating over all crash types:

$$R(I, \text{given } v) = \text{Casualty Crash Risk (given } v) * \sum \text{Severe Injury Risk (given casualty crash type at impact speed = function}(v)) * E(\text{crash type})$$

3.6.2 RELATIONSHIPS BETWEEN TRAVEL SPEED AND IMPACT SPEED

The crashed motorist records analysed by Kloeden et al. (1997a,b) were obtained by Diamantopoulou et al. (2003) and matched with information in South Australian Police crash reports to enhance the information about the crashes not otherwise recorded. As well as the estimated travel speed for each individual motorist, the records included the estimated impact speed (see Figure 17).

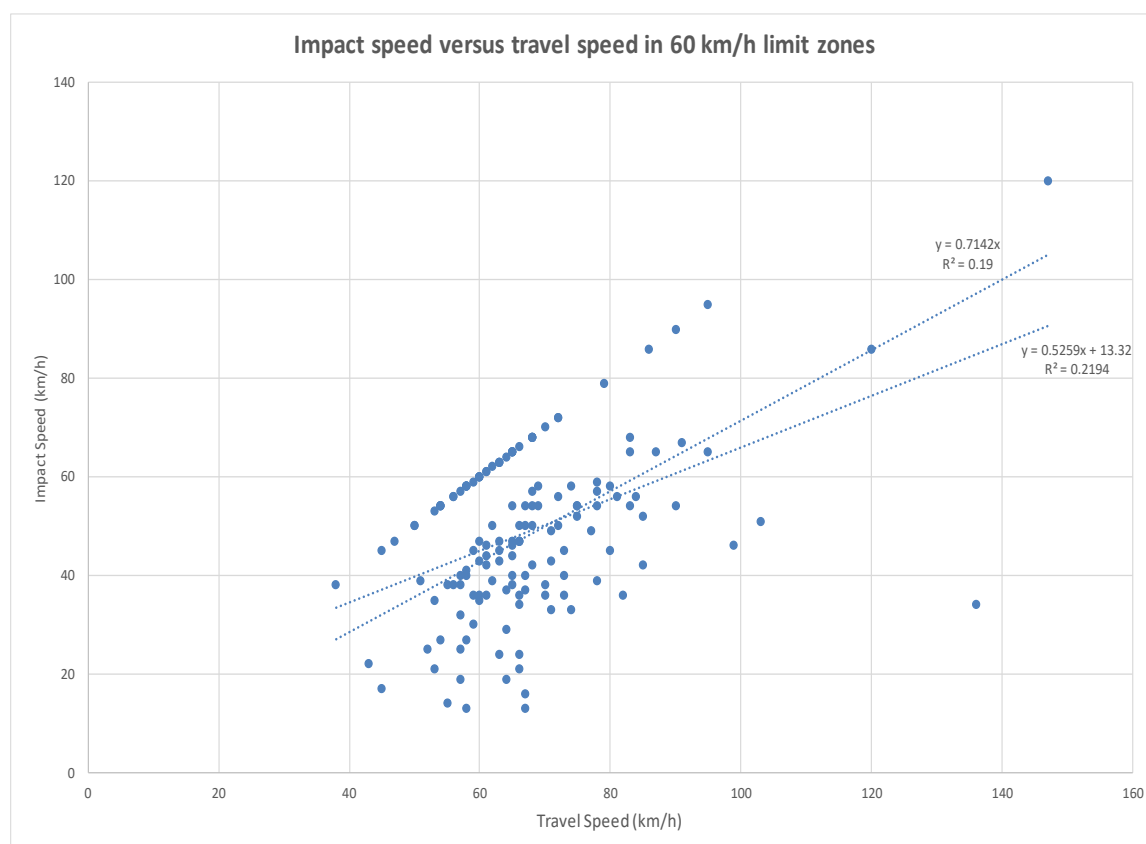


Figure 17: Estimated impact speeds and travel speeds of crashed drivers in Adelaide 1995-1996

It can be seen that fitted linear relationships between travel speed and impact speed do not fit the data well. There are a number of cases where the impact speed was assumed to be the same as the travel speed, and when these were removed from the comparison (see Figure 18), a fitted relationship suggested that the impact speeds were about 62% of the travel speeds. In this data there appears to be at least two functional relationships: crashes with impact speed substantially less than the travel speed (perhaps due to driver emergency braking) and crashes where there was no braking and the impact occurred at full travel speed.

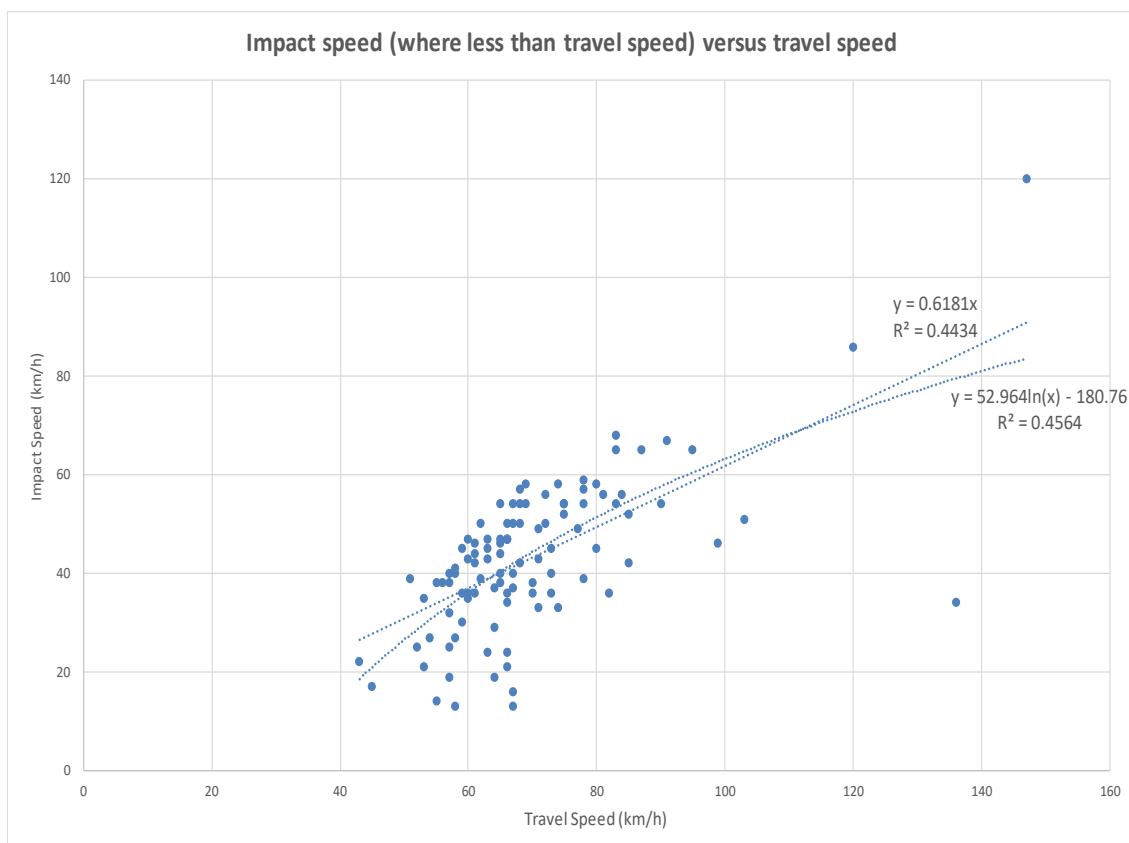


Figure 18: Estimated impact speeds less than the travel speeds

3.6.3 IMPLICATIONS FOR GENERAL MODELS OF FATAL AND SERIOUS INJURY RISKS

There is limited research data in Australia connecting travel speeds and impact speeds in a reliable way. Such research requires in-depth investigation of crashes and analysis that reconstructs the crash circumstances to estimate these two fundamental speeds in each crash case. It can be seen from Figure 17 and 18 that only in a fraction of real urban crashes can it be concluded that the travel speed and the impact speed were the same. In the remaining crash cases, Figure 18 suggests that there are many other crash factors that distort any direct relationship between travel speed and impact speed, such as the crash configuration, road surface condition, and motorist reaction time.

It was concluded that it was not feasible to build general models of the fatal and serious injury risks related to travel speeds from the base relationships connecting casualty crash risk with travel speed. This is because there is a need for reliable relationships connecting impact speed with travel speed in Queensland that take into account the crash configuration and other influential factors. It is understood that no in-depth investigation of crashes in Queensland has been undertaken in recent years that would allow relationships between travel and impact speeds to be established.

The implication of this conclusion is that the PAR method can only be applied to casualty crashes, and that the fractions of crashes attributable to each speeding range can be estimated only for casualty crashes in Queensland. The next section of the report describes how the relative risk functions given in Section 3.6 are applied to speed data collected in each speed limit zone on Queensland roads to estimate the fraction of casualty crashes attributable to each level of speeding.

4 ESTIMATION OF THE EXTENT OF LOW-LEVEL SPEEDING METHOD

This section outlines the means by which MUARC addressed the specific research tasks identified by TMR in order to identify the crash risk(s) associated with low-level speeding across Queensland's roads. This analysis provides information to help TMR identify geographic locations and speed environments where low-level speeding is prevalent and where speeds are excessive. The preceding section outlines how the speed data provided by TMR was analysed.

4.1 HERE SPEED DATA

Central to the quantification of crash risk associated with low-level speeding are estimates of the proportion of the vehicle fleet travelling at each speed within a given speed zone.

The initial analysis method proposed to TMR to determine the crash risk associated with low-level speeding involved the use of speed survey data that has historically been collected across Queensland through the use of pneumatic tube-based surveys. These counts were conducted at sites across the road network on an annual basis, with the 2016 counts conducted at 189 sites. However, in recent years TMR has utilised speed GPS probe data provided by HERE technologies as an alternative method for monitoring speed performance across the Queensland road network.

Compared to the historic tube-based surveys, the HERE data provides a more robust and comprehensive data set with speed estimates collected throughout the year over virtually the entire road network, as opposed to a single annual speed survey conducted at a finite number of selected sites. Therefore, the HERE data provides greater coverage of the Queensland road network compared to the historic tube surveys.

4.2 LIMITATIONS OF THE HERE SPEED DATA

Notwithstanding the quality and quantity, there are some noted limitations with the HERE data. These limitations have previously been identified by Housten Kemp in their report, *The Use of Speed Probe Data to Support Future Road Safety Programs* (Kemp et al. 2017). Most notably, the report highlights statistically significant differences between the speed measurements when comparing the two methods of data collection (pneumatic tubes vs. speed probe data), with HERE speed GPS probe data consistently detecting lower average speeds. The lower average speeds detected by the probes are likely to be due to the HERE data estimating speed along road links, as opposed to spot-speed measurements from traditional tube-based surveys. As such, this is likely

to result in estimates of the proportion of vehicles travelling at each speed to be lower than estimates obtained from previous research.

In addition, it is noted that while the HERE data covers a significant proportion of the Queensland road network, with approximately 900,000 road links across the state, it does not collect information on every road.

Furthermore, the road links are not consistent in length, with each link instead representing a section of road with a unique geometry and a constant speed limit.

The following limitations are acknowledged and conclusions from this study will be drawn with due reference:

- Unavailability of vehicle headway data (i.e. the time between the front axles of two vehicles passing the same point, or an equivalent measure), which allows for a more accurate measure of a vehicle's free speed to be gauged. This cannot be determined using the speed probe data. The data presented to MUARC includes speeds for all vehicles, even during periods of traffic congestion (the old tube data only included vehicles with a minimum four seconds headway).
- The speed probe data collects speeds from all vehicles. HERE technologies provided the data separated into passenger vehicles and heavy vehicles. It is not clear if further specificity of the data is possible.
- Coverage of the probe data is currently limited and estimated to capture speeds for less than 5% of all vehicles on Queensland roads. Coverage is expected to increase in the future which may have implications for longitudinal analyses.
- Each vehicle/motorist can contribute to multiple data points within the probe dataset, by driving along a long section of road with multiple road links. As such the figures presented in this report may represent multiple observations of the same vehicle. Noting this limitation, the results from this point forward in the report are referred to more generally as passenger vehicle motorists and heavy vehicle drivers.
- Missing and incomplete variables for some readings.

In order to investigate the suitability of the HERE probe data for the extended analysis and to develop a suitable methodology, a sample of HERE speed probe data was provided to MUARC by TMR.

4.3 PRELIMINARY ANALYSIS OF HERE SPEED DATA

The sample speed data provided to MUARC presented one line of data for each road link, binned over a five-minute time period. The data consisted of a vehicle count, and with respect to the speeds at which these vehicles were travelling, provided the mean, standard deviation, a measure of confidence and percentile bands of speed at five percent intervals.

4.3.1 LOGAN CITY SAMPLE DATA

The speed probe data provided was from the Logan City Local Government Area (LGA), located in South East Queensland, south of Brisbane. The Logan LGA contains 70 suburbs with a mixture of urban, semi urban and rural areas. Probe data was provided for 66 suburbs within Logan from 1 May 2019 to 3 June 2019. Data was provided for each road link monitored by the HERE probes within the Logan LGA road network at five-minute summaries and binned into 19 percentile speed bins (ranging from 5th to 95th percentile speeds).

Using this data, percentile speeds were weighted using the count for each time period. This provided an approximate distribution of travel speeds. Next, the distributions for each five-minute summary period were combined to create a speed distribution for the full data set. Finally, data was stratified by speed limit to produce a distribution of travel speeds within each speed zone. An example distribution of vehicle travel speeds in 80 km/h speed environments within Logan is shown in Figure 19, which shows the proportion of vehicles travelling at each speed in 1 km/h increments (blue) and the cumulative percentage (orange) of vehicle travel speeds in the 80 km/h speed zones within Logan City.

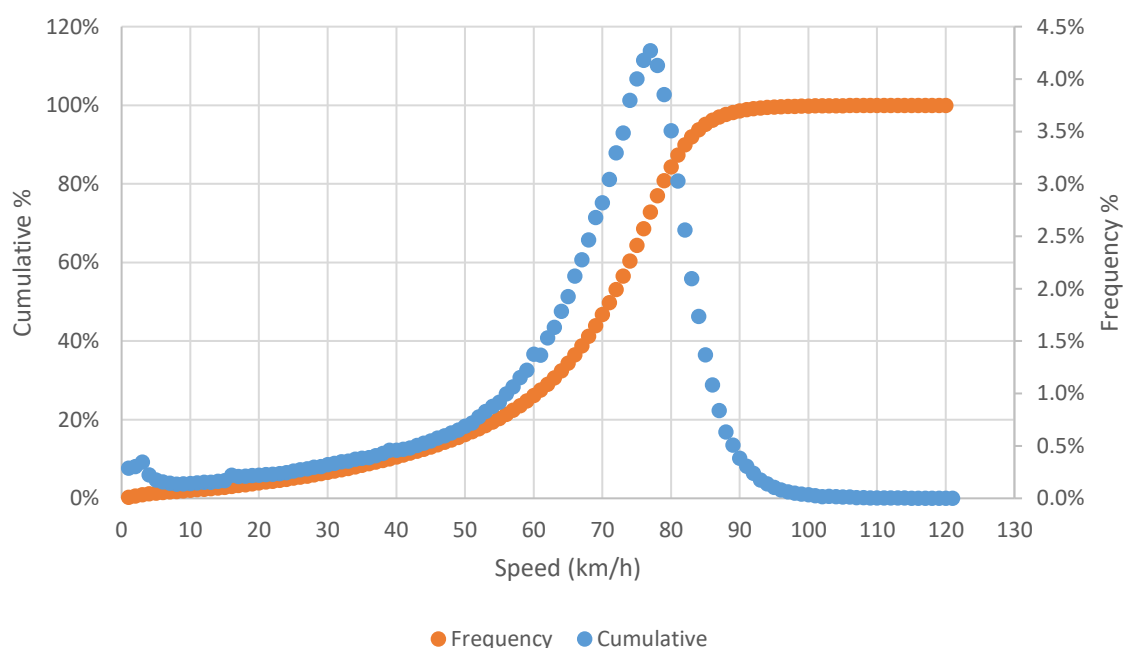


Figure 19: Speed distribution within 80 km/h signed speed zones, Logan LGA (1 May 2019 to 3 June 2019)

The data presented in Figure 19 demonstrated that the key variables required for casualty crash risk estimation can be extracted from the HERE data. This preliminary analysis confirmed that the HERE speed probe data from other regions within Queensland can be combined and used for the analysis and stratified by variables of interest, such as speed environment, location and time period for estimating the proportion of vehicles engaging in low-level speeding.

Due to the manner and frequency in which the speed probe data is collected, there was a considerable volume of data associated with each road link over any given period. As a result, there were various methodological issues associated with using large data volumes in terms of processing times and output. The preliminary analysis of the Logan City data, for example, represented approximately 52 million vehicle speed records over a one-month period and contained approximately 2.7 gigabytes of raw data. As such, a sample frame (detailed in the following section) was developed.

4.4 HERE DATA SAMPLE FRAME

Given that it was beyond the scope of this project to analyse the full HERE probe data set due to its volume, it was more appropriate to sample the data and use a data set representative of travel speeds across the Queensland road network in order to address the research questions.

4.4.1 DAYS OF WEEK

Using the sample Logan City LGA data, the distribution of speeds for all seven days of the week were plotted to ensure that there was sufficient similarity between the speed distributions over weekdays and weekends. The preliminary plotting of speed distribution (in an 80km/h zone) showed that speeds are consistently higher on weekends, indicating that low-level speeding may be more prevalent on weekends. Figure 20 also provided justification as to why selecting data from one weekday and one weekend day over a 12-month period will be sufficient to conduct the analysis and address the research questions.

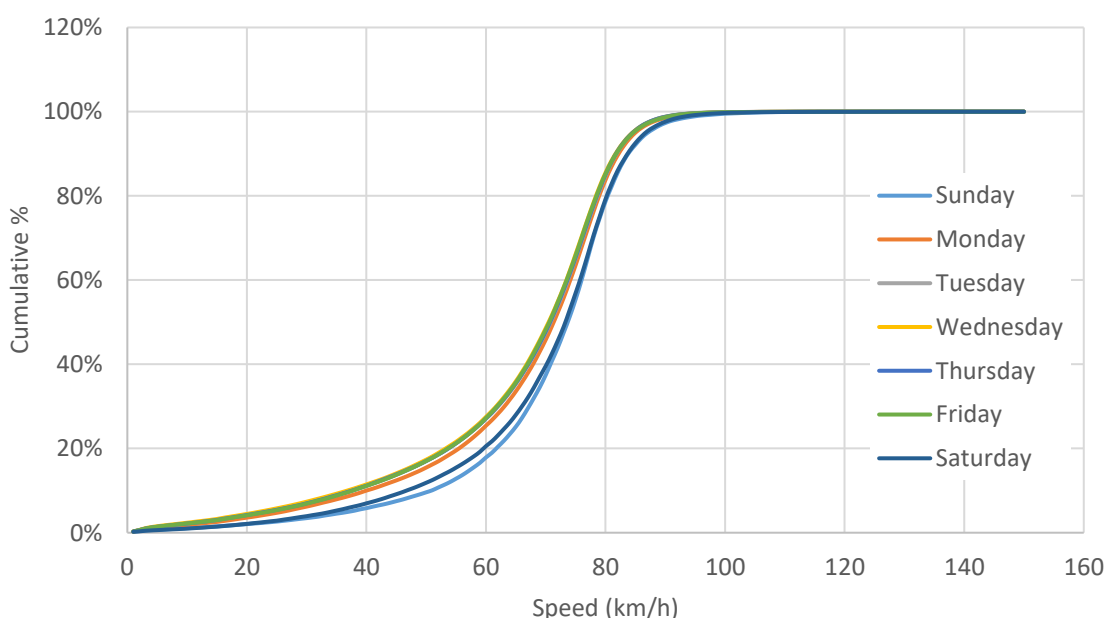


Figure 20: Cumulative speed distribution by day of week within 80km/h signed speed zones, Logan LGA (1 May 2019 to 3 June 2019)

Therefore, MUARC requested vehicle speed records collected from each Wednesday (to represent a weekday) and each Saturday (to represent a weekend day) over a 12-month period across the Queensland road network.

4.4.2 SUMMARY OF THE REQUESTED DATASET

A summary of the requested data is provided in Table 7.

Table 7: Proposed HERE probe data parameters

Data parameter	Requested output
Epic	60 min
Area	All SA1s in Queensland
Date Range	1 weekday (Wednesday) and 1 weekend day (Saturday) per month for 12 months

In order to adequately represent speed-related trends during each day while limiting the volume of data, MUARC requested that speed data be extracted at 60-minute intervals.

4.5 ANALYSIS OF THE PASSENGER VEHICLE DATASET

The passenger vehicle data set provided to MUARC consisted of speed data from 43,060,497 probe recordings of passenger vehicle motorists. As previously noted, it is possible that these recordings include multiple observations of the same vehicle, however for simplicity these will be referred to generally as passenger vehicle motorists throughout the report. The frequency (Figure 21) of vehicle speeds along the road links across Queensland where speed probe data collected was plotted. These figures provide a broad overview of passenger vehicle speed distributions across the Queensland road network. More refined estimates of crash risk are provided by disaggregating the data based on the various spatial and temporal variables included in the dataset and matching these data through spatial linkages to other datasets (see Section 4.6).

Note that throughout the analysis, the term *passenger vehicle motorist* has been used when referring to drivers of passenger vehicles including drivers of cars and motorcycle riders. The term *heavy vehicle drivers* refers to drivers of heavy vehicles.

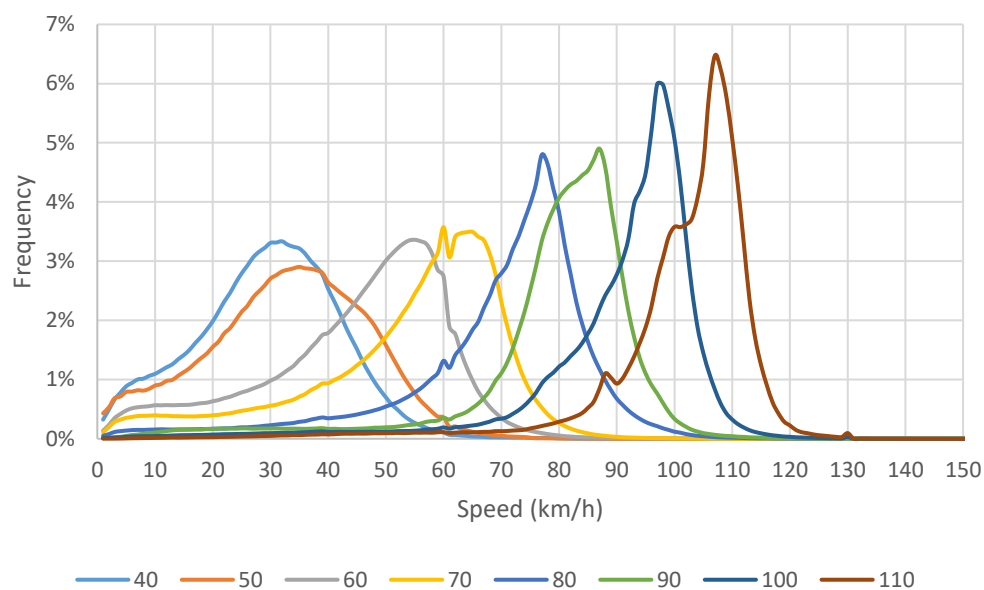


Figure 21: Passenger vehicle speed frequency distributions by speed limit zone, all Queensland data, 2018

4.5.1 HEAVY VEHICLES

When providing MUARC with the data set, TMR identified that heavy vehicles were over-represented in the HERE data. As a result of this, and in recognition that not all analysis methods applied to passenger vehicle motorists are applicable to heavy vehicle data, data for heavy vehicles and passenger vehicle motorists were extracted and analysed separately. The sample of heavy vehicle data consisted of speed data from 49,460,729 speed probes from heavy vehicles. As per the data for passenger vehicle motorists, this may include multiple probes from the same heavy vehicle.

It is noteworthy that the equations which translate vehicle speed to attributable crash risk have been historically derived from data pertaining to passenger vehicle speeds and passenger vehicle crashes, and as such, these equations cannot be meaningfully applied to heavy vehicle data. The literature regarding casualty crash risk involving heavily vehicles is not comprehensive and consequently the PARF analysis (described in Section 3) will not be applied to the heavy vehicle dataset. Notwithstanding this limitation, the analysis provides estimates of the proportion of heavy vehicle drivers engaging in low-level speeding across Queensland.

4.6 LEVELS OF DISAGGREGATION

In order to ensure a comprehensive speed analysis was provided to TMR, MUARC proposed a matrix of temporal and spatial disaggregation of the speed data by each speed limit/zone. The levels of disaggregation proposed are shown in Table 8. A more detailed description of the spatial levels of disaggregation are provided in the following sections.

Table 8: Data disaggregation variables

Variable Type	Variable	Level of Disaggregation	Specifics
Spatial	ABS Remoteness Structure	Major Cities	Based on road link centroid
		Inner Regional Australia	
		Outer Regional Australia	
		Remote Australia	
		Very Remote Australia	
ABS SA4	19 SA4 in Queensland		
Temporal	Time of Day	Morning peak	6:00am – 9:59am
		Afternoon peak	3:00pm – 6:59pm
		Off peak	10:00am – 2:59pm
		Evening	7:00pm – 10:59pm
		Late night/ Early morning	11:00pm – 5:59am
	Day of week	Weekday	Wednesday
		Weekend day	Saturday
Month of Year	12 months		
Vehicle type	Vehicle type	Passenger	As per HERE classification
		Heavy	

4.6.1 SPATIAL AGGREGATION

Two levels of spatial aggregation were used as per classifications from the Australian Bureau of Statistics (ABS) and the road network for Queensland provided by HERE. The first level of aggregation uses the remoteness structure classification, which describes five geographic areas based on the Accessibility and Remoteness Index Score of Australia, these being;

- Major cities
- Inner regional Australia
- Outer regional Australia
- Remote Australia
- Very remote Australia.

Figure 22 demonstrates the ABS remoteness structure overlaid with the Queensland road network mapped by HERE.

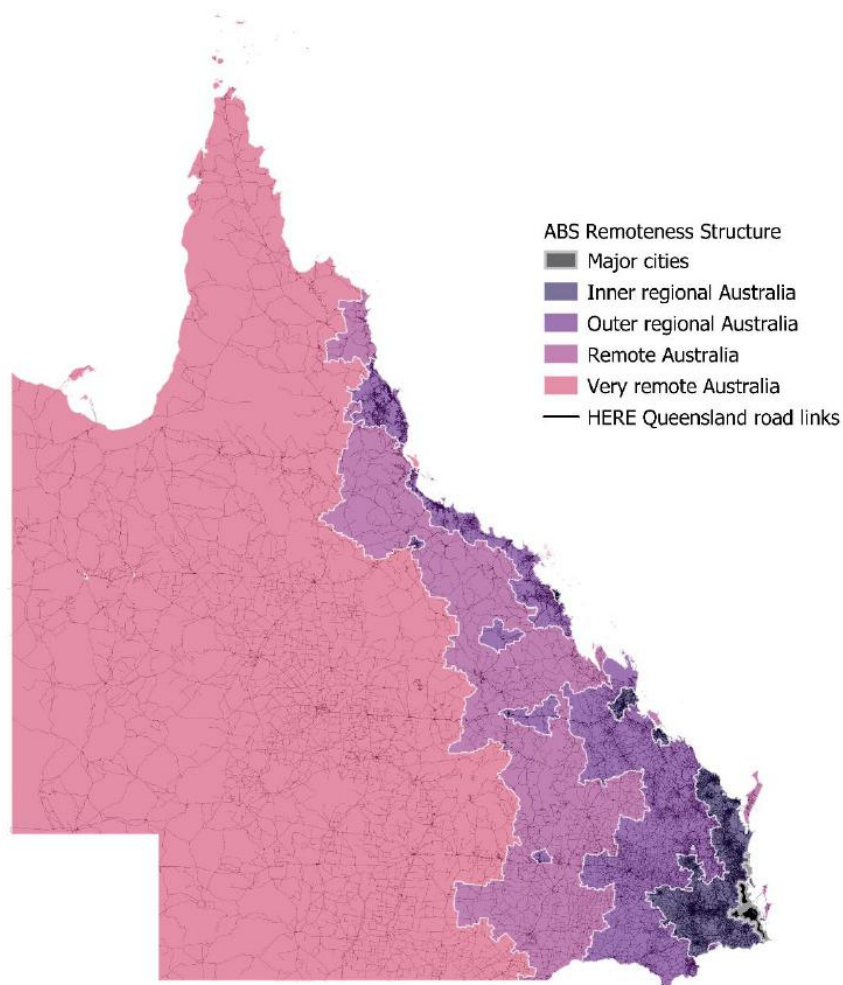


Figure 22: ABS Remoteness structure for Queensland with HERE road network overlay

The second level of spatial classification is the Statistical Area Level 4 (SA4), again, as specified by the ABS. In Queensland, there are 19 SA4 regions, these being:

- Brisbane – East
- Brisbane – North
- Brisbane – South
- Brisbane – West
- Brisbane Inner City
- Cairns
- Darling Downs – Maranoa
- Fitzroy
- Gold Coast
- Ipswich
- Logan – Beaudesert
- Mackay
- Moreton Bay – North
- Moreton Bay – South

- Queensland – Outback
- Sunshine Coast
- Toowoomba
- Townsville
- Wide Bay.

Classification within each remoteness structure and SA4 region is based on the centroid of each road link included in the HERE road network.

4.7 OUTPUT

Speed profiles similar to Figure 21 were generated for all passenger vehicle motorists and heavy vehicles drivers across the Queensland road network, as well as each combination of spatial and temporal disaggregation.

Results are presented to one decimal place and as such there may be minor discrepancies between calculated and presented values.

4.7.1 SPEED CLASSIFICATIONS

Travel speeds above the speed limit were categorised into ranges shown in Table 9, based on the penalty levels associated with infringement notices currently issued for speeding (low to extreme) in Queensland.

Table 9: Definition of speed above the limit ranges (adapted from the TMR website¹)

Speed range	Definition
Low	More than 1 km/h but no more than 10 km/h over the speed limit
Low-Medium	More than 10 km/h but no more than 12 km/h over the speed limit
Medium	More than 12 km/h but not more than 20 km/h over the speed limit
High	More than 20 km/h but not more than 30 km/h over the speed limit
Excessive	More than 30 km/h but not more than 40 km/h over the speed limit
Extreme	More than 40 km/h over the speed limit

4.7.2 CALCULATION AND PRESENTATION OF PARF VALUES

The four functions estimating the relative risk (RR) of a casualty crash at different travel speeds, shown in Figure 15 and Figure 16 (see Section 3.6), were used to calculate the Population Attributable Risk Fraction (PARF) of casualty crashes at each travel speed for passenger vehicle motorists at the aggregation levels outlined above.

The PARF is the fraction of the [total] population of casualty crashes (in the analysed speed zone) that are attributable to the component of the relative risk exceeding one for the crash risk in the speed range. In essence, the attributable fraction is the proportion of crashes that are estimated to result from the *increase in risk* due to the speeding in the specific range. Therefore, the PARF is the fraction of crashes, not the fraction of drivers on the road.

The calculated fractions were subsequently grouped in the speed ranges shown in Table 9 to estimate the fraction of casualty crashes attributable to the level of speeding.

The four functions for the RR at each travel speed were based on:

- Kloeden et al.'s (2002) exponential quadratic function of urban travel speeds
- Elvik's (2019) risk fitted by an exponential cubic function of urban travel speeds
- Kloeden et al.'s (2001) exponential quadratic function of rural travel speed differences from mean speed, converted to a function of absolute travel speed based on a mean speed of 85 km/h
- Kloeden et al.'s (1997a) risk fitted by an exponential quadratic function to Elvik's (2019) data extracted from Kloeden et al.'s (2001) rural case-control data, hereafter referred to as Elvik's RR function of rural travel speeds to avoid confusion with Kloeden et al.'s (2001) rural function.

For analyses of the PARF of casualty crashes from passenger vehicle motorist travel speeds in each speed limit zone, the RR functions were rescaled to a risk of 1 at the speed limit. Kloeden and Elvik's urban functions were rescaled for each of the 40, 50, 60 and 70 km/h zones, and Kloeden and Elvik's rural functions were rescaled for the 80, 90, 100 and 110 km/h zones.

To avoid extreme estimates of relative risk at high speeds from the Kloeden et al. (2001, 2002) functions, the urban function was capped at 30 km/h above the limit, as per the methodology utilised by Cameron (2013), and the rural function was capped at 40 km/h above the limit, as was the Elvik rural function. The Elvik exponential cubic function of urban travel speeds suggested, unrealistically, that risk would decrease at speeds greater than 25 km/h above the limit, so this RR was fixed at the risk for 25 km/h above the limit for all higher urban speeds.

To avoid very low speeds distorting the PARF analysis, especially where a RR function suggested increased risk when travel speeds decreased (Figure 15 and Figure 16), the RR was replaced by a linear decrease to zero from the lowest RR suggested by the function.

The PARF was calculated from the percentage of total passenger vehicle motorists at each travel speed and the appropriate RR function described above, using Walter's (1976) PARF function defined in the footnote of Table 4 (Section 3.1) with summation across all recorded travel speeds. The calculated fractions of casualty crashes attributable to each speed were grouped into speeding ranges (Table 9) and into a range of speeds at or below the limit (1 to 10 km/h below). The PARFs calculated for vehicles travelling below the speed limit were negative. This indicates the protective effect of below-limit speeds in preventing crashes. The PARFs above the limit indicate the extent to which each speeding range contributes to casualty crashes, in terms of the fraction of total casualty crashes in the speed zone that are attributable to speeding in the range. The results of the PARF calculations are given in the following sections.

Note that PARFs based on both Kloeden's and Elvik's RR functions are presented following each analysis of speed data related to passenger vehicle motorists. This is to provide the reader with an indication of the fractions of casualty crashes attributable to speeding estimated using both methods. Typically, Kloeden's RR curves

provide higher PARF estimates and these have been predominately discussed. In addition, Kloeden et al.'s (2001, 2002) exponential quadratic functions of travel speeds are well-known and highly regarded (Aarts and van Schagen 2006), so the PARF estimates based on these functions have higher credibility. The new relative risk functions developed in Section 2 of this report, based on Elvik et al.'s (2019) methods and data, have yet to be peer-reviewed and hence have lower credibility at this stage. However, the PARF results presented in Section 5 are given side-by-side based on the Kloeden and Elvik RR functions relevant to each urban and rural road environment. This will allow the reader to make a direct comparison of the PARFs from each approach.

5 POPULATION ATTRIBUTABLE RISK FRACTIONS

5.1 QUEENSLAND

This section discusses the analysis of the passenger vehicle speed data from Queensland's road network using the temporal and spatial criteria outlined in Section 0. Passenger and heavy vehicle speed data have been subjected to separate analyses throughout this report due to constraints identified in Section 4.5.1.

5.1.1 PASSENGER VEHICLES

Table 10 shows the percentage of passenger vehicle motorists travelling at various speeds in each speed zone. Overall, the vast majority of passenger vehicle motorists were observed as travelling at or below the posted speed limit across all zones (between 79.5% and 91.0%). Compliance was greatest in the 50 km/h, 60 km/h and 70 km/h speed zones (between 88% and 91% compliance) and lowest in the 40 km/h zone, 80 km/h, 100 km/h and 110 km/h speed zones (between 79.5% and 83.9% compliance).

Table 10: Proportion of passenger vehicle motorists travelling at various speeds, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	82.1	91.0	88.3	90.2	79.5	86.5	82.0	83.9
Above limit (total)	17.9	9.0	11.7	9.8	20.5	13.5	18.0	16.1
1-5 above	9.6	5.3	7.3	6.5	11.9	9.0	13.5	12.9
6-10 above	4.9	2.3	2.7	2.2	5.1	3.1	3.3	2.4
11-12 above	1.1	0.4	0.5	0.4	1.1	0.5	0.4	0.3
13-20 above	1.8	0.8	0.9	0.6	1.9	0.7	0.6	0.5
21-30 above	0.4	0.2	0.2	0.1	0.4	0.2	0.1	0.0
31-40 above	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0
41-50 above	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

As can also be seen in Table 10, of those motorists who were exceeding the speed limit, the majority were engaged in low-level speeding of between 1-10 km/h over the speed limit (between 80.6% and 95%).

Interestingly, low-level speeding was typically most prominent in higher speed zones (i.e., 80 km/h, 100 km/h and 110 km/h zones), both in terms of the proportion of *all motorists* and the proportion of *all speeding motorists* engaged in this behaviour. Further, the majority of motorists exceeding the speed limit by 1-10 km/h were doing so by 1-5 km/h (upwards of 80.1%). Encouragingly, less than 1% of all passenger vehicle motorists were

observed engaging in high to extreme levels of speeding (exceeding the speed limit by 21 km/h or more) in any speed zone.

Figure 23 shows the cumulative speed distribution for passenger vehicle motorists across Queensland's road network, analysed according to speed limit zones. Distributions show the percentage of passenger vehicle motorists travelling at various speeds within each speed zone. The cumulative distributions reiterate the high levels of speed compliance across all speed zones, with a large majority of passenger vehicle motorists travelling at or below the posted speed limit.

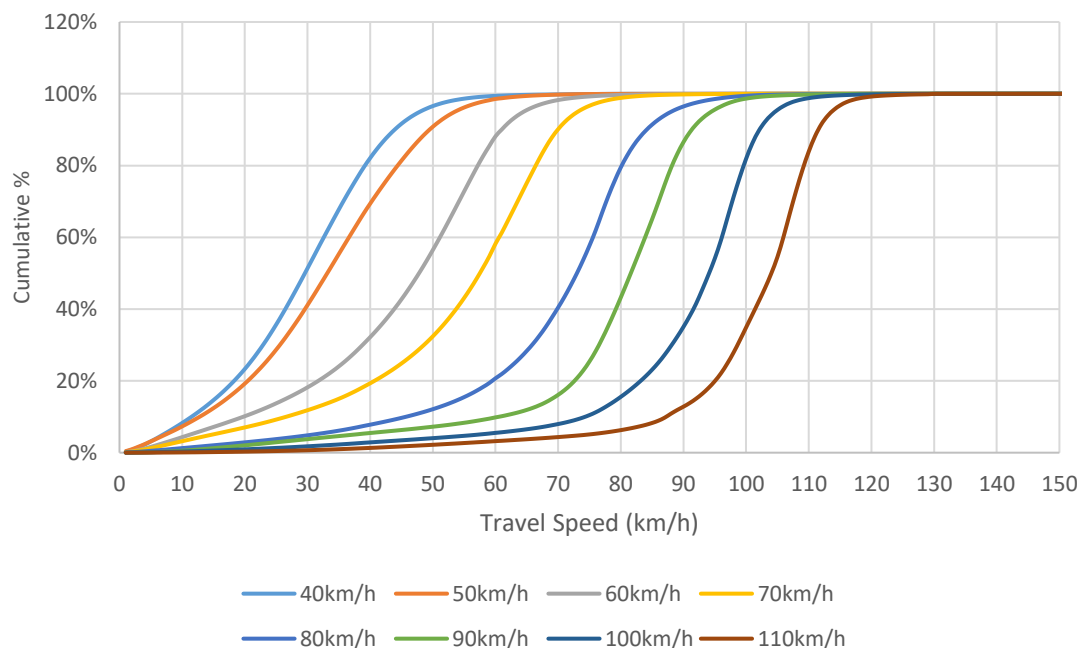


Figure 23: Passenger vehicle motorist speed profiles, Queensland, 2018

The PARFs for passenger vehicle motorists were calculated using the methods detailed in Section 4.7.2 and are presented for 40 km/h to 70 km/h speed zones in Table 11 and for 80 km/h to 110 km/h speed zones in Table 12. Using Kloeden's relative risk functions to generate the PARF typically generated higher PARF estimates compared to those estimated using the functions developed from Elvik et al.'s (2019) most recent data. For brevity, the findings in this report primarily discuss risk calculated using Kloeden's function, however to provide an indication of the range of risk Elvik's findings are reported but typically not discussed. As can be seen in Table 11 and Table 12, there are a number of both negative and positive PARF values. As described by Walter (1976), and restated by Cameron (2013), factors with a negative contribution are described as "protective factors" and PARFs for these factors are considered "protective fractions". That is, negative fractions imply a decrease in attributable casualty crashes. Conversely, positive fractions imply an increase in attributable casualty crashes.

Table 11 shows that, when considering the PARFs for passenger vehicle motorists in 40 km/h to 70 km/h zones using Kloeden's risk function for urban travel speeds, negative fractions are observed in relation to travelling at or below the speed limit, across all speed zones. Indeed, there was an 18.4% reduction in attributable casualty

crashes for those who travelled between 1-10 km/h under the 70 km/h speed limit. That is, 18.4% fewer crashes are likely to occur due to people travelling below the speed limit compared to if they had travelled at 70 km/h. Similar reductions in attributable casualty crashes were found in other speed zones, including a 16% reduction in 60 km/h zones, 15.3% reduction in 50 km/h zones, and a 10.9% reduction in 40 km/h zones. When using Elvik's risk function for urban travel speeds, the range of reductions in casualty crashes for traveling below the speed limit were reduced to between 9.6% and 12.3%.

Table 11: PARF for passenger vehicle motorists in 40 km/h to 70 km/h speed limit zones, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1-10 under	-10.9	-10.0	-15.3	-9.6	-16.0	-12.1	-18.4	-12.3
Total above	66.8	21.6	39.0	12.7	45.3	14.4	34.9	12.5
1-5 above	6.4	3.2	3.4	2.2	3.5	2.8	4.1	2.9
6-10 above	12.8	6.0	6.2	3.8	5.5	4.0	5.9	3.8
11-12 above	3.1	2.4	2.2	1.2	2.1	1.4	2.2	1.3
13-20 above	11.9	6.5	10.1	3.8	8.7	3.9	7.8	3.1
21-30 above	15.7	2.5	11.1	1.4	12.8	1.7	10.0	1.2
31-40 above	15.5	1.0	4.2	0.2	10.0	0.5	4.6	0.2
41-50 above	1.3	0.1	1.8	0.1	2.7	0.1	0.3	0.0

Table 11 also shows that travelling above the posted speed limit results in increases in attributable casualty crashes, regardless of the speed zone. While the largest increases in attributable crashes were generally associated with exceeding the speed limit by more than 13 km/h, substantial increases in risk were also found in relation to low-level speeding. Specifically, calculations performed using Kloeden's risk function suggest that driving 1-10 km/h over the speed limit increases casualty crashes by 19.2% in 40 km/h zones, 9.6% in 50 km/h zones, 9.0% in 60 km/h zones, and 10.0% in 70 km/h zones. Thus, low-level speeding in 40 km/h zones presents a substantially higher increased risk of being involved in a casualty crash compared to other zones. Moreover, travelling at 11-20 km/h over the limit was found to be associated with a 15.0% increase in attributable casualty crashes in 40 km/h zones, a 12.3% increase in 50 km/h zones, a 10.8% increase in 60 km/h zones, and a 10.0% increase in 70 km/h zones. When using Elvik's risk function for urban travel speeds, the range of increases in crashes associated with traveling 1-10 km/h above the speed limit were reduced to between 6.0% and 9.2%, while the range of increases in crashes associated with traveling 11-20 km/h above the speed limit were reduced to between 4.0% and 8.9%.

Finally, and perhaps not surprisingly, substantial increases in attributable casualty crash risk were found to be associated with high to excessive speeding. Specifically, it was estimated that exceeding the speed limit by 21 km/h or more was associated with an increase in attributable casualty crashes of 32.5% in 40 km/h zones, 17.1% in 50 km/h zones, 25.5% in 60 km/h zones, and 14.9% in 70 km/h zones. When using Elvik's risk function for urban travel speeds, the range of increases in casualty crashes associated with exceeding the speed limit by 21 km/h or more were reduced to between 1.4% and 3.6%.

Table 12: PARF for passenger vehicle motorists in 80 km/h to 110 km/h speed limit zones, Queensland, 2018

Vehicle speed (km/h)	80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1-10 under	-11.8	-4.6	-14.6	-5.4	-14.7	-5.1	-16.7	-5.6
Total above	26.8	5.9	18.2	4.0	12.2	2.8	8.8	2.1
1-5 above	3.1	1.0	3.6	1.1	3.6	1.0	3.4	1.0
6-10 above	4.8	1.4	4.7	1.3	3.3	0.9	2.5	0.6
11-12 above	1.9	0.5	1.5	0.4	0.8	0.2	0.5	0.1
13-20 above	6.2	1.3	3.5	0.7	2.1	0.4	2.0	0.4
21-30 above	6.2	1.3	2.8	0.4	1.9	0.2	0.2	0.0
31-40 above	2.9	0.2	1.4	0.1	0.4	0.0	0.1	0.0
41-50 above	1.7	0.1	0.7	0.0	0.2	0.0	0.1	0.0

Similar results are observed when considering the PARFs for passenger vehicle motorists in 80 km/h to 110 km/h zones using Kloeden's risk function for rural travel speeds (see Table 12). That is, negative fractions are found in relation to travelling below the speed limit, across all speed zones. This equates to a 16.7% reduction in attributable casualty crashes in 110 km/h zones, a 14.7% reduction in 100 km/h zones, a 14.6% reduction in 90 km/h zones, and an 11.8% reduction in 80 km/h zones. When using Elvik's risk function for rural travel speeds, the range of reductions in crashes were reduced to between 4.6% and 5.6%.

Table 12 also shows that travelling above the posted speed limit results in increases in attributable casualty crashes, regardless of the speed zone. Indeed, travelling 1-10 km/h over the speed limit was found to increase casualty crashes by 7.9% in 80 km/h zones, 8.3% in 90 km/h zones, 6.9% in 100 km/h zones, and 5.9% in 110 km/h zones. Moreover, travelling at 11-20 km/h over the limit was found to be associated with an 8.1% increase in attributable casualty crashes in 80 km/h zones, a 5% increase in 90 km/h zones, a 2.9% increase in 100 km/h zones, and a 2.5% increase in 110 km/h zones. When using Elvik's risk function for rural travel speeds, the range of increases in crashes associated with traveling 1-10 km/h above the speed limit were reduced to between 1.6% and 2.4%, while the range of increases in crashes associated with traveling 11-20 km/h above the speed limit were reduced to between 0.5% and 1.8%.

Interestingly, exceeding the speed limit by 21 km/h or more was found to be associated with much lower increases in attributable casualty crashes in 80 km/h to 110 km/h speed limit zones compared to the estimated increases in crashes associated with excessive speeding in 40 km/h to 70 km/h zones. Specifically, it was estimated that high to excessive speeding of this nature was associated with an increase in attributable casualty crashes of 10.8% in 80 km/h zones, 4.9% in 90 km/h zones, 2.5% in 100 km/h zones, and 0.4% in 110 km/h zones. When using Elvik's risk function for rural travel speeds, the range of these increases in crashes was even lower, at 0% for 110 km/h zones, 0.2% for 100 km/h zones, 0.5% for 90 km/h zones and 1.6% for 80 km/h zones.

These contributions to preventing casualty crashes in Queensland, together with the proportion of drivers exceeding the speed limit are shown in Figure 24. Not surprisingly, passenger vehicle motorists who travel below the speed limit in 40 km/h, 50 km/h, 60 km/h and 70 km/h zones compare favourably to those engaged in low-

level speeding. Figure 24 highlights that measures to address low-level (1-10km/h) and moderate (11-20km/h) speeding could result in large road safety improvements, given the comparatively higher proportion of motorists engaged in this kind of speeding and crash risks associated with driving at these speeds.

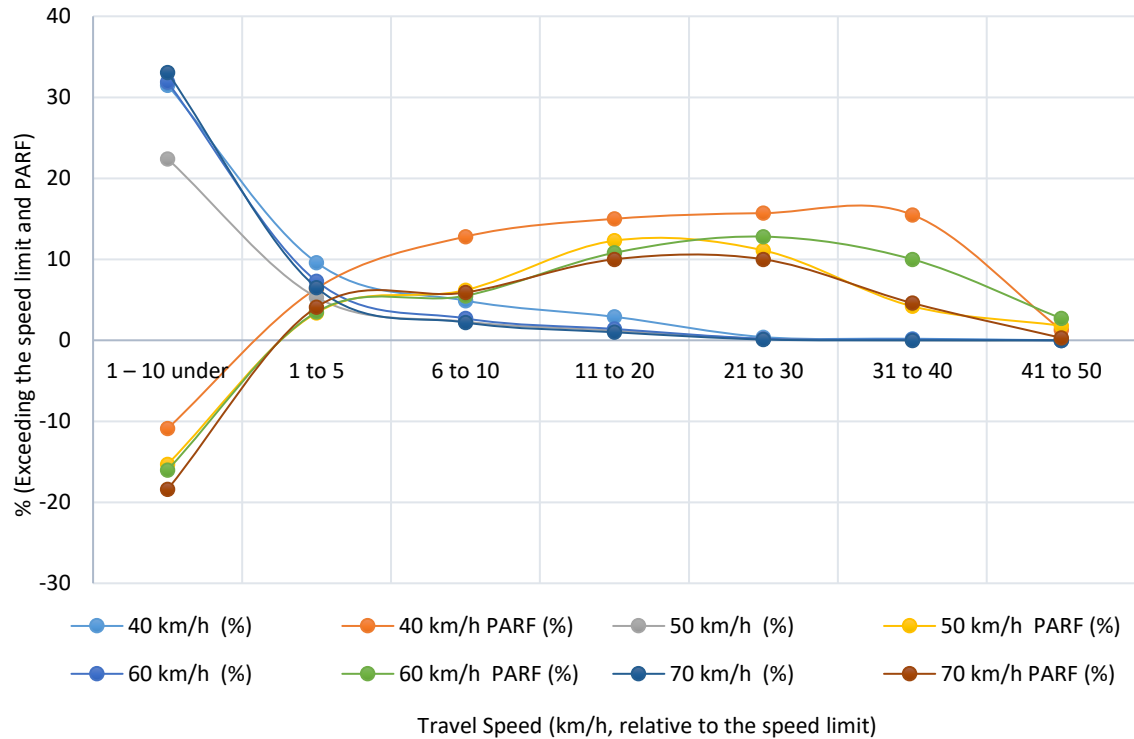


Figure 24: Estimated attributable fraction of casualty crashes for each speed range and the proportion of passenger vehicle motorists speeding within each speed zone, Queensland, 2018

5.1.2 HEAVY VEHICLES

Table 13 presents the proportion of heavy vehicle drivers exceeding the speed limit within each speed zone. Similar to the trends observed for passenger vehicle motorists, there was a high degree of compliance with speed limits among heavy vehicle drivers across all speed zones (between 79% and 95.3% compliance). Heavy vehicle driver speed compliance was highest in 50 km/h and 70 km/h speed zones (between 94.2% and 95.3%), and lowest in 80 km/h and 100 km/h speed zones (between 79% and 82.8%). These findings may be explained by the typically lower heavy vehicle traffic volumes on suburban roads zoned 40 km/h to 70 km/h compared to higher speed roads, as well as the physical limitations for heavy vehicles to exceed speed limits on lower speed roads due to the characteristics of such roads, such as traffic congestion and traffic signals.

Table 13: Proportion of heavy vehicle drivers travelling at various speeds, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	89.1	95.4	91.8	94.2	79.0	87.6	82.8	92.6
Above limit (total)	10.9	4.6	8.2	5.8	21.0	12.4	17.2	7.4
1-5 above	6.6	2.7	5.2	3.8	12.4	8.7	13.8	5.2
6-10 above	2.5	1.1	1.8	1.3	5.6	2.8	2.4	1.4
11-12 above	0.5	0.2	0.3	0.2	1.1	0.4	0.3	0.2
13-20 above	0.9	0.5	0.6	0.4	1.6	0.4	0.5	0.6
21-30 above	0.3	0.2	0.2	0.1	0.3	0.1	0.2	0.0
31-40 above	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
41-50 above	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 13 also shows that, similar to non-speed compliant passenger vehicle motorists, those heavy vehicle drivers who did exceed the speed limit were typically engaged in low-level speeding. Specifically, of all heavy vehicle drivers that were observed exceeding the speed limit, between 80.9% and 94.2% did so by 1-10 km/h. Somewhat similar to passenger vehicle motorists, low-level speeding amongst heavy vehicle drivers was also generally more prominent in higher speed zones, but only in terms of the proportion of *all speeding motorists* engaged in this behaviour. Furthermore, the majority of drivers exceeding the speed limit by 1-10 km/h were doing so by 1-5 km/h (upwards of 80.2%). Encouragingly, less than 0.5% of all heavy vehicle drivers were observed engaging in extreme levels of speeding (exceeding the speed limit by 21 km/h or more).

Figure 25 presents a cumulative speed profile for heavy vehicle drivers travelling within each speed zone. Distributions show the percentage of heavy vehicle drivers travelling at various speeds within each speed zone. The cumulative distributions reiterate the high levels of speed compliance across all speed zones, with a large majority of heavy vehicle drivers travelling at or below the posted speed limit.

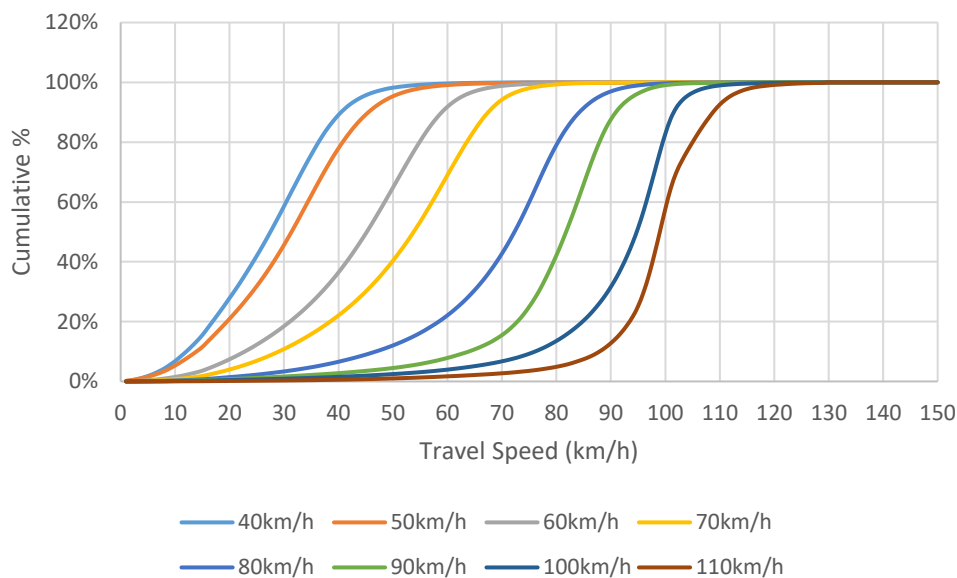


Figure 25: Heavy vehicle driver speed profiles, Queensland, 2018

Figure 26 compares the proportion of passenger vehicle motorists with heavy vehicle drivers detected travelling above the speed limit within each speed zone. Passenger vehicle motorists and heavy vehicle drivers were least speed compliant in 80 km/h zones and 100 km/h zones. Within 40 km/h to 70 km/h speed zones, compliance was noticeably higher amongst heavy vehicle drivers, with almost twice as many passenger vehicle motorists observed as exceeding the speed limit in 40 km/h, 50 km/h and 70 km/h zones. However, the disparity between rates of non-compliance became less obvious at speeds of 80 km/h to 100 km/h (inclusive), where roughly equal proportions of heavy vehicle drivers and passenger vehicle motorists were detected exceeding the speed limit. At speeds of 110 km/h however, over double the percentage of passenger vehicle motorists (16.1%) were detected exceeding the speed limit compared to heavy vehicle drivers (7.4%).

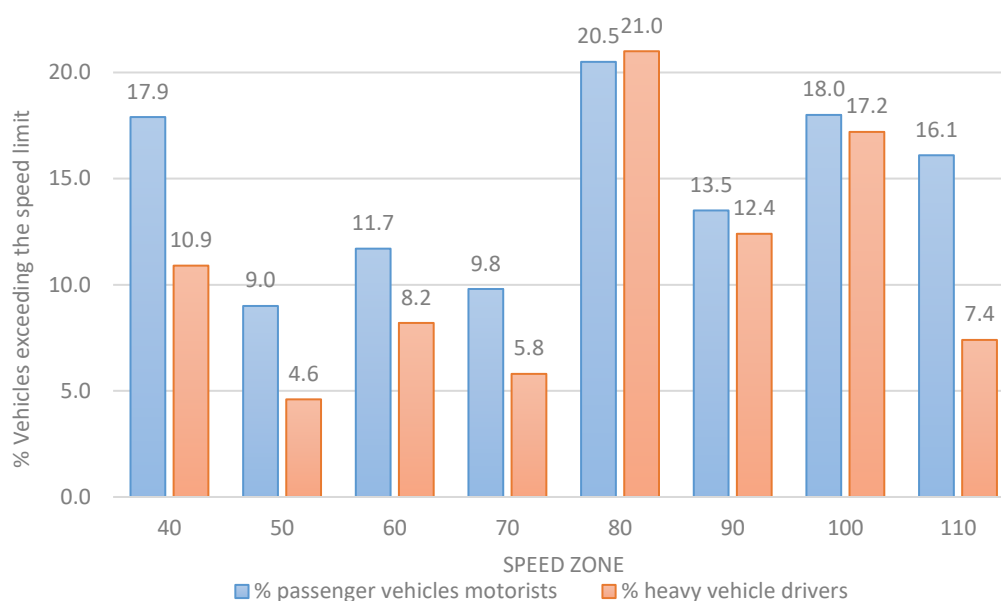


Figure 26: Proportion of passenger vehicle motorists and heavy vehicle drivers exceeding the speed limit, by speed zone, Queensland, 2018

5.1.3 TIME OF DAY

The speed profiles of passenger vehicle motorists were analysed according to time of day, including by morning peak, afternoon peak, off-peak, evening and late night/early morning. The hours which constituted these time periods are presented in Table 14 below and an overview of passenger vehicle motorist speed non-compliance across the time periods is presented in Figure 27.

Table 14: Time of day periods

Period of Day	Time
Morning peak	6:00am – 9:59am
Off-peak	10:00am – 2:59pm
Afternoon peak	3:00pm – 6:59pm
Evening	7:00pm – 10:59pm
Late night/early morning	11:00pm – 5:59am

Figure 27 shows the proportion of passenger vehicle motorists in Queensland travelling above the speed limit by time of day. As can be seen, motorists exceeded the speed limit most frequently during the late night/early morning hours, across 40 km/h to 90 km/h speed zones (inclusive). Conversely, the majority of vehicles exceeding the speed limit in 100 km/h and 110 km/h zones were doing so during the evening hours. There were also increases in the proportion of motorists exceeding the speed limit during the evening hours in 60 km/h to 90 km/h speed zones (inclusive). Conversely, non-compliance during daylight hours (morning and afternoon peaks and off-peak) was relatively consistent within each speed zone.

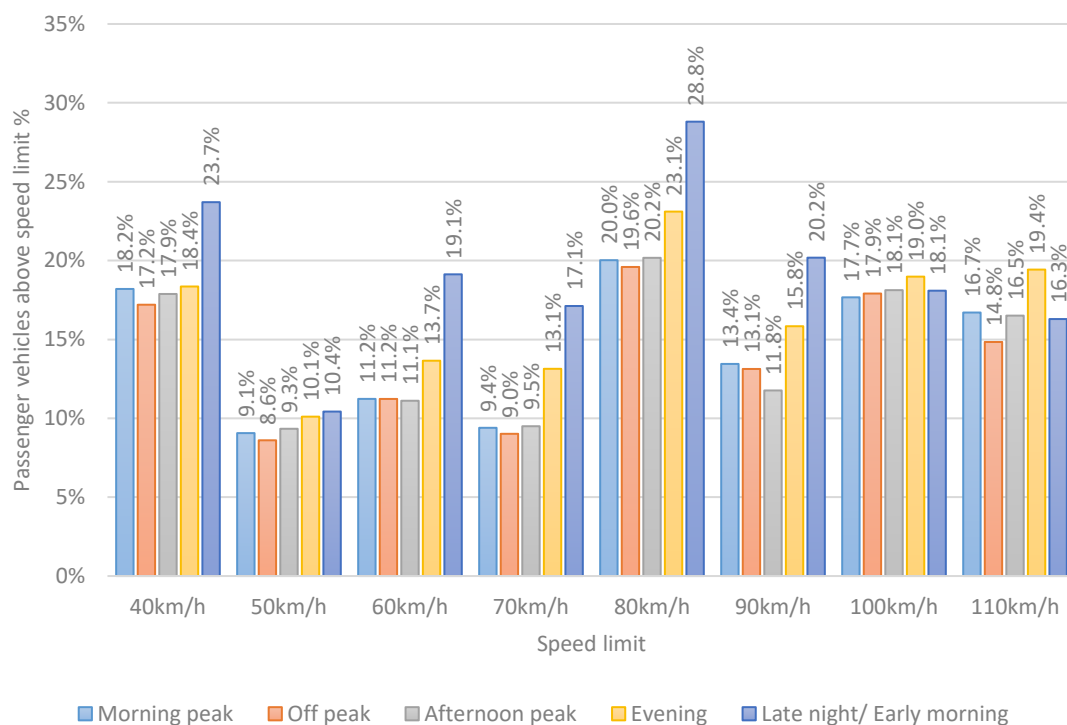


Figure 27: Proportion of passenger vehicle motorists travelling above the speed limit by time of day, Queensland, 2018

Table 15 further highlights the level of speed non-compliance among passenger vehicle motorists by time of day, with a comparison to overall levels of speed non-compliance (see Table 10). As can be seen, there were a number of differences in the levels of non-compliance across all time periods, to varying degrees. Differences in the morning peak period were inconsistent, with speeding being less prevalent in 60 km/h, 70 km/h and 80 km/h zones (by 4.3%, 4.1% and 2.4%, respectively) during this time period, compared to overall levels, but more prevalent in 110 km/h zones (3.7%). Similar inconsistencies were observed during the afternoon peak period, with speeding being less prevalent in 60 km/h, 70 km/h and 90 km/h zones (5.1%, 3.1% and 12.6%, respectively) during this time period, compared to overall levels, but more prevalent in 50 km/h and 110 km/h zones (3.3% and 2.5%, respectively). Generally speaking, speeding was less prevalent across all zones during the off-peak period (between 3% and 8.2%), compared to overall levels, with the exception of 100 km/h zones where there was limited difference.

Table 15: Proportion of passenger vehicle motorists travelling above the speed limit by time of day, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
All time periods	17.9	9.0	11.7	9.8	20.5	13.5	18.0	16.1
Morning peak	18.2 (+1.7)	9.1 (+1.1)	11.2 (-4.3)	9.4 (-4.1)	20.0 (-2.4)	13.4 (-0.7)	17.7 (-1.7)	16.7 (+3.7)
Off-peak	17.2 (-3.9)	8.6 (-4.4)	11.2 (-4.3)	9.0 (-8.2)	19.6 (-4.4)	13.1 (-3.0)	17.9 (-0.6)	14.8 (-8.1)
Afternoon peak	17.9 –	9.3 (+3.3)	11.1 (-5.1)	9.5 (-3.1)	20.2 (-1.5)	11.8 (-12.6)	18.1 (+0.6)	16.5 (+2.5)
Evening	18.4 (+2.8)	10.1 (+12.2)	13.7 (+17.1)	13.1 (+33.7)	23.1 (+12.7)	15.8 (+17.0)	19.0 (+5.6)	19.4 (+20.5)
Late night/ early morning	23.7 (+32.4)	10.4 (+15.6)	19.1 (+63.2)	17.1 (+74.5)	28.8 (+40.5)	20.2 (+49.6)	18.1 (+0.6)	16.3 (+1.2)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists exceeding the speed limit during the corresponding time period and speed zone, compared to the prevalence of motorists exceeding the speed limit across all time periods in the corresponding speed zone.

As can also be seen in

Table 15, greater differences in the prevalence of speeding among passenger vehicle motorists were observed in the evening and late night/early morning periods. Indeed, across all speed limit zones, speeding was between 2.8% and 33.7% more prevalent in the evening period, compared to overall levels. This greater prevalence was even more pronounced during the late night/early morning period, however was largely restricted to 40 km/h to 90 km/h speed zones, with speeding being between 15.6% and 74.5% more prevalent in these zones. Conversely, there were limited differences in 100 km/h or 110 km/h zones during this time period.

Figure 28 shows that heavy vehicle drivers exceeded the speed limit most frequently during the late night/early morning hours in all speed limit zones, with the exception of 70 km/h and 100 km/h zones, where speeding was more prevalent during the evening hours. There were also increases in the proportion of motorists exceeding the speed limit during the evening hours in 80 km/h and 90 km/h speed zones. With the exception of an increase in the proportion of heavy vehicle drivers exceeding the speed limit during the afternoon peak period in 100 km/h zones, non-compliance during daylight hours (morning and afternoon peaks and off-peak) was relatively consistent within speed zone.

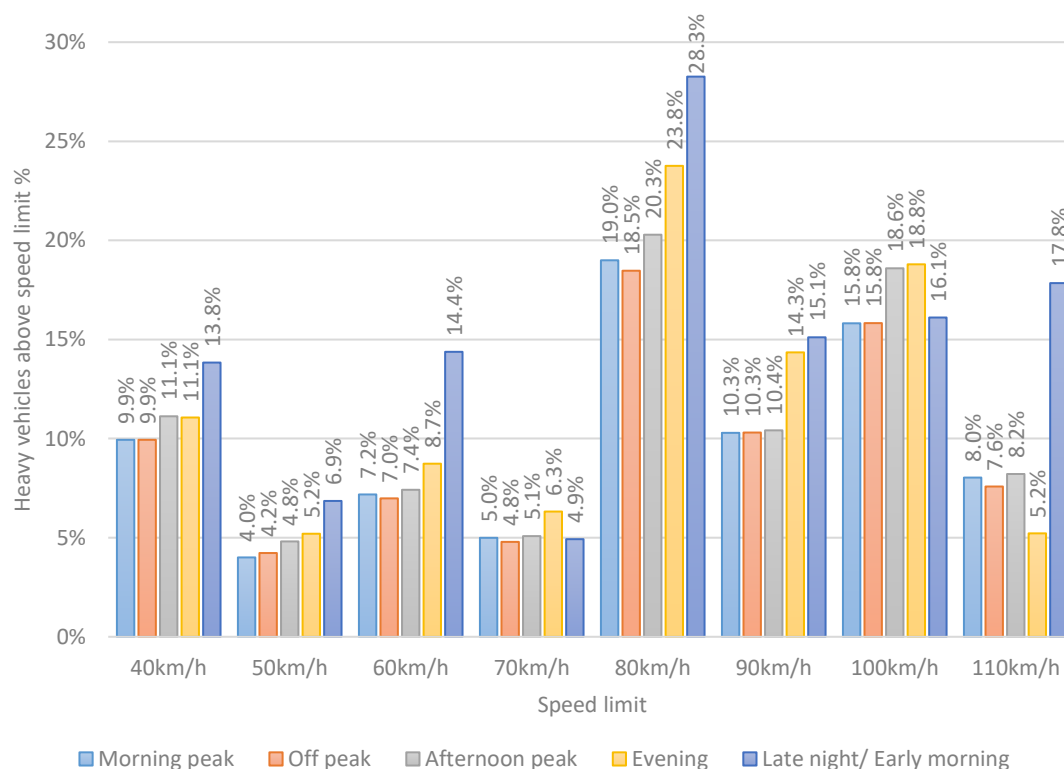


Figure 28: Proportion of heavy vehicle drivers travelling above the speed limit, by time of day, Queensland, 2018

Table 16 further highlights the level of speed non-compliance among heavy vehicle drivers by time of day, with a comparison to overall levels of speed non-compliance (see

Table 13). As can be seen, there were a number of differences in the prevalence of heavy vehicle driver speeding across all time periods, to varying degrees. Specifically, speeding was less prevalent across all zones in both the morning peak (between 8.6% and 17.0% lower) and off-peak periods (between 8.2% and 17.5% lower), compared to overall levels, with the exception of the 110 km/h zone. Differences in the prevalence of speeding were less consistent during the afternoon peak period, with speeding being less prevalent in 60 km/h to 90 km/h speed zones (between 3.2% and 12.5% lower), but all other speed zones experiencing a greater prevalence of speeding drivers.

Table 16: Proportion of heavy vehicle drivers travelling above the speed limit, by time of day, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
All time periods	10.9	4.6	8.2	5.8	21.0	12.4	17.2	7.4
Morning peak	9.9 (-8.6)	4.0 (-13.7)	7.2 (-12.0)	5.0 (-14.0)	19.0 (-9.4)	10.3 (-17.2)	15.8 (-8.3)	8.0 (+8.1)
Off-peak	9.9 (-8.6)	4.2 (-8.9)	7 (-14.4)	4.8 (-17.5)	18.5 (-11.9)	10.3 (-17.0)	15.8 (-8.2)	7.6 (+2.0)
Afternoon peak	11.1 (+2.3)	4.8 (+3.7)	7.4 (-9.1)	5.1 (-12.5)	20.3 (-3.2)	10.4 (-16.2)	18.6 (+7.8)	8.2 (+10.5)
Evening	11.1 (+1.8)	5.2 (+12.1)	8.7 (+7.0)	6.3 (+8.8)	23.8 (+13.3)	14.3 (+15.5)	18.8 (+9.0)	5.2 (-29.8)
Late night/ early morning	13.8 (+27.3)	6.9 (+47.8)	14.4 (+76.2)	4.9 (-15.2)	28.4 (+35.4)	15.1 (+21.6)	15.6 (-9.7)	7.0 (-5.2)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers exceeding the speed limit during the corresponding time period and speed zone, compared to the prevalence of heavy vehicle drivers exceeding the speed limit across all time periods in the corresponding speed zone

Table 16 also shows that, with a few exceptions, heavy vehicle driver speeding was more prevalent in the evening and late night/early morning periods. Specifically, during the evening period, the prevalence of speeding was between 6.1% and 15.3% higher across 50 km/h to 100 km/h speed zones, compared to overall levels. Interestingly, speeding was 29.7% less prevalent in 110 km/h zones during the evening period, while there was limited difference in 40 km/h zones. During the late night/early morning period, the prevalence of heavy vehicle driver speeding was substantially higher when compared to overall levels, including by 21.8% in 90 km/h zones, 26.6% in 40 km/h zones, 34.8% in 80 km/h zones, 50% in 50 km/h zones, 75.6% in 60 km/h zones and 140.5% in 110 km/h zones. Conversely, the prevalence of heavy vehicle driver speeding was lower in 70 km/h and 100 km/h zones (6.4% and 15.5%, respectively).

5.1.3.1 Morning peak period

Table 17 shows the level of speed non-compliance among passenger vehicle motorists during the morning peak period (6.00am–9.59am), with a comparison to overall levels of speed non-compliance across all time periods (see Table 10). As can be seen, the proportion of motorists exceeding the speed limit during the morning peak period was generally consistent with overall levels, with a few notable exceptions. Interestingly, differences in the prevalence of low-level speeding were inconsistent. That is, compared to overall levels, exceeding the speed limit by 1-5 km/h was less prevalent during the morning peak period in 60 km/h and 70 km/h zones (4.1% and 3.1%, respectively) but more prevalent in 110 km/h zones (4.7%). Similarly, exceeding the speed limit by 6-10 km/h was less prevalent during the morning peak period in 60 km/h, 70 km/h and 100 km/h zones (3.7%, 4.5% and 3%, respectively) but more prevalent in 110 km/h zones (4.2%). There was also consistent evidence of a lower prevalence of motorists exceeding the speed limit by 13-20 km/h in 50 km/h to 80 km/h, as well as 110 km/h zones (between 11.1% and 20%), compared to overall levels. In both the morning peak period and overall, exceeding the speed limit by 21 km/h or more was extremely rare among passenger vehicle motorists.

Table 17: Proportion of passenger vehicle motorists travelling at various speeds during the morning peak period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	81.8 (-0.3)	90.9 (0)	88.8 (+0.5)	90.6 (+0.5)	80 (+0.5)	86.6 (0)	82.3 (+0.4)	83.3 (-0.8)
Above limit (total)	18.2 (+1.6)	9.1 (+0.1)	11.2 (-3.7)	9.4 (-4.2)	20 (-2.1)	13.4 (-0.2)	17.7 (-1.7)	16.7 (+3.9)
1-5 above	9.7 (+1.7)	5.4 (+0.9)	7.0 (-3.6)	6.3 (-3.5)	11.7 (-1.7)	9.0 (-0.3)	13.3 (-1.5)	13.5 (+5.0)
6-10 above	5.0 (+2.4)	2.3 (-0.4)	2.6 (-3.6)	2.1 (-4.7)	5.0 (-2.0)	3.1 (-0.4)	3.2 (-1.3)	2.5 (+1.7)
11-12 above	1.1 (+0.1)	0.4 (-1.1)	0.5 (-3.3)	0.4 (-5.2)	1.0 (-2.0)	0.5 (+0.3)	0.4 (-1.1)	0.3 (+0.1)
13-20 above	1.8 (+0.6)	0.7 (-2.5)	0.8 (-3.6)	0.5 (-8.0)	1.8 (-2.9)	0.7 (-0.1)	0.6 (-5.0)	0.4 (-10.3)
21-30 above	0.4 (-2.3)	0.2 (-3.3)	0.2 (-6.7)	0.1 (-11.8)	0.4 (-7.8)	0.2 (+6.3)	0.1 (-16)	0.0 (-7.3)
31-40 above	0.2 (+1.8)	0.0 (+3.0)	0.1 (-11.0)	0.0 (-14.1)	0.1 (-14.4)	0.0 (-14.2)	0.0 (-0.1)	0.0 (-64.5)
41-50 above	0.0 (+12.3)	0.0 (-8.9)	0.0 (-15)	0.0 (-21.7)	0.0 (-27)	0.0 (-84.5)	0.0 (+1.8)	0.0 (-49.6)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at specific speeds during the morning peak period in the corresponding speed zone, compared to the prevalence of motorists traveling at these speeds across all time periods in the corresponding speed zone.

The PARFs for passenger vehicle motorists during the morning peak period are shown in Table 18. Results are similar to the overall PARF calculations for all motorists outlined in Table 11 and Table 12. Specifically, when using Kloeden's risk function for urban and rural travel speeds, the morning peak period PARF values did not differ by more than $\pm 1\%$ for any specific speed categorisation. Even when expressed as proportional differences, there appears to be minimal differences in the proportion of casualty crashes attributable to various speeds in the morning peak periods compared to overall data, particularly when considering low-level and moderate speeding.

Table 18: PARF for passenger vehicle motorists during the morning peak period, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1-10 under	-11.1	-10.2	-15.5	-9.7	-16.2	-11.9	-18.8	-12.3	-11.9	-4.5	-14.5	-5.4	-14.7	-5.1	-16.5	-5.6
Total above	66.7	21.7	38.4	12.5	44.0	14.0	33.1	12.0	26.0	5.7	18.1	4.0	11.9	2.7	8.5	2.1
1-5 above	6.5	3.2	3.4	2.3	3.5	2.7	4.1	2.8	3.1	1.0	3.7	1.1	3.6	1.0	3.5	1.0
6-10 above	13.0	6.1	6.2	3.8	5.5	3.9	5.9	3.7	4.9	1.4	4.7	1.3	3.3	0.9	2.5	0.6
11-12 above	3.1	2.4	2.2	1.2	2.2	1.3	2.2	1.2	1.9	0.5	1.5	0.4	0.8	0.2	0.5	0.1
13-20 above	11.8	6.5	9.7	3.7	8.7	3.8	7.4	2.9	6.2	1.3	3.5	0.7	2.0	0.4	1.7	0.3
21-30 above	15.2	2.4	10.9	1.4	12.3	1.6	9.0	1.1	6.2	1.3	3.0	0.4	1.6	0.2	0.2	0.0
31-40 above	15.6	1.0	4.4	0.2	9.3	0.5	4.2	0.2	2.6	0.2	1.3	0.1	0.4	0.0	0.1	0.0
41-50 above	1.4	0.1	1.7	0.1	2.4	0.1	0.2	0.0	1.3	0.1	0.5	0.0	0.2	0.0	0.0	0.0

Table 19 shows the proportion of heavy vehicle drivers who exceeded the speed limit during the morning peak period, with a comparison to overall levels of speed non-compliance across all time periods (see

Table 13). There were some notable differences in the prevalence of speeding among heavy vehicle drivers during the morning peak period. Specifically, low-level speeding among heavy vehicle drivers was less prevalent during the morning peak period compared to overall levels, including exceeding the speed limit by 1-5 km/h (between 5.1% and 13.6%) and by 6-10 km/h (between 2.4% and 26.2%), with the exception of 110 km/h zones where exceeding the speed limit by 1-5 km/h was 12.8% more prevalent and there was a 3.4% increase in the proportion of drivers travelling 6-10 km/h over. There was also evidence to suggest a lower prevalence of heavy vehicle drivers exceeding the speed limit by 13-20 km/h in 40 km/h to 110 km/h zones (between 0.9% and 28.5%), compared to overall levels. In both the morning peak period and overall, exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers.

Table 19: Proportion of heavy vehicle drivers travelling at various speeds during the morning peak period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	90.1 (+1.0)	96 (+0.7)	92.8 (+1.1)	95 (+0.9)	81 (+2.5)	89.7 (+2.4)	84.2 (+1.7)	92 (-0.7)
Above limit (total)	9.9 (-8.6)	4.0 (-13.7)	7.2 (-12)	5.0 (-14)	19 (-9.4)	10.3 (-17.2)	15.8 (-8.3)	8.0 (+8.1)
1-5 above	6.2 (-5.8)	2.3 (-13.6)	4.6 (-11.1)	3.4 (-10.8)	11.7 (-5.1)	7.6 (-12.5)	12.5 (-9.5)	5.8 (+12.8)
6-10 above	2.2 (-12.8)	0.9 (-15.3)	1.6 (-12.7)	1.0 (-17.5)	4.9 (-12.7)	2.0 (-26.2)	2.4 (-2.4)	1.4 (+3.0)
11-12 above	0.4 (-16.3)	0.2 (-13.1)	0.3 (-15.2)	0.2 (-18.9)	0.9 (-19)	0.2 (-34.7)	0.3 (-8.9)	0.3 (+7.4)
13-20 above	0.8 (-12.4)	0.4 (-14.9)	0.5 (-15.6)	0.3 (-28.5)	1.3 (-21.4)	0.3 (-34.1)	0.5 (-0.9)	0.5 (-18.7)
21-30 above	0.3 (-7.8)	0.1 (-8.5)	0.2 (-13.4)	0.1 (-25.5)	0.2 (-26.4)	0.1 (-42.1)	0.2 (-11)	0 (-56.4)
31-40 above	0.0 (-27)	0.0 (+3.2)	0.1 (-9.5)	0.0 (-30.9)	0.0 (-18.6)	0.0 (+5.1)	0.0 (+15.2)	0.0 (-90.9)
41-50 above	0.0 (+31.6)	0.0 (+7.7)	0.0 (-13.7)	0.0 (-65.9)	0.0 (-6.7)	0.0 (-100.0)	0.0 (+44.0)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at specific speeds during the morning peak period in the corresponding speed zone, compared to the prevalence of heavy vehicle drivers traveling at these speeds across all time periods in the corresponding speed zone.

5.1.3.2 Off-peak period

Table 20 shows the level of speed non-compliance among passenger vehicle motorists during the off-peak period (10.00am–2.59pm), with a comparison to overall levels of speed non-compliance across all time periods (see Table 10). As can be seen, there was consistent evidence of a reduced prevalence of both low-level (1-10 km/h over the limit) and moderate speeding (11-20 km/h over the speed limit) during the off-peak period compared with overall levels. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was generally less prevalent during the off-peak period in all zones (between +0.3% and -6.9%). Moreover, exceeding the speed limit by 6-10 km/h was less prevalent during the off-peak period in all zones (between -0.8% and 9.9%). There was also evidence of a lower prevalence of motorists exceeding the speed limit by 11-12 km/h (between -2.6% and 13.9%), as well as by 13-20 km/h (between 5.3% and 26.2%) across a number of

speed limit zones, compared to overall levels. In both the off-peak period and overall, exceeding the speed limit by 21 km/h or more was extremely rare among passenger vehicle motorists.

Table 20: Proportion of passenger vehicle motorists travelling at various speeds during the off-peak period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	82.8 (+0.9)	91.4 (+0.5)	88.8 (+0.5)	91 (+0.9)	80.4 (+1.1)	86.9 (+0.4)	82.1 (+0.1)	85.2 (+1.5)
Above limit (total)	17.2 (-4.0)	8.6 (-4.9)	11.2 (-3.7)	9.0 (-8.1)	19.6 (-4.2)	13.1 (-2.6)	17.9 (-0.4)	14.8 (-7.7)
1-5 above	9.3 (-2.9)	5.1 (-4.4)	7.1 (-2.2)	6.1 (-6.4)	11.6 (-2.2)	9.0 (-0.5)	13.6 (+0.3)	12 (-6.9)
6-10 above	4.7 (-4.6)	2.2 (-4.9)	2.6 (-4.4)	2.0 (-9.9)	4.8 (-4.7)	2.9 (-5.7)	3.2 (-0.8)	2.3 (-6.8)
11-12 above	1.0 (-5.3)	0.4 (-5.2)	0.5 (-7.1)	0.3 (-11.6)	1.0 (-6.6)	0.4 (-6.5)	0.4 (-2.6)	0.2 (-13.9)
13-20 above	1.7 (-5.3)	0.7 (-6.3)	0.8 (-9.2)	0.5 (-15.1)	1.7 (-10.6)	0.6 (-10.6)	0.6 (-6.0)	0.4 (-26.2)
21-30 above	0.4 (-10.7)	0.2 (-11.1)	0.2 (-11.9)	0.1 (-17.8)	0.4 (-15.5)	0.2 (-10.7)	0.1 (-20.2)	0.0 (-42.6)
31-40 above	0.1 (-10.2)	0.0 (-15.7)	0.1 (-18.4)	0.0 (-26.6)	0.1 (-22.1)	0.0 (-21.7)	0.0 (-15.4)	0.0 (-73.2)
41-50 above	0.0 (-15.5)	0.0 (-20.9)	0.0 (-24.8)	0.0 (-28.4)	0.0 (-42.5)	0.0 (-8.3)	0.0 (-18)	0.0 (-94)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at specific speeds during the off-peak period in the corresponding speed zone, compared to the prevalence of motorists traveling at these speeds across all time periods in the corresponding speed zone.

Table 21 presents the PARFs for passenger vehicle motorists during the off-peak period. Results are similar to the overall PARF calculations for all motorists outlined in Table 11 and Table 12. Specifically, when using Kloeden's risk function for urban and rural travel speeds, the off-peak period PARF values did not differ by more than $\pm 1.3\%$ for any specific speed categorisation. Moreover, when expressed as a proportional difference, there appears to be no differences in the proportion of casualty crashes attributable to low-level speeds in the off-peak periods compared to the overall data. That said, there was some evidence of reductions in moderate speeding (13-20 km/h over the limit) of between 4.6% and 30% in 60 km/h to 110 km/h zones, as well as reductions in more excessive speeding across all zones. In addition, when considering the PARF associated with exceeding the speed limit by any amount, there were noticeable increases in the proportion of casualty crashes attributable to speeding in general in 60 km/h (+3%) and 70 km/h zones (+3.3%).

Table 21: PARF for passenger vehicle motorists during the off-peak period, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-11.3	-10.0	-15.6	-9.4	-17.1	-12.3	-19.7	-12.6	-12.5	-4.7	-15.5	-5.7	-15.2	-5.2	-17.0	-5.6
Total above	65.1	20.8	37.4	12.1	42.3	13.5	31.6	11.4	24.4	5.4	16.6	3.7	11.5	2.7	7.7	1.9
1-5 above	6.5	3.1	3.4	2.2	3.6	2.8	4.1	2.8	3.1	1.0	3.6	1.1	3.6	1.0	3.3	0.9
6-10 above	12.8	5.9	6.3	3.7	5.5	3.9	5.7	3.6	4.8	1.3	4.4	1.2	3.3	0.8	2.4	0.6
11-12 above	3.1	2.3	2.2	1.1	2.1	1.3	2.1	1.1	1.8	0.4	1.4	0.3	0.8	0.2	0.5	0.1
13-20 above	11.9	6.3	10.0	3.6	8.3	3.6	7.1	2.7	5.7	1.2	3.1	0.6	1.9	0.4	1.4	0.3
21-30 above	15.0	2.2	10.3	1.3	11.8	1.5	8.7	1.0	5.7	1.2	2.4	0.3	1.4	0.2	0.1	0.0
31-40 above	14.7	0.9	3.8	0.2	8.7	0.4	3.7	0.2	2.3	0.2	1.4	0.1	0.3	0.0	0.0	0.0
41-50 above	1.1	0.1	1.5	0.1	2.2	0.1	0.2	0.0	1.0	0.1	0.3	0.0	0.1	0.0	0.0	0.0

Table 22 presents the proportion of heavy vehicle drivers engaged in speeding during the off-peak period, with a comparison to overall levels of speed non-compliance across all time periods (see

Table 13). Similar to the findings for passenger vehicle motorists, there was consistent evidence of a reduced prevalence of speeding, including both low-level (1-10 km/h over the limit) and moderate speeding (11-20 km/h over the speed limit), during the off-peak period compared with overall levels. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was less prevalent during the off-peak period in all zones (between 6.6% and 13.3%), with the exception of 110 km/h zones, where speeding by this amount was 9.3% more prevalent. Moreover, exceeding the speed limit by 6-10 km/h was less prevalent during the off-peak period in all zones (between 7.3% and 27.7%). There was also evidence of a lower prevalence of motorists exceeding the speed limit by 13-20 km/h (between 6.5% and 31.9%) during the off-peak period compared to overall levels in all speed zones. In both the off-peak period and overall, exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers.

Table 22: Proportion of heavy vehicle drivers travelling at various speeds during the off-peak period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	90.1 (+1.0)	95.8 (+0.4)	93.0 (+1.3)	95.2 (+1.1)	81.5 (+3.2)	89.7 (+2.4)	84.2 (+1.7)	92.4 (-0.2)
Above limit (total)	9.9 (-8.6)	4.2 (-8.9)	7.0 (-14.4)	4.8 (-17.5)	18.5 (-11.9)	10.3 (-17)	15.8 (-8.2)	7.6 (+2.0)
1-5 above	6.1 (-7.1)	2.4 (-9.9)	4.5 (-13.3)	3.3 (-14.5)	11.5 (-6.9)	7.7 (-12.0)	12.9 (-6.6)	5.7 (+9.3)
6-10 above	2.2 (-11.8)	1.0 (-7.3)	1.5 (-16.9)	1.0 (-22.6)	4.7 (-15.6)	2.0 (-27.7)	2.2 (-10.6)	1.3 (-9.3)
11-12 above	0.4 (-12.6)	0.2 (-8.0)	0.3 (-18.5)	0.2 (-24.6)	0.8 (-21.8)	0.3 (-28.5)	0.3 (-18.3)	0.2 (-16.9)
13-20 above	0.9 (-6.5)	0.4 (-7.8)	0.5 (-16.1)	0.3 (-25.9)	1.2 (-26.5)	0.3 (-31.9)	0.4 (-27.9)	0.4 (-26.6)
21-30 above	0.3 (-14.1)	0.1 (-7.2)	0.2 (-12.0)	0.1 (-24.3)	0.2 (-34.3)	0.1 (-40.1)	0.2 (-21.9)	0.0 (-10.6)
31-40 above	0.1 (-7.1)	0.0 (-2.8)	0.1 (-5.9)	0.0 (-0.3)	0.0 (-22.7)	0.0 (-58.2)	0.0 (-17.8)	0.0 (-17.5)
41-50 above	0.0 (+0.3)	0.0 (-11.8)	0.0 (-3.8)	0.0 (-50.5)	0.0 (-36.3)	0.0 (-69.5)	0.0 (-22.6)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at specific speeds during the off-peak period in the corresponding speed zone, compared to the prevalence of heavy vehicle drivers traveling at these speeds across all time periods in the corresponding speed zone.

5.1.3.3 Afternoon peak period

Table 23 shows the level of speed non-compliance among passenger vehicle motorists during the afternoon peak period (3.00pm–6.59pm), with a comparison to overall levels of speed non-compliance across all time periods (see Table 10). As can be seen, differences in the prevalence of speeding between the afternoon peak period and overall were relatively small and inconsistent. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was less prevalent during the afternoon peak period in 60 km/h, 70 km/h and 90 km/h zones (4.9%, 2.9% and 11.9%, respectively), but slightly more prevalent in 50 km/h and 110 km/h zones (4.1% and 2.5%, respectively). Similarly, exceeding the speed limit by 6-10 km/h was less prevalent during the afternoon peak period in 60 km/h, 70 km/h, 80 km/h and 90 km/h zones (5.2%, 3.5%, 2.6% and 17.6%, respectively), but slightly more prevalent in 50 km/h and 100 km/h zones (2.6% and 3.2%, respectively). Moreover, while the prevalence of motorists exceeding the speed limit by 13-20 km/h was lower in the afternoon peak period in 40 km/h, 60 km/h and 90 km/h (3.7%, 4.4% and 6.7%, respectively), it was 19.5% more prevalent in 110 km/h zones. In both the afternoon peak period and overall, exceeding the speed limit by 21 km/h or more was extremely rare among passenger vehicle motorists.

Table 23: Proportion of passenger vehicle motorists travelling at various speeds during the afternoon peak period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	82.1 (0.0)	90.7 (-0.3)	88.9 (+0.6)	90.5 (+0.3)	79.8 (+0.4)	88.2 (+2.0)	81.9 (-0.2)	83.5 (-0.5)
Above limit (total)	17.9 (-0.2)	9.3 (+3.2)	11.1 (-4.7)	9.5 (-3.2)	20.2 (-1.4)	11.8 (-12.7)	18.1 (+0.8)	16.5 (+2.7)
1-5 above	9.6 (+0.2)	5.5 (+4.1)	6.9 (-4.9)	6.3 (-2.9)	11.8 (-1.1)	7.9 (-11.9)	13.5 (0.0)	13.2 (+2.5)
6-10 above	4.9 (+0.4)	2.4 (+2.6)	2.6 (-5.2)	2.1 (-3.5)	4.9 (-2.6)	2.5 (-17.6)	3.4 (+3.2)	2.4 (+0.1)
11-12 above	1.1 (-0.5)	0.4 (+1.3)	0.5 (-4.5)	0.4 (-5.2)	1.0 (-3.1)	0.4 (-13.7)	0.4 (+1.6)	0.3 (+2.8)
13-20 above	1.7 (-3.7)	0.8 (-1.6)	0.8 (-4.4)	0.6 (-4.1)	1.9 (-1.4)	0.6 (-6.7)	0.6 (+4)	0.6 (+19.5)
21-30 above	0.4 (-2.9)	0.2 (+4.7)	0.2 (-1)	0.1 (-5.8)	0.5 (+5.1)	0.2 (+5.5)	0.2 (+7.7)	0.0 (+50.7)
31-40 above	0.2 (+7)	0.0 (-0.7)	0.1 (+8.7)	0.0 (+4.4)	0.1 (+5.4)	0.0 (+22.6)	0.0 (-7.4)	0.0 (+93.8)
41-50 above	0.0 (+3.5)	0.0 (+27.2)	0.0 (+19.7)	0.0 (+26.1)	0.0 (+50.9)	0.0 (+2.1)	0.0 (-18.3)	0.0 (-38.9)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at specific speeds during the afternoon peak period in the corresponding speed zone, compared to the prevalence of motorists traveling at these speeds across all time periods in the corresponding speed zone.

Table 24 presents the PARFs for passenger vehicle motorists travelling during the afternoon peak period.

Results are similar to the overall PARF calculations for all motorists outlined in Table 11 and Table 12.

Specifically, when using Kloeden's risk function for urban and rural travel speeds, the afternoon peak period PARF values did not differ by more than ±1.1% for any specific speed categorisation. Even when expressed as a proportional difference, there are minimal differences in the proportion of casualty crashes attributable to various speeds in afternoon peak periods compared to overall data, particularly with low-level and moderate speeding.

Table 24: PARF for passenger vehicle motorists during the afternoon peak period, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-10.9	-10.0	-15.5	-9.8	-15.7	-12.0	-18.2	-12.1	-11.5	-4.5	-14.4	-5.2	-14.4	-5.0	-16.6	-5.7
Total above	66.7	21.5	39.1	12.7	46.2	14.1	34.8	12.3	27.5	5.9	18.4	3.8	12.7	2.9	9.4	2.2
1-5 above	6.5	3.2	3.4	2.3	3.3	2.7	4.0	2.9	3.0	1.0	3.5	1.0	3.6	1.1	3.4	1.0
6-10 above	12.9	6.1	6.2	3.8	5.2	3.9	5.8	3.8	4.7	1.4	4.3	1.1	3.4	0.9	2.4	0.6
11-12 above	3.1	2.4	2.2	1.2	2.1	1.3	2.2	1.2	1.8	0.5	1.3	0.3	0.9	0.2	0.5	0.1
13-20 above	11.5	6.3	9.6	3.6	8.3	3.8	7.6	3.1	6.1	1.3	3.4	0.7	2.2	0.4	2.4	0.4
21-30 above	14.9	2.4	11.4	1.5	13.0	1.7	10.1	1.2	6.1	1.3	3.2	0.4	2.1	0.3	0.3	0.0
31-40 above	16.6	1.0	4.1	0.2	11.0	0.6	4.7	0.2	3.2	0.3	1.5	0.1	0.3	0.0	0.3	0.0
41-50 above	1.3	0.1	2.2	0.1	3.3	0.2	0.3	0.0	2.6	0.2	1.3	0.1	0.1	0.0	0.0	0.0

Table 25 shows the proportion of heavy vehicle drivers who exceeded the speed limit during the afternoon peak period, with a comparison to overall levels of speed non-compliance across all time periods (see

Table 13). Similar to the results for passenger vehicle motorists, differences in the prevalence of speeding between the afternoon peak period and overall levels were relatively inconsistent. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was less prevalent during the afternoon peak period in 60 km/h to 90 km/h zones (0.8% to 11.8%), but more prevalent in 40km/m, 50 km/h, 100 km/h and 110 km/h zones (2.5% to 10.5%). Similarly, exceeding the speed limit by 6-10 km/h was less prevalent during the afternoon peak period in 50 km/h to 90 km/h zones (1.1% to 24.2%), but more prevalent in 40 km/h, 100 km/h and 110 km/h zones (1.1%, 13.2% and 5.7%, respectively). Moreover, the prevalence of drivers exceeding the speed limit by 13-20 km/h was lower in the afternoon peak period in 50 km/h to 90 km/h (by between 10.0% and 38.6%). In both the afternoon peak period and overall, exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers.

Table 25: Proportion of heavy vehicle drivers travelling at various speeds during the afternoon peak period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	88.9 (-0.3)	95.2 (-0.2)	92.6 (+0.8)	94.9 (+0.8)	79.7 (+0.9)	89.6 (+2.3)	81.4 (-1.6)	91.8 (-0.8)
Above limit (total)	11.1 (+2.3)	4.8 (+3.7)	7.4 (-9.1)	5.1 (-12.5)	20.3 (-3.2)	10.4 (-16.2)	18.6 (+7.8)	8.2 (+10.5)
1-5 above	6.7 (+2.5)	2.8 (+6.5)	4.8 (-7.9)	3.4 (-11.1)	12.3 (-0.8)	7.7 (-11.8)	14.7 (+6.8)	5.7 (+10.5)
6-10 above	2.6 (+1.1)	1.1 (-1.1)	1.6 (-11.4)	1.1 (-13.1)	5.4 (-3.9)	2.1 (-24.2)	2.8 (+13.2)	1.5 (+5.7)
11-12 above	0.5 (-2.4)	0.2 (-3.9)	0.3 (-12.1)	0.2 (-15.9)	1.0 (-9.0)	0.3 (-22.1)	0.4 (+13.9)	0.3 (+17.6)
13-20 above	1.0 (+2.5)	0.5 (+1.5)	0.5 (-10.0)	0.3 (-24.5)	1.4 (-14.1)	0.3 (-38.6)	0.5 (+9)	0.7 (+17.9)
21-30 above	0.3 (+9.8)	0.2 (+6.8)	0.2 (-12.6)	0.1 (-7.7)	0.2 (-9.4)	0.1 (-34)	0.2 (+0.2)	0 (+97.4)
31-40 above	0.1 (+30.6)	0.0 (+0.3)	0.1 (-8.4)	0.0 (-25.6)	0.0 (-10.7)	0.0 (-61.1)	0.0 (+18.1)	0 (+86.8)
41-50 above	0.0 (-8.7)	0.0 (+12)	0.0 (-8.9)	0.0 (+86.2)	0.0 (-16.7)	0.0 (-38.2)	0.0 (+127.6)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at specific speeds during the afternoon peak period in the corresponding speed zone, compared to the prevalence of heavy vehicle drivers traveling at these speeds across all time periods in the corresponding speed zone.

5.1.3.4 Evening period

As can be seen in Table 26, levels of non-compliance during the evening period (7.00pm–10.59pm) among passenger vehicle motorists were typically higher compared to overall levels of speeding across all time periods (see Table 10). Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was more prevalent during the evening period in 50 km/h to 110 km/h zones (between 5.8% and 14.7%). Similarly, exceeding the speed limit by 6-10 km/h was more prevalent in 50 km/h to 110 km/h zones (between 2.1% and 36.9%). Moreover, the prevalence of motorists exceeding the speed limit by 13-20 km/h was higher in the evening period across all zones (between 7.1% and 88.6%). In both the evening period and overall, exceeding the speed limit by 21 km/h or more was extremely rare, although there was some evidence of increased speeding by 21-30 km/h during the evening period among passenger vehicle motorists.

Table 26: Proportion of passenger vehicle motorists travelling at various speeds during the evening period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	81.6 (-0.5)	89.9 (-1.2)	86.3 (-2.2)	86.9 (-3.7)	76.9 (-3.3)	84.2 (-2.7)	81.0 (-1.2)	80.6 (-4.0)
Above limit (total)	18.4 (+2.5)	10.1 (+11.7)	13.7 (+17)	13.1 (+33.9)	23.1 (+13)	15.8 (+17.5)	19.0 (+5.6)	19.4 (+20.9)
1-5 above	9.7 (+1.0)	5.8 (+8.4)	8.4 (+15.2)	8.5 (+30.4)	12.9 (+8.4)	10.5 (+16.2)	14.3 (+5.4)	14.8 (+14.7)
6-10 above	5.0 (+0.7)	2.6 (+12.5)	3.2 (+16.7)	2.9 (+35.1)	5.7 (+13.4)	3.7 (+18.7)	3.3 (+2.1)	3.3 (+36.9)
11-12 above	1.1 (+6.3)	0.5 (+14.6)	0.6 (+21.4)	0.5 (+40.9)	1.2 (+16.1)	0.6 (+25.8)	0.5 (+8.5)	0.4 (+54.8)
13-20 above	1.9 (+7.1)	1.0 (+24.3)	1.1 (+24.8)	0.9 (+52.9)	2.4 (+28.2)	0.9 (+27.7)	0.7 (+23.6)	0.9 (+88.6)
21-30 above	0.5 (+23.4)	0.2 (+32.2)	0.3 (+29.2)	0.2 (+69.2)	0.6 (+41.3)	0.2 (+3.5)	0.2 (+22.1)	0.0 (-29.5)
31-40 above	0.2 (+14.1)	0.0 (+36.6)	0.1 (+42.6)	0.0 (+99.8)	0.1 (+75.5)	0.0 (+44.5)	0.0 (-24.1)	0.0 (-73)
41-50 above	0.0 (+8.6)	0.0 (+10.0)	0.0 (+55.2)	0.0 (+62.4)	0.0 (+95.7)	0.0 (+71.4)	0.0 (-24.6)	0.0 (-30.2)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at specific speeds during the evening period in the corresponding speed zone, compared to the prevalence of motorists traveling at these speeds across all time periods in the corresponding speed zone.

Table 27 presents the PARFs for passenger vehicle motorists travelling during the evening period. Results reveal that, when compared to the overall PARF calculations for all motorists (see Table 11 and Table 12), the risk of crash involvement is heightened in the evening period when speeding. Specifically, when using Kloeden's risk function for urban and rural travel speeds and considering any speed over the limit, the evening period PARF values were higher across all zones (between 2.2% and 8%), with the exception of 100 km/h zones which showed limited difference. When expressed as a proportional difference, this represented an increased attributable crash risk in the evening period of between 3.6% and 26.1%. Results also show that attributable crash risk associated with low-level speeding was slightly higher in the evening period in 110 km/h zones, and to a lesser extent 90 km/h zones, with proportional differences in the magnitude of 5.9% to 24%. Moreover, there was evidence that motorists who engage in mid, high and extreme levels of speeding (i.e., travelling above 13 km/h above the limit) are at a heightened risk of being involved in a casualty crash attributable to speeding compared to the passenger vehicle motorists who are travelling at or below the speed limit. This was observed for motorists exceeding the speed limit by 21-30 km/h in 40 km/h, 50 km/h and 70 km/h zones (2.6%, 2% and 3.6%, respectively), and by 31-40 km/h in 60 km/h and 70 km/h zones (2% and 2.2%, respectively).

Table 27: PARF for passenger vehicle motorists during the evening period, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or – 10 under	-10.2	-9.9	-14.4	-9.6	-15.0	-12.5	-16.1	-12.4	-10.5	-4.4	-13.2	-5.1	-14.4	-5.1	-15.7	-5.6
Total above	69.2	22.6	43.3	14.4	49.5	16.1	42.9	16.1	31.5	7.1	20.4	4.6	12.7	2.9	11.1	2.8
1-5 above	6.2	3.2	3.3	2.4	3.3	2.9	4.1	3.4	3.0	1.0	3.9	1.3	3.4	1.0	3.6	1.1
6-10 above	12.2	5.9	6.3	4.1	5.4	4.3	6.3	4.6	4.9	1.5	5.1	1.4	3.2	0.9	3.1	0.8
11-12 above	3.0	2.5	2.3	1.3	2.2	1.5	2.5	1.6	1.9	0.5	1.6	0.4	0.9	0.2	0.7	0.2
13-20 above	11.8	6.9	11.3	4.5	9.1	4.5	9.4	4.3	7.1	1.7	4.1	0.9	2.5	0.5	3.4	0.7
21-30 above	18.3	3.0	13.1	1.8	14.0	2.0	13.6	1.8	7.1	1.7	2.7	0.4	2.4	0.3	0.1	0.0
31-40 above	16.4	1.1	5.2	0.2	12.0	0.7	6.8	0.4	4.5	0.4	1.6	0.1	0.2	0.0	0.0	0.0
41-50 above	1.3	0.1	1.8	0.1	3.6	0.2	0.4	0.0	3.0	0.2	1.5	0.1	0.1	0.0	0.0	0.0

Table 28 shows the proportion of heavy vehicle drivers who exceeded the speed limit during the evening period, with a comparison to overall levels of speed non-compliance across all time periods (see

Table 13). Similar to the results for passenger vehicle motorists, there was evidence of increased prevalence of speeding during the evening period. However, unlike the passenger vehicle motorists, where increased speeding prevalence was largely explained by mid and high-level speeding, the increased prevalence of speeding among heavy vehicle drivers was largely due to increased low-level speeding. Specifically, compared to overall levels, heavy vehicle drivers exceeding the speed limit by 1-5 km/h was more prevalent across 50 km/h to 100 km/h zones (between 7.1% and 17.7%), although was less prevalent in 40 km/h and 110 km/h zones (4.6% and 37.6%, respectively). Similarly, exceeding the speed limit by 6-10 km/h was more prevalent in 40 km/h to 90 km/h zones (between 5.1% and 20.0%), but less prevalent in 100 km/h and 110 km/h zones (10.7% and 14.9%, respectively). There was also some evidence to suggest an increased prevalence of exceeding the speed limit by 13-20 km/h in the evening period in 40 km/h, 70km/h and 80 km/h zones (8.6%, 17.3% and 21.5%, respectively). In both the evening period and overall, exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers.

Table 28: Proportion of heavy vehicle drivers travelling at various speeds during the evening period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	88.9 (-0.2)	94.8 (-0.6)	91.3 (-0.6)	93.7 (-0.5)	76.2 (-3.5)	85.7 (-2.2)	81.2 (-1.9)	94.8 (+2.4)
Above limit (total)	11.1 (+1.8)	5.2 (+12.1)	8.7 (+7.0)	6.3 (+8.8)	23.8 (+13.3)	14.3 (+15.5)	18.8 (+9)	5.2 (-29.8)
1-5 above	6.3 (-4.6)	3.1 (+16.3)	5.6 (+8.6)	4.1 (+7.1)	13.4 (+8.0)	10.3 (+17.7)	15.6 (+13.6)	3.2 (-37.6)
6-10 above	2.7 (+5.1)	1.2 (+12.7)	1.9 (+6.5)	1.4 (+11.1)	6.7 (+20.0)	3.2 (+15.1)	2.2 (-10.7)	1.2 (-14.9)
11-12 above	0.6 (+31.9)	0.2 (+8.2)	0.4 (+6.9)	0.3 (+12.7)	1.3 (+23.8)	0.4 (-1.3)	0.3 (-6)	0.2 (-17.3)
13-20 above	1.0 (+8.6)	0.4 (-3.2)	0.6 (-0.6)	0.4 (+17.3)	2.0 (+21.5)	0.4 (-7)	0.5 (-1.9)	0.6 (-1.7)
21-30 above	0.4 (+30)	0.2 (+3.6)	0.2 (-7.1)	0.1 (+11)	0.3 (+28.8)	0.1 (+8.7)	0.2 (-12.5)	0 (-32.7)
31-40 above	0.1 (+61.3)	0.0 (-16.7)	0.1 (+5.3)	0.0 (-6.2)	0.0 (-1.7)	0.0 (-18.1)	0.0 (-53.8)	0.0 (-86.9)
41-50 above	0.0 (+12.7)	0.0 (-45.4)	0.0 (+6.1)	0.0 (-19.1)	0.0 (+16.3)	0.0 (+202.4)	0.0 (+82.5)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at specific speeds during the evening period in the corresponding speed zone, compared to the prevalence of heavy vehicle drivers traveling at these speeds across all time periods in the corresponding speed zone.

5.1.3.5 Late night/early morning period

As can be seen in

Table 29, levels of non-compliance during the late night/early morning period (11.00pm–5.59am) among passenger vehicle motorists were typically higher compared to overall levels of speeding across all time periods (see Table 10). Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was more prevalent during the late night/early morning period in 40 km/h to 90 km/h zones (between 3.6% and 55.2%). This increased prevalence was even more pronounced when considering exceeding the speed limit by 6-10 km/h, with speeding by this amount more prevalent in 40 km/h to 90 km/h zones by between 20.1% and 96.7%. Moreover, the prevalence of motorists exceeding the speed limit by 13-20 km/h was also higher in the late night/early morning period across all zones (between 56.3% and 146.8%). While exceeding the speed limit by 21 km/h or more was extremely rare in both the late night/early morning period and overall, there was some evidence of increased speeding by 21-30 km/h during the late night/early morning period among passenger vehicle motorists.

Table 29: Proportion of passenger vehicle motorists travelling at various speeds during the late night/early morning period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	76.3 (-7.1)	89.6 (-1.5)	80.9 (-8.4)	82.9 (-8.1)	71.2 (-10.5)	79.8 (-7.8)	81.9 (-0.1)	83.7 (-0.3)
Above limit (total)	23.7 (+32.3)	10.4 (+15.2)	19.1 (+64)	17.1 (+74.5)	28.8 (+40.8)	20.2 (+49.8)	18.1 (+0.6)	16.3 (+1.4)
1-5 above	11.4 (+19.1)	5.5 (+3.6)	10.9 (+50.7)	10.1 (+55.2)	14.8 (+24)	12.1 (+34.1)	13.4 (-1.0)	12.7 (-1.1)
6-10 above	6.6 (+34.0)	2.8 (+20.1)	4.8 (+74)	4.3 (+96.7)	7.7 (+51.1)	5.9 (+91.7)	3.1 (-4.8)	2.4 (-2.2)
11-12 above	1.6 (+52.1)	0.5 (+33.4)	0.9 (+87.6)	0.8 (+119.4)	1.8 (+67.3)	0.8 (+67.9)	0.5 (+6.7)	0.3 (+28.6)
13-20 above	3.0 (+68.5)	1.2 (+56.4)	1.8 (+105.8)	1.5 (+146.8)	3.5 (+83.3)	1.1 (+64.5)	0.7 (+19.8)	0.8 (+57.7)
21-30 above	0.9 (+111.5)	0.3 (+64.4)	0.5 (+126.1)	0.4 (+183.3)	0.9 (+104.8)	0.2 (+14.4)	0.4 (+156.2)	0.1 (+184.7)
31-40 above	0.2 (+29.6)	0.0 (+100.2)	0.2 (+140.3)	0.1 (+174.7)	0.2 (+154.1)	0.1 (+58.2)	0.0 (+167.5)	0.0 (+601)
41-50 above	0.0 (+56.2)	0.0 (+115)	0.0 (+142.2)	0.0 (+177.7)	0.1 (+143.3)	0.0 (+354.1)	0.0 (+223.6)	0.0 (+1383.5)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at specific speeds during the late night/early morning period in the corresponding speed zone, compared to the prevalence of motorists traveling at these speeds across all time periods in the corresponding speed zone.

Table 30 presents the PARFs for passenger vehicle motorists travelling during the late night/early morning period. Similar to that observed in the evening period, results reveal that when compared to the overall PARF calculations for all motorists (see Table 11 and Table 12), the risk of crash involvement is heightened in the late night/early morning period when speeding. Specifically, when using Kloeden's risk function for urban and rural travel speeds and considering any speed over the limit, the evening period PARF values were higher across all zones (between 2.6% and 16.4%). When expressed as a proportional difference, this represents an increase in attributable crash risk of between 15.7% and 47%. Interestingly, while late night/early morning PARF values were typically lower for exceeding the speed limit by 1-5 km/h, they were typically elevated when considering exceeding the speed limit by 6-10 km/h (with the exception of 50 km/h, 100 km/h and 110 km/h zones). Results also showed that motorists who engage in mid, high and extreme levels of speeding (i.e., travelling more than 13 km/h above the limit) in the late night/ early morning period are at a heightened risk of being involved in a casualty crash attributable to speeding compared to the passenger vehicle motorists travelling at the speed limit and those travelling throughout the day. This was observed for motorists in 40 km/h to 80 km/h zones who exceeded the speed limit by 13-20 km/h (between 2.4% and 4%) or by 21-30 km/h (between 4% and 8%), as well as by 31-40 km/h in 50 km/h to 80 km/h and 100 km/h zones (between 2.5% and 4.7%).

Table 30: PARF for passenger vehicle motorists during the late night/early morning period, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-7.5	-8.4	-11.7	-8.8	-10.6	-10.7	-12.3	-10.8	-8.3	-3.9	-11.4	-4.7	-13.4	-5.0	-17.1	-6.0
Total above	77.3	29.0	49.6	16.8	59.1	22.2	51.3	21.1	38.3	9.4	23.7	5.9	14.8	3.1	12.0	2.5
1-5 above	6.2	3.3	2.9	2.3	3.2	3.5	3.9	3.6	3.0	1.2	3.8	1.3	3.1	1.0	3.2	0.9
6-10 above	13.7	7.1	6.1	4.4	5.9	5.7	7.0	5.9	5.7	2.0	7.0	2.1	2.9	0.8	2.4	0.6
11-12 above	3.3	3.2	2.4	1.5	2.5	2.1	3.0	2.2	2.4	0.7	2.3	0.6	0.8	0.2	0.6	0.1
13-20 above	14.7	9.7	13.2	5.8	11.1	6.6	11.8	6.2	8.9	2.3	4.9	1.1	2.3	0.5	3.3	0.6
21-30 above	23.7	4.5	15.1	2.3	17.7	3.1	17.4	2.7	8.9	2.3	2.7	0.4	4.4	0.6	0.6	0.1
31-40 above	14.3	1.1	6.8	0.3	14.7	1.0	7.8	0.5	6.0	0.6	1.8	0.2	0.9	0.1	1.1	0.1
41-50 above	1.4	0.1	3.1	0.2	4.0	0.3	0.4	0.0	3.3	0.2	1.2	0.1	0.5	0.0	0.9	0.0

Table 31 shows the proportion of heavy vehicle drivers who exceeded the speed limit during the late night/early morning period, with a comparison to overall levels of speed non-compliance across all time periods (see

Table 13). Results indicated relatively consistent increases in the prevalence of speeding, with a few notable exceptions. Specifically, compared to overall levels, speeding among heavy vehicle drivers was more prevalent across 40 km/h to 60 km/h and 80 to 90 km/h zones both for exceeding the speed limit by 1-5 km/h (between 19.7% and 100.8%), by 6-10 km/h (between 27.8% and 46.2%) and by 13-20 km/h (between 24.3% and 113.4%). Indeed, heavy vehicle drivers were twice as likely to exceed the speed limit by 1-5 km/h in 60 km/h zones, and by 13-20 km/h in 50 km/h zones, during the late night/early morning period. That said, overall heavy vehicle driver speeding was less prevalent in 70 km/h, 100 km/h and 110 km/h zones.

Table 31: Proportion of heavy vehicle drivers travelling at various speeds during the late night/early morning period, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	86.2 (-3.3)	93.1 (-2.3)	85.6 (-6.8)	95.1 (+0.9)	71.6 (-9.4)	84.9 (-3.1)	84.4 (+2)	93 (+0.4)
Above limit (total)	13.8 (+27.3)	6.9 (+47.8)	14.4 (+76.2)	4.9 (-15.2)	28.4 (+35.4)	15.1 (+21.6)	15.6 (-9.7)	7.0 (-5.2)
1-5 above	8.1 (+23.1)	3.6 (+34.8)	10.4 (+100.8)	3.2 (-16.1)	16.7 (+34.8)	10.4 (+19.7)	12.8 (-6.9)	5.7 (+9.6)
6-10 above	3.5 (+39.5)	1.6 (+46.2)	2.4 (+31.6)	1.1 (-13.1)	7.5 (+34.6)	3.5 (+27.8)	2.0 (-17.2)	1.1 (-19.5)
11-12 above	0.6 (+35.1)	0.3 (+50.7)	0.5 (+37.4)	0.2 (-23.2)	1.4 (+33.6)	0.5 (+27.5)	0.3 (-20.1)	0.1 (-69.6)
13-20 above	1.2 (+24.3)	1.0 (+113.4)	0.8 (+37.9)	0.3 (-9.2)	2.4 (+45.4)	0.6 (+30.6)	0.4 (-22.9)	0.2 (-71.6)
21-30 above	0.4 (+25.7)	0.3 (+82.8)	0.3 (+45)	0.1 (-13)	0.4 (+37.7)	0.1 (+2.6)	0.1 (-59)	0.0 (-62.6)
31-40 above	0.0 (-37.1)	0.1 (+94.1)	0.1 (+8.0)	0.0 (-2.0)	0.0 (+11.1)	0.0 (-100)	0.0 (-70.3)	0.0 (-100)
41-50 above	0.0 (-1.7)	0.0 (+22.4)	0.0 (-4.1)	0.0 (-61.2)	0.0 (-98.2)	0.0 (-100)	0.0 (-100)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at specific speeds during the late night/early morning period in the corresponding speed zone, compared to the prevalence of heavy vehicle drivers traveling at these speeds across all time periods in the corresponding speed zone.

5.1.4 DAY OF THE WEEK

Across the Queensland road network in 2018, the proportion of passenger vehicle motorists exceeding the speed limit was consistently higher on weekends compared to weekdays (Figure 29). This difference was most pronounced in 70 km/h zones, where the prevalence of speeding was 39.3% greater on weekends compared to weekdays, followed by 50 km/h and 100 km/h zones (31.3% and 30.8%, respectively). However, speeding was also substantially more prevalent in all other zones on weekends, including 60 km/h (27.9%), 80 km/h (24.2%), 90 km/h (23.6%), 110 km/h (18.2%) and 40 km/h zones (13%).

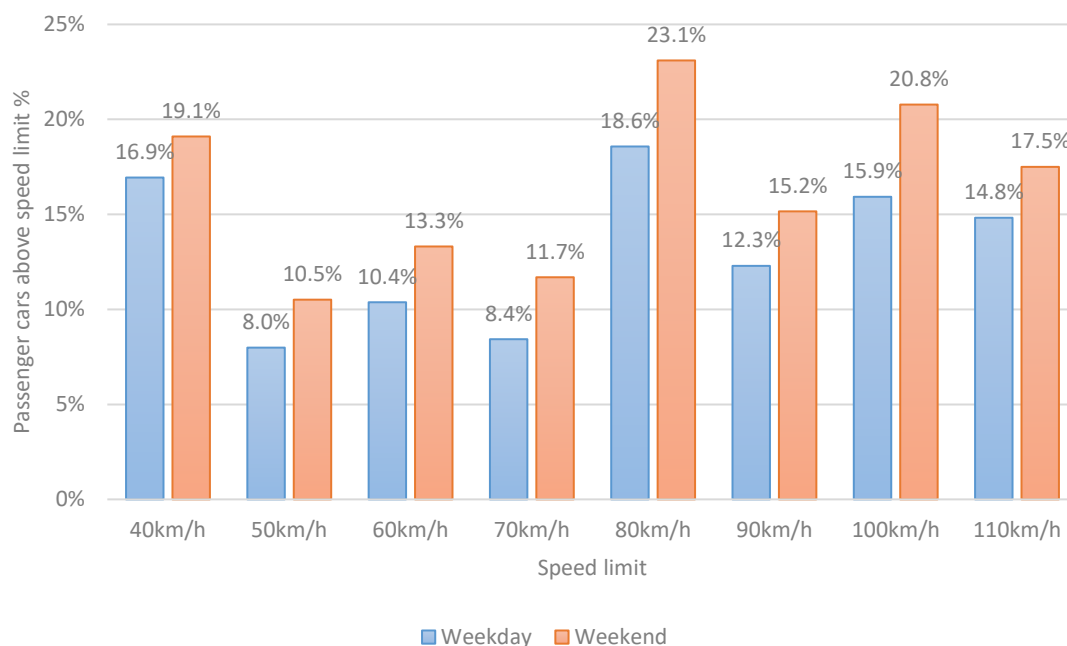


Figure 29: Proportion of passenger vehicle motorists traveling above the speed limit, by day of the week, Queensland, 2018

Figure 29 also shows that speed compliance among passenger vehicle motorists was highest in 50 km/h and 70 km/h speed zones on both weekends and weekdays, with only between 8% and 11.7% of motorists exceeding the speed limit in these zones. Conversely, speed non-compliance was greatest in the 80 km/h speed zone on both weekends and weekdays (18.6% and 23.1%, respectively), with relatively high levels of non-compliance also observed in 40 km/h and 100 km/h zones on both weekends and weekdays (between 15.9% and 20.8%).

Table 32 further highlights the level of speed non-compliance among passenger vehicle motorists by day of the week, with a comparison to overall levels of speed non-compliance (see Table 10). As can be seen, the prevalence of speeding was consistently lower on a typical weekday across all speed zones (between 5.6% and 14.3%) when compared to overall levels. Conversely, speeding was consistently more prevalent on a typical weekend day across all zones (between 6.7% and 19.4%) when compared to overall levels. Taken together these findings highlight that passenger vehicle motorists engage in more prevalent levels of speeding during the weekend compared to weekdays.

Table 32: Proportion of passenger vehicle motorists travelling above the speed limit by day of the week, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
All days	17.9	9.0	11.7	9.8	20.5	13.5	18.0	16.1
Typical weekday	16.9 (-5.4)	8 (-11.7)	10.4 (-11)	8.4 (-14.1)	18.6 (-9.2)	12.3 (-8.8)	15.9 (-11.4)	14.8 (-7.8)
Typical weekend day	19.1 (+6.6)	10.5 (+16.2)	13.3 (+14.1)	11.7 (+19.2)	23.1 (+12.9)	15.2 (+12.5)	20.8 (+15.6)	17.5 (+8.9)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists exceeding the speed limit on the corresponding day in the corresponding speed zone, compared to the prevalence of motorists exceeding the speed limit overall in the corresponding speed zone.

Figure 30 shows similar results in regards to the proportion of heavy vehicle drivers exceeding the speed limit by day of the week. Specifically, the proportion of heavy vehicle drivers exceeding the speed limit was consistently higher on weekends compared to weekdays, however the differences were typically less pronounced. The difference was greatest in 50 km/h zones, where the prevalence of speeding was 25.5% greater on weekends compared to weekdays, followed by 60 km/h (21.1%). That said, speeding was also more prevalent in all other zones on weekends.

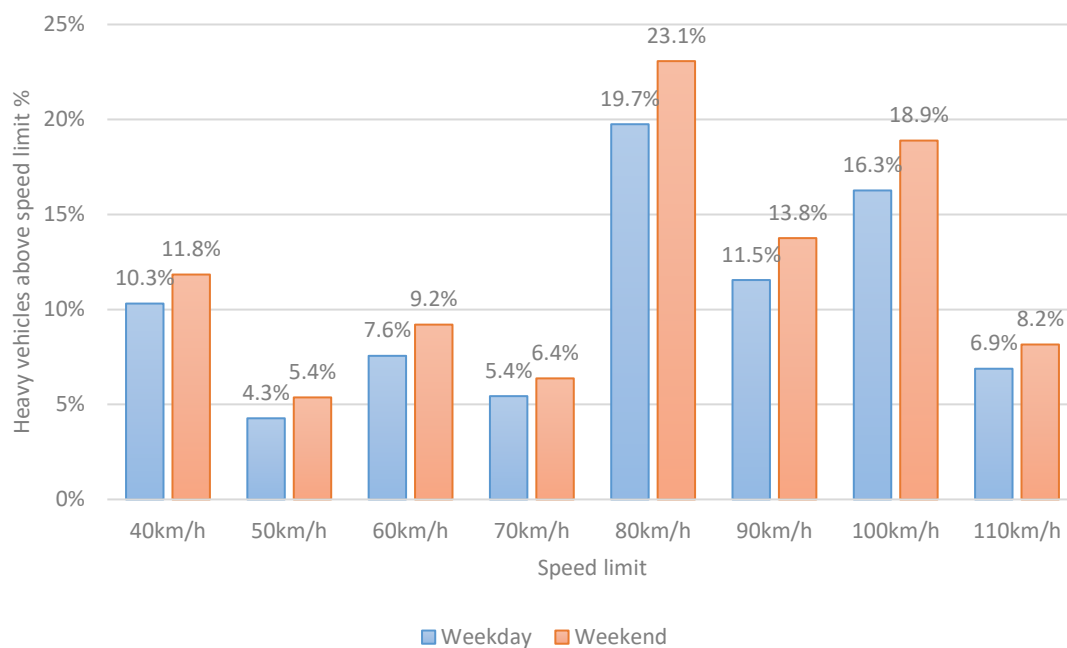


Figure 30: Proportion of heavy vehicle drivers travelling above the speed limit, by day of the week, Queensland, 2018

As can also be seen in Figure 30, heavy vehicle drivers were most compliant with speed limits in 50 km/h and 70 km/h speed zones on both weekends and weekdays, with 5.4% to 6.4% of heavy vehicle drivers detected speeding in these zones. Conversely, speed non-compliance was greatest in 80 km/h and 100 km/h speed zones on both weekends and weekdays (between 19.7% and 23.1%).

Table 33 further highlights the level of speed non-compliance among heavy vehicle drivers by day of the week, with a comparison to overall levels of speed non-compliance (see

Table 13). As can be seen, the prevalence of speeding was consistently higher across all speed zones on a typical weekend (between 8.9% and 15.8%), when compared to overall levels, as well as being consistently lower across all speed zones on a typical weekday (between 5.2% and 7.9%).

Table 33: Proportion of heavy vehicle drivers travelling above the speed limit by day of the week, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
All days	10.9	4.6	8.2	5.8	21.0	12.4	17.2	7.4
Typical weekday	10.3 (-5.2)	4.3 (-7.9)	7.6 (-7.4)	5.4 (-6.4)	19.7 (-5.8)	11.5 (-7.0)	16.3 (-5.7)	6.9 (-7.4)
Typical weekend day	11.8 (+8.9)	5.4 (+15.8)	9.2 (+12.8)	6.4 (+9.7)	23.1 (+10.0)	13.8 (+10.7)	18.9 (+9.6)	8.2 (+9.7)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers exceeding the speed limit on the corresponding day in the corresponding speed zone, compared to the prevalence of heavy vehicle drivers exceeding the speed limit overall in the corresponding speed zone.

5.1.4.1 Weekdays

As can be seen in Table 34, levels of non-compliance on a typical weekday among passenger vehicle motorists were consistently lower compared to overall levels of speeding (see Table 32). Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was less prevalent on a typical weekday in all speed zones (between 3.2% and 12.8%). This reduced prevalence was even more pronounced when considering exceeding the speed limit by 6-10 km/h, with speeding by this amount also less prevalent in all speed zones by between 6.6% and 15.9%. Moreover, the prevalence of motorists exceeding the speed limit by 13-20 km/h was also lower on a typical weekday across all zones by between 10.5% and 19%. Exceeding the speed limit by 21 km/h or more was extremely rare on both a typical weekday and overall among passenger vehicle motorists.

Table 34: Proportion of passenger vehicle motorists travelling at various speeds on a typical weekday, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	83.1 (+1.2)	92 (+1.2)	89.6 (+1.5)	91.6 (+1.5)	81.4 (+2.4)	87.7 (+1.4)	84.1 (+2.5)	85.2 (+1.5)
Above limit (total)	16.9 (-5.4)	8 (-11.7)	10.4 (-11)	8.4 (-14.1)	18.6 (-9.2)	12.3 (-8.8)	15.9 (-11.4)	14.8 (-7.8)
1-5 above	9.3 (-3.2)	4.7 (-11.3)	6.5 (-10.3)	5.7 (-12.8)	11 (-7.3)	8.3 (-8.4)	12.2 (-10.1)	11.9 (-7.3)
6-10 above	4.6 (-6.6)	2 (-13.4)	2.4 (-12.2)	1.8 (-15.9)	4.6 (-9.8)	2.9 (-7.3)	2.8 (-14.5)	2.2 (-9.3)
11-12 above	1.0 (-11.0)	0.4 (-11.8)	0.4 (-13.0)	0.3 (-17.9)	0.9 (-12.4)	0.4 (-11.8)	0.4 (-15.9)	0.2 (-9)
13-20 above	1.6 (-11.6)	0.7 (-10.5)	0.8 (-13.0)	0.5 (-19.0)	1.6 (-14.8)	0.6 (-15.6)	0.5 (-18.9)	0.4 (-10.5)
21-30 above	0.4 (-3.6)	0.2 (-8.2)	0.2 (-12.0)	0.1 (-14.9)	0.4 (-21.0)	0.2 (-16.0)	0.1 (-21.1)	0.0 (-35.2)
31-40 above	0.2 (-2.2)	0.0 (-10)	0.1 (-3.5)	0.0 (-3.7)	0.1 (-20.6)	0.0 (-23.6)	0.0 (-15.3)	0.0 (-9.8)
41-50 above	0.0 (-5.1)	0.0 (+3.3)	0.0 (-0.1)	0.0 (-23.2)	0.0 (-13.6)	0.0 (-42.7)	0.0 (-13.2)	0.0 (-0.1)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at specific speeds on a typical weekday in the corresponding speed zone, compared to the prevalence of motorists traveling at these speeds overall in the corresponding speed zone.

Table 34 also shows that, on a typical weekday, passenger vehicle motorist speeding is most prevalent in 80 km/h speed zones, with 18.6% of motorists exceeding the speed limit. Speeding was also relatively prevalent in 40 km/h, 100 km/h and 110 km/h zones (16.9%, 15.9% and 14.8%, respectively). Conversely, speeding was less prevalent in 50 km/h, 60 km/h and 70 km/h zones (8%, 10.4% and 8.4%, respectively). As can be seen, the vast

majority of motorists exceeding the speed limit on a typical weekday were engaging in low-level speeding (travelling 1-10 km/h above the speed limit), irrespective of the speed zone. Very few motorists engaged in extreme speeding.

Table 35 presents the PARFs for passenger vehicle motorists on a typical weekday. The PARF calculations for passenger vehicle motorists who exceeded the speed limit during a typical weekday were consistently lower compared to the overall PARF values for all passenger vehicles from across Queensland (up to -2.5%). The analysis showed that approximately 66% of casualty crashes are attributable to speeding in the 40 km/h speed zone using Kloeden's RR functions and the highest risk of being involved in casualty crash occurs when speeding in 40 km/h signed zones, particularly when travelling at above 61 km/h in a 40 km/h zone. Using both equations, the percentage attributable risk fraction of a casualty crash was lowest for drivers who were speeding in the 110 km/h speed zone. When compared to overall data, weekday PARFs tended to be slightly to moderately lower, suggesting a lower proportion of speed-related crashes on weekdays compared to weekends.

Table 35: PARF for passenger vehicle motorists on a typical weekday, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit		50 km/h limit		60 km/h limit		70 km/h limit		80 km/h limit		90 km/h limit		100 km/h limit		110 km/h limit	
	PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-11.2	-10.1	-15.6	-9.4	-16.6	-12.1	-19.3	-12.4	-12.4	-4.6	-14.8	-5.3	-15.5	-5.2	-17.0	-5.6
Total above	65.6	20.5	37.7	11.7	44.0	13.2	32.4	11.0	24.7	5.3	16.9	3.7	10.8	2.4	8.2	1.9
1-5 above	6.4	3.1	3.2	2.1	3.3	2.6	3.9	2.6	3.0	0.9	3.5	1.1	3.3	0.9	3.2	0.9
6-10 above	12.3	5.8	5.8	3.4	5.2	3.7	5.4	3.4	4.6	1.3	4.6	1.2	2.9	0.7	2.3	0.6
11-12 above	2.9	2.2	2.1	1.1	2.0	1.2	2.0	1.1	1.7	0.4	1.4	0.3	0.7	0.2	0.5	0.1
13-20 above	10.9	5.9	9.7	3.5	8.1	3.5	6.9	2.7	5.6	1.2	3.1	0.6	1.7	0.3	1.8	0.3
21-30 above	16.1	2.4	10.8	1.4	12.1	1.5	9.4	1.0	5.6	1.2	2.5	0.3	1.6	0.2	0.1	0.0
31-40 above	15.8	1.0	4.1	0.2	10.4	0.5	4.7	0.2	2.5	0.2	1.2	0.1	0.3	0.0	0.1	0.0
41-50 above	1.3	0.1	2.0	0.1	2.9	0.1	0.2	0.0	1.6	0.1	0.5	0.0	0.1	0.0	0.1	0.0

Table 36 shows the proportion of heavy vehicle drivers who exceeded the speed limit on a typical weekday, with a comparison to overall levels of speed non-compliance (see

Table 13). Results revealed consistent evidence of a reduced prevalence of speeding among heavy vehicle drivers on a typical weekday, compared to overall levels of speeding. Specifically, compared to overall levels, low-level speeding among heavy vehicle drivers was less prevalent across all zones, both for exceeding the speed limit by 1-5 km/h (between 4.2% and 8.4%) and by 6-10 km/h (between 6.3% and 12.0%) as well as when considering medium (11-20 km/h) and high-level (21-30km/h) speeding.

Table 36: Proportion of heavy vehicle drivers travelling at various speeds on a typical weekday, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	89.7 (+0.6)	95.7 (+0.4)	92.4 (+0.7)	94.6 (+0.4)	80.3 (+1.5)	88.5 (+1)	83.7 (+1.2)	93.1 (+0.6)
Above limit (total)	10.3 (-5.2)	4.3 (-7.9)	7.6 (-7.4)	5.4 (-6.4)	19.7 (-5.8)	11.5 (-7.0)	16.3 (-5.7)	6.9 (-7.4)
1-5 above	6.2 (-5.2)	2.4 (-8.4)	4.8 (-7.4)	3.6 (-5.7)	11.8 (-4.2)	8.2 (-6.4)	13.1 (-4.7)	4.9 (-5.1)
6-10 above	2.4 (-6.3)	1.0 (-9.2)	1.6 (-8.2)	1.2 (-6.9)	5.2 (-6.6)	2.5 (-8.2)	2.2 (-8.1)	1.2 (-12.1)
11-12 above	0.5 (-5.1)	0.2 (-9.4)	0.3 (-7.9)	0.2 (-8.2)	1.0 (-9.1)	0.3 (-7.1)	0.3 (-11.4)	0.2 (-9.0)
13-20 above	0.9 (-5.5)	0.4 (-5.4)	0.6 (-6.7)	0.3 (-9.8)	1.5 (-11.9)	0.4 (-9.2)	0.4 (-13.3)	0.5 (-15.7)
21-30 above	0.3 (+1.7)	0.2 (-0.4)	0.2 (-2.7)	0.1 (-6.8)	0.2 (-11.3)	0.1 (-10.4)	0.2 (-12.8)	0 (-16.5)
31-40 above	0.1 (+9.1)	0 (+4.1)	0.1 (-1.9)	0.0 (-2.6)	0.0 (-16.5)	0.0 (-29.0)	0.0 (+7.7)	0.0 (-2.3)
41-50 above	0.0 (+17.7)	0.0 (+8.1)	0.0 (-3.2)	0.0 (-33.3)	0.0 (-7.6)	0.0 (-25.7)	0.0 (+19.5)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at specific speeds on a typical weekday in the corresponding speed zone, compared to the prevalence of heavy vehicle drivers traveling at these speeds overall in the corresponding speed zone.

5.1.4.2 Weekends

As can be seen in

Table 29, levels of non-compliance on a typical weekend day among passenger vehicle motorists were consistently higher compared to overall levels of speeding (see Table 32). Taken together with the findings presented in the previous section, passenger vehicle motorists tend to speed more on weekend days and less on weekdays. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was more prevalent on a typical weekend day in all speed zones (between 3.9% and 17.4%). This increased prevalence was even more pronounced when considering exceeding the speed limit by 6-10 km/h, with speeding by this amount also more prevalent in all speed zones by between 8.1% and 21.7%. Moreover, the prevalence of motorists exceeding the speed limit by 13-20 km/h was also higher on a typical weekend day across all zones by between 12.1% and 25.8%. Exceeding the speed limit by 21 km/h or more was extremely rare on both a typical weekday and overall among passenger vehicle motorists, however there was evidence to suggest increases in the prevalence of exceeding the speed limit by 21-30 km/h.

Table 37: Proportion of passenger vehicle motorists travelling at various speeds on a typical weekend day, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	80.9 (-1.4)	89.5 (-1.6)	86.7 (-1.9)	88.3 (-2.1)	76.9 (-3.3)	84.8 (-1.9)	79.2 (-3.4)	82.5 (-1.7)
Above limit (total)	19.1 (+6.6)	10.5 (+16.2)	13.3 (+14.1)	11.7 (+19.2)	23.1 (+12.9)	15.2 (+12.5)	20.8 (+15.6)	17.5 (+8.9)
1-5 above	9.9 (+3.9)	6.2 (+15.6)	8.2 (+13.2)	7.6 (+17.4)	13.1 (+10.2)	10.1 (+12.0)	15.4 (+13.8)	13.9 (+8.4)
6-10 above	5.3 (+8.1)	2.8 (+18.4)	3.2 (+15.6)	2.6 (+21.7)	5.8 (+13.8)	3.4 (+10.4)	3.9 (+19.8)	2.7 (+10.6)
11-12 above	1.2 (+13.4)	0.5 (+16.3)	0.6 (+16.6)	0.5 (+24.3)	1.2 (+17.4)	0.5 (+16.8)	0.5 (+21.7)	0.3 (+10.3)
13-20 above	2.0 (+14.1)	0.9 (+14.4)	1.0 (+16.6)	0.7 (+25.9)	2.3 (+20.8)	0.8 (+22.3)	0.7 (+25.8)	0.5 (+12.1)
21-30 above	0.4 (+4.4)	0.2 (+11.3)	0.3 (+15.3)	0.2 (+20.3)	0.6 (+29.7)	0.2 (+22.7)	0.2 (+28.8)	0.0 (+40.4)
31-40 above	0.2 (+2.7)	0.0 (+13.7)	0.1 (+4.5)	0.0 (+5.1)	0.1 (+29)	0.0 (+33.6)	0.0 (+21)	0.0 (+11.2)
41-50 above	0.0 (+6.2)	0.0 (-4.5)	0.0 (+0.1)	0.0 (-31.6)	0.0 (+19.1)	0.0 (+60.8)	0.0 (+18.1)	0.0 (+0.1)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at specific speeds on a typical weekend day in the corresponding speed zone, compared to the prevalence of motorists traveling at these speeds overall in the corresponding speed zone.

The PARF calculated using the weekend passenger vehicle motorist speed data (Table 38) are typically up to 2.8% higher (within each speed zone) compared the weekday data. The exception to this occurs in 70 km/h and 80 km/h signed speed zones, where the risk of a casualty crash attributable to speeding is overall 5.2% and 4.8% higher (respectively) for passenger vehicle motorists during weekend days compared to weekdays. Similarly, the PARF for the weekend passenger vehicle motorist speed data was typically higher compared to overall data (up to 2.7%). Overall, 68% of casualty crashes are attributable to speeding in the 40 km/h speed zone, with approximately 20% of casualty crashes attributable to low-level speeding (i.e. drivers travelling at 41-50 km/h in 40 km/h zones), but 48.2% of crashes being attributable to mid to high-level speeding (i.e. travelling above 11 km/h in a 40 km/h zone) on weekend days. Consistent with results presented in relation to the weekday data, weekend PARFs tended to be slightly to moderately higher compared to overall data, suggesting a higher proportion of speed-related crashes on weekends compared to weekdays.

Table 38: PARF for passenger vehicle motorists on a typical weekend day, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-10.5	-9.8	-14.9	-9.7	-15.4	-12.0	-17.3	-12.2	-11.0	-4.5	-14.3	-5.5	-13.8	-5.0	-16.3	-5.6
Total above	68.0	23.0	40.6	13.9	46.6	15.7	37.6	14.4	29.5	6.7	19.7	4.4	13.8	3.2	9.4	2.3
1-5 above	6.5	3.2	3.6	2.5	3.6	3.0	4.3	3.2	3.1	1.1	3.7	1.2	3.9	1.2	3.6	1.0
6-10 above	13.4	6.3	6.8	4.3	5.8	4.4	6.5	4.4	5.1	1.5	4.8	1.4	3.7	1.0	2.7	0.7
11-12 above	3.4	2.6	2.4	1.3	2.3	1.5	2.5	1.5	2.0	0.5	1.5	0.4	1.0	0.2	0.6	0.1
13-20 above	13.0	7.3	10.5	4.1	9.3	4.3	8.8	3.7	6.9	1.6	3.8	0.8	2.5	0.5	2.1	0.4
21-30 above	15.3	2.5	11.4	1.5	13.5	1.8	10.8	1.4	6.9	1.6	3.2	0.5	2.2	0.3	0.3	0.0
31-40 above	15.2	1.0	4.4	0.2	9.6	0.5	4.4	0.2	3.5	0.3	1.7	0.1	0.4	0.0	0.2	0.0
41-50 above	1.3	0.1	1.6	0.1	2.5	0.1	0.3	0.0	1.9	0.1	0.9	0.1	0.2	0.0	0.1	0.0

Table 39 shows the proportion of heavy vehicle drivers who exceeded the speed limit on a typical weekend day, with a comparison to overall levels of speed non-compliance (see

Table 13). Results revealed consistent evidence of a heightened prevalence of speeding among heavy vehicle drivers on weekend days compared to overall levels of speeding. Specifically, compared to overall levels, low-level speeding among heavy vehicle drivers was more prevalent across all zones, both for exceeding the speed limit by 1-5 km/h (between 7.2% and 16.8%) and by 6-10 km/h (between 10.8% and 18.4%). In addition, the prevalence of exceeding the speed limit by 13-20 km/h was also higher during a typical weekend day in all speed zones (between 9.4% and 22.4%). While exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers on both a typical weekend day and overall, there was some evidence for slight increases in exceeding the limit by 21-30 km/h.

Table 39: Proportion of heavy vehicle drivers travelling at various speeds on a typical weekend day, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	88.2 (-1.1)	94.6 (-0.8)	90.8 (-1.1)	93.6 (-0.6)	76.9 (-2.7)	86.2 (-1.5)	81.1 (-2.0)	91.8 (-0.8)
Above limit (total)	11.8 (+8.9)	5.4 (+15.8)	9.2 (+12.8)	6.4 (+9.7)	23.1 (+10)	13.8 (+10.7)	18.9 (+9.6)	8.2 (+9.7)
1-5 above	7.1 (+8.9)	3.1 (+16.8)	5.8 (+12.8)	4.2 (+8.8)	13.3 (+7.2)	9.6 (+9.8)	14.9 (+8.0)	5.5 (+6.7)
6-10 above	2.8 (+10.8)	1.3 (+18.4)	2 (+14.2)	1.4 (+10.6)	6.2 (+11.4)	3.1 (+12.5)	2.8 (+13.6)	1.6 (+15.8)
11-12 above	0.5 (+8.7)	0.3 (+18.8)	0.4 (+13.7)	0.3 (+12.6)	1.2 (+15.7)	0.4 (+10.8)	0.4 (+19.1)	0.3 (+11.8)
13-20 above	1.0 (+9.4)	0.5 (+10.7)	0.7 (+11.6)	0.4 (+15)	2.0 (+20.5)	0.5 (+14)	0.6 (+22.4)	0.7 (+20.7)
21-30 above	0.3 (-2.9)	0.2 (+0.8)	0.2 (+4.8)	0.1 (+10.4)	0.3 (+19.5)	0.1 (+15.9)	0.3 (+21.5)	0.0 (+21.7)
31-40 above	0.1 (-15.6)	0.0 (-8.2)	0.1 (+3.3)	0.0 (+4)	0.1 (+28.4)	0.1 (+44.2)	0.0 (-12.9)	0.0 (+3)
41-50 above	0.0 (-30.5)	0.0 (-16.2)	0.0 (+5.5)	0.0 (+51)	0.0 (+13.1)	0.0 (+39.2)	0.0 (-32.9)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at specific speeds on a typical weekend day in the corresponding speed zone, compared to the prevalence of heavy vehicle drivers traveling at these speeds overall in the corresponding speed zone.

5.1.5 SEASONAL

Figure 31 shows the proportion of passenger vehicle motorists exceeding the speed limit across the Queensland road network by season. As can be seen, motorists typically demonstrated more compliant behaviour during autumn across all speed zones, with speeding less prevalent at this time compared to the other seasons. There were limited differences in the prevalence of speeding when comparing summer, winter and spring, with the exception of slightly elevated levels of speeding prevalence in 40 km/h zones in spring. Consistent with overall data, the prevalence of speeding amongst passenger vehicle motorists was highest in 80 km/h zones, followed by 40 km/h, 100 km/h and 110 km/h zones, while speeding was least prevalent in 50 km/h to 70 km/h zones.

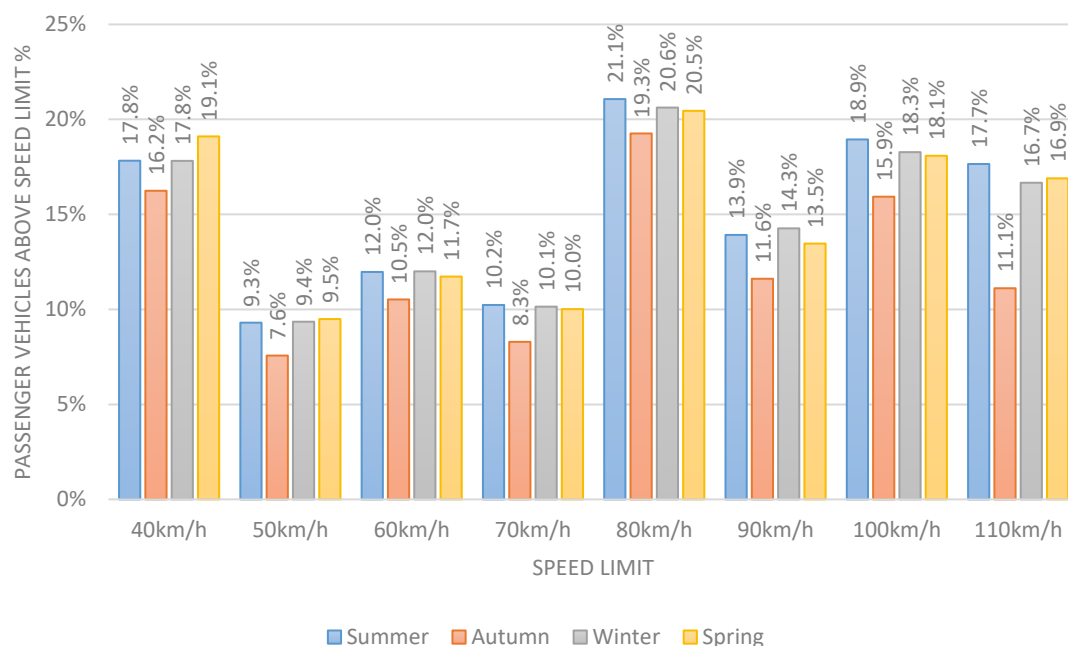


Figure 31: Proportion of passenger vehicle motorists travelling above the speed limit by season, Queensland, 2018

Table 40 further highlights the level of speed non-compliance among passenger vehicle motorists by season, with a comparison to overall levels of speed non-compliance (see Table 10). As can be seen, the prevalence of speeding was consistently lower during autumn across all speed zones (between 5.8% and 30.9%), compared to overall levels. Conversely, speeding was slightly more prevalent across all speed zones during summer (between 2.6% and 9.8%), with the exception of 40 km/h zones, where little difference was observed. Similarly, speeding was also slightly more prevalent across all speed zones in winter (between 0.8% and 5.9%), with the exception of 40 km/h speed zone, where limited differences were found. During spring, there was some evidence of slightly more prevalent speeding in 40 km/h, 50 km/h and 110 km/h zones (6.6%, 4.9% and 5.1%, respectively).

Table 40: Proportion of passenger vehicle motorists travelling above the speed limit by season, Queensland, 2018

Season	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
All seasons	17.9	9.0	11.7	9.8	20.5	13.5	18.0	16.1
Summer	17.8 (-0.5)	9.3 (+2.8)	12.0 (+2.6)	10.2 (+4.3)	21.1 (+3.0)	13.9 (+3.3)	18.9 (+5.4)	17.7 (+9.8)
Autumn	16.2 (-9.3)	7.6 (-16.3)	10.5 (-9.8)	8.3 (-15.5)	19.3 (-5.8)	11.6 (-13.8)	15.9 (-11.4)	11.1 (-30.9)
Winter	17.8 (-0.5)	9.4 (+3.3)	12.0 (+2.9)	10.1 (+3.4)	20.6 (+0.8)	14.3 (+5.9)	18.3 (+1.7)	16.7 (+3.7)
Spring	19.1 (+6.6)	9.5 (+4.9)	11.7 (+0.5)	10.0 (+2.1)	20.5 (0.0)	13.5 (-0.1)	18.1 (+0.6)	16.9 (+5.1)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists exceeding the speed limit in the corresponding season and speed zone, compared to the prevalence of all motorists exceeding the speed limit across all seasons in the corresponding speed zone.

Figure 32 shows the proportion of heavy vehicle drivers exceeding the speed limit across the Queensland road network by season. Similar to the trends observed for passenger motor vehicle drivers, there was evidence to suggest a lower prevalence of speeding during autumn, however to a considerably lesser extent and with less consistency across the speed zones. Consistent with overall data, the prevalence of speeding amongst heavy vehicle drivers was highest in 80 km/h zones, followed by 100 km/h, 90 km/h and 40 km/h zones, while speeding was least prevalent in 50 km/h to 70 km/h and 110 km/h zones.

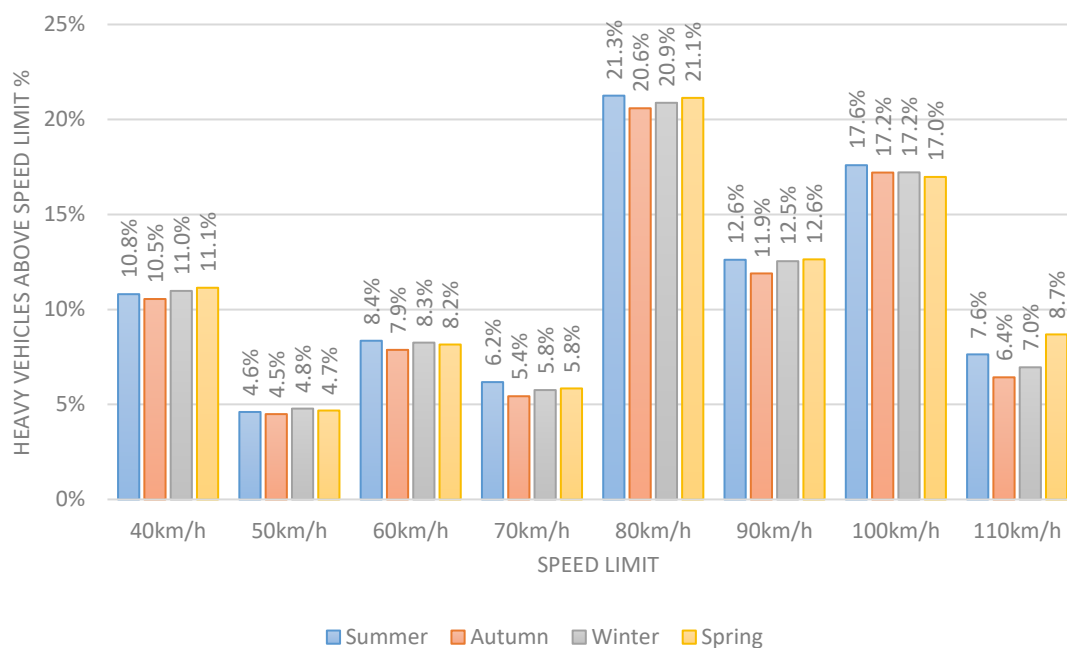


Figure 32: Proportion of heavy vehicle drivers travelling above the speed limit by season, Queensland, 2018

Table 41 further highlights the level of speed non-compliance among heavy vehicle drivers by season, with a comparison to overall levels of speed non-compliance (see

Table 13). As can be seen, similar to the results observed in relation to passenger vehicle motorists, the prevalence of speeding amongst heavy vehicle drivers was consistently lower during autumn across all speed zones compared to overall levels, however to a lesser extent (between 1.8% and 13.5%). Conversely, there was some evidence of an increased prevalence of speeding during summer in 60 km/h to 110 km/h zones (between 1.4% and 6.4%). The prevalence of speeding amongst heavy vehicle drivers during winter was less consistent, with speeding in 50 km/h zones 3.1% more prevalent, 6.4% less prevalent in 110 km/h zones, and limited differences in all other speed zones. Finally, speeding amongst heavy vehicle drivers was found to be 16.7% more prevalent in 110 km/h zones during spring, compared to overall.

Table 41: Proportion of heavy vehicle drivers travelling above the speed limit by season, Queensland, 2018

Season	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
All seasons	10.9	4.6	8.2	5.8	21.0	12.4	17.2	7.4
Summer	10.8 (-0.6)	4.6 (-0.7)	8.4 (+2.4)	6.2 (+6.4)	21.3 (+1.4)	12.6 (+1.5)	17.6 (+2.0)	7.6 (+2.7)
Autumn	10.5 (-3.0)	4.5 (-3.2)	7.9 (-3.5)	5.4 (-6.4)	20.6 (-1.8)	11.9 (-4.2)	17.2 (-0.2)	6.4 (-13.5)
Winter	11 (+1)	4.8 (+3.1)	8.3 (+1.2)	5.8 (-0.9)	20.9 (-0.4)	12.5 (+0.9)	17.2 (-0.2)	7.0 (-6.4)
Spring	11.1 (+2.5)	4.7 (+0.9)	8.2 (-0.1)	5.8 (+0.6)	21.1 (+0.8)	12.6 (+1.7)	17.0 (-1.5)	8.7 (+16.9)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers exceeding the speed limit in the corresponding season and speed zone, compared to the prevalence of all heavy vehicle drivers exceeding the speed limit across all seasons in the corresponding speed zone.

5.1.5.1 Summer

Table 42 shows the level of speed non-compliance among passenger vehicle motorists during summer, with a comparison to overall levels of speed non-compliance across all time periods (see Table 10). As can be seen, the proportion of motorists exceeding the speed limit during summer was typically higher across all speed limit zones, when compared with overall levels, but only in relation to low-level speeding. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was up to 10.4% more prevalent in summer, while exceeding the speed limit by 6-10 km/h was up to 9.2% more prevalent. When considering exceeding the speed limit by more than 13 km/h, differences in prevalence rates between summer and overall levels were far more inconsistent.

Table 42: Proportion of passenger vehicle motorists travelling at various speeds during summer, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	82.2 (+0.1)	90.7 (-0.3)	88 (-0.3)	89.8 (-0.5)	78.9 (-0.8)	86.1 (-0.5)	81.1 (-1.2)	82.3 (-1.9)
Above limit (total)	17.8 (-0.5)	9.3 (+2.8)	12 (+2.6)	10.2 (+4.3)	21.1 (+3.0)	13.9 (+3.3)	18.9 (+5.4)	17.7 (+9.8)
1-5 above	9.7 (+1.0)	5.5 (+3.3)	7.5 (+3.2)	6.8 (+4.7)	12.2 (+2.6)	9.3 (+3.6)	14.4 (+6.3)	14.2 (+10.4)
6-10 above	4.9 (-1.3)	2.4 (+2.9)	2.8 (+2.5)	2.3 (+4.8)	5.3 (+3.9)	3.2 (+2.6)	3.5 (+6)	2.7 (+9.2)
11-12 above	1.0 (-2.9)	0.4 (+1.6)	0.5 (+0.8)	0.4 (+3.9)	1.1 (+3.8)	0.5 (+2.9)	0.4 (-2.9)	0.3 (+5.6)
13-20 above	1.7 (-4.2)	0.8 (+0.2)	0.9 (-0.1)	0.6 (+1.3)	2.0 (+3.8)	0.7 (+2.8)	0.6 (-5.3)	0.5 (-0.4)
21-30 above	0.4 (-2.9)	0.2 (+0.7)	0.2 (-0.2)	0.1 (-4)	0.5 (+2.2)	0.2 (+3.2)	0.1 (-26.1)	0.0 (+6.1)
31-40 above	0.1 (-2.6)	0.0 (+5.8)	0.1 (+1.8)	0.0 (-9.6)	0.1 (-11)	0.0 (+0.5)	0.0 (-31.9)	0.0 (-20.2)
41-50 above	0.0 (-13.4)	0.0 (+10.5)	0.0 (-0.5)	0.0 (-2.7)	0.0 (-16.9)	0.0 (-69.1)	0.0 (-39.3)	0.0 (-78.4)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds during summer in the corresponding speed zone, compared to the prevalence of all motorists travelling at these speeds across all seasons in the corresponding speed zone.

The PARFs for passenger vehicle motorists during summer are shown in Table 43. Results are similar to the overall PARF calculations for all motorists outlined in Table 11 and Table 12. Specifically, when using Kloeden's risk function for urban and rural travel speeds, the summer PARF values did not differ by more than $\pm 0.8\%$ for any specific speed categorisation. Even when expressed as proportional differences, there appeared to be minimal differences in the proportion of casualty crashes attributable to various speeds during summer compared to the overall data, particularly in relation to low-level and moderate speeding.

Table 43: PARF for passenger vehicle motorists during summer, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-11.2	-10.1	-15.3	-9.7	-16.1	-12.1	-18.5	-12.4	-11.8	-4.6	-14.4	-5.4	-14.6	-5.1	-16.3	-5.6
Total above	66.0	21.2	39.2	12.8	45.1	14.4	34.4	12.7	26.7	6.0	18.5	4.1	11.6	2.8	9.0	2.2
1-5 above	6.6	3.2	3.4	2.3	3.5	2.8	4.2	3.0	3.1	1.0	3.7	1.1	3.8	1.1	3.6	1.0
6-10 above	12.8	6.0	6.3	3.9	5.5	4.0	6.2	4.0	5.0	1.4	4.8	1.3	3.4	0.9	2.6	0.7
11-12 above	3.1	2.3	2.2	1.2	2.1	1.4	2.3	1.3	1.9	0.5	1.5	0.4	0.8	0.2	0.5	0.1
13-20 above	11.5	6.3	9.8	3.7	8.6	3.8	7.8	3.2	6.4	1.4	3.5	0.7	1.9	0.4	1.9	0.3
21-30 above	15.7	2.4	11.1	1.4	12.6	1.7	9.4	1.1	6.4	1.4	2.8	0.4	1.3	0.2	0.2	0.0
31-40 above	15.3	0.9	4.4	0.2	10.1	0.5	4.2	0.2	2.5	0.2	1.6	0.1	0.2	0.0	0.1	0.0
41-50 above	1.1	0.1	2.0	0.1	2.7	0.1	0.3	0.0	1.4	0.1	0.5	0.0	0.1	0.0	0.0	0.0

Table 44 shows the proportion of heavy vehicle drivers who exceeded the speed limit during summer, with a comparison to overall levels of speed non-compliance (see

Table 13). Similar to the data for passenger vehicle motorists, the proportion of heavy vehicle drivers exceeding the speed limit during summer was typically higher compared with overall levels, across most speed limit zones (with the exception of 40 km/h and 50 km/h zones). Again, this finding only pertained to low-level speeding. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was up to 7.3% more prevalent in summer, while exceeding the speed limit by 6-10 km/h was up to 5.3% more prevalent. When considering exceeding the speed limit by more than 13 km/h, differences in prevalence rates between summer and overall levels were far more inconsistent.

Table 44: Proportion of heavy vehicle drivers travelling at various speeds during summer, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	89.2 (+0.1)	95.4 (0)	91.6 (-0.2)	93.8 (-0.4)	78.7 (-0.4)	87.4 (-0.2)	82.4 (-0.4)	92.4 (-0.2)
Above limit (total)	10.8 (-0.6)	4.6 (-0.7)	8.4 (+2.4)	6.2 (+6.4)	21.3 (+1.4)	12.6 (+1.5)	17.6 (+2)	7.6 (+2.7)
1-5 above	6.7 (+1.8)	2.6 (-1.9)	5.3 (+2.4)	4.1 (+7.3)	12.6 (+1.7)	8.9 (+1.9)	14.2 (+3.0)	5.2 (+1.0)
6-10 above	2.4 (-5.1)	1.1 (-0.4)	1.8 (+3.0)	1.3 (+3.9)	5.6 (+0.3)	2.8 (+1.7)	2.4 (-2.4)	1.5 (+5.3)
11-12 above	0.5 (+2.2)	0.2 (+0.2)	0.3 (+3.6)	0.3 (+8.2)	1.1 (-0.5)	0.4 (+4.8)	0.3 (+1.3)	0.3 (+11)
13-20 above	0.8 (-9.6)	0.5 (+3.4)	0.6 (+2.3)	0.4 (+3.9)	1.7 (+3.7)	0.4 (-5)	0.5 (-0.1)	0.7 (+8.5)
21-30 above	0.3 (+2.8)	0.2 (+2.4)	0.2 (-4.1)	0.1 (+8.5)	0.3 (+4.4)	0.1 (-16.7)	0.2 (-6.1)	0.0 (-13.4)
31-40 above	0.1 (+28.8)	0.0 (+4.3)	0.1 (-5.9)	0.0 (+3.1)	0.0 (-21)	0.0 (-4.4)	0.0 (+4.5)	0.0 (-92.4)
41-50 above	0.0 (-33.3)	0.0 (-1.8)	0.0 (-1.4)	0.0 (-46.5)	0.0 (-13.4)	0.0 (-31.5)	0.0 (-36.4)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds during summer in the corresponding speed zone, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all seasons in the corresponding speed zone.

5.1.5.2 Autumn

Table 45 shows the level of speed non-compliance among passenger vehicle motorists during autumn, with a comparison to overall levels of speed non-compliance across all time periods (see Table 10). As can be seen, the proportion of motorists exceeding the speed limit during autumn was consistently lower across all speed limit zones, when compared with overall levels. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was between 7.4% and 31.5% less prevalent in autumn, while exceeding the speed limit by 6-10 km/h was between 7.4% and 33.3% less prevalent. Moreover, exceeding the speed limit by 13-20 km/h was between 10.9% and 25.2% less prevalent. While overall data showed that excessive speeding of more than 20 km/h over the speed limit was rare, it was also less prevalent during autumn.

The PARFs for passenger vehicle motorists during autumn are shown in Table 46. Results are similar to the overall PARF calculations for all motorists outlined in Table 11 and Table 12. Specifically, when using Kloeden's risk function for urban and rural travel speeds, the autumn PARF values did not differ by more than $\pm 1.7\%$ for any specific speed categorisation. However, when expressed as proportional differences, the proportion of casualty crashes attributable to low-level and moderate speeding appeared to be lower during autumn compared to the overall data, with differences more pronounced in higher speed limit zones. Moreover, there was also some evidence to suggest that the proportion of casualty crashes attributable to more excessive speeding was also lower during autumn compared to the overall data.

Table 45: Proportion of passenger vehicle motorists travelling at various speeds during autumn, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	83.8 (+2.0)	92.4 (+1.6)	89.5 (+1.3)	91.7 (+1.7)	80.7 (+1.5)	88.4 (+2.2)	84.1 (+2.5)	88.9 (+5.9)
Above limit (total)	16.2 (-9.3)	7.6 (-16.3)	10.5 (-9.8)	8.3 (-15.5)	19.3 (-5.8)	11.6 (-13.8)	15.9 (-11.4)	11.1 (-30.9)
1-5 above	8.9 (-7.4)	4.5 (-15.7)	6.7 (-8.1)	5.5 (-14.8)	11.4 (-4.1)	7.9 (-12.7)	12.3 (-9.4)	8.8 (-31.5)
6-10 above	4.4 (-10.6)	1.9 (-18.7)	2.4 (-11.4)	1.8 (-17.4)	4.7 (-7.4)	2.7 (-12.8)	2.6 (-19.3)	1.6 (-33.3)
11-12 above	1.0 (-9.0)	0.3 (-14.5)	0.4 (-14.6)	0.3 (-17.7)	1.0 (-7.3)	0.4 (-21.6)	0.4 (-12.5)	0.2 (-15)
13-20 above	1.5 (-14.4)	0.7 (-15.2)	0.7 (-16.7)	0.5 (-15.8)	1.7 (-10.9)	0.5 (-25.2)	0.5 (-14.1)	0.4 (-13)
21-30 above	0.4 (-13.4)	0.2 (-12.6)	0.2 (-13.4)	0.1 (-9.3)	0.4 (-12.4)	0.1 (-24.6)	0.1 (-3.8)	0.0 (+27.9)
31-40 above	0.1 (-18.9)	0.0 (-22.2)	0.1 (+6.8)	0.0 (-16.1)	0.1 (+0.9)	0.0 (-13.6)	0.0 (-2.3)	0.0 (+88.5)
41-50 above	0.0 (-16.6)	0.0 (-8.0)	0.0 (+13.1)	0.0 (+16.4)	0.0 (+1.2)	0.0 (+114.5)	0.0 (-3.4)	0.0 (-2.4)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds during autumn in the corresponding speed zone, compared to the prevalence of all motorists travelling at these speeds across all seasons in the corresponding speed zone.

Table 46: PARF for passenger vehicle motorists during autumn, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit		50 km/h limit		60 km/h limit		70 km/h limit		80 km/h limit		90 km/h limit		100 km/h limit		110 km/h limit	
	PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-11.9	-10.3	-15.9	-9.4	-16.7	-12.3	-19.6	-12.6	-12.0	-4.6	-15.8	-5.6	-15.6	-5.3	-18.1	-5.7
Total above	63.0	19.8	36.5	11.2	44.4	13.0	32.4	11.0	25.9	5.5	15.8	3.4	11.0	2.4	7.5	1.6
1-5 above	6.3	3.0	3.1	2.0	3.3	2.6	3.7	2.6	3.1	1.0	3.4	1.0	3.3	0.9	2.6	0.7
6-10 above	12.3	5.6	5.6	3.2	5.1	3.7	5.3	3.3	4.6	1.3	4.3	1.1	2.7	0.7	1.9	0.4
11-12 above	3.1	2.3	2.1	1.1	1.9	1.2	2.0	1.1	1.8	0.4	1.4	0.3	0.8	0.2	0.5	0.1
13-20 above	11.2	5.8	9.6	3.4	7.5	3.3	7.0	2.7	5.7	1.2	2.8	0.6	1.9	0.4	1.9	0.3
21-30 above	15.2	2.2	10.5	1.3	12.0	1.5	9.8	1.1	5.7	1.2	2.2	0.3	1.8	0.2	0.3	0.0
31-40 above	13.8	0.8	3.7	0.1	11.3	0.6	4.3	0.2	3.2	0.3	1.5	0.1	0.4	0.0	0.3	0.0
41-50 above	1.2	0.1	1.9	0.1	3.3	0.2	0.3	0.0	1.8	0.1	0.3	0.0	0.2	0.0	0.1	0.0

Table 47 shows the proportion of heavy vehicle drivers who exceeded the speed limit during autumn, with a comparison to overall levels of speed non-compliance (see

Table 13). As can be seen, the proportion of heavy vehicle drivers exceeding the speed limit during autumn was typically lower compared with overall levels, across all speed limit zones. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was up to 12.2% less prevalent in autumn, exceeding the speed limit by 6-10 km/h was up to 19.4% less prevalent, and exceeding the speed limit by 13-20 km/h was up to 15.9% less prevalent. Excessive speeding of more than 20 km/h over the speed limit was rare, both overall and during autumn.

Table 47: Proportion of heavy vehicle drivers travelling at various speeds during autumn, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	89.5 (+0.4)	95.5 (+0.2)	92.1 (+0.3)	94.6 (+0.4)	79.4 (+0.5)	88.1 (+0.6)	82.8 (0)	93.6 (+1.1)
Above limit (total)	10.5 (-3)	4.5 (-3.2)	7.9 (-3.5)	5.4 (-6.4)	20.6 (-1.8)	11.9 (-4.2)	17.2 (-0.2)	6.4 (-13.5)
1-5 above	6.4 (-2.4)	2.6 (-2.4)	5 (-2.8)	3.6 (-6.9)	12.1 (-1.8)	8.5 (-2.3)	13.6 (-1.1)	4.6 (-12.2)
6-10 above	2.5 (-2.8)	1 (-3.6)	1.8 (-2.1)	1.2 (-6.4)	5.5 (-1.4)	2.6 (-5.6)	2.6 (+6.3)	1.1 (-19.4)
11-12 above	0.4 (-12.1)	0.2 (-1.2)	0.3 (-6)	0.2 (-11.7)	1 (-2)	0.3 (-18.3)	0.3 (+3.3)	0.2 (-14.7)
13-20 above	0.9 (+0.8)	0.4 (-5.5)	0.5 (-11.8)	0.4 (+1.6)	1.6 (-3.1)	0.4 (-15.9)	0.5 (-4.3)	0.5 (-12.1)
21-30 above	0.3 (-11.3)	0.1 (-9.1)	0.2 (-4.1)	0.1 (-4.2)	0.3 (-1.4)	0.1 (-24.4)	0.2 (-17)	0.0 (+20.9)
31-40 above	0.1 (-14.3)	0.0 (-8.1)	0.1 (-7.1)	0.0 (-12.5)	0.0 (-5.3)	0.0 (-28.3)	0.0 (-44.6)	0.0 (+358.4)
41-50 above	0.0 (-5.3)	0.0 (+0.6)	0.0 (+3.6)	0.0 (-3.9)	0.0 (+10.8)	0.0 (-100)	0.0 (+324.5)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds during autumn in the corresponding speed zone, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all seasons in the corresponding speed zone.

5.1.5.3 Winter

Table 48 shows the level of speed non-compliance among passenger vehicle motorists during winter, with a comparison to overall levels of speed non-compliance across all time periods (see Table 10). As can be seen, the proportion of motorists exceeding the speed limit during winter was typically higher across all speed limit zones, when compared with overall levels, with the exception of 40 km/h zones. Specifically, compared to overall levels, exceeding the speed limit by 1-5 km/h was up to 4.3% more prevalent in winter, while exceeding the speed limit by 6-10 km/h was up to 7.2% more prevalent. Moreover, exceeding the speed limit by 13-20 km/h was up to 15.4% more prevalent. Both overall and during winter, exceeding the speed limit by more than 20 km/h was extremely rare.

Table 48: Proportion of passenger vehicle motorists travelling at various speeds during winter, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	82.2 (+0.1)	90.6 (-0.3)	88 (-0.4)	89.9 (-0.4)	79.4 (-0.2)	85.7 (-0.9)	81.7 (-0.4)	83.3 (-0.7)
Above limit (total)	17.8 (-0.5)	9.4 (+3.3)	12 (+2.9)	10.1 (+3.4)	20.6 (+0.8)	14.3 (+5.9)	18.3 (+1.7)	16.7 (+3.7)
1-5 above	9.4 (-1.4)	5.5 (+3.5)	7.5 (+3.1)	6.7 (+3.2)	11.9 (+0.3)	9.4 (+4.3)	13.6 (+0.1)	13.4 (+3.8)
6-10 above	4.9 (0.0)	2.4 (+3)	2.8 (+3.1)	2.3 (+3.9)	5.1 (+1.3)	3.3 (+7.2)	3.4 (+5.0)	2.5 (+2.9)
11-12 above	1.1 (+0.8)	0.4 (+3.8)	0.5 (+3.8)	0.4 (+4.0)	1.1 (+2.2)	0.5 (+11.5)	0.5 (+8.5)	0.3 (+6.7)
13-20 above	1.8 (+1.2)	0.8 (+3.7)	0.9 (+2.3)	0.6 (+3.7)	1.9 (+2.6)	0.8 (+15.4)	0.7 (+12.1)	0.5 (+2.3)
21-30 above	0.4 (-0.2)	0.2 (+1.6)	0.2 (-1.1)	0.1 (+0.9)	0.5 (+1.8)	0.2 (+17.4)	0.2 (+3.5)	0.0 (+23.3)
31-40 above	0.2 (+3.4)	0.0 (+0.8)	0.1 (-9.9)	0.0 (-9.3)	0.1 (-3.3)	0.0 (-19.1)	0.0 (+42.0)	0.0 (+28.2)
41-50 above	0.0 (+13.7)	0.0 (+2.8)	0.0 (-8.2)	0.0 (+4.6)	0.0 (-29.7)	0.0 (+0.4)	0.0 (+63.0)	0.0 (+136.8)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds during winter in the corresponding speed zone, compared to the prevalence of all motorists travelling at these speeds across all seasons in the corresponding speed zone.

The PARFs for passenger vehicle motorists during winter are shown in Table 49. Results are similar to the overall PARF calculations for all motorists outlined in Table 11 and Table 12. Specifically, when using Kloeden's risk function for urban and rural travel speeds, the winter PARF values did not differ by more than $\pm 0.9\%$ for any specific speed categorisation. Even when expressed as a proportional difference, there appeared to be minimal differences in the proportion of casualty crashes attributable to various speeds during winter compared to the overall data, particularly in relation to low-level and moderate speeding.

Table 49: PARF for passenger vehicle motorists during winter, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit		50 km/h limit		60 km/h limit		70 km/h limit		80 km/h limit		90 km/h limit		100 km/h limit		110 km/h limit	
	PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-10.9	-10.0	-15.2	-9.6	-16.0	-12.0	-18.1	-12.2	-11.7	-4.5	-14.3	-5.4	-14.4	-5.1	-16.2	-5.5
Total above	67.0	21.8	39.4	13.0	44.6	14.6	35.0	12.9	26.6	6.0	18.9	4.3	12.8	2.9	9.2	2.2
1-5 above	6.3	3.1	3.4	2.3	3.6	2.9	4.2	3.0	3.1	1.0	3.7	1.1	3.5	1.0	3.5	1.0
6-10 above	12.9	6.0	6.3	3.9	5.7	4.1	6.1	4.0	4.9	1.4	4.9	1.4	3.4	0.9	2.6	0.7
11-12 above	3.1	2.4	2.3	1.2	2.2	1.4	2.3	1.3	1.9	0.5	1.5	0.4	0.9	0.2	0.6	0.1
13-20 above	12.0	6.6	10.3	3.9	8.9	4.0	8.0	3.2	6.4	1.4	3.8	0.8	2.3	0.5	2.0	0.4
21-30 above	15.3	2.4	11.1	1.4	12.6	1.7	10.1	1.2	6.4	1.4	3.2	0.5	1.9	0.2	0.2	0.0
31-40 above	16.0	1.0	4.2	0.2	9.1	0.5	4.2	0.2	2.8	0.2	1.2	0.1	0.5	0.0	0.2	0.0
41-50 above	1.4	0.1	1.8	0.1	2.5	0.1	0.3	0.0	1.2	0.1	0.5	0.0	0.3	0.0	0.1	0.0

Table 50 shows the proportion of heavy vehicle drivers who exceeded the speed limit during winter, with a comparison to overall levels of speed non-compliance (see

Table 13). Overall, there was limited evidence of differences in the proportion of heavy vehicle drivers exceeding the speed limit during winter compared with overall levels, with the exception of some reduced speeding prevalence in 110 km/h zones, as well as some increased low- and moderate-level speeding in 40 km/h and 50 km/h zones.

Table 50: Proportion of heavy vehicle drivers travelling at various speeds during winter, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	89.0 (-0.1)	95.2 (-0.2)	91.7 (-0.1)	94.2 (+0.1)	79.1 (+0.1)	87.5 (-0.1)	82.8 -	93.0 (+0.4)
Above limit (total)	11 (+1.0)	4.8 (+3.1)	8.3 (+1.2)	5.8 (-0.9)	20.9 (-0.4)	12.5 (+0.9)	17.2 (-0.2)	7.0 (-6.4)
1-5 above	6.5 (-0.9)	2.8 (+3.9)	5.2 (+1.1)	3.8 (-1.2)	12.3 (-0.9)	8.6 (-0.9)	13.8 (+0.3)	4.9 (-5.3)
6-10 above	2.6 (+3.6)	1.1 (+4.4)	1.8 (+0.2)	1.3 (+0.6)	5.6 (+0.5)	2.8 (+0.7)	2.4 (-3.8)	1.4 (-2.0)
11-12 above	0.5 (+4.6)	0.2 (+0.2)	0.3 (+0.4)	0.2 (-0.3)	1.1 (+0.7)	0.4 (+14.7)	0.3 (-1.2)	0.2 (-11.9)
13-20 above	1.0 (+5.7)	0.5 (+0.3)	0.6 (+4.5)	0.3 (-2.7)	1.6 (-0.2)	0.5 (+17.9)	0.5 (+5)	0.5 (-23)
21-30 above	0.3 (+4.7)	0.1 (-3.8)	0.2 (+3.1)	0.1 (-0.1)	0.2 (-10)	0.1 (+22.8)	0.2 (+2.3)	0.0 (-64.5)
31-40 above	0.0 (-30)	0.0 (-5)	0.1 (+4)	0.0 (+3.4)	0.0 (+16.3)	0.1 (+56.7)	0.0 (+14.6)	0.0 (-100)
41-50 above	0 (+46.6)	0 (-6.6)	0 (-20.5)	0 (-51.3)	0 (+27.2)	0 (-22.5)	0 (-38.4)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds during winter in the corresponding speed zone, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all seasons in the corresponding speed zone.

5.1.5.4 Spring

Table 51 shows the level of speed non-compliance among passenger vehicle motorists during spring, with a comparison to overall levels of speed non-compliance across all time periods (see Table 10). As can be seen, inconsistent differences in the proportion of motorists exceeding the speed limit during spring were reported compared with overall levels. Specifically, compared to overall levels, speeding was typically more prevalent in spring in 40 km/h to 70 km/h zones. In all other speed zones, inconsistencies were observed.

The PARFs for passenger vehicle motorists during spring are shown in Table 52. Results are similar to the overall PARF calculations for all motorists outlined in Table 11 and Table 12. Specifically, when using Kloeden's risk function for urban and rural travel speeds, the spring PARF values did not differ by more than $\pm 0.8\%$ for any specific speed categorisation. Even when expressed as a proportional difference, there appeared to be minimal differences in the proportion of casualty crashes attributable to various speeds during spring compared to the overall data, particularly in relation to low-level and moderate speeding.

Table 51: Proportion of passenger vehicle motorists travelling at various speeds during spring, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
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At or below limit	80.9 (-1.5)	90.5 (-0.5)	88.3 (-0.1)	90 (-0.2)	79.5 (0.0)	86.5 (0.0)	81.9 (-0.1)	83.1 (-1.0)
Above limit (total)	19.1 (+6.6)	9.5 (+4.9)	11.7 (+0.5)	10 (+2.1)	20.5 (0.0)	13.5 (-0.1)	18.1 (+0.6)	16.9 (+5.1)
1-5 above	10.0 (+4.7)	5.5 (+3.9)	7.2 (-1.3)	6.6 (+1.5)	11.9 (-0.2)	9.1 (+0.4)	13.5 (-0.2)	13.5 (+4.8)
6-10 above	5.3 (+7.8)	2.5 (+6.7)	2.8 (+1.5)	2.2 (+2.3)	5.0 (-0.3)	3.0 (-1.2)	3.3 (+2)	2.6 (+7.9)
11-12 above	1.2 (+7.7)	0.4 (+4.5)	0.5 (+4.3)	0.4 (+3.3)	1.0 (-1.2)	0.5 (-0.1)	0.4 (+2.9)	0.3 (-2.9)
13-20 above	2.0 (+11.9)	0.8 (+6.6)	0.9 (+7.9)	0.6 (+4.9)	1.9 (+0.7)	0.7 (-1.4)	0.6 (+2.8)	0.5 (+5.9)
21-30 above	0.5 (+11.3)	0.2 (+6.2)	0.3 (+9.2)	0.2 (+8.8)	0.5 (+4)	0.2 (-4.1)	0.2 (+24.5)	0.0 (-43.7)
31-40 above	0.2 (+10.9)	0.0 (+8.0)	0.1 (+3.5)	0.0 (+28.4)	0.1 (+13.4)	0.0 (+25.8)	0.0 (-7.0)	0.0 (-58.5)
41-50 above	0.0 (+11.2)	0.0 (-8.2)	0.0 (+0.4)	0.0 (-11.9)	0.0 (+44.4)	0.0 (-4.8)	0.0 (-18.9)	0.0 (-50.9)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds during spring in the corresponding speed zone, compared to the prevalence of all motorists travelling at these speeds across all seasons in the corresponding speed zone.

Table 52: PARF for passenger vehicle motorists during spring, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit		50 km/h limit		60 km/h limit		70 km/h limit		80 km/h limit		90 km/h limit		100 km/h limit		110 km/h limit	
	PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-10.1	-9.6	-15.0	-9.5	-15.6	-12.0	-17.8	-12.1	-11.6	-4.6	-14.3	-5.3	-14.5	-5.1	-16.7	-5.7
Total above	69.2	23.0	40.0	13.2	46.5	14.9	36.5	12.9	27.7	6.0	18.6	4.0	12.8	2.9	8.9	2.2
1-5 above	6.5	3.2	3.4	2.3	3.4	2.7	4.0	2.9	3.0	1.0	3.6	1.1	3.6	1.0	3.4	1.0
6-10 above	13.2	6.3	6.4	4.0	5.4	4.0	5.9	3.9	4.7	1.4	4.6	1.3	3.4	0.9	2.6	0.7
11-12 above	3.1	2.5	2.3	1.2	2.2	1.4	2.3	1.3	1.8	0.5	1.4	0.4	0.9	0.2	0.5	0.1
13-20 above	12.5	7.1	10.4	4.0	9.2	4.2	7.9	3.3	6.2	1.4	3.4	0.7	2.1	0.4	2.1	0.4
21-30 above	16.5	2.7	11.5	1.5	13.6	1.8	10.7	1.3	6.2	1.4	2.7	0.4	2.4	0.3	0.1	0.0
31-40 above	16.1	1.0	4.4	0.2	10.1	0.5	5.4	0.2	3.3	0.3	1.5	0.1	0.3	0.0	0.1	0.0
41-50 above	1.3	0.1	1.6	0.1	2.7	0.1	0.2	0.0	2.5	0.1	1.3	0.1	0.1	0.0	0.0	0.0

Table 53 shows the proportion of heavy vehicle drivers who exceeded the speed limit during spring, with a comparison to overall levels of speed non-compliance (see

Table 13). Overall, there was limited evidence of differences in the proportion of heavy vehicle drivers exceeding the speed limit during spring compared with overall levels, with the exception of elevated speeding prevalence in 110 km/h zones (including a 16% increase in low-level speeding), and to a lesser extent in 40 km/h zones (up to a 4.4% increase in low-level speeding).

Table 53: Proportion of heavy vehicle drivers travelling at various speeds during spring, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	88.9 (-0.3)	95.3 (0.0)	91.8 (0.0)	94.2 (0.0)	78.9 (-0.2)	87.4 (-0.2)	83 (+0.3)	91.3 (-1.4)
Above limit (total)	11.1 (+2.5)	4.7 (+0.9)	8.2 (-0.1)	5.8 (+0.6)	21.1 (+0.8)	12.6 (+1.7)	17 (-1.5)	8.7 (+16.9)
1-5 above	6.6 (+1.3)	2.7 (+0.6)	5.1 (-0.7)	3.9 (+0.5)	12.5 (+0.9)	8.8 (+1.2)	13.5 (-2.1)	6 (+16)
6-10 above	2.6 (+4.4)	1.1 (-0.1)	1.8 (-1.1)	1.3 (+1.7)	5.6 (+0.6)	2.9 (+3.2)	2.4 (-0.2)	1.6 (+15.7)
11-12 above	0.5 (+4.9)	0.2 (+0.7)	0.3 (+1.9)	0.2 (+3.3)	1.1 (+1.8)	0.4 (-1.0)	0.3 (-3.2)	0.3 (+15.8)
13-20 above	1.0 (+3.8)	0.5 (+1.6)	0.6 (+4.9)	0.3 (-2.8)	1.6 (-0.4)	0.4 (+3.3)	0.5 (-0.6)	0.8 (+26.7)
21-30 above	0.3 (+3.4)	0.2 (+9.4)	0.2 (+5)	0.1 (-4.4)	0.3 (+6.6)	0.1 (+18.4)	0.2 (+19.7)	0.0 (+56.5)
31-40 above	0.1 (+11.5)	0.0 (+7.8)	0.1 (+8.7)	0.0 (+5.6)	0.0 (+9.5)	0.0 (-22.6)	0.0 (+24.4)	0.0 (+87)
41-50 above	0.0 (-3.6)	0.0 (+7.0)	0.0 (+16.8)	0.0 (+98.6)	0.0 (-23.1)	0.0 (+150.8)	0.0 (+44.7)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds during spring in the corresponding speed zone, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all seasons in the corresponding speed zone.

5.1.6 REMOTENESS STRUCTURE

Two spatial classifications were utilised to stratify the speed probe data, the first classification being the remoteness structure which includes five area classifications based on the Accessibility and Remoteness Index Score of Australia:

- Major cities (RA30)
- Inner regional (RA31)
- Outer regional (RA32)
- Remote (RA33)
- Very remote (RA34)

Figure 33 demonstrates the remoteness structure for Queensland, overlaid with the HERE road network.

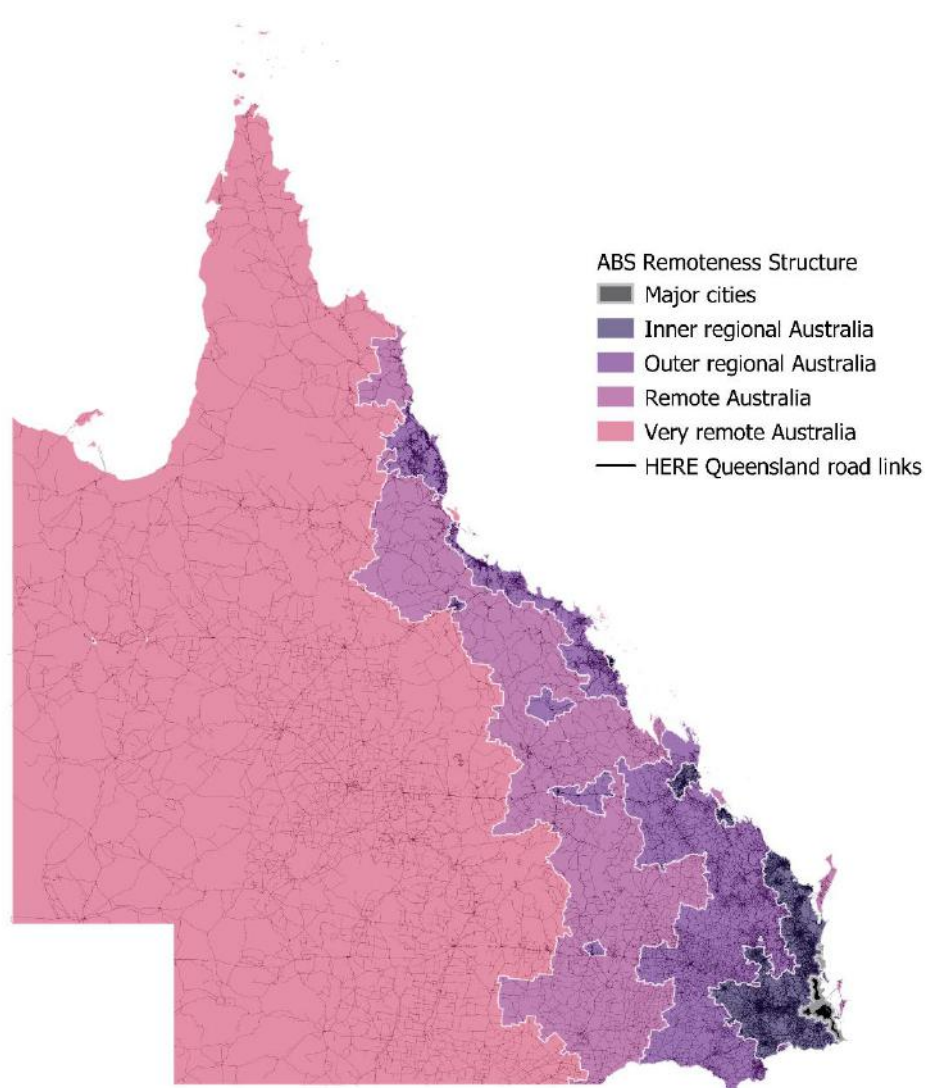


Figure 33: ABS Remoteness structure for Queensland, with the HERE road network overlayed, 2018

Figure 34 shows the results of the analysis of the speed data using this remoteness structure classification. As can be seen, the proportion of passenger vehicle motorists observed as exceeding the speed limit in each remoteness category varied substantially depending on the speed zone. Specifically, the prevalence of speeding in 40 km/h zones was greatest in more regional and remote areas (outer regional, remote and very remote), with between 30.4% and 38.9% of motorists exceeding the speed limit in these zones. In 50 km/h and 60 km/h zones, there were only slight differences between the proportion of motorists speeding in major cities, inner and outer regional areas and remote areas (between 8.6% and 10.9% for 50 km/h zones and between 11.4% and 14.5% for 60 km/h zones), before sharp increases in the prevalence of speeding in very remote areas (20.7% and 23.5%, respectively). In 70 km/h and 90 km/h zones speeding was most prevalent in remote areas (32.5% and 24.6%, respectively), followed by inner and outer regional areas (12.4%-14.8% and 16.2%-17.2%, respectively) and least prevalent in major cities (9.5% and 13.2%, respectively). It is worth noting that no data was available for 70 km/h and 90 km/h zones in very remote areas. In 80 km/h and 110 km/h zones, the prevalence of

speeding in major cities, outer regional and remote areas tended to be relatively similar (19.4%-20.2% and 13.9%-15.8%, respectively), compared to a heightened prevalence in inner regional areas (22.3% and 21.1%, respectively) and a lower prevalence in very remote areas (12.8% and 13.2%, respectively). Finally, in 100 km/h zones, the prevalence of speeding in major cities and remote areas was once again similar (16.9% and 17.9%, respectively), compared to a heightened prevalence in inner and outer regional areas (20.7% and 24.2%, respectively) and a lower prevalence in very remote areas (11%).

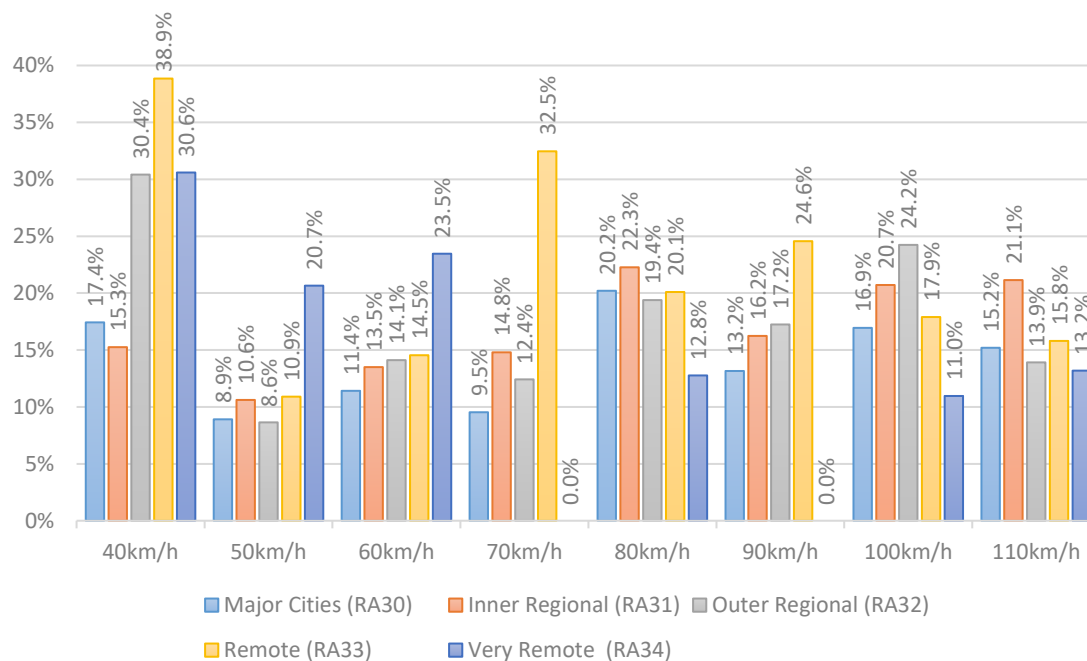


Figure 34: Proportion of passenger vehicle motorists travelling above the speed limit by remoteness structure, Queensland, 2018

Table 54 further highlights the level of speed non-compliance among passenger vehicle motorists by remoteness structure, with a comparison to overall levels of speed non-compliance (see Table 10). As can be seen, compared to overall levels, the prevalence of speeding amongst motorists was slightly lower across all speed zones in major cities (between 1.2% and 5.7%). Conversely, there was an increased prevalence of speeding in inner regional areas across all zones (between 8.9% and 50.8%), with the exception of 40 km/h zones (14.9% lower). Differences in the prevalence of speeding amongst passenger vehicle motorists in outer regional, remote and very remote areas were less consistent, perhaps reflecting the typical speed limit zones found in these areas. Specifically, while speeding was more prevalent in outer regional areas in 40 km/h, 60 km/h, 70 km/h, 90 km/h and 100 km/h zones (between 21% and 69.8%), it was less prevalent in 50 km/h, 80 km/h and 110 km/h zones (between 4.5% and 13.4%). Similarly, in remote areas, speeding was moderately more prevalent in 50 km/h and 60 km/h zones (20.5% and 24.7%, respectively), substantially more prevalent in 40 km/h, 70 km/h and 90 km/h zones (116.9%, 230.9% and 82.3%, respectively), and relatively unchanged in other zones. Finally, substantially higher levels of speeding prevalence were observed in very remote areas in 40 km/h to 60 km/h

zones (between 70.8% and 128.2%), while the prevalence of speeding was lower in 80 km/h, 100 km/h and 110 km/h zones (37.6%, 38.9% and 17.9%, respectively).

Table 54: Proportion of passenger vehicle motorists travelling above the speed limit by remoteness structure, Queensland,

2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
All areas	17.9	9.0	11.7	9.8	20.5	13.5	18.0	16.1
Major Cities	17.4 (-2.7)	8.9 (-1.5)	11.4 (-2.1)	9.5 (-2.8)	20.2 (-1.2)	13.2 (-2.4)	16.9 (-5.7)	15.2 (-5.4)
Inner Regional	15.3 (-14.9)	10.6 (+17.3)	13.5 (+15.7)	14.8 (+50.8)	22.3 (+8.9)	16.2 (+20.5)	20.7 (+15.2)	21.1 (+31.6)
Outer Regional	30.4 (+69.8)	8.6 (-4.5)	14.1 (+21.0)	12.4 (+26.6)	19.4 (-5.2)	17.2 (+28.0)	24.2 (+34.8)	13.9 (-13.4)
Remote	38.9 (+116.9)	10.9 (+20.5)	14.5 (+24.7)	32.5 (+230.9)	20.1 (-1.7)	24.6 (+82.3)	17.9 (-0.4)	15.8 (-1.7)
Very Remote	30.6 (+70.8)	20.7 (+128.2)	23.5 (+101.1)	-	12.8 (-37.6)	-	11.0 (-38.9)	13.2 (-17.9)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists exceeding the speed limit in the corresponding remoteness structure classification and speed zone, compared to the prevalence of all motorists exceeding the speed limit across all areas in the corresponding speed zone.

As can be seen in Figure 35, the proportion of heavy vehicle drivers exceeding the speed limit in each remoteness category also varied substantially depending on the speed zone. That said, speeding amongst heavy vehicle drivers was typically more prevalent in remote areas across all zones, with the exception of 50 km/h and 110 km/h zones. Specifically, in 40 km/h, 70 km/h, 90 km/h and 100 km/h zones, the prevalence of speeding was typically greatest in remote areas, followed by outer regional and very remote areas, inner regional areas and major cities. Similarly, in 50 km/h and 60 km/h zones, the prevalence of speeding amongst heavy vehicle drivers also tended to increase with remoteness, with very remote areas recording levels of speeding similar to or higher than those observed in remote areas. Conversely, in 110 km/h zones, the prevalence of speeding tended to decrease slightly with remoteness, with the exception of very remote areas. Finally, in 80 km/h zones, remote and inner regional areas recorded the highest levels of speeding by heavy vehicle drivers, followed by outer regional and very remote areas, with the least prevalent levels observed in major cities.

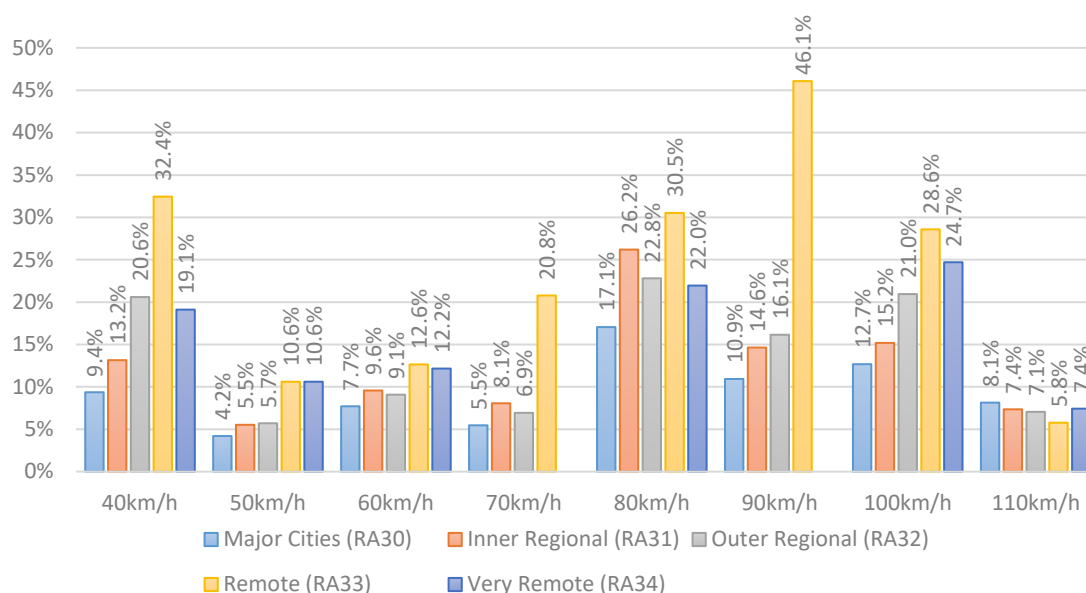


Figure 35: Proportion of heavy vehicle drivers travelling above the speed limit by remoteness structure, Queensland, 2018

Table 55 further highlights the level of speed non-compliance among heavy vehicle drivers by remoteness structure, with a comparison to overall levels of speed non-compliance (see Table 13). As can be seen, compared to overall levels, heavy vehicle drivers typically engaged in speeding to a greater extent as remoteness increased, with the prevalence of speeding tending to be lowest in major cities and highest in remote areas. The prevalence of heavy vehicle driver speeding in very remote areas was similar to that in either outer regional or remote areas, depending on the speed limit zone. Interestingly, these trends were not applicable to 110 km/h zones, where the proportion of drivers exceeding the speed limit was roughly similar in all areas except remote areas, where speeding was less prevalent.

Table 55: Proportion of heavy vehicle drivers travelling over the speed limit by remoteness structure, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
All areas	10.9	4.6	8.2	5.8	21.0	12.4	17.2	7.4
Major Cities	9.4 (-13.9)	4.2 (-9.5)	7.7 (-5.5)	5.5 (-5.9)	17.0 (-18.7)	10.9 (-12.0)	12.6 (-26.5)	8.1 (+9.5)
Inner Regional	13.2 (+21.0)	5.5 (+19.1)	9.6 (+17.3)	8.1 (+38.9)	26.1 (+24.9)	14.6 (+17.8)	15.1 (-11.9)	7.4 (-1.1)
Outer Regional	20.6 (+89.5)	5.7 (+23.0)	9.1 (+11.3)	6.9 (+19.5)	22.8 (+8.8)	16.1 (+30.0)	20.9 (+21.5)	7.1 (-5.1)
Remote	32.4 (+198.5)	10.6 (+128.6)	12.6 (+55)	20.8 (+257.9)	30.5 (+45.6)	46.1 (+270.9)	28.6 (+65.8)	5.8 (-22.3)
Very Remote	19.1 (+75.8)	10.6 (+128.7)	12.2 (+49.0)	-	21.9 (+4.7)	-	24.7 (+43.0)	7.4 (-)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers exceeding the speed limit in the corresponding remoteness structure classification and speed zone, compared to the prevalence of all heavy vehicle drivers exceeding the speed limit across all areas in the corresponding speed zone.

5.1.6.1 Passenger vehicle motorists by remoteness structure

Table 56 shows the level of speed non-compliance among passenger vehicle motorists in major cities, with a comparison to overall levels across all areas (see Table 10). As can be seen, the proportion of motorists exceeding the speed limit in major cities was generally consistent with overall levels, with a few notable exceptions. Specifically, there was some evidence to suggest that exceeding the speed limit by 1-5 km/h was less prevalent in major cities (between 0.4% and 4.7%) across all speed zones. In addition, exceeding the speed limit by 6-10 km/h was less prevalent in major cities in 40 km/h, 70 km/h, 100 km/h and 110 km/h zones (3.5%, 3.6%, 5.4% and 7.8%, respectively). There was also evidence of a lower prevalence of motorists exceeding the speed limit by 13-20 km/h across all zones (between 4.4% and 24.4%), with the exception of 80 km/h zones. In both major cities and overall, exceeding the speed limit by 21 km/h or more was extremely rare among passenger vehicle motorists.

Table 56: Proportion of passenger vehicle motorists travelling at various speeds in major cities, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	82.6 (+0.6)	91.1 (+0.2)	88.6 (+0.3)	90.5 (+0.3)	79.8 (+0.3)	86.8 (+0.4)	83.1 (+1.3)	84.8 (+1.0)
Above limit (total)	17.4 (-2.7)	8.9 (-1.5)	11.4 (-2.1)	9.5 (-2.8)	20.2 (-1.2)	13.2 (-2.4)	16.9 (-5.7)	15.2 (-5.4)
1-5 above	9.5 (-0.8)	5.3 (-0.4)	7.1 (-1.6)	6.4 (-1.7)	11.6 (-2.4)	8.9 (-1.2)	13.0 (-4.3)	12.3 (-4.7)
6-10 above	4.7 (-3.5)	2.3 (-2.0)	2.7 (-2.0)	2.1 (-3.6)	5.1 (+0.5)	3.1 (-0.5)	3.1 (-5.4)	2.3 (-7.8)
11-12 above	1.0 (-6.0)	0.4 (-3.4)	0.5 (-3.1)	0.4 (-5.9)	1.1 (+2.5)	0.5 (-2.7)	0.4 (-13.0)	0.2 (-8.2)
13-20 above	1.6 (-7.5)	0.7 (-4.4)	0.8 (-4.7)	0.5 (-8.3)	1.9 (+1.0)	0.6 (-13.6)	0.4 (-24.4)	0.4 (-10.3)
21-30 above	0.4 (-9.0)	0.2 (-7.9)	0.2 (-8.2)	0.1 (-10.8)	0.4 (-4.3)	0.1 (-43.3)	0.1 (-47.6)	0.0 (-62.4)
31-40 above	0.2 (+1.4)	0.0 (-19.9)	0.1 (-9.7)	0.0 (-11.6)	0.1 (-16.5)	0.0 (-31.6)	0.0 (-64.2)	0.0 (-73.7)
41-50 above	0.0 (+1.2)	0.0 (-38.5)	0.0 (-8.9)	0.0 (-23.9)	0.0 (-23.3)	0.0 (-14.3)	0.0 (-65.8)	0.0 (-74.5)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in major cities in the corresponding speed zone, compared to the prevalence of all motorists travelling at these speeds across all areas in the corresponding speed zone.

A different trend in the proportion of passenger vehicle motorists speeding was found in inner regional Queensland (Table 57), compared to overall levels across all areas (see Table 10). As can be seen, the proportion of motorists exceeding the speed limit in inner regional areas was typically higher compared to overall levels. Specifically, there was evidence that low-level speeding was more prevalent in inner regional areas across all zones, including exceeding the speed limit by 1-5 km/h (between 7.2% and 37.2%), with the exception of 40km/h zones. There was also evidence of exceeding the speed limit by 6-10 km/h (between 3.9% and 67.9%), with the exception of 40 km/h where low-level speeding was up to 15.6% less prevalent. Moreover, there was evidence of more prevalent levels of exceeding the speed limit by 13-20 km/h (between 0.5% and 125.4%) across all zones. While exceeding the speed limit by 21 km/h or more was extremely rare among passenger

vehicle motorists in inner regional areas, there was some evidence that travelling 21-30 km/h over the speed limit was more prevalent across most speed zones, compared to overall levels.

Table 57: Proportion of passenger vehicle motorists travelling at various speeds in inner regional areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	84.7 (+3.2)	89.4 (-1.7)	86.5 (-2.1)	85.2 (-5.5)	77.7 (-2.3)	83.8 (-3.2)	79.3 (-3.3)	78.9 (-6.0)
Above limit (total)	15.3 (-14.9)	10.6 (+17.3)	13.5 (+15.7)	14.8 (+50.8)	22.3 (+8.9)	16.2 (+20.5)	20.7 (+15.2)	21.1 (+31.6)
1-5 above	7.7 (-19.4)	5.7 (+7.2)	8.1 (+11.5)	8.9 (+37.2)	13.5 (+13.3)	9.8 (+9.1)	15.2 (+12.0)	17.0 (+32.2)
6-10 above	4.2 (-15.6)	2.8 (+20.6)	3.1 (+15.3)	3.6 (+67.9)	5.3 (+4.7)	3.2 (+3.9)	3.7 (+14.4)	3.1 (+28.5)
11-12 above	1.0 (-6.8)	0.5 (+33.8)	0.6 (+24.2)	0.7 (+93.2)	1.0 (-2.1)	0.6 (+22.8)	0.6 (+33.3)	0.3 (+27.5)
13-20 above	1.8 (+1.1)	1.1 (+44.4)	1.1 (+31.9)	1.2 (+95.7)	1.9 (+0.5)	1.5 (+125.4)	0.9 (+59.6)	0.6 (+25.4)
21-30 above	0.5 (+21.2)	0.3 (+83)	0.4 (+53.8)	0.3 (+98.9)	0.4 (-0.1)	1.0 (+406.1)	0.3 (+91.9)	0.0 (+158.1)
31-40 above	0.1 (-48.6)	0.1 (+189.2)	0.1 (+70.6)	0.0 (+119.5)	0.1 (-5.2)	0.1 (+300.4)	0.0 (+141.7)	0.0 (+245.4)
41-50 above	0.0 (+19.9)	0.0 (+306.5)	0.0 (+54.2)	0.0 (+306)	0.0 (+42.5)	0.0 (+142.1)	0.0 (+131.8)	0.0 (+389)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in inner regional areas in the corresponding speed zone, compared to the prevalence of all motorists travelling at these speeds across all areas in the corresponding speed zone.

As can be seen in Table 58, there was also evidence of a greater proportion of motorists exceeding the speed limit in outer regional areas, compared to overall levels (see Table 10). Specifically, there was evidence that low-level speeding was more prevalent in outer regional areas, including exceeding the speed limit by 1-5 km/h (between 6.4% and 37.6%) and by 6-10 km/h (between 12.6% and 87.4%), with the exception of 50 km/h and 80 km/h zones, where low-level speeding was up to 12.3% less prevalent, as well as 110 km/h zones where travelling 1-5 km/h over the limit was 26.7% less prevalent but travelling 6-10 km/h over was 33.3% more prevalent. In addition, there was evidence of more prevalent levels of exceeding the speed limit by 13-20 km/h (up to 155.7%) across all zones, with the exception of 50km/h and 80 km/h zones, where speeding of this magnitude was less prevalent. While exceeding the speed limit by 21 km/h or more was extremely rare among passenger vehicle motorists in outer regional areas, there was some evidence that travelling 21-30 km/h over the speed limit was more prevalent across most speed zones, compared to overall levels.

Table 58: Proportion of passenger vehicle motorists travelling at various speeds in outer regional areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	69.6 (-15.2)	91.4 (+0.4)	85.9 (-2.8)	87.6 (-2.9)	80.6 (+1.3)	82.8 (-4.4)	75.8 (-7.6)	86.1 (+2.6)
Above limit (total)	30.4 (+69.8)	8.6 (-4.5)	14.1 (+21)	12.4 (+26.6)	19.4 (-5.2)	17.2 (+28)	24.2 (+34.8)	13.9 (-13.4)
1-5 above	13.2 (+37.6)	5.0 (-5.4)	8.4 (+15.8)	6.9 (+6.4)	11.5 (-3.2)	11.7 (+30.1)	17.3 (+27.8)	9.4 (-26.7)
6-10 above	9.2 (+87.4)	2.3 (-2.4)	3.2 (+17.3)	2.8 (+27.1)	4.4 (-12.3)	3.5 (+12.6)	4.2 (+29.5)	3.2 (+30.1)
11-12 above	2.4 (+125.9)	0.4 (-2.4)	0.6 (+27.3)	0.7 (+75.3)	0.9 (-17.2)	0.6 (+38.9)	0.7 (+70.4)	0.5 (+75)
13-20 above	4.4 (+146.7)	0.7 (-2.6)	1.3 (+47.2)	1.5 (+155.7)	1.7 (-8.6)	1.0 (+53.9)	1.3 (+124.3)	0.8 (+65.6)
21-30 above	1.0 (+150.6)	0.2 (-12.6)	0.4 (+87)	0.5 (+241.5)	0.6 (+34)	0.3 (+66.6)	0.6 (+308)	0.0 (+148.6)
31-40 above	0.2 (+20.1)	0.0 (-31.7)	0.1 (+92.6)	0.1 (+244.8)	0.2 (+142.5)	0.0 (-11.7)	0.0 (+368.2)	0.0 (+48.1)
41-50 above	0.0 (-53.8)	0.0 (-48.1)	0.0 (+100.6)	0.0 (+417.5)	0.0 (+93.4)	0.0 (-100.0)	0.0 (+409.4)	0.0 (+32.2)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in outer regional areas in the corresponding speed zone, compared to the prevalence of all motorists travelling at these speeds across all areas in the corresponding speed zone.

Similarly, a greater proportion of passenger vehicle motorists were found to be exceeding the speed limit in remote areas (Table 59), compared to overall levels (see Table 10). Specifically, there was evidence that low-level speeding was more prevalent in remote areas, including exceeding the speed limit by 1-5 km/h (between 1.8% and 197.3%) and by 6-10 km/h (between 16.6% and 302%), with the exception of 80 km/h zones, where low-level speeding was up to 17.4% less prevalent, as well as 110 km/h zones where travelling 1-5 km/h over the limit was 15.8% less prevalent but travelling 6-10 km/h over was 46.6% more prevalent. In addition, there was evidence of more prevalent levels of exceeding the speed limit by 13-20 km/h across all zones. While exceeding the speed limit by 21 km/h or more was extremely rare among passenger vehicle motorists in remote areas, there was some evidence that travelling 21-30 km/h over the speed limit was more prevalent across most speed zones, compared to overall levels.

Table 59: Proportion of passenger vehicle motorists travelling at various speeds in remote areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	61.1 (-25.5)	89.1 (-2)	85.5 (-3.3)	67.5 (-25.1)	79.9 (+0.4)	75.4 (-12.8)	82.1 (+0.1)	84.2 (+0.3)
Above limit (total)	38.9 (+116.9)	10.9 (+20.5)	14.5 (+24.7)	32.5 (+230.9)	20.1 (-1.7)	24.6 (+82.3)	17.9 (-0.4)	15.8 (-1.7)
1-5 above	13.2 (+38)	5.4 (+1.8)	7.5 (+2.8)	19.3 (+197.3)	9.8 (-17.4)	13 (+44.5)	11.9 (-12.2)	10.8 (-15.8)
6-10 above	10.8 (+119.8)	2.9 (+24.6)	3.5 (+27.7)	8.7 (+302)	5 (-2.2)	8 (+159.7)	3.8 (+16.6)	3.6 (+46.6)
11-12 above	3.5 (+227.7)	0.6 (+39.3)	0.7 (+37.9)	1.7 (+338.3)	1.5 (+45.3)	0.9 (+102)	0.6 (+30.3)	0.4 (+45.2)
13-20 above	7.3 (+312.5)	1.0 (+30.9)	1.8 (+107.9)	2.5 (+323.7)	2.4 (+26.6)	1.6 (+132.6)	1.2 (+107.5)	0.9 (+91.8)
21-30 above	2.9 (+619.8)	0.4 (+107.8)	0.8 (+241.7)	0.2 (+57)	1.0 (+128.9)	1.0 (+422.7)	0.4 (+172.5)	0.1 (+212.5)
31-40 above	0.9 (+508.5)	0.3 (+1048.7)	0.2 (+271.9)	0.0 (-100)	0.2 (+178.9)	0.0 (-100)	0.0 (+101.8)	0.0 (+328.7)
41-50 above	0.1 (+821)	0.4 (+3855.2)	0.1 (+320.2)	0.0 (-100)	0.2 (+567.8)	0.0 (-100)	0.0 (-26.3)	0.0 (+2151.8)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in remote areas in the corresponding speed zone, compared to the prevalence of all motorists travelling at these speeds across all areas in the corresponding speed zone.

Far less consistent trends were found when considering the proportion of passenger vehicle motorists exceeding the speed limit in very remote areas (Table 60), compared to overall levels (see Table 10). For example, while low-level speeding was more prevalent in 40 km/h and 50 km/h zones (up to 87.9% and 119.8%, respectively), it was less prevalent in 80 km/h and 100 km/h zones (up to 36% and 59.7%, respectively). There was also evidence of more prevalent levels of exceeding the speed limit by 13-20 km/h (by up to 259.1%) in 50 km/h, 60 km/h, 100 km/h and 110 km/h zones, while speeding of this magnitude was less prevalent in 40 km/h and 80 km/h zones (by 8.8% and 47.1%, respectively). While exceeding the speed limit by 21 km/h or more was extremely rare among passenger vehicle motorists in very remote areas, there was some evidence that travelling 21-30 km/h over the speed limit was more prevalent across most speed zones, compared to overall levels.

Table 60: Proportion of passenger vehicle motorists travelling at various speeds in very remote area, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	69.4 (-15.4)	79.3 (-12.8)	76.5 (-13.4)	-	87.2 (+9.7)	-	89 (+8.6)	86.8 (+3.4)
Above limit (total)	30.6 (+70.8)	20.7 (+128.2)	23.5 (+101.1)	-	12.8 (-37.6)	-	11.0 (-39)	13.2 (-17.9)
1-5 above	18 (+87.9)	11.7 (+119.8)	12.8 (+76)	-	7.6 (-36.0)	-	5.5 (-59.7)	6.6 (-48.6)
6-10 above	7.9 (+60.6)	3.9 (+64.4)	6.2 (+127.1)	-	3.0 (-41.1)	-	2.5 (-22.6)	4.3 (+76.4)
11-12 above	1.3 (+24)	1.4 (+247.8)	1.2 (+130.7)	-	0.5 (-51.7)	-	0.5 (+25.8)	0.4 (+58.1)
13-20 above	1.6 (-8.8)	2.8 (+259.1)	2.5 (+188.5)	-	1.0 (-47.1)	-	1.8 (+211.4)	1.4 (+201.2)
21-30 above	1.8 (+332.1)	0.9 (+374.1)	0.7 (+185.9)	-	0.4 (-16)	-	0.5 (+241.4)	0.4 (+1845.4)
31-40 above	0.0 (-100)	0.1 (+292.8)	0.2 (+129)	-	0.1 (+87.6)	-	0.1 (+781.6)	0.1 (+1587.2)
41-50 above	0.0 (-100)	0.0 (-100)	0.0 (+65.4)	-	0.1 (+497.9)	-	0.0 (+1047.2)	0.0 (-100.0)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in very remote areas in the corresponding speed zone, compared to the prevalence of all motorists travelling at these speeds across all areas in the corresponding speed zone.

The estimated total fractions of crashes attributable to speeding in outer regional Queensland, remote Queensland and very remote Queensland, were typically higher than the estimated fractions of crashes attributable to speeding in Queensland's major cities and inner regional Queensland across all speed zones. Table 61 to Table 65 provides estimates of the fractions of casualty crashes attributable to each level of speeding in the five geographical regions.

The findings indicate that there are minimal differences in PARF for major cities and inner regional areas in Queensland compared to the overall risk calculations (Table 11 and Table 12). With the results from the PARF calculation identified for speeding in 40km/h zones, for example using Kloeden's RR curve to calculate the PARF, estimated that 92% casualty crashes (in total) were attributable to speeding in the 40 km/h speed zones in remote Queensland.

Differences were more pronounced in outer regional, remote and very remote areas. This was particularly notable for speeding in 100 km/h and 110 km/h zones. This is expected given the increased risk associated with higher speeds, and the higher proportion of high-speed roads in these areas. The findings provide indication of locations for enforcement

Analysis of the population attributable fraction of crashes for each remoteness level, analysed by each speed zone and by speeding level is presented below.

Table 61: PARF for passenger vehicle motorists in major cities, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	At or 1-10 under	-11.4	-10.2	-16.0	-9.7	-16.4	-12.1	-19.0	-12.4	-11.9	-4.6	-15.1	-5.5	-15.7	-5.3	-17.5
Total above	65.6	20.8	37.2	12.2	43.9	14.0	33.2	12.0	26.4	5.9	16.4	3.8	10.2	2.4	8.0	1.9
1-5 above	6.5	3.2	3.5	2.2	3.6	2.8	4.1	2.9	3.1	1.0	3.7	1.1	3.5	1.0	3.3	0.9
6-10 above	12.6	5.9	6.3	3.7	5.6	4.0	5.9	3.7	5.0	1.4	4.8	1.3	3.2	0.8	2.3	0.6
11-12 above	3.0	2.3	2.2	1.2	2.2	1.3	2.2	1.2	1.9	0.5	1.5	0.4	0.7	0.2	0.5	0.1
13-20 above	11.3	6.1	9.9	3.6	8.5	3.7	7.4	2.9	6.3	1.4	3.2	0.7	1.6	0.3	1.8	0.3
21-30 above	14.6	2.3	10.5	1.3	12.1	1.6	9.2	1.1	6.3	1.4	1.7	0.2	1.0	0.1	0.1	0.0
31-40 above	16.2	1.0	3.5	0.1	9.4	0.5	4.2	0.2	2.4	0.2	0.9	0.1	0.1	0.0	0.0	0.0
41-50 above	1.3	0.1	1.2	0.0	2.6	0.1	0.2	0.0	1.4	0.1	0.5	0.0	0.1	0.0	0.0	0.0

Table 62: PARF for passenger vehicle motorists in inner regional areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	At or 1-10 under	-10.4	-9.3	-11.0	-8.8	-13.7	-12.0	-13.4	-10.8	-22.5	-9.4	-19.5	-8.9	-24.3	-9.3	-25.0
Total above	64.1	21.1	51.6	16.6	52.3	16.8	47.0	18.6	26.7	5.9	31.2	6.4	16.1	3.5	10.9	2.7
1-5 above	5.5	2.7	2.7	2.3	3.1	2.8	4.0	3.4	3.3	1.1	3.2	1.2	3.7	1.1	4.0	1.2
6-10 above	11.6	5.4	5.5	4.3	5.1	4.3	7.0	5.4	4.8	1.4	3.8	1.2	3.5	1.0	2.9	0.8
11-12 above	3.1	2.3	2.2	1.5	2.1	1.6	3.0	2.0	1.7	0.5	1.3	0.4	1.0	0.3	0.6	0.1
13-20 above	12.9	6.9	11.1	5.2	9.2	4.7	11.0	5.3	5.9	1.3	5.0	1.2	3.2	0.7	2.3	0.4
21-30 above	20.7	3.1	15.6	2.5	15.8	2.4	14.5	2.0	5.9	1.3	10.7	1.8	3.5	0.5	0.4	0.1
31-40 above	8.6	0.5	9.0	0.5	13.6	0.8	6.7	0.4	2.7	0.2	5.1	0.5	0.8	0.1	0.5	0.0
41-50 above	1.6	0.1	5.4	0.3	3.4	0.2	0.9	0.0	2.3	0.1	2.1	0.1	0.3	0.0	0.3	0.0

Table 63: PARF for passenger vehicle motorists in outer regional areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-5.8	-6.7	-14.9	-8.8	-13.0	-12.1	-11.3	-10.5	-22.2	-9.6	-17.6	-7.4	-20.9	-8.7	-32.9	-10.7
Total above	82.0	34.4	36.8	12.4	55.2	17.8	56.5	19.9	29.8	5.9	19.6	4.9	21.4	4.7	13.0	2.7
1-5 above	6.4	3.5	3.5	2.2	2.9	2.9	2.8	2.7	2.8	1.0	4.0	1.4	3.9	1.3	3.3	0.8
6-10 above	16.6	8.8	6.7	3.8	4.7	4.2	4.7	4.2	4.0	1.2	4.6	1.4	3.7	1.1	4.0	0.9
11-12 above	22.1	16.5	12.9	4.9	11.5	6.8	14.8	1.9	7.1	1.7	5.8	1.4	5.4	1.2	4.7	0.8
13-20 above	25.4	4.7	9.7	1.3	18.0	2.8	23.0	6.7	5.6	1.3	3.8	0.6	6.3	0.9	0.6	0.1
21-30 above	11.2	0.9	3.1	0.1	14.0	0.9	10.3	3.7	7.1	0.6	1.3	0.1	1.5	0.1	0.2	0.0
31-40 above	0.4	0.0	1.0	0.0	4.0	0.2	0.8	0.6	3.2	0.2	0.0	0.0	0.7	0.0	0.1	0.0
41-50 above	6.4	3.5	3.5	2.2	2.9	2.9	2.8	0.1	2.8	1.0	4.0	1.4	3.9	1.3	3.3	0.8

Table 64: PARF for passenger vehicle motorists in remote area, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-3.0	-6.1	-4.1	-6.8	-7.9	-9.9	-9.4	-7.9	-19.8	-9.6	-14.0	-6.2	-28.8	-10.8	-24.4	-8.7
Total above	91.4	44.9	60.8	20.0	68.7	22.9	46.7	27.4	37.9	7.6	33.4	8.6	17.7	3.7	15.4	3.1
1-5 above	3.6	2.5	1.3	2.2	1.8	2.4	6.1	5.4	2.2	0.8	2.8	1.0	3.1	0.9	3.5	1.0
6-10 above	12.4	8.2	2.7	4.3	3.8	4.6	10.4	8.2	3.9	1.3	6.4	2.0	3.9	1.0	4.0	1.0
11-12 above	2.7	4.6	1.1	1.5	1.5	1.6	6.3	4.4	2.2	0.7	9.6	2.7	1.1	0.3	0.8	0.2
13-20 above	12.6	15.5	5.1	4.7	10.0	7.2	15.7	8.1	6.8	1.7	6.5	1.6	4.4	0.9	4.0	0.7
21-30 above	32.2	10.4	9.1	2.7	26.4	5.0	8.1	1.2	6.8	1.7	8.1	1.4	4.4	0.6	0.7	0.1
31-40 above	24.9	3.4	16.8	1.9	19.2	1.6	0.0	0.0	6.3	0.6	0.0	0.0	0.7	0.1	0.8	0.1
41-50 above	3.1	0.4	24.9	2.8	5.9	0.5	0.0	0.0	9.6	0.7	0.0	0.0	0.1	0.0	1.5	0.1

Table 65: PARF for passenger vehicle motorists, very remote areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-6.8	-7.1	-9.1	-8.9	-7.7	-8.0	-	-	-28.1	-11.6	-	-	-40.3	-16.2	-19.4	-6.6
Total above	78.5	29.4	61.3	26.2	62.5	26.6	-	-	29.5	4.4	-	-	24.0	4.2	24.3	4.2
1-5 above	10.2	5.4	3.0	3.1	3.6	3.9	-	-	2.0	0.6	-	-	1.5	0.4	2.5	0.6
6-10 above	15.2	7.8	5.0	4.6	7.1	7.1	-	-	2.9	0.8	-	-	2.8	0.8	5.5	1.3
11-12 above	2.6	2.4	3.5	2.9	2.8	2.4	-	-	0.9	0.2	-	-	1.1	0.3	1.0	0.2
13-20 above	6.3	4.6	18.9	10.2	13.6	8.5	-	-	3.6	0.8	-	-	7.4	1.5	7.9	1.3
21-30 above	44.1	9.2	23.3	4.8	20.1	3.7	-	-	3.6	0.8	-	-	6.3	0.8	4.8	0.6
31-40 above	0.0	0.0	7.6	0.5	12.8	0.9	-	-	5.5	0.5	-	-	3.2	0.3	2.6	0.2
41-50 above	0.0	0.0	0.0	0.0	2.5	0.2	-	-	10.9	0.6	-	-	1.8	0.1	0.0	0.0

5.1.6.2 Heavy vehicles by remoteness structure

Table 66 shows the level of speed non-compliance among heavy vehicle drivers in major cities, with a comparison to overall levels of speed non-compliance (see

Table 13). As can be seen, the proportion of heavy vehicle drivers exceeding the speed limit in major cities was generally lower than overall levels. Specifically, there was evidence of less prevalent low-level speeding across all speed zones, including exceeding the speed limit by 1-5 km/h (between 5.7% and 25.5%) and by 6-10 km/h (between 4.3% and 26.9%), with the exception of 110 km/h zones where low-level speeding was more prevalent (by up to 17.8%). Similarly, there was evidence of a lower prevalence of heavy vehicle drivers exceeding the speed limit by 13-20 km/h across all zones (between 3.8% and 45.1%), with the exception of 110 km/h zones where it was 20.1% more prevalent. While exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers in both major cities and overall, there was some evidence to suggest excessive speeding was less prevalent in major cities across most speed zones.

Table 66: Proportion of heavy vehicle drivers travelling at various speeds in major cities, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	90.6 (+1.7)	95.8 (+0.5)	92.3 (+0.5)	94.5 (+0.4)	82.9 (+5.0)	89.1 (+1.7)	87.3 (+5.5)	91.9 (-0.8)
Above limit (total)	9.4 (-13.9)	4.2 (-9.5)	7.7 (-5.5)	5.5 (-5.9)	17.1 (-18.7)	10.9 (-12.0)	12.7 (-26.5)	8.1 (+9.5)
1-5 above	5.9 (-10.6)	2.4 (-8.2)	4.9 (-5.7)	3.6 (-6.0)	10.3 (-16.7)	7.6 (-12.6)	10.3 (-25.5)	5.4 (+5.0)
6-10 above	2.1 (-17.4)	1.0 (-10.7)	1.7 (-4.3)	1.2 (-5.8)	4.4 (-20.2)	2.4 (-12.2)	1.8 (-26.9)	1.6 (+17.8)
11-12 above	0.4 (-22.5)	0.2 (-8.4)	0.3 (-4.7)	0.2 (-5.1)	0.8 (-21.5)	0.3 (-8.4)	0.2 (-35.2)	0.3 (+35.5)
13-20 above	0.7 (-22.8)	0.4 (-9.3)	0.6 (-3.8)	0.3 (-6.2)	1.2 (-27.5)	0.4 (-9.5)	0.3 (-45.1)	0.7 (+20.1)
21-30 above	0.3 (-16.1)	0.1 (-12.1)	0.2 (-11.8)	0.1 (-4.9)	0.2 (-18.2)	0.1 (+5.3)	0.1 (-29.9)	0.0 (-80.5)
31-40 above	0.1 (-7.8)	0.0 (-26.2)	0.1 (-23.5)	0.0 (-3.2)	0.0 (+6.5)	0.0 (+26.3)	0.0 (-88.9)	0.0 (-75.6)
41-50 above	0.0 (-16.5)	0.0 (-57.5)	0.0 (-13.0)	0.0 (+11.3)	0.0 (+3.3)	0.0 (-25.6)	0.0 (-66.1)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in major cities in the corresponding speed zone, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all areas in the corresponding speed zone.

In contrast, Table 67 shows that speed non-compliance among heavy vehicle drivers was typically more prevalent in inner regional areas compared to overall levels (see

Table 13). Specifically, there was evidence of more prevalent low-level speeding across all speed zones, including exceeding the speed limit by 1-5 km/h (between 10.1% and 37.4%) and by 6-10 km/h (between 17.6% and 42.4%), with the exception of 100 km/h zones, where low-level speeding was less prevalent (by up to 19.7%), and 110 km/h zones where travelling 1-5 km/h over the limit was 9.1% more prevalent but travelling 6-10 km/h over was 17% less prevalent. Similarly, there was evidence of a greater prevalence of heavy vehicle drivers exceeding the speed limit by 13-20 km/h across all zones (between 19.1% and 54.4%), with the exception of 100 km/h and 110 km/h zones, where it was up to 35.7% less prevalent. While exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers in both inner regional areas and overall, there was some evidence to suggest excessive speeding was more prevalent in inner regional areas in speed zones up to and including 80 km/h, but less prevalent in speed zones of 90 km/h or above.

Table 67: Proportion of heavy vehicle drivers travelling at various speeds in inner regional areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	86.8 (-2.6)	94.5 (-0.9)	90.4 (-1.5)	91.9 (-2.4)	73.8 (-6.6)	85.4 (-2.5)	84.8 (+2.5)	92.6 (+0.1)
Above limit (total)	13.2 (+21.0)	5.5 (+19.1)	9.6 (+17.3)	8.1 (+38.9)	26.2 (+24.9)	14.6 (+17.8)	15.2 (-11.9)	7.4 (-1.1)
1-5 above	7.4 (+13.6)	2.9 (+10.1)	6.0 (+16.7)	5.3 (+37.4)	15.4 (+24.3)	10.1 (+15.8)	12.4 (-9.7)	5.7 (+9.1)
6-10 above	3.4 (+35.6)	1.3 (+17.6)	2.1 (+16.5)	1.8 (+42.4)	6.9 (+24.1)	3.4 (+23.6)	2.0 (-19.7)	1.2 (-17.0)
11-12 above	0.7 (+40.4)	0.3 (+23.2)	0.4 (+21.6)	0.3 (+25.8)	1.3 (+23.2)	0.5 (+23.3)	0.3 (-22.6)	0.2 (-37.4)
13-20 above	1.1 (+19.1)	0.7 (+54.4)	0.7 (+22.1)	0.5 (+48.7)	2.2 (+34.1)	0.5 (+26.4)	0.4 (-23.9)	0.4 (-35.7)
21-30 above	0.4 (+32.7)	0.3 (+67.4)	0.2 (+28.4)	0.1 (+42.5)	0.3 (+26.9)	0.1 (-1.0)	0.2 (-19)	0.0 (-71.4)
31-40 above	0.1 (+21.7)	0.0 (+77.7)	0.1 (-4.4)	0.0 (+60.5)	0.0 (+4.5)	0.0 (-35.2)	0.0 (-38.1)	0.0 (-100)
41-50 above	0.0 (+90.1)	0.0 (+12.1)	0.0 (-15.1)	0.0 (-36.5)	0.0 (+33.1)	0.0 (+69.4)	0.0 (-14.2)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in inner regional areas in the corresponding speed zone, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all areas in the corresponding speed zone.

Somewhat inconsistent trends were also observed in relation to speed non-compliance among heavy vehicle drivers in outer regional areas (Table 68), compared to overall levels (see

Table 13). Specifically, low-level speeding by heavy vehicle drivers was more prevalent in outer regional areas across all speed zones, including exceeding the speed limit by 1-5 km/h (between 6.5% and 70.6%) and by 6-10 km/h (between 2.7% and 104%), with the exception of 110 km/h zones, where low-level speeding was less prevalent (by up to 9.6%). While exceeding the speed limit by 13-20 km/h was less prevalent in 50 km/h, 60 km/h and 90 km/h speed zones (between 7.9% and 45.4%), it was more prevalent across all other zones (between 10.4% and 159%). While exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers in both outer regional areas and overall, there was some evidence to suggest excessive speeding was more prevalent in outer regional areas in 40 km/h, 60 km/h, 100 km/h or 110 km/h speed zones, but less prevalent or relatively comparable in 50 km/h and 70 to 90 km/h speed zones.

Table 68: Proportion of heavy vehicle drivers travelling at various speeds in outer regional areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	79.4 (-10.9)	94.3 (-1.1)	90.9 (-1.0)	93.1 (-1.2)	77.2 (-2.3)	83.9 (-4.3)	79.0 (-4.5)	92.9 (+0.4)
Above limit (total)	20.6 (+89.5)	5.7 (+23)	9.1 (+11.3)	6.9 (+19.5)	22.8 (+8.8)	16.1 (+30)	21.0 (+21.5)	7.1 (-5.1)
1-5 above	11.2 (+70.6)	3.4 (+28.6)	5.9 (+14.7)	4.7 (+23.0)	13.2 (+6.5)	12.9 (+48.2)	16.7 (+21.6)	4.7 (-9.6)
6-10 above	5.2 (+104)	1.4 (+33.3)	1.8 (+2.7)	1.4 (+11.9)	6.3 (+12.6)	2.8 -	3.0 (+21.6)	1.4 (-1.4)
11-12 above	1.2 (+142)	0.3 (+16.6)	0.3 (-3.7)	0.3 (+27.6)	1.2 (+12.7)	0.2 (-49.5)	0.4 (+24.0)	0.2 (-9.5)
13-20 above	2.4 (+159)	0.4 (-7.9)	0.5 (-12.9)	0.4 (+10.4)	1.9 (+13.1)	0.2 (-45.4)	0.6 (+21.6)	0.8 (+24.5)
21-30 above	0.6 (+96)	0.1 (-16)	0.2 (+35.1)	0.1 (+3.2)	0.3 (+1.5)	0.0 (-65.3)	0.2 (+12.6)	0.0 (+190)
31-40 above	0.1 (+32.7)	0.0 (-36.2)	0.2 (+179)	0.0 (-47.1)	0.0 (-21.9)	0.0 (-90.8)	0.0 (+37.9)	0.0 (+201)
41-50 above	0.0 (+26.9)	0.0 (-78.1)	0.0 (+112)	0.0 (-100)	0.0 (-49.7)	0.0 (-100)	0.0 (+54.5)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in outer regional areas in the corresponding speed zone, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all areas in the corresponding speed zone.

Table 69 shows the level of speed non-compliance among heavy vehicle drivers in remote areas, with a comparison to overall levels of speed non-compliance (see

Table 13). As can be seen, there was strong evidence to suggest the proportion of heavy vehicle drivers exceeding the speed limit in remote area is typically higher than overall levels. Specifically, low-level speeding was more prevalent across all speed zones, including exceeding the speed limit by 1-5 km/h (between 5.9% and 128%) and by 6-10 km/h (between 58% and 467%), with the exception of 110 km/h zones where low-level speeding was up to 24% less prevalent. Similarly, there was evidence of a greater prevalence of heavy vehicle drivers exceeding the speed limit by 13-20 km/h across all zones (between 50.2% and 592%), with the exception of 110 km/h zones where it was 43.8% less prevalent. While exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers in both remote areas and overall, there was evidence to suggest excessive speeding was more prevalent in remote areas across most speed zones.

Table 69: Proportion of heavy vehicle drivers travelling at various speeds in remote areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	67.6 (-24.2)	89.4 (-6.3)	87.4 (-4.9)	79.2 (-15.9)	69.5 (-12.1)	53.9 (-38.4)	71.4 (-13.7)	94.2 (+1.8)
Above limit (total)	32.4 (+199)	10.6 (+129)	12.6 (+55)	20.8 (+258)	30.5 (+45.6)	46.1 (+271)	28.6 (+65.8)	5.8 (-22.3)
1-5 above	15.0 (+128)	4.3 (+60.9)	7.3 (+41.5)	12.9 (+236)	13.1 (+5.9)	19.3 (+122)	20.3 (+47.3)	4.2 (-18.7)
6-10 above	10.0 (+295)	1.9 (+77.2)	2.8 (+58.0)	5.8 (+357)	9.8 (+75.3)	15.7 (+467)	5.3 (+116)	1.1 (-24.0)
11-12 above	1.7 (+245)	0.4 (+74.1)	0.6 (+81.4)	1.1 (+360)	2.9 (+174)	6.3 (+1614)	0.8 (+148)	0.1 (-39.9)
13-20 above	4.2 (+348)	0.7 (+50.2)	1.2 (+109)	0.9 (+148)	4.1 (+148)	3.0 (+592)	1.6 (+227)	0.3 (-43.8)
21-30 above	1.1 (+277)	0.5 (+246)	0.4 (+134)	0.1 (+49.1)	0.6 (+134)	1.8 (+1651)	0.6 (+183)	0.0 (+84.6)
31-40 above	0.4 (+539)	0.5 (+1850)	0.2 (+151)	0.0 (-100)	0.0 (+14.3)	0.0 (-100)	0.0 (+352)	0.0 (+213.6)
41-50 above	0.1 (+1645)	2.3 (+7115)	0.1 (+264)	0.0 (-100)	0.0 (-47.0)	0.0 (-100)	0.0 (+546)	0.0 -

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in remote areas in the corresponding speed zone, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all areas in the corresponding speed zone.

Finally, Table 70 demonstrates that speed non-compliance among heavy vehicle drivers was also typically higher in very remote areas, compared to overall levels (see

Table 13). As can be seen, exceeding the speed limit by 1-5 km/h was more prevalent across all zones (between 8.7% and 164%), with the exception of 110 km/h zones where it was 6.8% less prevalent. Similarly, exceeding the speed limit by 6-10 km/h was more prevalent across all zones (between 2.8% and 92.6%), with the exception of 80 km/h zones where it was relatively similar. There was also evidence of a higher prevalence of heavy vehicle drivers exceeding the speed limit by 13-20 km/h across all zones (between 7.3% and 232%). While exceeding the speed limit by 21 km/h or more was extremely rare among heavy vehicle drivers in both very remote areas and overall, there was some evidence to suggest excessive speeding was more prevalent in very remote areas, with the exception of 80 km/h speed zones.

Table 70: Proportion of heavy vehicle drivers travelling at various speeds in very remote areas, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	80.9 (-9.2)	89.4 (-6.3)	87.8 (-4.4)	-	78.0 (-1.2)	-	75.3 (-9.0)	92.6 -
Above limit (total)	19.1 (+75.8)	10.6 (+129)	12.2 (+49.0)	-	22.0 (+4.7)	-	24.7 (+43.3)	7.4 -
1-5 above	10.2 (+55.3)	7.0 (+164)	6.3 (+22.1)	-	13.4 (+8.7)	-	16.7 (+21.6)	4.8 (-6.8)
6-10 above	4.8 (+87.9)	2.1 (+91.9)	2.9 (+60.2)	-	5.5 (-1.8)	-	4.7 (+92.6)	1.4 (+2.8)
11-12 above	0.4 (-16.4)	0.2 (+2.4)	0.7 (+99.4)	-	1.0 (-6.8)	-	1.0 (+215)	0.3 (+27.0)
13-20 above	2.7 (+191)	0.7 (+51.6)	1.4 (+142)	-	1.8 (+7.3)	-	1.6 (+232)	0.8 (+39.1)
21-30 above	0.8 (+163)	0.3 (+81.6)	0.7 (+303)	-	0.2 (-6.8)	-	0.6 (+170)	0.0 (+163)
31-40 above	0.3 (+308)	0.2 (+456)	0.1 (+86.2)	-	0.0 (-21.5)	-	0.0 (+992)	0.0 (-100)
41-50 above	0.0 (-100)	0.1 (+365)	0.0 (-57.8)	-	0.0 (-66.1)	-	0.0 (+3252)	0.0 -

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in very remote areas in the corresponding speed zone, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all areas in the corresponding speed zone.

Summary tables of heavy vehicle speed data within regions in Queensland, stratified by time of day, day of week and seasons is provided in Appendix A to Appendix E.

5.1.7 QUEENSLAND STATISTICAL AREAS, LEVEL 4 (SA4)

Figure 36 and Table 71 presents the proportion of passenger vehicle motorists within each SA4 level exceeding the speed limit in 40 km/h to 110 km/h speed zones. Particularly noteworthy are the disproportionately high percentages of motorists in Brisbane (North, South, West and City), Cairns, Central Queensland and Outback Queensland who exceed the 40 km/h speed limit. For example, over 40% of motorists in 40 km/h zones in Cairns were exceeding the speed limit. In Brisbane (North and West), Ipswich and Toowoomba, large numbers of passenger vehicle motorists were also exceeding the speed in 80 km/h signed roads.

Speed compliance was again best in 50 km/h zones, 60 km/h and 70 km/h zones. At 80 km/h, 90 km/h, 100 km/h and 110 km/h speed zones, relatively poor speed compliance was evident in Central Queensland and Wide Bay, where more than 20% of passenger vehicle motorists travelling through each speed zone were found to be engaging in some level of speeding. The speeding data was separated to highlight low-level speeding across the SA4 jurisdictions (Table 72). Not surprisingly, this data is fairly consistent with the proportion of passenger vehicle motorists engaging in speeding (at any level) and indicates that a significant proportion of motorists who do engage in speeding, do so at speeds of 1-10 km/h above the speed limit.

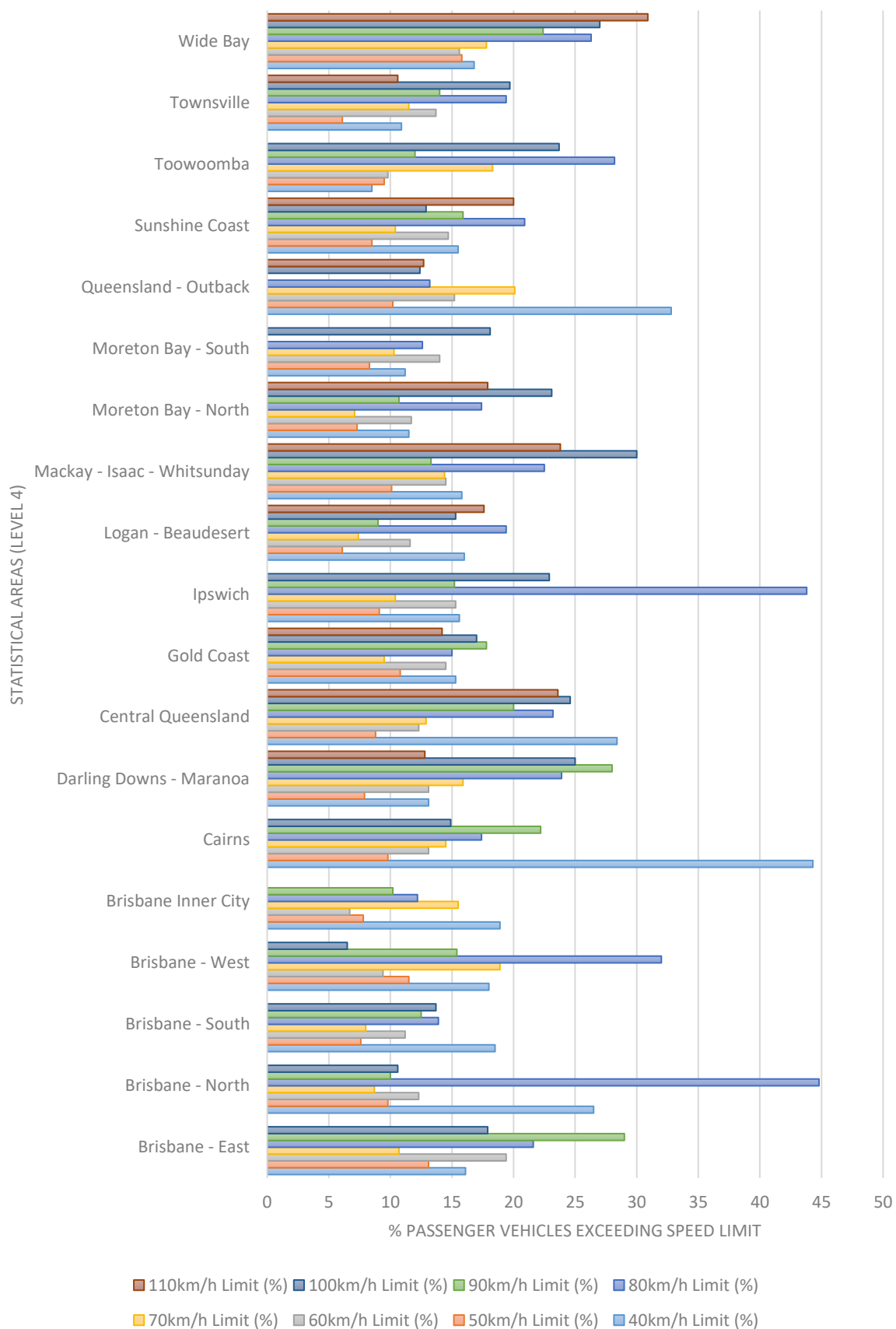


Figure 36: Proportion of passenger vehicle motorists travelling above the speed limit within SA4 level, Queensland, 2018

Table 71: Proportion of passenger vehicle motorists travelling above the speed limit by Statistical Area Level 4 (SA4), Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
All areas	17.9	9.0	11.7	9.8	20.5	13.5	18.0	83.9
Brisbane - East	16.1	13.1	19.4	10.7	21.6	29.0	17.9	-
Brisbane - North	26.5	9.8	12.3	8.7	44.8	10.0	10.6	-
Brisbane - South	18.5	7.6	11.2	8.0	13.9	12.5	13.7	-
Brisbane - West	18.0	11.5	9.4	18.9	32.0	15.4	6.5	-
Brisbane Inner City	18.9	7.8	6.7	15.5	12.2	10.2	-	-
Cairns	44.3	9.8	13.1	14.5	17.4	22.2	14.9	-
Darling Downs - Maranoa	13.1	7.9	13.1	15.9	23.9	28.0	25.0	12.8
Central Queensland	28.4	8.8	12.3	12.9	23.2	20.0	24.6	23.6
Gold Coast	15.3	10.8	14.5	9.5	15.0	17.8	17.0	14.2
Ipswich	15.6	9.1	15.3	10.4	43.8	15.2	22.9	-
Logan - Beaudesert	16.0	6.1	11.6	7.4	19.4	9.0	15.3	17.6
Mackay - Isaac - Whitsunday	15.8	10.1	14.5	14.4	22.5	13.3	30.0	23.8
Moreton Bay - North	11.5	7.3	11.7	7.1	17.4	10.7	23.1	17.9
Moreton Bay - South	11.2	8.3	14.0	10.3	12.6	-	18.1	-
Queensland - Outback	32.8	10.2	15.2	20.1	13.2	-	12.4	12.7
Sunshine Coast	15.5	8.5	14.7	10.4	20.9	15.9	12.9	20.0
Toowoomba	8.5	9.5	9.8	18.3	28.2	12.0	23.7	-
Townsville	10.9	6.1	13.7	11.5	19.4	14.0	19.7	10.6
Wide Bay	16.8	15.8	15.6	17.8	26.3	22.4	27.0	30.9

Table 72: Proportion of passenger vehicle motorists engaged in low-level speeding (1-10 km/h) by SA4 level, Queensland, 2018

	40km/h Limit (%)	50km/h Limit (%)	60km/h Limit (%)	70km/h Limit (%)	80km/h Limit (%)	90km/h Limit (%)	100km/h Limit (%)	110km/h Limit (%)
All Areas	14.5	7.7	10.0	8.7	17.0	12.1	16.8	15.3
Brisbane - East	13.8	11.4	14.9	9.4	18.0	26.8	17.1	-
Brisbane - North	19.2	8.4	10.7	7.7	33.0	9.0	10.1	-
Brisbane - South	15.2	6.7	9.9	7.1	12.3	11.5	13.0	-
Brisbane - West	15.0	10.4	8.5	16.9	28.4	14.7	6.3	
Brisbane Inner City	15.2	6.6	5.9	13.9	11.1	8.7	-	-
Cairns	32.7	8.4	11.3	12.8	15.5	19.1	13.0	-
Darling Downs - Maranoa	8.9	6.8	10.5	13.0	17.9	23.8	22.9	11.4
Central Queensland	20.8	7.6	10.8	11.3	20.0	18.4	22.2	21.6
Gold Coast	13.5	9.3	12.4	8.4	12.2	14.9	16.2	13.8
Ipswich	11.6	7.3	12.7	8.7	32.6	13.6	21.4	-
Logan - Beaudesert	12.4	4.6	9.6	6.5	16.4	7.5	14.6	15.8
Mackay - Isaac - Whitsunday	12.0	8.3	11.4	13.0	18.1	12.2	27.3	21.5
Moreton Bay - North	8.8	5.7	10.5	6.6	15.5	10.1	22.0	17.1
Moreton Bay - South	9.3	6.8	12.3	9.5	11.3	-	17.5	-
Queensland - Outback	23.2	8.1	11.9	15.3	10.3	-	9.2	10.5
Sunshine Coast	13.2	7.0	12.2	9.1	17.6	11.4	11.8	19.0
Toowoomba	7.2	8.2	8.5	15.5	23.6	11.0	22.1	-
Townsville	7.7	5.1	11.2	8.7	15.2	13.4	17.0	9.8
Wide Bay	12.7	12.9	13.7	15.8	21.3	19.1	24.0	28.9

Table 73 shows the PARF estimates for the speeding population of passenger vehicle motorists who engage in low-level speeding (1-10 km/h above the speed limit). The PARF estimates were most noteworthy in the 40 km/h speed zone in Brisbane (East and South), Cairns, Central Queensland and Sunshine Coast which showed that over 20% but up to 29% of casualty crashes were attributable to travelling at 41-50 km/h (in 40km/h zones).

Similarly, 7-14% of crashes were attributable to low-level speeding through 50 km/h and 60 km/h zones in Brisbane, Cairns and Gold Coast. In the 70 km/h speed zones, Brisbane (East, West and inner City), Cairns, Gold Coast, Mackay-Isaac-Whitsundays, Moreton Bay South and Sunshine Coast showed that over 10% of crashes were attributable to speeding.

Over 10% of crashes were attributable to low-level speeding in 80 km/h speed zones in Brisbane (North and West) and Ipswich. While, typically less than 10% of crashes were attributable to low-level speeding in 100km/h and 110 km/h speed zones within any of the SA4 areas.

Table 73: PARF of passenger vehicle motorists engaged in low-level speeding by SA4 level, Queensland, 2018

Speed above limit (km/h)	40 km/h limit		50 km/h limit		60 km/h limit		70 km/h limit		80 km/h limit		90 km/h limit		100 km/h limit		110 km/h limit	
	PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
All Areas	19.3	9.2	9.6	6.0	8.9	6.8	10.0	6.7	7.9	2.4	8.3	2.4	6.9	1.9	5.9	1.6
Brisbane – East	20.7	8.5	13.3	8.3	9.1	9.0	10.7	7.3	8.7	2.6	14.5	4.9	6.8	1.9	-	-
Brisbane - North	16.5	9.3	11.5	6.8	9.4	7.0	9.0	6.1	10.9	4.4	6.7	1.8	4.8	1.2	-	-
Brisbane - South	21.7	9.5	10.2	5.5	9.2	6.6	9.1	5.8	7.0	1.8	8.8	2.4	5.8	1.5	-	-
Brisbane - West	19.6	8.9	12.2	7.1	8.7	5.5	13.6	10.4	12.4	3.9	9.7	2.8	2.9	0.7	-	-
Brisbane Inner City	19.8	10.0	8.3	5.0	6.9	4.4	12.7	9.3	4.7	1.3	6.3	1.7	-	-	-	-
Cairns	28.6	15.2	11.2	6.6	9.3	6.9	12.5	8.7	7.1	2.0	8.9	3.2	5.4	1.5	-	-
Darling Downs - Maranoa	10.8	5.7	9.1	5.9	7.2	6.8	9.0	8.2	8.0	2.7	12.1	4.2	7.5	2.3	5.6	1.4
Central QLD	24.3	12.3	11.4	6.5	8.8	6.5	9.4	7.7	8.4	2.6	9.9	3.2	7.7	2.5	10.8	2.9
Gold Coast	19.9	8.3	11.6	7.1	10.4	8.3	10.2	6.8	6.0	1.8	7.9	2.7	7.1	1.9	5.3	1.4
Ipswich	14.4	7.3	7.2	5.8	9.0	8.1	8.9	6.7	11.2	4.4	9.3	2.7	8.1	2.4	-	-
Logan - Beaudesert	14.8	7.7	5.9	4.2	8.4	6.9	8.3	5.5	8.1	2.3	5.5	1.5	6.2	1.7	6.4	1.8
Mackay - Isaac - Whitsunday	17.2	8.1	6.0	6.4	4.5	6.6	13.0	9.0	7.1	2.4	7.8	2.3	9.1	2.9	8.0	2.7
Moreton Bay - North	14.1	5.8	7.4	4.7	9.9	6.8	8.6	4.9	7.4	2.0	7.1	1.9	7.8	2.3	6.1	1.7
Moreton Bay - South	14.3	5.9	9.7	5.7	10.6	7.9	10.9	6.9	5.9	1.5	-	-	6.0	1.7	-	-
Queensland - Outback	15.9	9.8	9.7	6.7	6.9	7.6	9.0	8.7	4.3	1.5	-	-	4.4	1.4	7.7	1.8
Sunshine Coast	21.2	8.6	8.8	5.6	9.9	8.1	10.6	7.1	8.0	2.4	5.4	2.0	6.0	1.5	6.6	1.9
Toowoomba	14.6	5.6	9.9	6.6	7.0	5.5	13.5	10.5	9.6	3.1	8.5	2.3	8.0	2.3	-	-
Townsville	9.3	5.2	8.1	4.5	7.6	7.0	6.8	6.4	6.3	2.2	8.9	2.6	6.6	2.0	7.3	1.5
Wide Bay	14.6	8.1	8.9	8.9	10.0	8.0	11.9	9.8	7.8	2.6	9.3	3.4	7.9	2.6	9.5	3.0

Heavy vehicle driver speeding trends (Table 74, Figure 37) were similar to that of passenger vehicle motorists. That is, in 40 km/h zones, heavy vehicle drivers were most frequently detected exceeding the limit in Brisbane (North, West), in Cairn, Central Queensland, Ipswich, Outback Queensland, Townsville and Wide Bay where on average 17% of heavy vehicle drivers exceed the 40 km/h limit by some magnitude.

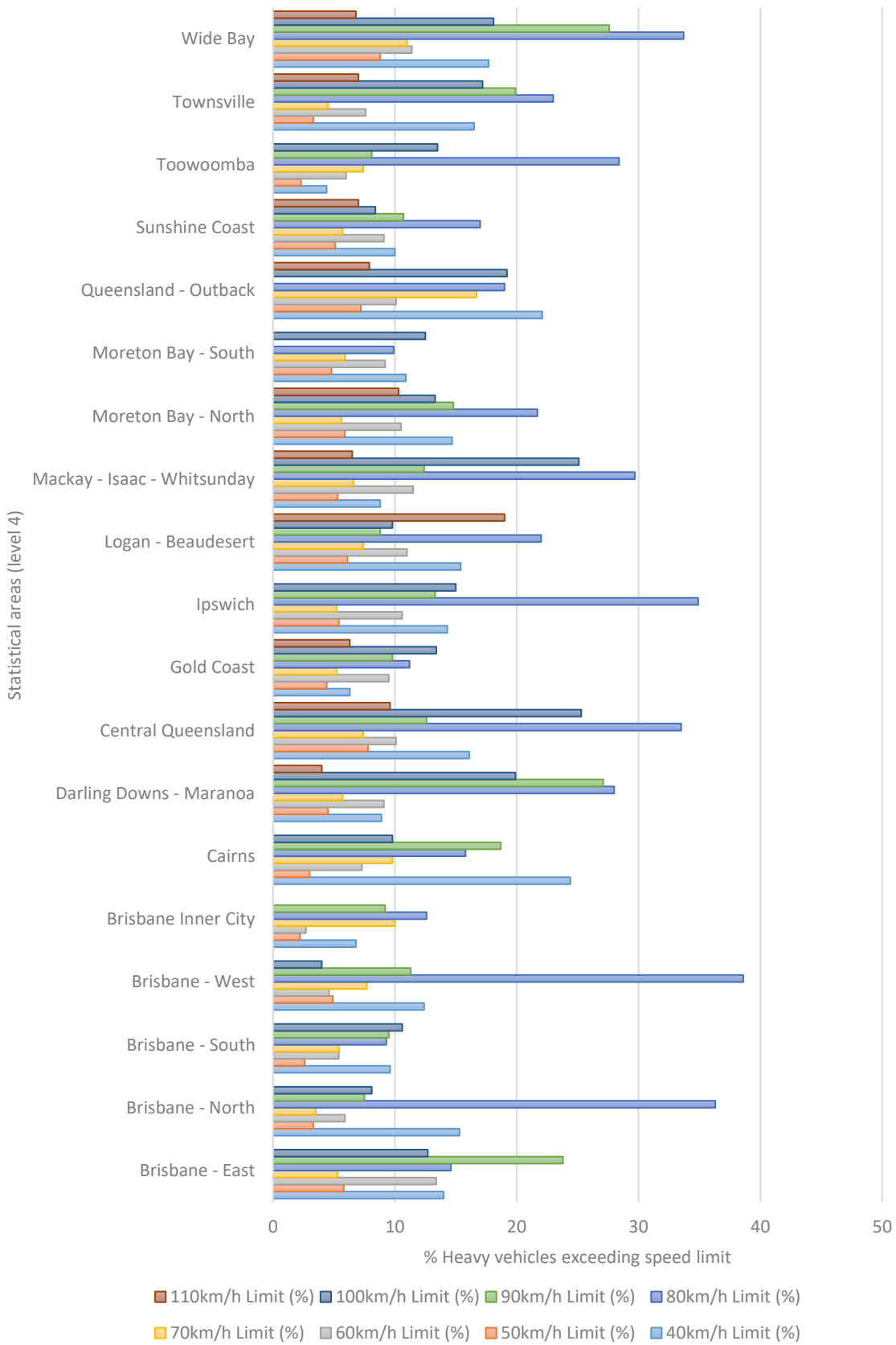


Figure 37: Proportion of heavy vehicle drivers travelling above the speed limit by SA4 level, Queensland, 2018

Similar to passenger vehicle motorists, heavy vehicle drivers were most speed compliant in 50 km/h, 60 km/h and 70 km/h speed zones. Conversely, poor levels of speed compliance were noted in 80 km/h speed zones, where in Brisbane (North and West), Central Queensland and Wide Bay over 30% of heavy vehicle drivers were detected speeding. Trends were not dissimilar in Darling Downs Mackay - Isaac - Whitsunday and Toowoomba where similar proportions of heavy vehicle drivers (in 80 km/h zones) were detected speeding. Levels of non-compliance amongst heavy vehicle drivers were similar to passenger vehicle motorist non-compliance in higher speed zones, with over 25% of heavy vehicle drivers in Darling Downs, Central Queensland, Mackay - Isaac - Whitsunday and Wide bay exceeding the speed limit in either 90 km/h zones or 100 km/h zones. Very few (less than 11% heavy vehicle drivers were detected speeding) in 110 km/h zones.

Table 74: Proportion of heavy vehicle drivers travelling above the speed limit by SA4 level, Queensland, 2018

	40km/h Limit (%)	50km/h Limit (%)	60km/h Limit (%)	70km/h Limit (%)	80km/h Limit (%)	90km/h Limit (%)	100km/h Limit (%)	110km/h Limit (%)
All Areas	10.9	4.6	8.2	5.8	21.0	12.4	17.2	7.4
Brisbane - East	14.0	5.8	13.4	5.3	14.6	23.8	12.7	-
Brisbane - North	15.3	3.3	5.9	3.5	36.3	7.5	8.1	-
Brisbane - South	9.6	2.6	5.4	5.4	9.3	9.5	10.6	-
Brisbane - West	12.4	4.9	4.6	7.7	38.6	11.3	4.0	-
Brisbane Inner City	6.8	2.2	2.7	10.0	12.6	9.2	-	-
Cairns	24.4	3.0	7.3	9.8	15.8	18.7	9.8	-
Darling Downs - Maranoa	8.9	4.5	9.1	5.7	28.0	27.1	19.9	4.0
Central Queensland	16.1	7.8	10.1	7.4	33.5	12.6	25.3	9.6
Gold Coast	6.3	4.4	9.5	5.2	11.2	9.8	13.4	6.3
Ipswich	14.3	5.4	10.6	5.2	34.9	13.3	15.0	-
Logan - Beaudesert	15.4	6.1	11.0	7.4	22.0	8.8	9.8	19.0
Mackay - Isaac - Whitsunday	8.8	5.3	11.5	6.6	29.7	12.4	25.1	6.5
Moreton Bay - North	14.7	5.9	10.5	5.6	21.7	14.8	13.3	10.3
Moreton Bay - South	10.9	4.8	9.2	5.9	9.9	-	12.5	-
Queensland - Outback	22.1	7.2	10.1	16.7	19.0	-	19.2	7.9
Sunshine Coast	10.0	5.1	9.1	5.7	17.0	10.7	8.4	7.0
Toowoomba	4.4	2.3	6.0	7.4	28.4	8.1	13.5	-
Townsville	16.5	3.3	7.6	4.5	23.0	19.9	17.2	7.0
Wide Bay	17.7	8.8	11.4	11.0	33.7	27.6	18.1	6.8

Table 75 compares the difference in percentages between passenger vehicle motorists which speed within each speed zone and heavy vehicle drivers that engage in speeding within each speed zone. A positive value indicates that a greater number of passenger vehicle motorists were detected speeding in the area, while a negative value indicates that a greater proportion of heavy vehicle drivers were engaged in speeding. Passenger vehicle motorists in 40 km/h zones in Brisbane (North and Inner City), in Cairns and Central Queensland were much less speed compliant than their heavy vehicle driver counterparts, with more than 10%

difference in passenger vehicle motorist compliance rate compared to heavy vehicle driver compliance. In 50 km/h, 60 km/h and 70 km/h zones, a larger number of passenger vehicle motorists were detected speeding within all areas of Queensland compared to heavy vehicle drivers. Within 80 km/h speed zones however, in Brisbane West, Darling Downs, Central Queensland, Logan, Mackay-Isaac-Whitsundays, Moreton Bay (North), Queensland Outback, Townsville and Wide Bay more heavy vehicle drivers were detected exceeding the speed limit than passenger vehicle motorists.

Table 75: The percentage difference between passenger vehicles and heavy vehicles engaging in speeding within the SA4 level, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Brisbane - East	2.1	7.3	6.0	5.4	7.0	5.2	5.2	-
Brisbane - North	11.2	6.5	6.4	5.2	8.5	2.5	2.5	-
Brisbane - South	8.9	5.0	5.8	2.6	4.6	3.0	3.1	-
Brisbane - West	5.6	6.6	4.8	11.2	-6.6	4.1	2.5	-
Brisbane Inner City	12.1	5.6	4.0	5.5	-0.4	1.0	-	-
Cairns	19.9	6.8	5.8	4.7	1.6	3.5	5.1	-
Darling Downs - Maranoa	4.2	3.4	4.0	10.2	-4.1	0.9	5.1	8.8
Central Queensland	12.3	1.0	2.2	5.5	-10.3	7.4	-0.7	14.0
Gold Coast	9.0	6.4	5.0	4.3	3.8	8.0	3.6	7.9
Ipswich	1.3	3.7	4.7	5.2	8.9	1.9	7.9	-
Logan - Beaudesert	0.6	0.0	0.6	0.0	-2.6	0.2	5.5	-1.4
Mackay - Isaac - Whitsunday	7.0	4.8	3.0	7.8	-7.2	0.9	4.9	17.3
Moreton Bay - North	-3.2	1.4	1.2	1.5	-4.3	-4.1	9.8	7.6
Moreton Bay - South	0.3	3.5	4.8	4.4	2.7	-	5.6	-
Queensland - Outback	10.7	3.0	5.1	3.4	-5.8	-	-6.8	4.8
Sunshine Coast	5.5	3.4	5.6	4.7	3.9	5.2	4.5	13.0
Toowoomba	4.1	7.2	3.8	10.9	-0.2	3.9	10.2	-
Townsville	-5.6	2.8	6.1	7.0	-3.6	-5.9	2.5	3.6
Wide Bay	-0.9	7.0	4.2	6.8	-7.4	-5.2	8.9	24.1

Table 76 shows the proportion of heavy vehicle drivers within SA4 levels which were detected speeding at low-levels (i.e. travelling 1-10 km/h over the speed limit) within each speed zone. Figure 38 highlights these proportions graphically for heavy vehicle drivers travelling in each speed zone and shows that low-level speeding was the most common form of speeding behaviour engaged in. Within 40 km/h zones, heavy vehicle drivers engaged in low-level speeding most noticeably in Cairns, where over 20% of drivers traversing these zones were detected at speeds of 41-50 km/h. Outback Queensland had a similar percentage of heavy vehicle drivers exceeding the 40 km/h limit by 1-10 km/h. Within 80 km/h zones, the proportion of heavy vehicle drivers speeding (i.e. travelling 81-90 km/h) was most noticeable in Brisbane (North and West) as well as Central Queensland, and Wide Bay where 30% or more of the heavy vehicle drivers were detected speeding. Heavy

vehicle drivers engaging in low-level speeding within 90 km/h and 100 km/h zones were fairly equally distributed within all SA4 districts except for Darling Downs, Central Queensland, Mackay-Isaac-Whitsundays and Wide Bay where more than 20% of heavy vehicle drivers were detected engaging in low-level speeds.

Table 76: Proportion of heavy vehicle drivers engaging in low-level speeding by Statistical Area Level 4 (SA4), Queensland, 2018

	40km/h Limit (%)	50km/h Limit (%)	60km/h Limit (%)	70km/h Limit (%)	80km/h Limit (%)	90km/h Limit (%)	100km/h Limit (%)	110km/h Limit (%)
All areas	8.0	3.4	6.6	4.8	14.7	10.1	12.0	7.1
Brisbane - East	12.4	4.9	10.2	4.6	12.9	22.4	12.2	-
Brisbane - North	11.7	2.7	5.3	3	30	7	7.7	-
Brisbane - South	8.1	2.2	4.8	4.6	8.3	8.5	10.1	-
Brisbane - West	10.9	4.4	4.1	7.4	35.2	10.5	3.6	-
Brisbane Inner City	5.7	1.7	2.3	8.8	10.9	7.6	0	0
Cairns	20.4	2.6	6.6	8.9	14.5	18.1	9.4	0
Darling Downs - Maranoa	6.5	3.1	7.6	4.7	23	24.9	18.4	3.5
Central Queensland	13.5	6.6	9	6.7	28.6	12.1	23.6	8.3
Gold Coast	5.4	3.8	8.2	4.5	9.4	8.9	12.8	5.7
Ipswich	12.1	3.9	9	4.3	28.7	12.4	14.1	-
Logan - Beaudesert	10.6	4.5	9	6.3	19.5	7.9	9.3	14.9
Mackay - Isaac - Whitsunday	8	3.9	8.9	6.1	25.1	12.1	23.3	6.2
Moreton Bay - North	13.6	4.4	9.4	5.2	18.6	12.7	12.8	9.2
Moreton Bay - South	9.9	4.1	8.2	5.5	9	-	11.5	-
Queensland - Outback	16.9	6.1	8.6	12.4	15.8	-	16.9	6.5
Sunshine Coast	9.2	3.6	7.6	4.9	15.2	10.1	7.8	6.5
Toowoomba	3.7	1.9	5	6.7	24.4	7.5	12.7	-
Townsville	8.7	2.7	6.7	4.1	18.7	18.6	16.3	6.2
Wide Bay	13.6	7.4	9.9	9.6	26.5	26.1	17.2	6.3

Further summary tables of vehicle speed data within each SA4 in Queensland, stratified by time of day, day of week and seasons are provided in Appendix F to Appendix X.

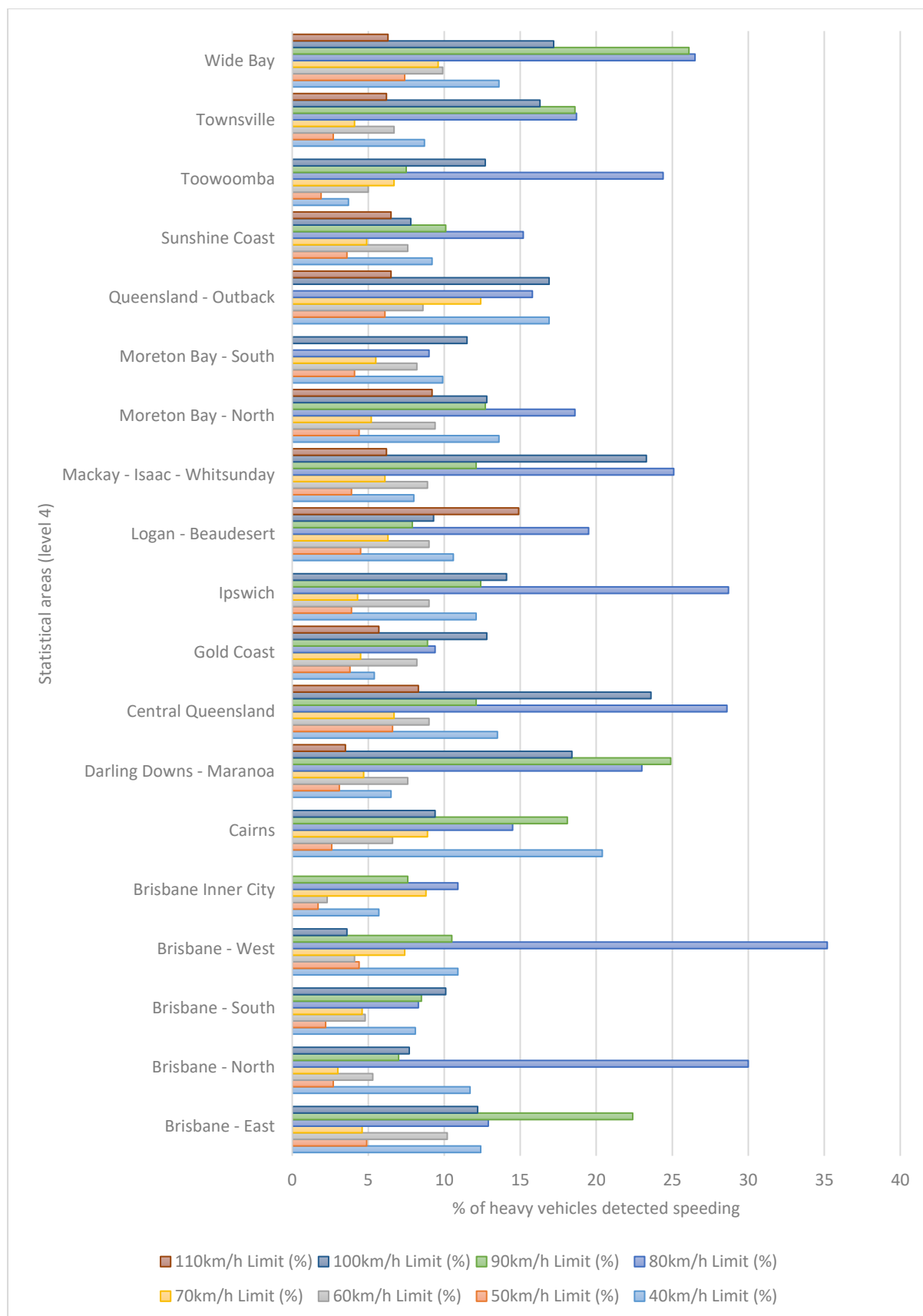


Figure 38: Proportion of heavy vehicle drivers engaging in low-level speeding within Queensland's SA4 levels, 2018

6 CHARACTERISTICS OF CRASH-INVOLVED DRIVERS IN EACH SPEED RANGE

The matched file of Kloeden et al.'s (1997a) crashed vehicles (and drivers) and South Australian Police crash reports is the only available real-world crash data that allows comparison of characteristics of urban drivers/vehicles who were travelling at various speeds within a 60 km/h zone, including those who engaged in low-level speeding, the focus of this study.

The following figures show driver demographics plotted against estimated pre-crash travelling speeds of the case vehicles. The pre-crash travel speeds were determined using computer-aided crash reconstruction techniques (Kloeden et al., 1997a). For the purposes of this analysis, the pre-crash travelling speeds were grouped into 10 km/h ranges, starting at 31 km/h, and 'speeding' was considered to be travelling above the 60 km/h speed limit, by any amount. For ease of discussion, the pre-crash travel speed of the 149 vehicles will be categorised and referred to as being either speed limit compliant, or engaging in low-level speeding, medium-level speeding, high-level speeding or excessive speeding according to speeds outlined in Table 77 below.

Table 77: Travel speeds of crashed vehicles (Kloeden et al., 1997a) and the descriptive labels used in this report

Label/category	Vehicle Travel Speed (km/h)
Speed limit compliant	Up to 60
Low-level speeding	61-70
Medium-level speeding	71-80
High-level speeding	81-90
Excessive speeding	91 and above

6.1 CAR AGE VS. TRAVEL SPEED

The age of the vehicles in Kloeden et al.'s (1997a) study (crash year minus year of manufacture) were grouped into year ranges to determine if there was an influence of vehicle age on improved vehicle safety in each speed range (Figure 39). Vehicle age was grouped into the following categories: 0-5 years old, 6-10 years old, 11-15 years old, 16-20 years, 21-25 years old and 26-30 years old.

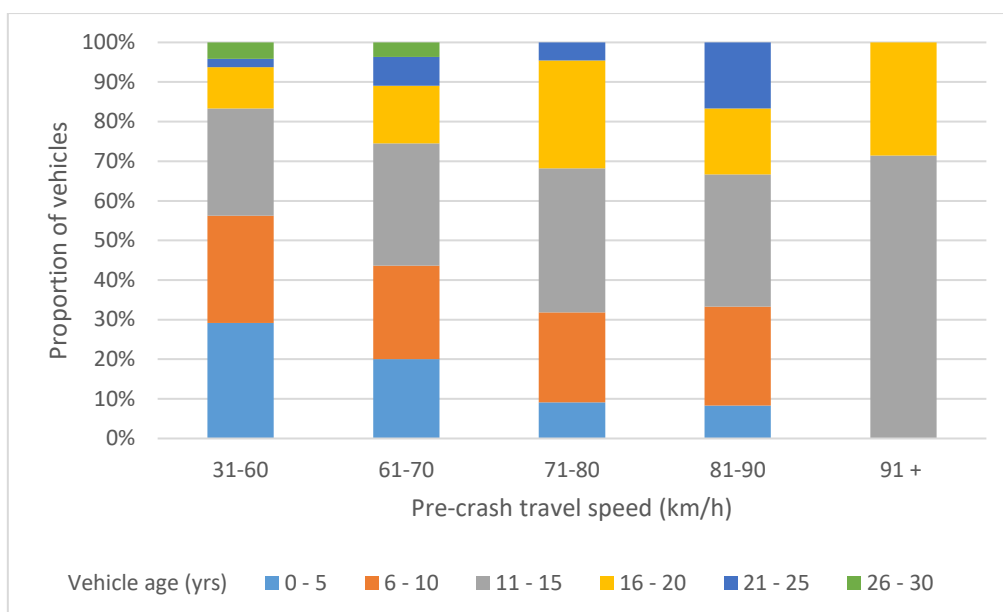


Figure 39: Crashed vehicle ages and their estimated pre-crash travel speed (km/h)

Table 78: Data related to vehicle age (year of vehicle manufacture minus crash year) and the estimated pre-crash travel speed (km/h) of vehicles

Travel Speed (km/h)	Vehicle age (years)												Total	
	0 - 5		6 - 10		11 - 15		16 - 20		21 - 25		26 - 30			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
31-60	14	29.2	13	27.1	13	27.1	5	10.4	1	2.1	2	4.2	48	100
61-70	11	20.0	13	23.6	17	30.9	8	14.5	4	7.3	2	3.6	55	100
71-80	2	9.1	5	22.7	8	36.4	6	27.3	1	4.5	0	0.0	22	100
81-90	1	8.3	3	25.0	4	33.3	2	16.7	2	16.7	0	0.0	12	100
91 +	0	0.0	0	0.0	5	71.4	2	28.6	0	0.0	0	0.0	7	100
Total	28	19.4	34	23.6	47	32.6	23	16.0	8	5.6	4	2.8	144	100

Figure 39 and Table 78 shows that over 80% of drivers who were speed limit compliant prior to their crash were driving vehicles which were less than 15 years old, while over 50% of drivers who were speed limit compliant prior to crashing were in vehicles less than 10 years old. Only three vehicles (6.3%) who were travelling at or under the speed limit when they crashed were aged 21+ years. The percentage of crash involved newer vehicles decreased with increasing levels of non-compliance. For example, while there were 11 vehicles (20%) aged 0-5 years old engaging in low-level speeding at the time of the crash, there was only one such vehicle that was engaging in high-level speeding prior to the impact. Conversely drivers in older vehicles tended to engage in high and extreme level speeding, with only 25.4% of low-level speeders driving vehicles aged 16 years or older pre-crash, but 31.8%, 33.4% and 28.6% of medium, high and extreme speeders driving vehicles aged 16 years or older, respectively. All vehicles travelling at excessive speeds (at least 31 km/h above the posted limit) prior to

being involved in a crash were vehicles aged 11-20 years old. The vehicle age data (i.e. the 'year of manufacture') for five vehicles were unknown.

Discussed another way, 50% of all crash-involved vehicles aged 0-5 years were exceeding the speed limit, compared to 61.8% of vehicles aged 6-10 years, 72.3% of vehicles aged 11-15 years, and 77.1% of vehicles aged 16 years or older. In summary, analysis of Kloeden et al.'s data (1997a) suggests that drivers in newer vehicles were more speed limit compliant than their counterparts driving older vehicles. Similarly, those engaging in low and medium level speeding were individuals driving older vehicles.

6.2 DRIVER GENDER VS. TRAVEL SPEED

Cross-tabulating driver gender against travel speed (Figure 40) demonstrated that of the 149 drivers, 48 drivers were speed limit compliant (60% males, 40% females), while of the 100 drivers who were travelling above the 60 km/h speed limit, 68% were male and 32% were female. Table 79 shows that the majority of the drivers who engaged in low-level speeding, medium range speeding, high-level speeding and extreme speeding when they crashed were male (54.4%, 78.3%, 91.7% and 100%, respectively). The data shows that more of the drivers who crashed while speeding were males compared to females, particularly in higher level speeding crashes.

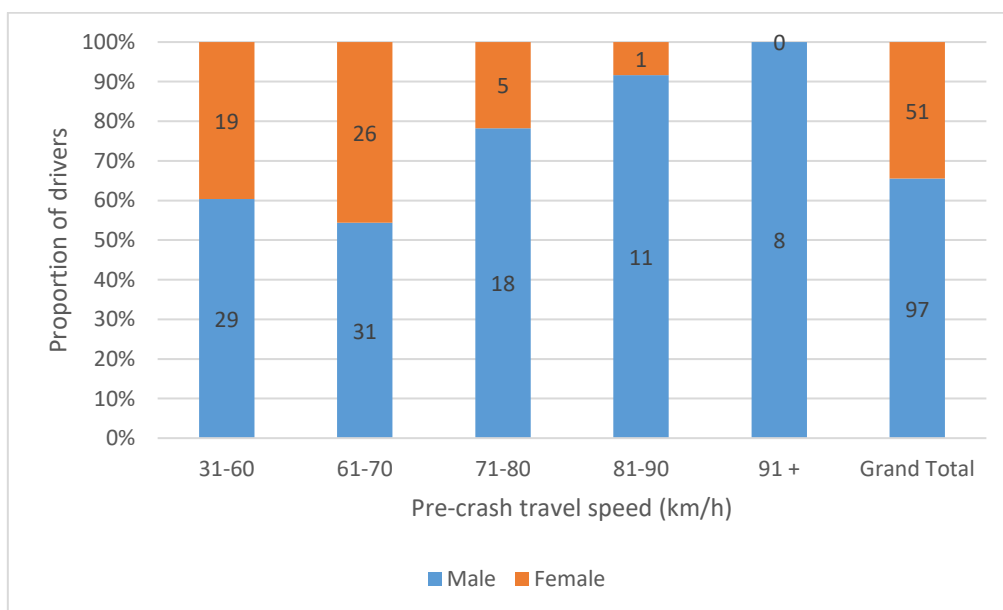


Figure 40 :Driver gender distribution within each pre-crash travel speed category (km/h)

Table 79: Data showing the numbers and percentages of male and female drivers who were speed limit compliant and those who were speeding before they crashed (within each travel speed category, km/h)

Travel Speed (km/h)	Driver Gender					
	Male		Female		Total	
	N	%	N	%	N	%
31-60	29	60.4	19	39.6	48	100
61-70	31	54.4	26	45.6	57	100
71-80	18	78.3	5	21.7	23	100
81-90	11	91.7	1	8.3	12	100
91 +	8	100.0	0	0.0	8	100
Total	97	65.5	51	34.5	148	100

6.3 DRIVER AGE VS. TRAVEL SPEED

The age of the driver was categorised into those 25 years old and under, 26-59 years old, and greater than 60 years old (age data for one participant was unknown). Analysis of driver age by estimated pre-crash travel speed showed that the majority of drivers who engaged in speeding prior to crashing were aged 26-59 years (Figure 41). Perhaps not surprisingly, drivers aged 60 years or older were the most compliant age group.

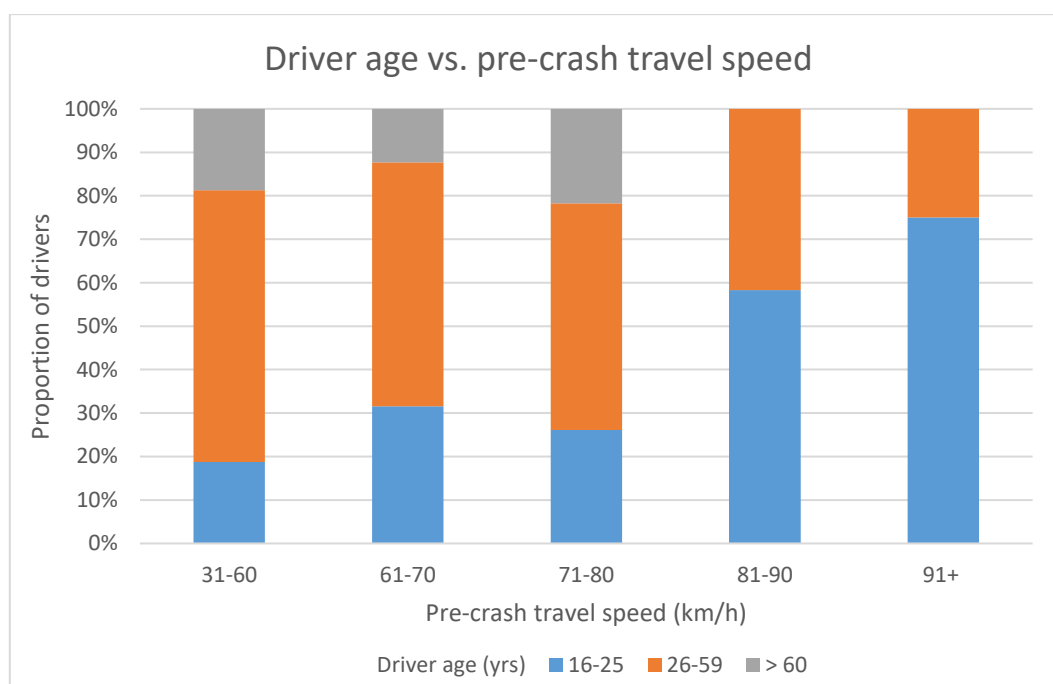


Figure 41: Stacked column chart showing the percentage distribution of driver age within each pre-crash travel speed category (km/h)

Of the drivers travelling at or below the 60 km/h limit when they crashed, approximately two thirds of drivers were 26-59 years old (Table 80). This fraction changes when looking at the proportion of drivers who were speeding by any magnitude (100 drivers in total) prior to crashing, where 37% of those exceeding the speed limit were aged 16-25 years, 51% were aged 26-59 years and 12% were aged more than 60 years old. Of those travelling at extreme speeds prior to crashing (i.e. travelling 31km/h over the speed limit), 75% were aged 16-25 years but no one was aged above 60 years.

Table 80: Data pertaining to driver age (years) and pre-crash travel speed (km/h)

Travel Speed (km/h)	Driver Age (years)							
	16-25		26-59		> 60		Total	
	N	%	N	%	N	%	N	%
31-60	9	18.8	30	62.5	9	18.8	48	100
61-70	18	31.6	32	56.1	7	12.3	57	100
71-80	6	26.1	12	52.2	5	21.7	23	100
81-90	7	58.3	5	41.7	0	0.0	12	100
91 +	6	75.0	2	25.0	0	0.0	8	100
Total	46	31.1	81	54.7	21	14.2	148	100

Interestingly, a larger number of individuals aged 26-59 years were engaging in low to high level speeding prior to crashing compared to those in the younger age bracket, with only 34% of 16-25 year olds travelling at pre-crash travel speeds of 61-90 km/h but 53% of 26-59 year olds travelling at low-high pre-crash travel speeds. Older drivers appeared to have engaged less in high and excessive speeds prior to crashing compared to their younger counterparts.

Overall, the data shows that there was an increasing proportion of younger drivers associated with increasing levels of pre-crash travel speeds (i.e. non-compliance), while there were fewer older drivers (n=21) in the crash data altogether, and most these individuals were either speed limit compliant or engaged in low-level speeding prior to their crash.

6.4 LICENCE TYPE VS. TRAVEL SPEED

For the 149 drivers in Kloeden et al.'s study (1997a), licence data for 12 drivers were unknown and so the analysis presented below only shows the licence information pertaining to 137 drivers (Figure 42). When the licence type data of crashed drivers from Kloeden et al.'s study (1997a) is presented in a percentage stacked column chart, it becomes apparent that a greater proportion of probationary drivers were engaging in high-level speeding prior to crashing compared to fully licenced drivers.

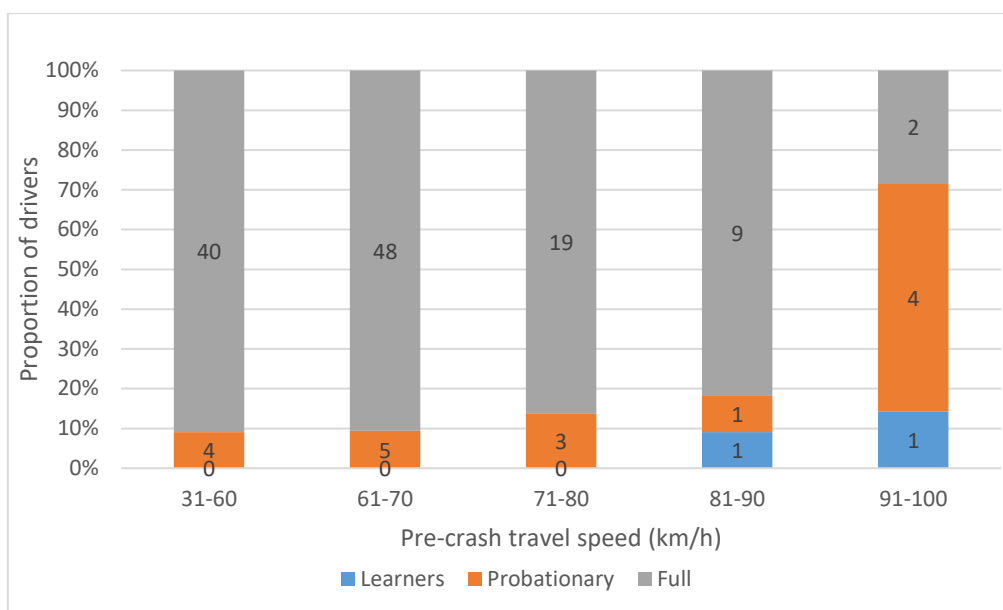


Figure 42: Type of licence held by drivers and their estimated pre-crash travel speed (km/h)

Error! Not a valid bookmark self-reference. shows the number of drivers in each licence category. Interestingly, almost 91% (n=40) of the drivers who were speed limit compliant prior to crashing were fully licenced drivers. While fully licenced drivers did engage in low-level (i.e. 1-10 km/h above the limit) and mid-level speeding (i.e. travelling 11-20 km/h over the limit), considerably fewer probationary drivers were found to be travelling at these speeds before crashing. There was however, a disproportionately large number of probationary drivers travelling at extremely high speeds (i.e. 31 km/h above the speed limit) prior to crashing. Even though the latter results should be interpreted with care given the small number of drivers in the excessive speed range and the smaller number of probationary drivers (n=17, 12.5%) in the sample, the data does highlight that probationary drivers are over represented when examining drivers who were engaging in excessive speeds prior to crashing.

Table 81: Data pertaining to licence type vs. pre-crash travel speed (km/h) of drivers (Kloeden et al., 1997a)

Travel Speed (km/h)	Licence Type							
	Learner		Probationary		Full		Total	
	N	%	N	%	N	%	N	%
31-60	0	0.0	4	9.1	40	90.9	44	100
61-70	0	0.0	5	9.4	48	90.6	53	100
71-80	0	0.0	3	13.6	19	86.4	22	100
81-90	1	9.1	1	9.1	9	81.8	11	100
91 +	1	14.3	4	57.1	2	28.6	7	100
Total	2	1.5	17	12.4	118	86.1	137	100

6.5 TIME OF CRASH VS TRAVEL SPEED

Using the Kloeden et al., (1997a) crash data, times at which the crashes occurred were analysed. Time of crash data was grouped into categories, these being: 8:00am to 10.59am, 11:00am to 1.59pm, 2:00pm to 4.59pm, 5:00pm to 7.59am (Figure 43). As mentioned previously, results should be interpreted with care given that Kloeden et al. (1997a) stated that crash data collection concentrated on daylight hours on workdays and hence data from relatively few crashes which occurred at night were collected.

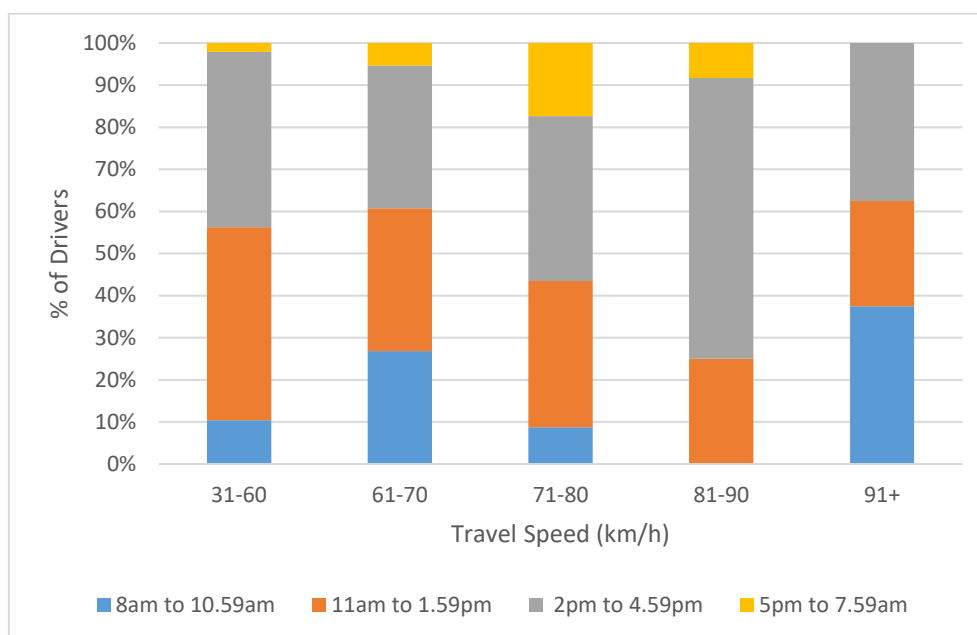


Figure 43: Time of day and the estimated pre-crash travel speed of drivers (km/h)

Table 82: Data pertaining to time of impact and travel speed of crashed drivers (Kloeden et al., 1997a)

Travel Speed (km/h)	Vehicle Age (years)								Total	
	8 am - 10.59 am		11 am - 1.59 pm		2 pm - 4.59 pm		5 pm - 7.59 am			
	N	%	N	%	N	%	N	%	N	%
31-60	5	10.4	22	45.8	20	41.7	1	2.1	48	100
61-70	15	26.8	19	33.9	19	33.9	3	5.4	56	100
71-80	2	8.7	8	34.8	9	39.1	4	17.4	23	100
81-90	0	0.0	3	25.0	8	66.7	1	8.3	12	100
91 +	3	37.5	2	25.0	3	37.5	0	0.0	8	100
Total	25	17.0	54	36.7	59	40.1	9	6.1	147	100

The stacked column chart (Figure 43) shows that speed limit compliance was greatest during the late morning (11am to 1.59pm) to afternoon hours (2pm to 4.59pm), with 42 crashed drivers in total (i.e. 29% of all drivers) travelling at or below the speed limit during these hours. Approximately equal proportions of drivers were engaging in low-level speeding and medium level speeding during these hours prior to crashing, although there

were a larger number of drivers engaging in low-level speeding (Table 82). Of the 12 drivers who were engaging in high-level speeding prior to crashing (i.e. travelling 81-90 km/h in a 60 km/h zone), the majority (n=8, 67%) crashed during the afternoon hours 2:00pm to 4.59 pm. Surprisingly, all of the individuals who had travelled at excessively high speeds (i.e. 31 km/h above the speed limit, n=8) did so during day-light hours where one would expect to have greater speed compliance. While one would expect a greater number of crashed individuals to have been engaged in excessive speeds during late night/early morning hours (i.e. 5:00pm to 7.59am), this was not observed in this study, however, the fact that data collection was concentrated on day-light hours does represent bias.

Kloeden et al.,'s (1997a) data shows that the majority of drivers who were involved in a crash were so during 11:00am to 4.59pm independent of how speed limit compliant or non-compliant they were, however this conclusion needs to be interpreted with care due to the fact that data collection pre-dominantly occurred during day time/business hours.

6.6 DAY OF WEEK VS. TRAVEL SPEED

Kloeden et al.,'s (1997a) crash data was used to determine the day of week which the crashes occurred. It is important to note that no crashes were recorded on Saturday and very few were recorded on Sunday due to the fact that data collection was concentrated on weekdays. Therefore, there is limited information which can be drawn from day-of-week crash speeds.

Of the 149 crashes, data for 2 crashes regarding the day of week was unknown and so the graph shows when the crashes occurred (Sunday-Friday) for 147 participants in total (Figure 44).

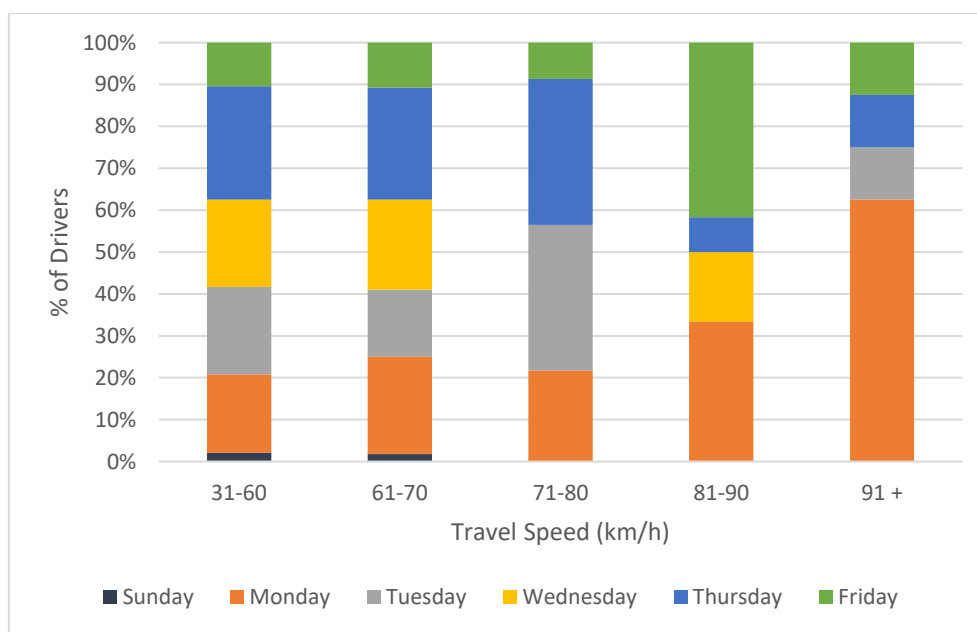


Figure 44: Crashes analysed by the day of week and estimated pre-crash travel speed (km/h) category

Table 83: Data pertaining to the day of week which the crashes occurred and the pre-crash travel speed of the vehicles

Travel speed (km/h)	Vehicle Age (years)													
	Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
31-60	1	2.1	9	18.8	10	20.8	10	20.8	13	27.1	5	10.4	48	100
61-70	1	1.8	13	23.2	9	16.1	12	21.4	15	26.8	6	10.7	56	100
71-80	0	0.0	5	21.7	8	34.8	0	0.0	8	34.8	2	8.7	23	100
81-90	0	0.0	4	33.3	0	0.0	2	16.7	1	8.3	5	41.7	12	100
91 +	0	0.0	5	62.5	1	12.5	0	0.0	1	12.5	1	12.5	8	100
Total	2	1.4	36	24.5	28	19.0	24	16.3	38	25.9	19	12.9	147	100

Table 83 shows that the majority of crashes occurred on Mondays (n=36, ≈25%) and Thursday (n=38, ≈26%). On both of these days, the majority of drivers (n=28 in total) who crashed were travelling 61-70 km/h (low-level speeding) in the 60 km/h zone before the crash event. Of the 48 drivers who were travelling at or below the speed limit prior to crashing, 33 drivers (69%) crashed on Tuesday – Thursday (inclusive). Drivers who were engaging in medium-level speeding prior to crashing were most frequent on Tuesday while the majority of those who were travelling at high speeds before crashing, did so on a Friday (n=5). There were, in total 8 vehicles which were thought to have been travelling at excessively high speeds (91 km/h +) prior to the crash event and the majority of these drivers crashed their vehicles on a Monday (n=5, 63% of all those engaging in excessive speeds prior to crashing).

In general little information can be drawn regarding crash trends related to the day of week which crashes occurred from Kloeden et al.'s study (1997a) due to the small (or absent) number of crashed drivers for which data was collected on Saturday's and Sunday's. It is however apparent that the majority of crashes which occurred on week days, occurred on Monday and Thursday.

7 DISCUSSION

The objectives of this study included quantifying the extent of low-level speeding in Queensland and providing estimates of the proportion of crashes attributable to low-level speeding. The extent of low-level speeding was measured by on-road observations of vehicles in each speed range, specifically the proportion travelling 1 to 10 km/h above the limit as well as the proportions in higher ranges of speeding. The proportion (or fraction) of crashes attributable to speeding in each range was estimated from the on-road observations coupled with a function of the crash risk associated with individual travel speeds. The calculated Population Attributable Risk Fraction (PARF) estimates the fraction of crashes attributable to the increased risk above the limit, relative to that at the limit.

The PARF of casualty crashes at travel speeds above and below the speed limit for passenger vehicles in each of the speed ranges outlined in Table 9, Section 4 were calculated using speed probe data collected by HERE technologies. The PARFs based on both Kloeden's exponential quadratic functions (2001, 2002) and Elvik functions derived from re-analysis of Elvik (2019) were presented throughout the report to provide the reader with a range in risk of casualty crashes due to speeding using the two independent relative risk functions for each of the urban and rural regions.

The HERE speed probe data analysed in this study is likely to be an underestimate of the actual speeds travelled due to the fact that speed is estimated along road links, which are sections of road with a unique geometry but are not consistent in length and have only one speed limit associated with it. Data from over 900,000 links were included in the HERE data analysed in this report. For this reason, estimates of the proportion of vehicles travelling at each speed may be lower than actual figures and estimates obtained from previous research. Further to this, although the HERE data was likely to be representative of passenger vehicle and heavy vehicle travel speeds, it only captured data from approximately 5% of Queensland's passenger and heavy vehicle fleet. Had the speed probe data captured speeds from a greater proportion of vehicles different speeding trends may have been observed. In addition to this, vehicle headway data was unavailable and it could not be ensured that the speeds captured by the probes were free-travel speeds of vehicles. The speed data captured during periods of congestion for example, are likely to bias these results and present lower travel speeds than actual free travel speeds.

7.1 SUMMARY OF RESULTS

High levels of speed compliance were observed across the Queensland road network and across all speed zones, with a large majority of passenger vehicle motorists travelling at or below the appropriate speed limit. Speed compliance was generally greatest in 50 km/h to 70 km/h zones (state-wide compliance over 90%) and lowest in 40 km/h and 80 km/h zones (compliance between 79.5% and 81.1%). There was greater variance the

proportion of motorists exceeding the speed limit in 90 km/h, 100 km/h and 110 km/h zones, depending on the spatial and temporal analysis conducted.

Further analyses showed that the majority of passenger vehicle motorists and heavy vehicle drivers who exceeded the speed limit engaged in low-level speeding, travelling 1-10 km/h over the speed limit. More specifically, of the speed non-compliant passenger vehicle motorists, over 50% within each speed zone typically exceeded the speed limit by 1-5 km/h, with this figure increasing to over 60% in 60 km/h and 70km/h speed zones, and over 75% in 100 km/h and 110 km/h zones. Less than 1% of all passenger vehicle motorists engaged in extreme levels of speeding (i.e. 31 km/h above the speed limit). Heavy vehicle drivers were found to be more speed-compliant than passenger vehicle motorists generally, particularly in 40-70 km/h speed zones. Nevertheless, the lowest levels of compliance amongst heavy vehicle drivers were observed in 40 km/h zones, as well as 80 km/h zones.

Analysis of the passenger vehicle motorist speed data showed negative PARF values when travelling at 1-10 km/h below the speed limit, indicating a protective effect or a decrease in attributable casualty crashes of approximately 10% to 18% (using Kloeden's RR functions across all speed zones analysed). The fraction of casualty crashes attributable to low-level speeding (i.e. travelling 1-10 km/h over the speed limit) varied from 6% to 19% (using Kloeden's RR functions) and 2% to 9% (using Elvik's RR functions), with both calculation methods showing that speeding in 40 km/h zones presented the highest fraction of casualty crashes due to low-level speeding. Although only 0.4% and 0.2% of passenger vehicle motorists were detected travelling at 61-70 km/h and 71-80 km/h in 40 km/h speed zones, respectively, these individuals were shown to have 15.7% and 15.5%, respectively, of crashes attributable to their speeding, the highest calculated fractions of crashes across all speed zones and speeding levels. These PARF values indicate the heightened proportion of casualty crashes due to those who engage in high-level speeding and highlight the dangers of travelling at excessive speeds in 40 km/h zones.

The speed data was analysed using spatial and temporal categories to determine if there were particular trends related to speeding amongst the passenger vehicle fleet and heavy vehicle fleet across Queensland, and to determine any heightened fractions of casualty crashes attributable to speeding amongst passenger vehicle motorists during particular times or in particular regions within Queensland.

7.1.1 TIME OF DAY

When speeding trends were analysed by the times of day, passenger vehicles were found to exceed the speed limit most frequently during the 'Late night/Early morning' hours (11:00pm – 5:59am), across 40 km/h - 90 km/h speed zones (inclusive). There was also a marked increase in the levels of speed limit non-compliance during the 'Evening' hours (7:00pm – 10:59pm) across all speed zones.

Independent of time of day, speed compliance was always best in 50 km/h zones and 70 km/h zones. During the 'AM peak', 'Off peak' and 'PM peak' hours, levels of non-compliance amongst the passenger vehicle motorists was relatively consistent within each speed zone. These speeding trends were mirrored by the heavy vehicle drivers. Engaging in extreme levels of speeding was rare, although there were a small percentage of passenger vehicle motorists detected travelling at excessive speeds (i.e. travelling 21-50 km/h above the speed limit) in the 'Evening' and 'Late night/Early morning' time period.

In terms of the fraction of casualty crashes analysed by time of day, particularly elevated fractions were associated with those who travelled 21 km/h above the posted speed limit in 40 km/h zones and 70 km/h zones in the 'Evening' and 'Late Night/Early Morning' time period, compared to those who engaged in speeding at other times of the day and in other speed zones.

7.1.2 DAY OF WEEK

When speeding trends were analysed by day of week (weekend vs weekday) across the Queensland road network, those in 80 km/h and 100 km/h were found to exceed the speed limit most noticeably during the weekends compared to weekdays. Speed compliance was greatest in the 50 km/h and 70 km/h speed zone on both weekends and weekdays, with only 8.0% - 11.7% of motorists exceeding the speed limit overall in these speed zones. Levels of non-compliance were similar across weekdays and weekends in 40 km/h zones (16.9% - 19.1%). Similar proportions of heavy vehicles travelled above the speed limit during weekend days and week days with slightly higher percentages of heavy vehicles detected speeding in 80 km/h and 100 km/h speed zones during the weekends (26.6% and 25.2% respectively) and week days (23.1% and 23.3% respectively) compared to non-speed compliant passenger vehicles. Again, low-level speeding by passenger vehicle motorists and heavy vehicle motorists was far more prevalent during weekend days and weekdays compared to mid-range, high or extreme level speeding.

PARF calculations show that the highest attributable fractions of crashes associated with speeding were for motorists travelling in 40 km/h speed zones on weekend days, particularly when travelling above 61 km/h in a 40 km/h zone.

7.1.3 SEASON OF THE YEAR

While speed compliance across all seasons was consistent with previous trends, low-level speeding was frequently detected by both passenger vehicles and heavy vehicles travelling in the 40 km/h zone and the 80 km/h zone across all four-seasons, with more heavy vehicles engaging in low-level speeding in the 100 km/h zone across the four seasons. The greatest speed-compliance was observed during Autumn amongst passenger vehicle motorists. The greatest difference in PARF was observed in Autumn which had the lowest attributable fractions of crashes associated with speeding, however the variation in PARF was only minor for other seasons.

7.1.4 REGION OF QUEENSLAND

When the speed data was analysed spatially according to remoteness level, speed compliance by passenger vehicle motorists and heavy vehicle drivers was found to be poorest in Remote Australia (RA33). In remote regions, 39% of passenger vehicle motorists exceeded the speed limit in 40 km/h zones and 32.5% of passenger vehicle motorists exceeded the speed in 70 km/h zones. In very remote areas, speed compliance was unusually poor in 50 km/h zones and 60 km/h zones where 21% and 24% of passenger vehicle drivers were detected speeding. Speed compliance was typically the best in major cities and inner regional areas where levels of non-compliance was relatively low. In terms of the nineteen SA4 regions analysed, there were a particularly disproportionately high percentage of passenger vehicle motorists in Brisbane (North, South, West and City), Cairns, Central Queensland and Outback Queensland who exceed the 40 km/h speed limit (most noticeable in Cairns) and 80km/h speed limit (most notable in Brisbane: North and West, Ipswich and Toowoomba). Not surprisingly, consistent with all other data, speed compliance was best in 50 km/h zones, 60 km/h and 70 km/h zones. Of those who were detected speeding, the majority of passenger vehicle motorists were found to engage in low-level speeding.

The PARF calculations show that 20-29% of casualty crashes were attributable to travelling at 41-50 km/h in 40km/h zones in Brisbane (East and South), Cairns, Central Queensland and Sunshine Coast. PARF calculation across the SA4 regions did not show notable differences across jurisdictions.

7.1.5 CHARACTERISTICS OF CRASH-INVOLVED DRIVERS IN EACH SPEED RANGE

Since the speed probe data only captured travel speeds of vehicles and no other vehicle or driver information was linked to the speed data, an analysis of driver or vehicle characteristics could not be undertaken. Analysis of Kloeden et al.'s (1997a) data matched with South Australian Police crash reports (Section 6) showed that crashed drivers in newer vehicles were likely be to more speed limit compliant than their counterparts driving older vehicles and those engaging in low and medium level speeding were individuals driving older vehicles. Further, it showed that males were more likely to be involved in speed-related impacts (particularly at higher speeds) than females. There were also a high proportion of younger drivers associated with increasing levels of pre-crash travel speeds (i.e. non-compliance), while older drivers were either speed limit compliant or engaged in low-level speeding prior to their crash. Most notable was that there was a disproportionately large number of probationary drivers in Kloeden's crash data sample travelling at extremely high speeds (i.e. 31 km/h above the speed limit) prior to crashing.

While using Kloeden's data, temporal trends could not be analysed without bias due to the data collection predominately occurring during certain times and days, it did highlight that younger drivers tended to drive older vehicles and were more likely to engage in high levels of speeding compared to older drivers, who drove newer vehicles. It is noted that linking this data to the Queensland fleet is tenuous. The data presented in this report would be of greater value if driver and vehicle characteristics could be linked to speed data, in order to determine

more targeted speed reduction countermeasures and interventions and determine if behaviour-related speeding trends existed.

8 RECOMMENDATIONS

Overall, the findings highlight that speed compliance in Queensland is reasonable across the road network. If interventions are being considered to improve crash risks related to speeding, then efforts should be expended on targeting low-level speeding across the network, particularly in 40 km/h zones and 80 km/h zones, where the fraction of casualty crashes attributable to speeding are noticeably higher than speeding in other speed zones. Further, eliminating speeding during the hours of 7:00pm to 6:00am should be a focus due to the high levels of non-compliance noted in the speed data during these hours. It is important to note however, that results need to be interpreted with care due to the reasons identified earlier. Notwithstanding the limitations, efforts to increase enforcement and lower speeding thresholds may help to reduce the prevalence of low-level speeding. Similarly, education campaigns such as previous 'Wipe-Off-5' road safety messages, may improve community awareness regarding the risks of low-level speeding. In low-speed environments there may also be the potential to increase the implementation of traffic calming measures to encourage speed compliance. This appears to be particularly warranted in 40km/h speed environments where the prevalence of speeding was typically greatest.

There is suggestion from TMR that road safety practitioners in Queensland have advocated for adjustments to speed categories associated with speeding offence sanctions, namely reducing the first offence bracket from up to 13 km/h over the limit to up to 10 km/h over the limit. It is presumed that any change in the threshold for speeding offence categories would apply throughout Queensland, but the results would allow consideration of specific speed zones. Assuming that a reduction in the first bracket would address speeding of 11-12 km/h above the limit, then the PARF values associated with this range could be used as an estimate of the fractional reduction in casualty crashes that could be achieved. This equates to a reduction in passenger motor vehicle casualty crashes of approximately 2.1-3.1% in 40-70 km/h zones and 0.5-1.9% in 80-110 km/h zones across the whole of Queensland. That said, it must be noted that some drivers would adjust their behaviour to travelling 1-10 km/h over the limit, which has its own attendant risks. There may also be a reduction in motorists travelling more than 12 km/h above the speed limit, as was found when the speeding threshold was reduced in March 2002 in Victoria from 10 km/h above the limit by an unpublished amount. Offence detection rates per vehicle assessed decreased by 30-40% for vehicles speeding 10 to 44km/h above the limit, with smaller reductions in rates of offending at higher speeds (Bobevski et al. 2007). The effects of the full behaviour change in Queensland could be modelled based on the results in this study, but would require a number of assumptions about the shift in speed distribution within each speed zone (and perhaps in each stratum analysed). Such an analysis is outside the scope of the present study. Nonetheless, the results of this report clearly demonstrate the potential crash reductions that can be achieved when vehicles travel at lower speeds. Thus, any reductions in speeds associated with adjusting speed penalty brackets is likely to be associated with reduced crashes.

It is also noteworthy that the benefits of new vehicle technologies such as speed keep assist, lane keep assist, autonomous electronic braking are also likely to have crash reduction benefits and the influence of these technologies have not been considered with regards to the PARF values presented within this report. The benefits of new vehicle technologies should be considered in light of the newer vehicles in the modern fleet which are likely to improve casualty crash risks in general.

While fractions of casualty crashes attributable to speeding were not presented for the heavy vehicle population in this report, this could be achieved in future research when appropriate real-world crash data becomes available and appropriate risk functions are developed for heavy vehicles. The severity of heavy vehicle impacts are likely to be higher than passenger vehicle impacts at a given speed and more attention should be given to minimising speeding associated with heavy vehicle drivers and reducing their crash likelihood. Although speed risk curves were not developed for Queensland as part of this research, such curves would be of great value to determine the risks associated with speeding across the speed zones, given the fleet of vehicles in Queensland. A detailed sample of crashed vehicles with associated vehicle, environment and driver data would be necessary to develop such curves and it is proposed that this be considered for future research. At a more basic level, continuous monitoring of speeding trends, as currently undertaken by TMR and HERE technologies, is essential for developing effective anti-speeding interventions. While consistent and accurate methods should continue to be employed for this purpose, recommendations are made to ensure that data collection using the speed probe data occurs over a greater network to capture the speeding behaviour of a greater proportion of the Queensland vehicle fleet.

At present, given the high casualty crash risks associated with low-level speeding, and the high proportion of vehicles engaging in low-level speeding across the network (both passenger vehicles and heavy vehicles), particularly in more remote areas of Queensland, interventions which target low-level speeding should be a priority if greater speed compliance across the Queensland road network is to be achieved. This research has demonstrated that the majority of drivers most likely believe that low-level speeding is acceptable despite it presenting high risks associated with being involved in a casualty crash. Speed reduction interventions which target low-level speeding, particularly during evening and night hours across the Queensland road network are encouraged.

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Appendix A Major cities

Major cities by time of day

Table 84: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in major cities, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	14.6	7.6	9.4	8.2	16.4	12.1	15.9	15.1
Off peak	13.7	7.3	9.5	7.9	16.4	11.9	16.2	13.3
PM peak	14.1	7.8	9.2	8.2	16.1	10.1	15.6	14.8
Evening	14.5	8.4	11.6	11.4	18.6	14.0	17.1	18.3
Late night/ Early morning	18.7	8.4	16.1	14.5	22.6	17.9	16.4	14.4

Table 85: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in major cities, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	19.4	9.2	9.9	6.0	9.2	6.6	10.0	6.4	8.1	2.4	8.5	2.4	6.8	1.8	5.7	1.5
Off peak	19.0	8.8	9.9	5.8	9.3	6.6	9.8	6.2	8.0	2.3	8.2	2.3	6.7	1.8	5.3	1.4
PM peak	19.0	9.0	9.8	6.0	8.7	6.5	9.9	6.5	7.8	2.3	7.8	2.1	6.8	1.8	5.6	1.5
Evening	18.6	9.0	9.7	6.4	8.9	7.3	10.7	8.0	8.0	2.6	9.1	2.7	6.5	1.8	6.7	1.9
Late night/ Early morning	20.7	10.8	9.2	6.7	9.8	9.4	11.4	9.7	9.1	3.2	10.9	3.4	6.3	1.8	5.6	1.5

Table 86: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in major cities, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	7.3	3.0	5.7	4.1	13.2	9.0	10.7	6.9
Off peak	7.3	3.2	5.7	4.0	12.8	8.8	11.0	7.2
PM peak	8.1	3.7	5.9	4.1	14.0	8.6	12.3	8.4
Evening	7.6	3.6	7.0	5.2	17.0	10.2	12.6	6.4
Late night/ Early morning	10.2	4.2	10.8	8.0	20.8	14.4	13.8	6.6

Major cities by day of week

Table 87: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in major cities, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	13.6	6.7	8.7	7.4	15.3	11.0	14.1	13.6
Weekend	15.0	8.8	11.2	10.0	18.6	13.3	18.6	15.5

Table 88: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in major cities, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
Weekday	18.5	8.7	9.2	5.4	8.6	6.2	9.3	5.9	7.8	2.2	8.3	2.3	6.1	1.6	5.4	1.4
Weekend	19.8	9.4	10.5	6.7	9.6	7.3	10.8	7.5	8.3	2.6	8.7	2.5	7.5	2.1	5.8	1.6

Table 89: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in major cities, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	9.3	3.8	7.4	5.7	15.7	11.6	14.7	7.9
Weekend	10.4	4.6	9.0	6.5	19.4	13.9	18.7	10.4

Major cities by season

Table 90: Proportion of passenger vehicle motorists engaged in low-level speeding by season in major cities, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	14.3	7.8	10.1	8.9	17.3	12.4	17.0	16.2
Autumn	13.0	6.3	8.8	7.1	15.7	10.4	13.5	8.9
Winter	14.0	7.9	10.2	8.8	16.9	12.6	16.5	14.9
Spring	15.0	7.9	9.8	8.6	16.6	12.0	16.3	15.6

Table 91: PARF for passenger vehicle motorists engaged in low-level speeding by season in major cities, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	19.2	9.1	10.0	6.1	9.2	6.8	10.4	6.9	8.2	2.5	8.7	2.5	7.0	1.9	6.0
Autumn	18.6	8.5	8.8	5.1	8.6	6.2	9.0	5.7	7.8	2.2	7.8	2.1	5.6	1.5	4.0	1.0
Winter	19.1	9.0	10.0	6.1	9.5	6.9	10.3	6.8	8.2	2.4	8.8	2.5	6.9	1.9	5.7	1.6
Spring	19.4	9.4	10.0	6.2	8.9	6.7	10.0	6.7	7.8	2.4	8.4	2.4	6.9	1.9	5.8	1.6

Table 92: Proportion of heavy vehicle drivers engaged in low-level speeding by season in major cities, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	8.1	3.5	6.8	5.2	15.1	10.5	12.8	7.4
Autumn	7.7	3.3	6.3	4.4	14.2	9.6	11.3	6.0
Winter	7.8	3.4	6.6	4.7	14.5	9.6	11.9	6.8
Spring	8.0	3.4	6.6	4.8	14.8	10.3	12.1	7.8

Appendix B Inner regional

Inner regional areas by time of day

Table 93: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in inner regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	11.7	8.4	11.1	11.9	18.4	12.1	18.1	20.9
Off peak	11.2	7.6	10.9	11.8	17.4	12.1	17.8	18.8
PM peak	13.5	9.9	11.8	14.1	20.4	14.1	21.3	21.4
Evening	12.1	11.0	10.7	13.9	20.9	15.8	20.9	18.5
Late night/ Early morning	12.4	9.9	13.1	14.1	25.1	19.1	19.4	22.1

Table 94: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in inner regional areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	17.1	7.9	7.9	6.5	8.3	7.0	10.6	8.6	8.0	2.4	6.9	2.3	7.1	2.0	7.1	2.0
Off peak	17.7	8.0	8.4	6.1	8.4	7.0	11.1	8.5	7.8	2.3	6.7	2.2	7.0	2.0	6.8	1.9
PM peak	18.5	8.8	8.2	7.2	8.2	7.4	12.0	9.6	8.3	2.6	7.1	2.6	8.0	2.4	6.8	2.0
Evening	13.4	7.2	9.5	8.2	7.4	6.8	9.1	8.8	7.7	2.8	7.4	2.8	7.3	2.2	6.9	2.0
Late night/ Early morning	15.2	8.0	8.2	7.8	6.6	7.8	10.7	9.3	8.9	3.4	10.2	3.4	5.4	1.9	5.9	1.9

Table 95: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in inner regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	9.9	3.6	7.4	6.4	20.7	10.2	12.8	8.7
Off peak	8.4	3.4	6.9	5.4	20.1	10.6	12.7	9.3
PM peak	10.3	4.1	7.6	6.3	22.3	11.0	15.9	8.0
Evening	13.4	5.3	9.0	8.1	26.0	20.2	17.9	2.1
Late night/ Early morning	20.2	7.9	13.9	12.6	29.3	23.2	16.4	4.8

Inner regional areas by day of week

Table 96: Proportion of passenger vehicle motorisits engaged in low-level speeding by day of week in inner regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	11.5	7.5	10.1	10.2	17.3	11.6	16.7	17.4
Weekend	12.5	10.8	13.2	16.4	21.2	15.8	22.0	23.7

Table 97: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in inner regional areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	16.8	7.9	7.9	6.0	7.9	6.6	10.2	7.6	7.7	2.3	6.9	2.2	6.5	1.8	5.9
Weekend	17.7	8.3	8.9	7.8	8.4	8.0	11.9	10.5	8.5	2.8	7.2	2.8	8.1	2.5	8.0	2.4

Table 98: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in inner regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	11.4	4.5	9.2	8.3	24.3	15.8	18.8	8.3
Weekend	15.1	6.3	11.2	9.8	28.5	18.5	21.9	9.7

Inner regional areas by season

Table 99: Proportion of passenger vehicle motorists engaged in low-level speeding by season in inner regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	11.8	8.9	11.7	13.6	19.3	13.4	19.7	21.1
Autumn	12.1	7.2	10.8	10.8	17.8	11.9	17.1	17.5
Winter	11.7	8.9	11.1	13.0	18.8	13.5	18.9	21.5
Spring	12.0	9.0	11.2	12.4	19.0	13.2	19.5	19.7

Table 100: PARF for passenger vehicle motorists engaged in low-level speeding by season in inner regional areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Summer	17.3	8.0	8.2	6.8	8.3	7.3	11.5	9.3	8.2	2.5	6.9	2.5	7.6	2.2	7.1
Autumn	17.4	8.2	8.3	5.8	7.9	6.8	10.7	8.0	7.8	2.4	7.1	2.2	6.4	1.8	6.0	1.7
Winter	15.9	7.7	7.9	6.8	7.9	7.1	10.8	9.0	7.9	2.5	7.0	2.5	7.0	2.1	7.0	2.1
Spring	18.0	8.3	8.6	6.9	8.4	7.2	11.0	8.9	8.1	2.5	7.2	2.5	7.4	2.2	7.0	2.0

Table 101: Proportion of heavy vehicle drivers engaged in low-level speeding by season in inner regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	10.7	4.4	8.5	7.6	22.7	13.3	14.8	6.8
Autumn	11.5	4.2	8.2	6.9	21.8	13.2	13.8	6.5
Winter	11.2	4.1	8.1	6.9	22.4	13.6	14.8	6.1
Spring	10.8	4.1	7.9	7.0	22.2	13.7	14.2	7.7

Appendix C Outer regional

Outer regional areas by time of day

Table 102: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in outer regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	23.7	7.9	11.5	9.5	15.3	14.5	21.6	13.6
Off peak	22.8	7.2	11.5	9.3	15.6	13.7	21.8	16.7
PM peak	22.7	7.9	11.4	9.3	16.1	16.7	23.6	10.8
Evening	19.5	6.2	11.1	10.1	17.1	18.9	19.7	3.1
Late night/ Early morning	16.2	5.4	14.3	12.1	18.9	21.6	15.7	1.6

Table 103: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in outer regional areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	23.5	12.4	10.4	6.3	7.6	7.0	7.9	6.9	6.8	2.1	8.1	2.7	7.6	2.4	8.1	2.0
Off peak	23.9	12.7	10.1	5.9	8.0	7.0	8.3	6.8	6.9	2.1	8.0	2.4	7.8	2.4	7.7	2.0
PM peak	23.7	12.4	10.6	6.4	7.6	7.0	7.0	6.6	6.7	2.1	10.0	3.1	8.1	2.6	8.2	1.9
Evening	19.4	11.0	9.6	5.3	7.3	6.9	6.6	7.1	6.8	2.3	9.0	3.3	6.3	2.1	1.3	0.3
Late night/ Early morning	15.8	9.4	9.0	5.0	6.4	8.1	6.4	7.6	6.9	2.8	10.5	3.7	4.1	1.5	1.7	0.3

Table 104: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in outer regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	16.2	4.0	7.1	5.8	18.4	13.9	18.3	7.2
Off peak	14.8	4.1	6.6	5.6	18.3	13.5	18.1	5.6
PM peak	17.0	4.5	7.5	6.3	19.3	15.5	21.0	5.8
Evening	16.1	6.2	9.0	6.6	20.7	19.3	22.0	3.7
Late night/ Early morning	20.5	8.3	12.1	8.0	23.6	19.8	22.1	7.8

Outer regional areas by day of week

Table 105: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in outer regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	22.2	6.6	10.4	8.4	14.8	14.1	20.7	11.3
Weekend	22.6	8.4	13.2	11.4	17.4	16.7	22.7	14.7

Table 106: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in outer regional areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Weekday	23.7	12.4	9.7	5.5	7.4	6.6	6.9	6.1	6.7	2.0	8.6	2.6	7.4	2.3	7.1
Weekend	22.4	12.2	10.7	6.6	7.9	7.7	8.1	7.8	7.0	2.3	8.8	3.0	7.7	2.5	7.7	1.9

Table 107: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in outer regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	17.4	5.1	9.1	6.7	22.1	18.6	25.9	7.8
Weekend	21.7	6.9	10.9	9.9	22.4	23.6	28.6	7.6

Outer regional areas by season

Table 108: Proportion of passenger vehicle motorists engaged in low-level speeding by season in outer regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	22.3	7.5	11.6	9.4	15.5	16.1	24.2	15.5
Autumn	18.9	6.4	11.1	8.8	16.2	15.3	22.3	6.8
Winter	22.4	7.2	11.9	10.3	15.8	14.3	20.5	17.6
Spring	24.6	8.0	11.7	10.1	16.4	15.1	19.4	9.6

Table 109: PARF for passenger vehicle motorists engaged in low-level speeding by season in outer regional areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Summer	23.2	12.2	10.2	6.0	7.6	7.0	8.1	6.8	6.9	2.1	8.7	2.8	8.4	2.6	8.3
Autumn	19.8	10.7	9.7	5.4	7.1	6.9	6.9	6.6	6.6	2.2	8.2	2.8	7.8	2.4	4.1	0.9
Winter	23.3	12.5	9.8	5.9	7.7	7.2	8.6	7.3	6.9	2.2	8.8	2.7	7.2	2.4	9.4	2.4
Spring	24.4	13.0	10.8	6.5	7.9	7.2	6.5	6.9	6.9	2.2	8.9	2.8	6.6	2.1	6.7	1.5

Table 110: Proportion of heavy vehicle drivers engaged in low-level speeding by season in outer regional areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	16.3	4.1	8.0	5.6	19.2	16.0	19.8	5.7
Autumn	15.5	4.7	7.7	5.6	19.8	16.5	20.9	4.8
Winter	15.4	5.2	7.7	5.7	19.0	15.9	19.9	5.2
Spring	17.5	5.2	7.9	7.4	20.0	15.2	18.9	8.1

Appendix D Remote

Remote areas by time of day

Table 111: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	28.0	10.0	10.4	39.4	18.6	44.4	15.9	14.5
Off peak	24.2	8.5	11.4	27.3	15.6	32.7	16.8	20.2
PM peak	23.9	9.8	10.5	22.3	13.4	7.0	18.9	9.6
Evening	30.7	5.2	9.5	-	10.4	1.8	10.6	15.5
Late night/ Early morning	12.2	6.7	12.9	-	13.1	-	8.6	0.4

Table 112: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in remote areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	14.3	10.3	3.1	7.3	4.3	6.3	21.5	17.4	8.5	2.7	15.3	5.6	7.2	2.0	4.3	2.0
Off peak	17.9	12.2	3.4	6.1	5.9	7.2	15.5	13.2	5.6	2.2	13.7	4.7	7.2	2.0	6.1	2.3
PM peak	14.3	9.4	4.4	7.1	4.0	6.3	15.3	11.5	5.0	2.0	2.1	0.7	8.0	2.4	5.8	1.5
Evening	20.7	10.8	7.3	5.6	7.0	6.5	-	-	5.6	1.6	1.2	0.3	4.9	1.2	1.6	1.6
Late night/ Early morning	14.2	6.1	6.2	5.9	10.1	8.4	-	-	8.6	2.1	-	-	1.5	0.9	0.5	0.1

Table 113: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	21.9	4.1	10.6	16.9	22.6	19.0	23.4	5.7
Off peak	30.6	6.5	9.5	24.0	24.4	40.0	25.2	4.4
PM peak	29.1	7.9	10.0	25.0	21.8	23.0	25.7	5.1
Evening	7.0	5.1	11.6	14.3	22.9	37.3	26.7	3.5
Late night/ Early morning	3.1	7.0	11.3	13.0	21.0	70.4	29.1	8.4

Remote areas by day of week

Table 114: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	21.5	8.6	10.8	31.9	15.3	12.5	16.4	12.3
Weekend	27.1	8.1	11.0	25.4	14.1	37.8	14.8	16.4

Table 115: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in remote areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	17.2	9.9	2.6	6.1	5.7	7.0	17.4	15.2	7.5	2.3	5.8	1.6	7.0	2.0	6.0
Weekend	15.8	11.5	8.3	7.0	5.4	6.8	15.8	12.4	4.8	2.0	13.2	5.2	6.9	1.9	6.7	2.2

Table 116: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	24.5	7.1	11.1	24.1	26.8	34.9	32.3	7.1
Weekend	31.4	8.5	14.0	25.8	21.6	34.3	33.2	5.8

Remote areas by season

Table 117: Proportion of passenger vehicle motorists engaged in low-level speeding by season in remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	28.0	10.0	11.2	31.8	14.3	18.0	25.2	14.8
Autumn	24.4	7.2	12.1	31.4	18.8	7.4	22.8	13.5
Winter	21.8	9.3	10.8	24.0	11.7	16.4	12.3	17.8
Spring	22.9	6.6	9.7	25.6	15.4	35.5	10.9	11.1

Table 118: PARF for passenger vehicle motorists engaged in low-level speeding by season in remote areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Summer	13.4	9.8	3.6	7.3	4.9	6.5	15.4	14.3	5.6	2.0	10.0	3.0	9.5	2.8	5.0
Autumn	18.5	12.1	4.0	5.5	7.7	8.0	19.8	15.7	9.1	2.9	2.9	1.1	7.3	2.6	6.7	1.7
Winter	16.8	10.5	4.8	7.2	5.3	6.8	15.7	12.3	6.2	1.8	9.5	2.7	6.3	1.9	10.0	2.8
Spring	15.3	9.8	3.7	5.4	4.9	6.5	16.2	11.5	4.7	2.2	12.3	4.3	4.4	1.2	5.4	1.6

Table 119: Proportion of heavy vehicle drivers engaged in low-level speeding by season in remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	27.1	6.2	9.9	25.8	26.0	34.7	26.8	4.5
Autumn	28.3	5.6	9.5	21.9	25.9	21.1	25.8	4.1
Winter	25.7	5.7	9.9	24.6	23.1	29.0	26.1	5.0
Spring	22.4	6.8	10.7	13.6	21.4	45.0	24.3	7.3

Appendix E Very remote

Very remote areas by time of day

Table 120: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in very remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	38.2	19.2	22.6	-	11.1	-	5.3	8.8
Off peak	16.5	9.9	17.0	-	10.5	-	13.4	9.9
PM peak	34.4	23.2	19.1	-	10.5	-	5.5	16.4
Evening	0.0	9.1	20.3	-	12.3	-	17.1	17.9
Late night/ Early morning	0.0	5.8	28.5	-	8.6	-	5.8	2.9

Table 121: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in very remote areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	55.2	23.0	10.9	8.7	11.7	12.4	-	-	5.9	1.4	-	-	4.1	0.9	3.3	1.4
Off peak	11.3	6.7	6.2	5.7	10.0	10.1	-	-	5.4	1.6	-	-	6.7	2.1	6.2	1.8
PM peak	33.4	15.1	8.7	10.7	9.9	10.6	-	-	3.6	1.4	-	-	2.3	0.8	7.5	2.3
Evening	0.0	0.0	4.1	4.3	18.7	12.3	-	-	7.1	1.7	-	-	5.6	1.7	2.7	2.8
Late night/ Early morning	0.0	0.0	2.1	1.3	13.8	14.1	-	-	4.8	1.4	-	-	1.5	0.9	1.7	0.3

Table 122: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in very remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	25.9	6.9	10.0	-	18.9	-	20.7	7.5
Off peak	1.7	10.6	9.2	-	18.6	-	24.7	7.1
PM peak	10.0	10.5	7.6	-	21.2	-	20.5	6.5
Evening	32.4	4.3	7.1	-	12.4	-	14.5	2.2
Late night/ Early morning	30.3	3.0	15.6	-	18.2	-	16.2	2.2

Very remote areas by day of week

Table 123: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in very remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	24.6	15.2	17.6	-	9.3	-	8.2	9.8
Weekend	27.6	16.1	20.5	-	12.0	-	7.7	12.2

Table 124: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in very remote areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
Weekday	15.8	9.1	8.7	8.1	10.6	10.7	-	-	5.6	1.3	-	-	5.6	1.3	5.4	1.6
Weekend	48.7	19.3	7.1	7.3	10.7	11.2	-	-	4.5	1.6	-	-	3.4	1.2	7.9	2.2

Table 125: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in very remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	26.0	9.0	11.1	-	22.1	-	29.5	9.1
Weekend	10.8	12.7	9.7	-	19.7	-	26.3	6.3

Very remote areas by season

Table 126: Proportion of passenger vehicle motorists engaged in low-level speeding by season in very remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	17.8	19.1	18.5	-	10.2	-	8.7	11.5
Autumn	28.1	10.6	20.0	-	9.8	-	8.9	7.2
Winter	25.8	21.0	17.4	-	10.0	-	7.8	9.0
Spring	29.0	9.6	20.3	-	11.9	-	6.4	15.1

Table 127: PARF for passenger vehicle motorists engaged in low-level speeding by season in very remote areas, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Summer	25.6	10.6	5.6	6.9	9.4	9.8	-	-	5.2	1.5	-	-	4.1	1.5	5.9
Autumn	37.6	16.9	7.0	6.7	15.1	11.5	-	-	5.1	1.3	-	-	2.4	1.0	6.1	1.3
Winter	36.8	13.6	13.1	11.0	7.5	10.1	-	-	5.5	1.5	-	-	5.2	1.3	4.2	1.6
Spring	16.7	11.0	8.3	6.3	14.0	12.7	-	-	0.4	1.0	-	-	2.1	0.9	2.6	2.3

Table 128: Proportion of heavy vehicle drivers engaged in low-level speeding by season in very remote areas, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	24.3	8.7	9.4	-	16.4	-	20.2	9.5
Autumn	14.8	6.9	8.9	-	20.4	-	24.5	6.3
Winter	10.9	5.6	8.7	-	20.6	-	23.7	5.1
Spring	7.4	12.8	8.4	-	17.6	-	19.1	4.9

Appendix F Brisbane – East

Table 129: Proportion of passenger vehicle motorists travelling at various speeds in Brisbane East, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	83.9 (+2.2)	86.9 (-4.4)	80.6 (-8.7)	89.3 (-0.9)	78.4 (-1.4)	71 (-18.0)	82.1 (+0.1)	-
Above limit (total)	16.1 (-10.2)	13.1 (+44.3)	19.4 (+66.1)	10.7 (+8.6)	21.6 (+5.6)	29 (+115.5)	17.9 (-0.7)	-
1-5 above	9.5 (-0.7)	7.8 (+46.5)	10.1 (+39.2)	7 (+7.4)	12.4 (+4.3)	18 (+99.5)	13.8 (+1.6)	-
6-10 above	4.3 (-12.4)	3.6 (+53.3)	4.9 (+77.7)	2.4 (+12.4)	5.6 (+10.4)	8.8 (+186.3)	3.3 (+0.9)	-
11-12 above	0.8 (-25.5)	0.6 (+43.2)	1.1 (+122.6)	0.4 (+12.9)	1.2 (+12.1)	0.8 (+78.8)	0.3 (-19.8)	-
13-20 above	1.3 (-29.1)	0.9 (+20.7)	2.5 (+186)	0.6 (+8.9)	2 (+5.9)	1.1 (+68.1)	0.4 (-33.4)	-
21-30 above	0.2 (-53.9)	0.1 (-20.1)	0.7 (+206.1)	0.1 (+0.6)	0.3 (-23.9)	0.2 (+10.8)	0.1 (-55.7)	-
31-40 above	0 (-85.6)	0 (-41.2)	0.1 (+67.3)	0 (-19.4)	0 (-38.7)	0.0 (-32.9)	0.0 (-79.4)	-
41-50 above	0 (-61.5)	0 (-74.6)	0 (+8.5)	0 (-4.2)	0 (-11.2)	0 (-100)	0 (-88)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Brisbane East, compared to the prevalence of all motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 130: PARF Brisbane East, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-19.8	-13.6	-15.6	-9.7	-9.3	-9.3	-18.1	-12.3	-11.8	-4.5	-7.9	-3.4	-17.0	-5.9	-	-
Total above	46.9	16.4	36.7	14.9	61.5	25.5	34.9	13.4	27.2	6.1	24.8	7.2	9.6	2.4	-	-
1-5 above	7.4	3.1	4.6	3.0	3.0	3.2	4.2	3.0	3.3	1.0	5.1	1.9	3.6	1.0	-	-
6-10 above	13.3	5.3	8.7	5.2	6.0	5.8	6.4	4.2	5.4	1.5	9.4	3.0	3.2	0.8	-	-
11-12 above	3.1	1.8	2.9	1.5	2.9	2.4	2.4	1.4	2.1	0.5	2.5	0.7	0.7	0.2	-	-
13-20 above	11.4	4.7	10.4	4.0	15.8	9.2	8.3	3.4	6.5	1.4	4.5	1.1	1.3	0.3	-	-
21-30 above	8.0	1.1	7.4	1.0	21.8	4.1	9.6	1.2	6.5	1.4	2.4	0.4	0.8	0.1	-	-
31-40 above	3.0	0.1	2.3	0.1	10.2	0.7	3.7	0.2	1.9	0.1	0.8	0.1	0.1	0.0	-	-
41-50 above	0.7	0.0	0.4	0.0	1.8	0.1	0.2	0.0	1.6	0.1	0.1	0.0	0.0	0.0	-	-

Table 131: Proportion of heavy vehicle drivers travelling at various speeds in Brisbane East, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	86 (-3.5)	94.2 (-1.3)	86.6 (-5.7)	94.7 (+0.5)	85.4 (+8.1)	76.2 (-13)	87.3 (+5.4)	-
Above limit (total)	14 (+28.9)	5.8 (+26.1)	13.4 (+63.7)	5.3 (-8.6)	14.6 (-30.4)	23.8 (+91.4)	12.7 (-26.1)	-
1-5 above	9.1 (+39.1)	3.5 (+31.9)	7 (+34.4)	3.4 (-10.1)	8.9 (-28)	16.2 (+86.3)	10.4 (-24.7)	-
6-10 above	3.3 (+30.1)	1.4 (+27.5)	3.2 (+78)	1.2 (-3.3)	4 (-28.9)	6.2 (+124)	1.8 (-27.5)	-
11-12 above	0.4 (-11.4)	0.3 (+18.7)	0.8 (+128.5)	0.2 (-17.3)	0.6 (-40.6)	0.6 (+54.4)	0.2 (-28.8)	-
13-20 above	0.8 (-8.9)	0.5 (+14.7)	1.9 (+216.7)	0.3 (-3.4)	0.9 (-45.9)	0.5 (+28.2)	0.3 (-47.5)	-
21-30 above	0.2 (-25)	0.1 (-8)	0.5 (+153.4)	0.1 (-16.2)	0.1 (-44.5)	0.1 (+38.7)	0.1 (-66.2)	-
31-40 above	0.1 (+39.8)	0 (-36.2)	0.1 (+40.3)	0 (-1.9)	0 (+2.4)	0 (+27.3)	0 (+1572.7)	-
41-50 above	0 (+175.8)	0 (-79.3)	0 (+29.9)	0 (-57.7)	0 (-0.5)	0 (+6134.1)	0 (+493.1)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Brisbane East, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Brisbane - East by time of day

Table 132: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane - East, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	15.4	11.4	14.6	9.3	17.2	26.2	15.9	-
Off peak	12.8	11.3	14.7	8.8	18.0	24.4	19.4	-
PM peak	12.6	11.0	14.2	8.3	16.9	23.3	16.5	-
Evening	15.0	13.4	17.7	12.1	21.3	24.7	16.8	-
Late night/ Early morning	19.3	11.4	19.1	20.6	25.5	38.7	12.6	-

Table 133: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane - East, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	21.9	9.4	13.5	8.4	9.0	9.0	10.6	7.2	8.7	2.5	13.7	4.7	6.4	1.7	-	-
Off peak	20.1	8.0	13.7	8.3	9.2	8.9	10.6	6.8	8.7	2.5	13.5	4.4	7.2	2.1	-	-
PM peak	19.4	7.8	13.0	7.9	8.9	8.8	9.9	6.6	8.1	2.4	12.4	4.2	6.7	1.9	-	-
Evening	21.7	8.9	12.9	9.0	9.0	9.7	11.0	8.3	8.0	2.8	14.3	4.7	6.3	1.8	-	-
Late night/ Early morning	23.9	10.6	10.4	8.3	9.3	10.7	11.8	12.4	10.0	3.6	19.9	7.1	5.0	1.3	-	-

Table 134: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Brisbane - East, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	10.7	4.1	8.7	3.8	10.9	17.9	10.2	-
Off peak	9.5	4.2	8.5	3.3	9.8	19.2	12.3	-
PM peak	12.7	4.8	9.6	3.6	11.8	19.2	14.5	-
Evening	14.7	6.4	12.4	6.4	16.1	23.2	11.2	-
Late night/ Early morning	19.3	6.7	15.5	8.9	21.6	32.3	12.0	-

Brisbane - East by day of week

Table 135: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane - East, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	13.6	9.7	13.4	8.8	16.7	26.9	13.6	-
Weekend	14.0	13.7	16.9	10.2	19.6	26.7	22.5	-

Table 136: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane - East, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Weekday	20.2	8.4	12.3	7.2	8.9	8.5	10.4	7.0	8.5	2.4	14.8	4.9	5.6	1.5	-
Weekend	21.2	8.5	14.3	9.5	9.2	9.7	10.9	7.6	8.8	2.7	13.8	4.8	8.4	2.5	-	-

Table 137: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Brisbane - East, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	11.1	4.5	9.3	4.2	11.7	21.0	9.7	-
Weekend	14.4	5.6	11.6	5.3	14.5	25.0	14.8	-

Brisbane - East by season

Table 138: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Brisbane - East, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	14.6	11.9	15.5	9.8	18.2	27.8	18.1	-
Autumn	13.2	9.7	13.3	7.7	16.3	23.9	13.3	-
Winter	13.1	11.0	14.2	9.2	17.6	27.3	16.0	-
Spring	14.2	11.5	15.1	9.8	18.4	28.0	18.5	-

Table 139: PARF for passenger vehicle motorists engaged in low-level speeding by season in Brisbane - East, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
Summer	21.3	8.9	13.6	8.4	9.4	9.2	10.7	7.4	8.8	2.6	14.5	4.9	7.2	2.0	-	-
Autumn	20.8	8.2	12.3	7.2	10.6	8.6	9.8	6.2	7.8	2.3	14.0	4.5	5.0	1.4	-	-
Winter	19.6	8.0	13.6	8.7	9.3	9.3	10.7	7.4	8.7	2.6	14.5	5.0	6.6	1.9	-	-
Spring	21.2	8.8	13.3	8.4	8.1	8.8	11.0	7.5	8.4	2.6	14.9	5.0	7.3	2.0	-	-

Table 140: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Brisbane - East, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	11.2	5.0	10.8	5.5	13.1	23.1	12.4	-
Autumn	11.7	4.9	10.3	4.2	12.0	19.9	11.0	-
Winter	13.5	5.0	9.7	4.7	12.5	20.8	11.6	-
Spring	12.4	4.4	9.6	4.3	13.4	23.6	13.1	-

Appendix G Brisbane – North

Table 141: Proportion of passenger vehicle motorists travelling at various speeds in Brisbane North, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	73.5 (-10.4)	90.2 (-0.8)	87.7 (-0.7)	91.3 (+1.2)	55.2 (-30.6)	90 (+4)	89.4 (+9)	-
Above limit (total)	26.5 (+47.8)	9.8 (+7.8)	12.3 (+5.2)	8.7 (-10.8)	44.8 (+118.8)	10 (-25.6)	10.6 (-41.1)	-
1-5 above	12.9 (+35)	5.7 (+6.9)	7.9 (+9.3)	5.8 (-11.3)	20.6 (+73.5)	6.9 (-23.8)	8.4 (-38.2)	-
6-10 above	6.2 (+26.9)	2.7 (+16.9)	2.8 (+1.8)	1.9 (-12.1)	12.3 (+143.1)	2.2 (-29.9)	1.8 (-46.2)	-
11-12 above	1.6 (+47.4)	0.4 (+5.3)	0.5 (-2.7)	0.3 (-13.1)	3.2 (+202.6)	0.4 (-22.2)	0.2 (-54.5)	-
13-20 above	4.1 (+128.5)	0.7 (-5.2)	0.8 (-10.2)	0.6 (-3.8)	6.8 (+262.1)	0.5 (-25.4)	0.2 (-61.7)	-
21-30 above	1.4 (+238.1)	0.2 (-12.1)	0.2 (-3.6)	0.1 (+4.7)	1.6 (+262.3)	0.1 (-54.4)	0.1 (-63.4)	-
31-40 above	0.3 (+65.2)	0 (-41.9)	0.1 (-11.2)	0 (+6.2)	0.1 (+68.4)	0 (-32.4)	0 (-75)	-
41-50 above	0 (+163.9)	0 (-58.4)	0 (-3.1)	0 (-52.6)	0 (+1.3)	0 (+84.8)	0 (-85.8)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Brisbane North, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 142: PARF Brisbane North, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-7.0	-9.1	-15.6	-9.3	-16.8	-12.5	-18.7	-12.6	-5.6	-2.9	-18.7	-6.5	-15.3	-4.6	-	-
Total above	79.4	32.1	36.4	13.0	43.2	14.0	34.2	11.8	46.7	14.4	13.9	2.9	7.3	1.5	-	-
1-5 above	5.7	3.3	3.8	2.4	3.8	3.0	3.7	2.6	3.5	1.5	3.0	0.9	2.7	0.7	-	-
6-10 above	10.8	6.0	7.6	4.4	5.6	4.0	5.3	3.5	7.4	2.9	3.6	0.9	2.2	0.5	-	-
11-12 above	2.6	2.8	2.5	1.2	2.1	1.3	2.0	1.1	3.5	1.2	1.2	0.3	0.5	0.1	-	-
13-20 above	16.5	12.2	9.8	3.5	7.8	3.5	7.6	3.1	14.2	4.2	2.9	0.6	1.0	0.2	-	-
21-30 above	27.7	6.5	9.4	1.3	12.3	1.6	10.3	1.3	14.2	4.2	1.5	0.2	0.9	0.1	-	-
31-40 above	14.3	1.2	2.6	0.1	9.0	0.4	5.2	0.2	2.8	0.3	0.8	0.1	0.1	0.0	-	-
41-50 above	1.9	0.2	0.8	0.0	2.7	0.1	0.1	0.0	1.1	0.1	0.9	0.0	0.0	0.0	-	-

Table 143: Proportion of heavy vehicle drivers travelling at various speeds in Brisbane North, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	84.7 (-5.0)	96.7 (+1.4)	94.1 (+2.5)	96.5 (+2.5)	63.7 (-19.4)	92.5 (+5.6)	91.9 (+11.1)	-
Above limit (total)	15.3 (+41.1)	3.3 (-29.5)	5.9 (-27.8)	3.5 (-40.3)	36.3 (+73.3)	7.5 (-39.8)	8.1 (-53.1)	-
1-5 above	8.8 (+33.6)	1.9 (-29.3)	4.1 (-21.8)	2.2 (-41.6)	19 (+53.6)	5.4 (-38.5)	6.6 (-52)	-
6-10 above	2.9 (+16.1)	0.8 (-29)	1.2 (-33.9)	0.8 (-39)	11 (+96.7)	1.6 (-43.9)	1.1 (-55.9)	-
11-12 above	0.8 (+57.6)	0.2 (-27.9)	0.2 (-42.6)	0.1 (-39.8)	2.6 (+144.9)	0.2 (-39.6)	0.1 (-55.2)	-
13-20 above	2 (+110.2)	0.3 (-23.5)	0.3 (-46.4)	0.2 (-34.1)	3.4 (+104)	0.2 (-43)	0.2 (-66.7)	-
21-30 above	0.8 (+163)	0.1 (-33.7)	0.1 (-45.8)	0.1 (-28.4)	0.3 (+30.3)	0.1 (-28.3)	0.1 (-57.4)	-
31-40 above	0.1 (+58.4)	0 (-71)	0 (-48.3)	0 (-41.1)	0.1 (+39.8)	0 (-39.7)	0 (-100)	-
41-50 above	0 (+269.6)	0 (-95.2)	0 (-24.7)	0 (-100)	0 (+18.9)	0 (+165)	0 (-100)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Brisbane North, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Brisbane - North by time of day

Table 144: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane – North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	18.5	9.0	10.2	8.0	33.1	9.3	10.0	-
Off peak	19.1	8.1	10.1	6.6	33.8	8.9	10.3	-
PM peak	18.7	8.3	9.7	6.8	31.8	9.1	9.8	-
Evening	20.2	9.2	14.3	11.6	30.8	8.1	10.1	-
Late night/ Early morning	23.1	8.8	19.1	13.7	34.3	9.6	10.8	-

Table 145: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane - North, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	17.4	9.3	12.1	7.1	9.0	6.7	9.6	6.3	11.2	4.5	6.7	1.8	5.0	1.2	-	-
Off peak	17.0	9.4	11.3	6.6	9.2	6.7	8.0	5.4	11.3	4.5	6.7	1.8	4.9	1.2	-	-
PM peak	16.2	9.1	11.2	6.6	8.8	6.6	8.2	5.6	10.1	4.2	6.7	1.8	4.6	1.1	-	-
Evening	14.8	8.9	11.4	7.5	10.4	8.2	10.9	8.1	9.0	4.1	6.3	1.7	4.5	1.1	-	-
Late night/ Early morning	14.9	9.3	11.3	7.2	12.0	10.6	11.6	9.0	9.9	4.4	5.9	1.9	5.3	1.3	-	-

Table 146: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Brisbane - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	10.0	2.2	4.2	2.5	27.8	7.0	7.3	-
Off peak	10.9	2.6	3.8	2.2	28.9	7.6	7.9	-
PM peak	11.6	2.8	4.1	2.4	30.1	7.2	8.0	-
Evening	12.4	2.7	6.3	3.2	29.7	5.1	7.5	-
Late night/ Early morning	15.3	3.3	9.8	5.2	32.9	7.0	7.1	-

Brisbane - North by day of week

Table 147: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	18.4	7.3	9.4	7.0	31.5	8.2	8.8	-
Weekend	20.1	10.0	12.3	8.4	35.0	10.1	11.7	-

Table 148: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane - North, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	15.7	8.9	10.3	6.1	8.8	6.3	8.8	5.7	10.9	4.3	6.4	1.7	4.4	1.0	-
Weekend	17.5	9.7	12.9	7.8	9.9	7.7	9.1	6.5	10.7	4.6	7.0	1.9	5.3	1.3	-	-

Table 149: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Brisbane - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	11.0	2.4	4.6	2.7	27.6	5.9	6.7	-
Weekend	13.0	3.2	6.4	3.5	32.9	8.2	8.6	-

Brisbane - North by season

Table 150: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Brisbane - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	19.2	8.4	11.0	8.2	33.2	10.0	10.8	-
Autumn	18.1	6.9	9.6	6.3	31.5	6.8	8.8	-
Winter	19.2	8.2	10.8	7.5	32.3	8.4	9.4	-
Spring	19.4	8.9	10.4	7.6	33.2	9.7	10.6	-

Table 151: PARF for passenger vehicle motorists engaged in low-level speeding by season in Brisbane - North, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
Summer	16.4	9.2	11.3	6.8	9.5	7.1	9.7	6.5	10.9	4.4	7.2	2.0	5.0	1.3	-	-
Autumn	16.8	9.3	9.9	5.7	8.5	6.4	7.1	5.1	10.9	4.2	5.4	1.4	4.0	0.9	-	-
Winter	16.8	9.4	12.2	7.2	10.2	7.5	9.6	6.4	10.7	4.5	6.7	1.8	4.7	1.1	-	-
Spring	16.2	9.2	11.9	7.2	8.9	6.8	8.6	6.0	10.5	4.4	6.9	1.9	5.1	1.2	-	-

Table 152: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Brisbane - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	12.2	2.7	5.2	3.3	30.0	8.0	8.2	-
Autumn	11.3	2.5	4.9	2.7	28.8	6.1	7.4	-
Winter	11.5	2.7	5.6	3.0	29.0	6.1	7.0	-
Spring	11.3	2.7	5.1	2.9	30.6	7.2	7.6	-

Appendix H Brisbane – South

Table 153: Proportion of passenger vehicle motorists travelling at various speeds in Brisbane South, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	81.5 (-0.7)	92.4 (+1.5)	88.8 (+0.5)	92 (+2)	86.1 (+8.2)	87.5 (+1.1)	86.3 (+5.2)	-
Above limit (total)	18.5 (+3.1)	7.6 (-15.5)	11.2 (-3.8)	8 (-18.7)	13.9 (-31.8)	12.5 (-7.3)	13.7 (-23.8)	-
1-5 above	10 (+4.7)	4.7 (-11.9)	7.5 (+3)	5.4 (-16.5)	8.9 (-25.1)	8.6 (-4.2)	10.5 (-22.5)	-
6-10 above	5.2 (+6.2)	2 (-14.1)	2.5 (-9.5)	1.7 (-21.6)	3.4 (-32.6)	2.9 (-6.3)	2.5 (-23.9)	-
11-12 above	1.1 (-1.4)	0.3 (-26.1)	0.4 (-19.3)	0.3 (-24.9)	0.6 (-43.3)	0.4 (-10.1)	0.3 (-29.5)	-
13-20 above	1.8 (-0.9)	0.5 (-31.1)	0.6 (-25.5)	0.4 (-27.6)	0.8 (-56.5)	0.5 (-32)	0.4 (-38.9)	-
21-30 above	0.4 (-12.5)	0.1 (-43.5)	0.2 (-27.4)	0.1 (-27.4)	0.1 (-68.4)	0.1 (-63.6)	0.1 (-58)	-
31-40 above	0 (-73.3)	0 (-65.2)	0.1 (-23.6)	0 (-13.9)	0 (-57.8)	0 (-76.8)	0 (-68.8)	-
41-50 above	0 (-83.1)	0 (-53.5)	0 (-4.1)	0 (-31.2)	0 (-31.1)	0 (-37)	0 (-69.9)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Brisbane South, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 154: PARF for passenger vehicle motorists travelling above the speed limit in Brisbane South, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-14.5	-11.3	-17.6	-9.4	-18.1	-12.8	-20.2	-12.7	-13.7	-4.6	-14.5	-5.1	-16.2	-5.3	-	-
Total above	58.1	20.6	30.1	10.1	39.7	12.4	30.4	10.3	18.2	3.5	15.0	3.5	8.9	2.0	-	-
1-5 above	7.2	3.3	3.6	2.1	3.9	2.9	3.8	2.6	2.9	0.8	3.8	1.1	3.1	0.8	-	-
6-10 above	14.5	6.3	6.6	3.4	5.3	3.7	5.3	3.2	4.1	1.0	5.0	1.3	2.7	0.7	-	-
11-12 above	3.5	2.3	2.0	0.9	1.9	1.1	1.9	1.0	1.3	0.3	1.4	0.3	0.7	0.1	-	-
13-20 above	13.8	6.4	8.3	2.7	7.0	3.0	6.3	2.4	3.3	0.6	2.9	0.6	1.3	0.3	-	-
21-30 above	14.1	2.1	6.7	0.9	10.3	1.3	8.5	0.9	3.3	0.6	1.2	0.2	0.9	0.1	-	-
31-40 above	4.8	0.3	1.8	0.1	8.4	0.4	4.4	0.2	1.7	0.1	0.4	0.0	0.1	0.0	-	-
41-50 above	0.2	0.0	1.0	0.0	2.9	0.1	0.2	0.0	1.5	0.1	0.2	0.0	0.1	0.0	-	-

Table 155: Proportion of heavy vehicle drivers over speed limit on typical weekend day, Brisbane South, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	90.4 (+1.4)	97.4 (+2.2)	94.6 (+3)	94.6 (+0.4)	90.7 (+14.8)	90.5 (+3.3)	89.4 (+8)	-
Above limit (total)	9.6 (-11.4)	2.6 (-44.4)	5.4 (-33.8)	5.4 (-6.6)	9.3 (-55.7)	9.5 (-23.3)	10.6 (-38.3)	-
1-5 above	5.9 (-9.5)	1.6 (-41.6)	3.7 (-29.3)	3.3 (-13.8)	6.2 (-49.8)	6.4 (-26.7)	8.6 (-37.9)	-
6-10 above	2.2 (-13.1)	0.6 (-43.6)	1.1 (-37.8)	1.3 (+2.2)	2.1 (-63)	2.1 (-23.3)	1.5 (-39)	-
11-12 above	0.5 (+1.1)	0.1 (-46.2)	0.2 (-43.4)	0.3 (+20)	0.4 (-64)	0.3 (-11.1)	0.2 (-49.7)	-
13-20 above	0.8 (-13.2)	0.2 (-52.6)	0.3 (-51)	0.4 (+19.1)	0.5 (-69.7)	0.5 (+7.2)	0.2 (-51.4)	-
21-30 above	0.1 (-51.6)	0.1 (-63.7)	0.1 (-49.2)	0.1 (-1.4)	0.1 (-56.8)	0.1 (+48.7)	0.2 (-14.4)	-
31-40 above	0 (-25.4)	0 (-65.1)	0 (-40.1)	0 (+27.9)	0 (-59.9)	0.1 (+98.4)	0 (-78.4)	-
41-50 above	0 (+67.8)	0 (-67.2)	0 (-8.1)	0 (+11.9)	0 (-1.5)	0 (+40.2)	0 (+97.3)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Brisbane South, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Brisbane - South by time of day

Table 156: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane – South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	15.7	6.8	9.4	7.0	11.8	12.1	13.0	-
Off peak	15.3	6.6	9.9	6.8	12.6	11.8	13.8	-
PM peak	15.7	6.7	8.8	6.5	11.4	7.8	11.7	-
Evening	12.9	6.2	11.7	8.4	13.4	15.1	13.2	-
Late night/ Early morning	14.3	8.3	17.6	12.3	16.1	20.1	12.6	-

Table 157: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane – South, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	22.7	10.0	10.4	5.5	9.3	6.4	9.3	5.7	7.0	1.8	9.4	2.6	5.9	1.5	-	-
Off peak	22.2	9.6	10.3	5.5	9.6	6.5	8.8	5.5	7.1	1.8	8.6	2.4	6.0	1.6	-	-
PM peak	21.9	9.6	10.2	5.5	8.4	6.0	8.8	5.5	6.7	1.7	7.5	1.8	5.6	1.4	-	-
Evening	17.5	7.8	9.3	5.2	8.9	7.1	8.7	6.3	7.1	1.9	9.5	2.8	5.3	1.4	-	-
Late night/ Early morning	20.6	9.3	10.1	6.8	10.8	9.9	10.7	8.4	7.5	2.3	11.2	3.7	5.1	1.4	-	-

Table 158: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Brisbane - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	6.8	2.0	3.9	3.8	7.5	7.6	8.9	-
Off peak	7.9	2.1	3.8	3.4	7.2	6.8	9.9	-
PM peak	8.3	2.3	3.5	3.6	7.3	4.9	10.5	-
Evening	5.2	2.3	4.7	4.4	7.9	9.3	9.2	-
Late night/ Early morning	10.9	2.5	9.4	8.3	11.8	14.3	10.8	-

Brisbane - South by day of week

Table 159: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	15.1	6.1	8.7	6.5	10.9	10.2	11.5	-
Weekend	15.4	7.4	11.3	7.8	14.1	13.0	15.0	-

Table 160: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane - South, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	22.7	9.6	9.6	5.1	8.5	6.0	8.8	5.4	6.7	1.6	8.7	2.3	5.3	1.3	-
Weekend	20.9	9.4	10.9	6.0	9.9	7.1	9.5	6.2	7.4	2.0	8.9	2.5	6.5	1.7	-	-

Table 161: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Brisbane - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	8.4	2.1	4.4	4.3	7.2	7.3	8.3	-
Weekend	7.6	2.3	5.5	5.0	9.7	10.0	11.9	-

Brisbane - South by season

Table 162: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Brisbane - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	15.2	7.0	10.3	7.4	12.6	12.0	14.0	-
Autumn	14.0	5.6	8.7	6.4	11.1	9.7	10.2	-
Winter	14.6	6.4	10.0	7.1	12.2	11.8	12.8	-
Spring	15.8	6.9	9.7	7.0	12.2	10.6	12.8	-

Table 163: PARF for passenger vehicle motorists engaged in low-level speeding by season in Brisbane - South, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	21.1	9.4	10.7	5.7	9.4	6.7	9.3	5.9	7.2	1.9	9.1	2.5	6.2	1.6	-
Autumn	20.8	8.9	9.0	4.7	8.8	5.9	8.8	5.3	6.5	1.6	8.0	2.1	4.5	1.1	-	-
Winter	21.9	9.7	10.4	5.7	9.8	7.0	9.3	5.9	7.4	1.9	9.4	2.7	6.0	1.6	-	-
Spring	22.9	9.8	10.3	5.7	8.7	6.4	9.0	5.7	6.8	1.8	8.2	2.2	5.9	1.5	-	-

Table 164: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Brisbane - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	9.3	2.2	4.9	5.0	8.4	8.3	10.8	-
Autumn	7.6	2.0	4.6	4.2	7.8	9.5	9.5	-
Winter	7.9	2.2	5.0	4.4	8.3	9.0	10.0	-
Spring	7.5	2.3	4.6	4.6	8.6	8.4	9.3	-

Appendix I Brisbane – West

Table 165: Proportion of passenger vehicle motorists travelling at various speeds in Brisbane West, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	82 (-0.1)	88.5 (-2.6)	90.6 (+2.6)	81.1 (-10)	68 (-14.5)	84.6 (-2.2)	93.5 (+14)	-
Above limit (total)	18 (+0.6)	11.5 (+26.6)	9.4 (-19.8)	18.9 (+92.4)	32 (+56.4)	15.4 (+14.4)	6.5 (-63.7)	-
1-5 above	10.3 (+7.5)	7.6 (+42.4)	6.5 (-9.9)	12.6 (+93.4)	19.2 (+61)	11.8 (+30.5)	5.5 (-59.7)	-
6-10 above	4.7 (-4.6)	2.8 (+18.8)	2 (-28.6)	4.3 (+97.6)	9.3 (+83.3)	2.9 (-6.4)	0.8 (-75.3)	-
11-12 above	1 (-8.7)	0.4 (-1.4)	0.3 (-40.9)	0.8 (+99.5)	1.6 (+49.6)	0.3 (-30.3)	0.1 (-79.9)	-
13-20 above	1.5 (-15.7)	0.6 (-22.6)	0.4 (-50.2)	1 (+73.4)	1.8 (-4.1)	0.4 (-45.8)	0.1 (-76.8)	-
21-30 above	0.5 (+25.7)	0.1 (-50.7)	0.1 (-54.9)	0.2 (+43.1)	0.1 (-67.3)	0.1 (-70.5)	0 (-73.7)	-
31-40 above	0 (-71.4)	0 (-66.8)	0 (-53.7)	0 (-23)	0 (-78.7)	0 (-74.7)	0 (-91.8)	-
41-50 above	0 (-53.8)	0 (-80.3)	0 (-45)	0 (+21.2)	0 (-67.6)	0 (-52.2)	0 (-68.7)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Brisbane West, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 166: PARF for passenger vehicle motorists engaged in speeding, Brisbane West, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-14.9	-12.4	-19.5	-11.3	-22.9	-14.3	-16.0	-12.3	-10.6	-4.3	-13.3	-4.9	-19.1	-5.6	-	-
Total above	59.0	19.8	28.7	11.5	31.0	9.5	38.3	18.4	25.6	6.9	14.4	3.7	4.7	0.9	-	-
1-5 above	7.0	3.3	4.8	2.9	3.9	2.6	5.4	4.4	4.6	1.5	4.8	1.5	1.8	0.4	-	-
6-10 above	12.6	5.6	7.4	4.1	4.9	2.9	8.2	6.0	7.8	2.4	4.8	1.3	1.1	0.2	-	-
11-12 above	3.0	2.1	2.2	1.1	1.6	0.8	3.0	1.9	2.5	0.7	1.2	0.3	0.2	0.0	-	-
13-20 above	11.0	5.5	7.5	2.6	5.3	2.0	9.6	4.5	4.8	1.1	2.1	0.4	0.7	0.1	-	-
21-30 above	19.9	3.0	5.0	0.7	7.5	0.8	9.2	1.4	4.8	1.1	0.9	0.1	0.8	0.1	-	-
31-40 above	4.8	0.3	1.4	0.1	5.9	0.2	2.7	0.1	0.6	0.0	0.4	0.0	0.0	0.0	-	-
41-50 above	0.6	0.0	0.4	0.0	1.9	0.1	0.2	0.0	0.5	0.0	0.1	0.0	0.1	0.0	-	-

Table 167: Proportion of heavy vehicle drivers over speed limit on typical weekend day, Brisbane West, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	87.6 (-1.8)	95.1 (-0.3)	95.4 (+3.9)	92.3 (-2)	61.4 (-22.4)	88.7 (+1.3)	96 (+16.1)	-
Above limit (total)	12.4 (+14.4)	4.9 (+5.4)	4.6 (-43.9)	7.7 (+33.1)	38.6 (+84.3)	11.3 (-9.3)	4 (-77.1)	-
1-5 above	7.1 (+8.1)	3.4 (+27.1)	3.2 (-38.7)	6.0 (+55.5)	23.6 (+90.6)	8.8 (+0.8)	3.1 (-77.3)	-
6-10 above	3.8 (+50.4)	1 (-5)	0.9 (-51.5)	1.4 (+6.6)	11.6 (+108.2)	1.7 (-39.7)	0.5 (-78.2)	-
11-12 above	0.6 (+18.6)	0.2 (-32.9)	0.2 (-47.5)	0.1 (-35.8)	1.5 (+43.6)	0.2 (-35.7)	0.1 (-79.2)	-
13-20 above	0.8 (-9.5)	0.3 (-43.5)	0.3 (-56.3)	0.2 (-36.7)	1.7 (+1)	0.3 (-28.7)	0.1 (-86.3)	-
21-30 above	0.1 (-59.4)	0.1 (-61.7)	0.1 (-61.5)	0 (-67.4)	0.2 (-23.2)	0.1 (+33.6)	0 (-80.6)	-
31-40 above	0 (-91.2)	0 (-71.6)	0 (-65.4)	0 (-52.4)	0.1 (+45.9)	0.0 (+11.5)	0.1 (+2279.3)	-
41-50 above	0.0 (-100)	0.0 (-99.6)	0.0 (-43.9)	0.0 (-100)	0.0 (+9.2)	0.1 (+27054.3)	0.1 (+32466.2)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Brisbane West, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Brisbane - West by time of day

Table 168: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane – West, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	17.4	10.4	8.4	14.5	25.7	14.8	5.3	-
Off peak	14.9	10.6	8.1	17.9	30.9	16.0	5.5	-
PM peak	14.0	9.7	7.7	16.5	23.4	10.7	5.8	-
Evening	10.6	10.8	10.7	19.3	35.0	18.0	10.6	-
Late night/ Early morning	17.8	12.8	16.6	21.5	41.8	20.8	13.7	-

Table 169: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane - West, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	21.3	10.0	12.7	7.1	9.1	5.5	13.6	9.4	11.9	3.6	8.7	2.8	2.9	0.7	-	-
Off peak	19.4	8.9	12.6	7.2	8.9	5.3	13.4	10.9	12.9	4.0	9.8	2.9	2.3	0.5	-	-
PM peak	20.8	8.6	11.3	6.5	7.5	5.0	13.8	10.2	5.2	3.1	6.2	2.4	1.4	0.6	-	-
Evening	10.9	5.7	11.7	7.4	8.6	6.3	12.8	11.2	13.6	4.7	10.6	3.2	0.6	0.8	-	-
Late night/ Early morning	24.6	10.9	13.0	8.9	9.8	9.0	15.2	12.8	14.0	5.4	10.5	3.5	3.3	1.4	-	-

Table 170: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Brisbane - West, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	11.3	3.4	3.2	6.1	28.7	9.4	3.2	-
Off peak	10.4	4.6	3.2	7.1	32.3	9.2	1.8	-
PM peak	10.8	4.3	3.0	5.7	26.1	6.8	2.5	-
Evening	6.6	4.9	4.6	9.7	44.6	12.3	5.7	-
Late night/ Early morning	13.6	6.2	8.8	11.6	49.1	15.5	6.8	-

Brisbane - West by day of week

Table 171: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane - West, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	14.8	9.2	7.5	15.5	25.5	12.2	5.0	-
Weekend	15.2	11.5	9.4	18.2	31.9	17.7	7.8	-

Table 172: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane - West, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	20.1	9.0	11.4	6.4	7.8	5.0	13.0	9.8	11.9	3.6	8.9	2.5	2.4	0.5	-
Weekend	19.2	8.8	12.9	7.7	9.5	6.0	14.1	11.0	12.8	4.2	10.4	3.2	3.1	0.8	-	-

Table 173: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Brisbane - West, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	11.2	4.0	3.6	7.1	30.6	9.2	2.9	-
Weekend	10.4	5.4	4.9	7.6	40.9	12.0	4.6	-

Brisbane - West by season

Table 174: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Brisbane - West, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	15.4	10.5	8.8	17.0	28.6	14.4	6.2	-
Autumn	14.5	8.5	7.4	14.7	26.1	12.7	5.4	-
Winter	15.7	10.1	8.6	17.0	28.3	14.7	6.9	-
Spring	14.0	10.9	8.2	17.2	27.8	15.1	5.9	-

Table 175: PARF for passenger vehicle motorists engaged in low-level speeding by season in Brisbane - West, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	20.7	9.4	12.3	7.1	8.6	5.6	15.2	10.8	12.5	3.9	9.9	2.9	2.8	0.7	-
Autumn	22.0	8.9	11.3	6.0	8.0	4.9	13.0	9.3	11.3	3.6	8.5	2.5	2.2	0.6	-	-
Winter	21.7	9.5	12.2	7.3	9.3	5.8	12.7	10.4	13.1	4.1	9.8	3.0	3.3	0.8	-	-
Spring	16.1	7.9	12.6	7.4	8.5	5.4	13.2	10.6	12.1	3.8	9.2	2.9	2.7	0.6	-	-

Table 176: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Brisbane - West, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	14.4	4.2	4.3	7.0	35.5	8.5	3.8	-
Autumn	8.8	5.0	3.9	6.9	31.9	9.7	3.4	-
Winter	9.5	4.9	4.3	8.5	35.9	12.0	3.8	-
Spring	10.4	3.7	3.7	7.4	35.5	11.9	3.7	-

Appendix J Brisbane Inner City

Table 177: Proportion of passenger vehicle motorists travelling at various speeds in Brisbane Inner City, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	81.1 (-1.1)	92.2 (+1.4)	93.3 (+5.6)	84.5 (-6.3)	87.8 (+10.4)	89.8 (+3.8)	-	-
Above limit (total)	18.9 (+5.3)	7.8 (-14.1)	6.7 (-42.3)	15.5 (+58.2)	12.2 (-40.4)	10.2 (-24.4)	-	-
1-5 above	9.9 (+3.2)	4.8 (-9.9)	4.4 (-39.3)	10.3 (+58.6)	8.9 (-25.6)	6.6 (-26.4)	-	-
6-10 above	5.4 (+9.1)	1.8 (-22.3)	1.5 (-46.9)	3.6 (+63.5)	2.3 (-55.1)	2 (-34)	-	-
11-12 above	1.2 (+8.2)	0.3 (-20.4)	0.3 (-50)	0.6 (+58.4)	0.4 (-63.7)	0.4 (-19.4)	-	-
13-20 above	1.8 (+1)	0.6 (-15.6)	0.5 (-46.7)	0.9 (+44.7)	0.5 (-72.4)	0.8 (+24.2)	-	-
21-30 above	0.4 (-7.6)	0.2 (-2.9)	0.1 (-57.3)	0.2 (+24.7)	0.1 (-77.1)	0.3 (+31.8)	-	-
31-40 above	0.3 (+68.4)	0 (-30.7)	0 (-29.1)	0 (-19.9)	0 (-62.4)	0 (+17.6)	-	-
41-50 above	0 (+68.5)	0 (-73.2)	0 (-19.8)	0 (+43.6)	0 (-27.9)	0 (-100)	-	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Brisbane Inner City, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 178: PARF for passenger vehicle motorists in Brisbane Inner City, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-8.2	-8.4	-18.2	-11.0	-20.3	-12.7	-17.7	-13.0	-17.9	-6.2	-14.7	-5.2	-	-	-	-
Total above	72.7	23.2	35.8	10.9	36.0	9.0	37.6	16.5	12.0	2.3	18.0	3.5	-	-	-	-
1-5 above	6.4	3.3	3.1	2.0	2.9	1.9	5.1	3.9	2.3	0.7	3.0	0.9	-	-	-	-
6-10 above	13.4	6.6	5.2	3.0	4.1	2.5	7.6	5.4	2.4	0.6	3.3	0.9	-	-	-	-
11-12 above	3.1	2.6	1.9	1.0	1.5	0.8	2.9	1.8	0.8	0.2	1.1	0.3	-	-	-	-
13-20 above	10.7	6.6	9.2	3.3	6.5	2.4	8.7	3.9	1.9	0.4	4.1	0.8	-	-	-	-
21-30 above	13.5	2.3	12.8	1.4	8.0	0.8	10.3	1.4	1.9	0.4	4.0	0.5	-	-	-	-
31-40 above	23.7	1.6	3.1	0.1	10.0	0.4	2.7	0.1	1.4	0.1	2.0	0.1	-	-	-	-
41-50 above	2.0	0.1	0.5	0.0	3.1	0.1	0.3	0.0	1.4	0.1	0.5	0.0	-	-	-	-

Table 179: Proportion of heavy vehicle drivers travelling at various speeds in Brisbane Inner City, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	93.2 (+4.5)	97.8 (+2.5)	97.3 (+6)	90 (-4.5)	87.4 (+10.6)	90.8 (+3.7)	-	-
Above limit (total)	6.8 (-37.2)	2.2 (-51.8)	2.7 (-67.3)	10 (+72.4)	12.6 (-40)	9.2 (-26)	-	-
1-5 above	3.9 (-40.2)	1.2 (-53.8)	1.8 (-65.5)	6.8 (+76.5)	8.1 (-34.4)	5.8 (-33.1)	-	-
6-10 above	1.8 (-28.4)	0.5 (-51.9)	0.5 (-70.7)	2 (+57.2)	2.8 (-49.4)	1.8 (-35.1)	-	-
11-12 above	0.3 (-31.8)	0.1 (-47.8)	0.1 (-73.4)	0.4 (+62.4)	0.4 (-58.4)	0.3 (-11.4)	-	-
13-20 above	0.5 (-46.4)	0.3 (-38.9)	0.2 (-73.6)	0.6 (+77.7)	0.6 (-60.9)	0.4 (-1.8)	-	-
21-30 above	0.2 (-33.8)	0.1 (-46.5)	0.1 (-61.1)	0.2 (+102.8)	0.3 (+23.9)	0.1 (+39.6)	-	-
31-40 above	0.1 (-2.4)	0 (-76)	0 (-51.1)	0 (+121.8)	0.1 (+192.9)	0.1 (+258.6)	-	-
41-50 above	0 (-91.6)	0 (-96.6)	0 (-39)	0 (+160.7)	0.1 (+554.9)	0.5 (+146725.2)	-	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Brisbane Inner City, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Brisbane Inner City by time of day

Table 180: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane Inner City, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	15.2	6.7	5.5	13.3	10.3	9.9	-	-
Off peak	15.2	6.4	5.8	13.7	11.5	8.6	-	-
PM peak	14.7	6.3	5.0	11.2	9.5	7.1	-	-
Evening	14.7	7.2	7.2	19.0	13.2	9.5	-	-
Late night/ Early morning	22.4	10.4	12.7	23.7	18.8	9.8	-	-

Table 181: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Brisbane Inner City, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	19.4	9.8	8.3	5.0	6.9	4.3	12.5	8.9	4.5	1.2	6.7	1.9	-	-	-	-
Off peak	20.1	10.0	8.4	4.9	7.1	4.3	12.5	8.9	4.7	1.3	6.1	1.7	-	-	-	-
PM peak	19.4	9.8	7.9	4.8	5.9	3.8	12.5	8.3	3.2	1.1	4.9	1.5	-	-	-	-
Evening	19.7	9.7	8.3	5.3	7.0	4.8	13.2	11.4	4.7	1.5	7.0	1.9	-	-	-	-
Late night/ Early morning	23.0	12.4	9.0	7.4	9.5	7.7	14.2	13.3	4.9	2.2	6.5	1.9	-	-	-	-

Table 182: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Brisbane Inner City, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	4.8	1.3	1.6	7.2	11.3	5.9	-	-
Off peak	4.6	1.6	1.7	7.3	11.0	6.6	-	-
PM peak	5.6	1.8	1.6	7.1	8.2	7.5	-	-
Evening	6.1	2.1	2.6	9.7	8.3	8.4	-	-
Late night/ Early morning	8.2	2.6	4.8	14.8	16.0	11.0	-	-

Brisbane Inner City by day of week

Table 183: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane Inner City, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	14.6	6.1	5.2	12.4	10.4	8.0	-	-
Weekend	16.0	7.2	6.6	15.5	11.9	9.5	-	-

Table 184: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Brisbane Inner City, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	19.3	9.6	7.8	4.7	6.4	4.0	12.1	8.7	4.5	1.2	6.1	1.7	-	-	-
Weekend	20.4	10.3	8.7	5.3	7.4	4.7	13.3	10.0	4.6	1.3	6.4	1.8	-	-	-	-

Table 185: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Brisbane Inner City, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	5.1	1.6	2.0	8.2	9.6	6.1	-	-
Weekend	6.9	2.1	2.8	9.7	13.2	10.4	-	-

Brisbane Inner City by season

Table 186: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Brisbane Inner City, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	15.0	6.6	6.0	14.4	11.2	8.7	-	-
Autumn	13.8	5.5	5.0	10.8	10.3	6.8	-	-
Winter	14.5	6.4	5.8	13.2	11.3	8.8	-	-
Spring	16.4	7.0	6.0	14.6	11.0	8.8	-	-

Table 187: PARF for passenger vehicle motorists engaged in low-level speeding by season in Brisbane Inner City, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
Summer	19.6	9.8	8.3	4.9	6.8	4.4	12.9	9.4	4.8	1.3	6.5	1.8	-	-	-	-
Autumn	19.4	9.4	7.6	4.2	5.8	3.7	9.3	7.6	4.2	1.2	5.0	1.3	-	-	-	-
Winter	19.6	9.9	8.5	5.1	7.1	4.4	12.7	9.6	4.9	1.3	6.9	1.9	-	-	-	-
Spring	20.5	10.5	8.4	5.4	7.3	4.7	13.0	9.6	3.7	1.2	5.2	1.7	-	-	-	-

Table 188: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Brisbane Inner City, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	5.6	1.8	2.2	8.2	10.2	7.3	-	-
Autumn	5.3	1.7	2.3	6.8	9.6	7.1	-	-
Winter	5.8	1.9	2.3	7.9	11.7	7.4	-	-
Spring	6.2	1.6	2.4	11.6	11.7	8.3	-	-

Appendix K Cairns

Table 189: Proportion of passenger vehicle motorists travelling at various speeds in Cairns, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	55.7 (-32.1)	90.2 (-0.8)	86.9 (-1.7)	85.5 (-5.2)	82.6 (+3.8)	77.8 (-10.1)	85.1 (+3.7)	-
Above limit (total)	44.3 (+147.1)	9.8 (+8)	13.1 (+12.7)	14.5 (+47.8)	17.4 (-14.7)	22.2 (+64.6)	14.9 (-17)	-
1-5 above	18.7 (+95.7)	5.7 (+8)	8.3 (+15.1)	9.3 (+42.6)	11.8 (-0.9)	14.6 (+61.3)	10.3 (-24.2)	-
6-10 above	14 (+183.8)	2.6 (+11.5)	2.9 (+8)	3.5 (+62.4)	3.7 (-26.7)	4.5 (+46.7)	2.7 (-16.1)	-
11-12 above	3.7 (+244.9)	0.4 (+4.6)	0.6 (+11.3)	0.6 (+68.5)	0.7 (-36.8)	0.9 (+85.8)	0.5 (+8.4)	-
13-20 above	6.6 (+272.9)	0.8 (+7.9)	1 (+15.6)	0.9 (+52.1)	1 (-47.1)	1.5 (+123.9)	1 (+67.6)	-
21-30 above	1.1 (+172.2)	0.1 (-19.2)	0.2 (-3.5)	0.1 (+3.1)	0.2 (-51.1)	0.7 (+254.7)	0.4 (+188.3)	-
31-40 above	0.1 (-4.9)	0 (-42.5)	0.1 (-17.1)	0 (-48.9)	0 (-49.7)	0 (+31.1)	0 (+249.3)	-
41-50 above	0 (-68.4)	0 (-84.9)	0 (-21.8)	0 (-100)	0 (-31.6)	0 (-100)	0 (+63.2)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Cairns, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 190: PARF for passenger vehicle motorists in Cairns, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-4.4	-5.1	-16.1	-9.4	-17.5	-13.0	-17.9	-12.6	-14.2	-5.0	-7.4	-3.3	-18.6	-6.6	-	-
Total above	84.7	40.5	35.8	13.0	41.8	14.5	34.6	16.0	18.4	3.9	24.8	6.4	16.7	3.2	-	-
1-5 above	7.6	4.2	3.8	2.4	3.7	2.9	4.8	3.5	3.2	1.0	4.5	1.7	2.7	0.8	-	-
6-10 above	21.0	11.0	7.4	4.2	5.5	4.0	7.7	5.2	3.8	1.0	4.4	1.5	2.8	0.7	-	-
11-12 above	5.4	5.2	2.5	1.2	2.2	1.4	3.1	1.8	1.3	0.3	2.0	0.6	0.9	0.2	-	-
13-20 above	22.4	15.3	10.9	3.9	9.3	4.1	9.9	4.3	3.6	0.7	4.9	1.3	3.6	0.7	-	-
21-30 above	20.6	4.2	8.4	1.1	11.1	1.5	7.2	1.1	3.6	0.7	5.0	0.9	5.3	0.7	-	-
31-40 above	7.4	0.6	2.5	0.1	7.8	0.4	1.9	0.1	1.6	0.1	4.0	0.5	1.2	0.1	-	-
41-50 above	0.2	0.0	0.3	0.0	2.0	0.1	0.0	0.0	1.3	0.1	0.0	0.0	0.3	0.0	-	-

Table 191: Proportion of heavy vehicle drivers travelling at various speeds in Cairns, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	75.6 (-15.2)	97 (+1.7)	92.7 (+1)	90.2 (-4.3)	84.2 (+6.6)	81.3 (-7.2)	90.2 (+9)	-
Above limit (total)	24.4 (+124.7)	3 (-34.3)	7.3 (-11.1)	9.8 (+69.5)	15.8 (-24.8)	18.7 (+50.7)	9.8 (-43.1)	-
1-5 above	14.3 (+117.6)	2 (-23.6)	5.1 (-0.9)	7 (+82.1)	10.8 (-12.5)	14.4 (+65.8)	8.3 (-39.5)	-
6-10 above	6.1 (+139.7)	0.6 (-40.1)	1.5 (-17.3)	1.9 (+51.5)	3.7 (-33.4)	3.7 (+32.5)	1.1 (-54.8)	-
11-12 above	1.2 (+145.1)	0.1 (-50.2)	0.2 (-32.6)	0.4 (+80.6)	0.5 (-48.7)	0.4 (+7.4)	0.1 (-59.2)	-
13-20 above	2.2 (+135.7)	0.2 (-61.2)	0.3 (-48.2)	0.4 (+22.7)	0.6 (-63.3)	0.2 (-56.5)	0.2 (-69)	-
21-30 above	0.6 (+101.7)	0.1 (-55.5)	0.1 (-58.5)	0.1 (-18.1)	0.1 (-67.7)	0 (-83.1)	0.1 (-62.4)	-
31-40 above	0.1 (+55.1)	0 (-82.3)	0 (-60.2)	0 (-81.8)	0 (-66.4)	0 (-100)	0 (-58.9)	-
41-50 above	0 (+54.8)	0 (-93.9)	0 (-75.4)	0 (-100)	0 (-86.3)	0 (-100)	0 (+411.6)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Cairns, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Cairns by time of day

Table 192: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Cairns, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	32.6	8.8	10.6	10.0	15.0	22.5	12.8	-
Off peak	32.2	7.8	11.1	13.7	15.0	13.4	13.7	-
PM peak	33.2	9.0	11.6	12.2	15.6	18.8	14.6	-
Evening	36.8	7.7	12.2	17.9	17.2	27.6	10.5	-
Late night/ Early morning	27.8	9.6	18.3	27.6	23.1	47.1	6.6	-

Table 193: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Cairns, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	28.4	14.8	12.3	6.9	9.4	6.6	12.2	7.3	7.5	2.0	8.5	3.6	4.5	1.4	-	-
Off peak	29.0	15.4	10.7	6.2	9.4	6.9	12.6	9.0	6.9	1.9	7.7	2.4	6.0	1.7	-	-
PM peak	29.2	15.3	11.7	7.1	9.0	7.0	12.1	8.3	6.7	1.9	9.0	3.0	5.1	1.6	-	-
Evening	29.0	15.5	10.3	6.1	9.2	7.2	15.9	11.6	7.0	2.0	17.2	5.4	3.5	1.2	-	-
Late night/ Early morning	21.5	12.9	10.0	7.4	9.6	9.1	10.5	14.9	8.9	3.0	11.5	5.5	1.5	0.8	-	-

Table 194: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Cairns, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	20.7	2.2	5.7	7.6	13.2	15.0	7.9	-
Off peak	19.1	2.4	5.6	7.1	13.0	12.1	8.7	-
PM peak	22.0	2.8	6.5	10.0	14.2	17.1	9.8	-
Evening	18.0	3.3	7.8	9.4	15.5	39.8	8.2	-
Late night/ Early morning	22.5	3.9	10.5	16.4	20.4	26.4	15.7	-

Cairns by day of week

Table 195: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Cairns, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	31.4	7.3	9.4	9.2	13.8	23.7	13.0	-
Weekend	34.2	9.8	13.6	17.5	17.4	14.4	13.0	-

Table 196: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Cairns, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
Weekday	28.8	15.1	10.8	6.0	8.4	6.1	10.5	6.6	6.4	1.8	11.0	3.7	5.8	1.6	-	-
Weekend	28.5	15.2	11.7	7.3	10.2	7.8	14.2	10.9	7.7	2.2	7.0	2.6	4.6	1.4	-	-

Table 197: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Cairns, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	18.9	2.5	6.1	8.0	14.7	16.2	8.8	-
Weekend	22.6	3.0	7.5	10.3	14.2	22.7	11.0	-

Cairns by season

Table 198: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Cairns, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	33.9	8.6	11.6	13.5	15.1	14.3	15.6	-
Autumn	29.5	7.1	10.8	12.6	16.0	23.5	17.9	-
Winter	30.4	8.1	10.9	13.3	15.0	24.4	12.7	-
Spring	33.8	8.8	11.5	12.2	16.3	17.1	11.6	-

Table 199: PARF for passenger vehicle motorists engaged in low-level speeding by season in Cairns, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
Summer	29.7	15.5	11.3	6.7	9.7	7.1	12.8	9.5	6.9	1.9	10.4	3.0	5.7	1.7	-	-
Autumn	26.2	14.0	10.2	5.8	8.6	6.6	13.9	8.9	7.1	2.0	9.8	3.5	6.5	2.1	-	-
Winter	28.8	15.3	11.0	6.6	9.4	6.8	12.0	8.3	6.9	1.9	9.4	3.3	4.8	1.4	-	-
Spring	28.9	15.3	11.8	7.0	9.2	7.1	11.9	8.2	7.3	2.1	7.5	2.9	4.6	1.3	-	-

Table 200: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Cairns, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	20.3	2.6	6.9	9.5	14.1	18.0	9.5	-
Autumn	19.8	2.6	6.5	8.2	14.9	15.9	10.2	-
Winter	19.7	2.8	6.3	7.2	14.3	19.1	8.7	-
Spring	21.4	2.8	6.9	10.4	15.2	18.6	9.6	-

Appendix L Darling Downs – Maranoa

Table 201: Proportion of passenger vehicle motorists travelling at various speeds in Darling Downs – Maranoa, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	86.9 (+5.9)	92.1 (+1.2)	86.9 (-1.6)	84.1 (-6.7)	76.1 (-4.3)	72 (-16.8)	75 (-8.5)	87.2 (+3.9)
Above limit (total)	13.1 (-27.1)	7.9 (-12.5)	13.1 (+12)	15.9 (+61.8)	23.9 (+16.9)	28 (+107.6)	25 (+38.8)	12.8 (-20.3)
1-5 above	6.2 (-35.5)	4.7 (-11.4)	7.4 (+2.1)	9.6 (+47.4)	11.9 (-0.3)	16.2 (+79.8)	18.9 (+39.4)	9.1 (-29)
6-10 above	2.8 (-43.6)	2.1 (-11.9)	3.1 (+13.2)	3.4 (+58.4)	6 (+18.3)	7.5 (+144.3)	4 (+22.8)	2.3 (-6.4)
11-12 above	0.9 (-20.6)	0.4 (-11.2)	0.6 (+29.2)	0.7 (+80.2)	1.5 (+42.1)	1.8 (+285.4)	0.6 (+41.7)	0.4 (+55.4)
13-20 above	2.3 (+28.2)	0.6 (-21.2)	1.3 (+45.4)	1.6 (+163.6)	3.4 (+80.4)	2.1 (+204.1)	1 (+77.5)	0.9 (+92.5)
21-30 above	0.7 (+83.5)	0.1 (-26.5)	0.5 (+113.9)	0.5 (+268.3)	1 (+125.7)	0.2 (+29.2)	0.4 (+163.9)	0 (+157.5)
31-40 above	0.2 (+26.7)	0.0 (+3.7)	0.1 (+105.9)	0.1 (+192.7)	0.1 (+34.9)	0.1 (+248.5)	0.0 (+143.4)	0.0 (+317)
41-50 above	0 (+162.8)	0 (+93)	0 (+53.7)	0 (+1116.5)	0 (+22.5)	0 (-100)	0 (+137.8)	0 (-100)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Darling Downs- Maranoa, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 202: PARF for passenger vehicle motorists in Darling Downs – Maranoa, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-9.5	-10.7	-14.3	-9.2	-11.5	-11.0	-14.1	-13.0	-8.4	-3.6	-7.6	-3.4	-10.6	-4.1	-15.9	-5.0
Total above	73.0	22.6	36.2	11.8	57.4	18.2	51.9	19.9	37.1	8.8	30.2	8.1	17.0	4.0	11.3	2.3
1-5 above	4.1	2.2	3.2	2.2	2.6	2.6	3.4	3.3	2.8	1.0	4.5	1.7	4.0	1.3	2.9	0.7
6-10 above	6.7	3.5	5.9	3.7	4.6	4.2	5.6	4.9	5.2	1.6	7.7	2.5	3.5	1.0	2.7	0.6
11-12 above	2.0	1.9	2.2	1.2	2.0	1.6	1.9	1.4	2.4	0.7	2.8	0.8	1.0	0.3	1.0	0.2
13-20 above	13.4	8.9	8.0	3.2	9.5	5.3	11.0	6.2	10.7	2.5	8.6	2.2	3.3	0.7	3.5	0.6
21-30 above	28.0	4.6	8.5	1.2	20.5	3.3	22.3	3.6	10.7	2.5	2.6	0.4	4.1	0.6	0.6	0.1
31-40 above	16.1	1.2	4.7	0.2	15.1	1.0	6.1	0.4	3.4	0.3	3.5	0.3	0.7	0.1	0.6	0.0
41-50 above	2.8	0.2	3.8	0.2	3.1	0.2	1.6	0.1	1.9	0.1	0.5	0.0	0.3	0.0	0.0	0.0

Table 203: Proportion of heavy vehicle drivers travelling at various speeds in Darling Downs – Maranoa, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	91.1 (+2.2)	95.5 (+0.1)	90.9 (-1)	94.3 (+0.2)	72 (-8.9)	72.9 (-16.8)	80.1 (-3.2)	96 (+3.7)
Above limit (total)	8.9 (-18.1)	4.5 (-2)	9.1 (+11.3)	5.7 (-2.6)	28 (+33.4)	27.1 (+118.4)	19.9 (+15.5)	4 (-46.2)
1-5 above	4.8 (-27)	2.3 (-13.6)	5.7 (+10.1)	3.2 (-16.8)	14.9 (+20.2)	18.2 (+109.3)	15.9 (+15.8)	2.7 (-47.8)
6-10 above	1.7 (-31.2)	0.8 (-30.4)	1.9 (+7.9)	1.5 (+18.2)	8.1 (+45)	6.7 (+142.1)	2.5 (+4.3)	0.8 (-43.1)
11-12 above	0.3 (-32.4)	0.2 (-11.6)	0.4 (+12.7)	0.3 (+27.8)	1.8 (+65.6)	1 (+172.2)	0.4 (+16.5)	0.1 (-54.4)
13-20 above	1 (+8.4)	0.7 (+44.8)	0.7 (+14.6)	0.5 (+28.3)	2.8 (+72.7)	1 (+142.1)	0.7 (+48.2)	0.4 (-37.5)
21-30 above	0.9 (+202.5)	0.5 (+196.2)	0.3 (+62.5)	0.1 (+51.1)	0.4 (+48)	0.1 (+35.3)	0.3 (+41.6)	0 (+85.5)
31-40 above	0.1 (+43.9)	0.1 (+352.5)	0.1 (+28.9)	0.1 (+265.9)	0 (-35.8)	0 (-100)	0 (+93.9)	0 (+161.3)
41-50 above	0 (+352)	0.1 (+86.8)	0 (-20.1)	0 (-100)	0 (-27.5)	0 (-100)	0 (+172)	0 (-)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Darling Downs- Maranoa, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Darling Downs - Maranoa by time of day

Table 204: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Darling Downs - Maranoa, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	7.9	7.5	9.7	11.6	17.0	23.7	22.8	10.3
Off peak	8.1	6.6	10.6	14.3	17.1	24.9	22.0	13.3
PM peak	10.0	6.8	11.0	14.0	20.9	24.6	24.5	14.2
Evening	11.3	9.4	11.3	9.1	15.3	12.3	23.7	2.7
Late night/ Early morning	21.3	3.9	10.7	7.5	18.3	23.2	22.5	2.0

Table 205: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Darling Downs - Maranoa, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	8.3	4.9	9.7	6.4	7.5	6.5	9.3	7.9	8.2	2.6	13.4	4.6	7.5	2.3	4.7	1.1
Off peak	10.7	5.4	9.0	5.5	7.2	6.8	8.0	8.2	7.6	2.5	11.9	4.1	7.3	2.3	6.7	1.7
PM peak	11.5	6.1	7.9	5.5	6.3	6.7	10.6	8.7	8.8	3.0	11.2	4.2	8.0	2.6	6.0	1.5
Evening	20.1	7.1	12.0	7.9	8.0	7.3	15.1	8.9	7.5	2.5	12.8	3.4	5.9	2.0	2.2	0.6
Late night/ Early morning	30.3	13.0	8.1	5.4	9.5	7.8	7.4	6.2	8.6	2.7	12.3	3.7	4.6	1.6	2.0	0.4

Table 206: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Darling Downs - Maranoa, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	7.7	2.7	7.3	4.4	21.8	21.8	16.8	4.3
Off peak	5.9	2.8	7.0	5.2	22.6	25.2	17.6	3.1
PM peak	5.2	3.0	7.5	4.1	23.4	21.9	19.8	4.0
Evening	6.2	4.9	8.7	4.0	26.7	24.1	21.4	3.0
Late night/ Early morning	15.1	5.7	10.3	5.7	21.6	34.1	19.5	2.1

Darling Downs - Maranoa by day of week

Table 207: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Darling Downs - Maranoa, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	7.2	5.4	9.0	9.5	16.3	20.2	20.5	10.2
Weekend	12.0	9.1	13.4	16.4	21.2	28.8	27.0	14.2

Table 208: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Darling Downs - Maranoa, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	10.0	4.8	8.0	4.9	7.6	6.1	7.4	6.3	8.1	2.5	11.3	3.8	6.6	2.0	5.2
Weekend	11.9	7.0	10.4	7.4	6.7	7.8	10.0	9.8	8.0	2.9	13.1	4.8	8.8	2.8	6.5	1.6

Table 209: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Darling Downs - Maranoa, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	6.8	2.8	7.1	4.8	22.7	25.3	18.3	4.3
Weekend	5.7	4.1	8.7	4.4	23.4	24.3	18.9	2.3

Darling Downs - Maranoa by season

Table 210: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Darling Downs - Maranoa, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	11.0	8.4	12.0	13.0	21.4	21.2	25.8	10.7
Autumn	7.2	6.0	8.8	11.7	15.0	15.6	18.6	14.3
Winter	8.3	6.0	9.1	14.6	16.3	24.8	20.8	13.2
Spring	9.2	6.8	11.2	13.9	18.1	26.8	23.2	9.2

Table 211: PARF for passenger vehicle motorists engaged in low-level speeding by season in Darling Downs - Maranoa, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	10.4	6.2	9.4	7.0	8.2	7.2	10.4	8.9	8.4	2.9	11.3	3.8	8.3	2.6	5.7
Autumn	9.4	5.1	9.7	5.4	6.5	6.1	8.6	8.1	7.8	2.4	10.1	3.1	6.4	1.9	3.3	1.7
Winter	9.7	5.0	7.9	5.2	6.2	6.5	7.6	7.0	7.8	2.6	13.7	5.1	6.9	2.4	5.3	1.4
Spring	14.3	6.3	9.3	5.7	7.6	7.2	8.5	8.3	8.1	2.7	12.7	4.6	7.4	2.3	4.4	1.0

Table 212: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Darling Downs - Maranoa, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	10.1	3.2	8.4	5.4	24.5	26.2	19.0	3.4
Autumn	6.3	3.1	7.3	4.0	21.6	21.4	18.1	3.1
Winter	5.3	3.5	7.4	4.1	21.6	24.0	18.3	3.7
Spring	5.6	2.3	7.8	5.2	23.7	26.2	19.0	3.7

Appendix M Central Queensland

Table 213: Proportion of passenger vehicle motorists travelling at various speeds in Central Queensland, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	71.6 (-12.7)	91.2 (+0.2)	87.7 (-0.8)	87.1 (-3.5)	76.8 (-3.5)	80 (-7.5)	75.4 (-8.1)	76.4 (-9)
Above limit (total)	28.4 (+58.3)	8.8 (-2.2)	12.3 (+5.7)	12.9 (+31.8)	23.2 (+13.5)	20 (+48.5)	24.6 (+37)	23.6 (+46.9)
1-5 above	12 (-24.9)	5.1 (-3.9)	8.2 (+13.1)	8.6 (+31.6)	14.6 (+22.3)	14.7 (+63.3)	17.4 (+28.8)	15.6 (+21.3)
6-10 above	8.8 (+79.7)	2.5 (+8)	2.6 (-3.6)	2.7 (+25.5)	5.4 (+6.6)	3.6 (+17.8)	4.7 (+44.7)	6 (+146.5)
11-12 above	2.3 (+118.5)	0.4 (+10.6)	0.4 (-10.5)	0.4 (+15.9)	1 (-3.4)	0.6 (+25.3)	0.8 (+87.9)	0.8 (+216.6)
13-20 above	4.3 (+139.3)	0.6 (-17.3)	0.8 (-13.2)	0.8 (+43.9)	1.8 (-2.2)	0.8 (+17.7)	1.2 (+110.2)	1.1 (+121.4)
21-30 above	0.9 (+115.6)	0.1 (-40.7)	0.2 (-3.1)	0.3 (+108.3)	0.3 (-22)	0.2 (+6.9)	0.4 (+152.7)	0.1 (+296.7)
31-40 above	0.1 (-52.3)	0 (-36.9)	0.1 (-5.5)	0.1 (+182.1)	0 (-39.6)	0 (+44.1)	0 (+351.9)	0 (+260.5)
41-50 above	0 (-17.6)	0 (-75.6)	0 (-35)	0 (+160.5)	0 (-56.3)	0 (-100)	0 (+564)	0 (+319.3)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Central Queensland, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 214: PARF for passenger vehicle motorists in Central Queensland, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-6.1	-6.2	-15.6	-8.8	-18.2	-13.5	-14.4	-11.8	-12.5	-4.8	-10.6	-4.4	-10.7	-4.3	-8.4	-2.9
Total above	78.6	33.5	34.0	11.9	41.4	13.1	45.3	15.7	24.0	5.7	19.6	4.9	18.8	4.4	18.5	4.3
1-5 above	6.5	3.4	3.8	2.3	3.7	2.9	4.0	3.5	3.6	1.2	5.0	1.7	3.8	1.3	4.4	1.3
6-10 above	17.8	8.8	7.6	4.2	5.1	3.7	5.4	4.3	4.9	1.4	4.9	1.5	3.9	1.2	6.4	1.6
11-12 above	4.8	4.2	2.8	1.3	1.9	1.2	1.9	1.3	1.7	0.4	1.2	0.3	1.3	0.3	1.7	0.4
13-20 above	20.1	12.4	8.8	3.1	7.4	3.2	8.4	4.0	5.8	1.3	3.3	0.8	3.6	0.8	4.4	0.8
21-30 above	23.4	4.2	7.6	0.9	12.4	1.6	16.6	2.2	5.8	1.3	2.4	0.4	4.0	0.6	0.9	0.1
31-40 above	5.2	0.4	3.0	0.1	9.3	0.5	8.7	0.5	1.6	0.1	1.5	0.1	1.4	0.1	0.6	0.0
41-50 above	0.7	0.1	0.5	0.0	1.7	0.1	0.3	0.0	0.7	0.0	1.3	0.1	0.9	0.1	0.3	0.0

Table 215: Proportion of heavy vehicle drivers travelling at various speeds in Central Queensland, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	83.9 (-5.9)	92.2 (-3.3)	89.9 (-2.1)	92.6 (-1.7)	66.5 (-15.8)	87.4 (-0.2)	74.7 (-9.7)	90.4 (-2.4)
Above limit (total)	16.1 (+48.2)	7.8 (+68.3)	10.1 (+23.2)	7.4 (+28)	33.5 (+59.7)	12.6 (+1.3)	25.3 (+46.8)	9.6 (+29.8)
1-5 above	8.6 (+30.6)	4.4 (+66.3)	6.9 (+32.8)	5.2 (+35.1)	18.9 (+53.3)	9.8 (+12.8)	19.8 (+44.1)	6.5 (+25)
6-10 above	4.9 (+92.5)	2.2 (+104.3)	2.1 (+16.2)	1.5 (+18.3)	9.7 (+74.6)	2.3 (-16.9)	3.8 (+56.7)	1.8 (+30.7)
11-12 above	0.8 (+65.9)	0.4 (+76.3)	0.4 (+11.7)	0.3 (+16.5)	2 (+90.1)	0.2 (-58.8)	0.5 (+54.8)	0.3 (+4.2)
13-20 above	1.4 (+48.7)	0.6 (+37.3)	0.5 (-7.4)	0.3 (-3)	2.5 (+52.6)	0.3 (-38.9)	0.8 (+66.6)	1.1 (+73.3)
21-30 above	0.4 (+39.3)	0.1 (-17.5)	0.1 (-31)	0.1 (+13)	0.2 (-14)	0 (-84.2)	0.3 (+44.9)	0 (+330.2)
31-40 above	0.1 (-7.3)	0 (-51.6)	0 (-28.3)	0 (+39.1)	0 (+2.9)	0 (-33.4)	0 (+54.1)	0 (+1026.9)
41-50 above	0 (+143.5)	0 (-85)	0 (-52.1)	0 (-100)	0 (-19.2)	0 (-100)	0 (+582.5)	0 (-)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Central Queensland, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Central Queensland by time of day

Table 216: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Central Queensland, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	19.0	6.8	10.4	10.3	18.7	17.9	20.0	25.3
Off peak	20.9	6.8	9.9	11.1	18.2	17.9	20.9	22.6
PM peak	24.3	10.1	12.0	10.5	22.0	15.9	26.3	19.4
Evening	12.2	13.4	13.6	12.7	21.2	16.6	26.9	6.9
Late night/ Early morning	25.6	10.0	19.9	21.8	33.4	33.8	23.5	0.2

Table 217: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Central Queensland, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	19.9	10.6	10.5	5.9	8.5	6.2	10.5	7.6	8.0	2.4	9.6	3.2	6.9	2.3	12.6	3.6
Off peak	25.5	12.7	10.5	5.8	8.7	6.1	9.2	7.5	8.0	2.4	10.3	3.2	7.8	2.4	8.9	2.4
PM peak	28.6	13.9	13.1	8.0	9.3	7.1	9.8	7.2	8.7	2.7	8.6	2.8	8.5	2.9	12.4	3.2
Evening	18.3	8.4	17.6	10.6	10.9	7.9	6.9	7.9	9.2	2.9	7.3	2.6	7.4	2.8	4.1	0.8
Late night/ Early morning	32.1	14.3	12.8	7.7	8.3	9.9	9.1	11.6	11.3	4.4	14.7	5.5	4.0	2.0	0.1	0.0

Table 218: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Central Queensland, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	11.4	5.9	8.6	6.6	27.6	10.7	22.5	11.2
Off peak	11.5	5.4	7.7	4.9	28.3	9.7	23.0	7.3
PM peak	13.9	6.1	8.1	5.2	26.7	8.8	23.9	7.1
Evening	14.4	8.8	8.4	6.9	29.5	13.0	27.3	3.0
Late night/ Early morning	20.0	9.9	14.2	11.6	33.4	20.4	24.2	11.5

Central Queensland by day of week

Table 219: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Central Queensland, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	22.2	6.5	10.0	10.0	18.8	17.2	20.1	21.6
Weekend	17.4	11.6	13.7	13.3	24.0	24.8	26.9	21.6

Table 220: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Central Queensland, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	24.8	12.8	10.3	5.5	8.5	6.1	8.7	6.9	8.1	2.4	9.5	3.0	7.3	2.3	12.1
Weekend	23.0	10.9	13.8	9.1	9.8	8.1	10.4	8.9	9.3	3.2	11.5	4.3	8.2	3.0	8.4	2.3

Table 221: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Central Queensland, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	13.6	5.2	8.3	6.0	27.4	12.2	23.6	7.3
Weekend	13.2	9.4	10.3	7.8	31.3	12.0	23.9	10.2

Central Queensland by season

Table 222: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Central Queensland, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	21.6	8.1	11.0	11.7	19.9	16.3	24.9	29.9
Autumn	23.7	6.0	10.5	10.8	19.6	17.4	20.6	10.6
Winter	21.8	6.5	10.8	12.0	19.1	14.8	20.1	23.2
Spring	18.7	9.1	11.0	10.3	20.5	23.8	21.1	11.4

Table 223: PARF for passenger vehicle motorists engaged in low-level speeding by season in Central Queensland, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	23.9	12.5	11.6	6.9	8.9	6.7	9.6	8.0	8.3	2.6	9.2	2.9	9.1	2.9	12.1
Autumn	27.9	13.3	9.6	5.0	8.9	6.3	8.6	7.4	8.0	2.4	9.2	3.0	6.9	2.1	5.7	1.4
Winter	21.9	11.2	11.0	6.0	8.6	6.5	10.5	8.5	8.3	2.6	8.3	2.9	6.4	2.5	16.2	4.7
Spring	24.1	12.0	12.5	7.5	8.8	6.7	8.9	7.1	9.1	2.7	12.3	4.1	7.5	2.3	3.4	1.8

Table 224: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Central Queensland, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	12.8	5.4	9.3	6.6	28.9	10.4	24.0	8.2
Autumn	13.9	6.4	9.1	6.9	29.0	12.4	23.5	5.5
Winter	14.1	7.1	8.8	7.1	27.8	14.2	23.9	7.0
Spring	13.4	7.1	8.7	6.1	28.6	11.0	23.0	11.4

Appendix N Gold Coast

Table 225: Proportion of passenger vehicle motorists travelling at various speeds in Gold Coast, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	84.7 (+3.1)	89.2 (-2)	85.5 (-3.2)	90.5 (+0.3)	85 (+6.9)	82.2 (-5)	83 (+1.2)	85.8 (+2.2)
Above limit (total)	15.3 (-14.3)	10.8 (+19.7)	14.5 (+24.2)	9.5 (-2.8)	15 (-26.9)	17.8 (+31.9)	17 (-5.4)	14.2 (-11.3)
1-5 above	9.6 (+0.6)	6.3 (+19)	8.7 (+19.9)	6.2 (-5.1)	8.7 (-26.8)	11 (+21.5)	13 (-3.7)	11.8 (-8.3)
6-10 above	3.9 (-20.5)	2.9 (+24.5)	3.7 (+34.2)	2.2 (+2.5)	3.4 (-32)	3.9 (+26.1)	3.2 (-2.2)	2 (-18)
11-12 above	0.7 (-35.5)	0.5 (+24.8)	0.7 (+34.8)	0.4 (+4.3)	0.7 (-33.3)	0.7 (+48.8)	0.3 (-20)	0.2 (-33.3)
13-20 above	0.9 (-50.8)	0.9 (+16.1)	1.1 (+26.6)	0.6 (-0.2)	1.3 (-31.7)	1.3 (+99)	0.4 (-36.5)	0.3 (-43.3)
21-30 above	0.2 (-53.3)	0.2 (-6.3)	0.3 (+14)	0.1 (-5.4)	0.6 (+39.9)	0.7 (+249.5)	0.1 (-59)	0 (-71.2)
31-40 above	0.1 (-66.6)	0 (-38.7)	0.1 (+16)	0 (-4.4)	0.1 (+87)	0.2 (+543.1)	0 (-73.3)	0 (-89.8)
41-50 above	0 (-79.2)	0 (-65.3)	0 (-0.5)	0 (-27.2)	0 (+18)	0 (+54.9)	0 (-56.4)	0 (-86.2)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Gold Coast, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 226: PARF for passenger vehicle motorists in Gold Coast, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-18.1	-12.9	-15.0	-9.2	-13.6	-10.8	-17.8	-11.7	-12.0	-4.5	-11.7	-5.2	-14.3	-4.8	-18.0	-5.9
Total above	48.6	14.9	37.6	14.0	48.5	17.2	35.1	12.7	24.4	4.7	31.0	6.4	10.3	2.4	6.9	1.7
1-5 above	7.6	3.3	4.0	2.6	3.8	3.3	4.0	2.8	2.4	0.8	3.3	1.2	3.7	1.1	3.2	0.9
6-10 above	12.3	5.0	7.6	4.5	6.6	5.1	6.2	4.0	3.6	1.0	4.6	1.5	3.4	0.9	2.1	0.5
11-12 above	2.7	1.7	2.7	1.4	2.6	1.7	2.4	1.4	1.3	0.3	1.5	0.4	0.7	0.2	0.4	0.1
13-20 above	7.9	3.4	11.0	4.1	9.6	4.6	8.1	3.2	4.7	1.0	4.9	1.2	1.4	0.3	1.1	0.2
21-30 above	10.6	1.2	9.2	1.3	13.0	1.8	9.7	1.1	4.7	1.0	7.1	1.1	0.9	0.1	0.1	0.0
31-40 above	7.1	0.3	2.5	0.1	10.4	0.6	4.5	0.2	5.5	0.5	7.3	0.7	0.1	0.0	0.0	0.0
41-50 above	0.4	0.0	0.6	0.0	2.4	0.1	0.2	0.0	2.2	0.1	2.3	0.2	0.1	0.0	0.0	0.0

Table 227: Proportion of heavy vehicle drivers travelling at various speeds in Gold Coast, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	93.7 (+5.2)	95.6 (+0.2)	90.5 (-1.5)	94.8 (+0.7)	88.8 (+12.3)	90.2 (+3)	86.6 (+4.6)	93.7 (+1.2)
Above limit (total)	6.3 (-42.2)	4.4 (-4.9)	9.5 (+16.8)	5.2 (-11)	11.2 (-46.4)	9.8 (-21.2)	13.4 (-22.2)	6.3 (-15.5)
1-5 above	4.1 (-37)	2.8 (+5.8)	6 (+16.3)	3.4 (-11.9)	6.7 (-46.1)	6.9 (-20.5)	11.1 (-19.3)	4.7 (-9.9)
6-10 above	1.3 (-47.6)	1 (-8.3)	2.2 (+22.6)	1.1 (-10.1)	2.7 (-51.2)	2 (-27.9)	1.7 (-29.9)	1 (-29)
11-12 above	0.2 (-54.3)	0.2 (-8.3)	0.4 (+18.5)	0.2 (-13.5)	0.5 (-48.7)	0.3 (-17.2)	0.2 (-38)	0.2 (-28.5)
13-20 above	0.4 (-58.4)	0.3 (-31.1)	0.7 (+13.8)	0.3 (-9.9)	1 (-39.1)	0.3 (-21)	0.2 (-50.8)	0.5 (-25.7)
21-30 above	0.2 (-41.1)	0.1 (-51.8)	0.2 (-8)	0.1 (+15.4)	0.3 (-4.3)	0.2 (+68.8)	0.1 (-29)	0 (-73.4)
31-40 above	0 (-39.9)	0 (-81.9)	0.1 (-9.5)	0 (-10.4)	0 (+15.6)	0 (+17.5)	0 (-91.6)	0 (-68.1)
41-50 above	0 (-85.8)	0 (-89.9)	0 (+10.1)	0 (-60.6)	0 (-5.4)	0 (+332.8)	0 (-47.8)	0 (-)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Gold Coast, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Gold Coast by time of day

Table 228: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Gold Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	15.2	10.2	12.6	8.5	12.8	16.5	16.1	14.5
Off peak	13.5	8.9	12.0	7.7	11.7	14.0	15.8	12.6
PM peak	12.6	9.4	11.7	8.2	11.4	14.0	15.4	13.8
Evening	12.4	9.2	13.5	10.3	13.4	14.3	19.2	18.2
Late night/ Early morning	13.5	7.9	17.0	13.6	16.1	20.9	19.4	13.1

Table 229: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Gold Coast, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	22.2	9.1	12.4	7.6	11.0	8.4	10.6	6.9	6.2	1.9	8.6	3.0	7.0	1.9	5.5	1.5
Off peak	20.4	8.2	11.5	6.8	11.0	8.2	10.2	6.4	6.0	1.7	7.5	2.5	7.1	1.9	5.1	1.3
PM peak	19.3	7.8	11.6	7.2	10.2	8.1	10.0	6.7	5.7	1.7	7.9	2.6	7.1	1.9	5.2	1.4
Evening	17.6	8.0	10.6	7.0	9.5	8.7	10.5	7.6	5.4	1.8	7.0	2.5	7.4	2.1	6.6	1.9
Late night/ Early morning	16.2	8.4	9.5	6.3	7.7	9.9	9.5	9.1	6.5	2.3	8.7	3.5	7.7	2.2	4.8	1.3

Table 230: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Gold Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	6.1	3.5	7.3	4.1	8.4	6.9	10.3	5.5
Off peak	5.2	3.5	6.9	3.6	7.5	6.5	8.6	5.2
PM peak	5.0	4.1	7.5	4.6	9.3	8.9	11.9	7.0
Evening	4.2	3.4	8.1	3.6	9.0	9.0	17.0	5.9
Late night/ Early morning	6.5	4.8	14.3	7.6	15.6	18.8	17.5	5.1

Gold Coast by day of week

Table 231: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Gold Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	13.7	8.8	11.4	7.7	11.0	15.5	14.2	13.1
Weekend	13.4	9.7	13.3	9.1	13.4	14.2	18.6	14.5

Table 232: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Gold Coast, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Weekday	20.1	8.3	11.5	6.8	9.9	7.8	9.9	6.4	5.8	1.6	8.2	2.8	6.5	1.7	5.2
Weekend	19.7	8.2	11.7	7.4	10.9	8.8	10.5	7.2	6.2	1.9	7.6	2.6	7.9	2.2	5.5	1.5

Table 233: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Gold Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	5.5	3.6	7.8	4.4	8.6	8.7	11.1	4.6
Weekend	5.3	4.1	8.9	4.7	10.6	9.4	15.0	6.8

Gold Coast by season

Table 234: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Gold Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	14.4	9.5	12.7	8.8	13.0	16.2	18.6	15.9
Autumn	12.7	8.0	11.7	7.8	11.1	12.8	15.5	7.2
Winter	12.9	9.2	12.2	8.2	11.5	14.3	14.9	13.0
Spring	13.4	9.4	12.3	8.1	12.2	14.7	15.4	15.0

Table 235: PARF for passenger vehicle motorists engaged in low-level speeding by season in Gold Coast, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
Summer	21.5	8.9	11.6	7.2	10.5	8.5	10.6	7.0	6.2	1.9	8.5	3.0	7.9	2.2	5.9	1.6
Autumn	17.9	7.5	10.5	6.4	9.7	7.9	9.6	6.3	5.7	1.6	7.6	2.4	6.3	1.7	3.2	0.8
Winter	19.6	8.0	11.8	7.3	10.8	8.4	10.5	6.9	6.0	1.7	7.8	2.7	7.0	1.8	5.5	1.5
Spring	19.7	8.4	11.8	7.1	10.3	8.3	9.9	6.6	5.9	1.8	7.6	2.6	7.0	1.8	5.5	1.5

Table 236: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Gold Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	6.0	3.9	8.6	4.5	10.0	9.3	15.2	6.3
Autumn	5.6	3.8	8.0	4.2	8.7	8.0	13.1	4.1
Winter	4.9	3.8	8.1	4.5	9.0	9.3	12.2	5.5
Spring	5.4	3.7	8.1	4.5	9.6	8.8	10.9	6.3

Appendix O Ipswich

Table 237: Proportion of passenger vehicle motorists travelling at various speeds in Ipswich, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	84.4 (+2.9)	90.9 (-0.1)	84.7 (-4.1)	89.6 (-0.6)	56.2 (-29.3)	84.8 (-2)	77.1 (-6)	-
Above limit (total)	15.6 (-13.1)	9.1 (+0.8)	15.3 (+31.3)	10.4 (+5.8)	43.8 (+113.9)	15.2 (+13)	22.9 (+27.5)	-
1-5 above	7.6 (-20.7)	5 (-6.5)	9 (+23.7)	6.4 (-0.9)	20.5 (+72.7)	9.6 (+6.8)	16.9 (+25.2)	-
6-10 above	4 (-19.3)	2.4 (+0.6)	3.8 (+37.6)	2.3 (+5.9)	12.1 (+138.3)	3.9 (+27.8)	4.4 (+36.1)	-
11-12 above	1 (-9.8)	0.4 (+7.1)	0.7 (+47.6)	0.5 (+27.6)	3.3 (+208.7)	0.7 (+56)	0.6 (+38.9)	-
13-20 above	2.1 (+19.5)	0.9 (+21.6)	1.3 (+51.8)	0.9 (+46.5)	6.5 (+244.2)	0.8 (+19.6)	0.8 (+34.9)	-
21-30 above	0.7 (+81.6)	0.3 (+71.5)	0.4 (+72.4)	0.2 (+77)	1.2 (+179.3)	0.1 (-51)	0.1 (-4.3)	-
31-40 above	0.1 (-6.7)	0.1 (+221.5)	0.1 (+73.3)	0 (+75.1)	0.1 (+61.2)	0 (-32.7)	0 (-16.2)	-
41-50 above	0 (+113.4)	0 (+302.2)	0 (+34.9)	0 (+129.7)	0 (-11.7)	0 (+19.9)	0 (-6.2)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Ipswich, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 238: PARF for passenger vehicle motorists in Ipswich, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-10.5	-10.8	-10.7	-8.6	-12.6	-11.3	-15.3	-11.5	-6.0	-3.1	-13.4	-5.0	-14.5	-5.3	-	-
Total above	70.5	22.9	50.8	15.0	54.1	18.7	44.2	15.0	46.2	13.9	19.1	4.5	13.5	3.4	-	-
1-5 above	4.7	2.4	2.4	2.1	3.3	3.1	3.5	2.8	3.6	1.5	3.7	1.1	4.0	1.2	-	-
6-10 above	9.8	4.9	4.7	3.7	5.7	5.0	5.4	3.9	7.5	2.8	5.6	1.5	4.0	1.1	-	-
11-12 above	2.5	2.2	1.8	1.3	2.4	1.8	2.3	1.4	3.7	1.3	2.1	0.5	1.0	0.3	-	-
13-20 above	13.1	7.9	9.6	4.6	10.0	5.3	9.9	4.4	13.7	3.9	4.6	1.0	2.5	0.5	-	-
21-30 above	25.4	4.4	16.3	2.4	16.9	2.6	15.4	2.0	13.7	3.9	1.5	0.2	1.6	0.2	-	-
31-40 above	12.7	0.9	10.3	0.6	13.1	0.8	7.2	0.4	3.0	0.3	0.9	0.1	0.3	0.0	-	-
41-50 above	2.4	0.2	5.5	0.3	2.8	0.2	0.6	0.0	1.0	0.1	0.6	0.0	0.1	0.0	-	-

Table 239: Proportion of heavy vehicle drivers travelling at various speeds in Ipswich, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	85.7 (-3.8)	94.6 (-0.8)	89.4 (-2.6)	94.8 (+0.6)	65.1 (-17.7)	86.7 (-1)	85 (+2.7)	-
Above limit (total)	14.3 (+31.5)	5.4 (+15.9)	10.6 (+29.8)	5.2 (-10.4)	34.9 (+66.7)	13.3 (+7.2)	15 (-13.2)	-
1-5 above	8.6 (+31)	2.7 (+2.6)	6.5 (+24.9)	3.1 (-20)	18.1 (+46.8)	9 (+2.9)	12 (-12.5)	-
6-10 above	3.5 (+38.1)	1.2 (+14.9)	2.5 (+40.2)	1.2 (-4)	10.6 (+90.5)	3.4 (+20.9)	2.1 (-13.5)	-
11-12 above	0.6 (+35.2)	0.3 (+38.7)	0.5 (+46.7)	0.3 (+18.5)	2.2 (+111.2)	0.4 (-0.5)	0.3 (-22.3)	-
13-20 above	1.2 (+31.6)	0.7 (+50.7)	0.8 (+37.2)	0.5 (+32)	3.4 (+103.5)	0.5 (+24.5)	0.4 (-21.7)	-
21-30 above	0.3 (-6.5)	0.3 (+77.4)	0.2 (+27.5)	0.1 (+41.6)	0.5 (+90.3)	0.1 (-24.3)	0.2 (-20.9)	-
31-40 above	0.1 (-21.3)	0.1 (+138.2)	0.1 (-8.2)	0 (+90.7)	0.1 (+39.2)	0 (-24.8)	0 (-61.6)	-
41-50 above	0 (-53.7)	0.1 (+102.1)	0 (-21.8)	0 (+85)	0 (+54)	0 (+73.9)	0 (+51.2)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Ipswich, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Ipswich by time of day

Table 240: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Ipswich, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	12.6	6.8	12.3	8.7	33.7	13.1	21.0	-
Off peak	10.6	7.4	12.4	8.5	32.3	13.8	21.8	-
PM peak	11.7	7.1	13.0	8.3	31.4	13.5	22.2	-
Evening	11.7	8.5	13.9	9.5	33.0	13.7	20.2	-
Late night/ Early morning	16.1	8.6	15.5	13.4	34.3	14.2	18.7	-

Table 241: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Ipswich, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	16.1	7.9	6.5	5.5	9.2	7.9	8.9	6.7	11.4	4.5	9.9	2.8	8.1	2.4	-	-
Off peak	13.0	6.7	8.0	6.0	9.1	7.9	9.0	6.6	11.3	4.3	9.3	2.6	8.1	2.4	-	-
PM peak	14.7	7.4	6.5	5.6	8.7	8.0	8.8	6.4	10.7	4.2	9.2	2.6	8.3	2.5	-	-
Evening	14.0	7.1	7.8	6.5	8.7	8.5	9.1	6.8	10.8	4.5	8.8	2.6	7.0	2.1	-	-
Late night/ Early morning	19.9	9.3	6.8	6.7	9.1	9.2	8.1	8.9	11.4	4.7	8.3	2.7	6.6	2.0	-	-

Table 242: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Ipswich, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	11.9	3.7	8.2	4.1	26.5	11.3	12.7	-
Off peak	9.9	3.9	8.3	3.7	27.5	11.9	13.1	-
PM peak	11.6	4.3	8.4	3.5	29.7	13.3	15.8	-
Evening	13.7	3.6	9.2	4.8	32.9	11.4	15.1	-
Late night/ Early morning	17.1	4.6	12.7	6.4	30.5	13.7	15.4	-

Ipswich by day of week

Table 243: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Ipswich, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	10.6	6.4	10.9	7.3	32.2	12.4	18.9	-
Weekend	13.1	9.0	16.0	10.8	33.3	15.4	25.3	-

Table 244: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Ipswich, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
Weekday	14.1	6.9	6.9	5.3	8.8	7.2	8.0	5.8	11.6	4.4	9.2	2.5	7.3	2.1	-	-
Weekend	14.9	7.9	7.6	6.7	9.2	9.3	9.9	7.8	10.5	4.4	9.4	2.8	9.1	2.8	-	-

Table 245: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Ipswich, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	11.6	3.9	8.5	4.0	26.7	11.1	12.9	-
Weekend	13.0	4.1	10.0	4.7	32.2	13.9	16.2	-

Ipswich by season

Table 246: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Ipswich, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	12.2	7.6	13.4	8.9	32.1	13.5	21.4	-
Autumn	11.5	5.9	11.7	7.6	33.1	13.7	19.1	-
Winter	11.1	7.0	12.6	8.7	32.7	13.8	20.7	-
Spring	11.0	7.9	12.5	9.0	32.0	13.1	22.4	-

Table 247: PARF for passenger vehicle motorists engaged in low-level speeding by season in Ipswich, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
Summer	14.8	7.5	7.0	5.9	9.3	8.3	9.5	6.9	11.4	4.3	9.3	2.7	7.9	2.3	-	-
Autumn	17.6	7.6	6.8	5.0	9.1	7.7	8.7	6.1	11.7	4.5	9.6	2.7	7.0	2.0	-	-
Winter	13.8	7.3	7.2	6.0	9.2	8.2	8.6	6.8	10.9	4.4	9.3	2.7	8.4	2.5	-	-
Spring	13.2	6.9	7.5	6.2	8.5	7.9	8.7	6.9	10.7	4.3	9.0	2.6	8.5	2.5	-	-

Table 248: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Ipswich, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	11.6	4.0	8.8	4.4	27.8	11.6	14.4	-
Autumn	10.9	3.8	8.9	4.2	28.0	12.4	12.9	-
Winter	12.9	3.9	9.4	4.3	28.9	12.4	14.4	-
Spring	12.9	4.1	8.9	4.3	29.8	13.1	15.0	-

Appendix P Logan – Beaudesert

Table 249: Proportion of passenger vehicle motorists travelling at various speeds in Logan – Beaudesert, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	84 (+2.3)	93.9 (+3.2)	88.4 (0)	92.6 (+2.7)	80.6 (+1.3)	91 (+5.1)	84.7 (+3.3)	82.4 (-1.8)
Above limit (total)	16 (-10.7)	6.1 (-32.7)	11.6 (-0.3)	7.4 (-25)	19.4 (-5)	9 (-33)	15.3 (-14.9)	17.6 (+9.3)
1-5 above	8.4 (-12.2)	3.1 (-41.2)	6.7 (-7)	4.8 (-25.9)	11.6 (-2.3)	5.2 (-41.9)	11.9 (-12.3)	12.6 (-1.7)
6-10 above	4 (-18.4)	1.5 (-35.4)	2.9 (+6.2)	1.7 (-23.5)	4.7 (-6.3)	2.3 (-25.9)	2.7 (-17.6)	3.2 (+29.8)
11-12 above	1 (-9.6)	0.3 (-21.7)	0.6 (+15)	0.3 (-24.2)	0.9 (-13.5)	0.5 (+13.3)	0.3 (-28.3)	0.5 (+103.6)
13-20 above	1.8 (-1.3)	0.7 (-3.8)	1 (+14.1)	0.4 (-28.9)	1.7 (-7.7)	0.8 (+21.2)	0.4 (-39.8)	1.2 (+151.6)
21-30 above	0.6 (+57.1)	0.3 (+78.4)	0.3 (+29.9)	0.1 (-3)	0.3 (-22.8)	0.1 (-37.5)	0.1 (-52.6)	0 (-68.3)
31-40 above	0.2 (+26.3)	0.1 (+152.8)	0.1 (+46.4)	0 (+32.2)	0 (-41.8)	0 (+2)	0 (-73)	0 (-87.4)
41-50 above	0 (-2.2)	0 (+39.1)	0 (+30.9)	0 (-19.5)	0 (-41.5)	0 (-7.2)	0 (-79.1)	0 (-100)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Logan - Beaudesert, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 250: PARF for passenger vehicle motorists in Logan – Beaudesert, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-9.6	-10.2	-11.2	-7.9	-13.4	-11.1	-17.0	-11.0	-12.0	-4.4	-18.6	-6.6	-16.4	-5.5	-16.7	-5.9
Total above	71.9	21.8	51.2	12.8	52.0	16.1	34.5	10.4	25.0	5.5	15.3	3.1	9.3	2.2	12.0	2.9
1-5 above	5.2	2.8	1.9	1.5	3.0	2.6	3.4	2.3	3.2	1.0	2.3	0.7	3.3	0.9	3.2	0.9
6-10 above	9.7	4.9	3.9	2.7	5.4	4.3	5.0	3.1	4.8	1.3	3.2	0.8	2.9	0.7	3.1	0.8
11-12 above	2.5	2.2	1.7	1.0	2.2	1.6	1.9	1.0	1.7	0.4	1.4	0.3	0.6	0.1	1.0	0.2
13-20 above	10.5	6.7	10.0	4.1	9.0	4.4	6.2	2.4	6.1	1.3	4.4	0.9	1.3	0.2	4.6	0.9
21-30 above	25.8	4.0	20.9	2.8	15.8	2.2	11.2	1.2	6.1	1.3	1.9	0.3	1.0	0.1	0.1	0.0
31-40 above	17.2	1.2	10.3	0.5	13.4	0.7	6.5	0.3	1.9	0.1	1.3	0.1	0.1	0.0	0.0	0.0
41-50 above	1.1	0.1	2.4	0.1	3.3	0.2	0.3	0.0	1.1	0.1	0.9	0.0	0.0	0.0	0.0	0.0

Table 251: Proportion of heavy vehicle drivers travelling at various speeds in Logan – Beaudesert, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	91.2 (+2.3)	94.7 (-0.7)	88.5 (-3.6)	93.4 (-0.9)	70.3 (-11.1)	87.6 (0)	74.9 (-9.5)	93.5 (+1)
Above limit (total)	8.8 (-18.6)	5.3 (+13.4)	11.5 (+40.7)	6.6 (+14.3)	29.7 (+41.7)	12.4 (-0.1)	25.1 (+45.6)	6.5 (-12.2)
1-5 above	6.1 (-7.1)	2.9 (+7.2)	6.8 (+31.6)	4.7 (+21.4)	16.2 (+31.3)	10.1 (+16.5)	19.2 (+39.4)	5.1 (-1.8)
6-10 above	1.9 (-25.1)	1 (-11.6)	2.1 (+16)	1.4 (+7.7)	8.9 (+58.9)	2 (-27.9)	4.1 (+68)	1.1 (-19)
11-12 above	0.3 (-43.3)	0.2 (-4.9)	0.4 (+8.3)	0.2 (-33.6)	1.7 (+58.8)	0.1 (-68.1)	0.6 (+77.2)	0.1 (-57.7)
13-20 above	0.4 (-54.4)	0.4 (-7)	0.7 (+16.8)	0.4 (+10.8)	2.5 (+50.6)	0.1 (-75.3)	0.9 (+79.5)	0.2 (-66.1)
21-30 above	0.1 (-53.7)	0.2 (+35.6)	0.7 (+276.1)	0.1 (-35.5)	0.4 (+34.8)	0 (-68.9)	0.3 (+59.9)	0 (-34.3)
31-40 above	0 (-63.9)	0.1 (+352.9)	0.7 (+977.9)	0 (-72.3)	0.1 (+64)	0 (-90.6)	0 (+95.3)	0 (-100)
41-50 above	0 (-100)	0.5 (+1430.4)	0.1 (+781.2)	0 (-100)	0 (+71.2)	0 (-100)	0 (+108.9)	0 (-)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Logan - Beaudesert, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Logan - Beaudesert by time of day

Table 252: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Logan – Beaudesert, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	13.7	4.2	8.6	5.8	14.9	7.0	13.8	16.4
Off peak	10.9	4.3	9.1	5.9	15.7	7.6	14.1	14.8
PM peak	14.6	5.7	10.8	7.2	17.9	7.6	13.9	15.7
Evening	11.9	6.1	13.0	10.1	20.8	11.4	19.8	19.6
Late night/ Early morning	11.5	5.1	13.2	8.7	19.9	6.1	17.2	15.9

Table 253: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Logan - Beaudesert, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	16.9	8.6	5.5	3.9	8.3	6.4	7.7	5.0	7.7	2.1	5.5	1.5	6.1	1.6	6.5	1.8
Off peak	13.6	6.8	6.1	4.0	8.2	6.6	8.1	5.1	8.0	2.2	5.5	1.5	5.8	1.5	6.1	1.7
PM peak	16.2	8.6	6.0	4.7	8.7	7.6	9.1	6.0	8.3	2.5	5.3	1.5	6.3	1.7	6.2	1.7
Evening	13.1	6.9	5.3	4.9	8.0	8.3	9.7	7.4	8.2	2.8	7.0	2.2	7.3	2.1	7.0	2.2
Late night/ Early morning	11.3	6.7	6.5	4.5	8.6	8.5	8.5	6.5	8.8	2.8	4.1	1.2	6.6	1.9	6.9	1.9

Table 254: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Logan - Beaudesert, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	10.0	3.9	7.9	5.4	17.6	7.2	7.4	13.7
Off peak	10.1	4.1	8.1	5.7	17.7	6.6	7.5	14.8
PM peak	10.9	5.4	8.5	5.9	19.5	6.6	9.1	16.5
Evening	15.2	5.2	11.1	7.5	21.0	10.0	10.6	15.3
Late night/ Early morning	12.0	5.2	13.9	9.4	26.3	11.8	13.0	14.1

Logan - Beaudesert by day of week

Table 255: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Logan - Beaudesert, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	10.5	3.9	8.0	5.0	13.7	6.4	12.9	15.1
Weekend	15.4	6.6	13.0	9.7	21.5	9.7	16.6	16.7

Table 256: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Logan - Beaudesert, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
Weekday	12.8	6.7	5.7	3.6	7.9	6.0	6.9	4.4	7.2	1.9	4.9	1.3	5.8	1.5	6.3	1.7
Weekend	17.8	9.0	6.1	5.3	9.1	8.4	10.8	7.5	9.3	3.0	6.4	1.9	6.6	1.8	6.4	1.8

Table 257: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Logan - Beaudesert, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	10.0	4.2	8.0	5.9	17.6	6.8	7.5	13.2
Weekend	11.9	5.1	10.7	7.0	22.5	9.4	11.5	16.5

Logan - Beaudesert by season

Table 258: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Logan - Beaudesert, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	12.8	5.2	10.2	7.2	17.5	8.2	16.2	17.2
Autumn	12.0	4.1	8.7	5.3	15.3	7.1	9.2	9.3
Winter	11.5	4.5	9.3	6.1	16.1	7.3	14.1	15.6
Spring	14.2	4.6	9.7	6.7	16.0	6.8	15.2	17.6

Table 259: PARF for passenger vehicle motorists engaged in low-level speeding by season in Logan - Beaudesert, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	15.7	7.7	6.1	4.5	8.4	7.2	9.0	6.0	8.5	2.5	5.9	1.6	6.7	1.8	6.6
Autumn	16.5	7.6	5.5	3.8	7.6	6.3	7.3	4.6	7.8	2.2	5.4	1.4	4.1	1.0	4.9	1.2
Winter	16.6	7.3	5.9	4.2	8.7	7.0	8.3	5.6	8.1	2.3	5.8	1.6	6.5	1.8	6.3	1.8
Spring	13.0	7.9	5.9	4.1	8.5	7.0	8.6	5.5	7.7	2.2	4.7	1.3	6.4	1.7	6.8	1.9

Table 260: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Logan - Beaudesert, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	11.4	4.7	9.2	6.7	20.4	8.1	9.9	15.8
Autumn	10.7	4.4	8.6	5.6	19.1	7.9	7.6	12.1
Winter	10.5	4.4	8.8	6.1	19.2	7.7	9.1	14.3
Spring	10.2	4.5	9.2	6.6	19.0	7.8	10.2	15.8

Appendix Q Mackay

Table 261: Proportion of passenger vehicle motorists travelling at various speeds in Mackay, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	84.2 (+2.6)	89.9 (-1.2)	85.5 (-3.2)	85.6 (-5.1)	77.5 (-2.6)	86.7 (+0.2)	70 (-14.6)	76.2 (-9.2)
Above limit (total)	15.8 (-11.8)	10.1 (+11.8)	14.5 (+24.4)	14.4 (+47)	22.5 (+9.9)	13.3 (-1.5)	30 (+66.7)	23.8 (+48.1)
1-5 above	7.5 (-22.1)	5.7 (+6.2)	8.4 (+15.5)	9.7 (+49.6)	13 (+9.3)	9.7 (+7.5)	22.3 (+64.4)	15.3 (+18.7)
6-10 above	4.6 (-7.4)	2.7 (+14.4)	3 (+9.9)	3.3 (+52.5)	5.1 (+1.3)	2.5 (-18)	5 (+54.1)	6.3 (+156.9)
11-12 above	1.1 (+1.4)	0.4 (+3.4)	0.6 (+22)	0.5 (+32.3)	1.3 (+19.5)	0.4 (-11.8)	0.7 (+61.6)	0.4 (+33.2)
13-20 above	2 (+14.6)	0.8 (+10.5)	1.3 (+47.4)	0.7 (+24.3)	2.3 (+21.4)	0.4 (-33.7)	1.3 (+124.2)	1.8 (+276.7)
21-30 above	0.6 (+58.1)	0.2 (+34)	0.6 (+153.7)	0.1 (-14.1)	0.5 (+22.4)	0.2 (-3.2)	0.6 (+324.4)	0.1 (+217.2)
31-40 above	0 (-86.2)	0.1 (+394.8)	0.5 (+606.5)	0 (+3.4)	0.2 (+94.9)	0 (-85.8)	0 (+273.1)	0 (+223.5)
41-50 above	0 (-100)	0.2 (+1688.1)	0.2 (+899)	0 (-100)	0.1 (+322.2)	0 (-100)	0 (+281.5)	0 (+2910.2)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Mackay, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 262: PARF for passenger vehicle motorists in Mackay, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-11.6	-10.5	-8.3	-8.7	-7.4	-10.8	-17.3	-11.9	-10.5	-4.5	-13.9	-5.2	-9.7	-3.9	-8.6	-3.7
Total above	66.1	21.5	52.7	15.5	72.5	21.3	34.8	15.1	33.9	7.0	14.5	3.5	21.5	5.1	16.1	4.3
1-5 above	4.8	2.4	2.0	2.3	1.8	2.8	5.2	3.8	2.9	1.0	3.8	1.2	4.9	1.6	3.1	1.1
6-10 above	12.3	5.7	4.0	4.1	2.7	3.8	7.8	5.2	4.2	1.4	4.0	1.1	4.2	1.2	5.0	1.6
11-12 above	3.2	2.5	1.3	1.2	1.2	1.5	2.6	1.5	1.9	0.6	1.2	0.3	1.1	0.3	0.6	0.2
13-20 above	11.6	6.9	6.4	4.0	6.1	5.1	8.7	3.5	6.5	1.6	2.2	0.5	4.0	0.9	5.3	1.3
21-30 above	31.9	3.9	8.7	1.8	16.4	3.7	7.1	1.0	6.5	1.6	3.0	0.4	5.7	0.9	0.5	0.1
31-40 above	2.2	0.1	11.8	0.8	31.9	3.1	3.4	0.2	5.4	0.5	0.3	0.0	1.1	0.1	0.3	0.0
41-50 above	0.0	0.0	18.3	1.3	12.3	1.2	0.0	0.0	6.4	0.4	0.0	0.0	0.5	0.0	1.5	0.1

Table 263: Proportion of heavy vehicle drivers travelling at various speeds in Mackay, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	91.2 (+2.3)	94.7 (-0.7)	88.5 (-3.6)	93.4 (-0.9)	70.3 (-11.1)	87.6 (0)	74.9 (-9.5)	93.5 (+1)
Above limit (total)	8.8 (-18.6)	5.3 (+13.4)	11.5 (+40.7)	6.6 (+14.3)	29.7 (+41.7)	12.4 (-0.1)	25.1 (+45.6)	6.5 (-12.2)
1-5 above	6.1 (-7.1)	2.9 (+7.2)	6.8 (+31.6)	4.7 (+21.4)	16.2 (+31.3)	10.1 (+16.5)	19.2 (+39.4)	5.1 (-1.8)
6-10 above	1.9 (-25.1)	1 (-11.6)	2.1 (+16)	1.4 (+7.7)	8.9 (+58.9)	2 (-27.9)	4.1 (+68)	1.1 (-19)
11-12 above	0.3 (-43.3)	0.2 (-4.9)	0.4 (+8.3)	0.2 (-33.6)	1.7 (+58.8)	0.1 (-68.1)	0.6 (+77.2)	0.1 (-57.7)
13-20 above	0.4 (-54.4)	0.4 (-7)	0.7 (+16.8)	0.4 (+10.8)	2.5 (+50.6)	0.1 (-75.3)	0.9 (+79.5)	0.2 (-66.1)
21-30 above	0.1 (-53.7)	0.2 (+35.6)	0.7 (+276.1)	0.1 (-35.5)	0.4 (+34.8)	0 (-68.9)	0.3 (+59.9)	0 (-34.3)
31-40 above	0 (-63.9)	0.1 (+352.9)	0.7 (+977.9)	0 (-72.3)	0.1 (+64)	0 (-90.6)	0 (+95.3)	0 (-100)
41-50 above	0 (-100)	0.5 (+1430.4)	0.1 (+781.2)	0 (-100)	0 (+71.2)	0 (-100)	0 (+108.9)	0 (-)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Mackay, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Mackay by time of day

Table 264: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Mackay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	10.5	9.8	11.9	14.1	18.9	11.2	29.4	30.6
Off peak	10.6	7.3	10.5	12.8	17.7	12.3	25.9	19.5
PM peak	14.0	9.1	12.0	12.6	18.6	13.5	28.4	16.8
Evening	30.1	7.5	11.4	9.6	13.9	11.6	23.1	27.1
Late night/ Early morning	18.2	11.2	17.3	14.9	19.2	12.6	25.2	0.3

Table 265: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Mackay, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	15.0	6.5	5.2	6.6	3.7	6.6	14.3	9.6	7.5	2.5	7.2	2.2	9.9	3.3	12.0	3.4
Off peak	15.3	7.6	6.2	6.0	4.7	6.3	12.1	8.9	7.3	2.3	7.5	2.2	8.3	2.6	6.6	2.0
PM peak	20.6	8.5	7.0	7.0	5.1	7.0	13.8	8.7	7.8	2.5	9.1	2.6	9.7	3.1	5.7	2.9
Evening	33.5	14.5	7.5	5.4	4.8	6.4	11.3	6.6	5.0	1.8	7.2	2.0	3.5	1.9	16.9	4.5
Late night/ Early morning	41.9	14.8	3.5	6.1	6.2	9.2	10.8	8.3	4.0	2.4	8.8	2.5	4.5	2.3	0.0	0.0

Table 266: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Mackay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	6.6	2.7	7.5	6.2	24.6	9.9	20.6	8.2
Off peak	5.0	2.6	7.4	5.4	23.6	11.1	20.9	4.2
PM peak	7.4	3.7	8.4	5.2	25.2	11.7	25.9	4.3
Evening	20.3	5.5	10.4	6.2	26.5	12.7	27.1	4.5
Late night/ Early morning	14.7	7.3	14.2	8.4	28.0	16.2	26.0	12.5

Mackay by day of week

Table 267: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Mackay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	11.2	7.4	10.2	11.6	17.0	10.4	25.1	17.0
Weekend	14.1	10.7	13.6	15.0	19.8	15.2	30.7	25.2

Table 268: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Mackay, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	15.9	7.6	4.8	5.6	4.5	6.1	12.3	8.1	7.3	2.3	7.1	2.0	8.6	2.6	5.5
Weekend	20.3	9.1	9.6	8.1	4.5	7.5	13.8	10.0	7.0	2.6	8.8	2.8	9.4	3.3	10.4	3.2

Table 269: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Mackay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	6.3	3.4	8.1	5.5	24.7	10.4	21.9	6.3
Weekend	11.6	4.5	10.1	6.7	25.7	14.5	25.7	6.1

Mackay by season

Table 270: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Mackay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	13.2	8.1	12.0	16.3	18.5	15.4	28.9	21.1
Autumn	11.3	8.7	11.3	12.6	18.4	11.1	27.3	17.8
Winter	11.8	8.2	11.2	12.3	17.0	11.7	28.6	13.3
Spring	12.1	8.5	11.0	12.2	18.1	10.7	23.1	19.4

Table 271: PARF for passenger vehicle motorists engaged in low-level speeding by season in Mackay, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	24.1	9.2	4.6	5.9	5.0	6.9	14.9	10.4	7.6	2.4	8.7	2.7	8.2	2.8	7.6
Autumn	13.9	7.8	7.6	6.8	5.2	6.7	14.3	9.5	7.1	2.4	7.0	2.2	9.0	2.9	6.7	1.9
Winter	15.4	7.0	6.5	6.6	3.7	6.3	9.3	7.0	7.3	2.4	7.9	2.3	10.6	3.5	4.7	4.7
Spring	17.2	8.0	6.4	6.2	4.5	6.5	13.5	8.7	6.6	2.3	7.4	2.0	7.6	2.5	4.0	2.0

Table 272: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Mackay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	7.3	3.6	8.9	7.2	25.5	12.9	21.8	5.0
Autumn	8.6	3.8	9.0	5.6	26.4	13.8	24.9	5.5
Winter	7.3	3.9	9.2	5.4	24.9	11.9	24.8	5.5
Spring	8.6	3.8	8.6	5.9	24.3	10.9	22.4	8.1

Appendix R Moreton Bay – North

Table 273: Proportion of passenger vehicle motorists travelling at various speeds in Moreton Bay North, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	88.5 (+7.8)	92.7 (+1.9)	88.3 (-0.1)	92.9 (+3)	82.6 (+3.8)	89.3 (+3.3)	76.9 (-6.3)	82.1 (-2.2)
Above limit (total)	11.5 (-35.7)	7.3 (-19.3)	11.7 (+0.7)	7.1 (-28)	17.4 (-14.8)	10.7 (-20.9)	23.1 (+28.8)	17.9 (+11.6)
1-5 above	6 (-37.2)	4 (-25.7)	7.9 (+8.4)	5.3 (-17.7)	11.6 (-2.9)	7.9 (-12.3)	17.9 (+32.3)	14.4 (+12.3)
6-10 above	2.8 (-43.5)	1.8 (-24.2)	2.7 (-2.3)	1.2 (-42.9)	3.9 (-22.8)	2.2 (-30.2)	4.1 (+25)	2.7 (+9.7)
11-12 above	0.7 (-33.4)	0.4 (-7.9)	0.4 (-15.9)	0.2 (-54)	0.7 (-34.6)	0.2 (-51.7)	0.5 (+13.7)	0.3 (+13.8)
13-20 above	1.7 (-3.6)	0.9 (+22.3)	0.6 (-31.6)	0.2 (-58.3)	1 (-45.4)	0.3 (-56.6)	0.6 (-5.5)	0.5 (+2)
21-30 above	0.3 (-33.1)	0.2 (+24.4)	0.1 (-37.2)	0 (-67.2)	0.2 (-55)	0.1 (-67.9)	0.1 (-28.9)	0 (-28.6)
31-40 above	0 (-87.2)	0 (+14.7)	0 (-31.3)	0 (-67.9)	0 (-64.7)	0 (-72.6)	0 (-18.2)	0 (-17.4)
41-50 above	0 (-100)	0 (+8.8)	0 (-33.4)	0 (-34.6)	0 (-61.8)	0 (-100)	0 (-51.1)	0 (-2.5)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Moreton Bay North, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 274: PARF for passenger vehicle motorists in Moreton Bay North, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-20.5	-14.2	-14.1	-9.0	-18.8	-12.9	-25.7	-14.5	-14.7	-5.2	-17.3	-6.0	-14.8	-5.5	-16.5	-5.7
Total above	49.3	16.4	43.3	13.1	37.0	12.1	20.2	7.5	17.9	3.9	11.3	2.7	11.8	3.0	8.8	2.2
1-5 above	4.9	2.1	2.6	1.7	4.1	2.9	4.2	2.5	3.3	1.0	3.5	1.0	4.1	1.3	3.5	1.0
6-10 above	9.2	3.7	4.8	3.0	5.9	3.9	4.4	2.4	4.1	1.1	3.6	0.9	3.6	1.0	2.6	0.7
11-12 above	2.9	1.7	2.1	1.1	2.0	1.1	1.3	0.6	1.4	0.3	1.0	0.2	0.8	0.2	0.6	0.1
13-20 above	17.2	7.0	13.7	5.0	6.3	2.6	4.1	1.4	3.7	0.7	1.7	0.3	1.7	0.4	1.8	0.3
21-30 above	12.3	1.7	13.2	1.9	9.0	1.1	4.4	0.5	3.7	0.7	0.9	0.1	1.2	0.2	0.1	0.0
31-40 above	2.8	0.1	4.9	0.2	7.6	0.3	1.7	0.1	1.1	0.1	0.4	0.0	0.3	0.0	0.1	0.0
41-50 above	0.0	0.0	2.0	0.1	2.0	0.1	0.2	0.0	0.7	0.0	0.2	0.0	0.1	0.0	0.1	0.0

Table 275: Proportion of heavy vehicle drivers travelling at various speeds in Moreton Bay North, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	85.3 (-4.3)	94.1 (-1.3)	89.5 (-2.6)	94.4 (+0.3)	78.3 (-0.9)	85.2 (-2.7)	86.7 (+4.8)	89.7 (-3.1)
Above limit (total)	14.7 (+35.4)	5.9 (+27.6)	10.5 (+28.8)	5.6 (-4.2)	21.7 (+3.3)	14.8 (+19)	13.3 (-22.9)	10.3 (+38.1)
1-5 above	10.4 (+58.5)	3.1 (+16.5)	7.2 (+38.2)	4.2 (+9.5)	13.4 (+8.8)	9.9 (+13.7)	10.8 (-21.8)	7 (+34.2)
6-10 above	3.2 (+26.8)	1.3 (+22.9)	2.2 (+23.6)	1 (-22.5)	5.2 (-6.2)	2.8 (+2.5)	2 (-19.4)	2.2 (+56.3)
11-12 above	0.5 (-1.5)	0.3 (+21.5)	0.3 (+5.1)	0.1 (-43.5)	1 (-8.4)	0.5 (+27.9)	0.2 (-35)	0.4 (+57.7)
13-20 above	0.6 (-39)	0.8 (+69)	0.6 (-4.9)	0.2 (-49.1)	1.6 (-2.8)	1.2 (+183)	0.3 (-49.3)	0.7 (+22.5)
21-30 above	0.1 (-77.9)	0.3 (+115.2)	0.2 (-6.6)	0.1 (-44.1)	0.3 (+29.5)	0.3 (+197.9)	0.1 (-55.6)	0 (-87.5)
31-40 above	0 (-86.8)	0.1 (+137.7)	0 (-30.3)	0 (-29.8)	0.1 (+47.9)	0.1 (+47.5)	0 (-51)	0 (-100)
41-50 above	0 (-100)	0 (+50.5)	0 (-38.9)	0 (+22.2)	0 (-50.7)	0 (-10.9)	0 (+360.7)	0 (-)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Moreton Bay North, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Moreton Bay - North by time of day

Table 276: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Moreton Bay - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	8.9	5.1	9.5	5.7	14.8	9.1	21.9	17.5
Off peak	7.1	5.2	9.4	5.8	13.6	9.4	21.3	14.6
PM peak	11.8	8.5	12.4	7.8	18.5	12.7	23.0	19.5
Evening	12.4	8.9	16.5	11.2	18.1	12.1	22.7	18.4
Late night/ Early morning	12.5	5.5	16.7	11.5	24.2	11.7	22.6	23.7

Table 277: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Moreton Bay - North, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	14.9	6.0	7.0	4.3	9.6	6.3	8.0	4.4	7.3	2.0	6.5	1.8	7.6	2.2	5.8	1.6
Off peak	12.6	4.8	7.2	4.4	9.3	6.1	8.0	4.4	6.7	1.8	6.9	1.8	7.6	2.2	5.5	1.5
PM peak	14.9	7.1	8.7	6.2	11.0	7.7	9.5	5.7	8.2	2.4	8.4	2.4	8.0	2.4	6.6	1.9
Evening	14.1	6.6	8.0	6.3	11.2	9.2	10.8	7.1	7.4	2.2	7.7	2.2	6.5	2.2	6.7	1.9
Late night/ Early morning	17.5	7.3	6.2	4.9	11.5	9.9	11.2	7.5	9.8	3.1	7.9	2.3	7.1	2.3	8.3	2.5

Table 278: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Moreton Bay - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	10.3	3.9	7.9	4.5	17.5	9.7	10.1	9.7
Off peak	11.4	4.4	7.7	4.1	16.1	9.0	10.5	10.1
PM peak	14.0	4.6	8.8	4.2	19.3	10.3	13.6	11.2
Evening	20.7	6.0	12.4	7.4	22.3	23.7	14.4	6.2
Late night/ Early morning	28.5	4.8	15.8	9.4	25.5	19.4	17.1	7.8

Moreton Bay - North by day of week

Table 279: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Moreton Bay - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	8.8	4.9	8.9	5.3	13.5	8.8	18.8	15.7
Weekend	8.9	8.7	15.1	10.5	21.2	14.2	26.7	19.0

Table 280: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Moreton Bay - North, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
Weekday	14.3	5.9	6.9	4.2	9.5	5.9	7.5	4.1	6.7	1.7	6.5	1.7	6.7	1.9	5.6	1.5
Weekend	13.6	5.6	8.6	6.5	10.8	8.8	11.0	7.2	8.8	2.7	9.1	2.7	9.0	2.8	6.7	1.9

Table 281: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Moreton Bay - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	11.7	3.9	8.4	4.7	18.3	12.5	11.3	8.5
Weekend	18.0	5.6	10.9	6.0	19.3	13.2	15.3	9.8

Moreton Bay - North by season

Table 282: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Moreton Bay - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	8.7	6.3	11.2	6.9	16.3	10.2	23.2	17.4
Autumn	9.3	4.8	9.1	5.8	14.3	8.5	19.3	16.5
Winter	8.4	5.7	10.2	6.7	15.4	10.3	21.2	16.9
Spring	9.6	5.7	10.9	6.6	15.3	10.5	22.9	17.3

Table 283: PARF for passenger vehicle motorists engaged in low-level speeding by season in Moreton Bay - North, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	14.1	5.7	7.9	5.1	10.2	7.1	8.7	5.1	7.7	2.1	7.2	2.0	7.9	2.4	5.9
Autumn	16.0	6.2	6.8	4.2	8.9	6.1	7.9	4.4	7.0	1.9	6.4	1.7	6.8	2.0	6.0	1.6
Winter	12.7	5.1	7.5	4.9	10.3	6.9	9.2	5.2	7.5	2.1	7.5	2.1	7.8	2.3	6.1	1.7
Spring	14.0	6.2	7.2	4.7	10.1	6.9	8.5	5.0	7.3	2.0	7.3	2.0	8.0	2.4	5.6	1.7

Table 284: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Moreton Bay - North, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	14.0	4.6	9.5	5.7	19.6	13.9	13.7	7.8
Autumn	13.7	4.4	8.8	5.0	18.8	12.5	11.7	9.8
Winter	13.4	4.4	9.6	4.8	18.9	12.4	13.0	8.6
Spring	12.7	4.3	9.5	5.4	17.7	11.9	12.5	10.3

Appendix S Moreton Bay – South

Table 285: Proportion of passenger vehicle motorists travelling at various speeds in Moreton Bay South, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	88.8 (+8.2)	91.7 (+0.8)	86 (-2.6)	89.7 (-0.5)	87.4 (+9.8)		81.9 (-0.1)	
Above limit (total)	11.2 (-37.6)	8.3 (-8.5)	14 (+19.6)	10.3 (+4.7)	12.6 (-38.2)	-	18.1 (+0.7)	-
1-5 above	6.6 (-30.6)	4.5 (-15.3)	8.9 (+23.4)	7.5 (+14.9)	8.5 (-28.7)	-	15 (+10.9)	-
6-10 above	2.6 (-46.4)	2.3 (-3.9)	3.3 (+22.6)	2 (-6.1)	2.8 (-44.3)	-	2.5 (-23.8)	-
11-12 above	0.6 (-48)	0.4 (+12.5)	0.6 (+10)	0.3 (-27.5)	0.5 (-54.9)	-	0.2 (-45.5)	-
13-20 above	1 (-41.4)	0.9 (+14.6)	0.8 (-4.7)	0.4 (-34.5)	0.7 (-63.5)	-	0.3 (-52.9)	-
21-30 above	0.3 (-36.4)	0.2 (-5.1)	0.2 (-7.7)	0.1 (-41.5)	0.1 (-70.7)	-	0.1 (-51)	-
31-40 above	0 (-72.1)	0 (-49.5)	0.1 (-11.6)	0 (-33.3)	0 (-54)	-	0 (-49.1)	-
41-50 above	0 (-94.4)	0 (-51.8)	0 (-22.6)	0 (-42.4)	0 (-57.8)	-	0 (-76.5)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Moreton Bay South, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 286: PARF for passenger vehicle motorists in Moreton Bay South, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-20.6	-14.6	-14.8	-8.7	-16.5	-12.2	-21.0	-13.3	-16.6	-5.5	-	-	-17.1	-6.0	-	-
Total above	47.6	13.7	38.4	13.0	42.6	14.8	27.4	10.8	15.0	2.9	-	-	8.6	2.1	-	-
1-5 above	5.4	2.3	3.2	2.0	4.2	3.3	4.9	3.3	2.6	0.7	-	-	3.6	1.1	-	-
6-10 above	8.8	3.6	6.5	3.7	6.4	4.6	6.0	3.7	3.3	0.8	-	-	2.4	0.6	-	-
11-12 above	2.3	1.4	2.7	1.4	2.3	1.4	1.8	1.0	1.0	0.2	-	-	0.4	0.1	-	-
13-20 above	10.2	4.3	12.4	4.4	7.7	3.5	5.3	2.0	2.7	0.5	-	-	0.9	0.2	-	-
21-30 above	14.4	1.7	10.4	1.4	11.4	1.5	6.0	0.7	2.7	0.5	-	-	1.0	0.1	-	-
31-40 above	6.2	0.3	2.3	0.1	8.6	0.4	3.2	0.1	1.8	0.1	-	-	0.2	0.0	-	-
41-50 above	0.1	0.0	0.9	0.0	2.1	0.1	0.1	0.0	0.9	0.0	-	-	0.0	0.0	-	-

Table 287: Proportion of heavy vehicle drivers travelling at various speeds in Moreton Bay South, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	89.1 (-0.1)	95.2 (-0.2)	90.8 (-1.2)	94.1 (-0.1)	90.1 (+14)	-	87.5 (+5.7)	-
Above limit (total)	10.9 (+0.7)	4.8 (+3.8)	9.2 (+13)	5.9 (+1.8)	9.9 (-52.9)	-	12.5 (-27.5)	-
1-5 above	7.7 (+16.8)	2.9 (+10.4)	6 (+16.7)	4.3 (+12.5)	6.9 (-44)	-	10.2 (-25.8)	-
6-10 above	2.2 (-13.9)	1.2 (+6.8)	2.2 (+19.9)	1.2 (-5.4)	2.1 (-63)	-	1.3 (-44.8)	-
11-12 above	0.3 (-38.2)	0.2 (+0.7)	0.3 (-3.1)	0.1 (-37.3)	0.4 (-66.4)	-	0.2 (-45.4)	-
13-20 above	0.6 (-40.4)	0.4 (-10.5)	0.5 (-12.2)	0.2 (-48.1)	0.4 (-73.4)	-	0.2 (-51.9)	-
21-30 above	0.2 (-36.4)	0.1 (-53.3)	0.1 (-30.8)	0.1 (-40.9)	0.1 (-70.8)	-	0.2 (-7.6)	-
31-40 above	0.1 (-19.9)	0 (-79.4)	0 (-30.1)	0 (-34.6)	0 (-40.8)	-	0.3 (+13674.3)	-
41-50 above	0 (+65.3)	0 (-79.4)	0 (-28.8)	0 (+37.2)	0 (-76.8)	-	0 (+647.6)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Moreton Bay South, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Moreton Bay - South by time of day

Table 288: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Moreton Bay - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	7.5	6.0	11.2	8.3	11.3	-	17.3	-
Off peak	9.0	6.2	11.4	8.8	9.9	-	16.6	-
PM peak	12.0	8.6	13.9	10.5	12.5	-	18.4	-
Evening	11.5	9.8	17.6	14.7	14.8	-	20.1	-
Late night/ Early morning	12.7	8.2	17.1	15.3	17.5	-	18.3	-

Table 289: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Moreton Bay - South, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	12.9	5.2	9.1	5.2	10.4	7.4	9.7	6.2	6.0	1.5	-	-	5.9	1.7	-	-
Off peak	14.2	5.8	9.9	5.5	10.5	7.4	10.3	6.5	5.3	1.3	-	-	5.8	1.6	-	-
PM peak	16.0	7.0	9.7	6.6	10.8	8.7	11.4	7.5	6.2	1.7	-	-	6.0	1.8	-	-
Evening	13.3	6.2	10.6	7.7	11.2	10.1	12.6	9.6	5.4	2.0	-	-	6.2	1.8	-	-
Late night/ Early morning	19.5	9.0	10.0	6.4	11.1	10.1	15.9	10.5	8.8	2.5	-	-	3.4	1.7	-	-

Table 290: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Moreton Bay - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	6.8	3.0	7.4	4.6	8.6	-	8.3	-
Off peak	11.4	3.8	7.3	5.1	8.1	-	9.2	-
PM peak	9.3	4.0	7.5	4.7	8.5	-	10.9	-
Evening	13.4	4.8	9.3	5.9	8.9	-	14.0	-
Late night/ Early morning	12.2	7.2	12.2	8.9	12.8	-	13.7	-

Moreton Bay - South by day of week

Table 291: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Moreton Bay - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	7.8	5.5	10.4	7.6	9.6	-	15.1	-
Weekend	12.8	10.1	16.5	13.4	14.4	-	20.5	-

Table 292: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Moreton Bay - South, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Weekday	13.0	5.3	8.9	4.8	10.0	6.8	9.5	5.8	5.3	1.3	-	-	5.2	1.4	-
Weekend	16.8	7.3	11.1	7.8	11.4	9.8	12.9	9.0	6.8	1.9	-	-	6.7	2.0	-	-

Table 293: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Moreton Bay - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	9.0	3.6	7.5	5.3	8.5	-	10.0	-
Weekend	11.6	5.3	9.5	5.9	9.8	-	12.7	-

Moreton Bay - South by season

Table 294: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Moreton Bay - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	10.4	7.7	13.3	10.1	12.3	-	18.3	-
Autumn	8.1	5.1	10.6	7.9	9.3	-	15.0	-
Winter	8.4	6.4	11.8	9.4	10.7	-	17.4	-
Spring	9.2	6.8	12.4	9.7	11.6	-	18.1	-

Table 295: PARF for passenger vehicle motorists engaged in low-level speeding by season in Moreton Bay - South, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Summer	14.5	6.3	10.3	6.4	11.1	8.4	11.3	7.3	6.3	1.6	-	-	6.0	1.7	-
Autumn	12.7	5.2	9.0	4.6	9.8	7.0	10.0	6.0	5.1	1.3	-	-	4.9	1.4	-	-
Winter	14.3	6.0	9.9	5.9	10.7	8.0	10.7	7.1	6.0	1.5	-	-	6.0	1.7	-	-
Spring	15.2	6.1	9.4	5.7	10.6	7.9	10.6	7.1	5.9	1.5	-	-	6.1	1.8	-	-

Table 296: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Moreton Bay - South, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	9.5	4.1	8.7	6.0	9.5	-	12.5	-
Autumn	9.9	4.0	8.0	5.5	8.3	-	11.2	-
Winter	9.7	3.7	8.3	5.6	9.4	-	11.0	-
Spring	10.2	4.4	7.7	4.7	8.6	-	11.0	-

Appendix T Queensland – Outback

Table 297: Proportion of passenger vehicle motorists travelling at various speeds in Queensland Outback, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	67.2 (-18.1)	89.8 (-1.2)	84.8 (-4.1)	79.9 (-11.4)	86.8 (+9.1)	-	87.6 (+6.8)	87.3 (+4.1)
Above limit (total)	32.8 (+83)	10.2 (+12.2)	15.2 (+30.7)	20.1 (+104.9)	13.2 (-35.4)	-	12.4 (-30.9)	12.7 (-21.2)
1-5 above	15.6 (+62.8)	5.4 (+2)	8.1 (+11.3)	11.2 (+72)	7.1 (-40.3)	-	6.5 (-51.7)	6.4 (-50.5)
6-10 above	7.6 (+55)	2.7 (+15.1)	3.8 (+38.5)	4.1 (+89.5)	3.2 (-36.9)	-	2.7 (-17.8)	4.1 (+67.1)
11-12 above	1.9 (+77.2)	0.6 (+48)	0.7 (+41.8)	1.1 (+199.6)	0.5 (-49)	-	0.7 (+63.7)	0.4 (+60.6)
13-20 above	4.2 (+136.4)	1.1 (+41.3)	1.8 (+104.9)	2.5 (+316)	1.3 (-31.9)	-	1.9 (+218.9)	1.4 (+184.4)
21-30 above	3.1 (+670.1)	0.3 (+70.4)	0.7 (+200.1)	1.2 (+753.6)	0.6 (+25.5)	-	0.5 (+229.2)	0.4 (+1952.3)
31-40 above	0.3 (+74.9)	0 (+27.6)	0.2 (+143.1)	0 (-100)	0.3 (+250.6)	-	0.1 (+1042.8)	0.1 (+1585.9)
41-50 above	0.1 (+454.8)	0 (-40.5)	0.1 (+233.8)	0 (-100)	0.3 (+1002.7)	-	0 (+1587.6)	0 (-100)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Queensland Outback, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 298: PARF for passenger vehicle motorists in Queensland Outback, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-4.4	-7.1	-10.0	-6.9	-8.6	-9.6	-9.4	-8.8	-9.3	-4.2	-	-	-6.6	-2.7	-4.8	-1.5
Total above	84.7	38.1	48.9	16.7	65.0	22.3	60.1	28.0	38.9	5.7	-	-	24.1	4.4	24.3	4.1
1-5 above	5.5	3.5	3.2	2.4	2.2	2.6	3.4	3.4	1.6	0.6	-	-	1.7	0.5	2.4	0.6
6-10 above	10.4	6.3	6.4	4.3	4.6	5.0	5.6	5.3	2.7	0.9	-	-	2.7	0.8	5.3	1.2
11-12 above	2.1	2.9	2.9	1.7	1.8	1.7	1.7	1.4	0.8	0.3	-	-	1.3	0.3	1.0	0.2
13-20 above	11.2	10.8	14.4	5.6	10.9	7.1	18.1	10.5	3.8	1.0	-	-	6.7	1.5	7.9	1.3
21-30 above	42.2	13.2	16.3	2.4	25.8	4.4	31.3	7.4	3.8	1.0	-	-	5.4	0.8	5.1	0.6
31-40 above	10.6	1.2	4.8	0.2	14.3	1.1	0.0	0.0	9.0	0.9	-	-	3.9	0.3	2.6	0.2
41-50 above	2.8	0.3	1.0	0.0	5.4	0.4	0.0	0.0	17.2	1.2	-	-	2.5	0.1	0.0	0.0

Table 299: Proportion of heavy vehicle drivers travelling at various speeds in Queensland Outback, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	77.9 (-12.6)	92.8 (-2.7)	89.9 (-2.1)	83.3 (-11.6)	81 (+2.5)	-	80.8 (-2.4)	92.1 (-0.5)
Above limit (total)	22.1 (+103.2)	7.2 (+55.8)	10.1 (+23.7)	16.7 (+187.6)	19 (-9.3)	-	19.2 (+11.5)	7.9 (+5.9)
1-5 above	10.9 (+66.3)	4.3 (+61.8)	6.3 (+21.2)	7.7 (+102)	10.4 (-16)	-	12.8 (-6.7)	4.9 (-4.9)
6-10 above	6 (+138.2)	1.8 (+69.6)	2.3 (+27.8)	4.7 (+273.1)	5.4 (-2.4)	-	4.1 (+69.1)	1.6 (+16.9)
11-12 above	1.3 (+170.9)	0.3 (+38.5)	0.4 (+21.4)	1.3 (+441.4)	1 (-1.6)	-	0.6 (+92.4)	0.3 (+44)
13-20 above	2.9 (+213.3)	0.5 (+14.4)	0.8 (+37.1)	2.4 (+580.9)	1.8 (+9.8)	-	1.2 (+143.3)	1 (+56.1)
21-30 above	0.7 (+142.4)	0.2 (+33.6)	0.3 (+42.6)	0.5 (+445.3)	0.3 (+0.2)	-	0.4 (+83.5)	0 (+208.8)
31-40 above	0.2 (+214.8)	0 (-11.4)	0 (-27.5)	0 (-100)	0.1 (+92.3)	-	0 (+537.3)	0 (-100)
41-50 above	0 (-100)	0 (-45)	0 (-67.9)	0 (-100)	0 (-70.1)	-	0 (+3436.5)	0 (-)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Queensland - Outback, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Queensland - Outback by time of day

Table 300: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Queensland - Outback, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	35.5	11.0	12.8	9.7	13.9	-	8.1	8.3
Off peak	18.0	6.5	12.1	18.7	10.4	-	14.0	9.9
PM peak	29.7	10.8	11.1	16.9	9.7	-	6.7	15.6
Evening	29.9	5.4	9.8	-	9.0	-	12.5	11.8
Late night/ Early morning	11.8	6.9	13.5	-	8.1	-	6.1	2.7

Table 301: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Queensland - Outback, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	35.0	17.1	10.9	7.9	7.5	8.2	13.2	7.4	7.9	2.0	-	-	5.0	1.2	3.1	1.4
Off peak	12.3	8.0	9.0	5.4	7.4	7.8	12.5	10.3	4.0	1.5	-	-	6.7	2.0	6.3	1.9
PM peak	14.4	9.8	10.4	8.3	4.6	6.8	5.5	7.9	3.1	1.4	-	-	2.7	1.0	6.7	2.1
Evening	20.9	11.0	7.1	5.6	7.4	6.7	-	-	4.8	1.3	-	-	4.7	1.3	1.4	1.7
Late night/ Early morning	14.1	6.0	10.9	6.1	11.1	8.8	-	-	5.1	1.3	-	-	1.5	0.9	1.3	0.2

Table 302: Percentage of heavy vehicle drivers engaged in low-level speeding by time of day in Queensland - Outback, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	16.3	4.1	8.8	6.2	13.6	-	14.2	7.1
Off peak	19.3	6.6	8.5	18.3	17.0	-	21.2	8.4
PM peak	14.2	7.7	8.9	11.6	15.6	-	16.7	6.1
Evening	27.5	3.1	6.7	9.1	10.6	-	7.3	2.1
Late night/ Early morning	10.1	7.7	8.9	8.9	23.3	-	13.3	1.5

Queensland - Outback by day of week

Table 303: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Queensland - Outback, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	22.7	8.5	11.5	16.9	9.6	-	9.6	9.9
Weekend	24.2	7.7	12.2	13.9	11.1	-	8.8	11.1

Table 304: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Queensland - Outback, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	14.8	8.9	9.9	6.8	7.4	7.7	11.0	8.9	5.8	1.4	-	-	5.6	1.3	5.3
Weekend	17.8	11.4	9.3	6.6	6.4	7.6	7.9	8.6	3.4	1.5	-	-	3.6	1.4	7.3	2.0

Table 305: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Queensland - Outback, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	15.6	5.8	7.9	11.0	16.4	-	16.3	8.4
Weekend	19.7	6.9	9.7	14.8	15.0	-	18.1	4.9

Queensland - Outback by season

Table 306: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Queensland - Outback, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	24.8	10.1	11.8	0.0	9.4	-	8.5	11.2
Autumn	21.9	6.8	12.9	10.2	12.6	-	12.1	7.5
Winter	23.6	8.8	12.0	15.5	10.1	-	9.0	9.6
Spring	23.7	6.4	11.2	20.5	8.4	-	6.4	14.0

Table 307: PARF for passenger vehicle motorists engaged in low-level speeding by season in Queensland - Outback, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
Summer	14.2	9.3	9.7	7.9	5.8	6.8	0.0	0.0	4.0	1.3	-	-	3.4	1.4	5.8	1.7
Autumn	22.7	11.6	9.5	5.8	9.1	8.5	6.5	6.0	6.8	1.9	-	-	2.8	1.4	6.5	1.4
Winter	23.7	11.2	9.8	6.8	6.5	7.5	8.3	9.4	5.3	1.4	-	-	3.9	1.5	7.3	1.5
Spring	10.6	7.6	9.7	5.8	6.7	7.9	16.5	11.4	0.1	0.4	-	-	2.1	0.8	2.8	2.2

Table 308: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Queensland - Outback, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	24.1	6.6	8.5	12.7	16.4	-	18.2	10.3
Autumn	16.0	5.6	8.2	14.0	14.9	-	17.9	6.9
Winter	12.9	5.1	7.8	13.1	16.7	-	16.3	5.6
Spring	14.8	6.9	8.7	12.2	13.9	-	16.7	4.4

Appendix U Sunshine Coast

Table 309: Proportion of passenger vehicle motorists travelling at various speeds in Sunshine Coast, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	84.5 (+3)	91.5 (+0.6)	85.3 (-3.4)	89.6 (-0.6)	79.1 (-0.6)	84.1 (-2.8)	87.1 (+6.2)	80 (-4.6)
Above limit (total)	15.5 (-13.7)	8.5 (-5.8)	14.7 (+26.1)	10.4 (+5.5)	20.9 (+2.2)	15.9 (+17.9)	12.9 (-28.3)	20 (+24.1)
1-5 above	9 (-6.2)	4.8 (-9.5)	8.4 (+15.2)	6.7 (+2.6)	12.4 (+4.3)	8.8 (-2.1)	9.2 (-32.1)	16.1 (+25.1)
6-10 above	4.2 (-14.8)	2.2 (-5.2)	3.8 (+39.2)	2.4 (+10.7)	5.2 (+2.7)	2.5 (-17.9)	2.6 (-19.7)	2.9 (+20.3)
11-12 above	0.9 (-19.5)	0.4 (-0.7)	0.8 (+55.8)	0.4 (+13.8)	1.1 (+2.5)	0.5 (+1.4)	0.4 (-3.3)	0.3 (+19.9)
13-20 above	1.2 (-32.1)	0.8 (+9.3)	1.3 (+54.6)	0.7 (+17.3)	1.8 (-5.7)	2.1 (+203.7)	0.5 (-7.2)	0.6 (+16.4)
21-30 above	0.2 (-49)	0.2 (+10.7)	0.3 (+44.3)	0.1 (-3.4)	0.3 (-22.8)	1.8 (+837.2)	0.1 (-18)	0 (+114.4)
31-40 above	0 (-84.5)	0 (+18.4)	0.1 (+9.1)	0 (-25.6)	0.1 (-22.5)	0.2 (+544.3)	0 (-28.7)	0 (+180.2)
41-50 above	0 (-95.9)	0 (+46.5)	0 (+25.4)	0 (-57.9)	0 (+34.2)	0 (+10.2)	0 (-17.3)	0 (+326.5)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Sunshine Coast, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 310: PARF for passenger vehicle motorists in Sunshine Coast, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-15.9	-10.8	-14.7	-9.3	-13.4	-11.0	-18.6	-12.3	-12.5	-4.8	-10.4	-5.1	-14.7	-4.7	-14.5	-5.1
Total above	50.0	16.8	41.3	12.9	50.7	18.3	35.1	13.4	25.9	5.7	39.1	7.9	11.3	2.3	10.3	2.5
1-5 above	7.4	3.1	3.0	2.0	3.5	3.0	4.1	2.9	3.2	1.0	2.5	1.0	2.9	0.8	3.8	1.1
6-10 above	13.7	5.5	5.8	3.6	6.5	5.1	6.5	4.2	4.9	1.4	2.8	1.0	3.1	0.7	2.8	0.7
11-12 above	3.6	2.1	2.2	1.2	2.8	1.9	2.5	1.4	1.9	0.5	0.9	0.3	0.9	0.2	0.6	0.1
13-20 above	11.2	4.7	11.0	4.1	11.1	5.4	9.1	3.6	5.6	1.2	5.1	1.3	2.2	0.4	2.2	0.4
21-30 above	10.6	1.3	11.7	1.6	14.8	2.2	9.3	1.2	5.6	1.2	17.5	3.2	1.8	0.2	0.4	0.1
31-40 above	3.4	0.2	4.9	0.2	9.2	0.5	3.5	0.2	2.4	0.2	8.0	0.9	0.3	0.0	0.4	0.0
41-50 above	0.1	0.0	2.6	0.1	2.9	0.2	0.1	0.0	2.3	0.1	2.2	0.2	0.2	0.0	0.2	0.0

Table 311: Proportion of heavy vehicle drivers over speed limit on typical weekend day Sunshine Coast, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	90.0 (+1.0)	94.9 (-0.5)	90.9 (-1)	94.3 (+0.1)	83 (+5)	89.3 (+2)	91.6 (+10.7)	93 (+0.5)
Above limit (total)	10.0 (-7.8)	5.1 (+10.4)	9.1 (+11.4)	5.7 (-1.4)	17 (-18.9)	10.7 (-14.2)	8.4 (-51.3)	7 (-5.7)
1-5 above	7.4 (+12.8)	2.4 (-10.8)	5.6 (+8.9)	3.8 (+0.3)	11.2 (-9.6)	7.8 (-10.2)	6.1 (-55.9)	5.4 (+4.2)
6-10 above	1.8 (-30)	1.2 (+11.1)	2 (+11.3)	1.1 (-12.3)	4 (-27.6)	2.3 (-17.7)	1.7 (-30.8)	1.1 (-22.8)
11-12 above	0.3 (-32.5)	0.3 (+37.3)	0.4 (+16.8)	0.2 (+2.7)	0.7 (-34.4)	0.3 (-24.3)	0.2 (-26.1)	0.1 (-38)
13-20 above	0.4 (-54.2)	0.8 (+83.5)	0.7 (+22.5)	0.4 (+11.4)	0.9 (-45.4)	0.2 (-46.4)	0.2 (-50)	0.4 (-37.4)
21-30 above	0.1 (-76.3)	0.3 (+105)	0.3 (+41.4)	0.1 (+17.6)	0.2 (-39.3)	0 (-70.6)	0.1 (-29.9)	0 (-75.5)
31-40 above	0 (-51.5)	0 (+71.8)	0.1 (+6)	0 (-21.1)	0 (-15.9)	0 (-73.7)	0 (-76.6)	0 (-60.6)
41-50 above	0 (-79.2)	0 (+16.4)	0 (-13.6)	0 (+9.5)	0 (-21.8)	0 (-58.1)	0 (+368)	0 (-)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Sunshine Coast, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Sunshine Coast by time of day

Table 312: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Sunshine Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	14.7	7.2	11.8	9.1	17.3	12.4	11.8	19.4
Off peak	11.7	6.7	11.7	8.0	16.9	10.0	11.5	18.1
PM peak	13.4	7.3	12.5	9.1	18.1	11.2	11.7	20.4
Evening	16.8	8.5	14.7	14.0	20.4	14.2	14.0	17.4
Late night/ Early morning	17.5	7.9	17.2	17.6	24.1	19.9	13.7	20.4

Table 313: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Sunshine Coast, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	22.5	9.3	8.8	5.8	9.9	8.0	10.7	7.1	7.9	2.4	5.9	2.3	6.1	1.5	6.6	1.9
Off peak	20.1	7.9	8.9	5.4	10.1	7.9	10.3	6.5	8.1	2.3	4.9	1.8	5.8	1.4	6.6	1.8
PM peak	21.5	8.7	8.7	5.7	10.0	8.2	10.7	7.1	7.9	2.4	5.2	2.0	5.7	1.5	6.6	1.9
Evening	22.1	10.0	9.1	6.2	9.3	9.0	11.6	9.3	7.9	2.8	5.4	2.4	6.1	1.8	6.7	1.9
Late night/ Early morning	21.9	10.7	8.3	6.6	9.2	10.2	11.9	11.3	9.4	3.3	9.2	3.3	5.9	1.6	5.3	1.8

Table 314: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Sunshine Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	9.6	3.5	7.5	4.8	15.4	10.2	7.3	7.9
Off peak	7.6	3.4	7.0	4.4	13.5	9.3	6.5	8.8
PM peak	9.9	4.0	7.8	4.6	15.0	9.9	8.4	7.5
Evening	8.0	2.8	7.3	4.0	16.6	5.2	7.4	1.9
Late night/ Early morning	16.4	4.4	11.3	8.6	23.2	15.4	11.3	5.1

Sunshine Coast by day of week

Table 315: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Sunshine Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	12.7	6.3	10.9	7.7	16.5	10.3	10.4	16.1
Weekend	13.7	8.3	14.1	11.2	19.4	13.2	13.7	23.0

Table 316: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Sunshine Coast, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	20.5	8.3	8.3	5.1	9.6	7.5	9.9	6.3	7.7	2.2	5.5	1.9	5.4	1.3	5.6
Weekend	21.9	8.9	9.6	6.3	10.4	8.9	11.6	8.2	8.6	2.6	5.2	2.3	6.7	1.7	7.7	2.3

Table 317: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Sunshine Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	9.2	3.5	7.3	5.2	14.3	10.0	6.8	6.0
Weekend	9.1	3.8	8.4	4.6	17.7	10.3	9.5	7.1

Sunshine Coast by season

Table 318: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Sunshine Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	12.8	7.1	12.1	9.0	18.3	11.8	11.8	19.6
Autumn	12.4	5.9	10.7	7.3	15.9	9.3	9.8	16.3
Winter	12.8	6.7	12.0	9.0	17.0	11.4	11.8	19.8
Spring	13.9	7.7	12.8	9.6	17.9	11.2	12.3	18.9

Table 319: PARF for passenger vehicle motorists engaged in low-level speeding by season in Sunshine Coast, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Summer	21.2	8.5	8.9	5.6	9.7	8.0	10.7	7.1	8.2	2.5	5.4	2.1	5.8	1.5	6.7
Autumn	19.4	8.0	7.9	4.9	9.3	7.4	9.5	6.0	7.4	2.2	5.0	1.7	5.0	1.2	5.7	1.6
Winter	21.9	8.7	8.9	5.6	10.3	8.3	11.3	7.5	8.2	2.4	5.5	2.2	6.3	1.6	6.8	2.0
Spring	21.4	8.9	9.3	6.1	10.1	8.5	10.6	7.3	8.2	2.4	5.3	2.0	6.1	1.6	6.8	1.9

Table 320: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Sunshine Coast, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	9.2	3.6	8.1	5.8	15.9	10.6	7.2	6.4
Autumn	9.4	3.0	7.0	4.5	13.8	10.0	7.5	6.1
Winter	8.8	3.5	7.1	4.2	14.9	8.0	8.1	5.8
Spring	9.1	4.0	8.1	5.4	15.9	11.1	8.3	7.5

Appendix V Toowoomba

Table 321: Proportion of passenger vehicle motorists travelling at various speeds in Toowoomba, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	91.5 (+11.5)	90.5 (-0.5)	90.2 (+2.1)	81.7 (-9.4)	71.8 (-9.7)	88 (+1.7)	76.3 (-7)	-
Above limit (total)	8.5 (-52.6)	9.5 (+5.4)	9.8 (-15.8)	18.3 (+86.2)	28.2 (+37.9)	12 (-10.8)	23.7 (+32)	-
1-5 above	5 (-47.7)	5.6 (+5.3)	6.4 (-12.1)	10.9 (+67.1)	16.4 (+37.5)	8.2 (-8.7)	18.1 (+33.7)	-
6-10 above	2.2 (-54.8)	2.6 (+9.1)	2.1 (-24)	4.6 (+113.5)	7.2 (+42.4)	2.8 (-9)	4 (+21.9)	-
11-12 above	0.4 (-63.6)	0.4 (+5.2)	0.4 (-25.2)	1 (+168.2)	1.4 (+36.2)	0.4 (-17.2)	0.6 (+33)	-
13-20 above	0.6 (-65.7)	0.7 (-2.8)	0.7 (-23.9)	1.5 (+152)	2.6 (+36.8)	0.5 (-28.8)	0.9 (+52.7)	-
21-30 above	0.2 (-41.2)	0.1 (-17.9)	0.2 (-3.6)	0.2 (+57.5)	0.5 (+10.5)	0.1 (-57.4)	0.2 (+18.1)	-
31-40 above	0 (-89.1)	0 (+56.4)	0.1 (+31.4)	0 (+30.5)	0.1 (-2.3)	0 (-32.5)	0 (-6.4)	-
41-50 above	0 (-83.4)	0 (+150.6)	0 (+21.3)	0 (-7.2)	0 (+83.8)	0 (+82.6)	0 (-83.5)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Toowoomba, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 322: PARF for passenger vehicle motorists in Toowoomba, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-16.0	-9.9	-13.0	-8.6	-17.1	-13.2	-11.9	-9.4	-9.9	-4.2	-12.1	-4.1	-11.5	-4.2	-	-
Total above	45.4	11.8	40.7	13.2	44.3	12.1	46.2	21.7	31.3	7.6	16.9	3.5	14.2	3.5	-	-
1-5 above	5.3	2.1	3.4	2.4	2.9	2.4	4.8	4.0	3.7	1.3	3.7	1.1	4.3	1.3	-	-
6-10 above	9.3	3.5	6.5	4.2	4.1	3.1	8.7	6.6	5.9	1.8	4.8	1.2	3.7	1.0	-	-
11-12 above	2.2	1.1	2.2	1.3	1.6	1.0	4.0	2.6	2.2	0.6	1.6	0.4	1.0	0.3	-	-
13-20 above	8.0	3.0	9.1	3.7	6.6	3.0	13.9	6.7	7.2	1.7	2.9	0.6	2.9	0.6	-	-
21-30 above	16.9	1.9	8.8	1.2	12.6	1.7	10.7	1.6	7.2	1.7	1.3	0.2	2.0	0.3	-	-
31-40 above	3.2	0.1	6.3	0.3	13.1	0.7	3.9	0.2	2.3	0.2	0.8	0.1	0.3	0.0	-	-
41-50 above	0.4	0.0	4.3	0.2	3.3	0.2	0.1	0.0	2.7	0.2	1.8	0.1	0.0	0.0	-	-

Table 323: Proportion of heavy vehicle drivers travelling at various speeds in Toowoomba, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	95.6 (+7.3)	97.7 (+2.5)	94 (+2.3)	92.6 (-1.7)	71.6 (-9.4)	91.9 (+4.9)	86.5 (+4.5)	-
Above limit (total)	4.4 (-59.5)	2.3 (-50.8)	6 (-26.3)	7.4 (+26.9)	28.4 (+35.4)	8.1 (-34.4)	13.5 (-21.7)	-
1-5 above	2.4 (-63.2)	1.3 (-50.5)	3.7 (-28.5)	5 (+30.1)	16.8 (+35.9)	6.1 (-30.3)	10.9 (-20.5)	-
6-10 above	1.3 (-47.2)	0.6 (-48.5)	1.3 (-26.3)	1.7 (+33.4)	7.6 (+36.2)	1.4 (-48)	1.8 (-26)	-
11-12 above	0.2 (-61.8)	0.1 (-64.7)	0.3 (-14.6)	0.3 (+14.6)	1.3 (+22.8)	0.4 (+3.2)	0.3 (-23.5)	-
13-20 above	0.4 (-59.1)	0.2 (-53.5)	0.5 (-14.5)	0.4 (-1.5)	2.3 (+37.1)	0.2 (-48.5)	0.3 (-34.6)	-
21-30 above	0.1 (-80)	0.1 (-59.1)	0.2 (-18.6)	0.1 (-31.2)	0.4 (+41.6)	0 (-73.2)	0.2 (-18.1)	-
31-40 above	0 (-60.5)	0 (-31.5)	0 (-37.1)	0 (-61.1)	0.1 (+65.1)	0 (-92.1)	0 (-15.4)	-
41-50 above	0 (+35.8)	0 (+1.8)	0 (-34.9)	0 (-100)	0 (-77.7)	0 (-100)	0 (+390.1)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Toowoomba, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Toowoomba by time of day

Table 324: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Toowoomba, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	8.2	8.6	8.8	14.6	23.3	9.3	19.9	-
Off peak	5.6	7.0	8.4	16.8	23.3	11.8	22.2	-
PM peak	6.2	7.8	8.2	15.8	25.8	11.7	26.0	-
Evening	9.6	9.6	6.9	14.6	21.2	13.1	20.1	-
Late night/ Early morning	10.1	10.0	9.8	13.3	20.5	10.2	16.6	-

Table 325: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Toowoomba, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	17.6	6.4	9.3	6.7	7.1	5.5	12.7	10.2	9.4	3.0	7.2	2.0	6.9	2.1	-	-
Off peak	12.6	4.4	10.8	5.8	8.0	5.5	14.6	11.3	10.0	3.2	9.2	2.4	7.4	2.3	-	-
PM peak	15.0	5.2	10.0	6.2	7.0	5.4	13.2	10.5	8.3	3.3	8.7	2.3	7.8	2.7	-	-
Evening	13.7	6.4	12.1	7.5	6.1	4.6	12.1	9.5	9.5	2.9	9.4	2.6	1.7	1.6	-	-
Late night/ Early morning	16.5	7.4	8.4	7.9	5.3	6.0	13.1	9.6	7.1	2.9	8.1	2.1	6.3	1.8	-	-

Table 326: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Toowoomba, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	4.0	1.8	4.9	5.9	24.6	7.2	12.1	-
Off peak	3.4	2.0	4.7	6.3	23.8	6.5	11.9	-
PM peak	3.6	1.9	4.9	6.7	23.7	6.3	13.1	-
Evening	3.7	1.7	4.8	11.4	23.4	9.7	15.5	-
Late night/ Early morning	6.1	1.9	7.3	7.2	27.9	11.3	13.4	-

Toowoomba by day of week

Table 327: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Toowoomba, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	7.2	7.5	7.7	12.9	22.1	9.0	18.9	-
Weekend	7.3	9.1	9.6	19.5	25.8	14.1	26.0	-

Table 328: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Toowoomba, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
	Weekday	14.1	5.6	9.1	6.2	6.4	5.1	12.8	9.4	9.2	3.0	7.8	1.9	7.1	2.0	-
Weekend	15.4	5.7	11.1	7.1	8.0	6.0	14.1	11.9	10.1	3.4	9.4	2.7	8.7	2.7	-	-

Table 329: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Toowoomba, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	3.5	1.8	4.9	6.4	22.9	6.5	11.1	-
Weekend	4.3	2.1	5.2	7.3	27.8	9.5	15.7	-

Toowoomba by season

Table 330: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Toowoomba, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	7.0	8.2	8.7	16.7	23.8	13.6	22.4	-
Autumn	7.2	6.6	8.4	13.0	21.9	9.0	20.6	-
Winter	7.3	8.1	8.4	14.4	23.7	11.1	21.5	-
Spring	7.7	8.6	8.4	16.3	23.4	9.5	22.1	-

Table 331: PARF for passenger vehicle motorists engaged in low-level speeding by season in Toowoomba, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	14.7	5.5	10.2	6.6	7.7	5.6	13.3	10.8	9.5	3.1	9.5	2.6	7.3	2.3	-
Autumn	14.8	5.8	10.0	5.6	6.7	5.5	12.9	9.2	7.8	3.0	7.1	1.8	7.1	2.0	-	-
Winter	13.8	5.4	8.5	6.9	6.1	5.4	13.4	10.6	9.3	3.3	9.7	2.5	8.2	2.5	-	-
Spring	15.4	5.9	11.3	6.9	7.5	5.5	14.1	11.2	9.7	3.1	7.5	2.0	7.2	2.5	-	-

Table 332: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Toowoomba, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	5.3	1.8	5.2	6.9	24.6	8.4	13.0	-
Autumn	4.6	1.9	4.9	6.1	23.7	7.4	12.7	-
Winter	3.9	1.7	4.9	6.2	24.8	7.4	12.8	-
Spring	2.1	2.1	5.2	7.4	24.4	6.9	12.6	-

Appendix W Townsville

Table 333: Proportion of passenger vehicle motorists travelling at various speeds in Townsville, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	89.1 (+8.5)	93.9 (+3.3)	86.3 (-2.3)	88.5 (-1.8)	80.6 (+1.4)	86 (-0.6)	80.3 (-2.1)	89.4 (+6.5)
Above limit (total)	10.9 (-39)	6.1 (-33)	13.7 (+17.7)	11.5 (+17)	19.4 (-5.3)	14 (+3.9)	19.7 (+9.5)	10.6 (-33.8)
1-5 above	5.2 (-45.8)	3.6 (-33.1)	8.1 (+11.3)	6.3 (-3.8)	10.5 (-12)	10.4 (+15.6)	13.4 (-1.1)	7.1 (-44.5)
6-10 above	2.5 (-48.2)	1.5 (-34.5)	3.1 (+14.8)	2.5 (+14.7)	4.7 (-7.3)	3 (-4.2)	3.6 (+10)	2.6 (+6.9)
11-12 above	0.6 (-41.5)	0.3 (-36.4)	0.6 (+26.1)	0.6 (+67.8)	0.9 (-15.8)	0.2 (-61.2)	0.6 (+49.8)	0.3 (-0.5)
13-20 above	1.3 (-28.7)	0.5 (-29.9)	1.3 (+49.4)	1.5 (+157.3)	1.9 (+3)	0.4 (-45.4)	1.3 (+123.6)	0.6 (+20.4)
21-30 above	1 (+148.1)	0.2 (-15.7)	0.5 (+103.3)	0.5 (+246.5)	0.9 (+104.8)	0.1 (-66.5)	0.7 (+380.4)	0 (+120.7)
31-40 above	0.3 (+81.6)	0 (-33.9)	0.1 (+62.9)	0.1 (+257.2)	0.4 (+381.4)	0 (-100)	0 (+202)	0 (-15.4)
41-50 above	0 (-21.3)	0 (-48.4)	0 (+40.7)	0 (+464.6)	0.1 (+246.6)	0 (-100)	0 (+94.6)	0 (-100)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Townsville, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 334: PARF for passenger vehicle motorists in Townsville, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 - 10 under	-8.2	-10.5	-14.5	-7.9	-13.1	-12.0	-11.2	-10.5	-8.3	-3.8	-14.2	-5.2	-10.6	-4.0	-8.0	-2.2
Total above	77.8	20.5	35.1	9.9	55.1	17.9	57.5	19.6	37.5	7.1	12.1	3.2	21.6	4.4	12.3	2.3
1-5 above	3.2	1.9	2.9	1.7	2.9	2.8	2.6	2.5	2.4	0.9	4.3	1.3	3.2	1.0	3.5	0.8
6-10 above	6.0	3.3	5.3	2.8	4.8	4.2	4.2	3.8	3.9	1.3	4.6	1.2	3.4	1.0	3.8	0.8
11-12 above	1.4	1.5	1.8	0.9	2.0	1.6	2.3	1.8	1.4	0.4	0.8	0.2	1.2	0.3	0.7	0.1
13-20 above	7.0	5.2	9.4	3.0	10.0	5.4	12.6	6.9	5.8	1.5	1.6	0.3	4.7	1.0	3.4	0.5
21-30 above	38.0	6.6	11.0	1.4	20.3	3.1	23.9	3.9	5.8	1.5	0.8	0.1	7.9	1.1	0.6	0.1
31-40 above	21.4	1.9	3.6	0.1	12.2	0.8	11.0	0.7	12.9	1.2	0.0	0.0	1.0	0.1	0.2	0.0
41-50 above	0.8	0.1	1.2	0.0	2.9	0.2	0.9	0.1	5.3	0.4	0.0	0.0	0.3	0.0	0.0	0.0

Table 335: Proportion of heavy vehicle drivers travelling at various speeds in Townsville, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	83.5 (-6.3)	96.7 (+1.4)	92.4 (+0.6)	95.5 (+1.4)	77 (-2.5)	80.1 (-8.6)	82.8 (0)	93 (+0.5)
Above limit (total)	16.5 (+51.8)	3.3 (-28.9)	7.6 (-7.2)	4.5 (-22.1)	23 (+9.6)	19.9 (+60.6)	17.2 (-0.2)	7 (-5.9)
1-5 above	3.9 (-39.8)	1.9 (-27.7)	5.2 (+1.4)	3.2 (-16.9)	12.4 (+0.4)	14.2 (+62.8)	14 (+1.7)	5 (-3.8)
6-10 above	4.8 (+89.3)	0.8 (-27.8)	1.5 (-13.9)	0.9 (-31.9)	6.3 (+12.4)	4.4 (+57.4)	2.3 (-5.4)	1.2 (-10.7)
11-12 above	1.9 (+294.2)	0.2 (-23.7)	0.2 (-24.2)	0.2 (-33.3)	1.2 (+15.7)	0.3 (-16.4)	0.3 (+3.6)	0.3 (+28)
13-20 above	4.9 (+427.6)	0.3 (-35.5)	0.4 (-34.3)	0.2 (-31.2)	2.6 (+59)	1.1 (+153.6)	0.4 (-24.4)	0.4 (-28.5)
21-30 above	0.9 (+191.3)	0.1 (-30.3)	0.1 (-40.4)	0.1 (-28.5)	0.4 (+53.3)	0 (-100)	0.2 (-16.6)	0 (+39.4)
31-40 above	0.1 (+13.7)	0 (-51)	0 (-64.9)	0 (-63.7)	0 (-24.4)	0 (-100)	0 (+108.1)	0 (+679.8)
41-50 above	0 (-100)	0 (-78.3)	0 (-54.5)	0 (-100)	0 (-59.5)	0 (-100)	0 (+505.6)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Townsville, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Townsville by time of day

Table 336: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Townsville, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	9.0	5.6	11.5	8.7	13.8	12.3	16.2	9.0
Off peak	7.6	5.4	11.2	8.1	15.0	12.2	20.1	20.6
PM peak	8.1	5.3	10.5	8.3	15.0	15.0	17.9	5.7
Evening	6.0	4.5	10.4	9.5	17.0	13.2	14.7	12.3
Late night/ Early morning	7.0	3.1	13.3	11.3	17.4	23.1	9.7	1.1

Table 337: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Townsville, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	10.2	5.8	8.1	4.8	8.2	7.1	7.1	6.4	5.4	1.9	7.9	2.3	7.1	2.0	7.4	1.6
Off peak	9.2	5.1	8.7	4.8	8.3	6.9	7.6	6.1	6.6	2.1	8.5	2.4	7.3	2.3	9.5	2.5
PM peak	10.3	5.4	7.9	4.4	7.6	6.7	6.2	6.0	6.1	2.2	8.8	2.6	6.6	2.1	6.1	1.2
Evening	7.3	4.4	7.8	4.0	7.0	6.7	6.2	6.8	6.6	2.6	12.4	3.3	5.3	1.7	5.6	1.1
Late night/ Early morning	7.5	4.5	6.6	3.1	6.1	7.7	6.3	7.2	6.6	2.8	12.3	4.5	3.1	1.1	1.2	0.2

Table 338: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Townsville, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	8.9	2.7	6.8	3.8	18.6	21.1	16.4	4.7
Off peak	6.5	2.8	5.9	4.0	17.8	13.5	16.4	5.9
PM peak	8.0	2.6	6.5	4.4	19.0	22.0	18.5	8.2
Evening	10.9	2.8	7.9	4.1	20.3	25.1	13.9	5.3
Late night/ Early morning	14.5	2.7	9.5	3.9	19.4	14.2	13.9	6.8

Townsville by day of week

Table 339: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Townsville, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	8.1	4.6	10.2	7.7	14.4	11.7	16.8	6.2
Weekend	7.4	5.8	12.5	10.1	16.2	15.2	17.2	12.8

Table 340: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Townsville, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
Weekday	10.1	5.4	7.6	4.1	7.6	6.6	6.4	5.7	6.4	2.1	8.0	2.2	6.4	1.9	5.0	1.0
Weekend	8.6	5.0	8.8	5.0	7.7	7.5	7.3	7.3	6.1	2.3	9.9	2.9	6.7	2.1	8.8	2.0

Table 341: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Townsville, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	8.7	2.4	6.1	3.3	18.2	16.0	14.7	5.9
Weekend	8.7	3.3	8.2	5.4	19.4	22.1	19.1	6.8

Townsville by season

Table 342: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Townsville, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	8.0	5.0	10.8	8.2	14.3	8.4	17.2	9.7
Autumn	7.4	4.4	10.6	7.9	14.8	13.7	17.6	3.7
Winter	7.6	5.0	11.8	9.2	15.4	15.3	16.4	11.8
Spring	7.1	5.6	11.3	9.3	15.7	20.9	17.4	10.3

Table 343: PARF for passenger vehicle motorists engaged in low-level speeding by season in Townsville, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)		PARF (%)	
	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El	Klo	El
Summer	9.7	5.4	8.0	4.3	7.3	6.6	7.5	6.1	6.4	2.1	6.2	1.7	6.0	1.9	6.5	1.3
Autumn	8.3	4.8	7.8	4.0	7.2	6.8	6.3	6.0	5.8	2.1	9.1	2.7	6.7	2.1	2.4	0.5
Winter	10.3	5.8	8.3	4.7	8.0	7.4	8.1	6.9	6.4	2.3	7.5	2.2	7.3	2.0	9.8	2.3
Spring	8.1	4.5	8.3	4.9	8.1	7.1	5.8	6.4	6.2	2.3	13.1	3.9	5.6	1.8	9.6	2.1

Table 344: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Townsville, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	5.6	2.1	6.6	3.5	17.3	14.5	17.2	3.9
Autumn	6.8	2.4	6.7	3.5	18.7	15.5	19.5	6.0
Winter	8.0	2.9	6.9	4.0	18.2	21.1	17.9	5.3
Spring	10.7	3.0	7.0	5.1	20.2	22.7	13.4	10.4

Appendix X Wide Bay

Table 345: Proportion of passenger vehicle motorists travelling at various speeds in Wide Bay, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	83.2 (+1.4)	84.2 (-7.4)	84.4 (-4.5)	82.2 (-8.8)	73.7 (-7.4)	77.6 (-10.4)	73 (-11.1)	69.1 (-17.7)
Above limit (total)	16.8 (-6.4)	15.8 (+74.2)	15.6 (+33.7)	17.8 (+81)	26.3 (+28.6)	22.4 (+66.5)	27 (+50.5)	30.9 (+92.3)
1-5 above	8.3 (-12.9)	8.6 (+61)	10.1 (+39.9)	12 (+84.7)	15.5 (+30)	14.2 (+57.7)	19.1 (+40.7)	22.9 (+78.2)
6-10 above	4.4 (-10.5)	4.4 (+86.7)	3.5 (+29.8)	3.8 (+75.8)	5.9 (+15.8)	4.8 (+57)	5 (+53)	6 (+145)
11-12 above	1.1 (+4)	0.8 (+91.9)	0.6 (+20.6)	0.7 (+78.5)	1.2 (+12.6)	0.8 (+73.3)	0.8 (+97.1)	0.6 (+129.4)
13-20 above	1.9 (+9.4)	1.4 (+80.2)	1 (+11.4)	0.9 (+60.2)	2.8 (+50.1)	1.8 (+162)	1.5 (+161.1)	1.2 (+152.9)
21-30 above	0.8 (+99)	0.4 (+142.1)	0.2 (+3.1)	0.2 (+47.9)	0.8 (+84.5)	0.7 (+245.1)	0.6 (+272.4)	0.1 (+612.2)
31-40 above	0.1 (-5.8)	0.1 (+439)	0.1 (+25.8)	0.1 (+227.9)	0.1 (+26.4)	0.1 (+292.5)	0.1 (+512.7)	0.1 (+1628.7)
41-50 above	0 (-21.5)	0.1 (+991.9)	0 (+8)	0 (+1674.2)	0 (+23.2)	0 (+331.9)	0 (+563.4)	0 (+192.5)

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of passenger vehicle motorists travelling at various speeds in the corresponding speed zone in Wide Bay, compared to the prevalence of all passenger vehicle motorists travelling at these speeds across all Queensland in the corresponding speed zone.

Table 346: PARF for passenger vehicle motorists in Wide Bay, Queensland, 2018

Vehicle speed (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
At or 1 – 10 under	-7.2	-9.2	-8.7	-8.7	-15.8	-12.6	-14.4	-11.9	-10.5	-4.5	-9.2	-4.3	-10.3	-4.3	-10.1	-4.0
Total above	61.6	23.4	58.7	20.8	44.7	15.5	43.9	17.8	30.7	7.4	29.3	7.0	21.9	5.0	17.9	4.5
1-5 above	4.8	2.8	2.8	3.0	4.1	3.4	5.0	4.3	3.2	1.2	4.2	1.6	3.9	1.4	4.8	1.6
6-10 above	9.8	5.4	6.1	5.9	5.9	4.6	6.9	5.5	4.6	1.5	5.1	1.7	4.0	1.2	4.7	1.4
11-12 above	2.3	2.4	2.2	1.9	2.2	1.5	2.4	1.7	1.7	0.5	1.6	0.5	1.3	0.4	0.9	0.3
13-20 above	9.6	7.1	9.7	5.7	7.9	3.8	8.5	4.3	8.2	2.0	5.8	1.5	4.3	1.0	4.4	0.9
21-30 above	24.2	4.8	15.9	2.9	11.4	1.5	10.2	1.4	8.2	2.0	6.4	1.1	5.9	0.9	1.2	0.2
31-40 above	10.3	0.9	11.8	0.8	10.7	0.6	7.4	0.4	3.0	0.3	3.3	0.3	1.7	0.2	1.7	0.2
41-50 above	0.7	0.1	10.2	0.7	2.5	0.1	3.5	0.2	1.8	0.1	3.0	0.2	0.8	0.1	0.1	0.0

Table 347: Proportion of heavy vehicle drivers travelling at various speeds in Wide Bay, Queensland, 2018

Vehicle speed (km/h)	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
At or below limit	82.3 (-7.6)	91.2 (-4.3)	88.6 (-3.5)	89 (-5.6)	66.3 (-16.1)	72.4 (-17.4)	81.9 (-1)	93.2 (+0.7)
Above limit (total)	17.7 (+62.4)	8.8 (+88.9)	11.4 (+39.6)	11 (+90.2)	33.7 (+60.5)	27.6 (+122.4)	18.1 (+4.9)	6.8 (-8.2)
1-5 above	8.4 (+28.2)	5.4 (+102)	7.5 (+44.9)	7.5 (+96.8)	17.6 (+42.4)	18.4 (+111.7)	15.1 (+9.5)	4.9 (-4.8)
6-10 above	5.2 (+105.1)	2 (+87.8)	2.4 (+35.1)	2.1 (+63.6)	8.9 (+59)	7.7 (+176.5)	2.1 (-12.6)	1.4 (-2)
11-12 above	1.1 (+128.5)	0.4 (+63.3)	0.5 (+45)	0.4 (+70.5)	2 (+88)	0.8 (+124.9)	0.3 (-14.2)	0.1 (-53.2)
13-20 above	1.7 (+83.3)	0.6 (+41.9)	0.7 (+22.7)	0.8 (+126.4)	4.4 (+168.2)	0.6 (+41.7)	0.4 (-19)	0.4 (-33.1)
21-30 above	0.9 (+187.6)	0.2 (+51.4)	0.2 (+9.1)	0.2 (+100.7)	0.7 (+164.2)	0.1 (-30.5)	0.2 (-11)	0 (-84)
31-40 above	0.3 (+415.4)	0.1 (+109.5)	0 (-33.6)	0 (+34.3)	0 (-0.2)	0 (-80.1)	0 (-43.9)	0 (-100)
41-50 above	0 (+684.9)	0 (+46.1)	0 (-13.3)	0 (-100)	0 (+163.8)	0 (-100)	0 (+12.5)	-

Note: The numbers in parentheses in each cell represents the percentage difference in the prevalence of heavy vehicle drivers travelling at various speeds in the corresponding speed zone in Wide Bay, compared to the prevalence of all heavy vehicle drivers travelling at these speeds across all Queensland in the corresponding speed zone.

Wide Bay by time of day

Table 348: Proportion of passenger vehicle motorists engaged in low-level speeding by time of day in Wide Bay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	12.2	14.0	13.7	16.8	21.5	18.0	23.7	33.9
Off peak	12.0	11.5	12.5	13.0	19.6	14.9	22.6	28.1
PM peak	16.1	13.3	14.5	18.0	21.9	18.5	26.5	28.9
Evening	16.1	15.5	16.6	19.5	25.2	31.6	29.1	20.3
Late night/ Early morning	7.0	23.9	23.0	24.8	33.7	45.6	22.7	20.1

Table 349: PARF for passenger vehicle motorists engaged in low-level speeding by time of day in Wide Bay, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
AM peak	13.6	7.6	8.9	9.3	10.4	8.1	12.9	10.8	8.1	2.7	9.3	3.3	7.6	2.5	11.6	3.7
Off peak	15.7	8.1	9.0	8.2	9.4	7.3	10.5	8.2	7.2	2.4	7.9	2.7	8.0	2.5	9.9	3.0
PM peak	13.6	9.0	8.3	8.8	10.2	8.3	13.7	11.1	7.8	2.6	8.8	3.4	8.8	2.9	8.1	2.7
Evening	20.2	9.7	9.0	10.3	11.1	9.4	11.2	9.8	8.2	3.1	12.6	5.0	8.1	3.2	7.4	2.1
Late night/ Early morning	12.3	4.8	10.9	14.8	10.6	11.6	9.5	11.5	7.0	3.7	14.7	6.8	3.5	1.9	5.3	1.9

Table 350: Proportion of heavy vehicle drivers engaged in low-level speeding by time of day in Wide Bay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
AM peak	12.2	6.0	8.1	6.8	22.4	17.3	16.4	8.8
Off peak	10.8	5.1	6.8	4.6	22.5	19.1	14.8	9.2
PM peak	11.4	5.8	8.2	7.7	26.2	19.5	19.3	8.7
Evening	19.9	9.5	14.1	14.2	32.6	33.8	19.9	0.7
Late night/ Early morning	20.9	18.1	20.4	22.1	37.2	44.0	18.1	2.9

Wide Bay by day of week

Table 351: Proportion of passenger vehicle motorists engaged in low-level speeding by day of week in Wide Bay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	8.6	12.2	12.2	14.6	20.6	20.3	21.9	23.6
Weekend	20.7	13.9	15.7	17.5	22.3	17.5	26.7	36.1

Table 352: PARF for passenger vehicle motorists engaged in low-level speeding by day of week in Wide Bay, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Weekday	11.8	6.3	8.5	8.6	9.5	7.3	11.5	9.3	7.6	2.6	10.2	3.6	7.3	2.4	8.3
Weekend	18.3	10.7	9.4	9.3	10.6	8.8	12.3	10.5	8.0	2.7	8.3	3.1	8.4	2.9	11.0	3.7

Table 353: Proportion of heavy vehicle drivers engaged in low-level speeding by day of week in Wide Bay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Weekday	9.2	6.5	8.7	8.7	25.3	25.3	16.7	6.0
Weekend	22.1	9.4	12.7	11.4	28.8	27.5	18.2	6.8

Wide Bay by season

Table 354: Proportion of passenger vehicle motorists engaged in low-level speeding by season in Wide Bay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	15.4	13.1	14.7	18.4	21.8	16.5	25.7	30.2
Autumn	11.7	12.5	14.1	15.1	21.4	21.8	23.6	24.9
Winter	10.9	12.7	13.2	15.4	21.3	19.1	24.2	30.8
Spring	13.5	13.0	13.0	13.9	21.0	19.9	22.2	27.9

Table 355: PARF for passenger vehicle motorists engaged in low-level speeding by season in Wide Bay, Queensland, 2018

Speed above limit (km/h)	40 km/h limit PARF (%)		50 km/h limit PARF (%)		60 km/h limit PARF (%)		70 km/h limit PARF (%)		80 km/h limit PARF (%)		90 km/h limit PARF (%)		100 km/h limit PARF (%)		110 km/h limit PARF (%)	
	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI	Klo	EI
	Summer	14.9	8.7	9.2	8.9	10.2	8.4	12.2	10.7	8.2	2.7	8.3	2.9	9.0	2.8	10.4
Autumn	13.2	7.7	9.3	8.7	9.4	8.0	10.6	9.3	7.6	2.6	10.8	3.7	7.7	2.5	7.6	2.4
Winter	11.8	6.5	8.7	8.9	10.2	7.9	12.3	9.8	7.4	2.5	8.6	3.4	7.0	2.6	9.4	3.1
Spring	17.7	9.3	8.7	9.0	9.9	7.6	12.0	9.2	7.8	2.7	9.9	3.5	7.3	2.4	10.3	3.2

Table 356: Proportion of heavy vehicle drivers engaged in low-level speeding by season in Wide Bay, Queensland, 2018

	40 km/h Limit (%)	50 km/h Limit (%)	60 km/h Limit (%)	70 km/h Limit (%)	80 km/h Limit (%)	90 km/h Limit (%)	100 km/h Limit (%)	110 km/h Limit (%)
Summer	13.3	7.7	10.4	10.0	26.8	23.9	18.5	7.5
Autumn	13.9	7.6	10.7	9.9	26.5	26.0	16.9	6.0
Winter	14.4	7.5	10.4	9.7	27.0	25.6	16.8	4.7
Spring	15.0	6.7	8.6	9.3	25.6	28.7	16.7	6.6

Appendix Y *Reanalysis of Kloeden’s crash data*

Table 357: Data related to driver age, time of crash and the estimated pre-crash travel speed (data from Kloeden et al., 1997a)

Travel Speed (km/h)	Time of Crash and Age of Driver																										
	8am to 10.59am				11am to 1.59pm				2pm to 4.59pm				5pm to 7.59am														
	16-25 yrs		26-59 yrs		> 60 yrs		16-25 yrs		26-59 yrs		> 60 yrs		16-25 yrs		26-59 yrs		> 60 yrs		16-25 yrs		26-59 yrs		> 60 yrs		Total		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
31-60	0	0	4	8.3	1	2.1	3	6.3	14	29.2	5	10.4	6	12.5	11	22.9	3	6.3	0	0	1	2.1	0	0	48	100	
61-70	3	5.5	9	16.4	3	5.5	4	7.3	12	21.8	2	3.6	9	16.4	9	16.4	1	1.8	1	1.8	2	3.6	0	0	55	100	
71-80	0	0	1	4.3	1	4.3	3	13	3	13	2	8.7	2	8.7	5	21.7	2	8.7	1	4.3	3	13	0	0	23	100	
81-90	0	0	0	0	0	0	3	25	0	0	0	0	4	33.3	4	33.3	0	0	0	0	1	8.3	0	0	12	100	
91+	2	25	1	12.5	0	0	1	12.5	1	12.5	0	0	3	37.5	0	0	0	0	0	0	0	0	0	0	0	8	100
Total	5	3.4	15	10.3	5	3.4	14	9.6	30	20.5	9	6.2	24	16.4	29	19.9	6	4.1	2	1.4	7	4.8	0	0	146	100	

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Table 358: Data related to driver age (years) and vehicle age (years) and estimated pre-crash travel speed (km/h)

Travel Speed (km/h)	Vehicle Age (yrs)	0 to 5		6 - 10		11 - 15		16 - 20		21 - 25		11 - 15		Total		
		Driver Age (yrs)	N	%	N	%	N	%	N	%	N	%	N	%	N	%
31-60	16-25		1	11.1	2	22.2	3	33.3	0	0.0	1	11.1	2	22.2	9	100
	26-59		12	40.0	7	23.3	8	26.7	3	10.0	0	0.0	0	0.0	30	100
	> 60		1	11.1	4	44.4	2	22.2	2	22.2	0	0.0	0	0.0	9	100
61-70	16-25		6	33.3	2	11.1	7	38.9	3	16.7	0	0.0	0	0.0	18	100
	26-59		3	9.7	10	32.3	10	32.3	4	12.9	3	9.7	1	3.2	31	100
	> 60		2	33.3	1	16.7	0	0.0	1	16.7	1	16.7	1	16.7	6	100
71-80	16-25		0	0.0	0	0.0	2	33.3	3	50.0	1	16.7	0	0.0	6	100
	26-59		2	16.7	3	25.0	5	41.7	2	16.7	0	0.0	0	0.0	12	100
	> 60		0	0.0	2	50.0	1	25.0	1	25.0	0	0.0	0	0.0	4	100
81-90	16-25		0	0.0	2	28.6	2	28.6	1	14.3	2	28.6	0	0.0	7	100
	26-59		1	20.0	1	20.0	2	40.0	1	20.0	0	0.0	0	0.0	5	100
	> 60		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	100
91+	16-25		0	0.0	0	0.0	5	83.3	1	16.7	0	0.0	0	0.0	6	100
	26-59		0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	1	100
	> 60		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	100
Total		28	19.4	34	23.6	47	32.6	23	16.0	8	5.6	4	2.8	144	100	



Further information

Monash University

Wellington Road

Clayton, Victoria 3800

Australia

T: +61 3 9905 4364

E Stuart.newstead@monash.edu

monash.edu.au