



Provision of Advice on Safer Driving Agreements in the Australian Context

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Final Report

November 2012



*The Centre for Accident Research & Road Safety –
Queensland is a joint venture initiative of the Motor
Accident Insurance Commission and Queensland
University of Technology*



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1. EXECUTIVE SUMMARY

1.1 Background

Safer driving agreements are a formal statement of driving conditions and restrictions ratified by a driver and other parties designed to enhance or promote safe driving behaviour. A common application of such agreements has been in the area of young novice drivers. Typically, the interested party with which the young driver enters into agreement is one or more parents or a supervising driver; however other persons (such as grandparents, peers and employers) or organisations (such as government licensing authorities or insurance companies) also represent potential partners. By way of example within the parent-young driver context, safer driving agreements encourage parents and their young novice driver to become better informed about the considerable risks associated with the earliest stages of independent driving. Safer driving agreements also encourage parents to enforce gradually less-restrictive driving conditions as novice drivers demonstrate greater compliance with the agreement or increases in skills and experience. For example, novice drivers might agree to not carry any peer passengers initially, increasing it to one during the day before allowing additional passengers during the day or at night on the weekend.

The Centre for Accident Research and Road Safety – Queensland (CARRS-Q) and Transport and Road Safety (TARS) Research were commissioned by the National Road Safety Council (NRSC) to provide advice regarding the potential approaches of safer driving agreements within the Australian context. This included a literature review of the efficacy of safer driving agreements applied within Australia and overseas jurisdictions and consultations with relevant stakeholders. Extensive stakeholder and community consultation was conducted, including discussions with an expert panel of United States researchers and program developers, interviews and surveys with Australian police, transport and motoring stakeholders, as well as focus groups, interviews and surveys of young drivers and the parents of young drivers.

1.2 Literature Review

To date there have been very few formal evaluations of the safer driving agreements that are currently available to young novice drivers and interested parties such as parents in Australia and overseas jurisdictions. The exception is extensive application and evaluation of the American *Checkpoints* program, and thus this report focuses on evaluations of this program. Whilst increases in parent-limit setting and greater discussion and awareness of driving risks and the need for such limits is apparent, only modest differences in traffic violations have been reported, and only one study has indicated positive impacts on road crash-involvement, in the peer-reviewed published literature.

1.3 Stakeholder and Community Consultations

Can safer driving agreements work?

Consultation identified that, overall, safer driving agreements were perceived to be an innovative approach in theory, however there was general scepticism regarding how effective they might be in practice. Support for the wide-scale introduction of such an initiative was reported as being contingent upon a successful trial and evaluation, and there

was a general perception the initiative, at best, would represent a complementary function to existing rules and regulations. Many young drivers questioned the degree to which young people would be motivated to voluntarily enter into the agreements, given that they reflected a restriction of their freedom and independence. The potential effectiveness of safer driving agreements was perceived as being limited to those young drivers who are already safety conscious, and are dependent on and have strong relationships with their parents built on trust, honesty and respect, rather than problematic young drivers. A lack of interest by parents in participating in the current project's consultation process was also indicative of likely low uptake if voluntary programs were introduced without additional incentives being promoted.

Most appropriate partners and time period for implementation of an agreement

Overall, parents or another trusted adult were argued to be the most appropriate partner for safer driving agreements given their direct and vested involvement in the young driver's life. Previous research has highlighted the numerous road safety benefits associated with greater parental involvement for young novice driver safety. For optimal effectiveness, it is recommended that the development of safer driver agreements should consider family dynamics, including information regarding parenting styles and key factors of parent-young driver relationships. Collective agreements, whereby a group of young drivers enter into separate agreements with their parents, have a number of potential benefits, including increased participation rates, reduced stigma associated with participation and generational shifts in attitudes and behaviours of young novice drivers. Safer driving agreements between young drivers and their employers/workplaces also received considerable support. Such an agreement could be additional to those implemented with parents and may become increasingly influential as the young driver becomes more independent.

While there were mixed perceptions of the optimal time to initiate safer driving agreements, there was a universal belief that they must cover the early years of independent driving, when young drivers receive their Provisional licence. Indeed, the peak in crash risk during this period was highlighted, as was the degree to which young drivers experience a large range of challenging decisions and situations during this period. While some believed agreements should first be implemented as drivers transition into the Provisional licence phase, others suggested that safer driving agreements should be implemented in the pre-licence or Learner phase, to normalise the process and encourage young persons to think about road safety issues from an earlier stage in the licensing process. Surprisingly, integrating safer driving agreements into existing licensing processes was suggested by young drivers but received minimal discussion among stakeholders.

Conditions, rewards and consequences

Perhaps not surprisingly, it was argued that the conditions included in a safer driving agreement should focus on illegal and unsafe driving behaviours, as well as complying with licence restrictions. This reflected the overall focus of increasing young driver safety as the fundamental aim of the initiative. However, young drivers were strongly opposed to conditions on the agreement being more stringent than existing regulations, suggesting they believed they had 'earned' the right to drive under certain conditions and perceived further restrictions as a restriction of their independence and freedom. Parental responsibilities,

such as being readily available to render assistance (in a supportive and non-judgmental manner), treating the young driver like an adult, modelling appropriate driving behaviours, and providing access to a safe vehicle were also highlighted. It was suggested that the development of the conditions should involve the young driver, be tailored to the individuals involved in the agreement, and be amenable to change.

There were mixed perceptions regarding the specification of rewards and consequences as part of safer driving agreements, as well as what rewards and consequences would be appropriate should they be an element of the initiative. Overall, consequences were perceived as more important than rewards, given that in the absence of consequences, agreements would lack 'teeth' and there would be limited motivation for young drivers to adhere to the conditions. There was a strong argument that consequences must be vehicle- or driving-related to be meaningful, with the most commonly suggested consequence being the removal or restriction of driving privileges.

Barriers to implementation and potential solutions

The greatest perceived barrier to the effectiveness of safer driving agreements was the degree to which the behaviour of young novice drivers could be reliably and accurately monitored and for breaches of conditions to be readily enforced, particularly as the young driver becomes more independent. Self-reporting on the part of the young driver was acknowledged as the most likely approach to behaviour monitoring, with high levels of scepticism displayed regarding the likelihood for such self-reports to be honest, particularly in agreements involving rewards and/or consequences. The use of in-vehicle technological devices to monitor young novice driver behaviour was not strongly supported, given the detrimental impact on the parent-young driver relationship and issues associated with costs of the approach. Interestingly, while young drivers were opposed to the use of invasive technology (e.g., video cameras, GPS trackers), they were more accepting of less invasive devices (e.g., speed monitoring). Such reports suggest that young drivers are not opposed to devices in which they can determine a direct link to safety, however are strongly opposed to those that are perceived as restricting their freedom of movement and independence.

The perceived difficulties associated with engaging young drivers in voluntary safer driving agreements were noted. Indeed, the results suggest that young drivers are opposed to initiatives that restrict their independence and freedom. In addition, it was suggested there may be difficulties associated with engaging parents, such that they may not be aware of the risks associated with young drivers and are often time-poor. The power imbalance for young drivers, and their ability to sanction parents if they should fail to meet their responsibilities within the agreement, was also discussed, with perceptions of unfairness in the management of the agreement among young drivers argued to be potentially destructive to their continued participation in the initiative.

Safer driving agreements with young driving offenders

Overall, there was a belief that safer driving agreements could be effectively applied as an additional intervention for young driving offenders returning from a period of licence suspension or disqualification, or in lieu of suspension for less serious traffic offences. A number of differences in the operation of the agreements in such instances were noted

however, including involving a regulated body (e.g., licence/transport authority, police) as the partner and using in-vehicle technological devices to monitor behaviour. This latter element is of particular relevance, given that many suggested that without such an approach to monitoring behaviour the agreement would have little additional benefits compared to existing systems.

1.4 Conclusions

Presently, there is limited empirical evidence on which to base recommendations for best-practice in the development and implementation of safer driving agreements in the Australian context. Nevertheless, the following conclusions can be drawn from the present research:

- A strong evidence base for what might comprise ‘best-practice’ safer driving agreements for optimal impact in reducing young driver road trauma is lacking. There is currently only a modest indication of a role for safer driving agreements in reducing risky driving and subsequent traffic offences and crashes;
- There is some support among stakeholder groups to introduce safer driving agreements with authority organisations but less clear support for these among young drivers and parents;
- The strongest support in the community was for voluntary, flexible agreements between young drivers and parents;
- No group could envisage a peer group agreement, although workplace agreements were considered viable;
- There is a clear lack of understanding among community groups in particular, as well as some stakeholder groups, of the flexible, mutually-negotiated and agreed nature of agreements, including their inherent rewards and consequences;
- While the optimal target of agreements is to impact the early Provisional period, and therefore agreements during this time receive the strongest levels of support, it might be necessary to work through and establish agreements earlier (e.g., pre-licence, Learner phase) for maximum impact at this time;
- Focusing conditions on known novice driver risks, and ensuring rewards and consequences are related to driving, received the greatest support;
- There was not a strong indication that financial incentives would encourage greater rates of participation in safer driving agreements; and
- The ability to monitor conditions was considered the greatest barrier. While technological advances were perceived as an approach that could help overcome this barrier, in-vehicle technology (particularly invasive devices) received only limited support.

1.5 Recommendations

Based on the above conclusions, the following recommendations are offered.

- Any safer driving agreement initiative would require a strong education component to ensure improved understanding of the nature, aims and objectives of the agreement;
- Safer driving agreements between young drivers and their parents, their workplace, or with an appropriate authority following a non-serious traffic offence are more likely to attract sufficient participants to trial than those with an authority organisation from the outset of licensing;
- While research is limited, there is sufficient research to suggest a trial is warranted. Parent agreements should include volunteer samples only. Workplaces could also trail agreements with volunteer participants. Traffic offender groups could be randomised into a control trial;
- Initiatives should include clear instructions and examples of conditions, rewards and consequences relating to young novice risks and driving;
- Options to include in-vehicle technology should be explored; and
- In addition to an outcome evaluation, a process evaluation, including observations of agreement negotiations, is also recommended to understand how best to implement the initiative.

Any evaluation should, at minimum:

- Seek to determine the cost-effectiveness of the approach;
- Examine participation rates and characteristics of participating and non-participating individuals;
- Involve a scientifically rigorous design (i.e., random-controlled trial); and
- Assess the impact of the initiative on tangible road safety outcomes, including crash and offence rates.

During the development of safer driving agreements in general, as well as any agreement developed for trial in the Australian context, the following elements will need to be carefully considered:

- Will the agreement be made mandatory and integrated into current licensing processes or voluntary? What impact will this decision have on the flexibility of the agreement and the ability to involve the young driver in the development of the agreement and the conditions within it?
- When will the agreement be initially implemented: pre-licence phase, Learner licence phase or Provisional licence phase? If implemented early, what is the impact on the young driver, if any?
- Will rewards and/or consequences (external to families) be included in the agreement? What impact does their inclusion have on behaviour monitoring and parent and young driver engagement in the agreement? How will the power imbalance between young drivers and their parents be addressed?
- How will accurate and reliable self-reporting of behaviour by the young driver be encouraged and monitored?

In addition, the following suggestions are made:

- The most widely accepted partner for the agreement is the young driver's parent, or a similarly trustworthy adult role model in the young driver's life;
- The development of the safer driver agreement should consider family dynamics, including information regarding parenting styles and key factors of parent-young driver relationships;
- Where feasible, the role of employers/workplaces as a third-party in the agreement could be explored;
- Where feasible, safer driving agreement initiatives should seek to engage young drivers in a collective environment, such as schools, sporting/social clubs – however the agreement should still include their parent/trusted adult role model;
- Regardless of when the agreement is initially implemented, it should cover the Provisional licence phase (due to the increased crash risk at this time), particularly the initial period of independent driving;
- The conditions on the agreement should:
 - Be flexible, tailored to the individuals involved, and amenable to change;
 - Be developed with the involvement of the young driver; and
 - Include conditions associated with:
 - Illegal and unsafe driving behaviours
 - Complying with licence restrictions
 - Appropriate teaching processes/skill acquisition (if agreement enacted during the Learner phase)
 - How conditions will be monitored
 - Rewards and consequences, if any
 - Additional young driver responsibilities
 - Parental responsibilities; and
 - Role of in-vehicle technologies.

Finally, it is suggested that the use of safer driving agreements with young driving offenders returning from a period of licence suspension or disqualification, or in lieu of suspension for less serious traffic offences should be investigated following a successful trial and evaluation of safer driving agreements with the general young driver population, in this case particularly including a role for in-vehicle monitoring technology.

INTRODUCTION

1.6 Background

Young novice drivers, defined as those aged 17-25 years who are relatively inexperienced in driving on the road constitute a major public health concern in terms of their over-representation in crash involvement and the injuries and fatalities arising from these crashes. While crash risk is extremely low on a Learner licence, it is higher than at any other life stage in the first 6-12 months of independent driving on the Provisional licence (McCartt et al., 2003), which is therefore a key focus of young driver interventions. Parents in particular are pivotal in modelling and shaping the driving behaviour of their young novice driver, from providing most of the driving supervision and instruction in safe road use during the Learner licence period (Scott-Parker et al., 2011), to modelling safe driving behaviour and attitudes to their child throughout their pre-driving and driving careers (Simons-Morton & Ouimet, 2006; Simons-Morton et al., 2008). Also more generally, parental monitoring, that is, knowing their child's whereabouts, activities and associates when they are not with the parents, is associated with less youth risk taking, including risky driving (e.g., DeVore & Ginsburg, 2005). However, parents may be unaware of the important role that they play in the road safety of their novice driver (Beck et al., 2002), including the importance of managing the risks associated with the earliest phase of independent driving.

Consequently, safe driving agreement initiatives have been developed to help parents minimise some of the risks experienced by their young novice driver. Driving agreements typically commit parents to support the young driver in their early months of independent driving and commit the young novice to follow restrictions, principally those legislated through graduated driver licensing (GDL), but potentially also additional restrictions or agreements (Simons-Morton et al., 2008; Simons-Morton & Ouimet, 2006). While the focus of such agreements has been on young drivers with their parents as the primary partners, there is potential for agreements also to be implemented with other partners, such as with social and peer groups or with other authority figures, such as with schools, licensing authorities and insurance companies. This trend has recently been evidenced in South Australia, for example, where a local initiative has encouraged young drivers to enter into safer driving agreements with their school or sports team (www.roads2survival.com.au) and where young drivers can opt to enter into a safer driving agreement with the Department of Planning, Transport and Infrastructure (DPTI) following a traffic offence (www.mylicence.sa.gov.au/p1_plater).

1.6.1 Current Project

This project was commissioned by the National Road Safety Council (NRSC) to the Centre for Accident Research and Road Safety – Queensland (CARRS-Q) and the Transport and Road Safety (TARS) Research at the University of New South Wales. The aims of the project were to examine the nature and effectiveness of existing safer driving agreement schemes, in Australia and abroad, and to assess the potential benefits of extending the involvement of young drivers and others (e.g., their parents, friends, peers and relevant organisations) in such programs in the Australian context.

The primary research deliverables were:

Deliverable 1. A review of the literature on safer driving agreements in Australia and abroad. This included consideration of recommendations and results of any evaluations that may have already been undertaken of programs involving safer driving agreements.

Deliverable 2. A review of the application of safer driving agreements in Australia and abroad. This more specifically includes an examination of:

- 2.1 The design, implementation, uptake, effectiveness and limitations of safer driving agreements between young drivers (especially drivers with Provisional licences) and their parents/supervising drivers;
- 2.2 The environments where safer driving agreements may be most effective including within existing licensing regimes and programs;
- 2.3 The use of safer driving agreements to address licence disqualification proceedings for provisionally-licensed drivers;
- 2.4 The potential role of reduced insurance premiums or other financial incentives to encourage safer driving agreements; and
- 2.5 Schemes which include, but are not limited to, government and non-government programs, community-based initiatives, and programs operated by motor vehicle insurance agencies and judicial processes.

Deliverable 3. Consultation with relevant stakeholders, including program operators, young drivers and their supervisors, road administration representatives, driving instructors, motoring organisations, state/territory insurers, police and other stakeholders identified during the course of the research. This was to particularly include driving instructors and stakeholders already involved in the *keys2drive* program.

Deliverable 4. Applying the findings from the project to provide recommendations on the potential benefits of a Safer Driving Agreement scheme and the shape it could take within Australian jurisdictions. This included:

- 4.1 Opportunities to expand the application of existing programs that have been found to be effective;
- 4.2 The scope for developing new programs based on identified best practice; and
- 4.3 The potential to incorporate safer driving agreements in the national keys2drive Learner driver program;

Deliverable 5. A comprehensive report on the above deliverables, which the present report represents.

2. LITERATURE REVIEW

2.1 Need for Safer Driving Agreements

While families might report having explicit and/or implicit rules about driving, parental rules and expectations regarding their novice driver's independent driving behaviour can be unclear or ambiguous to the novice. Specifically, research has demonstrated that whilst parents may impose some limits upon their novice driver's driving behaviour – including night-time and passenger limits – parents are not consistent in the regulation and enforcement of these rules and there is often considerable disagreement between parents and the young novice driver regarding the nature of these rules (Beck et al., 2005; Hartos et al., 2004). Notably, discordance regarding the nature of driving conditions, and the consequences for transgressions of these, has been found to predict the self-reported risky driving behaviour of young novice drivers with one, four and nine months of independent driving experience (Beck et al., 2006; Hartos et al., 2004). This is consistent with research within other domains of adolescent risk-taking, including alcohol consumption (e.g., Foley et al., 2004). These findings suggest that increasing the concordance between parents and their young novice driver regarding driving conditions and consequences for transgressions is necessary for the improvement in young novice driver safety.

Safer driving agreements can provide a clear and precise account of driving rules, expectations, and consequences. To illustrate, the *Checkpoints* program incorporates videos, newsletters and a formal driving agreement to clarify young driver risks, independent driving rules, expectations, and consequences, with both the young driver and parent/s completing and signing the agreement to acknowledge their commitment. In the Australian context, safer driving agreements could readily be incorporated into the Provisional 1 licence period, with the Learner logbook introducing the concept and advantages of the safer driving agreement midway through the Learner licence phase when the prospect of future solo driving has begun to be considered.

An example of a particular entry relates to night driving restrictions. The majority of GDL programs in Australia's states and territories permit night driving (albeit New South Wales, Queensland and Western Australia have passenger limits during late night/early morning). However, as a driving circumstance which is particularly risky for young inexperienced drivers, parents and the young driver can include additional night-driving restrictions in the earliest phase of the Provisional 1 licence. The young driver would commit to not driving unaccompanied at night and the parent would commit to continue supervising his/her driving at night during over an agreed to period of time. A staged night driving restriction could initially encompass all hours of reduced visibility such as between dusk and dawn for the first month, with later start times introduced at monthly intervals.

As another example, parents and young drivers could agree to share the family vehicle during the earliest stages of independent driving, with increased driving privileges conditional upon responsible driving behaviour. Not only is the family car frequently a newer car – and accordingly the vehicle is more likely to have crash-avoidance and crash-protection features – but young novice drivers who share the family vehicle during the earliest phases of independent driving report considerably less risky driving behaviour and mileage measured both as distance and duration driven throughout that period (Scott-

Parker et al., 2011, 2012) and accordingly have lower crash risk (Senserrick et al., 2007). Provision of information on this risk within the agreement materials could lead families to decide that their young drivers will only be able to have a vehicle of their own if they have a safe and offence-free P1 licence period, for example.

While alleviation of the restrictions over time is an inherent reward system within the program, additional rewards might be included, but also clear consequences must be specified so that motivation to comply with the agreement continues. For example, a young driver that breaks the agreement might need to regress to a former more restricted phase of the agreement or be given additional household chores, while a parent might be made to undertake more supervised driving at night and with passengers or take over some of the young driver's chores. Each family will have different reward and consequence systems that best make sense for their situation.

Therefore, safer driving agreements effectively act as a tool to consolidate current knowledge of young driver risks and how they might be prevented or modified, and make explicit between the young driver and parent or other partner in the agreement as to what are their personal set of rules and expectations, and what are the rewards and consequences with the aim to keep the young driver safe through the highest crash risk period.

2.2 Current Safer Driving Agreements

There are numerous driving agreements readily and freely available to the Australian driving public, including parents and their young novice drivers (e.g., many can be downloaded from the internet). Driving agreements encourage young drivers and their parents to discuss driving risks and ways to mitigate them, and they complete the agreement together. Common to the majority of these agreements are the following:

- A discussion of the risks facing all new drivers, in particular negative outcomes such as crashes, injuries and fatalities from deliberate risk-taking behaviour;
- Legislated driving rules including those specific to graduated driver licensing;
- The expectation to comply with these rules in addition to household rules and conditions for both the young driver and parents;
- Monitoring of compliance and consequences for transgressions;
- The dates the agreement will be reviewed; and
- Signatures of both the parent(s) and the young novice driver.

2.2.1 Safer Driving Agreements Available in the Australian Context

Whilst earlier research has identified that formal interventions such as safer driving agreements, such as the *Checkpoints* program, merit development, application, and evaluation in the Australian context (Mulvihill et al., 2005), to date this remains an unexplored intervention during the Provisional 1 licence phase. Rather, a variety of informal driving agreements are available from a number of Australian organisations, including *Roads 2 Survival* (www.roads2survival.com.au) and *Going Solo* (www.monash.edu.au/miri/going-solo.html). To date, there has been no formal evaluation of the *Roads 2 Survival* program, and as such conclusions cannot be drawn regarding the impact of the program on rates of driver compliance with an agreement, or the effectiveness of the program in reducing crash

and offence rates. A recent evaluation in which 27 parents and their 28 young novice driver children were randomly allocated to the *Going Solo* intervention or a control group found that whilst no participants in either group signed a safer driving agreement, parents who utilised the resource – and particularly those with an authoritative parenting style – were more likely to discuss road safety and driving risks with their young novice child during the Provisional 1 licence phase (Zhao, 2009). Whilst the resource did not influence the proportion of parents imposing driving limits during the Provisional 1 licence phase, an increase in limit-setting was reported by approximately one third of parents who were in the intervention group. The very small sample size precludes any definitive conclusions at this time regarding the likely efficacy of the *Going Solo* resource as a means for introducing safer driving agreements in the Australian context at this time.

Further, currently in Australia, insurance companies do not offer incentives, such as reduced premiums or insurance excess fees, to young novice drivers who have entered a safer driving agreement with the insurance company or their parents. This has been trialled in the Netherlands (Bolderdijk, 2011; Lahrmann et al., 2012 – see Section 3.3.2 for more detail) and the merit of the application of safer driving agreements in such circumstances in the Australian context warrants investigation.

Driving agreements can also be used in the context of novice driver remediation. In South Australia, novice drivers disqualified through accumulation of four or more demerit points may be afforded the option of entering a Safer Driver Agreement, rather than wait out or appeal the licence disqualification period (6 months) (www.mylicence.sa.gov.au/p1_plater). This agreement, which allows driving “under strict conditions” (Government of South Australia, 2011), grants the novice driver with a new Provisional licence with a minimum duration of three years (the Provisional 1 licence must be held for a minimum of 2 years six months, the Provisional 2 licence must be held for a minimum of 6 months). If the agreement is breached a disqualification period twice the length of the original penalty (12 months) must be served, with no further agreement and no chance to appeal.

In addition, there are a number of driver rehabilitation programs which could potentially incorporate a safer driving agreement if evaluation results were favourable. For example, the Gold Coast Traffic Offenders Program is a 5-week course available to traffic offenders who choose to plead guilty to the offence (e.g., drink driving). The program addresses the contributors to road crashes including substance use, the role of emergency services including Queensland Fire Rescue and the Police, road crash victims and grief and trauma counsellors, legal and insurance issues, and defensive driving (www.gcotp.com.au).

2.2.2 Safer Driving Agreements Available in the International Context

As noted in Deliverable 1: Brief Literature Review, parents and young novice drivers alike can download a driving agreement from a multitude of websites provided by a multitude of organisations around the world. An extensive variety of safer driving agreements that originate in the United States are available to parents and their young novice drivers. In addition, there are also driving agreements specifically made available by Australian organisations, and in South Australia for example driving agreements are also used in the context of novice driver remediation. As stated, there are currently no evaluations of driver compliance with, or the effectiveness of, agreements used in Australia. In comparison, the

Checkpoints program, which was developed in Connecticut, has been extensively evaluated (see section 4.1 below).

2.3 Formal Evaluations of Safer Driving Agreements

There is a paucity of formal evaluations examining the efficacy of safer driving agreements. Only one safer driving agreement program has undergone rigorous and repeated evaluation in a number of jurisdictions in the United States: the *Checkpoints* program (see review in Section 2.4.1 *Checkpoints* program). It is important to note that greater concordance regarding driving restrictions and privileges between parents and their young novice driver can be considered a positive outcome of safer driving agreements such as *Checkpoints*. Notwithstanding this, key on-road efficacy measures of any agreements may include reduced risky driving exposure and reduced risky driving behaviour (for example, driving in excess of speed limits and driving after drinking alcohol), and reduced crash-involvement and offence-detection during the period of the safer driving agreement. Persistent effects intended of the safer driving agreements include continued reductions in risky behaviours in the driving period *after* the agreement is no longer in effect. Best practice evaluation of such agreements would be to conduct a randomised controlled trial that assesses not only such outcomes (an *outcome* evaluation) but also assesses the usability of the resources and ease of uptake of the intervention (a *process* evaluation). *Checkpoints* is the only program incorporating a safer driving agreement that has undergone such process and outcome evaluation.

2.3.1 *Checkpoints*

The *Checkpoints* program recognises the pivotal role of parents in the road safety of their young novice driver, encouraging greater parental involvement in the North American intermediate licensing phase, equivalent to a single-stage Provisional licence in Australia (similar to a restricted P1 licence, noting there is no P2 licence in United States jurisdictions). The program integrates the risk-reducing capability of authoritative parenting practices with the risk-reducing capacity of broad countermeasures, such as graduated driver licensing programs (Beck et al., 2002). That is, the children of parents who use an *authoritative* parenting style that involves consistently-enforced, and reasonable, expectations set for their child, with sensitivity to and acceptance of the child (Sigelman, 1999), engage in less-risky driving behaviour in general. In contrast, such protective benefits are not observed in children with parents who use a *permissive* parenting style (in which there are few rules and children consequently are allowed considerable freedom) or *neglectful* parenting styles (in which there are also few rules and parents are uninvolved with and insensitive to their children's needs) (Ginsburg et al., 2009; Hartos et al., 2000).

The safer driving agreement facilitates a parent-young driver discussion and ratification of driving rules the novice driver should follow while also incorporating parental commitments (Simons-Morton et al. 2006a, b; Simons-Morton et al., 2008). Additional *Checkpoints* materials available include videos, newsletters, and a website for parents and novices to discuss risks and guide them in completing the agreement. Table 1 summarises the extant literature regarding the efficacy of the *Checkpoints* program in Connecticut (Simons-Morton et al., 2006a) and Maryland (Hartos et al., 2004). Manuscripts which are currently under review or in preparation (e.g., Zakrajsek et al.; Ouimet et al.) are excluded from this review.

Table 1 . Applications and evaluation of the *Checkpoints* program.

Study	Design	Sample ¹	Method	Results
Simons-Morton, Hartos, Leaf, & Preusser, 2006a ²	Randomised control trial with assessment at baseline (Learner permit), licensure (intermediate licence), 3-, 6-months post-licensure	3743	3743 dyads baseline surveys; 3277 dyads licensure surveys; 3002 3-month post-; 2874 6-month post-licensure surveys. Intervention group received persuasive materials including discussion with trained research assistant (video, newsletters, and safer driving agreement via mail).	At licensure, 3-, and 6-months post-licensure, intervention teens relative to controls reported: <ul style="list-style-type: none"> • Significantly greater teen passenger, weekend night, high-speed road limits • No difference in driving exposure (miles driven) • No difference in crashes (both groups .33 crashes on average) • Fewer violations detected (intervention average .25 violations, control average .28 violations)
Simons-Morton, Hartos, Leaf, & Preusser, 2006b ²	Randomised control trial with assessment at baseline (Learner permit), licensure (intermediate licence), 3-, 6-, 12-months post-licensure	3743	3743 dyads baseline surveys; 3277 dyads licensure surveys; 3002 3-month post-licensure surveys; 2874 6-month post-licensure surveys. Intervention group exposed to persuasive materials including discussion with trained research assistant (video, newsletters, safer driving agreement via mail).	At licensure, 3-, and 6-months post-licensure: <ul style="list-style-type: none"> • Intervention teens reported significantly less risky driving (e.g., speeding, tailgating, driving through yellow lights) than control teens • Parents reported greater limits were in place than teens At 12-months post-licensure <ul style="list-style-type: none"> • Greatest driving limits were at licensure and declined steadily over the first 12 months of independent driving • Interventions teens were significantly less likely to report violations than control teens, but no significant difference in crashes
Simons-Morton, Hartos, Leaf, & Preusser, 2006c	Randomised control trial with assessment at baseline (Learner permit), licensure (intermediate licence), 3-, 6-, 12-months post-licensure	4344	4344 dyads baseline surveys; 3398 dyads licensure surveys.	Intervention parents reported watching the video (62%); reading at least some of the newsletters (98%); completing a safer driving agreement (56%; compared with 45% of control-group parents); stricter limits on teen driving Intervention teens reported stricter limits on their driving than control teens Intervention dyads reported relative to controls: <ul style="list-style-type: none"> • Greater perceived risks of teen driving • Greater expected limits on teen driving (including for leisure).
Simons-Morton, Hartos, Leaf, & Preusser, 2006d ²	Randomised control trial with assessment at baseline (Learner permit), licensure (intermediate licence), 3-, 6-, 12-months post-licensure	3743	3743 dyads baseline surveys; 3277 dyads licensure surveys; 3002 3-month post-licensure surveys; 2874 6-month post-licensure surveys. Intervention group exposed to persuasive communications including discussion with trained research assistant (video, newsletters, safer driving agreement via the mail).	At licensure 14% of intervention teens and 20% of their parents reported having either the recommended passenger (no teen passengers) or night-driving (9pm curfew) limits At 3-months post-licensure <ul style="list-style-type: none"> • 19% of teens/36% of parents reported having the recommended passenger limits (1 teen) • 9% of teens/12% of parents reported having the recommended night-driving limits (10pm curfew) • 8% of teens/26% of parents reported having a restriction to driving on local roads only At 6-months post-licensure <ul style="list-style-type: none"> • 22% of teens reported having the recommended passenger limits (2 teens) • 20% reported having the recommended night-driving limits (11pm curfew) • 10% reported have a restriction to no highway driving At licensure, 3-, 6-, and 12-months post-licensure <ul style="list-style-type: none"> • Intervention dyads had stricter limits • Parents reported significantly greater limits than teens At 3-months post-licensure, traffic violations were <ul style="list-style-type: none"> • 1.68 (teen report) and 1.39 (parent report) times more likely among those teens with less strict passenger limits during preceding 3-month period, compared with those following recommended limit of 0 passengers

Study	Design	Sample ¹	Method	Results
				<ul style="list-style-type: none"> • 3.82 (teen reports) and 2.22 (parent reports) times more likely among those teens with less strict night-driving limits than recommended limit of 9:00pm <p>At 3-months post-licensure, teens who reported at least one crash during the preceding 3 months were:</p> <ul style="list-style-type: none"> • 1.20 (teen report) and 1.34 (parent report) times more likely to be allowed 1 or more teen passengers compared to those with strict limit of 0 passengers • 1.40 (teen report) more likely to have less strict night-driving requirements <p>At 6-months post-licensure, traffic violations were:</p> <ul style="list-style-type: none"> • 1.29 (teen report) and 1.44 (parent report) more likely among those teens with less strict passenger limits during preceding 3-month period, compared with those following recommended limit of ≤1 passenger • 2.61 (teen reports) and 2.02 (parent reports) times more likely among those teens with less strict night-driving limits than recommended limit of 10:00pm • 1.78 (teen reports) and 1.48 (parent reports) times more likely among those teens with less strict high-speed road limits <p>At 6-months post-licensure, teens who reported at least one crash during the preceding 3 months were:</p> <ul style="list-style-type: none"> • 1.40 (teen report) times more likely to have less strict night-driving limits <p>At 12-months post-licensure, traffic violations were:</p> <ul style="list-style-type: none"> • 1.47 (teen report) times more likely among those teens with less strict passenger limits during preceding 6-month period, compared with those following recommended limit • 1.78 (teen reports) times more likely among those teens with less strict night-driving limits than recommended limit of 11:00pm • 1.54 (teen reports) times more likely among those teens with less strict high-speed road limits
Simons-Morton, Hartos, Leaf, & Preusser, 2005	Randomised control trial with assessment at baseline (Learner permit), licensure (intermediate licence), 3-, 6-, 12-months post-licensure	469	Intervention group exposed to persuasive communications (interview by trained assistant and video upon recruitment, newsletters, and safer driving agreement via the mail). Control group receive information regarding road safety (eg, airbags, use of seat belts) at same intervals.	<p>Majority of intervention dyads reported (follow-up with intervention dyads only)</p> <ul style="list-style-type: none"> • Watching video, discussing video; video was easy to view, interesting, informative and relevant • Reading at least some of the newsletters before and after licensure, discussing them; newsletters were easy to read, interesting, appealing and relevant <p>Dyads who completed a safer driving agreement</p> <ul style="list-style-type: none"> • 44% of parents and 48% of teens in intervention group • 44% of parents and 25% of teens in control group <p>Proportion still using agreement</p> <ul style="list-style-type: none"> • At 3-months post-licensure: 84% of parents, 72% of teens in intervention; 21% of parents, 32% of teens in comparison • At 12 months: 73% of parents, 54% of teens in intervention <p>At 3-months post-licensure, intervention teens reported greater restrictions on teen passengers, high-speed roads, weekend nights</p> <p>Greater pre-Licence expected limits and being in intervention predicted greater limits at licensure; which predicted greater limits at 3-months post-licensure; which predicted greater limits at 6-months post-licensure; which predicted greater limits at 12-months post-licensure.</p>

Study	Design	Sample ¹	Method	Results
Simons-Morton, Hartos, & Beck, 2004 ³	Randomised control trial; assessment at baseline (Learner progressed to intermediate licence), 1-month post-licence	658	658 dyads baseline surveys; 579 dyads 1-month post-licence surveys. Intervention group exposed to persuasive communications including discussion with trained research assistant (video upon recruitment, newsletters and safer driving agreement via the mail).	At 1-month post-licence <ul style="list-style-type: none"> Intervention parents reported more driving rules, greater driving restrictions (earlier weekend night curfew) Intervention teens reported more strict driving limits on teen passengers, high-speed roads, and weekday/night driving Parents (n=186) using the safer driving agreement reported it was easy to understand, fair, contained satisfactory terms, and was a good idea; 86% would recommend using it; were three times more likely to use driving agreement than parents in control group Teens in intervention group were 5 times more likely to use a safer driving agreement than teens in control group.
Hartos, Beck, & Simons-Morton, 2004 ³	Randomised control trial; assessment at baseline (Learner progressed to intermediate licence), 1-month post-licence	658	658 dyads baseline surveys; 579 dyads 1-month post-licence surveys. Intervention group exposed to persuasive communications including discussion with trained research assistant (video upon recruitment, newsletters and safer driving agreement via the mail).	High trip driving limits were 1.5-1.75 time more likely if parents reported <ul style="list-style-type: none"> Higher parental monitoring in general More discussion of driving rules Less vehicle access Completing a safer driving agreement <ul style="list-style-type: none"> 2 times more likely with high parental monitoring 4 times more likely with more discussion of driving rules.
Simons-Morton, Hartos, & Beck, 2003 ³	Randomised control trial; assessment at baseline (Learner progressed to intermediate licence), 1-, 4-, and 9-months post-licence	658	658 dyads baseline surveys; 579 dyads 1-month post-licence surveys; 529 dyads 4-months post-licence surveys; 528 dyads 9-months post-licence. Intervention group exposed to persuasive communications including discussion with trained research assistant (video upon recruitment, newsletters and safer driving agreement via the mail).	At 1-month post-licence, compared with controls, intervention dyads were: <ul style="list-style-type: none"> Significantly more likely to report limits on teen driving (e.g., teen passengers, weekend nights, high speed roads) At 1- and 4-months post-licence, compared with controls, intervention dyads were: <ul style="list-style-type: none"> Significantly more likely to report high speed road and driving limit restrictions At 1-, 4-, and 9-months post-licence, compared with controls, intervention dyads were: <ul style="list-style-type: none"> Significantly more likely to report using safer driving agreement; discussing driving/consequences.
Simons-Morton, Hartos & Leaf, 2002	Randomised control trial; assessment at baseline (Learner permit), licensure, 3-months post-licence	420	420 dyads baseline surveys; 307 dyads licensure surveys (146 in intervention group); 264 dyads 3-month interview (125 in intervention group). Intervention group exposed to persuasive communications (video upon recruitment, newsletters and safer driving agreement via the mail). Control group exposed to general driving safety information.	At licensure and 3-months post-licence <ul style="list-style-type: none"> Intervention dyads reported significantly greater levels of driving restrictions (e.g., weekend curfews, teen passengers) Intervention parents reported significantly greater teen driving limits than intervention teens.

1. Number of parent-teen dyads.

2. These manuscripts pertain to the same research sample.

3. These manuscripts pertain to the same research sample.

As can be seen from Table 1, research consistently demonstrates that, for participants in the program, *Checkpoints* is able to increase parent-teen agreed young novice driving limits during the earliest phases of independent driving and to encourage the implementation of a safer driving agreement among these participants. The easy-to-understand agreement and supportive materials appear to facilitate communication between parents and their young novice driver and increase their understanding of driving risks and recommended measures to reduce these risks. It is noteworthy, however, that there was:

- Less-than-desirable uptake of driving agreements amongst intervention parent-teen dyads (however, this may have been negatively impacted upon by the recruitment strategy, such as mailing out material to participants);
- Pervasive discordance between parents and teens regarding the existence of limits, with more parents and fewer teens reporting driving limits;
- Considerable relaxing of driving conditions during the earliest phases of independent driving, contrary to recommendations; and
- Modest to no differences in crash and violation outcomes between intervention and comparison groups, although significant reductions in violations and crash-involvement were found amongst those young drivers who followed the recommended, and most strict, driving limits for conditions such as night driving and carrying passengers.

2.3.2 Discussion of Literature Review Findings

Multitudes of driving agreements are freely available for young novice drivers and parents in particular, as well as some limited examples for friends, peer groups and organisations interested in their road safety. By far the overwhelming majority of these agreements have not undergone any formal (or informal) evaluation. The American program *Checkpoints* is the predominant program explicitly designed to increase parental involvement and limit-setting during the earliest phases of independent driving with a safer driving agreement a key component of the program. *Checkpoints* has undergone rigorous evaluation in a number of North American jurisdictions. Evaluation results reveal that parents and young driver participants are more informed regarding the risks facing the newly-licensed young driver than those not adopting the program. While uptake is not optimal and there is discordance between parents and young drivers on the content of the agreements, the program is associated with more restrictions and stricter driving limits during early independent licensure. While this therefore indicates positive changes in driving behaviour, only modest differences in offence detection, and inconsistently crash-involvement have been demonstrated for the young novice drivers; albeit study size limitations might contribute to these findings. The strongest finding of an impact on crashes and violations was for families that included restrictions on peer passenger carriage (at 3 months follow up) and on night driving (at 3 and 6 months follow up). These are among the most effective elements of GDL models internationally, but have only recently emerged and often in limited forms only in Australia.

The available evidence suggests that safer driving agreements, such as those implemented within the *Checkpoints* program, can help educate parents and young drivers regarding novice driver risks and reduce risky driving behaviour, but might only be adopted by a limited range of families and these families might be those most safety conscious from the

outset. Even among safety conscious families, however, positive parent-youth relationships and an authoritative parenting style are also likely to be key to the success of agreement schemes, further limiting the potential reach of the program.

Applications of agreements with partners other than parents are limited and lacking evaluation. There is little evidence to suggest that safer driving agreements would be more effective if they were associated with financial incentives, such as reduced insurance premiums.

It is worth noting that the small sample sizes and short follow-up periods in the *Checkpoints* evaluations may have precluded the studies from having sufficient statistical power to detect significant differences in violations and crash involvement. In addition, the actual (rather than self-reported) compliance of novices with agreement conditions and restrictions remains unknown. Relying upon offences as a key indicator is also problematic as detection rates are fundamentally influenced by enforcement rates; and relying upon crashes as a key indicator is also problematic as crashes are influenced by a wide range of factors such as driving exposure (such as distance and duration driven, which was not controlled for in the *Checkpoints* program evaluations summarised in Table 1). In addition, crash and offence data were obtained via self-report, rather than via official records. This therefore includes minor crashes, including those not required to be reported to police, and so might not indicate reductions in the more serious crashes that are the target of young driver interventions. Likewise young people tend to over-report offences (Boufous et al., 2010) as they often include parking fines and other infringements that are also not recorded in police databases and therefore not primary targets of interventions. In addition, at this time there are no data available regarding potential and actual cost/benefit ratios for the *Checkpoints* – or similar driving agreement – intervention. Therefore, at present, there is not a strong indication that the relative costs of implementing a safer driving agreement program might be outweighed by a reduction in costs associated with a decrease in crashes and offences.

It is noteworthy also that safer driving agreements such as the *Checkpoints* program may benefit from augmentation by other initiatives designed to reduce risk-taking and increase compliance with legislated restrictions. In particular, simulator-based research suggests that in-car devices that distract young drivers can also redirect their attention to the driving task, for example through real-time feedback (Donmez et al., 2007). A variety of in-car technology, including speed governors, seatbelt reminders, and drowsiness detectors, are available and they can also be retrospectively fitted to vehicles (OECD, 2003; Sivak et al., 2007). In-car technologies like alcohol ignition interlocks which prevent the vehicle from being driven in the event the driver has been drinking alcohol have demonstrated to be effective in reducing the incidence of drink-driving (Coben & Larkin, 1999). In addition, speed limiting devices which prevent the driver from exceeding the posted speed limit by pre-programmed margins have also been found to be effective in increasing speed-limit compliance (Lahrmann et al., 2005).

More pointedly, a range of technologies for parents to monitor their novice's driving are now available that can inform the parent, including by immediate text message for example, when their novice is not wearing a seatbelt, speeding, driving recklessly or driving in an area that has been specified as not allowed (McCartt, 2012); the behaviours and conditions that

might be specified in a safer driving agreement. However, while a majority of parents surveyed in the United States said they would consider installing such a device, later experimental research with a website feedback format found very poor attendance to the information by parents, despite the risk taking of their young drivers (McCartt, 2012). Nonetheless, despite the limited attention to the website by parents, the risk behaviours of their young drivers did decrease, which suggests that even the potential for parents to more closely monitor their driving might have improved their behaviour.

Recent initiatives such as reduced insurance premiums may similarly act as an incentive for increased compliance with legislated limits and parental restrictions incorporated within the safer driving agreement. By way of example, five insurance companies in The Netherlands introduced a 'pay-as-you-drive scheme', in which the speeding behaviour of young drivers was monitored via global positioning systems (GPS) technology and compared to a control group. The young drivers in the scheme reported less mileage, and therefore time, speeding, and received lower insurance premiums as a result (Bolderdijk, 2011). Further, a Pay-as-You-Speed program which offered reduced insurance premiums (up to 30%) for compliance with speed limits which was monitored by an intelligent speed adaptation (ISA) system was found to be effective in encouraging speed-limit compliance whilst the ISA device was active (Lahrmann et al., 2012).

3. CONSULTATION PHASE

The consultation phase of the research involved four separate stages: (1) stakeholder consultations conducted with Australian stakeholders; (2) stakeholder consultations conducted with international stakeholders; (3) focus groups and one-on-one interviews with young drivers; and (4) a focus group and survey of parents of young drivers. The methodology of each of these stages is discussed below (see Section 3.1), with the results from each approach discussed separately in Sections 3.2.1 to 3.2.4.

3.1 Methodology

Prior to conducting the consultation phase of the research, CARRS-Q obtained research ethics approval from the Queensland University of Technology (QUT) University Human Research Ethics Committee (UHREC – 1200000278), which was ratified by the equivalent committee at the University of New South Wales (NSW UHREC). In addition, an interview schedule/survey instrument was developed by the project team and was used in all four stages of the consultation phase. This document outlined the specific issues to be addressed during the consultation phase and ensured accurate, comprehensive and consistent data collection. The document is provided as Appendix A.

3.1.1 Australian Stakeholders

A list of key Australian novice driver road safety stakeholders was compiled by the research team. The stakeholders included the following organisations from each jurisdiction, with all stakeholder types represented to varying degrees across the jurisdictions:

- Police agencies;
- Transport authorities;
- Motoring groups;
- Driver trainer organisations;
- Program providers (e.g., *Roads2Survival*, *keys2drive*).

A total of 22 stakeholder consultations were conducted. The vast majority of organisations contacted agreed to participate. Those stakeholders expressing an inability to participate in the research typically did so due to the existence of a more appropriate organisation within the jurisdiction to field such enquiries.

Initial contact with relevant stakeholders was made via email and/or telephone¹. During this process, the purpose of the project was explained and a formal invitation for representatives from the organisation to participate was provided. Representatives were offered two choices regarding their participation:

1. Complete an electronic survey instrument involving eight open-ended questions (based on Appendix A), which could be completed and returned via email in their own time; or

¹ Each organisation was contacted a minimum of four times via the most appropriate medium. When this failed to produce a response, all feasible attempts to identify other appropriate routes for communication were also exhausted.

2. Take part in a teleconference covering the same eight questions outlined in the survey instrument (approximately 60 minutes in length).

The questions outlined in the survey instrument were developed based on the available literature and the project brief.

A number of factors contributed to the majority of stakeholders choosing to participate through email correspondence. Firstly, a number of agencies cited concerns regarding the privacy of information and suggested that electronic mediums provided a better safeguard against accidental disclosure of sensitive information. Secondly, the survey instrument allowed for multiple representatives from a single organisation to contribute to the preparation of responses in a more feasible and manageable way. Teleconference discussions were audio recorded for transcribing purposes and use in the qualitative analysis.

3.1.2 International Stakeholders

A face-to-face meeting was conducted with an expert panel involving four key stakeholders in the United States associated with the development, management and/or evaluation of the *Checkpoints* program. The meeting was conducted in the United States by two members of the project team (Prof. Barry Watson and A/Prof. Teresa Senserrick).

The meeting covered a range of issues including: historical background of the use of safer driving agreements in the United States; evidence of effectiveness and best practice principles of safer driving agreements in the United States; and perceived applicability of these findings and experiences to the Australian context, including potential barriers and solutions.

It is worth noting that all members of the expert panel were relatively familiar with the driver licensing systems in place in Australia and that two of them had made extensive visits to Australia in the past.

3.1.3 Young Drivers

Focus group discussions and individual interviews were conducted with young drivers. Participants were Queensland University of Technology (an inner city university campus in Brisbane, Australia) first-year students recruited through the psychology student research participant pool or notifications at lectures. To be eligible to participate, young drivers were required to hold a current Learner licence or be in the first six months of their first Provisional licence phase (P1).

A total of three focus groups ($n = 10$) and five interviews ($n = 5$) were conducted. All focus groups and interviews were conducted by the same researcher using a structured interview schedule based on Appendix A. The sample consisted of ten females and five males. Focus groups took approximately 60-90 mins to complete, while interviews took approximately 30 minutes. Participants received either \$20 cash or course credit as reimbursement for their time and effort.

3.1.4 Parents of Young Drivers

A focus group and parent survey were conducted. Participants were recruited in one of two ways: (1) through the Queensland University of Technology psychology student research participant pool, or (2) at a parent-young driver information session on the Learner period conducted by Trent Driving School in Sydney, Australia. To be eligible, participants were required to be the parents of a young driver who currently held a Learner licence or was in the first six months of their first Provisional licence phase (P1).

The focus group discussion was conducted using a structured interview schedule, took approximately 60-90 mins to complete and participants received course credit as reimbursement for their time and effort. The parent-young driver information session involved approximately 90 individuals, including approximately 40 families (i.e. parent/s and young drivers).

A total of eight participants were involved in this phase of the research. The two participants who were recruited through the focus group were female, while the gender of those participants recruited at the information session ($n = 6$, including one postal return) was not recorded, but included both males and females.

3.1.5 Data analysis

In all four stages of the consultation phase of the research, directed conceptual content analysis was used to analyse the information provided by stakeholders, young drivers or parents (Hsieh & Shannon, 2005; Krippendorff, 2004). In the interest of the confidentiality and anonymity of participants, quotes are reproduced in this report with no identifiable information.

3.2 Results of the Consultation Phase

As stated the consultation phase involved four separate stages: (1) stakeholder consultations conducted with Australian stakeholders; (2) stakeholder consultations conducted with international stakeholders; (3) focus groups and one-on-one interviews with young drivers; and (4) a focus group and survey of parents of young drivers. The results of each of these four stages are presented in Sections 3.2.1 to 3.2.4 below.

3.2.1 Australian Stakeholders

3.2.1.1 Can safer driving agreements work in Australia?

Overall, a number of stakeholders noted that there was scarce empirical evidence to suggest that safer driving agreements are effective in reducing crash or violation rates among young novice drivers, suggesting that their support for the full introduction of such an initiative would be contingent on research being conducted to provide evidence of their effectiveness, such as a successful trial.

“Would not support the introduction of safer driving agreements if evaluations do not find them effective in reducing young driver crashes” (Motoring group).

"There is currently a lack of evidence demonstrating any correlation between safer driving agreements and improvements in driver safety or reductions in the incidence of traffic violations or road crashes" (Road authority).

"I'm not too sure that they can work, but I'm of the belief that they should be trialled in some way" (Police organisation).

Moreover, the potential effectiveness of safer driving agreements was argued to be limited only to those young drivers who are already safety conscious, rather than more problematic young drivers.

"Probably questionable in relation to those younger drivers who perhaps do engage in risk-taking behaviour ... those people who will do the right thing are likely to do the right thing whether there is an agreement there or not" (Police organisation).

However, a number of stakeholders warned against suggesting that safer driving agreements need to be evaluated as being effective for all young drivers to be evaluated as being effective overall.

"We have to accept that the safer driving agreements will not work for everyone or will not be appropriate for everyone – that doesn't matter – if they are only appropriate for 1% of people than that would mean we should be thinking about something different, but the fact that there is a group of recidivist offenders that it doesn't work for doesn't mean we shouldn't necessarily be doing it for others" (Program provider).

The majority of stakeholders suggested that current road rules and regulations, including GDL, represent the most effective approach to improving young novice driver safety and that safer driving agreements would, at best, represent a complimentary or supporting initiative in an overall strategy of broader programs.

"I don't see them [SDAs] as the next great hope to reduce the road toll. What I see them as is just another little strategy ... there is no silver bullet" (Police organisation).

"There is no better way to encourage safer driving behaviours than by enforcing traffic law and penalties on those drivers who commit offences and place themselves and others in harm's way" (Police organisation).

3.2.1.2 Which party or parties should be involved in safer driving agreements?

There were two primary arguments regarding which parties would most effectively be partnered with young drivers in a safer driving agreement: (1) parents/supervising drivers; and (2) an organisation of authority (e.g., transport authority, police).

Many stakeholders suggested that parents or supervising drivers are the most appropriate partner given they typically have the greatest direct involvement in the young driver's life, particularly during the initial period of licensing and the transition into independent driving. Specifically, it was argued that safer driving agreements can increase parental involvement and communication, including setting rules and imposing restrictions, which have been shown to have numerous road safety benefits for young novice drivers.

“Young drivers may benefit from participation in safer driving agreement programs involving their parents. In this regard research shows that risky young driver driving behaviours, traffic violations and road crashes are less common when parents impose strict limitations. Safer driving agreements between parents and young drivers that clearly delineate rules and consequences may result in better communication, more restrictions, and safer parent and young driver attitudes” (Transport authority).

“Young drivers and parents/supervising drivers as these agreements need to be monitored daily and others groups do not have the relationship that is necessary” (Program provider).

“A [young] driver is more likely to be committed to an agreement with a parent or peer rather than a government or licensing authority who are ‘faceless’ and do not have an emotional connection or relationship to the driver ... The agreement would provide a tool for parents and allow them to raise the issue of safe driving in a constructive manner” (Transport authority).

It was suggested that, for optimal effectiveness, the development of safer driver agreements should consider family dynamics, including information regarding parenting styles and key factors of parent-young driver relationships.

“The development of a safer driver agreement [should] take into consideration research on parental style, influence and interaction with teenagers and young adults” (Motoring group).

On the other hand, a number of stakeholders suggested that licensing authorities or police organisations would be the most appropriate partner for safer driving agreements given that the involvement of an authority would aid the enforcement of the agreement. This was argued to be particularly important when used with problematic young drivers.

“The agreement between the Police and young drivers is simple - these are the laws and if you break them, you will be penalised. I believe that this agreement probably will stand the strongest of them all as breaking the law has more severe repercussions on young drivers than what any other party could” (Police organisation).

However, the difficulties associated with authoritative partners monitoring and enforcing the driving behaviour of the young driver was highlighted, including the ability to monitor behaviour and administer punishments.

“Licensing authorities would seem a likely choice; however there are some issues which are likely to be problematic ... Licensing authorities don't have the ability to monitor or negotiate. In the case of consequences for violation of the agreement, the ability of licensing authorities to deliver 'punishment' is limited” (Transport authority).

“People don't generally have day-to-day contact with government in terms of any sort of monitoring of enforcement of their behaviour” (Motoring group).

A number of stakeholders also commented on other potential partnerships. Specifically, partnerships with employers/workplaces received considerable support, while partnerships

with schools, peers or social/sporting clubs were argued to still require some level of parental involvement to be effective. No stakeholders suggested that these alternative partnerships would be more effective than partnerships with parents/supervising drivers or authority organisations.

“There is also an opportunity for industry and business involvement in such agreements ... they may promote safer driving across the wider workforce and safer work practices generally. This may also be tied to work place incentives and provide opportunity for tangible sanction to encourage compliance” (Police organisation).

“Schools, sporting clubs, other social clubs could set safe driving agreements with young people but these probably need to be endorsed and supported by parents for them to work effectively” (Transport authority).

In addition, a number of stakeholders believed collective agreements made by a group of peers, but still between the young driver and parents, could increase the likelihood of young people engaging and participating in agreements and reduce any stigma attached to participation.

“Maybe an agreement where you sign it with all your friends ... a collective agreement ... sign an agreement as a group of people” (Police organisation).

3.2.1.3 When would safer driving agreements have the greatest impact on the safety of young drivers?

A number of stakeholders suggested that safer driving agreements would have the greatest potential impact on the safety of young novice drivers during the early stages of the Provisional licence phase. Specifically, it was noted that the transition to independent driving represents the period at which crash risk for young drivers is most pronounced and thus is an appropriate time to initiate an agreement.

“Statistics show that young drivers are most at risk of crashing during their first few years of solo driving ... therefore, an intervention that targets young drivers during the first few years of solo driving seems the most appropriate” (Motoring group).

“The risk of a crash significantly increases when a person goes from being closely supervised to unsupervised (i.e. when they move from a Learner to Provisional licence). The agreements provide the opportunity for parents and other guardians to monitor the times and ways in which a vehicle is driven by a provisional driver” (Transport authority).

“Would likely be most effective during the provisional licence phase when the driver was not being supervised by a more experienced driver and while still acquiring the skills and experience necessary for safe driving” (Transport authority).

On the other hand, a number of stakeholders suggested that the introduction of safer driving agreements during the pre-licence or Learner licence phases would better prepare young drivers to engage in responsible decision-making as they progress through the

licensing phases. Specifically, it was argued that earlier implementation of the agreements would normalise the process by the time the young person reaches the Provisional phase.

“Safer driving agreements would have an impact during all periods. Young drivers tend to observe the driving habits of their parents and peers during the pre-licence period and would be forming what they consider good examples based on what they have observed. By the time young drivers reach the Learner and subsequent P licence stages, they have already formed some opinion as to what is acceptable and appropriate driving behaviour. They would also be aware that they would be accountable for their driving behaviour” (Police organisation).

“Combination of periods to reinforce [the] concept that learning to drive safely continues after passing the practical driving test. [As a] Learner [it] can be used as a tool to guide discussions about safe driving, attitudes and risk taking as part of the learning process ... these discussions can assist in making it clear what both parties expect once solo driving commences” (Transport authority).

However, some stakeholders noted potential barriers to the effective implementation of agreements prior to the Provisional licence phase. Specifically, it was argued that parents are typically more focused on the process of helping the young driver obtain their licence, that logbooks and mandatory hours were currently a large commitment already imposed on drivers during this period, and that crash risk is typically lowest during the Learner period due to the constant supervision and limited driving exposure of the young driver.

“People see the logbook as enough of an impost on them, or a commitment to their Learner driver during that phase, and if you introduce more things would it overload them?” (Motoring group).

“Pre licensing is too early as parents are more concerned about the process of getting the licence, rather than looking ahead to the risks of solo driving” (Transport authority).

“The agreements are unlikely to have any impact in the learner phase, as the person is required at all times to drive accompanied. This in itself provides a high level of involvement by the supervisor” (Transport authority).

3.2.1.4 What specific conditions should be outlined in safer driving agreements?

Numerous possible conditions were identified as important as part of safer driving agreements implemented in either the Learner or Provisional licence phases, including:

- Not engaging in illegal behaviours, including: using a mobile phone when driving; speeding; drink or drug driving; tailgating; failing to wear a seatbelt; running red lights; and hooning.
- Conditions related to other safe behaviours, such as: avoiding distractions; not driving when fatigued/emotional; driving to the conditions (e.g., driving slower in the rain); being patient; looking out for vulnerable road users; and hazard perception.
- Complying with licence restrictions, such as: peer passenger restrictions; night-time driving restrictions or curfew; limits on vehicle horsepower; and carriage of licence and correct display of L or P plates.

- Instilling a sense of responsibility in relation to keeping your passengers safe (e.g., friends, family).
- Having to call or text one's parents when arriving at a destination, changing travel plans or leaving for the trip home (and when arriving home if you live away from your parents).
- Parents agreeing to: be readily available to render assistance, at any time and in a supportive and non-judgmental manner, to help young drivers avoid high-risk situations; treat the young driver as an adult; and, model safe and legal driving behaviours when they are driving.
- Conditions associated with maintaining the good working order of the vehicle and who is responsible for vehicle costs (e.g., insurance, registration, maintenance).
- Conditions associated with access to the vehicle and conditions of use (e.g., times of day/night, distances that can be travelled), including asking for permission to use the vehicle if the young driver does not have a vehicle of their own.

Perhaps not surprisingly, the majority of stakeholders suggested that conditions outlining legal and safe driving behaviours, as well as licensing regulations such as GDL, would be an important feature of safer driving agreements.

"It would presumably seek to pick the highest risk factors: (i) reinforcing key safety and legal requirements already, and (ii) those that are not already controlled via legislation and place 'voluntary' restrictions in the early months of licensing" (Transport authority).

"Such agreements can reinforce restrictions as part of a GLS [graduated licensing scheme], and perhaps include additional ones as agreed by the parties" (Transport authority).

While it was suggested that conditions on the agreement could be more restrictive than current laws and regulations, one stakeholder noted the difficulties associated with monitoring and enforcing such conditions.

"It would not be irrational if stakeholders and parents set even tougher conditions than the Police, however these conditions could only be monitored and enforced by the stakeholder themselves" (Police organisation).

A number of stakeholders highlighted that careful consideration would be required regarding the length of time in which restrictions were placed on the young novice driver, such that restrictions that are perceived to be unnecessary are likely to encourage less voluntary compliance. In addition, it was argued that conditions should be well justified as part of the agreements so that young drivers were aware of the underlying purpose for each condition. Involving the young driver in the development of the agreement was perceived as an important step to achieving this goal.

"Consideration should be given to the duration of restriction and finding the right balance. Compliance will be likely to be higher with shorter durations rather than longer" (Transport authority).

“Expectations for adherence to these conditions should be high. There needs to a clear understanding of the risks” (Motoring group).

“The agreement should be a strategy to empower them, not control them ... it should be an aid to make both of them [parents and young drivers] aware of the responsibilities involved with getting a licence” (Transport authority).

The majority of stakeholders stressed that safer driving agreements would need to include numerous parental responsibilities in order to make the agreement feel more like a partnership than a stringent set of rules forced upon young drivers and to make parents accountable to their young driver.

“An agreement also recognises the rights and responsibilities of stakeholders and helps to develop a culture where accountability is expected, especially in relation to care and consideration for people and property ... Parents/caregivers should also acknowledge that they have responsibilities” (Motoring group).

Those stakeholders who argued that safer driving agreements may be beneficial during the Learner licence phase, suggested that conditions should outline the appropriate processes in which teaching would occur. This included the acquisition of skills through adequate driving instruction, respectful behaviour between the supervising driver and young driver during the learning process, and the appropriate modelling of safe and legal driving behaviour by the parent or supervising driver.

“Some compulsory component of lessons provided by a driving instructor to raise the level of education received by the learner driver ... a course to allow supervisory drivers to be educated in how to deliver adequate driving instruction to the learner driver” (Motoring group).

“Parents engaging in agreements in the pre-licence and learner phase would facilitate parental accountability to model good driving during this impressionable phase” (Motoring group).

A number of stakeholders suggested that the conditions outlined on a safer driving agreement would need to be based on the particular individuals participating in the agreement, rather than attempting to develop a one-size-fits-all list of conditions.

“I think they [safer driving agreements] should be an individual negotiation between the two parties – it’s not a case of ‘one size fits all’. There could be a range of options/suggestions that the adult and young person can choose from” (Program provider).

3.2.1.5 What rewards and/or consequences do you think could be incorporated into safer driving agreements?

A number of stakeholders suggested that continued use of a vehicle and the privilege of holding a licence should be reward enough for not violating the conditions of a safer driving agreement.

“For some young drivers, the continued ability to borrow the family car may be the only necessary incentive” (Transport authority).

“Is the fact that the young person is allowed to drive, is not injured and does not cause injury to others sufficient reward in itself?” (Police organisation).

Nonetheless, a number of stakeholders highlighted that young people are often motivated by rewards and as such they could increase the degree to which young drivers engaged in agreements and complied with the conditions of the agreement.

“Young people are driven by reward, so offering incentives for driving safely would be effective” (Police organisation).

Indeed, numerous other possible rewards were also identified, including:

- Reduced registration, licensing and insurance costs, free/bonus driving lessons (paid either by the parent or authority organisation/industry partners).
- Additional demerit points.
- Relaxation or extension of agreement conditions.
- Monetary or materialistic rewards (e.g., movie tickets, petrol money).
- Positive recognition (e.g., on a website, driver star rating).

The most popular of these involved financial assistance with common costs associated with vehicle ownership and operation.

“Some incentives could include reduction of cost for comprehensive insurance ... reduction of registration/third party costs” (Motoring group).

“Driver training schools ... it could be that if you drive well, when you buy three lessons you get a fourth free” (Police organisation).

“The parent/guardian may pay for maintenance/reggo/insurance” (Transport authority).

Other stakeholders advocated more subtle rewards in the form of relaxation of particular conditions and restrictions as the young driver demonstrated improved or appropriate behaviour.

“Depending on the skills and maturity of the young driver, the agreement could be structured to increase use of the vehicle and relax conditions as the young driver demonstrates that they are able to use the vehicle safely and meet the responsibilities of driving” (Transport authority).

The most common consequence advocated by stakeholders involved the removal or restriction of driving privileges. However, the difficulties associated with this approach when young drivers have their own vehicle were noted. In addition, removing or restricting driving privileges was perceived by some to be counterintuitive, given that the agreements are supposed to be designed to help the young driver gain the necessary driving skills through experience, and may prove problematic in various circumstances, such as where the young driver does not have access to public or alternative forms of transport (e.g., regional areas).

“Loss of driving privileges is an obvious consequence, however that would work best when children drive family cars, rather than if they have their own” (Transport authority).

“Loss of driving privileges seems counter-intuitive to improving driving skill and experience ... it does depend on what the family's situation is and what the vehicle access situation is and what the child uses the vehicle for. Can they get to work or uni using public transport where they are?” (Motoring group).

A number of other potential choices for consequences were also suggested, including reductions in financial assistance (e.g., associated with vehicle costs), restrictions on social and sporting activities or increased chores in the home.

Overall, it was argued that consequences must reflect the seriousness or repeated nature of the breaches of conditions, with graduated punishments increasing in severity, and be sufficient enough to deter the young driver from engaging in unsafe or illegal driving behaviours or violating other conditions of the agreement.

“A staggered system of punishment should be the consequence of infringing against restrictions placed upon their licences beginning with cautions, monetary fines and demerit points. Continued transgressions should be penalized with suspensions, licence stage regressions and ultimately licence retesting and/or cancellation” (Motoring group).

“The consequences need to be sufficient to deter the driver. As the agreements are voluntary and won't be legally binding, the driver needs to feel that the consequences of breaching the agreements outweigh the benefits” (Transport authority).

The greatest difficulty associated with rewards and punishments was argued to be associated with reliable and accurate monitoring of behaviour to ensure they are justified.

“The most significant barrier for both penalties and rewards would be monitoring each individuals driving behaviour and ascertaining if they did or didn't commit safe driving during a certain period of time” (Police organisation).

“Difficulty monitoring behaviour at all times - may reward unsafe behaviour you're unaware of” (Transport authority).

The majority of stakeholders also acknowledged the difficulties associated with punishing young drivers as they become older and more independent. Indeed, the concept of punishment was argued by some stakeholders to detract from a fundamental need to treat the young driver as an adult during this phase of their lives.

“If people are working and buying things for themselves, having someone come and take it away from you that you have spent your own money on is pretty ordinary ... You're getting your driver's licence and it's a bit of a growing-up experience and you're being told to be a responsible road user, it's a bit of a conflicting message to turn around and say ‘if you're out after 10[pm] I'm going to take your toys away” (Motoring organisation).

“The notion of setting rules for 18 year olds is problematic, as both parents and young people see 18 year olds as adults and who should be making their own decisions and taking responsibility for themselves ... the idea of 'punishment for violating rules' would not fit well with this general framework” (Transport authority).

The majority of stakeholders suggested that rewards and consequences associated with safer driving agreements need to be vehicle or driving-related, be based on the particular individuals participating in the agreement, and be discussed and well understood prior to the commencement of the agreement.

“I think the punishments in relation to the vehicle have to be associated with the vehicle” (Motoring organisation).

“Should be agreed by the parties, who are in the best position to make suggestions about rewards or incentives that would be considered sufficiently attractive to affect behaviour” (Transport authority).

“It seems there will be a great deal of difficulty to establish support for the use of safer driving agreements unless you can clearly explain to the key stakeholders what the key benefits are of entering into such arrangements” (Transport authority).

Overall, an agreement without rewards or consequences, with a stronger focus on establishing a relationship based on supportive and open discussion, was not perceived to be effective. Indeed, it was argued that such agreements would require very little from each party and result in self-selection bias whereby those drivers who arguably need intervention the most would not participate.

“My question would be what's the actual agreement? Is the agreement just to talk about things when they happen? Because usually in a supportive family environment that would happen anyway ... If that's the sole basis of the agreement, it doesn't require that much from either party ... If they [SDAs] are not a compulsory thing ... you're going to have a bit of a self-selection bias where the people who are interested in safety and care enough to follow-up with their kids will probably do it, but the kids who have no contact with their parents, the parents don't care and the kid doesn't care - who are probably going to be at higher risk anyway - they are probably not going to do it” (Motoring group).

3.2.1.6 What difficulties/barriers do you think could be encountered in the Australian context and how could these barriers be overcome?

The majority of stakeholders agreed that the greatest barrier to the effectiveness of safer driving agreements would be the ability for the behaviour of young novice drivers to be reliably and accurately monitored and for breaches of conditions to be readily enforced.

“If the young driver can break the agreement without detection or there is no possibility of the imposition of a suitable, legally enforceable deterrent in the event of a violation of the agreement (e.g. parents cannot legally prohibit a young driver from using a vehicle that the driver legally owns despite the driver initially agreeing to some voluntary form of deterrent)” (Transport authority).

"It is difficult to quantify the benefits of such an agreement, beyond highlighting road safety issues, when there is an inability to evaluate compliance ... this can be aggravated by the fact that there is little motivation or incentive for either party to self-report where there has been a violation of the agreement" (Police organisation).

Such difficulties were believed to be exacerbated as the young driver becomes more independent (e.g., turns 18, moves out of home, buys their own vehicle).

"Difficulty monitoring behaviour at all when driver doesn't live at home. Difficulty restricting access as a consequence for drivers with their own vehicle" (Transport authority).

"Where the young person is the owner of the vehicle and has exclusive access to it. In these circumstances ... the ability to measure compliance, offer reward or impose sanction is considerably limited" (Police organisation).

Moreover, it was argued that honest self-reporting on the part of the young driver would be unlikely if they knew their reporting would lead to negative consequences, with the strength of the relationship between the parent and young driver argued to be essential to the effectiveness of any agreement.

"There needs to be a fairly good relationship between the parent and the child to start off with, and where the parent is pretty confident that the relationship is strong enough that the child is going to want to do the right thing even when they are not around ... as soon as a kid knows that saying 'I've done something wrong' is going to lead to a consequence, is that going to make them want to report it next time to you?" (Police organisation).

Many stakeholders were not opposed to the idea of using in-vehicle technological devices to monitor young novice driver behaviour. However, the importance of confidentiality and privacy were noted, as were the potential negative effects on trust in the agreement relationship, safety of the novice driver, costs associated with the approach and the impact on parental perceptions of responsibility.

"In-car monitoring utilising technology would need to be carefully assessed. It is imperative that any such technology does not present an additional distraction within the vehicle. The additional issue with in-car monitoring is any associated costs may be prohibitive to the installation" (Police organisation).

"There are some technological solutions to some of these issues, some of the developing technologies around vehicle tracking and camera-based technologies ... but if someone is 18 years old and living away from home ... I think you're going to have some privacy issues with that. But where it is a family vehicle, if the parent decides to put a tracking device in their own vehicle than that is totally up to them" (Motoring group).

"There is going to be a lot of barriers and I don't see how you're going to be able to overcome them without breaching that trust in the relationship ... and I'm not supportive of using any in-car technologies to ensure that it [good behaviour] occurs ...

because as soon as you do that the child is going to say that you just don't trust me" (Police organisation).

"I question whether in fact parents are going to sit down at the computer and look at the records of what their children are doing and when ... It really comes down to costs to some degree and what the parents are actually going to want to include to ensure their kids are safe. I wonder how many of these agreements will end up being looked upon by the parents to some degree like ... a bit of an absolution from actually monitoring behaviour" (Police organisation).

A number of stakeholders suggested there may be difficulties associated with engaging young drivers in safer driving agreements during a period in which they are likely to perceive themselves as having earned the right to drive. In addition, it was suggested there may be difficulties associated with engaging parents in safer driving agreements, such that parents may not be aware of the risks associated with young driver safety and are often time-poor regarding their ability to proactively partake in such an initiative.

"One of the biggest barriers to overcome would be the reluctance on a [young] driver's part to allow someone to dictate their ability to use the vehicle after they have obtained a legal right to drive" (Transport authority).

"Lack of awareness [among parents] of the extent of [the] high risks faced by young solo drivers is a barrier" (Transport authority).

"Parents are very time poor and arguably do not understand the important influence and participation that they can provide to assist the young driver. Many parents/carer cannot be 'reached' to pitch these agreements to" (Police organisation).

Moreover, the power imbalance for young drivers, and their ability to sanction partners in the agreement should the partner fail to meet their responsibilities or violate conditions on the agreement, was also noted.

"There is a significant imbalance in the power relationship between a young person and a parent or a young person and an employer. It is unclear what meaningful conditions could be set out in these circumstances for which there is recourse for the young person should the agreement be violated" (Police organisation).

Additional potential barriers noted by stakeholders included: the impact of vehicle and driving-related consequences where alternative transportation options are scarce; access and language barriers; agreements which are too complicated or perceived to be unfair; cultural and socio-economic factors; and issues associated the general management of safer driving agreements.

Stakeholders suggested that in-depth and open discussion regarding the specific conditions, rewards, consequences and other aspects of the safer driving agreement would be the most fundamental approach to minimising the impact of the potential barriers outlined above.

"Parties should spend considerable time talking about the agreement, its purpose, how it will be monitored, etcetera in an attempt to mitigate as many difficulties as they can

at the outset, and ensure there is a shared understanding going forward” (Transport authority).

3.2.1.7 Could safer driving agreements have an impact on the safety of young drivers in offender management programs or when returning from a period of suspension or disqualification?

The majority of stakeholders argued that safer driving agreements could be effectively applied as an additional intervention for young driving offenders returning from a period of licence suspension or disqualification, or in lieu of suspension for less serious traffic offences. In such instances however, it was suggested that the most appropriate and effective partner would be a regulated body such as a licence/transport authority or the police.

“Safer driving agreements between young drivers and licensing authorities in the event of a disqualification for non-serious disqualification offences could potentially impose the following conditions to enable young drivers to continue to drive in lieu of losing their licence with all the inconvenience that disqualification necessarily entails: (1) cancellation of the driver's existing provisional licence; (2) issue of a new provisional licence which is required to be held for a longer period than the provisional licence that is cancelled and possibly subject to the areas listed above in safer driving agreements between young drivers and parents; (3) disqualification for a period greater than the original disqualification period in the event of a breach of conditions or the accumulation of a specified number of demerit points” (Transport authority).

“In relation to the one's [SDA] that are ordered when a person is disqualified ... that would obviously be between the driver and the government or that department and about a structured process in which the driver is able to get their licence back” (Police organisation).

“For safer driving agreements to be effective amongst the young offending population, they need to be taken seriously ... If these programs and agreements were setup so they could run in conjunction with a penalty imposed by the court, then perhaps they would be taken more seriously and the young offending drivers will make every effort to participate” (Police organisation).

Indeed, it was suggested that safer driving agreements utilised with offenders would likely be associated with greater levels of public support compared to using them for all young people and provide more acceptable opportunities for the use of technological devices to monitor behaviour.

“Community support for placing restrictions and stronger penalties on offenders would probably be higher than the support for the notion of restricting all young people ... More formalised relationships with licensing authorities could be possible ... In this case a technology solution might help with monitoring of driving and enforcement of restrictions” (Transport authority).

The difficulties associated with funding and management of safer driving agreements used in this manner were noted by a number of stakeholders, however were not perceived to be insurmountable.

“To have a program like this implemented will obviously come with difficulties like resources, staffing, management of program and offenders. However, if it is a combined effort between stakeholders and government organisations then it is possible that it can be successful” (Police organisation).

However, a number of stakeholders argued that safer driving agreements are unlikely to be effective with the young driver offender population, and in particular repeat offenders, suggesting that such individuals typically have contempt for authority and rules and that attempts to use agreements in such instances would not represent an efficacious use of resources.

“Those involved in offender management programs have very little or no respect for the law ... the money would be better spent on another area of road safety” (Police organisation).

“Inexperienced one-off offenders are probably best supported through agreements. However, repeat offenders are likely to require different and more stringent approaches” (Motoring group).

In contrast to the majority, one stakeholder argued that there are currently sufficient laws and regulations in which to monitor and enforce the behaviour of offenders returning from licence suspension or disqualification and that the implementation of safer driving agreements with this population was unlikely to serve an additional benefit.

“There are sufficient laws and penalties which already regulate all drivers ... any driver, young or old, who returns from a period of disqualification and then does not move away from risky driver behaviour, is adequately covered by the existing road transport laws” (Police organisation).

3.2.2 International Stakeholders

The expert panel conducted in the United States reported that the historical background to agreements was the formalising of post-hospital care schedules that were discussed with patients before being discharged and had to be signed. This followed with patient-physician agreements in relation to quitting smoking. Transitioning to parent-young driver agreements was not as straight forward however. They suggested that parents could believe they had discussed issues with their young driver but then the young driver may have understood differently or changed in their belief in what was agreed over time. This was partly due to the developmental stage of young drivers, a stage that requires them to explore risks and keep revising and pushing to their limits.

Introducing an agreement at a “teachable moment,” such as when needing both parents and young drivers to be present together to sign documents during the licensing process, was recommended by the panel as likely increase uptake and compliance. They had experienced parents regarding the information positively but not entering into agreements

as they believed their young driver was “a good kid” and didn’t need one, only to return and want to start one after the young driver had experienced a crash or offence. They regarded this as a “salience issue” – how do we reach them before this happens? Conducting information sessions on a group basis, which allows participants to hear other dyads discussing the issues and answering questions, can provide a social influence such that “social norms” can be “primed” in such an environment. For example, asking how many dyads included passenger restrictions in their agreements and finding a majority raise their hands could influence others who did not include them to revise. They noted more aggressive marketing in the U.S. by insurance companies about making agreement that might also perceived norms regarding agreements as widely adopted.

The panel suggested a number of more specific optimal characteristics for efficacious implementation of safer driving agreements. Specifically, it was argued that the initiative is most effective when it:

- Supports GDL principles, and even involves more restrictions than what would be required under GDL in the early phases;
- Is integrated into the broader licensing system;
- Is ‘pitched’ in a proactive way (e.g., not reactive);
- Focuses on exposure management; and
- Readily reaches parents at a period when they are motivated to be engaged.

Overall, it was reported that the evidence suggests that safer driving agreements are more effective in jurisdictions with established GDL laws. In addition, it was reported that previous research has shown that the effectiveness of safer driving initiatives are robust in terms of when the initiative is implemented (i.e., pre-licence, Learner, or Provisional phase). Moreover, research conducted in the United States has suggested that there should be: open negotiation of the conditions imposed as part of an agreement; a strong focus on driving performance; and, consequences for non-compliance should be driving-related, such as the removal or restriction of driving privileges. That said, there was a belief that removal of access to mobile phones could also be an effective punishment, however, many parents want their children to have access to a phone for safety reasons. Consequences such as grounding, not being able to watch television or not being allowed to go out with friends were also suggested.

It was noted that the development of safer driving agreements has benefited from research in other domains (e.g., smoking cessation). Examples include industry partners such as insurance companies providing incentives for uptake, a focus of agreements on managing exposure, and the limited focus on offender management. However, the potential for rewards and incentive schemes to distort accurate and reliable self-reporting of behaviours was noted. As such, it was argued that rewards may be more beneficial for encouraging initial uptake into the initiative. There was doubt that a misbehaviour or offence would be reported to an insurance company even if addressing it led to a financial reward (especially in the United States context where enforcement is typically lower). Use of other technologies, such as in-vehicle monitoring systems, was also suggested in relation to a possible application for traffic offenders. One of the researchers had in fact received calls

from parents looking for such schemes following drinking offences, suggesting inclusion of alcohol interlocks or monitoring technology might be welcomed by parents.

The most common behaviours covered in conditions on safer driving agreements in the United States were reported to be: fatigue; speeding; drink driving; mobile phone use/distracted driving; tailgating; carrying peer passengers and exposure issues, such as being out too late.

A number of comments were provided regarding the barriers that could potentially be faced when implementing safer driving agreements in the Australian context. Specifically, it was noted that most young drivers involved in agreements in the United States are younger teens, and that there might be greater difficulty experienced in relation to engaging older teens. However, they cited research conducted in the United States showing that parental involvement and monitoring was still effective in reducing risk behaviours in terms of harmful drinking among students who had left home to attend college (Turrisi et al., 2010). Creating a sense of community among parents whereby they can share and discuss their experiences (e.g., through Facebook group pages) was argued to be important for engaging a greater number of parents.

Moreover, they suggested that, perhaps due to the older age in Australia, peer-to-peer agreements might be more relevant, particularly among groups of peers living out of home. However, such agreements were not perceived to be as relevant in relation to reducing exposure (the primary focus of the United States approach), given young people are less likely to want to restrict themselves. They suggested a focus around peer group activities, including responsible drinking and responsible driving when together, such as not being reckless and all wearing their seatbelts, might be an approach that would be adopted.

The panel also stated that integrating safer driving agreements as part of the licensing process in Australian jurisdictions could have a significant effect on rates of uptake and normalise the expectation to engage in an agreement, both for parents and young drivers.

The panel also acknowledged the difficulties associated with monitoring behaviour. A number of potential solutions were suggested, including encouraging regular parent 'ride-alongs' during intermediate/transitioning period between licence phases and encouraging increased sharing of family vehicles and delayed independent vehicle use and ownership. On the other hand, encouraging siblings to report on risky driving was not explicitly encouraged. In addition, the panel stated that more research was required to assess the effectiveness of in-vehicle technologies to verify compliance.

The use of mobile phones applications (apps) was discussed, however it was noted that limited progress has been made in this area. While the obvious limitation of teens potentially using the app while driving was acknowledged, a number of potential benefits were highlighted including: ready access to the agreement; more interactive; ability to send reminders that the agreement is due to be revised; and could be used to assess compliance with the agreement.

Of note, the panel also raised issues with being able to evaluate the impact of such initiatives, given that it was becoming increasingly difficult to collect data. Even after

successful recruitment and enrolment, follow-up phone survey rates were less than ideal and many reminders were needed to have web surveys completed. The most important time to impact was argued to be the first month of licensure, so in circumstances where resources are limited, it was argued as most efficacious to focus follow-up efforts at this time.

3.2.3 Young Driver Focus Groups

3.2.3.1 Can safer driving agreements work in Australia?

The potential effectiveness of safer driver agreements was argued to be heavily dependent on the strength of the relationship between the young driver and their parents (or whoever the agreement is made with), in relation to trust, respect and honesty.

“I think if you had a good relationship with your parents it could work, or whoever you do your driving with, but if you don’t really care what they have to say I doubt it would stop you from doing anything. You’d have to have a good level of trust otherwise you could just sign it and then go off and still do all the things you said you wouldn’t” (Female, FG1).

“I think there has to be a good enough relationship with your parents if this is going to work ... you have to be able to say ‘I did this and this happened’ rather than try and hide the evidence, because once you do it and get away with it, it’s just going to happen again and again and again” (Male, FG1).

“It’s very much based on trust and the relationship between the parties rather than the clear-cut guidelines in there” (Female, FG2).

A number of participants suggested that having a formal agreement outlining road safety issues would help to bring a subject that is sometimes not readily discussed out into the open and foster greater communication between young drivers and their parents.

“I imagine with some people that this [road safety] just doesn’t get talked about and I guess just having it [the safer driving agreement] there sort of sparks the conversation” (Female, FG2).

However, another participant suggested that involvement in an agreement would make him less likely to think about consequences in terms of road safety outcomes, but rather frame consequences in terms of personal costs and punishments.

“An agreement would make me think about consequences as losing my car, punishments for breaking rules, whereas I currently think of the consequences as car crashes, injury and death to myself and others” (Male, FG3).

It was argued that the agreements were likely to be less effective when young drivers were more independent of their parents, such as when they were living out of home, had their own vehicle or paid for their own driving and/or living expenses, or with young drivers who are more prone to engage in dangerous driving behaviours.

“I don’t know how effective it would be if they [the young driver] have their own car and they pay for everything – they don’t really have to sign the agreement ... They might obviously care what their parents think but it would be like ‘they don’t control me anymore, I can do what I like’” (Male, FG1).

“If you’re going to rebel, you’re going to rebel whether you’ve signed a contract or not” (Female, FG2).

3.2.3.2 Which party or parties should be involved in safer driving agreements and why?

The majority of young drivers suggested that parents were the most appropriate partner for entering into an agreement with given the greater direct contact parents typically have with their children, the greater ability for parents to monitor their behaviour and the established relationships of trust and respect. In contrast, there were mixed perceptions regarding the potential effectiveness of agreements with authority organisations.

“They [parents] have the ability to constantly monitor their child whereas the other organisations, they don’t because they only ever see them every now and then” (Female, FG2).

“I would think they would have to be fairly close for it to work, somebody that they see fairly often ... and obviously there is going to have to be some sort of trust and respect there as well” (Female, INT1).

“With my parents I actually feel like they legitimately care whereas a government agency or a school or something, you feel like they are only doing it because they have too or to protect themselves ... with a school or something, you’re kind of more leaning towards rebelling than upholding any of their rules” (Female, FG2).

Indeed, many participants noted that they already have existing informal agreements with their parents that stipulate rules and guidelines to ensure they drive safely.

“I already have an informal contract with my parents about this sort of thing [being safe when driving] ... in saying that, I would sign it if it was there because I don’t have a problem with it” (Female, FG2).

A number of young drivers suggested that in instances where the young driver did not have a good relationship with their parents, that some other trusted adult, such as another family member or teacher, would be the most appropriate partner.

“If they don’t have a very good relationship with their parents, then probably [have the agreement] with someone else, maybe another trusted adult ... a different family member, maybe aunts or uncles, maybe a family friend. I’ve made quite good friends with some of my teachers from school so I could say they are a trusted adult, it all just depends on how you see that adult in context” (Female, INT1).

Few participants suggested that safer driving agreements were likely to be effective if entered into with peers or social/sporting groups. Specifically, it was argued that the other young people in the group would be similarly inexperienced with driving and thus the young

driver would learn less from the partner. In addition, it was argued that peers would be less likely to be motivated to adhere to the agreement and more likely to exert a negative influence on each other to behave dangerously while driving, such as peer pressure.

“Most people’s friends are the same age as them and you have the same amount of experience, it will be harder to make it work when you’re actually writing up the agreement because you don’t have someone with that experience saying ‘when I was your age these are the things I did, and it didn’t work out well so I don’t want you doing them’” (Female, INT1).

“If your friends are the sort of people that would push the rules a little bit then it probably wouldn’t work so well” (Female, INT4).

Overall, the majority of young drivers did not believe that agreements made with partners who held greater authority (e.g., police, licensing authorities, insurance agencies) would be very effective. It was argued that in these instances there were already unspoken agreements, with punishments for inappropriate behaviour, and that safer driving agreements were unlikely to have any additional benefit.

“It seems it’s kind of built into the whole thing. If you have an accident, you pay the excess to your insurer and that’s your punishment ... I don’t know what more a contract could give other than just to be there and be in your mind that there is that accountability, but personally I’m already fearful enough of the accountability” (Male, FG1).

“I think you could say that with the road authorities, like the licensing department, that you kind of have an unofficial agreement with them anyway, that you’re not going to do these things to violate your licence” (Female, INT1).

3.2.3.3 When would safer driving agreements have the greatest impact on the safety of young drivers?

The majority of young drivers suggested that the agreements should begin in the Learner licence phase and be continued through to the Provisional licence phase, with the conditions to be reviewed and changed when drivers enter the Provisional licence phase to reflect the different driving scenarios faced when beginning independent driving. Implementing an agreement in the Learner licence phase was argued to make the initiative more normalised by the time the young driver reached the Provisional licence phase and increase the likelihood of compliance during this phase.

“It should be introduced in the Learner phase ... they’ll have it in mind from then but then it needs to be reinforced again in the Provisional phase so that they know about it but they are updated. So they have been exposed to it but it gets hardcore when they get their P’s” (Female, FG2).

“Before they get their Learners, they get an introduction, and then when they get their Learners they get a more detailed one and then when they get their P’s they’ll know they’re going to have this responsibility and have to abide by it” (Male, INT3).

Indeed, a number of participants suggested that safer driving agreements might be more effective if they were made a mandatory part of graduating through the licence phases.

“If you’re handed the contract at the same time as when you pass your P’s test or whatever I think it’s more intimidating. I’d definitely stick to the rules because of this contract and everyone’s witnessing it and I’d abide by it” (Female, FG2).

“You could inform them [young drivers] that they have to abide by these rules or they won’t get their licence” (Male, INT3).

The importance of the agreement during the early phase of the Provisional licence phase was highlighted given that this is a period of transition for the young driver where they must adapt to driving independently, without the supervision and assistance of their parent or supervising driver.

“They [a young driver with a Provisional licence] are more likely to make mistakes, because they haven’t really been driving by themselves a lot and they’ve always had that guidance there, and because they have that first freedom there, they might just go crazy and think they are invincible” (Female, INT2).

However, one participant suggested that agreements implemented in the Learner licence phase may not be effective as young drivers at this phase already have a large number of restrictions and pressures, and an agreement could lead to them being overloaded.

“I don’t think the contract specifically would work until the Provisionals. I mean I felt restricted enough as it was on my Learners and I think if there were that extra pressure it would have made it a lot harder for me to feel comfortable on the road” (Female, FG2).

A number of young drivers did suggest that beginning education during the pre-licence phase, while children are at school, could also be beneficial, but were not sure this should include an agreement. Specifically, they argued that education would serve to give children the opportunity to begin thinking about road safety from a younger age.

“I’d say that you need some sort of program in schools so kids are basically learning from when they are at school what safe driving is ... age appropriate and everything, so the message is there from when they are young so that they do it without even thinking by the time they actually start learning [how to drive] ... I think there should be education, but not necessarily a contract” (Female, FG2).

3.2.3.4 What specific conditions do you think could be outlined in safer driving agreements?

A number of participants highlighted that the conditions contained within the agreements could be built upon as young drivers progressed through the phases of licensure and different conditions became more relevant.

“In terms of the road rules ... I think it would be really good to introduce that as a Learner, but then when you’re talking about only carrying one passenger, things that don’t really affect you until you’re on your P plates, well it would be pointless to have

that in there as a Learner ... So I guess having an agreement as a Learner that covers the basic stuff ... but then as you move onto your P's then the conditions of your licence change so it has to be more suited to that" (Female, INT4).

Pre-licence phase

When probed, the majority of young drivers agreed there would be benefits associated with agreements whereby parents formally identified their responsibilities to drive safely when their children are in the vehicle and to model appropriate driving behaviours.

"I think it's very important, especially when the child is learning and they are in the car, for the parent to drive properly, because I know I would pick up my mum when she wasn't driving properly ... so I think it's important for the parents to drive responsibly ... because they're subconsciously picking stuff up" (Female, FG2).

Learner licence phase

The majority of young drivers who believed safer driving agreements could be effective in the Learner licence phase believed the specific conditions should lay the groundwork for the conditions that would be important in agreements in the Provisional licence phase. This predominately involved outlining the major road rules.

Young drivers also thought that, for safer driving agreements implemented during the Learner licence phase, conditions should specify how the learning process will occur. Specifically, it was argued that this would include specifying the number of hours per week in which lessons would occur; ensuring that lessons include a variety of different driving scenarios (e.g., road types, times of day/night and weather conditions) and cover the necessary skills (e.g., parking); and that parents would remain calm and supportive during lessons.

"You do so many hours a week, and you have to do so many hours in different types of conditions that you have to drive in, because we didn't do that when I was on my learners ... so that would be really beneficial I think ... maybe even that you have to do so many hours with a driving instructor, that could be beneficial" (Female, INT1).

"Perhaps making it an agreement because I know a lot of people have trouble tying their parents down to take them driving in the first place, so maybe having an agreement that 'we will get this many hours done per week'" (Female, FG2).

"I think one rule that would be really good is for the parent or the instructor to try and remain calm when something goes wrong ... because it will keep the Learner calm as well ... just being respectful of the Learner" (Male, INT5).

A number of young drivers did not think it was worthwhile placing a condition on the agreement that stipulated that they would not drive unsupervised. Indeed, it was argued that any driver willing to drive unsupervised was unlikely to obey the conditions of the agreement. In addition, it was suggested that having parents make obligations to ensure an appropriate amount of learning occurs would remove the need for many young drivers to drive unsupervised.

“If you get to the point where you are willing to drive on your own than I don’t think an agreement has much place to stand because you must have already reached a point where you are like ‘I don’t care anymore’” (Female, FG1).

“The agreement could overcome the need for having to drive by yourself if you know that this week you are going to drive this number of hours, then there wouldn’t be a need to drive by yourself” (Male, FG1).

Provisional phase

Numerous possible conditions were identified as important during the Provisional licence phase including:

- Not engaging in illegal behaviours, including: using a mobile phone when driving; speeding; drink or drug driving; tailgating; running red lights; and hooning.
- Conditions related to other safe behaviours, such as: avoiding distractions; not driving when fatigued; and driving to the conditions (e.g., driving slower in the rain).
- Complying with licence restrictions, such as: peer passenger restrictions; and night-time driving restrictions or curfew.
- Having to call or text one’s parents when arriving at a destination, changing travel plans (e.g., locations or times spent somewhere) or leaving for the trip home (and when you arrive home if you live away from your parents).
- Parents agreeing to make themselves readily available to render assistance, at any time and in a supportive and non-judgmental manner, to help young drivers avoid high-risk situations.
- Conditions associated with maintaining the good working order of the vehicle.
- Conditions associated with access to a vehicle, if the young driver does not have a vehicle of their own.

It was suggested that the major road rules should be explicitly outlined as many young drivers are unaware of all of the road rules and it would serve to certify that the young driver has read and agreed to comply with specific behaviours and rules.

“It can’t hurt to spell out in the agreement what all the provisions are. If you asked me what all the road rules are I would have no clue ... so even though it’s the law doesn’t mean we know it, so to have it on the agreement and have your signature on the piece of paper saying ‘I’ve seen it, I know what it is, I agree with it’ can’t hurt” (Male, FG1).

Having certain safety restrictions, or restrictions related to the GDL process, as conditions on an agreement were seen to be particularly important to young drivers as it gave them an ‘out’ when asked to engage in a behaviour that would be in violation of the conditions.

“If somebody wanted a lift with me ... it would be easier to tell your friends ‘no’ if it’s in the back of your mind – ‘I can’t’” (Male, FG1).

“Sometimes they [my friends] are like ‘can you drop me here, can you drop me there’ and I have my parents as an excuse; you know ‘ah sorry, no I’m not allowed” (Female, FG2).

However, a number of participants suggested that conditions should not be more restrictive than what is already set out in law, otherwise they would be unlikely to be accepted and supported by young drivers.

“I’d be happy to have it [the safer driving agreement] as a secondary thing to back-up the laws. I wouldn’t really want it to be more restrictive than that ... like if it said never allowed to take more than one passenger at any time even though the law is only at certain times – that would just be annoying” (Male, FG3).

Similarly, while a number of participants suggested that conditions could outline taking extra care in particular situations, such as in wet weather or when driving at night, it was argued to be important that conditions were not overly restrictive to the point where the young driver was not provided with opportunities to gain necessary experience.

“Maybe when it’s raining, like I know I don’t like going 100[km/h] in the rain, so maybe it you have a set agreement that you won’t go more than 90[km/h] if it’s raining, so that way they [your parents] know you are driving with considerations for your environment” (Female, FG1).

“I don’t think you can take it [placing conditions on driving in particular road and weather conditions] too far ... when I’m 17 years old and I need to drive somewhere and it’s raining I need to get that experience so that when I’m 35 and it’s raining I don’t have to sit in the corner waiting for the clouds to clear or call dad to give me a lift” (Male, FG1).

A number of participants suggested that few conditions would need to be added or removed over the period of a licence phase, arguing that rules and expectations on the young driver typically remain consistent over time. This belief was particularly true of the Learner licence phase, whereas more regular revision of conditions was seen as more appropriate during the Provisional licence phase.

“As long as the rules are constant for a certain period of time I don’t know that you can go and chop and change what’s expected of the driver every week or every month. Fair enough to review their adherence to it and ask ‘how have you performed against this set of criteria’ but I don’t think you can go and changing [conditions] too often. Fair enough as you are graduating through your licence, so maybe at the end of your Learners, at the end of your green P’s, at the end of your red P’s” (Male, FG1).

“The sort of things that I would have included in it aren’t sort of the things that you’d have to review ... and I think having the consistency the entire way through would be good so you don’t have to learn an entire new set of rules every month” (Female, INT4).

However, many participants did suggest that conditions altered to reflect greater responsibility being afforded to the younger driver (such as more relaxed peer passenger

and night-time driving restrictions as young drivers progress through the Provisional phase) would be appropriate. This was largely argued to occur at varying times for different people and as such should be decided on an individual level case-by-case basis.

“Probably the amount of conditions would go down, just because as you learn more, there is less need to say certain things” (Female, INT1).

A number of participants suggested it is more important that there is an open line of communication between the young driver and their parent or other partner, rather than it being a condition that they always let them know where they are. Specifically, this condition was argued to be overbearing and detract from the young person’s feeling of independence and that the condition should be contingent of the context of the trip.

“I don’t know, I think that just sounds a bit clingy of the parents ... the parents are there to help rather than police” (Female, INT2).

“I think it depends on where you are going. If it’s somewhere I haven’t been before then I would definitely want to tell my parents that I got there alright. If I’m just going down to the shops with a friend or to go see a movie than it would kind of be a bit irritating” (Female, INT4).

Having expectations of parents as part of the agreement was also perceived to be important, particularly conditions that increased the level of support offered by parents to the young driver and made the agreement feel like a partnership, rather than a contract where the young driver is making all the obligations.

“Having the parents put in some sense of responsibility for themselves in the contract as well, like if you’re stranded somewhere and you have to get in the car with someone and they have been drinking or if you’ve had a few drinks at a party and the only way home is for you to drive, then you can call your parents up and ‘we’ll pick you up’ or ‘we’ll organise something for you’ because that kind of takes the burden off the driver to have to try and avoid calling their parents and embarrassing themselves – so you have a two way street with the parents saying ‘we understand this could happen and we’ll help you out if it does’” (Male, FG1).

“I think it’s good having some responsibilities for the parents, because then as the young driver you’re going to be more likely to be fine with having some responsibilities yourself ... rather than them just telling you what to do” (Male, FG3).

A number of participants questioned whether all young drivers would want to voluntarily have the kinds of restrictions outlined in the conditions of a safer driving agreement put on them. Indeed, they argued that the agreements may be perceived by young drivers as detracting from their independence.

“I’m not sure how much people around my age would want to have those restrictions placed on them though ... because you’ve got your P’s and you’ve got your freedom, you might not want to have to report everything back to mum and dad” (Female, INT4).

“I would resent the control my parents were trying to exert over me and be more tempted to break the conditions and road rules simply to rebel against the restricting rules ... people don’t like being told what to do, especially if it is an area where they are supposed to be gaining their independence” (Male, FG3).

Overall, participants suggested that agreements would be more likely to be effective when the young driver supports and accepts the conditions included on the agreement, and was involved in the development of the agreement, rather than when conditions are perceived as being forced upon them.

“Young drivers are going to be less motivated to break the rules of the agreement if they help make the rules. If they don’t have any say in the plan then they will resent the plan and be angry and disobey it” (Male, FG3).

3.2.3.5 What rewards and/or consequences do you think could be incorporated into safer driving agreements?

Overall, the majority of young drivers suggested that rewards associated with the safer driving agreements need to be vehicle-related to be meaningful. Helping with vehicle maintenance costs was argued to be the most appropriate type of reward.

“Paying for the fuel, that would be good. Car maintenance – parents helping with that” (Female, INT2).

“I think probably a car-related reward is the only way to give a car-related agreement some sort of purpose” (Female, FG2).

A number of young drivers also suggested that movie tickets or being taken out to dinner could be an appropriate reward for good behaviour. This was argued to be particularly effective in instances where the young driver did not own their own vehicle and did not contribute towards vehicle costs.

While large rewards (e.g., a new car) were desired by young drivers, the majority acknowledged that the financial position of most households would preclude such rewards, and that large rewards may detract from the safety message of the agreements, whereby safe behaviours are a product of wanting a reward, rather than a desire to be safe.

“Money could be a problem ... Not all parents can afford the same things” (Male, FG1).

“When you finish your agreement you’re going to let it [your behaviour] slip because you’re not so much looking for the reward and I don’t think it should be about the rewards” (Female, INT4).

A number of young drivers suggested that rewards should not be incident-based but rather time-based, such that rewards were not given for each occurrence of good behaviour, but rather after particular periods of time. Smaller, but more frequent rewards were seen as being beneficial because they provided the young driver with a goal to regularly strive toward.

"I don't think it should be instance-related, I think it should be time-related. I don't think you can be like 'well I drove well today, give me a reward'" (Female, FG1).

"I think the tank of petrol each month would be much better because you are always leading up to it, and you might screw up one month but then there is always next month" (Male, FG1).

However, a number of young drivers believed that the increased freedom you get by being allowed to drive and the knowledge that you are a safe driver are rewards enough.

"I'm not sure about needing to have rewards in there, because if you're doing the right thing then you're going to be a safe driver ... that should be a reward in itself" (Female, INT4).

Indeed, there was a general sense that safer driving agreements could operate effectively without rewards. One participant highlighted that having consequences but not rewards was akin to situation that for the general population of drivers in relation to obeying road rules. However, it was argued that the certainty and severity of punishments would need to be high enough to deter violations of the agreement conditions.

"I guess you can judge the effectiveness of that, whether it would work without a reward, against how people go with not breaking the road rules. I mean you don't get a reward for not speeding or not going through red lights but you get a punishment every time you do it. And yet people continue to infringe either because they think that their punishment is insignificant or they don't consider the fact that it could eventuate" (Male, FG1).

A number of participants suggested that, without consequences, some young drivers would not be motivated to change bad behaviours, as they would be aware that there were no real repercussions.

"I think it's good for consequences and rewards to be encouraged ... because to monitor it [behaviour] is just not enough, because it doesn't change the behaviour in any way to be told 'that's not good', without any consequences, it'll be like 'yeah, whatever, I'm just gonna keep doing it because I'm not going to get into trouble'. But if they are given a consequence ... like not drive your car for a week they'll realise" (Female, INT2).

The majority of young drivers suggested that the most effective consequence would be removal or limitations to driving privileges. Similar to their perspectives on rewards, younger drivers insisted that consequences should be vehicle-related to be meaningful.

"Maybe they'll [parents] take your keys for day ... or they will drive you, which depending on your particular situation could be very embarrassing ... Consequences, I think if it's for a driving offence would have to relate somewhat to driving" (Female, FG1).

However, a number of difficulties associated with restricting or removing driving privileges were noted, including when the young driver is more independent or in circumstances

where there are limited transportation alternatives for the young driver or where transport is essential for work or study purposes.

“The age bracket [would be a problem] ... you’re almost an adult by the time you get your P’s so your parents are really limited as to what they can do to discourage bad behaviour” (Female, FG2).

“It’d be hard to find something that works, because if you need to get to work or something you obviously can’t restrict the usage on your car because then it’s effecting your ability to earn ... unless there are bus services or something” (Female, INT4).

The removal or restricted use of other items (e.g., mobile phone, gaming console) was argued to be less effective, as if was seen as treating the young driver like a child. In addition, participants argued that the void created by removing or restricting use of other items could typically be filled much easier than loss of the vehicle.

“It seems so juvenile that someone would take away your Playstation for a few days. I’ve got the internet, I have a phone, I have a car ... taking away my Playstation isn’t going to be my primary consideration in my mind. That’s why I think it’s got to be related to driving, especially because it’s presumably something that you do quite often and something that there is little alternative too. If I need to get to my friends house it is very convenient for me to drive. If I have to catch a bus there, I’m going to have to catch three or four buses to get to some obscure location ... whereas if they take away my Playstation, I’m going to go onto the internet; if they take away my mobile, I’m going to use the home phone” (Male, FG1).

One participant suggested that an appropriate consequence may involve tightening restrictions, particularly those related to the condition that was violated.

“Maybe bringing in the curfew a little bit to make it a little more restrictive, or getting them to check in more often ... I think that might work more as a deterrent” (Female, INT4).

Whatever the case, it was argued that rewards and consequences must be clearly outlined during the development of the agreement and that consequences should vary in severity depending on the type of violation.

“You would have to have a previous agreement of what will be taken away for what things, because if it came out of nowhere you might get angry” (Female, FG1).

“I think you could start with warnings, and then go up to like taking away petrol money and car rego and stuff” (Female, FG2).

When probed, many young drivers suggested that removing rewards and consequences from the safer driving agreement, such that the agreement was more focused on encouraging supportive and non-judgemental discussion of behaviour and road safety issues, would have positive effects on the level on honesty displayed in the self-reports of young drivers.

“It just takes away that threat that if I do own up something bad is going to happen or I’m going to have something taken away that I like” (Female, FG1).

“I think it would encourage them to drive safer and to be more honest, and have better communication ... because it would just be more open and they won’t be too scared to hold back and tell their parents anything that has happened out on the road” (Female, INT2).

“I think it could definitely work without the rewards or consequences ... I think you want it to be about the safe driving rather than the rewards you’re getting out of it” (Female, INT4).

3.2.3.6 What difficulties/barriers do you think could be encountered in the Australian context and how could these barriers be overcome?

The majority of young drivers suggested that the greatest barrier to the effectiveness of safer driving agreements would be the necessary reliance on self-reporting from the young driver regarding their behaviour. Many argued that young drivers will have little motivation to report violations of conditions if they knew their behaviour was not being objectively monitored and that failing to report violations could not be otherwise detected. This was argued to be particularly relevant in situations where reporting violations would result in being punished and/or missing out on rewards.

“With child self-reporting there is always the issue where if you know you’ve done something wrong then you don’t really want to tell your parents ... you’ll just want to pretend it didn’t happen” (Female, FG2).

“If they know they are going to get punished for reporting it [violating the conditions] they probably won’t report it – I know I wouldn’t” (Male, INT5).

“If your reward, an \$80 tank of petrol, is contingent upon your not having broken any road rules, and you want that \$80 tank of petrol, you’re not going to tell your parents that you broke any road rules” (Male, FG1).

The difficulties associated with monitoring behaviour were argued to be particularly difficult in instances where the young driver was more independent, such as living away from home or having their own vehicle. In addition, a number of participants highlighted that the busy schedule of many parents may have a negative effect on their ability to engage with the young driver and proactively monitor behaviour.

“Your parents perhaps play a smaller role in your life once you’re not living at home anymore ... there moral authority over you and enforcing a contract with you and your responsibility to them is, I assume, a whole lot less” (Male, FG1).

“A lot of my friends live out of home and for them it is their rules, what they want to do and what time they want to do it and they have very rare contact with their parents ... so I think it’s very hard for the driver and the parent to have that communication” (Female, INT2).

“There’s also the time ... parents are always busy” (Male, FG1).

For these reasons, the importance of the young driver having a good relationship with their parents, built on trust and respect and fostering open and honest communication, was highlighted by the majority of participants.

“You’d want to have a relationship with your parents where you felt like you could talk to them about any issue or problem and they wouldn’t judge or get really mad at you, but if they would then having a child self-reporting just wouldn’t work because they’d be totally terrified of their parents and of the consequences” (Female, FG2).

The majority of participants suggested that the difficulties associated with monitoring a young driver’s behaviour would be exacerbated in relation to agreements involving external partners, such as sporting or social clubs, insurance agencies, licensing authorities or police. Specifically, the limited direct contact the young driver has with the partner was argued to make it easier for violations of conditions to go unchecked.

“You’re not going to call up your insurance company and say ‘I nearly crashed, how are you today?’ ... you can always find a way to make them not figure it out, its way easier to sneak around them because they are just so big” (Male, FG1).

Overall, there were mixed perceptions regarding the use of technological devices as a method of monitoring young driver behaviour. Specifically, the use of invasive technology, such as video cameras and GPS vehicle trackers, were perceived as breaching the trust in the relationship between the parent and young driver, a violation of their privacy and reflected that they were being treated like a child. However, there was some evidence that less invasive technological devices would be accepted.

“I think if you put a monitoring device in the car ... the child would not trust their parents anymore because they would feel like their trust had been violated. So I think that would be the worst approach” (Female, FG2).

“I would hate to think that my parents knew where I was going, that they could track me ... especially if it’s a shared car ... what about all the other people who have to drive this car” (Male, FG1).

“I think it’s very invasive to have a camera in your car watching you 24/7. I guess having a camera in there would probably help them follow the rules but it also removes their sense of privacy ... I just don’t think a camera would be the best option” (Male, INT5).

“I would probably object to the video cameras in the car because I think that is probably a step too far, but as far speed monitoring and things like that I don’t think the majority of people would mind” (Female, INT1).

The difficulties in deciding who is responsible for the costs associated with installing this equipment was also highlighted, as was the inability for all parents or young drivers to be able to afford this equipment.

A number of participants suggested that peers may exert a negative influence on a young driver's willingness to adhere to the conditions of the safer driving agreement through peer pressure.

"They [the young driver] fall into peer pressure sometimes ... we do get the guilt trip and we just do it [violate the conditions of the agreement] because we don't think about it at that time" (Female, INT2).

3.2.3.7 Could safer driving agreements have an impact on the safety of young drivers in offender management programs or when returning from a period of suspension or disqualification?

A number of young drivers argued that for safer driving agreements to be effective with young driving offenders, they would need to have a number of important differences, including stricter conditions, more objective monitoring (e.g., technological devices) and partnership with an authority organisation.

"They [the conditions on the safer driving agreements] would probably be more specialised to where their risk-taking behaviour is, whether it's speeding or drinking and driving, their agreement would be more directed towards that ... it would probably be better if it were with a licensing authority or Police ... just because they have the weighting to back it up – if you do violate this there will be serious consequences" (Female, INT1).

"Maybe something with government or police or something where they are being monitored more carefully ... so that you feel that eyes are on you at all times so that you will drive more carefully ... and if police put it [technological monitoring devices] in your car than you wouldn't have that trust issue that you have with your parents" (Female, FG2).

"There needs to be a reasonable way to monitor it, because if it's just a case of rocking up once a week and tell them [authoritative partner] what you've been doing, then they're probably going to keep doing whatever it is they were doing wrong and just not tell them. But if there is a way of monitoring it ... like having cameras in your car ... where the police would find out, would be really effective" (Female, INT4).

While one participant suggested a more systemic agreement, whereby the young driver is accountable to their parents and their parents are accountable to the courts, another participant suggested that this detracted from the necessary transition to a responsible adult that the young driver must experience.

"[You could impose] a plan where, not only is the child held accountable to the parents, but the parents are held accountable to the courts" (Male, FG1).

"With the parents having the responsibility, I don't know how effective that would be ... the point of getting your P's is having less parental involvement and more individualism, so it should be more serious for me, not for them" (Male, FG1).

3.2.4 Parents of Young Drivers Focus Groups

3.2.4.1 Can safer driving agreements work in Australia?

While a number of parents suggested that safer driving agreements sounded good in theory, few believed the agreements alone would have a significant impact on improving young driver safety.

“The concept is fantastic ... if you can outline the agreement to your children and they understand it, but I don’t know how many parents would follow-up on the agreement” (Female, FG1).

“No, I don’t believe it could, at least not across all levels of society ... There are many families that struggle to control, or choose not to control, the behaviour of the children ... in so much as I agree with the idea [of safer driving agreements] ... it is up to the police and the legal system to enforce strict guidelines that can be used to keep the roads reasonably safe” (Survey).

Moreover, there were a number of parents who suggested the difficulties associated with reliable and accurate self-reporting could not be overcome and would ultimately make safer driving agreements ineffective.

“No [safer driving agreements could not work in Australia]. Majority of people would not stick to it honestly” (Survey).

“I don’t really see them working ... I don’t know how many 16 or 17 year olds would report near misses and half the time I don’t think they even recognise a near miss as a near miss. Anything, in my opinion, that relies on self-reports has a rather large hole in it” (Female, FG1).

3.2.4.2 Which party or parties should be involved in safer driving agreements and why?

The majority of parents suggested that the most appropriate partner would be an individual who is highly involved in the young driver’s life and is personally motivated to ensure their safety. It was argued that in the majority of instances, this would be the young driver’s parents. The importance of a strong relationship between the parent and their young driver was highlighted, including trust, honesty and appropriate communication. Indeed, without a close relationship and effective communication, parents believed the agreements would be destined to fail.

“I think it depends on who has the most involvement. For me personally it would be the parent because obviously I care about my children and I am part of their lives. But there are some parents who aren’t as much a part of their child’s lives so it would possibly have to go to another type of authority” (Female, FG1).

“Certainly with my family and my son’s friends, they are very family-oriented. They might think their parents are a bit old and dodgy and embarrassing some of the time but when something goes wrong or when they seek approval or when they are in trouble, their parents are the ones they turn too” (Female, FG1).

“This would work where parents and teenagers have close relationships and communicate well” (Survey).

However, a number of parents suggested that safer driving agreements could involve numerous additional partners in addition to parents, including licensing authorities, schools and driving instructors. Indeed, it was argued that driving instructors should be involved in parent-young driver agreements to reinforce the conditions outlined in the agreement.

“Parents/supervising drivers, licensing authorities ... better outcomes when all parties have a stake in the agreement” (Survey).

“Schools, driver education” (Survey).

“Maybe the driving instructor is part of the agreement and at the end of the lesson the driving instructor reports back to the parents ... mum and dad you need to be aware of this, help him out with this ... maybe having an impartial third party” (Female, FG1).

The prospect of young drivers entering into agreements with peers was not supported by parents. Specifically, they expressed concerns regarding the potential negative influence some peer groups would have on young drivers and their subsequent adherence to conditions.

“I don’t think you could particularly fall back on the mates [as a partner] because you might get a real good bunch of kids or you might get a real bunch of ratbags ... everyone has different levels of respect for their friends so I don’t think it could particularly work with peers ... all you need is one dominant rat in the bunch to skew it – to skew the value that the others see in the contract” (Female, FG1).

However, one participant suggested that having groups of peers sign a collective agreement with their parents would normalise the approach and reduce the likelihood of negative stigmas associated with being involved in such an agreement.

“I think if you get [school] classes or at a sporting club get the team to sign something with their parents ... harnessing that group mentality ... maybe if they do it as a group with their peers, it might give it some more strength ... but not as a co-signee [partner]” (Female, FG1).

Regardless of who the agreement is made with, a number of key characteristics of the relationship between the young driver and the partner were highlighted, including respect and a sense of authority over the young driver.

“I would say respect ... there has to be some sort of authoritative relationship – they’re not authoritarian, but they need to have an authoritative relationship” (Female, FG1).

3.2.4.3 When would safer driving agreements have the greatest impact on the safety of young drivers?

The majority of parents argued that safer driving agreements should be implemented in the pre-licence phase and carried through the various licence phases. Specifically, it was argued that early implementation of the agreements would highlight the responsibilities associated with starting to drive, encourage communication about road safety and make the approach more normalised by the time the young driver actually starts learning to drive.

“I think if it’s brought in at all stages. If it’s brought in in the build-up to them getting their L’s then they realise that this is serious and that you’ll have responsibilities and then when they get their L’s they’ll know that there is this agreement that they have to adhere too ... but I think the earlier the better because it becomes a natural part of what happens in life and of getting their licence” (Female, FG1).

“I think you have to bring it in at the pre-licensing phase, you talk about it and normalise it so it’s not a weird bunch of rules that mum and dad have imposed the day they get their licence” (Female, FG1).

“Good to introduce in the learner stage. Will be part of the routine by the time young drivers are on their provisional licence” (Survey).

Indeed, it was suggested that agreements implemented at later phases when the young driver has obtained their licence are unlikely to be well received given that the young driver will perceive themselves as having earned their right to drive.

“The greatest opportunity is when the young driver is still dependent on mum and dad for use of a car, or financially dependent, so good behaviour can ‘earn’ benefits” (Survey).

“Once young drivers earn their licences they feel entitled and no longer need supervision” (Survey).

3.2.4.4 What specific conditions do you think could be outlined in safer driving agreements?

A number of differences in the conditions to be included on agreements during different licence phases were highlighted, with revision of the conditions when transitioning between licence phases supported by the majority of parents.

“It could be reviewed at the Learner stage and then when they get their P’s, reviewed again” (Female, FG1).

Pre-licence and Learner phases

Parents were adamant that safer driving agreements implemented in the pre-licence and Learner phases should heavily involve parents making a number of obligations to their child, in addition to the child understanding their responsibilities.

“The parents establish themselves as viable role models during that period – this is what we’ll be expecting of you and this is jolly-well what you can expect from me while I’m teaching you and showing you the ropes. Maybe that will make it feel more like a partnership than another boring set of rules that mum and dad are chucking at them” (Female, FG1).

It was suggested that, compared to young drivers in the Provisional licence phase, fewer conditions would be placed on Learners due to the high level of supervision they receive during this phase.

“You’d probably have fewer [conditions] on the Learner driver because, by definition, they are likely to have mum and dad in the car there with them or a driving instructor” (Female, FG1).

Parents highlighted the importance of ensuring that the learning process involved allowing their young drivers to gain experience driving on different road surfaces (e.g., unsealed roads) and in varying weather conditions (e.g., wet weather). As such, it was suggested that this could be outlined in a condition of the agreement, along with adhering to current licensing processes (e.g., logbooks).

“Obviously they need to get experience [driving in different conditions] ... I don’t think you can limit it, they have to learn when they’re a Learner ... maybe part of the agreement perhaps is I will make sure you get experience driving in wet conditions ... we will go for drive’s in the country once a month and I will let you experience what it’s like to drive on gravel” (Female, FG1).

“When they are a Learner, you take them out in all the conditions and perhaps even they must complete a set number of hours on winding roads and in the rain ... there’s a set amount you must complete at night” (Female, FG1).

“Maybe every so many hours, say 20 hours, they need to have a lesson with a driving instructor” (Female, FG1).

Provisional phase

Parents believed it was important to treat the young driver like an adult. However, it was acknowledged that imposing rules, restrictions and conditions as part of the agreement ran counter to that premise.

“They don’t listen to you if you don’t [treat the young driver like an adult]. But then the argument is going to be ‘well why are you putting all these rules in place” (Female, FG1).

Indeed, the majority of parents argued that, given the greater independence during the Provisional phase and the greater exposure to novel experiences and situations, young drivers in this phase of the licensing process would require more conditions as part of their agreement.

“I’d be looking to ramp up the conditions ... they have more freedom, they have more power when they become a solo driver – they have more responsibility” (Female, FG1).

Specifically, parents outlined numerous possible conditions that would be important during the Provisional licence phase including:

- Not engaging in illegal behaviours, including: using a mobile phone when driving; speeding; drink or drug driving; tailgating; running red lights; and hooning.
- Conditions related to other safe behaviours, such as: avoiding distractions; not driving when fatigued; and driving to the conditions (e.g., driving slower in the rain, obeying advisory speed limits).
- Complying with licence restrictions, such as: peer passenger restrictions; and night-time driving restrictions or curfew.
- Having to call or text one’s parents when arriving at a destination, changing travel plans (e.g., locations or times spent somewhere) or leaving for the trip home (and when arriving home if the young driver live away from their parents).
- Parents agreeing to make themselves readily available to render assistance, at any time and in a supportive and non-judgmental manner, to help young drivers avoid high-risk situations.
- Conditions associated with maintaining the good working order of the vehicle.
- Conditions associated with access to a vehicle, if the young driver does not have a vehicle of their own.

The condition for young drivers to inform their parents of their whereabouts and estimated arrival and departure times was strongly supported by parents.

“My son is responsible for texting or calling me every two hours when driving long distances ... and I don’t think that is unreasonable for him to have to do that” (Female, FG1).

Similarly, the condition that parents would make themselves readily available to assist the young driver at any time and in a supportive and non-judgmental manner, in order to prevent the young driver from having to make decisions about engaging in high-risk activities, was also strongly supported by parents. Indeed, it was suggested that being contacted by the young driver when they find themselves in a high-risk situation should be rewarded, as this represented safe decision-making skills.

“I think that’s kind of unspoken ... we may not be happy campers at three o’clock in the morning, but you won’t be punished for this [asking for assistance] ... reward them for making a good decision” (Female, FG1).

Indeed, the majority of parents highlighted that it would be important for them to have responsibilities as part of the agreement.

Parents suggested that the decision to review the agreement should be made on an individual basis, such as when one or both parties feel the conditions need to be reviewed

or when a breach occurs. However, these parents also appeared to believe in the absence of breaches, the agreements should still be regularly revised.

“It shouldn’t just be a yearly thing, it should be more regular. And discuss it, because like anything, the more you talk about it, the more you’re going to learn about it and the more you’re going to understand it ” (Female, FG1).

“When those who are involved in the agreements believe there should be changes” (Survey).

“When breached. After a period of success (e.g., each month)” (Survey).

It was argued that revisions may include the relaxing of certain conditions and restrictions on the agreement, and would be dependent on the young driver demonstrating increased experience to justify such a change in conditions.

“Maybe it’s about saying ‘now you can have two mates in the car’ or something like that ... I think it’s just something that evolves” (Female, FG1).

3.2.4.5 What rewards and/or consequences do you think could be incorporated into safer driving agreements?

Overall, parents were adamant that rewards and consequences are a critical factor in reinforcing good behaviour and punishing violations of the conditions of an agreement. Indeed, parents believed that young drivers would not learn unless there were consequences for violating conditions.

“Do children learn from having no consequences? No they don’t” (Female, FG1).

“Must be consequences, otherwise the agreement is worthless” (Survey).

Parents appeared to favour smaller rewards that are administered subtly and without a fuss, compared to larger rewards, with this objection appearing to be less motivated by financial issues and more by the fact that having a licence and being a safe driver should be reward enough.

“Even if money wasn’t an object I wouldn’t go overboard because for me, the reward for safe driving is one, the privilege of having a licence and two, not being dead ... even if money was no object, there is no way my kid would be getting a car out of it ... I want my son to drive safely because that’s how you drive a car as part of having your licence” (Female, FG1).

Parents also highlighted the fact that drivers in the real world are not rewarded for good behaviour and as such young drivers should be prepared for this fact.

“That’s not how it works in the real world when you’re an adult on an open licence, the state government and penalties enforcement agency doesn’t send you a cheque every month because you’ve been a good driver and because you haven’t done anything naughty” (Female, FG1).

Parents suggested a number of rewards they perceived to be appropriate for good behaviour and adhering to the conditions of an agreement, including lending the young driver the family vehicle and assisting with vehicle costs (e.g., petrol).

“Instead of talking his clapped out, old, hideous car which needed petrol ... he got to take my nice, clean, silver two-seater to uni ... and didn’t need to pay for fuel” (Female, FG1).

In contrast to the beliefs of young drivers, parents suggested that rewards should be administered irregularly and based on specific instances, rather than being strictly time-based. While parents acknowledged that young drivers may be more motivated to adhere to the conditions if a time-based rewards system was part of the agreement, they highlighted the potential negative consequences of such an approach, including a reduced likelihood of honest reporting of driving behaviour.

“You’d probably go for an irregular [reward schedule] rather than a ‘well done this month, well done that month’” (Female, FG1).

“It’s acknowledging it [good behaviour] when it happens” (Female, FG1).

“If the kids could see that after one month of good driving you get this and after two months you get that they probably be more motivated, but then they would tend to lie. They’d go ‘yeah I’ve done great this month’ when they might have had a heap of near misses and so they might be more motivated to lie if there was a material reward” (Female, FG1).

Parents suggested that they would be willing to reward open and honest communication from young drivers, such as reporting that they has a near miss and wanted to discuss how they could improve their safety.

“I’d be inclined to reward in some way, shape or form, a near miss if I was told about it – ‘I was way too close to that guy, I almost ran up his backside, I’ve learnt something from it’ – I would take that as a win, rather than a fail on his part because he has learnt something and he has had the nous to learn something from it” (Female, FG1).

The consequence that received the most support involved removing or restricting the young driver’s access to a vehicle or driving privileges. In addition, it was argued that consequences would need to be based on the type of violation, such that more severe consequences are associated with more severe breaches of the agreement.

“Kids are spur-of-the-moment. It’s got to be a pretty big consequence – kids don’t think they’re going to die, they don’t think they’re going to kill someone, that’s not immediate to them. But the prospect of being a bus kid ... is a pretty real and embarrassing prospect – not being able to take someone out on a date because you’ve got to pick them up on a bus” (Female, FG1).

“Suspension of driving for a period ... depending on the situation, different consequences could be incorporated” (Survey).

The presence of rewards was noted as a factor that could potentially reduce the likelihood that young drivers would report their behaviour in an honest manner.

“I don’t think they are going to outright lie, but I don’t think they are going to put their hand up” (Female, FG1).

3.2.4.6 What barriers do you think could be encountered in the Australian context and how could these barriers be overcome?

Accurate and reliable monitoring of young driver behaviour was perceived to be the greatest barrier to the effectiveness of safer driving agreements. Specifically, parents perceived that self-reporting and self-regulation on the part of the young driver was likely to be the most common form of behaviour monitoring and there was a large degree of scepticism regarding the degree to which their children, even if typically honest, would reliably report bad behaviour to them, particularly if there was little opportunity for the parent to find out any other way.

“I think getting them to genuinely self-regulate and self-monitor their behaviour is the goal ... I don’t know how, without throwing a bat-cave amount of technology in a vehicle, how else you’re going to realistically achieve that” (Female, FG1).

“The average 17 or 18 year old isn’t really keen to go running to mum and dad and report that they’ve done something stupid or that they’ve really screwed up. I know with my son – he’s not a liar – if he backed into a pole he’d tell me because there is visual evidence but there is not a chance in hell he’d tell me if he ran a red light by accident” (Female, FG1).

For that reason, parents highlighted the need for the relationship between the parent and the young driver to be based on respect, trust and honesty, and where parents genuinely care about the safety of their children, to encourage young drivers to report their behaviour as openly as possible.

“I think there has got to be that fundamental bond, trust, respect ... if you’ve got kids who’ve got no respect for their parents, or parents who don’t know where they are or don’t care, what’s the point to the agreement” (Female, FG1).

Overall, parents did not perceive the use of technological devices in the vehicle as being a viable option for the monitoring of their young driver’s behaviour, given the issue of costs associated with such devices and the fact that it detracts from the trusting relationship the parents are trying to establish with their child.

“I don’t think that installing equipment is viable. Not everyone could afford it and there is that whole spying issue” (Female, FG1).

A number of parents highlighted that if the young driver’s peers were not also participating in safer driving agreements, the effectiveness of the agreement may be limited such that the young driver may be pressured by negative stigmas, or feel that the agreements are overly controlling. As such, collective agreements were supported by a number of parents.

“Unless their peers are subjected to a similar agreement, some teenagers will resent being monitored or sanctioned via a voluntary agreement” (Survey).

“I think there might be some power in having a group of peers, at the same time, signing an agreement with their parents so that they don’t feel as if they are the weirdo who’s got this weird contract with mum” (Female, FG1).

However, a number of parents questioned whether young drivers and their parents would be motivated to engage and participate in safer driving agreements on a voluntary basis.

“It will depend on the young person to follow the agreement or not and how serious the young person thinks about the agreement. Education is very important” (Survey).

“Lack of respect for law and order by both parents and young drivers in some sectors of the community [could be a problem]” (Survey).

3.2.4.7 Could safer driving agreements have an impact on the safety of young drivers in offender management programs or when returning from a period of suspension or disqualification?

Overall, parents had mixed perceptions regarding the potential effectiveness of using safer driving agreements with young driving offenders. While some suggested it would be a good idea, given that they need to be retaught how to be good drivers, others were sceptical about how effective they might prove to be.

“It could motivate offenders not to re-offend” (Survey).

“I think that’s a brilliant idea, because obviously they’re there because of their poor driving skills in the first place ... it’s almost like they have to be taught over again how to be a safe driver” (Female, FG1).

“I think any young driver who has been involved in a significant incident, I don’t see a whole lot of value in instigating a safer driving agreement after the event because from what I’ve seen ... they’re ratbags and they don’t really care” (Female, FG1).

Parents did not perceive themselves as the best partners for such agreements, given that problematic youth are not likely to have a good relationship with their parents.

“You’ve got to understand that there are some parents out there who would probably turn their back on their kids just for doing the wrong thing” (Female, FG1).

In addition, it was argued that the use of technological devices to monitor behaviour would be more acceptable in regards to safer driving agreements used with young driving offenders, with costs to be covered by the offender.

“I think driver’s who have lost their licence, they need to show that they are responsible and they need to prove themselves, so there has to be monitoring ... it’d have to be part of a program ... whether that’s GPS monitoring or something like that” (Female, FG1).

However one parent argued that the use of safer driving agreements might not be effective with many offenders, as they may naturally be more cautious and law-abiding upon returning to driving if the penalties and sanctions they experienced served an adequate deterrent function. In addition, this parent argued that existing regulations allow for the offender's behaviour to be monitored already.

"I believe that after coming back from suspension the driver may be more careful and cautious. Their behaviour could be closely monitored for months following suspension" (Survey).

3.2.5 Discussion of Consultation Findings

Overall, safer driving agreements were perceived to be an innovative approach in theory, however there was general scepticism regarding how effective they may be in practice. Indeed, stakeholders highlighted the limited empirical evidence that safer driving agreements have an impact on tangible road safety outcomes, such as traffic crashes and offence rates. Stakeholder support for the wide-scale introduction of such an initiative was reported as being contingent upon a successful trial and evaluation, with both stakeholders and community members viewing the initiative as serving, at best, a supporting and complementary function to existing rules and regulations, which were argued to be the most effective approach to novice driver safety. This is consistent with anecdotal evidence from the *Checkpoints* program, which has suggested stronger adoption and compliance in states with existing and established GDL models, compared to those with weak GDL models.

3.2.5.1 Agreement partners – parents and peers

There was general consensus among the different stakeholder and community groups that young driver agreements were likely to work best with parents as the key partner. It was commonly perceived that parents would be the only ones able to monitor the behaviour of the young driver. Agreements with peers received limited support. Specifically, peers were perceived as offering little to the partnership in terms of sharing or teaching appropriate behaviours due to their limited driving experience. In addition, the potential for negative influences through peer pressure that runs counter to the goals of the agreement were also highlighted.

These perceptions are particularly interesting given peer groups are the ones who actively share their driving experiences as both drivers and passengers. This is telling, particularly when considering the potential of agreements to help stage exposure to peer passenger risks – one of the most effective elements of GDL and a key element of the agreements in the study of the *Checkpoints* program that was able to demonstrate reduced crash risk (Simons-Morton et al., 2006c). It would seem more likely for an individual family's commitment to a staged peer passenger exposure agreement to be more effective if the other peers with whom the young person would typically drive with were also involved in such a commitment, particularly in jurisdictions where there are no GDL passenger restrictions.

Many young drivers questioned the degree to which young people would be motivated to voluntarily enter into agreements, given that they reflected a restriction of their freedom

and independence and move away from authority figures. They suggested the potential effectiveness of safer driving agreements would be limited to those who were already safety conscious and who were dependent on and had strong relationships with their parents built on trust, honesty and respect, rather than problematic young drivers. Similarly, a number of comments made by parents reflected views of the problem being limited to the stereotyped reckless young driver (“real bunch of ratbags”), rather than the “real good bunch of kids.”

These perceptions of youth and adults are consistent with important developmental changes that occur during the mid-adolescent years. However, there is clear neurobiological evidence as to why driving is so complex and risky during the adolescent years and therefore why driving may not be the activity to allow such freedom and independence (see Johnson & Jones, 2011). These biologically-driven changes apply to all young drivers, including the “good kids,” and therefore, as reported above, strong parental involvement and monitoring at this time is an important factor in reducing youth risk taking, including risky driving (DeVore & Ginsburg, 2005). Nonetheless, as also reflected in responses, positive parent-youth relationships and particularly an authoritative parenting style are likely to be critical to the success of safer driving agreement schemes (Ginsburg et al., 2009; Hartos et al., 2000). Indeed, direct involvement and established positive relationships create a fundamental platform from which to develop a mutually satisfying agreement, and facilitate the monitoring of behaviour and implementation of rewards and consequences.

Further, concerns were expressed that agreements might be less effective in the Australian context due to the older age of young drivers relative to the United States and, therefore, the likelihood that many will be living out of home and beyond the reach of parental monitoring. However, research conducted in the United States, in the context of young people moving to college, has clearly demonstrated that parent involvement and monitoring can continue to have an impact on risk taking when the young driver no longer lives at home (Turrisi et al., 2010). This research has shown impacts in many domains, including academic, social, emotional, and financial functioning, as well as health information and unsafe use of alcohol. This includes drinking and driving and therefore there is some evidence to speculate that such influence could also extend to other unsafe driving behaviours.

3.2.5.2 Agreement partners – authority organisations

Safer driver agreements with authority organisations, such as licensing/transport authorities or the police, received mixed support. Young drivers were particularly opposed to such partnerships given the relative lack of connectedness with such organisations. That is, the emotional connectedness young drivers have with their parents was argued to be an important aspect of why they are the most appropriate partner for such agreements.

While both young drivers and parents did not identify a strong role for road administrations or insurance companies, this seemed largely based on a perceived inability for them to monitor breaches of the agreement. Indeed, there are many safety behaviours which are difficult to enforce, such as driving fatigued or distracted, and arguably many instances of unsafe driving behaviour go undetected. There might also be conditions on an agreement that extend beyond current regulations, such as more stringent night-time driving or passenger restrictions, that authority organisations would be relatively limited in their

ability to monitor and enforce. However, other relevant legislated and enforced behaviours (e.g., speeding, mobile phone use, drink driving) appear in traffic offence and crash records that are routinely collected by the road authorities and are typically required to be reported to insurance companies. In fact, a number of stakeholders suggested that safer driving agreements might be more effective when made in partnership with an authority organisation. There was more support across both stakeholder and community groups for agreements entered into by young drivers returning from, or in lieu of, licence suspension or disqualification; albeit agreements used in such circumstances were questioned with regard to what additional benefit they would have over the current system of rules, regulation and enforcement.

Contrary to perceived difficulties monitoring risk behaviours, however, technological advances in interlock systems (e.g., seatbelts, alcohol) and in-vehicle monitoring systems (e.g., seatbelt, passengers, time of day, locations, speed, reckless driving) are now available and are emerging as common requirements for young drivers returning to driving after a period of licence suspension or disqualification following an offence. Therefore, a 'higher level' type of agreement, compared to that which would operate with parents, could be conceived whereby the young driver enters into a "good behaviour" agreement with a authority organisation or insurance company. Such agreements could introduce in-vehicle technology requirements once an offence is detected. Nonetheless, it is worth highlighting that there was limited, if any, indication that insurance premium discounts or other financial rewards would act as meaningful incentives for young drivers or parents to enter into such agreements. Further the relevant stakeholders were also reluctant to suggest such an incentive would be offered unless there was clear evidence of an actual benefit; which could not be identified in the existing research literature.

Safer driving agreements between young drivers and their employers/workplaces was an exception to the mixed response reported in relation to authority organisations and received considerable support. Such an agreement could be additional to those implemented with parents (e.g., employer/workplace included as a third party on the agreement) and may become increasingly influential as the young driver becomes more independent, such as moving away from home or purchasing their own vehicle. Agreements enacted in such circumstances could also have potential to instigate a cultural shift in attitudes among occupational drivers. As suggested by the expert panel, when groups of young drivers collectively enter into agreements with their parents, this can have a number of potential benefits including increased participation rates, reduced stigma associated with participation and shifts in perceived social norms regarding the attitudes and behaviours of young novice drivers.

3.2.5.3 Timing of Agreements

While there were mixed perceptions of the optimal time to initiate safer driving agreements, there was a universal belief that they must cover the early years of independent driving (i.e., when young drivers receive their Provisional licence). Indeed, the peak in crash risk during this period was highlighted, as was the degree to which young drivers experience a variety of challenging decisions and situations during this period. While some believed agreements should first be implemented as drivers transition into the Provisional licence phase, others suggested that such an approach may be met with

opposition, such that young drivers might perceive the agreement as overbearing given they have essentially 'earned' their right to drive.

Indeed, there was a strong perception among many of the stakeholders, parents and young drivers that safer driving agreements should be implemented prior to the Provisional phase, such as in the pre-licence or Learner phase. It was argued that, while crash risk is typically lowest during the Learner period due to the constant supervision and limited driving exposure of the young driver, there may be benefits in normalising the process by encouraging young persons to think about road safety issues and make more positive decisions regarding their safety from an earlier stage in the licensing process.

Interestingly, integrating safer driving agreements into existing licensing processes was suggested by young drivers (in addition to the expert panel) but received minimal discussion among Australian stakeholders or parents.

3.2.5.4 Conditions, Rewards, Consequences

Perhaps not surprisingly, conditions associated with illegal and unsafe driving behaviours were argued to be the most appropriate focus of safer driving agreements, as well as conditions associated with complying with licence restrictions. This reflected the overall focus of increasing young driver safety as the fundamental aim of the initiative. Such conditions highlighted the relative difficulties associated with monitoring behaviour, particularly when the agreement is held with a partner other than the young driver's parent or similarly trusted adult.

Interestingly, a number of young drivers highlighted that having restrictions related to the GDL process as conditions on their agreement would give them an 'out' when asked to engage in a behaviour that would be in violation of the conditions. Such reports suggest that young drivers are genuinely motivated to adhere to rules and regulations, however are not particularly confident they can resist the influence of their peers without a perceived valid excuse. However, young drivers were strongly opposed to conditions on the agreement being more stringent than existing regulations, suggesting they believed they had 'earned' the right to drive under certain conditions and perceived further conditions as a restriction of their independence and freedom.

A number of additional conditions were also highlighted. These included requirements for young drivers to keep their parents informed regarding their whereabouts and movements when driving. In addition, a number of parental responsibilities were suggested, including being readily available to render assistance (in a supportive and non-judgmental manner), treating the young driver as an adult, modelling appropriate driving behaviours, and providing access to a safe vehicle. These conditions highlight the importance of parental involvement in safer driving agreements.

It was suggested that conditions should be tailored to the individuals involved in the agreement, flexible and amenable to change as the young driver becomes more experienced or demonstrates appropriate behaviour, and not be overly restrictive to encourage voluntary engagement on behalf of the young driver. Involving the young driver in the development of the agreement was perceived as an important step to achieving this

goal and was argued to serve a number of ancillary benefits, including making the agreement feel like a partnership and making the young driver feel like an adult.

Those stakeholders who argued that safer driving agreements may be beneficial during the Learner licence phase suggested that conditions should outline the appropriate processes in which teaching would occur. This included the acquisition of skills through adequate driving instruction, respectful behaviour between the supervising driver and young driver during the learning process, and the appropriate modelling of safe and legal driving behaviour by the parent or supervising driver. These suggestions once again highlight the importance of parental involvement in such agreements and the potential involvement of driving instructors as a third-party partner.

Overall, there were mixed perceptions regarding the requirement of rewards and consequences as part of safer driving agreements, as well as what rewards and consequences would be appropriate should they be an element of the initiative. With regard to rewards, the majority suggested that they were not important and that the privilege of driving and staying safe should be reward enough. In addition, not having rewards was argued to more accurately reflect the circumstances experienced by Open licence drivers. Moreover, given the difficulties associated with monitoring behaviour and the typical reliance on self-reports, many highlighted the potential of rewarding drivers who had not behaved appropriately. However, there was some support for subtle rewards in the form of relaxation of particular conditions as the young driver demonstrates appropriate behaviour, which would fit well with the framework above.

On the other hand, consequences were perceived to be crucial to the effectiveness of safer driving agreements. Specifically, it was suggested that in the absence of consequences, agreements would lack 'teeth' and there would be limited motivation for young drivers to adhere to the conditions. The most commonly suggest consequence was the removal or restriction of driving privileges. Indeed, there was a strong argument that consequences must be vehicle- or driving-related to be meaningful, must be commensurate to the violation, and must be outlined during the development of the agreement. However, the difficulties associated with this approach were noted, including when young drivers have their own vehicle or where access to alternative forms of transport are limited.

Interestingly, a number of parents reported that they would be willing to reward open and honest communication from young drivers, such as reporting that they has a near miss and wanted to discuss how they could improve their safety.

3.2.5.5 Barriers, Solutions

Overall, the greatest perceived barrier to the effectiveness of safer driving agreements was the degree to which the behaviour of young novice drivers could be reliably and accurately monitored and for breaches of conditions to be readily enforced. In particular, the ability to monitor and enforce behaviour was argued to be increasingly difficult when the young driver is more independent. As stated previously, during these periods of the young driver's life, there may be increasing scope to include employers and workplaces in the agreement, potentially as a third-party. However, this approach would be limited only to those young persons who drive extensively as part of their employment.

The majority of stakeholders, parents and young drivers acknowledged that self-reporting on the part of the young driver would be the most common approach to behaviour monitoring. All consultations revealed high levels of scepticism regarding the likelihood for such self-reports to be honest, particularly in agreements involving rewards and/or consequences. For some, these difficulties were reported to be virtually insurmountable and suggest that such an initiative would be largely ineffective.

The use of in-vehicle technological devices for parents to monitor young novice driver behaviour was not strongly supported. Specifically, this approach was perceived as destructive to the underlying trust in the parent-young driver relationship and a violation of privacy. In addition, issues were raised regarding the costs associated with the approach. Interestingly however, young drivers were typically opposed to the use of invasive technology, such as video cameras and GPS vehicle trackers, while less invasive technological devices, such as speed monitoring equipment (which are not also used for vehicle tracking purposes) were perceived as being more acceptable. Such reports suggest that young drivers are not opposed to devices in which they can determine a direct link to safety, however are strongly opposed to those that are perceived as restricting their freedom of movement and independence.

A number of stakeholders suggested there may be difficulties associated with engaging young drivers in voluntary safer driving agreements during a period in which they are likely to perceive themselves as having earned the right to drive. Indeed, from the results presented it appears that young drivers are opposed to initiatives that restrict their independence and freedom. In addition, it was suggested there may be difficulties associated with engaging parents, such that they may not be aware of the risks associated with young drivers and are often time-poor. The power imbalance for young drivers in their ability to sanction parents in the agreement should their parents fail to meet their responsibilities on the agreement was a particular concern. As noted previously, young driver involvement and acceptance of the conditions and processes of the agreement appear to be imperative to their voluntary engagement in such an initiative. Perceptions of unfairness in the management of the agreement could be destructive to the continued participation in the initiative.

Overall, there was a belief that safer driving agreements could be effectively applied as an additional intervention for young driving offenders returning from a period of licence suspension or disqualification, or in lieu of suspension for less serious traffic offences. A number of differences in the operation of the agreements in such instances were noted however, including involving a regulated body (e.g., licence/transport authority, police) as the partner and using in-vehicle technological devices to monitor behaviour. This latter element is of particular relevance, given that many suggested that without such an approach to monitoring behaviour the agreement would have little additional benefits compared to existing systems. The difficulties associated with funding and management of safer driving agreements used with this population would need to be considered.

3.2.5.6 Limitations

It should be noted that the consultations undertaken as part of this study provides a snapshot of perceptions only. While considerable effort was made to maximise participation

in each of the consultation stages within the limited timeframe available, there was wide variation. While the majority of representatives of stakeholder organisations responded, a general level of difficulty was experienced recruiting both young drivers and their parents. These difficulties experienced are interesting and perhaps provide an insight into the likely rate of interest in the topic and therefore the likely uptake of such an initiative. For example, the parent-young learner driver information session involved approximately 90 individuals. From this group, who could reliably be assumed to be safety-minded individuals, given their attendance at the voluntary information session, only eight individuals (less than 10%) were recruited for participation in the research. It is unknown whether response rates might differ if recruitment occurred nearer the transition to the Provisional licence period or among an offender group, following the expert panel's suggestion of a salient "teachable moment". Nonetheless, qualitative research does not aim to be representative and quantifiable, but rather aims to reach a saturation of differing views. This was generally considered to be achieved for the stakeholder and community consultations, including among the young drivers, although it is not certain this was achieved among parents of young drivers.

Further, self-reports are considered to be subject to social desirability bias. However, given the general nature of the consultations, rather than questioning personal behaviour, this was considered unlikely in the present context. Rapport was built in the one-on-one interviews and anonymity assured for written replies resulting in a mix of positive and negative views being expressed. Nonetheless, participants can hide their genuine personal beliefs and self-reports are not always consistent with actual behaviour (Grbick, 1999), and these limitations cannot be discounted.

Moreover, there was limited time to introduce participants to the concept of safer driving agreements and what they might involve. The provision of specific details may prime responses only regarding those details and therefore, only a brief description was included. A lack of understanding by some participants is evident in their responses, particularly the young driver responses, which could be interpreted as including concern that a one-size-fits-all agreement would be imposed upon them and would apply indefinitely without variation, rather than a flexible agreement individually negotiated between the partners with the intention that requirements and restrictions should change over time. Nonetheless, it is encouraging that many of the themes identified in the literature review were repeated in the consultation responses beyond those explicitly prompted, suggesting that those who participated held consistent views with other larger research studies and many of the comments of stakeholder representatives suggested some exposure to the research or related issues, increasing confidence in their responses.

4. GENERAL DISCUSSION, CONCLUSIONS & RECOMMENDATIONS

While a multitude of driving agreements were identified as being utilised around the world, the majority focus on parents and young drivers, with limited examples for other community or stakeholder groups. Only one initiative had been extensively investigated, with findings regarding the *Checkpoints* program showing increases in parent and young driver knowledge of risks and, more restrictions and stricter limits being applied. However, findings have shown there was relatively poor uptake of the initiative and parent-young driver discordance on the content of the agreements. Only a modest reduction in traffic offences and crashes was found in one study, with a stronger effect noted when agreements included more stringent night-time driving and passenger restrictions.

More safety-orientated families and those with positive parent-youth relationships, including an authoritative parenting style and healthy parental involvement and monitoring, were considered most likely to benefit. Nonetheless, research involving parental monitoring via in-vehicle technology has shown that even arguably the most motivated parents tend to allocate insufficient time to this activity. The literature could not offer indications of the potential efficacy of other potential applications, or potential increased efficacy with inclusion of financial or other rewards.

To address a comparative lack of evaluations of Australian applications in the available literature, the current program of research involved extensive stakeholder and community consultation, including an expert panel of United States researchers and program developers, extensive consultations with Australian police, transport and motoring stakeholders, as well as focus groups, interviews and surveys of young drivers and the parents of young drivers. While there was good response from Australian stakeholders and the expert panel, a general level of difficulty was experienced recruiting both young drivers and their parents. This alone provided an insight into the likely interest of families and perhaps likely rate of uptake for such an initiative should an optional program be developed.

The most widespread support across all groups consulted was for safer driving agreements between young drivers and their parents; based on flexible agreements, negotiated by both parties, with built-in consequences for both. There was support for increasing awareness among parents and young drivers on risks and road rules. While there seems to be potential for the application of agreements with peer groups, authority organisations and insurance companies, these were not widely supported in the community. However, such views appeared to be based on misperceptions of how these might be applied. Indeed, stakeholder organisations were more supportive of agreements with authority organisations and insurance companies.

At this time there is little evidence to suggest that safer driving agreements would be more effective in the Australian context if they were associated with financial incentives, such as reduced insurance premiums. Monitoring of compliance with safer driving agreements by road administrations or insurance companies in such circumstances was considered problematic. Further evaluation is required before specific recommendations can be made to incorporate an agreement within Australian insurance, licensing or rehabilitation programs. However, the results suggest that such research is warranted. In this instance,

incorporating in-car technology such as seatbelt and alcohol interlocks, speed-limiting devices or in-vehicle monitoring systems, particularly for offenders, might be an essential component, although further exploration of the feasibility of such practices is required. Efforts to increase uptake, and to encourage regular monitoring and enforcement of driving conditions within families and peer groups, also requires further investigation.

Despite the availability of agreements, technologies and previous evaluated agreements with which to base an Australian initiative, there are also significant resource issues to consider. Many transport and licensing authorities and police organisations are under-resourced and placing the management and administration of a safer driving agreement initiative upon them would be a difficult task, particularly if the initiative was integrated into existing licensing processes and was mandatory for all drivers and furthermore failed to have sufficient impact to offset costs.

4.1 Conclusions

The following conclusions can be drawn from the present research:

- A strong evidence base for what might comprise ‘best-practice’ safer driving agreements for optimal impact in reducing young driver road trauma is lacking. There is currently only a modest indication of a role for safer driving agreements in reducing risky driving and subsequent traffic offences and crashes;
- There is some support among stakeholder groups to introduce safer driving agreements with authority organisations but less clear support for these among young drivers and parents;
- The strongest support in the community was for voluntary, flexible agreements between young drivers and parents;
- No group could envisage a peer group agreement, although workplace agreements were considered viable;
- There is a clear lack of understanding among community groups in particular, as well as some stakeholder groups, of the flexible, mutually-negotiated and agreed nature of agreements, including their inherent rewards and consequences;
- While the optimal target of agreements is to impact the early Provisional period, and therefore agreements during this time receive the strongest levels of support, it might be necessary to work through and establish agreements earlier (e.g., pre-licence, Learner phase) for maximum impact at this time;
- Focusing conditions on known novice driver risks, and ensuring rewards and consequences are related to driving, received the greatest support;
- There was not a strong indication that financial incentives would encourage greater rates of participation in safer driving agreements; and
- The ability to monitor conditions was considered the greatest barrier. While technological advances were perceived as an approach that could help overcome this barrier, in-vehicle technology (particularly invasive devices) received only limited support.

4.2 Recommendations

Based on the above conclusions, the following recommendations are offered.

- Any safer driving agreement initiative would require a strong education component to ensure improved understanding of the nature, aims and objectives of the agreement;
- Safer driving agreements between young drivers and their parents, their workplace, or with an appropriate authority following a non-serious traffic offence are more likely to attract sufficient participants to trial than those with an authority organisation from the outset of licensing;
- While research is limited, there is sufficient research to suggest a trial is warranted. Parent agreements should include volunteer samples only. Workplaces could also trial agreements with volunteer participants. Traffic offender groups could be randomised into a control trial;
- Initiatives should include clear instructions and examples of conditions, rewards and consequences relating to young novice risks and driving;
- Options to include in-vehicle technology should be explored; and
- In addition to an outcome evaluation, a process evaluation, including observations of agreement negotiations, is also recommended to understand how best to implement the initiative.

Any evaluation should, at minimum:

- Seek to determine the cost-effectiveness of the approach;
- Examine participation rates and characteristics of participating and non-participating individuals;
- Involve a scientifically rigorous design (i.e., random-controlled trial); and
- Assess the impact of the initiative on tangible road safety outcomes, including crash and offence rates.

During the development of safer driving agreements in general, as well as any agreement developed for trial in the Australian context, the following elements will need to be carefully considered:

- Will the agreement be made mandatory and integrated into current licensing processes or voluntary? What impact will this decision have on the flexibility of the agreement and the ability to involve the young driver in the development of the agreement and the conditions within it?
- When will the agreement be initially implemented: pre-licence phase, Learner licence phase or Provisional licence phase? If implemented early, what is the impact on the young driver, if any?
- Will rewards and/or consequences (external to families) be included in the agreement? What impact does their inclusion have on behaviour monitoring and parent and young driver engagement in the agreement? How will the power imbalance between young drivers and their parents be addressed?
- How will accurate and reliable self-reporting of behaviour by the young driver be encouraged and monitored?

- The most widely accepted partner for the agreement is the young driver’s parent, or a similarly trustworthy adult role model in the young driver’s life;
- The development of the safer driver agreement should consider family dynamics, including information regarding parenting styles and key factors of parent-young driver relationships;
- Where feasible, the role of employers/workplaces as a third-party in the agreement could be explored;
- Where feasible, safer driving agreement initiatives should seek to engage young drivers in a collective environment, such as schools, sporting/social clubs – however the agreement should still include their parent/trusted adult role model;
- Regardless of when the agreement is initially implemented, it should cover the Provisional licence phase (due to the increased crash risk at this time), particularly the initial period of independent driving;
- The conditions on the agreement should:
 - Be flexible, tailored to the individuals involved, and amenable to change;
 - Be developed with the involvement of the young driver; and
 - Include conditions associated with:
 - Illegal and unsafe driving behaviours
 - Complying with licence restrictions
 - Appropriate teaching processes/skill acquisition (if agreement enacted during the Learner phase)
 - How conditions will be monitored
 - Rewards and consequences, if any
 - Additional young driver responsibilities
 - Parental responsibilities; and
 - Role of in-vehicle technologies.

Finally, it is suggested that the use of safer driving agreements with young driving offenders returning from a period of licence suspension or disqualification, or in lieu of suspension for less serious traffic offences should be investigated following a successful trial and evaluation of safer driving agreements with the general young driver population, in this case particularly including a role for in-vehicle monitoring technology.

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Web Addresses for Safer Driving Agreement Examples

Checkpoints (United States): <http://www.saferdrivingforteens.org/>

Roads2Survival (Australia): www.roads2survival.com.au

Going Solo (Australia): www.monash.edu.au/miri/going-solo.html

Appendix A: Questionnaire used for Australian stakeholder consultations and consultations with young drivers and parents of young drivers.

The questionnaire below represents the electronic questionnaire sent to Australian stakeholders during the stakeholder phase (with some minor formatting edits for ease of reading herein). The questions and prompts formed the foundation of the interview schedule used in the focus group discussions and interviews with young drivers and the parents of young drivers.

Request for Participation Safer Driving Agreements in Australia

Project background:

This project has been commissioned by the National Road Safety Council (NRSC) and is a collaborative project involving the Centre for Accident Research and Road Safety – Queensland (CARRS-Q) and Transport and Road Safety (TARS) Research in New South Wales.

The aim of the research is to examine the nature and effectiveness of existing safer driving agreement schemes in Australia, as well as the potential for new evidence-based schemes.

Briefly, safer driving agreements are pacts made between a young novice driver and another party (e.g. parents, friends, social groups, licensing authorities, insurers, etc) specifying obligations and responsibilities for driving safely and often including rewards and consequences for behaviours. Examples include where, when, with whom, and in what circumstances, a young driver can drive; as well as the consequences for the younger driver if they are involved in a crash or commit a traffic offence. In addition, the agreement may stipulate the responsibilities of the parent or supervising driver, including a commitment to supervise driving.

While safer driving agreements have been most widely used in the United States, a number of schemes also operate within Australia.

Your involvement:

The current phase of the research involves stakeholder consultation. We are seeking your feedback in relation to a range of questions outlined in this document.

By completing and submitting this survey, you consent to your de-identified responses being used in the preparation the project report.

You are able to formally withdraw your participation at any time without reason. All information provided by you or your organisation is strictly confidential and anonymous.

Project contact details:

If you have any questions about the project, completing this document, or want to speak directly to a member of the research team please contact:

Bridie Scott-Parker: b.scott-parker@qut.edu.au or (07) 3138 7727.

David Soole: d.soole@qut.edu.au or (07) 3138 4686.

Instructions for completing the survey:

- All questions relate to safer driving agreements in the **Australian context**.
- For a number of questions, background information or examples relating to the question have been provided.
- Opinion-based responses are acceptable if you/your organisation do not have direct experience with safer driving agreements.
- If you quote research in your response, please provide a reference to this research (including a link if possible).
- If you are unable to provide a response to a particular question, simply leave the space blank and move onto the next question.
- If you need clarification for any item contained in the survey, please contact the research team via the contact details listed above.

Name of your organisation:

Please do not provide the names of specific individual who completed the survey. This information is to keep track of those organisations who have and have not completed the survey. Your organisations responses will be de-identified when the report is prepared.

Question 1. Thinking about the Australian context, which party or parties should be involved in safer driving agreements? Why?

Examples: young drivers and parents/supervising drivers; young drivers and licensing authorities; young drivers and peers; young drivers and social/sporting groups; young drivers and insurers; young drivers and another party (e.g. industry partners).

Question 2. Thinking about the Australian context, do you think safer driving agreements would have the greatest impact on the safety of young drivers in the pre-licence period, Learner licence phase, Provisional licence phase or a combination of these periods? Why/why not?

Background: Existing safer driving agreements have been implemented at varying times, including prior to a young person becoming licensed, during the Learner licence phase and during the Provisional licence phase.

Question 3. What specific conditions do you think could be outlined in safer driving agreements in the Australian context? Why?

Background: Some safer driving agreements clearly state the obligations and responsibilities that the young driver must adhere to in order to maintain their driving privileges.

Question 4. Thinking about the Australian context, what consequences do you think could be incorporated into a safer driving agreement for violating the conditions outlined in Question 3? Why?

Background: Some safer driving agreements clearly state what the consequences will be if conditions of the agreement are violated, as well as under what circumstances or period of time the consequences will be revised.

Question 5. What rewards or incentives do you think could be included in safer driving agreements in the Australian context? Why?

Background: Some safer driving agreements clearly state incentives or rewards for safe driving behaviour.

Question 6. What difficulties/barriers do you think could be encountered if safer driving agreements were introduced in the Australian context?

Examples: introducing a driving agreement when the young driver no longer lives in the family home; barriers to involved parties adopting an agreement; barriers to administering consequences; difficulties monitoring behaviour.

Question 7. What can be done to overcome the difficulties/barriers outlined in Question 6?

Examples: educating parents and young drivers about the benefits of these agreements; encouraging parents/supervising drivers to be actively involved in the road safety of their young driver; using in-vehicle technologies to monitor young driver behaviour.

Question 8. Thinking about the Australian context, do you think safer driving agreements could have an impact on the safety of young drivers in offender management programs or when returning from a period of suspension or disqualification? Why/why not?

Examples: State whether you believe safer driving agreements can be effective among the young offender population, what specific considerations would be necessary regarding the introduction of such agreements, and how potential barriers could be overcome.

Appendix B: Questionnaire used in expert panel consultation.

Under what circumstances do you think Safer Driving Agreements have been most effective in the US context?

- Can you comment on take-up rates?
- Any evaluation results (particularly changes in on-road driving behaviours, crash-involvement and offence-detection?)

What about in the United Kingdom?

- Familiar with approach?
- Aware of any evaluations?

How do you think a Safer Driving Agreement would work in the Australian context?

- Possible Australian-specific difficulties as a consequence of the older age of Australian novice drivers (minimum 16.5 years Northern Territory, 17 years all other states and territories except for Victoria minimum of 18 years)?
- Conditions for driving privileges (e.g., 'maintain GPA' unlikely to translate)?
- Consequences for unsafe driving behaviour (e.g., confiscating mobile likely to be very effective for young females in particular)?
- Rewards/incentives for safe driving behaviour (e.g., increased driving privileges within confines of existing graduated driver licensing restrictions)?
- Who could be potential industry partners based on your experience (e.g., licensing authorities, insurers?)

What difficulties do you see in implementing Safer Driving Agreements in the Australian context?

- What implementation difficulties were experienced in the American context? (e.g., engaging with and then educating parents and their novice children regarding the benefits and effective operation of the Agreements; encouraging uptake)?
- How were these implementation difficulties overcome?
- If they couldn't be overcome in the American context,
 - What efforts were made to overcome these difficulties that ultimately proved unsuccessful or were minimally successful?
 - How might the implementation difficulties be overcome in the Australian context?
 - How can we encourage parents to continue to be active in the road safety of their young novice driver?
- What barriers might prevent parents and novices from adopting an Agreement?
- What can be done to overcome this/these barrier(s)?

Can you comment on facilitating the introduction of Safer Driving Agreements in the Australian context, based on your experiences?

- Education campaigns likely to be effective?
- Provision of resources/ maintenance of website/ reminders via an APP?
- The role of 'road safety allies' (e.g., RACQ/RACV/NRMA etc)?

- Potential benefits for families implementing Safer Driving Agreements (e.g., reduced insurance premiums)

Can Safer Driving Agreements be improved and/or augmented based on the existing literature, improving the road safety for young novice drivers in Australia?

- Encourage regular parent 'ride-a-longs' during intermediate period?
- Ask siblings to do on risky driving?
- Encourage sharing of family vehicle and delayed independent vehicle use and ownership?
- Objective in-car recording to verify compliance with conditions?

What about evaluating the effectiveness of Safer Driving Agreements after their implementation in Australia?

- American experiences in difficulties recruiting?
- American experiences in difficulties retaining?
- Informed consent/Privacy issues in Australia?

In what other contexts could Safer Driving Agreements involving novice drivers be effective?

- With licensing authorities?
- During the Learner period?
- As part of offender management programs?

What are the key ingredients of a Safer Driver Agreements?

- Conditions?
- Restrictions?
- Consequences/ sanctions?
- Rewards/ increased privileges?

What are the key operational concerns for Safer Driver Agreements?

- Take-up?
- Maintenance over time/ monitoring?
- Operationalisation of rewards?
- Enforcement of sanctions?