NATIONAL DEBATE ON YOUNG DRIVERS IN SCOTLAND

Jane Robinson
Atkins
Carolyn Mitchell
Atkins
Steven Fraser
Atkins
Professor Stephen Stradling
Edinburgh Napier University

1. INTRODUCTION

Commissioned by the Scottish Government in November 2010 the national debate on young driver issues undertaken across Scotland involved young people (defined for this purpose as those aged between 17 and 25), their parents and carers, representatives from the road safety community, the motor insurance industry and other members of the public. It was undertaken to meet a commitment in Scotland's Road Safety Framework ¹ to:

"Conduct a public debate on young driver issues including graduated licences and additional training."

The debate builds on qualitative research commissioned by the Scottish Government² which found that young people (aged 16 to 25 years) were open to gaining more driving experience after passing their Driving Standards Agency (DSA) test through participation in Pass Plus or similar, but viewed restrictions on young drivers as discriminatory. However, in response to the consultation document published by the Scottish Government to inform the Road Safety Framework, restrictions for newly qualified drivers were mentioned as a key intervention in some responses³.

The aims and objectives for undertaking the debate were to:

- Identify potential solutions for improving young driver safety, and identify case study examples from Scotland and elsewhere
- Explore issues relating to young drivers, which may determine the effectiveness of potential solutions
- Determine the level of support for potential solutions from young people, parents and guardians, and the road safety community, and identify reasons for various levels of interest, and
- Assess proposals against appropriate criteria and to provide recommendations.

This paper reports on the findings of a report prepared by Atkins and Professor Stephen Stradling, National Debate on Young Drivers' Safety (March 2011)⁴. It provides a summary of the key facts and figures relating to young driver casualties; describes the various approaches taken to conduct

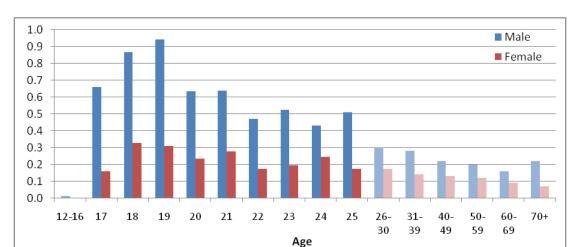
the national debate; summarises the type of interventions considered; and presents recommendations for reducing young driver casualties in Scotland.

2. KEY FACTS AND FIGURES

On average, 34 young drivers (aged 17 to 25 years) were killed, 233 were seriously injured, and 1690 were slightly injured each year in Scotland between 2005 and 2009⁵. This equates to 34% of all fatal, 30% of serious, and 29% of all slight injuries involving car drivers over this time period. The estimated cost to the Scottish economy is £160 million per annum⁶.

Young males in Scotland are more than twice as likely to be killed or seriously injured driving a car than their female counterparts. Young males and young females are most at risk aged 18 to 19 years. Males aged 18 and 19 years are more than three times as likely to be killed or seriously injured driving a car than those aged 26+, and more than four times as likely as those aged 31+7.

Figure 1 – Number per thousand population killed or seriously injured while driving a car in Scotland (2005 to 2009 average)



Source: Analytical Services, Transport Scotland 2010

Crashes on Scottish roads involving drivers aged 17 to 25 years often include young passengers - around 45% of who are aged 15 and 59% who are aged 16 years⁸.

Approximately one in five young novice drivers in Scotland are involved in a crash in their first six months of independent driving⁹. Learner drivers tend to be involved in less severe collisions (involving slight injuries or vehicle damage only) than drivers who have recently received their full licence.

The number and proportion of young drivers involved in fatal and serious collisions in Scotland has reduced over the last decade. A comparison of 2005-2009 data with that for 1994-1998 shows a 48% reduction in the number of young drivers killed and seriously injured. In addition, the proportion of all fatal and serious collisions involving young drivers declined from 28.2% to 26.1% over this period¹⁰.

The Department for Transport (DfT) has identified five key factors associated with collisions involving younger and older drivers: speeding; drink driving; lack of seat belt wearing; drug driving; and careless driving. The Driving Standards Agency (DSA) has furthermore identified the following factors, associated with the high collision rate amongst newly-qualified drivers:

- Over-confidence
- A lack of the right knowledge, understanding and attitude that make experience drivers safer, and
- Incomplete training and a practical test that focuses too heavily on vehicle control.

Other influences include: awareness of risks or perception of risk, the amount of driving experience in different conditions, peer pressure, and the driving behaviour of parents/carers and other experienced drivers who provide an example.

Research published by the Association of British Insurers covering Great Britain found that that 17 to 20 year olds associate driving with personal status, are more inclined than older drivers to drive for pleasure or thrills, and are more likely to choose not to drive safely. Young male drivers are more likely than others to indulge in competitive driving with others on the road, and this is much more likely to be a contributory factor in collisions.

Qualitative research for the Scottish Government¹¹ concluded that younger drivers rarely consider themselves to be at risk and mostly consider themselves to be good drivers. Passengers reported high levels of trust in their friends as drivers. They were also unsure about the legal limit for drink driving and were more likely to travel with a drink driver if they had also been drinking.

Findings from a six year study funded by the DfT¹² found that **age** was an important factor in influencing 'survival times' (in months or miles) to first accident, with older drivers 'surviving' accident-free longer than younger ones post test. Any interventions that delay the onset of solo driving are therefore likely to have a positive outcome. Driving behaviour during the first six months has also been found to be important, with 'better' driving behaviours being associated with longer survival times suggesting that post-test training and testing should be undertaken as soon as possible after passing the test.

3. CONDUCTING THE NATIONAL DEBATE

Overall approach

The national debate was undertaken using a range of engagement approaches including a brainstorming session, semi- structured interviews with representatives from the road safety community, focus groups with young people (aged 17 to 25 years) and parents and carers, and an online survey.

The variety of approaches helped to capture a wide range of views from across the stakeholder groups, and also to explore these in depth with young people (drivers and non- drivers), parents and carers, road safety organisations, transport organisations, the business community, as well as other members of the public.

Internal brainstorm

An internal brainstorm exercise with Atkins 'Road Safety Working Group' (consultants specialising in road safety) and relevant colleagues of the study team was undertaken to identify potential solutions for improving young driver safety, explore strengths and weaknesses of the potential solutions and discuss potential questions to be addressed in the debate.

General stakeholder engagement

A briefing note was sent out to 40 key stakeholders inviting written responses to key research questions identified through the literature review and the brainstorm. Stakeholders included road safety organisations, emergency services and transport organisations.

Responses were received from eight organisations; however, other organisations opted to contribute to the debate through other methods such as the online survey.

Semi- structured interviews with road safety representatives

Semi-structured interviews were undertaken with representatives from Transport Scotland, Road Safety Scotland, Royal Society for the Prevention of Accidents (RoSPA), Institute for Road Safety Professionals (IRSO), Association of Chief Police Officers in Scotland (ACPOS), the Fire and Rescue Service, the Institute of Advanced Motorists (IAM), and the Association of British Insurers (ABI).

A framework of themes was developed for the interviews, but the structure was flexible, allowing new questions to be asked during the interview in response to what the interviewee had to say. Interviews were undertaken face-to-face or by telephone where practical. This method provided in-depth information.

Focus groups

The primary means for in-depth engagement with young people was through a number of focus groups. In total thirteen focus groups (each consisting of between five and eight participants) were undertaken in December 2010 with:

- Pupils aged 17 years from a secondary school in Anstruther, Fife (one male and one female group)
- Apprentices/trainees attending Borders Technical College (two male and one female group)

- Students from the University of Aberdeen (one male and one female group)
- Workers aged 17 to 25 years, from a number of companies who drive for work in Strathclyde (one male and one mixed group)
- Young people not in employment, education or training (NEET) in Edinburgh (one mixed group)
- Call centre workers in Edinburgh (one mixed group with 21 to 25 year olds), and
- Low income workers in the Highlands (one mixed group with 17 to 20 year olds and one mixed group with 21 to 25 year olds).

A separate focus group was also undertaken with eight parents and carers in Strathclyde.

The composition of the groups reflected casualty rates amongst young people with a bias towards male drivers, and with a specific focus on van drivers who drive for work.

The different locations and target groups ensured that participants included a range of driver types in terms of age and experience. Where possible, separate focus groups for male and female participants were undertaken as experience has demonstrated that young people, in particular females, engage in discussion more freely in single sex groups.

A total of 92 people participated in the focus groups.

Online survey

At the same time a questionnaire survey was advertised online. The survey could be accessed by members of the public and the wider road safety community via a dedicated Facebook page or via links on various websites including universities, colleges, hospitals and websites associated with youth organisations, such as the Youth Parliament and Young Farmers Association.

The survey method allowed for a wide sample of opinions to be canvassed. Responses were received from 108 young males (17 to 25 years), 152 young females (17 to 25 years) and 352 over 25 year olds.

Dedicated 'Facebook' page

A dedicated Facebook page was set up to reach young adults and teenagers who might not be reached through the more traditional websites.

The page introduced the study, providing headline statistics on young driver accidents, a summary of the debate aims and a link to the online questionnaire. Regular 'posts' were written including questions on the debate; a summary of views and reminders of the consultation deadline.

The page was linked to other road safety organisations as well as youth organisations. Although there were no specific posts on the 'wall' there were around 150 hits to the page.

4. TYPES OF INTERVENTIONS CONSIDERED

Participants in the debate were asked to provide feedback on six generic categories of road safety interventions broadly based around four of the five 'E's which help to deliver Scotland's Road Safety Framework for 2020 (Engineering, Enforcement, Education and Encouragement):

- A- Education and training for younger children and pre-drivers (Education)
- B- Education, training and testing for learner and novice drivers (Education)
- C- Graduated driver licensing and licence restrictions (Enforcement)
- D- Enforcement and restorative justice (Enforcement)
- E- Use of technology (Engineering), and
- F- Encouragement and leadership, including incentives and working with the private sector.

The fifth E - Evaluation - is considered as an underpinning discipline for all interventions.

These categories were used to structure the topic guides for the semistructure interviews and the focus groups, and to structure the questions for the general stakeholder engagement and the online survey.

Intervention A- Education and training for younger children and pre-driver

A range of education and training interventions are offered by Road Safety Scotland, most Scottish Councils, the police, fire and rescue and other road safety partners, aimed at younger school children (aged 10 to 15 years) and pre-drivers (aged 16 to 17 years)¹³. Some are designed as a self-contained single delivery and some are designed to be delivered over a number of weeks. Some are focused solely on road user behaviour and others are part of a more general program. Some are used to convey messages about the scale of the risk to young persons and the consequences of certain behaviour; and some cover practical matters such as buying a car, insurance, in car activities, and practicing the theory part of the driving test.

Other initiatives seek to provide information about risks and consequences to a wider audience through advertisements on television and cinema and use of other media. The approaches used to get road safety messages across to young people have expanded in recent years, with greater use being made of social networking websites, mobile phone downloads, blogging sites, You Tube, and so on.

Intervention Type B - Education, training and testing for learner and novice drivers

The current approach to driver training and testing across the UK requires drivers to pass both a theory and practical test. The **theory test** is made up of a multiple choice part which tests individuals' knowledge of the Highway Code

and driving theory; and a video-based hazard perception part. The **practical test** examines an individual's ability to drive safely in different road and traffic conditions, their ability to demonstrate knowledge of the Highway Code through their driving, their ability to perform specific driving manoeuvres; and, since October 2010, their ability to drive safely while making route decisions independently.

Learners are encouraged to use the **DSA Approved Log Book**, to record their progress during training. However, this is not a mandatory requirement and use of the Log Book is believed to be low. There is no minimal period of training required, and at present limited coverage of public responsibilities (in terms of behaviour and attitudes on the road) within the current driver training and testing approach.

Following the UK Learning to Drive Consultation in 2008, the DSA has developed a Competency Framework to be used as a basis for driver training and assessment, and is implementing a range of improvements to the current testing regime through the **Learning to Drive Programme**.

Intervention Type C - Graduated driver licensing and licence restrictions

Graduated driver licensing (GDL) allows new drivers to build up their driving skills and experience gradually. Different stages of licensing are intended to reflect increased levels of driver competence.

A GDL scheme might involve introducing minimum age requirements for different stages of licensing or requiring drivers to hold a provisional licence for a minimum period, undergo a minimal period of driver training or practice and/or demonstrate a minimal period of safe driving (without any driving offences) before being entitled to apply or take a test for the next tier of licensing.

In addition, various restrictions might be placed on new drivers relating to, for example:

- Maximum driving speed or maximum engine size/power
- Use of vehicles with manual gearboxes
- Carrying passengers (aged 17 to 25 years, or in general)
- Driving at night (without supervision, or in general) and/or
- Blood alcohol levels (e.g. zero tolerance for young and inexperienced drivers).

Some GDL schemes require novice drivers to carry a 'P', 'N' or 'R' Plate to inform others that the driver of the vehicle is newly qualified, for a fixed period.

The UK already has aspects of GDL in that supervision is required; motorway driving is prohibited until a learner driver has passed a practical test; and a probationary period is imposed for the first two years post-test, during which time a new driver will be subject to immediate revocation of their licence

should they reach 6 or more penalty points (as opposed to 12 points for all other drivers).

More extensive GDL is widely used in Australia, Canada, New Zealand and the United States, where young people can generally start to learn to drive from the age of 15 or 16.

Intervention Type D - Enforcement and restorative justice

Scottish police forces carry out routine enforcement activities and targeted enforcement campaigns to raise public awareness of specific issues, such as drink-driving and driving on rural roads.

The Scottish Safety Camera Programme is an initiative that is designed to influence driver behaviour, particularly by the targeted enforcement of speed limits. The Programme is operated by eight Safety Camera Partnerships that cover all of mainland Scotland ¹⁴.

The use of 'restorative justice', in the form of **driver awareness courses**, has become increasingly popular amongst police forces in England in recent years, where the police have the discretion to utilise awareness courses rather than issue a Penalty Charge Notice for certain offences. Most schemes are targeted at offenders of all ages, although interventions could specifically be aimed at young drivers. Driver awareness courses are not available in Scotland at present; however Procurators Fiscal have the option of 'referral to a support service such as social work or psychiatry'. A driver awareness course could be considered to be a support service for drivers who are more likely to be classified as risk takers on the roads.

The DVLA and insurance companies also have an enforcement role in ensuring vehicles/drivers on the road are properly registered, taxed, adequately maintained and insured. A report commissioned by the UK Department for Transport ¹⁵ notes that the likelihood of uninsured drivers being involved in a road traffic accident is almost certainly higher than average, citing the evidence from New Zealand ¹⁶.

Intervention Type E - Use of technology

Technologies designed to help to **regulate driving or encourage better driving** include:

- Event (crash) data recorders which record information relating to vehicle crashes or accidents for analysis after the event
- Continuous data recorders enabling employers and parents/carers to download information on fuel consumption, location and harsh braking/acceleration
- Voluntary or mandatory use of Intelligent Speed Adaptation technology to limit speeds to the prevailing speed limit, and
- 'Alcolock' technology to immobilise a vehicle if the driver's blood alcohol level is above the legal limit.

Use or 'take-up' of these technologies amongst young drivers could be increased:

- Through a court order, requiring use of any of the above technology as part of a sentence following a serious offence such as excessive speeding or drink driving
- As an incentive for reducing the duration of any restrictions as part of a graduated licensing scheme, or
- As an incentive for obtaining real car insurance savings or rebates.

There are also technologies that **make cars safer** including air bags, adaptive cruise control, anti-lock braking systems, headway detectors, and lane-changing alerts that typically target passive, but not active safety.

Intervention Type F - Encouragement and leadership, including incentives and working with the private sector

While the above intervention types are all designed to encourage safe driving behaviour, there are specific ways in which the Scottish Government, the insurance industry, private sector employers, and parents and carers can 'encourage' young drivers to participate in interventions and show 'leadership', by for example, demonstrating best practice. In particular there are a range of **incentives** which can be offered to provide the 'carrot' necessary to support various 'stick' approaches described above.

The Scottish Government can provide leadership on young driver road safety issues by ensuring public funds are spent appropriately and deliver good value for money. This could be done by demonstrating good practice in terms of its own approach to young employees and encouraging good practice in other organisations it works with or takes tenders from.

It can encourage take-up of additional education and training by promoting and subsidising courses, offering offenders the opportunity to undertake additional training or education as an alternative to receiving a fine or penalty points, and offering other financial incentives.

The Scottish Government can also work directly with the insurance industry and private sector employers to encourage (or incentivise) good road safety practices, and can raise awareness about the important role that parents and carers can play in encouraging safe driving amongst young people.

Insurers, employers and parents can also play their own role in encouraging safe driving.

Other encouragement and leadership interventions look beyond the immediate road safety sphere and include messages to reduce driving occurrences and encourage greater public transport use, and to encourage eco-driving. A wider, co-ordinated transport policy can also have road safety benefits by encouraging use of more sustainable (and safer) travel modes.

5. SUMMARY OF FINDINGS

Evidence of effectiveness

It is important to note that there is currently limited evaluation evidence globally regarding the long term effectiveness of many young driver interventions. However, while there is little evidence to prove their effectiveness, there is also limited evidence to suggest that they do not work. While some interventions may not perform 'conversion' work on those currently driving or about to drive with bad attitudes road safety interventions may well perform 'maintenance' work, supporting and maintaining those whose current orientation is to see good driving as necessarily involving safe driving.

Support/Acceptability

In general, there were strong levels of support and acceptability amongst young people, and parents, carers and others, for interventions relating to education and training for younger children and pre-drivers; interventions relating to enforcement and restorative justice; and encouragement and leadership measures (including incentives). There was widespread support for lowering of the drink drive limit for all drivers. Views and opinions were mixed regarding education, training and testing interventions for learner and novice drivers; graduated driver licensing and license restrictions; and use of technology to regulate driving and encourage better driving behaviour.

Parents were invariably more supportive of any intervention than young people, and young females tended to be more supportive of any intervention than young males.

Differences across the three groups (young males; young females; and parents, carers and others) were most marked for interventions relating to:

- Strengthening the learner driver training and testing approach
- Graduated driver licensing and license restrictions, and
- Use of technology to regulate driving and encourage better driving behaviour.

Most focus groups participants felt that the current driving test does not prepare learners sufficiently well for driving conditions in Scotland but young males were slightly more supportive than young females of making the driving test harder. Young males had confidence in their ability to pass a harder test, while females can find the testing process a stressful experience and favour a minimum period of training or practice before taking the practical test.

Young people, particularly young males, were more supportive of those interventions which would not affect their driving opportunities. For example, both sexes opposed restrictions on driving at night and driving with passengers, but were less opposed to a requirement to display green 'P'

plates to inform other drivers that they have only recently passed their test; and were less opposed to a ban on driving high performance vehicles, which were generally seen as unaffordable anyway. Young males had mixed views on mandatory use of speed limiting technology, alcolock technology, and continuous and downloadable data recorders. Many commented that they would find ways round the technology if required to install it in their car - in contrast young females, and parents, carers and others were more likely to view these types of interventions as having a valuable role to play.

In general, young males, particularly those still at school and those who had left school but had not continued into further or higher education, tended not to view themselves as being at risk while driving; instead focusing on the risks facing passengers and other road users. Few seemed to be aware that they were more likely to be involved in a road collision than other drivers.

Young people aged 17 to 20 years, were also less supportive of education and awareness interventions than 21 to 25 year olds; and were also less supportive of financial incentives to encourage safe driving than 21 to 25 year olds.

Overall, graduated driver licensing (GDL) options attracted least support from all groups, although in general, parents, carers and others were far more supportive than young males of all GDL options. Opposition reduces with age (from 17 to 20 years to 21 to 25 years) and most forms of graduated licensing would be supported by the majority of drivers on the road, particularly those over 25 years.

Stakeholders from the road safety community considered the most effective interventions to be strengthening the learner driver training and testing approach, a greater focus on pre-driver education and training as part of a lifelong approach to road safety education, and some form of graduated licensing. They identified the need for more enforcement by police, awareness courses for young driver offenders, and greater involvement from parents.

Implementation risks

Some of the interventions are not within the gift of the Scottish Government as they are covered by reserved powers. However, given the Scottish Government's willingness to advocate for change to reserved powers where there is evidence that these measures would be effective (for example the call to lower the national drink drive limit) these interventions have been included for consideration.

The interventions considered vary in terms of their affordability. Options relating to graduated licensing would require new legislative powers, an extensive publicity campaign, and significant enforcement (at least initially), and are likely to represent the most costly interventions proposed.

Some interventions will also have adverse impacts on young peoples' lifestyles and opportunities. Options for strengthening the learner driver training and testing approach or increase participation in post-test training have the potential to increase the average cost of learning to drive. Graduated licensing options could impose significant constraints on young drivers' lifestyles and opportunities, and would be seen by many as penalising the majority who drive safely. Interventions which require young drivers to use technologies to regulate or encourage better driving would be seen as too much of a 'big brother' approach by some young drivers, while compulsory use of continuous and downloadable data recorders as part of a parent-young driver agreement risk removing the trust that exists between parents and young people.

6. RECOMMENDATIONS

Recommendations for improving young driver safety have been developed drawing on the findings of the debate and a detailed assessment of the options emerging from the debate. Recommendations are categorised as 'action', 'collect evidence/evaluate' and 'advocate'.

Category	Recommendation
Action recommendations (implement now)	Continue to encourage a life-long approach to learning in all schools, as part of the Curriculum for Excellence through the provision of free resources and support, to help ensure that all pupils are taught about road safety issues as pedestrians and cyclists, as car passengers, and as future drivers Introduce a lower drink drive limit in Scotland for all drivers
	Ensure police enforcement continues to be a priority and is undertaken in a strategic and targeted manner, focusing on those young drivers most at risk
	Work with employers to improve the safety of young drivers at work
	Raise awareness amongst parents regarding their role in young driver safety and how they can best perform this role, highlighting resources already available (e.g. Road Safety Scotland's 'So, Your Teenager is Learning to Drive leaflet) and providing advice on parent-young driver agreements

Category	Recommendation
	In consultation with service users, improve public transport availability at night, in conjunction with 'reduce mileage/don't travel' messages, focused on locations where there are high numbers of young driver casualties and limited public transport provision
	Encourage better governance and evaluation of interventions. Ensure that road safety education and awareness interventions are based on scientific theory and evidence of effectiveness, and represent good value for money
	Explore the possibility of using Insurance Premium Tax as a mechanism to raise revenue to fund road safety interventions.
Collect evidence/evaluate recommendations (collect further evaluation evidence before determining the scale and nature of implementation on a wider scale):	Collect further evidence on the benefits of a broad range of education and training interventions, delivered before and while young people learn to drive.
	Collect further evidence through trials and pilots to determine the effectiveness of road safety messages using a range of innovative approaches, including elearning methods, computer gaming environments, and web based applications and downloads
	Evaluate the effectiveness of undertaking post-test training, as part of a holistic life-long approach to learning. Investigate the effectiveness of accreditations for post-test training courses to encourage insurers to offer lower insurance premiums (representing a real discount) for young drivers who have taken effective action to improve their safety. Consider whether financial incentives would be effective in persuading young drivers to take up evaluated post-test training
	Gather evidence to help consider whether and, if so, how graduated licensing could be implemented in Scotland.
	Undertake a trial and evaluation of an optional road safety awareness course for young driver offenders, as an alternative to a Fixed Penalty Notice and penalty points.

Category	Recommendation
	Undertake separate pilot projects for use of speed limiting technology and black box data recorders, and evaluate the interventions
Advocate recommendations (encourage others to take action)	Encourage the Driving Standards Agency to review the case for a minimum period of learning and a requirement to demonstrate experience in different driving conditions via a log book or practical assessments, in no more than five years time
	Feed into the work of the Driving Standards Agency to develop a Continuous Professional Development intervention and encourage or require Approved Driving Instructors to participate in additional training
	Continue to press the UK Government to make not wearing a seat-belt an endorsable offence which could result in penalty points on a driver's licence and a fine for passengers (as in Northern Ireland), in the context of all drivers

Each recommendation that is accepted will need to be captured in an action plan with lead and support agencies and external partners identified.

Notes

- Scottish Government (2009) Go Safe on Scotland's Roads it's Everyone's Responsibility. Scotland's Road Safety Framework to 2020.
- 2. ODS Consulting (2008) Qualitative Research with Young People.
- 3. George Street Research (2008) Scottish Road Safety Strategy: Analysis of Consultation Responses.
- 4. Atkins and Professor Stephen Stradling (2011) National Debate for Young Driver Safety. The full report provides in detail the findings of the national debate on young drivers' issues in Scotland, involving young people, their parents and guardians, and representatives from the road safety community. It also includes relevant case studies from Scotland and elsewhere. Strengths, weaknesses and support for options are presented, based on views and opinions expressed and the report concludes with recommendations for actions to improve young driver safety. The full report can be found at http://www.transportscotland.gov.uk/strategy-and-research/publications-and-consultations/j13564-00.htm
- 5. Data provided directly by Analytical Services, Transport Scotland, December 2010. Detailed breakdown of data published in Reported Road Casualties Scotland 2010.
- 6. Based on accident values for all hours, from WebTAG Unit 3.4.1D, 2008 prices. Costs include casualty related costs (medical, lost output and human) and those for associated damage to vehicles and property, police costs and the administrative cost of insurance. Vehicle damage only collisions are not considered.
- 7. Data provided directly by Analytical Services, Transport Scotland, December 2010.
- 8. Scottish Government (2009) Go Safe on Scotland's Roads it's Everyone's Responsibility. Scotland's Road Safety Framework to 2020.
- 9. Scottish Government (2009) Go Safe on Scotland's Roads it's Everyone's Responsibility. Scotland's Road Safety Framework to 2020.
- 10. Scottish Government (2009) Reported Road Casualties Scotland 2009.
- 11. ODS Consulting (2008) Qualitative Research with Young People.
- 12. Wells et al. (2008) *Cohort II study*. Quoted in: Sexton and Grayson (2010), *When do drivers have their first accident and does it have an impact on their subsequent driving?*
- 13. See http://www.roadsafetyscotland.org.uk/driving/young-drivers/young-

- 14. See <u>www.scottishsafetycameras.com</u>
- 15. Greenaway (2004) Uninsured Driving in the United Kingdom.
- 16. Blows et al (2003) Car Insurance and the Risk of Car Crash Injury.

Bibliography

Association of British Insurers (2006). *Young Drivers: Reducing Death on the Roads.* London: Association of British Insurers.

Blows et al (2003). *Car Insurance and the Risk of Car Crash Injury*, Accident Analysis and Prevention, (35), 987-990.

Beuret and Chorlton (2010). *Offenders and Post-court Disposal Courses*, Road Safety Research Report No. 118. London: Department for Transport.

Chen et al. (2000). *Carrying passengers as a risk factor for crashes fatal to 16 and 17 year old drivers*. Journal of the American Medical Association, 283(12), 1578-1618.

Commission on Scottish Devolution (2009). Serving Scotland Better: Scotland and the United Kingdom in the 21st Century: Final Report - June 2009. Presented to the Presiding Officer of the Scottish Parliament and to the Secretary of State for Scotland, on behalf of Her Majesty's Government.

DfT (2008a). *Road Safety Compliance Consultation.* London: Department for Transport.

DfT (2008b). Strapping Yarns: Why People Do and Do Not Wear Seat Belts, Road Safety Research Report 98. London: Department for Transport.

DfT (2010). *DfT Citizens' Panel Road Safety* Road Safety Web Publication No. 10. London: Department for Transport (last accessed 10/03/2011 http://www.dft.gov.uk/pgr/roadsafety/research/rsrr/theme5/roadsafetywebpublication10/

DGTREN (2010). HERMES EU Coaching Project - *High Impact Approach for Enhancing Road Safety through More Effective Communication Skills*. Brussels: European Commission.

DSA (2009a). *Learning to Drive Report on Consultation*. Nottingham: Driving Standards Agency.

DSA (2009b). *Learning to Drive Report on Consultation - Impact Assessment Document*. Nottingham: Driving Standards Agency.

Durkin and Tolmie (2010). *The Development of Children's and Young People's Attitudes to Driving: A Critical Review of the Literature,* Road Safety Web Publication No. 18. London: Department for Transport. (last accessed 10/03/2011

http://www.dft.gov.uk/pgr/roadsafety/research/rsrr/theme2/researchreport18/pdf/rsarr18.pdf)

George Street Research (2008). *Scottish Road Safety Strategy: Analysis of Consultation Responses*. A report for the Scottish Government. Edinburgh: Scottish Government.

Graham (2004). 'Parental attitudes to road safety education.' Scottish Road Safety Campaign (SRSC) Annual Seminar, Dunblane Hydro, Perthshire, Scotland.

Greenaway (2004). *Uninsured Driving in the United Kingdom.* A report to the Secretary of State for Transport by Professor David Greenaway, University of Nottingham. London: Department for Transport.

Hartling et. al. (2009). *Graduated driver licensing for reducing motor vehicle crashes among young drivers (Review)*. A reprint of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in The Cochrane Library 2009, Issue 1.

IAM Motoring Trust (2008). *Young drivers - when are they most at risk?* London: IAM Motoring Trust

Jones and Palmer (2010). *Graduated Driver Licensing: Briefing Note.* Cardiff: Cardiff University.

Kinnear and Stradling (in press, 2011). *Young, novice drivers and the development of somatic markers for risk on the road.* In D.A.Hennessy (Ed.) Traffic Psychology & Driver Behavior. New York: Nova Science Publishers, Inc.

Deighton and Luther (2007). *Pre-driver Education: A Critical Review of the Literature on Attitude Change and Development.* Road Safety Research Report.London: Department for Transport.

McKenna F (2010a). Education in Road Safety. London: RAC Foundation.

McKenna F (2010b). *The public health benefits of road safety education for teenagers.* Think piece for Road Safety Scotland. Edinburgh: Transport Scotland.

mruk Ltd (2005). *Evaluation of the SRSC Young Driver Campaign*. Edinburgh: Scottish Executive.

North (2010). *Report of the Review of Drink and Drug Driving Law.* A report for the Department for Transport by Sir Peter North CBE QC. London: Department for Transport.

ODS Consulting (2008). *Qualitative Research with Young People.* Road Safety 2008. A report for the Scottish Government. Edinburgh: Scottish Government.

OECD and ECMT (2006). Young Drivers - The Road to Safety. Paris: OECD.

RoSPA (2009). Young Drivers at Work. Birmingham: RoSPA.

Scottish Government (2009a). *Go Safe on Scotland's Roads it's Everyone's Responsibility.* Scotland's Road Safety Framework to 2020. Edinburgh: Scottish Government.

Scottish Government (2009b). *Reported Road Casualties Scotland 2009*. Edinburgh: Scottish Government.

Senserrick and Whelan (2003). Cited in OECD and ECMT (2006).

Simons-Morton BG. (2007). Parent involvement in novice teen driving: Rationale, evidence of effects, and potential for enhancing graduated driver licensing effectiveness. Journal of Safety Research, 38(2):193-202.

Stradling, Meadows and Beatty (2001). *Driving as part of your work may damage your health* .G. Grayson (Ed.) Behavioural Research in Road Safety X. Crowthorne: Transport Research Laboratory.

Vlakved (2004). *New policy proposals for novice drivers in the Netherlands*. Behavioural Research in Road Safety. Fourteenth Seminar pp194-204. London: Department for Transport.

Wells et al. (2008) *Cohort II study*. Quoted in: Sexton and Grayson (2010), *When do drivers have their first accident and does it have an impact on their subsequent driving?* TRL Report PPR426. Crowthorne: TRL.

Work Related Road Safety Task Group and Health and Safety Commission (2001) *Reducing at-work road traffic incidents.* Norwich: Health and Safety Commission.