Chair

Cabinet Economic Growth and Infrastructure Committee

# **SAFER JOURNEYS - CHILD RESTRAINTS**

# **Proposal**

1. I seek Cabinet's agreement to amend the Land Transport (Road User) Rule 2004 and the Land Transport (Offences and Penalties) Regulations 1999 to extend the requirements relating to the use of child restraints by child passengers.

# **Executive Summary**

- 2. As part of the 2011/12 Action Plan for Safer Journeys, the Government's road safety strategy to 2020, the Ministry of Transport was tasked with investigating extending the child restraint requirements for child passengers.
- 3. Evidence from local and international studies indicates that in a crash, primary school-aged passengers are at a significantly greater risk of death or serious injury if they are restrained only by a seatbelt rather than using a booster seat<sup>1</sup>. Child passengers do not properly fit a seatbelt until they reach a standing height of 148 cm or around the age of 11 years. This injury risk can be significantly reduced by restraining child passengers in booster seats.
- I propose to extend the mandatory child restraint requirements to child passengers up to 7 years of age. This would align us with the Australian position. Child passengers aged 7 up to 8 years of age would have to use an appropriate child restraint if one was available (this is the current law and does not represent a change).

# **Background**

- 5. Safer Journeys, the Government's road safety strategy to 2020, aims to reduce the number of deaths and serious injuries on our roads. Under the Safer Journeys Action Plan 2011-2012, the Ministry of Transport was tasked with investigating extending the child restraint requirements by promoting booster seats for children up to a certain age, weight or height.
- Each year, primary school-aged passengers are killed and injured in motor vehicle crashes in New Zealand. The data presented in the table below show the numbers of deaths, serious and minor injuries for child passengers aged 5 to 10 years.

A booster seat is a type of child restraint that is designed for use by children from around the ages of 3 to 4 years up to 10 to 11 years depending on the standing height of the child. It is generally used in conjunction with a seatbelt which holds the child in place in the booster seat.

# Child Passenger Deaths and Injuries (aged 5 to 10 years) 2002 to 2011)\*

| Child Age | Fatal | Serious | Minor | Total |
|-----------|-------|---------|-------|-------|
| Five      | 7     | 31      | 272   | 310   |
| Six       | 9     | 47      | 314   | 370   |
| Seven     | 8     | 37      | 325   | 370   |
| Eight     | 12    | 42      | 378   | 432   |
| Nine      | 7     | 40      | 374   | 421   |
| Ten       | 8     | 41      | 409   | 458   |
| Total     | 51    | 238     | 2072  | 2361  |

<sup>\*</sup>The data in the table above relate to child passengers in cars, vans and sports utility vehicles.

## International comparisons and evidence

- 7. The death rate of New Zealand children aged 0 to 14 in motor vehicle crashes does not compare favourably with other countries in the OECD's International Road and Traffic Accident database. In 2010 there were around 2.0 deaths per 100,000 population for 0 to 14 year olds<sup>2</sup> in motor vehicle crashes. This is higher than almost all other developed countries, including Australia (1.3 deaths per 100,000), and the United Kingdom (0.6 deaths per 100,000)<sup>3</sup>.
- 8. One of the likely causative factors of the high death rate of children in crashes is the inappropriate use of restraints by primary school-aged passengers. These children are at risk of death or serious injury if they are restrained only by a seatbelt rather than using a booster seat.
- 9. There is physiological evidence relating to specific anatomical features of children that make them more vulnerable to injury if they are inappropriately restrained in a crash. These features include: their small size, short limbs, their relatively large and heavy heads, poorly-developed neck muscles, poorly-developed abdominal muscles, and unprotected and relatively large abdominal organs.
- 10. As a result of the child's size relative to the dimensions of the vehicle's seat, the lap portion of the seatbelt rides up over the soft abdominal tissues and the shoulder portion cuts across the child's face and neck.
- 11. Demonstrations, using crash-test dummies of the approximate size and weight of children in the age-range of interest, have been undertaken to show the impacts of the poor fit of the seatbelt in a crash. These crashes cause life-threatening injuries to the child's spine, head and abdomen, and permanent disabilities if the child survives. A child restrained only by a seatbelt can also slide out from under the seatbelt and be ejected from the vehicle. The poor fit of the seatbelt can be easily corrected through the use of a booster seat.

The statistics for the United Kingdom are based on 2009 data.

It is not possible to use narrower age groups for these comparisons as the numbers are too small. The rates would be subject to substantial fluctuation based on a few cases.

- 12. International research evidence reporting the actual injuries suffered by child passengers who were restrained in booster seats compared to those who were restrained only by seatbelts, is very robust. An American study<sup>4</sup> carried out in 2003 examined the rate of injuries suffered by children aged 4 to 7 years who were involved in crashes. The study found that the use of a booster seat lowered the risk of injury by 59 percent compared to the use of a vehicle seatbelt alone. A number of other studies show similar reductions in the risk of death and serious injuries if child passengers are restrained in booster seats.
- 13. As a child does not correctly fit a vehicle seatbelt until they reach a standing height of 148 cm, or around the age of 11 years when their body is stronger, there is evidence that all children who are less than 148 cm in height are significantly safer in booster seats than using seatbelts alone<sup>5</sup>.

Injuries to New Zealand children from non-use of booster seats

- 14. Injuries to child passengers arising from the lack of usage of booster seats are occurring in New Zealand. It is not possible to obtain a full picture as the NZ Police Traffic Crash Reports do not record the type of restraint used.
- 15. Information has been provided by Starship Children's Hospital. This shows similar patterns of injuries associated with inappropriately-restrained child passengers. From 2005 to 2011, Starship's Intensive Care Unit admitted 42 seriously-injured child passengers aged from 4 to 12 years. Many had severe spinal and/or head injuries. Only two were known to have used a booster seat and these were used in the front seat, rather than using a booster in the rear seat as is best practice.
- 16. This information does not provide a complete picture as it does not include child passengers who were treated at other hospitals around the country. Children who died instantly in a crash are also not included.

Usage of booster seats by New Zealand child passengers

- 17. A survey carried out in 2011, indicated that only 23 percent of 5 to 9 year olds were restrained in booster seats, 72 percent were in an adult seat belt and 5 percent were unrestrained.
- 18. In 2006 a more detailed study<sup>6</sup> was carried out into booster seat usage by age of child passengers in New Zealand. This study found that there was a high rate of booster seat usage by 4 year olds (85 percent of the sample), noting that child restraint usage is mandatory for children up to the age of 5 years.
- 19. At the age of 5 years and beyond, however, booster seat usage declined rapidly with increasing age as shown in the table below.

Durbin at el (2003) Study based on 3616 crashes involving children aged 4 to 7 years in the United States from 1998 to 2002, Belt Positioning Booster Seats and Reduction in Risk of Injury Among Children in vehicle Crashes.

Klinich (1994). Study of Older Child Restraint/Booster Seat Fit and NASS Injury Analysis.

Cameron, Segedin, Nuthall and Thompson, (2006) Safe restraint of the child passenger, Journal of Paediatrics and Child Health, 42, 752-757.

| Age of child | Percentage restrained in booster seats |
|--------------|--|
| 4            | 85                                     |
| 5            | 50                                     |
| 6            | 30                                     |
| 7            | 20                                     |
| 8            | 10                                     |
| 9 to 12      | Less than 10                           |

20. In summary, New Zealand performs poorly compared to other OECD countries with regard to child death rates in motor vehicle crashes. This is partly because of New Zealand's low usage of booster seats by child passengers and the resulting injuries in crashes to child passengers when booster seats are not used.

## Policy options

- 21. I have considered several options (both legislative and non-legislative) to address the problem of child deaths and injuries caused by the low use of booster seats in New Zealand.
- 22. The non-legislative option is a public awareness campaign. Since 2009, a public awareness campaign has been carried out by Safekids NZ on Child Motor Vehicle Passenger Safety to promote safer forms of restraint for older child passengers. The campaign was based on the provision of workshops, information, data, and public awareness resources to practitioners who undertake child injury prevention activities. These practitioners work at the community level in a number of workforce sector groups including Plunket, Health, Education, Government Agencies, Territorial Authorities, Maori Providers and Community Services across the country.
- 23. In 2012, Safekids NZ launched a new website that provides parents and caregivers with short, easy to understand information about child safety including passenger safety. The *Kids that Click* DVD was also launched in late 2011.
- 24. This approach has been useful to start the process of correcting parental misperceptions about the safe restraint of older child passengers<sup>7</sup>. The public awareness campaign has not resulted in increased rates of booster seat usage among the target group at a national level. The results of the survey carried out in 2011 were similar to the findings of the 2006 study referred to above<sup>8</sup>.
- 25. In conclusion, the non-legislative option has not and is not expected to significantly increase the usage of booster seats.

Common misperceptions held by parents are that primary school-aged children are too big for booster seats and that the law provides accurate guidance as to best practice for the safe restraint of child passengers.

While the 2011 study used a different survey methodology to that used in 2006, the results show a low usage rate of booster seats.

## Legislative options

- 26. Under New Zealand's current law all child passengers up to the age of 5 years must be restrained in an appropriate child restraint. Child passengers aged from 5 up to 8 years must be in an appropriate child restraint if one is available. In practice this means that if a suitable unoccupied child restraint is present in the vehicle, a child aged 5 up to 8 years must use it.
- 27. New Zealand's child restraint laws fall well short of recommended best practice for the optimal restraint of child passengers<sup>9</sup>. The mandatory child restraint laws applied by other key OECD countries are set out in the table below.

Mandatory requirements used by other OECD countries

| Country        | Height requirement                   | Age requirement*                     |
|----------------|--------------------------------------|--------------------------------------|
| Australia      | No height requirement                | 0-7 years                            |
| Belgium        | No height requirement                | 0-12 years                           |
| Canada         | Alberta: No height requirement       | Alberta: 0-7 years                   |
|                | Quebec: 63 centimetres seated height | Quebec: No age requirement           |
|                | British Columbia: 145 centimetres    | British Columbia: 0-10 years         |
| Germany        | 0-150 centimetres                    | 0-12 years                           |
| Hungary        | 0-150 centimetres                    | 0-12 years                           |
| Japan          | No height requirements               | 0-7 years                            |
| Switzerland    | 0-150 centimetres                    | 0-12 years                           |
| New Zealand    | No height requirement                | 0-5 years                            |
| Spain          | 0-150 centimetres                    | 0-12 years                           |
| United Kingdom | 0-135 centimetres                    | 0-12 years                           |
| United States  | Varies by State                      | Varies by state, generally 0-9 years |

(\*the age requirements are up to the age stated)

- 28. The majority of European countries have followed the European Union (Directive 2003/20/EC), which recommends that members require children less than 150 cm tall and aged less than 12 years to use a booster seat when travelling in motor vehicles.
- 29. Updating New Zealand's child restraint laws received strong support from both the general public and stakeholders in the public consultation undertaken in developing Safer Journeys. Comments received were that New Zealand's law should be brought in line with international best practice to protect the most vulnerable members of society. Submitters stated that changing the law is vital as parents need to be able to rely on the law for guidance the current law is providing the wrong information<sup>10</sup>. Submitters who did not support the proposal argued that the first step should be better enforcement of the existing law and that the decision should be left to parents.

The 148 cm height requirement is the approximate height of a 10 to 11 year old child.

This is in relation to the safe restraint of primary school-aged children.

# Proposal

- 30. I propose to extend the mandatory requirement for the usage of child restraints to all child passengers up to the age of 7 years. This would bring child passengers aged 5 and 6 years within the mandatory criteria for the usage of child restraints. I also propose to retain the current position where a child passenger aged 7 up to 8 years must use a child restraint if one is available.
- 31. I propose that the penalties for failing to restrain child passengers covered by the extended criteria be aligned to the penalties that currently apply for failing to restrain child passengers (i.e. an infringement fee of \$150 or a maximum fine of \$1,000 on summary conviction).
- 32. Assuming an 80 percent compliance rate with booster seat requirements, it is estimated that this option would prevent 2.2 fatalities, 12.8 serious injuries and 131.1 other injuries over the first 10 years with a net safety benefit (benefits over and above costs) of \$2.3 million. The estimated cost benefit ratio is 1.2.
- 33. If there was an 80 percent compliance rate with booster seat requirements, it is estimated that this option would cost parents and caregivers \$13.8 million over 10 years with \$4.25 million in the first year for the purchase of additional seats for children who would be covered by the extended criteria.
- 34. These costs are based on an estimated mid-range cost of \$80 per booster seat. It is possible to purchase online cheaper booster seats (at a cost of \$30 to \$50 per seat)<sup>11</sup> that would comply with the standards New Zealand accepts.
- 35. I acknowledge that there will be an increased cost to parents and caregivers for children that come within the extended age criteria. For this reason I have decided not to propose extending the criteria to children up to a standing height of 148 cm in height or up to 11 years of age, even though this option is more consistent with international best practice. I consider that extending the child age limit up to 7 years is a pragmatic balance between road safety outcomes and the additional burden on parents and caregivers.
- 36. Extending the upper age limit for the mandatory restraint of child passengers up to 7 years of age would align our requirements with those that currently apply in Australian states.

#### Risks

- 37. The main risk is lower booster seat usage because of costs, convenience, awareness, or acceptability to parents and child passengers. This can be managed in the following ways:
  - allowing a longer lead-in time (e.g. 12 months or more) for parents and government to prepare for the change. This could include Ministry of Social Development changing its funding assistance criteria, and other nongovernment assistance for lower-income families.

The less expensive seats tend to be the half-booster seat cushions.

- raising awareness by publicity and promotion which could explain the importance of booster seats and explain the difference between the legal requirement and the optimal safety practice.
- convenience and practical issues<sup>12</sup> can be reduced with time to work out systems, with Police using their discretion and by considering exemptions in some circumstances. Exemptions from requirements to use child restraints in specified circumstances will be raised as an issue for further discussion in public consultation on the Land Transport (Road User) Rule Amendment.
- focusing on increasing child restraint usage among ethnic minorities and migrants who have lower child restraint usage. Publicity that targets these groups and in their language could be considered.
- persuading older children to use booster seats is likely to reduce over time as booster seat usage becomes accepted as normal behaviour.

#### Consultation

- 38. The Minister of Transport has agreed to the submission of the paper.
- 39. The following agencies were consulted on this paper: NZ Transport Agency, NZ Police, Ministry of Social Development, Ministry of Youth Development, Te Puni Kokiri, the Treasury, Accident Compensation Corporation, Ministry of Justice and the Officials' Committee on Economic Growth and Infrastructure.
- 40. The Department of the Prime Minister and Cabinet was informed about this paper.

### **Financial Implications**

- 41. The NZ Transport Agency has provided initial estimates of the expected publicising and public support activities associated with a change to the child restraints law. Assuming a 6 to 12 months lead-in period, these initial estimates range from \$247,000 to \$334,000. Of this, \$160,000 relates to communication activities and \$87,000 to \$174,000 relates to temporary customer service staff requirements.
- 42. The NZ Transport Agency's communication and publicity costs will be funded from revenue from the sale of personalised number plates.
- 43. Police are unlikely to incur additional costs from enforcement of the extended child restraint requirements. Existing enforcement would continue and additional enforcement or targeted operations will be carried out through reprioritisation of Police resource.

This could include children on school trips or drivers transporting groups of children to or from events. In some smaller cars, it may be difficult to fit three booster seats with back and side protection along the back seat.

- 44. The price of a booster seat can be significant for a low income family that has multiple children that fall within the proposed requirements. The Ministry of Social Development provides recoverable financial assistance for approved child restraints under Advanced Payment of Benefits (for beneficiaries) and Recoverable Assistance Payments (for non-beneficiaries)<sup>13</sup>.
- 45. If the proposal to increase the age for the mandatory restraint of child passengers is adopted, Advance Payments of Benefits will extend to children up to 7 years of age, as it is a discretionary payment. The resulting additional cost is estimated to be \$31,445 in 2013/14 (based on a commencement early in 2014), increasing to \$61,750 in 2015/16 and outyears.
- 46. The Welfare Programme for Recoverable Assistance outlines the items that can be paid for under this scheme. It is proposed that the Welfare Programme for Recoverable Assistance is amended to include assistance payments for child restraints for children up to 7 years of age. The Minister for Social Development supports the amendment. The change is estimated to cost an additional \$1,655 in 2013/14 (based on a commencement early in 2014) increasing to \$3,250 in 2015/16 and outyears. Given the very small cost of this change, and the recoverable nature of the assistance, specific funding to meet this cost is not required.
- 47. Cost issues can be partially mitigated by allowing a longer lead-in period (e.g. a minimum of 12 months) to the start of the child restraint law change to allow parents to plan ahead and make the most cost effective choice for the longer term. A longer lead-in period would also enable the market to supply the restraints at reasonable prices. This issue will be discussed further in public consultation on the amendment to the Land Transport (Road User) Rule 2004.
- 48. There may be other opportunities to reduce societal costs for the purchase of booster seats (e.g. sponsorship, bulk purchasing of booster seats). These can be further explored as part of consultation on the Rule amendment or in the lead-in period.
- 49. It is expected that the 'compliance scheme' that the Police currently operate for offences relating to the non-use of mandatory child restraints would also apply to offences relating to children covered by the extended criteria. Under the scheme the Police may withdraw the offence notice if the driver produces evidence they have purchased or obtained a child restraint.

# Human rights, gender and disability implications

50. The proposals in this paper do not raise any implications from a human rights, gender or disability perspective.

### Legislative implications

51. Amendments would be required to relevant clauses in the Land Transport (Road User) Rule 2004 and the Land Transport (Offences and Penalties) Regulations 1999.

In line with the current law, both of these types of payment are for children up to 5 years of age.

- 52. The proposal to increase the age for mandatory restraint of child passengers would require the Minister for Social Development to amend the Welfare Programme for Recoverable Assistance to include payments for approved child restraints for children up to 7 years of age.
- 53. The proposed 2012/13 Land Transport Rules Programme includes a Land Transport (Road User) Amendment Rule. If supported, the child restraint proposal would be included in the Land Transport (Road User) Amendment Rule.

# **Regulatory Impact Analysis**

Regulatory Impact Analysis requirements

54. The regulatory impact analysis requirements apply to these policy proposals. A Regulatory Impact Statement (RIS) has been prepared and is attached to this paper. The Treasury has advised that the proposals in this paper do not trigger the significance criteria.

Quality of impact analysis

55. The Ministry of Transport's Regulatory Impact Statement (RIS) assessment panel considers that the information and analysis summarised in the RIS meets the quality assurance criteria.

Consistency with government statement on regulation

I have considered the analysis and advice of transport officials, as summarised in the attached RIS, and I am satisfied that the regulatory proposals as summarised in this paper are required in the public interest and will deliver a net benefit and are consistent with our commitments in the government statement 'Better Regulation, Less Regulation'.

## **Publicity**

- 57. As this proposal will have high public and media interest, I plan to issue a media statement following Cabinet approval to advice of the decisions and the process and timelines to be followed for the amendments to the Land Transport (Road User) Rule 2004.
- 58. I propose that this Cabinet paper be published on the Ministry of Transport website, following consideration by Cabinet.

#### Recommendations

- 59. It is recommended that the Committee:
  - 1. **agree** to improve the safety of child passengers by extending the criteria for mandatory use of appropriate child restraints to child passengers up to 7 years of age; and by requiring child passengers aged 7 up to 8 years old to be restrained in an appropriate child restraint if one is available

- 2. **agree** that the penalties for failing to restrain child passengers covered by the extended criteria be aligned to the penalties that currently apply for failing to restrain child passengers (i.e. an infringement fee of \$150 or a maximum fine of \$1,000 on summary conviction)
- agree that the issue of exemptions from requirements for child passengers to use child restraints in specified circumstances be raised as an issue for further discussion in public consultation on the Land Transport (Road User) Rule Amendment.
- 4. **agree** that the Welfare Programme for Recoverable Assistance be amended to include payments for approved child restraints for children aged 5 and 6 years
- 5. **invite** the Minister for Social Development to amend the Welfare Programme for Recoverable Assistance to include payments for approved child restraints for children aged 5 and 6 years
- 6. **invite** the Associate Minister of Transport to instruct the Parliamentary Counsel Office to draft amendments to the Land Transport (Road User) Rule 2004 and the Land Transport (Offences and Penalties) Regulations to give effect to recommendations 1, 2, and 3 (if supported by consultation), including any necessary consequential savings and transitional provisions
- 7. **authorise** the Associate Minister of Transport to determine any matters of minor policy detail that may arise in the course of preparing the draft legislation
- 8. **note** the intention of the Associate Minister of Transport to implement the proposals in this paper by amending the Land Transport (Road User) Rule 2004 without further reference to Cabinet unless contentious issues arise in the course of the development of the Rule or new policy decisions are required
- 9. **agree** that this Cabinet paper be published on the Ministry of Transport website following consideration by Cabinet.

Hon Simon Bridges

**Associate Minister of Transport** 

Dated: 27 September 2012