Guidelines for road safety around schools
Table of contents

2. Acknowledgements 7

PART A: Background, roles and responsibilities
3. Aim of the road safety around schools guidelines 8
   3.1. Who will use these guidelines? 8
   3.2. What are the aims of these guidelines? 8
   3.3. Who will use these guidelines? 8

4. How to use these guidelines 11

5. Background information 12
   5.1. Children as vulnerable road users 12
   5.2. Passenger safety 13
   5.3. Pedestrian safety 16
   5.4. Safety on wheels 20
   5.5. Safety around roads 22
   5.6. Road laws 23

6. Legal responsibilities 25

7. Roles and responsibilities of organisations 27
   7.1. Road Safety Executive Group 27
   7.2. Local governments 27
   7.3. Local Government Association of the Northern Territory 28
   7.4. Education (DET) 28
   7.5. NT Police 28
   7.6. Department of Lands and Planning 28

PART B: Road Safety Problems and solutions
8. Identifying problems 31

9. Finding solutions 32
   9.1. Engineering 32
   9.2. Transportable classrooms 44
   9.3. The ideal school 45

10. Common problems and possible solutions 47

PART C: Remote Communities
11. What are the big risks? 53

12. Who is responsible? 55

13. Useful Websites 59

PART D: Resources for schools
14. Road safety in a Health Promoting Schools Framework 61

15. Steps to improving road safety around your school 63
16. Forming a School Road Safety Committee 64
   16.1. Rationale for forming a School Road Safety Committee 64
   16.2. Tips for effective coordination of a School Road Safety Committee 65
17. Collating data from school road safety survey and developing an action plan 67
18. Possible solutions to common problems identified in the action plan 68
19. Sample action plan: Gunnadoo Primary School 69
20. Suggested education and encouragement strategies to address key road safety issues 72
   20.1. Classroom and at home curriculum material 72
   20.2. Whole school strategies 73
   20.3. Developing a School Road Safety and Traffic Guide 74
   20.4. Developing a Student Road Safety Committee 76
   20.5. Safer pedestrian and cyclist programs 77
21. Suggested engineering strategies to address key road safety issues 78
   21.1. Road crossing strategies 78
   21.2. Road safety audits 79
22. School road safety survey and cover letter 80
   22.1. School Road Safety Survey 81
23. School road safety action plan 85
24. Newsletter tips 86
   24.1. Information about your School Road Safety Committee 86
   24.2. Information about vehicle movement around schools 86
   24.3. Information about pedestrian and bus safety 89
   24.4. Safety on wheels information 92
   24.5. General road safety information 94

PART E: Useful resources and references
25. Useful road safety agencies and websites 99
   25.1. Websites consulted in developing these guidelines 101
   25.2. Contact details 102
26. References 103

List of tables

Table 1 Fatalities and hospital admitted road crashes casualties by road user group and gender for children aged 0 to 16 years in NT 1999 to 2008 12
Table 2 Protective behaviours for children aged 5 to 12 years 13
Table 3 Responsibilities and legislation for various facilities on roads 25
Table 4 Frequent problems and possible solutions 47
Table 5 Sample action plan 69

Guidelines for road safety around schools
List of Tables and Figures

Table 6 Action plan template 85
Table 7 Useful road safety agencies and websites 99
Table 8 Contact detail for Councils and Department of Education and Training 102

List of figures

Figure 1 Rearward facing restraint 15
Figure 2 Forward facing restraint 15
Figure 3 Booster seat 15
Figure 4 Bicycle helmet being properly worn 21
Figure 5 An example of Australian StandardsTM badging 21
Figure 6 Hector the Road Safety Cat 28
Figure 7 School zone speed limit signs 33
Figure 8 School crossing warning sign 34
Figure 9 No Stopping sign 36
Figure 10 No Parking sign 36
Figure 11 Drop Off Zone sign 36
Figure 12A and 12B Embayed parking in front of Roseberry Middle School 37
Figure 13 Primary school adjacent to shopping centre 38
Figure 14 Parking shared with adjacent shopping centre at Nightcliff Primary School 38
Figure 15A and 15B Off-road parking at Palmerston Senior College. Note one-way traffic flow, footpath and pedestrian crossing. 39
Figure 16 Illustration of off-road pick up and set down area (schematic only) 39
Figure 17 Indented bus parking at Moulden Primary School 39
Figure 18 Bus Zone sign 39
Figure 19 Pedestrian lights 40
Figure 20 Marked foot crossing 41
Figure 21 Pedestrian crossings (left shows signs and right shows No Stopping distances) 41
Figure 22 Children crossing flag 42
Figure 23 Children crossing warning signs (with Children’s Crossing in far background) 42
Figure 24 Children’s crossing 42
Figure 25 Layout of children’s crossing markings, signs and bollards 43
Figure 26 Children’s crossing diagram 79
Figure 27 Rearward facing restraint 95
Figure 28 Forward facing restraint 95
Figure 29 Booster seat 95
Part A:
Background, roles and responsibilities
2. Acknowledgements

The Northern Territory Department of Lands and Planning (DLP) acknowledges people from the following departments and organisations who informed the development of these guidelines:

- Alice Springs Town Council
- City of Palmerston
- Darwin City Council
- Driver Primary School
- Katherine Town Council
- Litchfield Council
- Local Government Association of the Northern Territory (LGANT)
- Nemarluk School
- Northern Territory Department of Education and Training
- Road Safety Executive Group
- Shepherds College
- The George Institute for Global Health
- Western Australian Local Government Association’s (WALGA’s) Community Road Safety Program
- Yirrkala Homeland School

These guidelines are based upon the:

1. *Road safety around schools*: school edition developed by the Western Australian Local Government Association, written by Kim Chute.

2. *Road safety around schools*: local government edition developed by the Western Australian Local Government Association, written by Peter Metropolis, Metropolis & Associates Pty Ltd.

DLP extends thanks to The George Institute for Global Health for its role in adapting the Western Australian guidelines for use in the Northern Territory including consultation with key stakeholders.

This version is current as at November 2011.
3. Aim of the road safety around schools guidelines

These guidelines have been prepared by DLP, specifically the NT Transport Group and the Road Safety Executive Group, in conjunction with stakeholders. The guidelines are, with permission, based upon the Western Australian Local Government Association’s RoadWise Program. They address the vulnerability of school children as pedestrians, passengers and cyclists – an important component of the Safe System approach to road safety.

3.1. What is the Safe System?

The Safe System approach to road safety recognises that people make mistakes but should not have to die or be seriously injured as a result. Rather, the road system should be able to accommodate mistakes and keep road users safe. This does not mean that all road crashes must be prevented, but that no one should be seriously injured in the event of a crash. This approach or “philosophy” is applied in all other areas of transport, such as aviation, rail and shipping, as well as in industries such as mining. It works by aiming for zero fatalities in the long term, by applying known effective intervention in the short term, and learning how to make improvements when the system fails.

The core elements of the Safe System are safe roads, safe vehicles and safe road users, requiring safe speeds and safe policy and management. Safe roads is also referred to as safe roads and roadsides or more broadly as safe infrastructure, therefore, representing the environment in which road users interact. Safe vehicles include all vehicles in the road system, including passenger cars and heavy vehicles such as buses, for example. Safe road users include all those that access the road system, including drivers, passengers, motorcyclists, cyclists and pedestrians. Safe speeds are essential to all these components, not only posted speed limits, but also speeding-related policies and enforcement, as well as vehicle factors such as intelligent speed adaptation technology that can adjust vehicle speeds to be within posted speed limits. These elements all require safe policy and management to ensure they mutually create a Safe System, requiring continued monitoring, evaluation and improvements.

Therefore, the Safe System is a “forgiving” system that recognises that human error can occur but safety must be shared by the system designers – a radical shift from the early days of blaming road users. We cannot accept therefore that children are unpredictable road users and resign ourselves to the belief that “accidents happen” and there is not much we can do. These guidelines demonstrate ways that we can improve the road environment and related policies and management of the areas surrounding schools to reduce the risk of any injuries occurring in the everyday task of commuting to and from school.
Part A: Background, roles and responsibilities

SAFE SYSTEM
Continued monitoring, evaluation and improvement
3.2. What are the aims of these guidelines?

These guidelines are produced for the express purpose of enhancing the safety of children travelling to, from and around schools by:

- providing information on many of the major road safety issues involved
- providing information on how best to maintain or improve road safety for children travelling to and from schools as well as advising where further assistance might be obtained
- providing answers to commonly asked questions about road safety issues around schools.

The information presented is not exhaustive and solutions suggested may not provide all the answers. Ultimately, investigation of the issue and implementation of solutions is the responsibility of particular authorities. Those investigations may involve education and a detailed engineering assessment including, as necessary, formal road safety audits by qualified personnel.

Key outcomes expected from the use of strategies suggested in this document include:

- a safer environment for children on their way to and from school
- more children walking and cycling safely to school
- a decrease in traffic conflicts surrounding the school during, before and after school
- a clear understanding of the roles and responsibilities of organisations involved in road safety in and around schools
- a greater awareness and commitment to school road safety by the whole school community.

3.3. Who will use these guidelines?

The guidelines have been designed to be used by local road authorities, teachers and school staff, school councils, school road safety committee members, school occupational health and safety committee members and other interested community members. Interested parties are guided through a range of education, encouragement, environmental and engineering strategies that can contribute towards a safer school transport environment.
4. How to use these guidelines

These guidelines are separated into four sections to assist readers in addressing road safety issues in and around schools.

| Part A | Background, roles and responsibilities | This section highlights the key road safety issues for children as vulnerable road users and outlines legal responsibilities of various authorities for the roads and infrastructure around schools. |
| Part B | Road safety problems and solutions | This section discusses typical road safety problems and what should be done to overcome or avoid them and provides a checklist of road safety features that could be applied. |
| Part C | Remote Communities | This section discusses the typical road safety risks in remote communities and what should be done by schools, parents and in the communities to overcome them. It also provides a comprehensive list of useful websites. |
| Part D | Resource for schools | This section of the guidelines aims to assist school communities in the identification of road safety issues in their school environment and the development of strategies to address these issues. |
| Part E | Useful resources and references | This section presents an overview of relevant websites and agencies that offer useful information about road safety around schools and provides a list of references and websites consulted during the development of these guidelines. |
5. Background information

This background information was adapted from the *Safer Roads (2010)* resources.

5.1. Children as vulnerable road users

Road-related fatalities are the leading cause of death for children aged between 0 and 12 years and the third highest cause of injuries behind falls and unintentional injuries.

Children involved in road crashes are more likely to:

- be injured than killed
- be killed when not wearing a restraint or seatbelt
- be killed or injured as a passenger than as a pedestrian or cyclist in rural areas (Table 1 below).

<table>
<thead>
<tr>
<th>Road user group</th>
<th>Metropolitan</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Driver</td>
<td>20</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Passenger</td>
<td>38</td>
<td>36</td>
<td>101</td>
</tr>
<tr>
<td>Motorcyclist</td>
<td>40</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Bicyclist</td>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>35</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>146</strong></td>
<td><strong>99</strong></td>
<td><strong>158</strong></td>
</tr>
</tbody>
</table>

Table 1: Fatalities and hospital admitted road crashes casualties by road user group and gender for children aged 0 to 16 years in NT 1999 to 2008.

(Source: *Safer Roads 2010*).
What are the main issues for children?

The main protective behaviours for children aged 5 to 12 years as passengers, pedestrians or cyclists (including riders of skateboards, scooters and other wheeled recreational devices) are:

<table>
<thead>
<tr>
<th>Passengers</th>
<th>Pedestrians</th>
<th>On wheels</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use of an approved child car restraint or booster seat</td>
<td>• Walking with adult supervision</td>
<td>• Wearing a correctly fitted helmet and other protective equipment and clothing</td>
</tr>
<tr>
<td>• entering and exiting from the rear door closest to the kerb (the “safety door”)</td>
<td>• using a systematic search strategy in different locations including designated pedestrian facilities</td>
<td>• riding a bicycle suited to the child’s height</td>
</tr>
<tr>
<td>• using safer behaviours to avoid driver distraction.</td>
<td>• checking for emerging vehicles from driveways and other hazards in the traffic environment.</td>
<td>• riding in safer places away from the road.</td>
</tr>
</tbody>
</table>

Table 2: Protective behaviours for children aged 5 to 12 years

5.2. Passenger safety

What places children as passengers at risk?

• Almost 30 per cent of seriously injured children aged 0 to 4 years on the roads were children travelling as passengers (AIHW 2009).
• Passengers travelling unrestrained in a car are ten times more likely to be killed in a road crash than those wearing a seatbelt (Data Analysis Australia 2000).
• Passengers sometimes travel in the back of a utility (ute) or open load space. This is illegal and exceptionally dangerous. They are much more likely to suffer injury or death in a crash or rollover due to non-restraint usage.
• In a crash, children carried in another passenger’s arms will most likely be propelled forward as the person will not be able to hold onto the child.
• Crash studies indicate that the force of a crash at 40 km/h with a power pole or parked car is like being dropped from a two-storey building onto concrete. The force at the point of impact will be equivalent to 20 times the child’s own weight (i.e. 600 kg if the child weighs 30 kg).
**Why are child passengers at risk?**

In the Northern Territory between 1999 and 2008 83 pedestrians aged 0 to 16 years were killed and 476 were hospitalised (*The George Institute, 2009 cited in Safer Roads, 2010*).

Passengers in this age group are at risk because they:

- do not use an appropriate restraint or use an incorrectly fitted restraint
- are not seen by drivers when they are entering or exiting cars due to their smaller stature
- may distract the driver or engage in some other inappropriate behaviour while travelling
- do not think about what they are doing or the consequences of their actions
- often do not know how to enter and exit a vehicle safely or how to use a restraint properly.

**Protective passenger behaviours**

To reduce the risk to child passengers, classroom and parent education should focus on children:

- using an appropriate restraint that is correctly fitted and adjusted
- sitting in the rear seat of a vehicle
- using the safety door to enter and exit the vehicle. This door is the rear door closest to the kerb
- travelling without distracting the driver or other passengers
- keeping all body parts within the vehicle
- acting under adult supervision when entering and exiting a vehicle, and while in places such as car parks.

**Child car restraints**

Of children and adolescents aged 0 to 16 years killed or seriously injured in car crashes in the Northern Territory 32 per cent were found not to be wearing a restraint (*The George Institute 2009 cited in Safer Roads 2010*).

A properly fitted and adjusted restraint that is suitable for the size and weight of the child reduces the risk of a serious or fatal injury by an estimated 50 per cent.
Restraint laws for passengers and drivers

The Australian Road Rules are used in each of the states and territories and can be found in the Northern Territory Traffic Regulations. Key restraint laws to be aware of include:

- Every person travelling in a motor vehicle must use an appropriate approved restraint.
- Penalties apply for drivers carrying an unrestrained child passenger aged under 16 years in their vehicle.

Selecting an appropriate child car restraint

Many jurisdictions throughout Australia have adopted new child restraint laws based on best practice guidelines. Selecting a restraint using these guidelines should ensure compliance with those road rules. Child car restraints offer crash protection appropriate for the weight and height of the child. The following is a guide. Always check restraint manufacturers’ guides for exact weights.

- Birth to six months: rearward facing restraint

![Figure 1 Rearward facing restraint](image1)

- Six months up to at least four years: either a forward or rearward facing restraint

![Figure 2 Forward facing restraint](image2)

- Four years up to at least seven years: forward facing restraint or booster seat

![Figure 3 Booster seat](image3)
Side impact studies have shown it is safer to use a rigid booster seat with a back, side wings and sash guide to keep the belt in place. Once a child’s eyes are higher than the top of the booster seat, it no longer provides protection for the child’s head and neck and the child should be moved to a larger booster seat or if appropriate the next level of restraint. Accessory child safety harnesses (or H-harnesses) are add-on devices used either with booster seats or adult seats and are not recommended if a lap-sash belt is available as studies have shown they are easy to misuse and provide no greater protection than a lap-sash belt even if used correctly. They are only recommended for use if a lap only belt is the only option and should be used with an anti-submarine device which is designed to keep the lower part of the harness low across the strong bones of the pelvis (Neuroscience Research Australia 2010).

- From 145cm: adult seatbelt
  Best practice shows that an adult seatbelt is designed for a person with a height of 145 cm or higher. When using lap-sash belts it is important to tighten the belt and remove the slack. A lap-sash belt offers more protection than a lap only belt.

**Who checks and installs car child restraints?**

There is a network of agencies throughout the Northern Territory who are qualified to check and install child car restraints. Information relating to the installation of child restraint devices can be found at Motor Vehicle Registry (MVR) offices or by calling 1300 654 628.

For a list of Authorised Vehicle Inspection Stations visit the Department’s internet website www.nt.gov.au/transport/mvr

**5.3. Pedestrian safety**

**When are child pedestrians involved in crashes?**

Research has found that children are more likely to be hit by a car when crossing mid block rather than at an intersection. Studies show that children as pedestrians are most vulnerable when they are tired and ‘are more likely to be involved in a road traffic crash after 3pm’ (The George Institute 2009 cited in Safer Roads 2010).
**Why are child pedestrians at risk?**

Children are considered vulnerable road users because up to the age of approximately ten years they may not be developmentally ready (i.e. they do not have the physical and cognitive skills) to make safer judgements and choices of their own about traffic. Parents, carers and educators need to be aware of the skills of the children and plan road safety awareness in accordance with the child’s development (Pettit, 1996). Between 1999 and 2008 83 pedestrians aged 0 to 16 were fatally injured or hospitalised in the Northern Territory. Of these 51 were male and 32 were female, 66 were in metropolitan areas and 17 were in rural areas.

Child pedestrians are at risk because **physically** they have:

- **developing peripheral vision**
  Children are less likely to notice objects not directly in front of them as their peripheral vision is still developing (it is one-third of an adult’s field of vision). Unless they turn their heads, they may not notice vehicles to their right or left.

- **developing directional hearing**
  Children may often have problems working out where sounds are coming from and may expect traffic to come from the wrong direction.

- **a smaller stature**
  Because of their size it is often difficult for drivers to see children, especially when standing between parked cars.

Child pedestrians are at risk because **cognitively** they have:

- **a limited sense of perception**
  Children have trouble judging how fast a vehicle is coming towards them or just how far away a vehicle is. They may let a slow vehicle pass and then cross in front of a fast one.

- **poor search behaviour and do not take sufficient time to look when crossing the road**
  Children like to keep moving! As a result they may not wait for stop lights to change, for cars to stop at crosswalks or give enough time to complete a thorough search procedure before they step out onto the road.

- **unpredictable behaviour and do not consider the consequences of their actions**
  Children often have trouble stopping at the kerb especially if they are excited or are chasing a ball and may dart out onto the road without thinking.

- **a tendency to be easily distracted**
  Children tend to focus only on the things that interest them most. They are easily distracted in the company of friends and cannot be relied upon to use safe behaviour consistently.

- **limited ability to respond quickly to a sudden change in traffic conditions**
  Children may be able to say when the road is clear and safe to cross but a sudden change in traffic conditions can cause confusion and panic.

- **difficulty seeing a situation from another’s viewpoint**
  Children often think that if they can see a car approaching them the driver must be able to see them too.
• an unwillingness to change from a direct route even if it is dangerous
  Children often focus on what they believe is the quickest way to reach their destination rather than the safest.

Children may also be at risk because of their:

• lack of knowledge and skills to deal safely with the traffic environment
• responsiveness to peer pressure
• propensity to take risks
• parents or other adults over estimating their ability
• possible lack of road side training
• presence on the road not being anticipated by drivers
• lack of experience dealing with different traffic situations (i.e. rural children interacting with city traffic situations).

Protective pedestrian behaviours

To reduce the risk to child pedestrians, classroom and parent education should focus on children:

• always using the **systematic crossing strategy** when crossing a road (described below)
• selecting safer places to cross
• using designated crossings (e.g. crosswalks, pedestrian phase signals, railway crossings)
• being supervised by an adult whenever possible
• using a footpath when available.

**Systematic crossing strategy**

The following steps describe a systematic crossing strategy recommended for safe road crossing.

**Step 1:** Choose the safest place to cross.

**Step 2:** Ask an adult for help to cross the road where possible.

**Step 3:** Stop back from the kerb and road.

**Step 4:** Look in all directions for traffic.

**Step 5:** Listen for traffic.

**Step 6:** Think about when it is safe to cross.

**Step 7:** When the road is clear or all traffic has come to a complete stand still, walk straight and quickly across the road, holding an adult’s hand.

**Step 8:** Keep checking the road by looking, listening and thinking about the traffic while crossing.
Where are safer places to cross?
Children have difficulty identifying and selecting places to cross the road safely. They tend to assume that all places are safe as long as no vehicles are visible nearby.

Pedestrian crossing facilities
It is important children use a pedestrian crossing facility when there is one available even if it means walking some extra distance. If a pedestrian facility is not available encourage children to cross where they have a clear view of traffic in every direction and drivers can see them waiting to cross.

Crossing at traffic lights
It is safer to use the systematic search strategy described previously when the green ‘walk’ figure is illuminated. However children should be reminded not to presume that traffic will stop and to check the traffic before stepping onto the road.

Crossing between parked cars
It is dangerous for children to cross between parked cars, however when this is the only choice they should be taught to:

• select a gap between two cars which have no drivers
• make sure the gap is not big enough for a car to park
• walk to the outside corner of the car and stop where drivers can see the pedestrian and the pedestrian can see the traffic (i.e. in line with the outside edge of the cars)
• use the systematic search strategy to cross the road.

In a car park
A car park can be a dangerous place for pedestrians, especially young children not supervised by an adult. Drivers are focused on driving into or out of parking bays and do not always search for pedestrians. Children should:

• stay close to an adult and hold his/her hand
• select the safest route (e.g. using footpaths, crosswalks, pedestrian phase lights)
• be aware of sights (e.g. exhaust smoke, reversing lights) and sounds (beepers, slamming doors) of vehicles especially as they drive in and out of parking bays.

Walking where there is no footpath
When a footpath is not available, pedestrians should:

• walk on the road verge as far away from the road as possible and face oncoming traffic
• walk on the edge of the road if no verge is accessible and face oncoming traffic
• be vigilant about looking for any oncoming vehicles and move off the road edge until they have passed.

Boarding a school bus
Pedestrians waiting to board a school bus should stay on the footpath or road verge until the bus has stopped.
Crossing after a school bus has left

Pedestrians should wait until the bus has moved away and the road is clear before crossing using the systematic search strategy.

How can children be more easily seen?

There are several ways to increase visibility of pedestrians in the traffic environment including:

- wearing light, brightly coloured or reflective clothing (e.g. a jacket, hat or runners) especially at times of poor visibility (i.e. dusk or wet weather)
- carrying a bag that has reflective strips of stickers.

5.4. Safety on wheels

What are the risks for young riders?

- Between 1999 and 2008, 57 cyclists aged between 0 and 16 years of age were killed or hospitalised in the Northern Territory (The George Institute 2009 cited in Safer Roads 2010).
- Most cycling injuries don’t involve another vehicle but occur when children fall off their bikes after crashing into a pole, kerb or fence (Kidsafe WA Bicycle Safety 2005).
- In Australia, injuries through scooter riding are on the increase. Two out of three of those injured are under 14 years of age. The most common serious injuries are fractures to the arm/wrist usually as riders put out a hand as they fall (Kidsafe WA Bicycle Safety 2005).
- Injuries to the face and head are less frequent but are potentially more serious (Kidsafe WA Bicycle Safety 2005).

Why are children riding bicycles and wheeled recreational devices at risk?

Children derive great enjoyment and satisfaction from cycling and using other wheeled recreational devices such as scooters, skateboards and rollerblades. It gives them a sense of pride and achievement when they become proficient in their skills. However injuries requiring hospitalisation do occur and between 1999 and 2008 57 cyclists aged between 0 and 16 years of age were killed or hospitalised in the Northern Territory (The George Institute 2009 cited in Safer Roads 2010).

Children under 10 years of age generally have not developed the necessary cycling and traffic skills to safely ride in traffic. They need to be closely supervised by an adult at all times. It is safer for children under 12 years of age to ride on footpaths or on other off-road locations such as shared paths or parks. Law requires that children 17 years and under wear a helmet when cycling at all times. A person aged 17 years or older must wear an approved helmet when travelling on a road or on a bicycle lane that forms part of the road (Northern Territory Government undated).

Children are at risk when riding because they:

- may not have the necessary physical skills to handle a bicycle or other wheeled vehicle
- lack knowledge and skills to deal with the traffic environment
- do not always think about the consequences of their actions
- have not developed an effective search behaviour and may not look for long enough when scanning traffic
- give in to peer pressure to act unsafely
- over estimate their ability.
### Protective riding behaviours

**To reduce the risk to child riders, classroom and parent education should focus on children:**

- avoiding roadways or other areas that are used by motor vehicles
- wearing an approved helmet at all times
- avoiding large hills, kerbs, cobblestones, grates and other rough or discontinuous surfaces
- never riding with more than one person on a bicycle or scooter
- before each use, checking that there are no loose or missing parts of their vehicle.

### Courtesy on shared paths and footpaths

When riding on paths there are rules that need to be followed:

- keep to the left of the path
- don’t ride too fast or do anything unexpected
- use a bell when approaching others
- give way to pedestrians
- obey signs along the path
- ride in single file
- ride in pairs only when the path is wide enough and when it is safe.

### Helmets

**How can young riders reduce the risk?**

Studies have shown that bicycle helmet use decreases the risk of head injury by 85 per cent and brain injury by 88 per cent (*Henderson 1996*).

The protective effects of helmets during a crash or fall are increased by:

- the helmet being fitted properly
- the helmet being properly worn (sitting at the front of the head)
- the retention straps being tight and fastened. This prevents the helmet from moving or coming off and the risk of head injury being reduced during a crash.

**What safety features do helmets have?**

Look for the Australian Standards™ Mark AS 2063.2 or AS/NZS 2063 certification label. This is usually displayed on and in the helmet. The label (pictured below) ensures that the helmet has passed safety tests and meets the standard required by Australian state road laws. Not all helmets meet this standard.

---

**Figure 5** An example of Australian Standards™ badging
Young children require a helmet that provides extra neck support. Where possible, a bright or fluoro coloured helmet should be selected to increase visibility in the traffic environment. Ensure the helmet has adequate venting to keep the child’s head cool.

**How to select and fit a helmet**

**Correct size:** Check head size by using a tape measure placed just above the eyes and ears. Match this with the helmet sizes listed on the display box to find a helmet that covers this measurement.

- Helmets are designed to protect the wearer against possible impact. For maximum protection a helmet must be a good fit (described below) and securely fastened.
- If a helmet is too small, it will not give adequate coverage and protection.
- If a helmet is too large, it may move on the head and not provide the protection intended.

**Fitting a helmet:** Helmets come with fitting instructions, however, the following points will be appropriate for most styles:

- Place the helmet on the child’s head and use the pads supplied to ensure a snug fit.
- Test the fit by grasping the helmet and attempt to move it to the front and back of the head. There should be limited movement, if any.
- Adjust the straps so that the side adjustor forms a ‘Y’ shape below the ears and the buckle is positioned well under the chin.
- Attempt to move the helmet backwards and forwards once on the head and straps have been fastened correctly. There should be virtually no movement.
- Make further adjustments if necessary as a loose helmet can increase the risk of injury.

**Helmet care**

- Extreme heat can damage the shell and weaken the helmet. This is usually visible when ‘bubbling’ occurs on the surface of the helmet shell. Avoid leaving the helmet outside in the weather, near a heater or on the back ledge of the car.
- Substances (i.e. petrol, paint adhesives and cleaning agents) can damage helmets. Clean helmets with mild soap and water, rinse then dry with a cloth not in front of a heater or in the sun.

**Replacing helmets**

- Helmets are essentially manufactured for single impact protection. They absorb the impact and protect the head. When a helmet has been subjected to a severe blow it should be replaced even if it appears undamaged.
- Replace a helmet when it shows obvious signs of wear or no longer fits the head correctly.

**5.5. Safety around roads**

**Why are young children at risk while playing near roads?**

While playing children at this age are at risk because they:

- do not think about the consequences of their actions (e.g. they may dart out onto the road without thinking)
• are not being anticipated by drivers
• have not developed an effective search behaviour and may not look for long enough when scanning traffic
• do not realise the dangers of playing on the road or driveway
• often forget safety rules when playing
• respond to peer pressure
• lack knowledge and skills to deal with the traffic environment
• have parents who over-estimate their ability
• have a limited concept of danger.

How can young children reduce the risk when playing?

Young children can reduce the risk by:

• playing in appropriate areas (e.g. backyard, enclosed front yard and parks)
• not playing on or near roads or driveways
• not playing on or in motor vehicles
• asking an adult to retrieve balls from the road
• being aware of other dangers such as gravel, overhanging trees and ditches.

5.6. Road laws

Road laws have been designed in the interest of promoting a safer community. The Traffic Act 2000 and Traffic Regulations (commenced 1 Dec, 1999; updated 19 May 2010: www.nt.gov.au/transport) clearly define the responsibilities of all road users. Further information about the traffic regulations is available on the Northern Territory Government’s website www.nt.gov.au/transport

The summary of relevant laws outlined below may be useful to consult when schools are developing road safety and traffic guides.

Passengers and the law

Restraints

Every person travelling in a motor vehicle must use an appropriate Australian Standards™ approved restraint. Penalties apply for drivers carrying an illegally unrestrained child passenger aged under 16 years in their vehicle.

Travelling in open space vehicles

It is against the law to travel in the open space of a vehicle where restraints are not provided (e.g. back of ute).

Pedestrians and the law

Using the footpath

• Pedestrians should use the footpath or nature strip where possible as it is an offence to walk on a road if there is a footpath or nature strip to walk on.
• If there is no footpath pedestrians must travel, where practical, on the right side of the road
facing the oncoming traffic. If it is not practical to travel on the right side then the pedestrian must use the left of the road and immediately move off the road when a vehicle approaches from behind.

- Pedestrians must not walk more than two abreast on the road unless overtaking.
- Drivers must give way to pedestrians and cyclists on the footpath when entering or exiting a driveway.
- If a driver is turning left or right or making a u-turn the driver must also give way to any pedestrian at or near the intersection on the road the driver is entering.

**Crossing the road**

- Pedestrians should use and obey pedestrian signals and crossings.
- Pedestrians must use a marked crossing if they are within 20 metres of the crossing.
- Pedestrians must follow the directions of a traffic attendant or crossing monitor while crossing.

**Cyclists and the law**

- Cyclists may ride on the footpath provided they keep to the left and give way to pedestrians (*Northern Territory Government undated*).
- Cyclists must wear an approved safety helmet carrying the Australian Standards™ Mark (AS2063) properly adjusted and fastened.
- Cyclists must warn pedestrians when riding past on a shared path or footpath by using a bell or calling out.
- Cyclists must walk their bikes across pedestrian crossings and at traffic signal crossings (unless there is a bicycle crossing light).
- On a path dedicated for the exclusive use of bicycles cyclists have the right of way.
- Marked bicycle lanes should be used wherever practicable.
- Drivers must give way to pedestrians and cyclists on the footpath when entering or exiting a driveway.

**Bicycle offences**

Apart from the risk of being killed or seriously injured there are fines for not wearing a helmet. It is a traffic offence for children up to the age of 17 to ride a bicycle without a helmet or without the helmet securely fastened. A Traffic Infringement Notice may be issued.
6. Legal responsibilities

What is a Local Road Authority?

A Local Road Authority refers to the owner of a particular road. In the Northern Territory this will either be DLP or a relevant Council. The Local Road Authority has responsibility for the roads that it owns.

Almost all actions to address particular road environment safety problems can only be implemented within the authority provided by legislation. Such legislation includes the Northern Territory Traffic Act and subordinate regulations, the Local Government Act 1995 and subordinate local laws adopted by local governments. In the Northern Territory the general principle for division of these responsibilities is by ownership of the road. Issues relating to infrastructure and safety on DLP roads are the responsibility of the department, while issues on local government roads fall under the jurisdiction of local government. The following table provides a guide who is responsible for the roads and infrastructure adjacent to schools based.

<table>
<thead>
<tr>
<th>Road next to school</th>
<th>Responsibility and legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Traffic-control signals (including pedestrian lights)</td>
<td>Relevant local road authority depending on ownership of road.</td>
</tr>
<tr>
<td>• road markings (centre lines, edge lines, lane lines, school crossing markings, zebra crossings)</td>
<td></td>
</tr>
<tr>
<td>• road signs (Stop, Give Way, Speed Limits, Keep Left etc.)</td>
<td></td>
</tr>
<tr>
<td>• bicycle lanes (on road)</td>
<td></td>
</tr>
<tr>
<td>• children’s crossings</td>
<td></td>
</tr>
<tr>
<td>• road widening, resurfacing, medians, pedestrian refuge islands, pedestrian bridges and subways, driveways (approvals)</td>
<td></td>
</tr>
<tr>
<td>• parking signs (any restrictions on parking or permissive parking)</td>
<td></td>
</tr>
<tr>
<td>• No Through Road signs.</td>
<td></td>
</tr>
<tr>
<td>• Footpaths, shared paths and bicycle paths.</td>
<td>DLP or local government (or developer at development stage) is responsible for construction. Approval for shared paths, bicycle paths is the responsibility of the local road authority.</td>
</tr>
<tr>
<td>• Bus stops</td>
<td>Public Transport Service group within the DLP in conjunction with local governments and the NT Road Network Group.</td>
</tr>
<tr>
<td>• Street light maintenance</td>
<td>Power Water</td>
</tr>
</tbody>
</table>

*Parking areas on school land*

*Table 3 Responsibilities and legislation for various facilities on roads*
For new private schools and the redevelopment of existing schools responsibility for providing off-road parking is generally the responsibility of the developer. However, overall parking requirements are determined as part of the planning/design process and, for new developments, approvals are sought from DLP for the establishment of these areas including access. Plans are shared with the local council for their comments however these are not binding. For developments involving roads that belong to the local government, the approval process involves the local government. The Department of Education and Training (DET) is responsible for government schools and it liaises with DLP on parking needs.
7. Roles and responsibilities of organisations

Responsibility for road safety is a community-wide issue. Everyone must be concerned for improving road safety for substantial reductions in road trauma to be achieved. Communities working together achieve the greatest benefit and this certainly applies in respect to road safety near schools. Statutory responsibilities for road safety by government departments and local governments are considerable and diverse and their assistance is vital. On issues relating to roads adjacent to schools, many agencies have a role. A précis of those responsibilities is contained in the following sections.

7.1. Road Safety Executive Group

The Roads Safety Executive Group (RSEG) replaces the former Road Safety Council in the Transport Group of DLP. The group comprises of members from various stakeholders across the Northern Territory Government involved in road safety. These stakeholders include DLP, NT Police and Territory Insurance Office (TIO). The RSEG role is to provide strategic leadership and set direction in conjunction with relevant Ministers, provide ongoing advice to Government on specific road safety policy and priorities and lead the co-ordination of whole-of-Government road safety-related activity.

7.2. Local governments

As local governments have responsibility for building and maintaining a significant area of roads they, among others, can have a significant influence on road safety around schools. At present local government boundaries cover about 95 per cent of the land mass in the Northern Territory and local councils in the Northern Territory manage 15,241 km of local road networks. Local governments are responsible for building and maintaining all local roads including intersection treatments, driveways, traffic islands and median strips, nature strips and all types of paths next to local roads. However, unlike local governments in all other states, local governments in the Northern Territory do not have responsibility for the functions of planning (development assessment and land use planning), building regulation and environmental health as the Northern Territory Government is responsible for these functions.

Local governments are responsible for the provision of kerbside parking prohibitions on most local roads in the Northern Territory.

Local governments have the role of commenting on developments of new subdivisions including the provision of new schools and the redevelopment of existing schools. It specifies traffic management and safety requirements for school developments and can influence planning by offering advice on how best to orient the school to make best use of facilities such as joint use of parks/playing arenas/parking.
7.3. Local Government Association of the Northern Territory

The Local Government Association of the Northern Territory (LGANT) is an independent membership-based group representing and supporting the work and the interests of 16 local governments in Northern Territory. LGANT manages 2174 km of road networks throughout the Northern Territory. These are mainly roads that have not yet been assigned to a local government boundary. However with the continued rapid growth and expansion of the Territory these numbers are set to continuously increase.

7.4. Education (DET)

DET is, among others, responsible for government schools in relation to their establishment, development and redevelopment. It works closely with respective local governments in respect to the planning and development of school parking facilities, location of transportable classrooms (if required) and vehicle access.

7.5. NT Police

Police officers are responsible for enforcement of road traffic laws. In instances where local governments do not have local laws for controlling parking, NT Police are responsible for enforcement of kerbside parking restrictions/prohibitions.

7.6. Department of Lands and Planning (DLP)

DLP’s Transport Group has responsibility of building and maintaining over 22 000km of the road network. This generally includes major highways and arterial roads and their associated treatments. Similar to local government, DLP has influence on road safety around schools. The Transport Group also provides regulatory services, manages the public transport system, develops and manages road safety advertising campaigns, conducts education and awareness programs, and implements road safety reforms. DLP also has a planning role relating to new school developments and the redevelopment of existing schools.

Education and awareness programs

The DLP offers a number of programs targeting school children safety. They include the following:

- **Hector the Road Safety Cat**
  This program makes use of its mascot, Hector the Cat, to educate Territory school children about how to be safe around roads, including road safety topics like crossing the roads, seatbelts, bicycle and bus safety.

- **Road Safety Officers**
  The Northern Territory Government’s Road Safety Officers (RSO) offer informative and educational age-specific presentations and enrichment lessons to school children. RSOs engage with all levels of the community and conduct school presentations in conjunction with key road safety stakeholders. These presentations are coordinated free of charge by DLP.

Figure 6 Hector the Road Safety Cat
• **Road Safety Centres**
  The Road Safety Centres in Darwin and Alice Springs offer free bicycle education training to students in years 4, 5 and 6. The centres are owned by DLP and training sessions are conducted by the RSOs.

• **Safer Roads school resources**
  These resources are linked to the NTG curriculum framework and provide teachers with an opportunity to teach their students vital road safety messages. They are available for early childhood, primary and middle years students.

  For more information contact roadsafety@nt.gov.au or phone 08 8924 7019.

An additional program is **Walk Safely to School Day**. This initiative is in line with the Australian Government’s latest ‘Get Moving’ campaign which promotes the importance of being active for an hour or more every day. The primary objectives of the event are:

- to promote the health benefits of walking and encourage the development of healthy lifestyle habits at a young age
- to help children develop the vital road-crossing skills they will need as they become mature pedestrians.

Primary school staff, students, parents and carers are also encouraged to find out more information at the Walk Safely to School Day website at www.walk.com.au
Part B:
Road safety problems and solutions
8. Identifying problems

Road safety problems around schools are usually identified by school staff, parents and carers of students or local residents in the area. Local road authorities may also identify problems through:

- site inspections and road safety audits
- analysis of statistical information such as crash data and traffic information.

In the NT problem identification such as this is usually conducted by consultants whose services are engaged by the local councils. Typical problems that occur at or near schools include road user problems such as excessive speed, poor parking habits and u-turning. Road and environmental problems include poor road alignment, poor surface conditions, lack of drainage, lack of adequate parking, poor visibility, inadequate road crossing locations, inadequate and poor footpaths, shared paths, kerbing, lack of hand rails and pram ramps, inadequate intersection controls and lack of road signs.
9. Finding solutions

Determining solutions to some problems requires expertise in traffic management and road safety. Some problems (and solutions) are obvious such as difficulties with footpaths, missing or damaged warning signs, trees and shrubs restricting visibility and so on. However some are not so obvious and require expertise to identify and resolve. While it is not possible to prescribe solutions for every situation, the following may assist in identifying potential solutions for a variety of problems. Apart from dealing with a particular problem, practitioners should consider issues and potential solutions from a holistic viewpoint since there may be consequences of a particular action that fixes one problem but causes another.

9.1. Engineering

Road design and the general environment in which roads are constructed have a strong influence on road safety. There are several attributes of road environments and user movements that are particularly important to providing safety in the vicinity of schools. The major ones are as follows.

- Traffic speeds should be low – desirably 40km/h or less during school hours (the road configuration and geometry should be such that it creates the expectation of a low speed environment).
- Access to schools should be from local roads and access from high speed roads should be avoided as far as possible.
- Parking should be adequate and appropriate to the location to allow safe picking up and setting down of children (sufficient parking has to be provided by schools for staff, casual and parent assistants and visitors to ensure that there is no overflow impact on pick up and set down requirements).
- Paths (footpaths and shared paths) should be provided on the school side of the road for children walking and cycling to and from school, bus stops and places where they are picked up or dropped off.
- Roads should generally be free from high levels of congestion.
- Traffic circulation should be enhanced by treatments that encourage vehicles to travel in a direction that enables dropping off and picking up on the school side of the road.
- Sight lines for drivers to see children and be seen by children should be clear at intersections and all places where children might cross a road.
- Road crossing places for children should be safely located and adequately signed.
- Attention should be given to ensuring visibility is adequate for drivers to safely enter and leave parking areas and see children on intersecting paths.
- All pedestrian and bicycle access ways should be free from visibility constraints.

Traffic speeds

Traffic speed is one of the most important issues relating to safety and there are many techniques for reducing and maintaining traffic speeds at reasonably safe levels. The installation of special school zone speed limits is one technique and DLP’s policy is to install these limits along all school frontages.
Guidelines for road safety around schools

Part B: Road safety problems and solutions

A school zone is defined in Australian Road Rules [Part 3, Rule 23 (2)] as:

- if there is a school zone sign and an end school zone sign, or a speed limit sign with a different number on the sign, on a road and there is no intersection on the length of road between the signs – that length of road; or
- if there is a school zone sign on a road that ends in a dead end and there is no intersection, nor a sign mentioned in paragraph (a), on the length of the road beginning at the sign and ending at the dead end – that length of road; or
- in any other case – the network of roads in an area with:
  - a school zone sign on each road into the area, indicating the same speed limit; and
  - an end school zone sign, or a speed limit sign indicating a different number, on each road out of the area.

While policies may change, at the time of preparation of these guidelines school zone speed limits are installed as follows:

- 40 km/h throughout all school zones, which operate from 7 am to 5 pm during school terms.
  
Two exceptions to this are Berry Springs (Cox Peninsular Rd) and Middle Point (Anzac Parade) Schools that are rural schools outside Darwin. Both are in 60 km/h zones.

Application is required to be made to DLP for installing school zone signs. For schools on NT Government roads apply to the NT Government and for schools on local government roads apply to the relevant local government. Applications to extend or modify an existing school zone on any road (whether it be on a NT Government road or local government road) goes through the DLP. The DLP will repair and maintain existing school zone signs. All requests for modification or extension of the school zones are to be made through the DLP.

While these speed limits, with regular enforcement, have been shown to reduce the speeds of vehicles, alterations to the road and its environment are generally self-regulating and have been shown to be very effective. Treatments that induce lower speeds, some of which have been put in place in the NT, include:

- roundabouts
- channelising islands (at intersections)
- median islands and kerb protrusions (nibs) to narrow available pavements
- speed humps (design is important. e.g. more aggressive humps designed to markedly lower speed are more suited to car parks and accesses)
- raised plateaus (application as part of overall road treatment only with care required to avoid making ramp slopes too steep and not give the impression that the plateau is an extension of a footpath or that it is a protected crossing)
- angled slow points (single or double)
- serpentines, chicanes or blisters.

Figure 7 School zone speed limit signs
Reference should be made to Australian Standards™ publication AS 1742.13 regarding the suitability of these treatments and the processes recommended for determining appropriate traffic calming measures.

Practitioners should refer to appropriate guidelines regarding the design of various treatments. Austroads is a useful source (www.austroads.com.au under publications section).

Yellow flashing warning lights

A number of trials are currently underway regarding the installation of flashing yellow warning lights on the approaches to and at school zones to determine their effectiveness in improving safety. These include the Tennant Creek Stuart Highway flashing lights during school hours and flashing regulatory lights around schools in Alice Springs. The purpose is to warn drivers of the zone ahead causing them to slow. While the outcomes of the trial are not known at the time writing, the application of flashing lights is likely to be limited to places where traffic travels at speeds higher than the 50 km/h speed limit for built up areas.

Other warning signs

Warnings to alert motorists to modify their driving behaviour as they near a school include:

- school crossings
- pedestrian crossings
- presence of school or preschool
- presence of pedestrians in the vicinity of a school or preschool
- people with disabilities.

Installation of the warning signs, such as the example in Figure 8, can be negotiated with the local roads authority or DLP.

Roundabouts

Roundabouts are useful as a speed control treatment on local roads at intersections. They also provide a means for vehicles to u-turn with reasonable safety and assist with parents and carers picking up or setting down children on the school side of a road without having to travel long distances or attempt to u-turn near the school. Particular care should be taken when considering roundabouts at intersections where there are high numbers of pedestrians or cyclists crossing one or more of the roads. Children in particular should be encouraged to cross roads away from roundabouts that have high traffic flows. Children should preferably cross where median refuge islands are installed.

Note: Care should be taken in the design of roundabouts to ensure that deflection angles require vehicles to drive slowly through the roundabout and that vegetation in the central island does not prevent drivers seeing ‘through’ the roundabout.

Median islands and nibs

Median islands enable pedestrians to cross roads in two stages by providing intermediate refuge. They also serve a traffic management function by:
Part B: Road safety problems and solutions

- reducing the road space available to traffic and lessening the distance pedestrians have to cross to places of refuge
- deterring overtaking (particularly important near schools)
- providing shelter for turning vehicles at breaks in the raised median island
- providing 'side friction' that reduces traffic speeds.

An additional benefit is they can assist monitors at children’s crossings to control both directions of traffic flow from a ‘refuge’ position (if necessary). Nibs that are often associated with indented parking stalls also narrow the pavement width for through traffic and lessen the road width pedestrians have to cross.

**Speed humps and plateaus**

Care must be taken in the use of speed humps and plateaus. Humps are generally rounded whereas plateaus have ramp slopes each side of a flat area. Humps and plateaus that have gentle slopes are suitable on local roads provided they are part of an overall approach to slowing traffic on that road. They **must** be accompanied by pavement markings (piano key type) and warning signs with advisory speed limits.

**Angled slow points, chicanes and blisters**

These treatments are generally not appropriate in front of schools since drivers tend to have to focus on negotiating the treatments rather than being alert for children. They are also difficult for cyclists. However they may be appropriate treatments away from schools (particularly blisters) to slow traffic on school approach roads (blisters are oval shaped islands either side of which vehicles are required to travel and introduce a road curve in each direction).

**Partial and full closures**

There are a variety of treatments that involve restrictions of access to roads that can have a traffic calming effect. However they also have a significant effect on permeability of traffic flow with through traffic being diverted to other roads. They should only be considered as part of an area-wide review of traffic safety and access and the safety implications on schools should be considered in that context. Full closure is usually a last resort.

Currently in the NT treatments including raised pavements, rumble strips and speed humps have all been used to slow and warn users of school crossings ahead. However there are very few treatments in remote communities, partially due to the lack of road infrastructure. LGANT actively encourages councils to install crossings in these communities not only for safety but also as an educational tool for community members to become familiar with their usage, so when travelling to larger towns they know the proper use of these crossings.

**Parking**

It is important to understand what is meant by the terms “stop” and “park”. The Australian Road Rules include definitions for these terms in the Dictionary (and these should be mirrored in local laws adopted by local governments in relation to parking).

In essence, as defined in Australian Road Rules (Part 12, Division 2) where there are No Stopping signs a vehicle may not stop unless held up by traffic. No Parking means a vehicle must not stop for longer than is necessary to pick up or set down people or goods, must not be left unattended and not for longer than 2 minutes.
Part B: Road safety problems and solutions

An extension is permitted for the disabled provided the vehicle has an appropriate authorising sticker.

For lengths of roads that are intended for pick up and set down areas only, No Parking signs can be used.

Kiss and Go and Drop Off Zones

Some local governments apply special signs such as Kiss and Go, Wait a While and Stop and Chat, other than No Parking to indicate picking up and setting down only is permitted. While these may be appealing, uniformity of signing practice is important so that drivers understand the meaning of signs as they travel from one area to another. However Kiss and Go signage appears to be used by a number of local governments in lieu of No Parking and their purpose seems reasonably well understood.

Contact your local road authority to work out which is the most appropriate for your school. Practitioners who use these types of signs should ensure that local laws support their use and that there is uniformity in application. In the NT, local governments’ use of these signs is usually confined to school properties. Indeed, these types of signs (including No Parking) are appropriate to use on a length of road immediately in front of a school. They allow children to be dropped off or picked up in the minimum amount of time. However in the after school period, parents and carers often arrive earlier than school finishing time so pick up sections are usually inadequate to serve their needs. Therefore parking bays and areas that cater for the parking of vehicles are necessary.

Introducing no parking zones improves road safety for pedestrians crossing streets, particularly for children who are often hidden from view between parked cars.

Specifically for Kiss and Go zones:

- consider one way traffic flow to keep pick up and set down on the school side of the road
- the location should be on the school side of the road
- parking restrictions on the side of the road opposite the school should be installed for before and after school
- entries and exits should be separate from entries for cyclists and pedestrians
- traffic speeds should be no more than 10 km/h.

Number of parking bays required

The requirement for parking at schools is related to the number of students attending a school. While a host of issues such as access to public transport, community vehicle ownership and population densities can influence parking needs, it has been found by practical assessment of numerous schools that parking requirements are mostly related to student numbers. The formulae to determine parking space that were applied by DET for development of the Rosebery schools for example, are as follows:

- For every 100 pre-primary school children there is 24 total parking bays (3 spaces for drop off, 6 for visitor parking, 14 for staff parking and 1 space for disability parking).
- For every 100 middle school children there is approximately 16 parking bays (2 spaces
Guidelines for road safety around schools

- for drop off, 4 for visitor parking, 9 for staff and 1 space for disability parking).
- At both the primary and middle schools in Rosebery there is also 10 bus drop off bays on the site (7 for the middle school and 3 for the primary school).

Taking Casuarina Secondary College as an example of parking allocation in a high school:

- For every 100 high school students there is an allocation of 24 parking bays (1 for drop-off, 3 spaces for visitor parking, 10 spaces for staff parking, 1 space for disability parking and 9 spaces for student parking). Bus drop off bays in this example are off-site.

Note that these formulae are a guide only.

Generally the amount of parking required for parents and carers dropping off children before school is less than when children are being picked up after school. While the above formula generally applies, some variations may be acceptable depending on the location of the school and access to public transport. Schools can also vary in numbers of students from one year to the next and care should be taken to ensure parking is adequate to meet reasonable needs. Some important requirements of parking bays and areas include the following:

- Parking (including pick up and set down parking and longer term parking bays) should be on the school side of the road where possible. Where parking is provided off-road, one way traffic flows should be developed within the parking area.
- Parking restrictions on the side of the road (for a short distance) opposite the school entrance should generally be No Stopping during periods before and after school. This discourages children being dropped off on the opposite side of the road to the school and having to walk across the road.
- The need for vehicles to reverse where there are child pedestrians in the vicinity should be avoided.
- Where a school has multiple road frontages, parking and accesses to off-road parking should preferably be on the less heavily trafficked (minor) roads.
- Entries and exits to off-road parking should be separated from entries for cyclists and pedestrians.
- Traffic speeds in parking areas must be low (no more than 10 km/h) and this is often best achieved by speed humps and raised plateaus within lanes next to or at the ends of parking areas. Pavements of dissimilar colour to normal roads are preferred for car parks.

On-road parking

Embayed parking is preferred along school frontages. This enables kerb nodes to protrude at intervals along a road, reducing pavement widths for through traffic and providing places where pedestrians can see past parked vehicles and be seen by drivers. In urban centre such as Darwin, on-road parking can pose challenges due to traffic congestion, schools should consider this within their designs.

**Figure 12A and 12B** Embayed parking in front of Rosebery Middle School
**Part B: Road safety problems and solutions**

**Off-road parking**

In some instances for schools in urban areas, parking can be supplemented by using adjacent sporting facilities or shopping centre parking. Figure 13 shows the configuration of schools in such a situation.

![Figure 13 Primary school adjacent to shopping centre](image)

In the above fictional example, Ellenbrook Primary School is adjacent to the shopping centre and parents and carers of children attending the school often park at the shopping centre to pick up children after school. They either shop before or after picking up children. Fortescue Place in front of the schools is a cul de sac with very generous parking integrated into the turn around area. The adjacent public open space is also useful in not requiring children to cross a road to use the facilities (which applies to both schools).

Some examples of schools in such set ups in Darwin are Nightcliff Primary and Palmerston High School. Most of the northern suburb schools in Darwin have an oval attached to them, which is then attached to a small shop.

![Figure 14 Parking shared with adjacent shopping centre at Nightcliff Primary School](image)
Bus parking can be off-road as shown in Figure 16. However the bus turning circle requirements can be prohibitive and it may not be possible to cater for buses other than in indented parking areas on the road.

**Bus facilities**

Public transport to and from schools can be an issue. The most desirable situation is for public buses to drop off and pick up children on the school side of a road at stops close to but not immediately in front of school entrances. While attempts should be made to obtain public bus services close to schools, bus scheduling and route selection sometimes do not match students’ requirements. This can lead to safety problems.

The planning of schools should consider public transport needs particularly in relation to the location of stops because it is important to children’s safety. Wherever possible, stops should be located on the school side of the road away from areas that are congested by parked vehicles. Bus stops on the side of the road opposite to a school should be similarly located and there should be good visibility to the bus stop and places where children might cross to the stop. A bus stop in traffic law terms disallows vehicles stopping within 20 m of the approach side and 10 m of the departure side of the stop post. This caters for a single rigid chassis bus stopping. However if more than one bus or an articulated bus is to be catered for at a stop, it is necessary for *Bus Zone* signs to be installed defining the length or kerbside space required. This is usually accompanied by a dashed line marking the bus parking bay between *Bus Zone* signs.

It is illegal for vehicles other than public buses to stop at a bus stop or within a bus zone.

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**Figure 15A and 15B** Off-road parking at Palmerston Senior College. Note one-way traffic flow, footpath and pedestrian crossing.

**Figure 16** Illustration of off-road pick up and set down area (schematic only)

**Figure 17** Indented bus parking at Moulden Primary School.

**Figure 18** Bus Zone sign

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*Guidelines for road safety around schools*
Depending on the traffic circumstances bus stops might be catered for in a bay. If median islands are installed along a road and they serve as refuges for pedestrians, a bus stopped next to the island will stop all traffic behind it. This is not necessarily acceptable, depending on traffic circumstances. It is not appropriate on important traffic arteries. On local roads a bus blocking the passage of following traffic is usually less of a problem. A short duration of stopping by a bus dropping off or picking up a few passengers is usually not of concern. However buses stopping for more than a few seconds holding up following traffic can cause safety problems. This is a matter of assessment of individual circumstances by experienced road safety practitioners. In the case of arterial roads, arterial traffic must be able to pass a stopped bus without crossing the centre of the road. This may require a bus bay to be constructed.

The public transport service group within the DLP must be consulted in respect to the location of bus stops and the provision of bus bays.

**School owned buses**

In some instances a school has its own bus. Stopping areas for these buses is usually on the school grounds. The places where these buses stop should be clearly marked and separate from other parking. Stopping areas should avoid the need for the bus to reverse and children should be able to leave and enter the bus directly from a path.

**Road crossings**

The ability of children and other pedestrians to safely cross roads is very important. Road crossing types include pedestrian bridges and underpasses, traffic control signals, marked foot crossings, pedestrian crossings and children’s crossings. Apart from bridges and underpasses the others have legal definitions in the Australian Standards 1742.10. Bridges and tunnels are extremely costly to build and they are reserved for crossing places with high pedestrian demands and very high vehicle movements.

**Traffic control signals**

Traffic control signals are installed at intersections that have high volumes of conflicting traffic. The signals may also incorporate pedestrian lights (e.g. *Walk, Don’t Walk*) incorporated with the signals. However young children have difficulties understanding the operations of traffic control signals and so they may not be the optimal solution to enhancing safety for young children crossing roads in all circumstances.
Marked foot crossings

These are pedestrian operated signals complemented by road markings. Marked foot crossings can be part of intersection signals (the pedestrian lights with lines across the road to mark where pedestrians must walk) or be a separate crossing facility installed between intersections. They are installed only where pedestrian crossing demand is high. Young children usually have difficulties understanding the operations of these facilities and they should generally not be installed to facilitate young children crossing busy roads.

Marked foot crossings are not usually appropriate for school children except where the road is very heavily trafficked and pedestrian numbers are very high for significant proportions of a day.

Pedestrian crossings (zebra crossings)

Pedestrian crossings are a regulatory device comprised of stripes painted on the road together with a ‘walking legs’ sign on each side of the road on the approach side of the crossing. These crossings impose a mandatory no stopping prohibition of 20 m on the approach side and 10 m on the leaving side of the crossing.

These crossings require consistent use for pedestrians to be afforded a reasonable level of safety. They should therefore not be installed where pedestrian use is low or spasmodic. Infrequent use leads to drivers not expecting pedestrians to be on the crossing and they are therefore unprepared to stop for the occasional pedestrian stepping onto the road. They are not particularly safe for children of primary school age to use for this reason and that children have difficulty judging the closing speed of approaching traffic. Children may step onto these crossings in the belief that vehicle drivers will have seen them and be able to stop in time. This is often not the case. Consequently installing pedestrian crossings to cater just for school children is not recommended.

Measurement of distance — Pedestrian crossing

Figure 20 Marked foot crossing

Figure 21 Pedestrian crossings (left shows signs and right shows No Stopping distances)
Children’s crossings

Children’s crossings afford children the highest level of protection of all crossings, especially where an adult trained warden or monitor operates the crossing and traffic is controlled by stop banners held by the warden.

They are installed where high volumes of children cross busy roads on application from the school to the relevant local road authority. For maximum effectiveness these crossings should only be operational during school hours and the crossing flags removed when not in use.

Figure 22 Children crossing flag

Figure 23 Children crossing warning sign (with Children’s crossing in far background)

Figure 24 Children’s crossing
Note that children crossing flags on the approaches to crossings are installed by the monitor when the crossing is operating. It is the responsibility of the school principal to ensure that the flags are installed and removed at the proper times. Children crossing warning signs are permanently installed and unless children are expected to cross the road at night time, the signs are not reflective (like most other warning signs).

**Applications for children’s crossings**

The NT Transport Group’s *Children’s Crossing Guidelines* mention that these crossings are intended for use at primary and preschools. The relevant road authority (DLP or council depending on who controls the road) decides the location of a school crossing. School councils should approach the relevant local authority regarding the installation of a children’s crossing. This may include assistance from the school council in collecting information about the numbers of pedestrians and vehicles using the road in the vicinity of the crossing.

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**NOTES:**

1. Island kerbs may be painted white.
2. If a refuge is used in conjunction with a marked-crossing, the spacing between the islands shall be increased accordingly.
3. Length of splayed approach marking should be increased or other delineation devices considered if visibility to the island is reduced by vertical or horizontal alignment. Unidirectional yellow raised retroreflective pavement markers shall be provided at 6.0 m spacings.
4. Painted median is preceded by a single barrier line extending for 30 m minimum.
5. Where refuges are used on arterial or high speed roads, pedestrians or children warning signs W6-1 or W6-3 (minimum size B) as appropriate, shall be erected together with supplementary plate REFUGE ISLAND (W8-25) in advance of the refuge.
6. KEEP LEFT signs may be omitted if delineation of the island under all conditions is adequate.
7. When used near intersections, the length of the island nearest to the intersection may be reduced to accommodate turning traffic. A suggested minimum length is 1.25 m.
8. Road lighting in accordance with AS/NZS 1158.4 should be provided.
9. Frangible pedestrian assist handrails may be provided on the island at the pedestrian crossing point provided the island is at least 2 m wide.
10. Variations to the no-stopping distance may be required, see Clause 6.2. The no-stopping zone on the departure side may need to be extended if needed to a point where the roadway is wide enough for parking and passing traffic.
11. Width W to be desirably 3 m minimum if there are high pedestrian volumes or significant numbers of cyclists or people with disabilities, or 2 m minimum in other cases.

**DIMENSIONS IN METRES**

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*Figure 25 Layout of children’s crossing markings, signs and bollards*
If required, it is the school council’s responsibility to recruit and train monitors for the crossing, and the responsibility of the principal to ensure that correct monitor behaviour is enacted. The school must gain written authorisation from the relevant local road authority under Part IV, Section 12 of the Traffic Act. Monitors may be volunteers, teachers or adults employed for the specific job.

Under the Traffic Act, controlling the behaviour of motorists at these crossings is the responsibility of the NT Police.

The relevant road authority supplies the school with advance warning flags to use on the approaches to the crossing and also installs the crossing pavement markings and appropriate advance warning signs. It is also responsible for the upkeep of the crossing however replacing the flags is usually the school’s responsibility.

Further details on children’s crossings and how to apply for them are available in the DLP Children’s Crossing Guidelines on the DLP Transport Group website www.roadsafety.nt.gov.au

**Bicycle safety**

Traffic laws allow cyclists to ride on any footpath unless a No Bicycles sign is displayed (NT Traffic Regulations Section 85). While the number of bicycle users vary from one school to another it is important that the safety of child cyclists be considered. For instance paths around schools should be wide enough for cyclists and pedestrians to share. At places where paths meet roads consideration should be given to encouraging children to dismount from bicycles when crossing roads rather than attempting to ride across them. By law cyclists are not permitted to ride across a road on a children’s crossing, marked foot crossing or pedestrian crossing. Entrances to bicycle parking areas on school grounds should be separate from entrances for motor vehicles and pedestrians. Potential conflict between motor vehicles and bicycles should be avoided. This requires sight lines when entering parking areas on school grounds to be clear of obstacles.

**Pedestrian fencing and landscaping barriers**

Pedestrian fencing is generally used in association with crossing facilities where it is necessary for safety to direct children to places where crossing is appropriate and deter them crossing where it is unsafe. It may be used on nature strips or medians (wide medians only). However fencing should be used sparingly and carefully applied since it also prevents pedestrians leaving a carriageway. Attention should also be given to the placement and height of fencing to ensure that it does not obscure sight lines for pedestrians wanting to cross a road and for vehicle drivers to see pedestrians - children in particular. Landscaping barriers are generally not favoured because they tend to interfere with sight lines or distract pedestrians from looking for oncoming vehicles. If these barriers can be crossed relatively easily by children they will do so. The consequence is that children may be hidden from drivers (in the case of shrubbery) or distracted from looking for traffic.

9.2. **Transportable classrooms**

Other engineering issues can arise as a consequence of changes to schools such as the introduction of additional (transportable) classrooms.
Transportable classrooms

When schools rapidly increase in numbers of students (such as often occurs with government schools) DET usually caters for increases by using demountable classrooms. These are placed on the school site in positions that generally suit school administration needs and in most situations this is done in consultation with local governments. The increase in student numbers is often the result of urban infill (denser land use) in addition to the ability of students to attend schools that are not necessarily closest to them. DET often is not aware of student numbers at any school until the beginning of the school year and this presents particular difficulties in terms of classroom accommodation. The number of demountable classrooms allowed to be located at a school is determined by DET and is restricted. The location of these rooms can impinge on road safety particularly for schools that are not fenced. Students tend to take the shortest distance to home and that may not involve use of facilities that were positioned prior to the transportable being located at the school. Places where pedestrians did not previously travel can become used, resulting in a need to consider new paths and pedestrian facilities and sometimes additional parking.

9.3. The ideal school

While there are many school road configurations that will provide a high level of safety for children, some of the elements that make these areas safe are as follows:

- Road access to schools should be provided by the school having roads on at least two but desirably three sides. It is preferable that one is a local distributor or connector road.
- The main entrance to the school should be from a local road.
- Off-road parking where speeds are restricted by raised plateaus should be available for parents and carers.
- Indented on-road parking should be away from the entrance on the local road(s).
- Pick up and set down area should be on a one way service road near the front of the school or on the local road in front of the school (this is achieved by installing No Parking signs along the road that may need periodic enforcement).
- Traffic circulation should be enhanced by treatments that encourage vehicles to travel in a direction that enables dropping off and picking up on the school side of the road.
- Turn around areas should be provided where necessary such as roundabouts at convenient nearby intersections.
- Pedestrian and school children bicycle access ways should not conflict with motorised traffic.
- School staff parking away should be from other parking and on school grounds.
- Median refuges on the local distributor road should be next to the school.
- Bus stops on the school side should be away from main congestion areas (main entrance).
- School recreational areas should be adjacent to the school.
- Visibility at all entry points and driveways and road crossings must be very good.
- Traffic speeds on local roads around the school should be limited by engineering treatments to not more than 40 km/h (roundabouts, general streetscape modifications) and these may require periodic enforcement.
- School warning signs should be installed and clearly visible on all school approaches.
Part B: Road safety problems and solutions

- No Stopping kerbside prohibitions should be imposed on the side of the road opposite the school for an hour before and after school times (this may require periodic enforcement).

- Children’s crossings (where warranted) should be located where children congregate to cross roads (as long as it is determined to be the safest place to cross).

- Paths (footpaths and shared paths) should provide easy access to schools and be located on the school side of the road.

- Where one road is a cul de sac there must be a very generous car park and turn around area at the end of a cul de sac.
10. Common problems and possible solutions

This section identifies typical problems that can occur at or near schools and suggests actions by local road authorities and schools that might be taken to solve them. They are not exhaustive and require expertise in respective areas to implement. While much of the following relates to potential engineering solutions there are other actions such as education, encouragement and enforcement that may be appropriate.

It is important that solutions conform to good practice determined by qualified personnel. Solutions generally require contributions by road users, schools and the various agencies involved with implementation including local governments for them to be effective.

Table 4 Frequent problems and possible solutions

<table>
<thead>
<tr>
<th>Issue</th>
<th>Problems</th>
<th>Possible solutions</th>
</tr>
</thead>
</table>
| Speeding  | Vehicles travelling too fast          | • Check conspicuity and visibility of children and school warning signs and remove any obstructions. Request relevant road authority to install (if not installed) or replace if dilapidated  
• check conspicuity and visibility of school zone speed limits (prune vegetation if obscuring or contact DLP if dilapidated)  
• police enforcement of special school zone speed limits  
• raise awareness of speeding in community newspapers and school council circulars  
• consider availability of speed alert mobiles to provide messages such as, “Please slow down - Consider our Kids”  
• examine options for implementation of traffic calming measures if justified (following recommended consultation process regarding options)  
• develop a School Road Safety and Traffic Guide and outline expectations of school community for compliance to this traffic law  
• include reminders about this aspect of safe driving in newsletters and praise those parents who do the right thing. |
### Part B: Road safety problems and solutions

<table>
<thead>
<tr>
<th>Issue</th>
<th>Problems</th>
<th>Possible solutions</th>
</tr>
</thead>
</table>
| **Road crossings** | Unsafe for children to cross busy road or crossing at dangerous place       | • Request warning signs from relevant road authority if not already installed and have them enforced  
• encourage children to shift to safer crossing location  
• examine path and fencing requirements for preferred crossing location  
• request a review of student pedestrian needs to the relevant local authority (school principal or chairman of school council to apply)  
• review need for refuge and median islands  
• review sight lines and school pedestrian entry and exit locations  
• review path locations and alignment.  
• review location of bus stops  
• consider a voluntary one way system so that parents are encouraged not to park on the opposite side of the road  
• develop a *School Road Safety and Traffic Guide* and outline expectations of school community for compliance to this parking law  
• include reminders about this aspect of safe parking in newsletters and praise those parents who do the right thing  
• conduct classroom based pedestrian safety education from the *Safer Roads* curriculum resource  
• send home the *At Home Activities* about pedestrian safety from *Safer Roads* curriculum resource. |

| **Manoeuvring** | Vehicle u-turning in driveways or near congested areas                     | • Advise parents and carers through school newsletter of dangers and advise of safer options and thank those parents who do the right thing  
• examine options for installing a roundabout at nearby intersection  
• examine potential for a median island over length of school frontage  
• request enforcement through your local road authority or NT Police if the u-turns are illegal or are considered to be dangerous  
• consider a voluntary one way system so that parents are encouraged to approach the school in a way that does not require a u-turn  
• develop a *School Road Safety and Traffic Guide* and outline expectations of school community for compliance to this traffic law. |
## Part B: Road safety problems and solutions

<table>
<thead>
<tr>
<th>Issue</th>
<th>Problems</th>
<th>Possible solutions</th>
</tr>
</thead>
</table>
| Parking | Vehicles parking illegally (double parking, parking on paths, across driveways, pedestrian ways or contrary to signs) | • Request enforcement by parking inspectors or NT Police as appropriate  
• review available parking and plan for increases if insufficient parking  
• advise parents and carers through newsletter of dangers and praise those parents who do the right thing  
• seek a safe routine for picking up and setting down children on the school side  
• school and local road authority to work together to develop a *Kiss and Go* zone. Consider planning for a covered area, particularly for children with special needs  
• encourage walking and cycling to and from school  
• consider staggering start and finish times of school day for different year groups  
• develop and distribute to parents a *School Road Safety and Traffic Guide*. |
| Parking | Vehicles parking on the nature strip or parking on side opposite to school and allowing children to cross road | • Review available parking and plan for increase if insufficient parking  
• advise parents and carers through newsletter of dangers and seek safe routine for picking up and setting down children on the school side  
• install *No Parking on Nature Strip* signs or *No Stopping* signs where stopping is not appropriate on the road and enforce these when first installed  
• consider a voluntary one way system to prevent parking on both sides of the road. |
| Visitor parking inadequate | | • Review available parking and liaise with school principal or DET to negotiate cost sharing arrangements for improved parking  
• encourage walking and cycling to and from school  
• encourage parents to park away from school (e.g. local reserve or shopping area) and reward behaviour in school newsletters. |
| Parking in the bus bay | | • Ensure signage is clear and legible  
• have teachers and parent volunteers monitor the bay occasionally to encourage compliance with this parking law  
• request enforcement and assistance from your local road authority  
• develop a *School Road Safety and Traffic Guide* and outline expectations of school community for compliance to this parking law  
• include reminders about this aspect of safe parking in newsletter and praise those parents who do the right thing. |
### Part B: Road safety problems and solutions

<table>
<thead>
<tr>
<th>Issue</th>
<th>Problems</th>
<th>Possible solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking</td>
<td>Parking or driving through teachers’ car park</td>
<td>• Ensure all signage is clear and legible &lt;br&gt;• have teachers monitor the area occasionally to encourage compliance with this parking law &lt;br&gt;• develop a <em>School Road Safety and Traffic Guide</em> and outline expectations of school community for compliance to this parking law &lt;br&gt;• include reminders about this aspect of safe driving in newsletters and praise those parents who do the right thing &lt;br&gt;• consider installing gates on the car park which get closed during peak periods &lt;br&gt;• consider having a parking monitor to move people along.</td>
</tr>
<tr>
<td>Paths</td>
<td>Pedestrians obstructing making it difficult for people to move along</td>
<td>• Education through school newsletter.</td>
</tr>
<tr>
<td></td>
<td>Damaged</td>
<td>• Repair path &lt;br&gt;• schedule maintenance checks.</td>
</tr>
<tr>
<td>Intersection</td>
<td>Traffic queues</td>
<td>• Refer to relevant road authority if road signs are an issue.</td>
</tr>
<tr>
<td></td>
<td>Poor sight distance</td>
<td>• Improve sight distance if possible.</td>
</tr>
<tr>
<td></td>
<td>Pedestrian safety problem</td>
<td>• Review need for engineering solutions (treatments).</td>
</tr>
<tr>
<td></td>
<td>Vehicle crashes</td>
<td>• Conduct crash investigation (if serious injury or fatal) or Road Safety Audit &lt;br&gt;• consider eligibility for black spot funding.</td>
</tr>
<tr>
<td></td>
<td>No ramps for pram or wheelchair access</td>
<td>• Install if local road or refer to DLP if DLP controlled road.</td>
</tr>
<tr>
<td>Bicycles</td>
<td>Children not wearing helmets, riding incorrectly, dinking or doubling</td>
<td>• Advise school principal &lt;br&gt;• advise parents and carers through school newsletter of benefits of wearing helmets.</td>
</tr>
<tr>
<td></td>
<td>Bicycle parking racks not available at school and bicycles badly maintained</td>
<td>• Advise school principal.</td>
</tr>
<tr>
<td></td>
<td>Bicycles using road rather than paths</td>
<td>• Examine options to install shared path.</td>
</tr>
</tbody>
</table>
### Part B: Road safety problems and solutions

<table>
<thead>
<tr>
<th>Issue</th>
<th>Problems</th>
<th>Possible solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bus</strong></td>
<td>Bus stop in dangerous place, requires relocation or modification</td>
<td>• Liaise with Public Transport Service Group and school principal.</td>
</tr>
<tr>
<td><strong>Passengers in vehicles</strong></td>
<td>Failure to wear seatbelts or inappropriate behaviours (e.g. leaning out of windows)</td>
<td>• Police enforcement.</td>
</tr>
<tr>
<td></td>
<td>Alighting road-side</td>
<td>• Advise parents and carers through school newsletter of dangers.</td>
</tr>
<tr>
<td><strong>Road surface</strong></td>
<td>Pot holed or cracked surface</td>
<td>• Maintenance issue. Schedule repair and regular checks.</td>
</tr>
<tr>
<td><strong>Road markings</strong></td>
<td>Inadequate or faded road markings, broken reflective markers</td>
<td>• Advise relevant local authority.</td>
</tr>
<tr>
<td><strong>Advertising sign</strong></td>
<td>Obscuring visibility or obstructing</td>
<td>• Investigate and relocate or remove (depending on local law). Refer to Department of Construction and Infrastructure for Advertising Signs Guidelines at <a href="http://www.nt.gov.au/infrastructure">www.nt.gov.au/infrastructure</a></td>
</tr>
<tr>
<td><strong>Trees and shrubs</strong></td>
<td>Obscuring visibility</td>
<td>• Remove or prune if on nature strip or median</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• contact principal if on school land.</td>
</tr>
<tr>
<td><strong>Heavy vehicles</strong></td>
<td>Inordinate use of road</td>
<td>• Undertake area counts and liaise with DLP on options.</td>
</tr>
<tr>
<td><strong>Pedestrians</strong></td>
<td>Children not using crossings or concern with closeness of traffic and older pedestrians</td>
<td>• Evaluate location of the crossing and available network of footpaths etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• install hand rails</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• contact school principal or school council and friends to initiate intervention program.</td>
</tr>
<tr>
<td><strong>Traffic-control signals</strong></td>
<td>Faulty, long queues or pedestrian demand high (WALK lights required)</td>
<td>• Contact DLP.</td>
</tr>
</tbody>
</table>
Part C: Remote Communities
Part C: Remote Communities

Who is this guide for?

- People who work in schools
- Local governments
- All local organisations
- Families
- Community members

This Guide is a summary of a more detailed document.

References to the Guidelines for Road Safety Around Schools are written in ORANGE

There are some very useful road safety resources in the Guidelines

Why do we need a guide?

Children can get hurt going to school or coming home as:

- Passengers in a car or bus
- Riding a bike
- Walking

11. What are the big risks?

As passengers in a car

- Car moving before children are safely seated
- Passengers not using a seatbelt or child restraint
- Children sitting in front seat
- Children in the back of a ute
- Driver not concentrating, kids making noise

What can be done?

- Everyone should be in before moving the car
- Seat belts are working and used
- Children sitting in back seats
- Children never sitting in the back of a ute
- Teach children to be quiet when they are in a car
Part C: Remote Communities

As a passenger in a bus

- Children moving around while the bus is moving
- Children distracting bus driver
- Getting out of bus into traffic
- Driver not concentrating, kids making noise
- Not looking for cars coming when getting off bus

What can be done?

- Provide working seat belts
- Teach children to be quiet in the bus
- Drivers always stops in safe place
- Teach STOP, LOOK, LISTEN, THINK.
- Provide supervision at bus stop

Riding a bike

- Child is hit by a car or bus
- Falling off the bike
- Head or other serious injury
- Rider can’t be seen by drivers

What can be done?

- Provide well fitted, undamaged helmets
- Make sure bikes are the right size for the child
- Teach bike riders to look out for cars
- Provide bike paths or footpaths
- Make car parks ‘bike free’
- Keep footpaths and bike paths hazard free

Walking

- Children running in front of a car
- Pedestrian crossings not being used
- Walking on road not verges or footpaths
- Children who aren’t easily seen by drivers
- Children allowed to walk or run in car parks

What can be done?

- Designate walking areas, no running in car parks
- Provide crossings, mark them well
- Have adults walk children to and from school
- Provide footpaths
- Teach STOP, LOOK, LISTEN, THINK.
- Encourage kids to wear bright coloured clothes
Part C: Remote Communities

12. Who is responsible?

<table>
<thead>
<tr>
<th>ROAD SAFETY ISSUE</th>
<th>WHO IS RESPONSIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road planning</td>
<td>Relevant road authority</td>
</tr>
<tr>
<td>Road building &amp; maintenance</td>
<td>Relevant road authority</td>
</tr>
<tr>
<td>Parking on roads</td>
<td>Relevant road authority</td>
</tr>
<tr>
<td>Parking enforcement</td>
<td>Local government or NT Police</td>
</tr>
<tr>
<td>School car parks</td>
<td>Department of Education and Training (DET)</td>
</tr>
<tr>
<td>Traffic enforcement</td>
<td>NT Police</td>
</tr>
<tr>
<td>School Crossings</td>
<td>Relevant local road authority</td>
</tr>
<tr>
<td>Footpaths &amp; bike paths</td>
<td>Relevant local road authority</td>
</tr>
<tr>
<td>Bus stops</td>
<td>Department of Lands and Planning (DLP) or relevant local road authority</td>
</tr>
<tr>
<td>Street lighting</td>
<td>Local government</td>
</tr>
<tr>
<td>Bike helmet enforcement</td>
<td>Police</td>
</tr>
<tr>
<td>Education campaigns</td>
<td>DLP &amp; DET</td>
</tr>
</tbody>
</table>

What is local road authority?

The responsibility and ownership of roads in the Northern Territory is either with the Northern Territory Government through the Department of Lands and Planning (DLP) or through local governments.

DLP owns approximately 22 000km of road throughout the Territory and local governments own approximately 15 000km of road. Generally, in remote communities the roads are owned by the local government known as a Shire. If you are not sure who owns what road in your community contact your local Shire or DLP on 89247531.
### Part C: Remote Communities

#### 12.1. What schools can do?

<table>
<thead>
<tr>
<th>ACTION</th>
<th>GUIDELINE LINK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road safety content in school curriculum</td>
<td>18, 20.1</td>
</tr>
<tr>
<td>Children’s crossings &amp; traffic wardens</td>
<td>9.1</td>
</tr>
<tr>
<td>School zone signs installed &amp; intact</td>
<td>9.1</td>
</tr>
<tr>
<td>Fence off car park</td>
<td>9.1</td>
</tr>
<tr>
<td>Select specific area for drop off &amp; pick up &amp; provide signage</td>
<td>9.1</td>
</tr>
<tr>
<td>Form a Road Safety Committee</td>
<td>16</td>
</tr>
<tr>
<td>Develop Action Plan</td>
<td>17</td>
</tr>
<tr>
<td>Include actions in School Plan</td>
<td>23</td>
</tr>
<tr>
<td>Road safety material in school newsletters</td>
<td>24</td>
</tr>
<tr>
<td>Arrange special road safety events</td>
<td>20.2</td>
</tr>
<tr>
<td>Road safety content in staff professional development</td>
<td>14</td>
</tr>
</tbody>
</table>

#### 12.2. What local road authorities can do?

<table>
<thead>
<tr>
<th>ACTION</th>
<th>GUIDELINE LINK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support children’s crossings application</td>
<td>9.1</td>
</tr>
<tr>
<td>Conduct site inspections &amp; road safety audits</td>
<td>21.2</td>
</tr>
<tr>
<td>Maintain all roads to ensure bike safety</td>
<td>9.1</td>
</tr>
<tr>
<td>Maintain footpaths to minimise hazards</td>
<td>9.1</td>
</tr>
<tr>
<td>Form a Road Safety sub committee of council</td>
<td></td>
</tr>
<tr>
<td>Develop sub committee plan</td>
<td></td>
</tr>
<tr>
<td>Support special road safety events</td>
<td>20.2</td>
</tr>
</tbody>
</table>
### 12.3. What local police can do?

<table>
<thead>
<tr>
<th>ACTION</th>
<th>GUIDELINE LINK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforce speed limits</td>
<td>10</td>
</tr>
<tr>
<td>Enforce bike helmet laws</td>
<td>10, 12, 24.4</td>
</tr>
<tr>
<td>Check roadworthiness of vehicles</td>
<td>7.5</td>
</tr>
<tr>
<td>Target local safety problems</td>
<td>10</td>
</tr>
<tr>
<td>Enforce parking restrictions</td>
<td>10</td>
</tr>
<tr>
<td>Participate in local planning activities</td>
<td>16</td>
</tr>
<tr>
<td>Participate in school-based road safety activities</td>
<td>16.2</td>
</tr>
</tbody>
</table>

### 12.4. What DLP can do?

<table>
<thead>
<tr>
<th>ACTION</th>
<th>GUIDELINE LINK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run ‘Hector the Road Safety Cat’ presentations in communities</td>
<td>7.6</td>
</tr>
<tr>
<td>Arrange Road Safety Officer presentations in communities &amp; teach bike safety</td>
<td>7.6</td>
</tr>
<tr>
<td>Encourage Walk Safely to School Day</td>
<td>7.6</td>
</tr>
</tbody>
</table>

### 12.5. What everyone can do?

<table>
<thead>
<tr>
<th>ACTION</th>
<th>GUIDELINE LINK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spot the safety hazard &amp; report it</td>
<td>25.2</td>
</tr>
<tr>
<td>Distribute road safety resources</td>
<td>16.2</td>
</tr>
<tr>
<td>Participate in all community planning activities</td>
<td>16</td>
</tr>
<tr>
<td>Read &amp; distribute school newsletter</td>
<td>24</td>
</tr>
<tr>
<td>Provide volunteer road safety assistance</td>
<td></td>
</tr>
<tr>
<td>Be a positive role model</td>
<td></td>
</tr>
<tr>
<td>Fund raising for reflectors and helmets</td>
<td>5.4</td>
</tr>
</tbody>
</table>
Part C: Remote Communities

12.6. Where we need to get to

**School**
- Road Safety Committee set up & working
- Road Safety Plan being implemented
- *Safer Roads* resources being used in class
- Road Safety included in professional development
- Regular road safety activities happening
- Families involved & consulted

**Home**
- Families supervising child safety
- Families involved in all safety planning
- Parents providing helmets & safe clothing
- Parents represented in Road Safety Committee
- Families participating in road safety activities
- Families following up on safety tips in newsletters, posters etc

**Community**
- Everyone participates in planning
- All organisations distribute safety material
- Adults provide good example of safe behaviour
- All hazards are reported
- Local government taking positive action on infrastructure
- Police enforcing traffic and helmet laws
13. Useful websites

**ARRB Group**
Home page: www.arrb.com.au

**Australian Government Department of Infrastructure, Transport, Regional Development and Local Government**

**Austroads**

**Australian Red Cross**
www.redcross.org.au

**Automobile Association of the Northern Territory**
www.aant.com.au

**Children’s Crossing Guidelines**

**Department of Lands and Planning**
www.nt.gov.au/dlp

**Department for Transport** (United Kingdom)
www.dft.gov.uk

**Department of Education and Training**
www.det.nt.gov.au

**Kidsafe NT Safety in Driveways** (2005)

**Main Roads WA**
(crash tool/crash analysis)

**Pedestrian Council of Australia**

**RoadWise-What is the RoadWise Program**
www.roadwise.asn.au

**Safer Road Use - A Territory Imperative**
www.saferroaduse.nt.gov.au (for statistics and reports)

**St. John Ambulance**
www.stjohnnt.org.au
Part D: Resources for schools
14. Road safety in a Health Promoting Schools Framework

Research indicates that the most effective school road safety interventions are those that are based on whole of community awareness and commitment. A useful framework to keep in mind when planning school road safety strategies is the World Health Organisation’s *Health Promoting Schools Framework* (Australia Health Promoting Schools Association 2001).

This framework can be applied to any health issue but in a school road safety context, it advocates that student road safety learning experiences in the classroom be complemented by strong school environment road safety strategies and strong links to parents and relevant community agencies. The diagram on page 52 represents what the *Health Promoting Schools Framework* may look like in the context of effective school road safety:
**Health Promoting Schools Framework**

**School environment**
- A School Road Safety Committee, Student Road Safety Committee or Occupational Health and Safety Committee is established.
- Road safety issues in the school community are identified and an action plan is developed to address them.
- School road safety and traffic advice or guides are developed with consultation and distributed to staff, parents and carers.
- Safer school road safety environmental strategies such as *Kiss and Go* parking bays are implemented.
- School road safety issues are promoted and safer school road safety behaviours are celebrated with parents and carers through newsletter tips, assembly items and library displays.

**Parent and community involvement**
- The parent information and at home activities in the *Safer Roads* resources for early, primary and middle school children are distributed to parents from their children.
- Parents are represented on the School Road Safety Committee.
- Parents are encouraged to participate in school road safety learning experiences.
- DLP, local government representatives (engineers, rangers etc.) and local police are consulted to address road safety issues in the school.
- Parents receive regular road safety tips through school newsletters.

**School health curriculum**
- *Safer Roads* resources are used in all early childhood, primary and middle school classrooms.
- Professional development on road safety is available to staff.
- Students, parents and teachers have input into school road safety issues addressed through the curriculum.
15. Steps to improving road safety around your school

The following step-by-step list is a quick reference guide for teachers, parents and students to plan for improving road safety around schools. These steps are further elaborated upon in this handbook (see appropriate sections).

**Step 1: Form a School Road Safety Committee** or consider including within the scope of the school's Occupational Health and Safety Committee to develop and implement a road safety action plan (see section 13).

**Step 2: Conduct a school road safety survey and collate data** or collect other information to determine road safety problems around the school (see sections 14 and 19).

**Step 3: Develop an action plan.** Firstly consider a range of education and encouragement strategies such as classroom and at home activities, developing a *School Road Safety and Traffic Guide*, developing a Student Road Safety Committee and safer pedestrian and cyclist programs (see sections 14-16).

Secondly, consider a range of engineering strategies relating to traffic speed, parking and road crossing (see sections 9 and 18).

**Step 4: Implement the action plan**

**Step 5: Review progress of the action plan** by checking if the planned strategies in the ‘By when?’ column have been implemented and reflect on their success to address the issues identified.

**Step 6: Maintenance.** Monitor progress and modify strategies, building on successes and identifying and implementing ways to improve others. Continue to promote school road safety practices and address other issues as they arise.
16. Forming a School Road Safety Committee

16.1. Rationale for forming a School Road Safety Committee

It is essential for those wishing to bring about coordinated change in schools to have a basic working knowledge of how schools can change. The following four components are vital for change to occur in schools:

1. A pressure for change
   - Is the principal supportive?
   - Are teachers, parents and students supportive?

2. A shared vision of change
   - What will these changes look like?
   - How will you visually summarise what you want to do?
   - How will you highlight the benefits for students, parents, teachers and school administration?

3. Capacity for change to occur
   - Will the school make this health change a priority?
   - Is the principal supportive?
   - How can you build the good will of staff and parents?
   - Who can help you implement your health changes (e.g. local governments or local NT Police)?

4. A plan for change
   - What are the key issues?
   - How will these issues be addressed?
   - What resources are required to implement strategies?
   - Will there be costs involved?

The best way for these four components to be incorporated into changes to school road safety issues is to work with a committee. It is suggested that the School Road Safety Committee comprise between five and eight representatives from the following:

- principal or member of the school administrative team
- health education coordinator
- interested teachers (from different year levels)
- students and interested parents
- community members (e.g. local government representative).

Alternatively, consider incorporating into the scope of the school’s current Occupational Health and Safety (OHS) Committee to develop and implement the school’s road safety action plan with the provision of input from key groups (parents, students, teachers and community members). Incorporation of road safety into the OHS Committee’s scope could allow for easier integration with other OHS guidelines.
16.2. Tips for effective coordination of a School Road Safety Committee

Conducting effective meetings

- Meet once a month or twice a term preferably away from school as this may provide a more relaxed atmosphere.
- Start and finish meetings on time.
- Conduct meetings with an agenda.
- Ensure that tasks are equally shared among the committee.
- Clearly record actions.
- Appoint a facilitator for each meeting to keep the group on task (this role can be rotated).

Developing an action plan

- Before developing an action plan, conduct a survey of parents and families using the School Road Safety Survey Form (section 19) to determine the most popular routes to school and problem areas around the school.
- Identify no more than three key issues for the committee to plan strategies to address each term. Substantial environmental strategies may take some time to achieve due to the need for local governments, your local road authority and the Department for Education and Training to budget for these items.
- Use the action plan (section 16) provided to plan strategies that the committee will undertake.

Implementing the action plan

- Consider whether the plan will need to be passed to the school decision making group for approval.
- Ensure that the first strategy to be implemented is a high profile or very visual strategy (e.g. an assembly launch of the School Road Safety and Traffic Guide).
- Ensure that planned strategies are spread evenly throughout the course of the year for maximum impact and to spread the workload.
- Ensure that the workload is evenly shared among the committee.
- Ensure that the Student Road Safety Committee (if it exists) is aware of the action plan and is addressing similar outcomes.
- Ensure that the plan is reviewed at each meeting.

Maintaining momentum

- If frustrations or doubts occur remind people that change is a process not an event and that it takes time to gain results from a new initiative.
- Prepare for the long haul. A new program needs to be sustained for three to five years before it becomes part of a school culture. Ensure that new teachers and families to the school are made aware of any existing road safety strategies and the School Road Safety and Traffic Guide.
- Involve all stakeholders. Parents must be part of the strategies the committee develop. They can become the best advocates for school initiatives if they are brought on side and informed early in the planning process. Representatives from government agencies such
as DLP, local governments and NT Police are crucial for the implementation of planned strategies. Try to develop personal relationships with these representatives.

• Share successes and results of data collection. This positive feedback loop will sustain the implementation of your program. Articles in the newsletter, on the school website, in local newspapers, on school notice boards and items at assemblies are useful means of celebrating success.

• Don’t underestimate the power of a Student Road Safety Committee. Strategies implemented by this student body (e.g. assembly items about parking congestion around the school, double parking or special walk to school or cycle to school days) have a strong impact on other students who can in turn encourage their own parents to do the right thing.
17. Collating data from school road safety survey and developing an action plan

Included in section 19 is a standard survey you can use to systematically identify road safety issues around your school. It is recommended that you include the whole school community in determining priorities and building ownership of them. This also ensures that all issues are identified and can be addressed.

The responses collected should be used to guide you in developing your action plan. Repeating the survey once you have completed all the actions in your plan will help measure your success.
18. Possible solutions to common problems identified in the action plan

The following solutions are a guide only to the possible problems identified by the action plan and may not be appropriate in every situation. Additionally not all solutions have to be implemented to address these common problems. Schools are encouraged to observe problems closely to help them identify the cause and should consider using a range of education, encouragement and environmental strategies. Advice is available from local governments, DLP, NT Transport Group to assist in the selection of appropriate strategies.

The sample action plan in section 16 has been included to help schools plan a strategic road safety program. The ‘What are our key issues?’ column relates to the main findings from the data collection. The ‘How will we address this issue?’ column identifies the range of education, encouragement and engineering strategies the school plans to use to address these issues. The ‘Who will do this?’ column ensures that the workload is shared among the School Road Safety Committee or school community and the ‘By When?’ column ensures accountability and can be used as a checklist to monitor the progress of the action plan. An action plan pro forma is included in section 20.

When developing the action plan please refer to other sections of these guidelines particularly the background (section 5), roles and responsibilities (section 6), finding solutions (section 9) and frequent problems and possible solutions (section 10).
### Table 5 Sample action plan

<table>
<thead>
<tr>
<th>What are our key issues?</th>
<th>How will we address this issue?</th>
<th>Who will do this?</th>
<th>By when?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before and after school congestion</td>
<td><strong>Education and encouragement</strong>&lt;br&gt;Develop a <em>School Road Safety and Traffic Guide</em> to outline rules and guidelines for parking and vehicle access around the school. Launch at assembly.</td>
<td>School Road Safety Committee (Tom and Lisa) consultation with School Council and Student Road Safety Committee.</td>
<td>End of Term 1</td>
</tr>
<tr>
<td>Congestion around Busy Street at drop off and pick up times</td>
<td><strong>Encourage teachers to use the classroom and <em>At Home Activities</em> from the <em>Safer roads</em> resources relating to pedestrian safety.</strong></td>
<td>Mark to liaise with all teachers.</td>
<td>By Week 3 Term 1</td>
</tr>
<tr>
<td>Children running onto road from behind parked cars</td>
<td><strong>Distribute certificates at assembly for Safe Pedestrians and Safe Driver Awards.</strong></td>
<td>Tony to explain system to Student Road Safety Committee. Students to identify and present certificates every fortnight at assembly.</td>
<td>End of Term 1</td>
</tr>
<tr>
<td>Parking on footpaths during these times</td>
<td><strong>Engineering</strong>&lt;br&gt;Liaise with your local road authority to install <em>Kiss and Go</em> signs and have a special morning tea to launch the use of them.</td>
<td>Tom to liaise with Sue (engineer at local government)</td>
<td>By Week 3 Term 1</td>
</tr>
<tr>
<td></td>
<td><strong>Enforcement</strong>&lt;br&gt;Liaise with your local road authority or NT Police to book illegally parked cars over a two week period initially.</td>
<td>Lisa contact local road authority (or NT Police) and explain problem areas.</td>
<td>Kiss and Go installed by start of Term 2. Provide information to parents Week 10 Term 1</td>
</tr>
</tbody>
</table>

Part D: Resources for schools

19. Sample action plan: Gunnadoo Primary School
## What are our key issues?

<table>
<thead>
<tr>
<th>Issue</th>
<th>How will we address this issue?</th>
<th>Who will do this?</th>
<th>By when?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars speeding along Straight Street particularly before and after school.</td>
<td><strong>Education and encouragement</strong>&lt;br&gt;Assembly item about dangers of speeding by students from <em>Safer Roads</em>.&lt;br&gt;Liaise with local government to borrow a speed alert mobile (SAM) pending approval and funding.&lt;br&gt;Request in newsletter to obey speed limits around school.</td>
<td>Students Road Safety Committee to organise (Lisa to assist coordination).&lt;br&gt;Vicki to organise newsletter snippet.</td>
<td><strong>By Week 5</strong>&lt;br&gt;<strong>Term 1</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Engineering</strong>&lt;br&gt;Liaise with your local roads authority, local council or DLP to install 40 km/h school zone on both sides of school grounds.</td>
<td>Tom to liaise with John at local road authority&lt;br&gt;Students Road Safety Committee to write letter requesting visit from John (local road authority).</td>
<td><strong>By Week 1</strong>&lt;br&gt;<strong>Term 1</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Enforcement</strong>&lt;br&gt;Liaise with local police or your local road authority to make spot visits to school (before and after) and book speeding offenders.</td>
<td>Tony to liaise with Sue (local government) and Frank (Police). Student Road Safety Committee to write article about this for newsletter and assembly.</td>
<td><strong>Each term as required</strong></td>
</tr>
</tbody>
</table>
### What are our key issues?

**Dangerous situation for children as cyclists and drivers share main drive to car park.**

### How will we address this issue?

**Education and encouragement**
- Ensure that rules for shared paths for cyclists are clearly outlined in *School Road Safety and Traffic Guide* and promote in newsletter.
- Discuss with students at assembly.
- Encourage teachers to use the classroom and *At Home Activities from the Safer Roads* resources relating to safety on wheels.
- Attend the Road Safety Centre in Darwin or Alice Springs.

**Engineering**
- Liaise with local government to install a pedestrian and cyclist bollard at end of shared paths to encourage student cyclists to dismount and not enter main drive to car park.

### Who will do this? By when?

**Who will do this?**

- Vicki to check and organise newsletter snippet. **End of Week 3 Term 1**
- Tom to discuss at assembly and organise Student Road Safety Committee to reinforce at weekly assembly spot. **Ongoing as required**
- Mark to liaise with all teachers. **By end of Term 1**
- Vicki to book students at centre through DLP. **By end of Term 1**
- Tony liaise with Sue (local government). **By end of Term 1**
20. Suggested education and encouragement strategies to address key road safety issues

Education and encouragement strategies should be the strategies that the School Road Safety Committee considers first. These strategies usually involve the whole school community and are often effective economical solutions to key road safety issues. Choose from the following education and encouragement strategies.

20.1. Classroom and at home curriculum material

Safer Roads road safety resources for early childhood, primary school and middle years

These three free resources produced by DLP in conjunction with DET encourage teachers to use them first to plan and implement whole school road safety programs. All learning experiences in these resources are linked to the Northern Territory Curriculum Framework.

The focus areas for the early childhood resource include:

- **Focus area 1: Passenger safety** focuses on wearing a correctly fitted restraint, using the safety door, behaviours that will not distract the driver and using public transport.
- **Focus area 2: Pedestrian safety** focuses on holding an adult’s hand to walk and cross roads, identifying safe places to cross the road and the systematic search strategy, potential and existing hazards in the traffic environment including car parks and planning safe routes to walk to and from school.
- **Focus area 3: Playing safely** focuses on wearing a correctly fitted helmet when riding a bike or wheeled device and safe places to ride.
- **Focus area 4: Sensing traffic** focuses on identifying relevant pedestrian and cyclist road signs, developing auditory recognition of sounds that relate to pedestrians and cyclists and increasing the visibility of pedestrians.

The focus areas for the primary school resource include:

- **Focus area 1: Passenger safety** focuses on the role of restraints in a crash, correct ways to get in and out of cars, buses and trains and passengers’ responsibility to act safely to avoid driver distraction.
- **Focus area 2: Pedestrian safety** focuses on using the systematic search strategy in different locations, identifying potential pedestrian risks and identifying potential hazards in the local area.
- **Focus area 3: Safety on wheels** focuses on selecting safer places to ride bicycles and wheeled devices, choosing and maintaining a bicycle and helmet and the physical, emotional and financial consequences of crashes.
- **Focus area 4: Road signs and rules** focuses on identifying relevant pedestrian and cyclist road signs and the consequences of non-compliance and making decisions in road user situations.
The At Home Activity Sheets at the end of each focus area provide easy to use activities to involve and educate parents and families in school road safety.

The focus areas for the middle years resource include:

- **Focus area 1**: Drug use issues
- **Focus area 2**: Predicting and responding to drug use risks and consequences
- **Focus area 3**: Road users issues
- **Focus area 4**: Predicting and responding to road use risk and consequences
- **Focus area 5**: Taking action.

### 20.2. Whole school strategies

The following strategies can be implemented as whole school or classroom based initiatives. They may be coordinated by teachers, members of the School Road Safety Committee, OHS Committee or members of the Student Health Committee. See section 13 for a range of strategies specifically suggested for members of the Student Health Committee to undertake. Some strategies to consider include:

- **Special events days**: Road Safety Week, Walk to School, Cycle to School Day and Blessing of the Roads
- **Guest speakers**: such as road safety officers to speak to children, staff and parents about key aspects of road safety around schools
- **Launches**: to promote the Safer Roads program, a School Road Safety and Traffic Guide or Kiss and Go bays or similar
- **Competitions**: posters and quizzes on a road safety theme
- **Library and shopping centre displays**: students’ road safety work or skits
- **Advocacy**: students lobby authorities for improvements in local traffic conditions or lobby the Advertising Standards Bureau (Reply paid 83005 Turner ACT 2612) about advertisements that promote unsafe driving practises. Students make personal checklists to take home to their parents and caregivers to advocate the use of the School Road Safety and Traffic Guide or personal pledges to walk or cycle to school
- **Newsletter items**: student work, promotion of special road safety events or general tips about road safety (see section 21)
- **Certificates of encouragement**: certificates for students and parents who do the right thing with regards to road safety
- **Road safety monitors**: older students assist younger students to cross busy roads or wait at Kiss and Go bays.
20.3. Developing a School Road Safety and Traffic Guide

A School Road Safety and Traffic Guide is basically a blueprint of how the committee would like pedestrians, cyclists and motorists to behave while travelling and moving around your school. It lets everyone know when and where they can park, how to use special parking areas such as Kiss and Go bays and includes information about pedestrian and cyclist safety programs.

The key to successful acceptance of this guide is to involve the whole school community in its planning and to launch the guide in a very public way (e.g. at an assembly with invited local media and community members in attendance). The launch of this guide is an ideal opportunity to acknowledge all the community agencies you have liaised with (e.g. your local roads authority, DET, local council, DLP).

It may also be appropriate to involve the Student School Road Safety Committee (if you have one) in the publication of this guide. A colourful student generated pamphlet or fold out wallet card will have more chance of being read by families than an official policy style document.

Ensure that new families and teachers to the school receive this guide and continue to modify and promote it each year. Also distribute the guide to parents at students’ orientation day and reproduce this information in the school handbook or school website (if applicable).

Possible information to include in a School Road Safety and Traffic Guide:

**Introduction**

- Explain that the School Road Safety Committee has developed the following advice to ensure that all children travel to and from school in the safest environment possible.
- Encourage parents and carers to read and follow these guidelines and also discuss it with their children to ensure they understand the guidelines appropriate to them as passengers, pedestrians and cyclists.
- Explain to parents and carers that it is important that other people that take their children to school (e.g. grandparents, babysitters) need to be aware of this information.

**Parking issues**

- Explain applicable designated drop off and pick up areas. For example:
  - **Kiss and Go zones** are specially marked bays to drop off and pick up students and not for standing for periods of over two minutes.
  - **Class and family pick up points** are areas specially designed to alleviate congestion at the main entrance of the school. Give an identified pick up area for preschool, transition and Years 1 to 3, Years 4 to 6 and families.
- Explain alternative parking options. For example:
  - Through negotiation with the local government it may be possible to use the parking area of a nearby community amenity such as a sporting club, community centre or shopping centre for parking before and after school. Encourage parents and carers to use these areas for parking rather than parking in the street.
  - Explain that parking opposite bus bays is prohibited as this situation forces children to cross in front of or behind a bus, putting them at risk of not being seen by other drivers.
• Encourage parents to ask their children to use the safety door (rear door nearest the kerb) for exiting and entering their car.

• Encourage parents to walk their children to and from school to reduce parking congestion and to act as active role models for their children.

• Include booster lessons from your local road safety officer (RSO) or a visit from Hector the Road Safety Cat. Hector the Road Safety Cat targets children aged under seven years. RSOs engage with all levels of the community and do school presentations in conjunction with police. They are coordinated by DLP and can be booked online by going to the NT Transport Group’s Road Safety website or by telephoning 08 8924 7019.

**Pedestrian issues**

• **Walking to school:** research indicates that children under the age of 10 should not walk to school unsupervised as they cannot accurately judge traffic speed and distance. Explain for parents and carers that if their child is under 10 and walks to school unsupervised, they should contact their School Road Safety Committee representative or OHS Committee representative (insert contact details and name) so they can explore forming a buddy system with an older student or another appropriate solution to decrease their child’s road safety risk.

• **Cyclist issues**

   Explain cycling rules in and around the school. For example:

   • Cyclists must wear a correctly fitted bicycle helmet when riding to and from school.
   • Cyclists must ride on the left of the footpath when it is available and give way to pedestrians.
   • Cyclists must walk their bikes across the school pedestrian crossing and into the school grounds.
   • No primary school age child should cycle to school unsupervised unless there are no roads to cross or there is a designated safe pathway.

• **Specific notification of road safety concerns surrounding the school**

   • Explain areas of road safety concerns specific to your school. For example, a crossing point which does not meet criteria for crossing guard but is used by children or intersections which may require extra care during drop off and pick up times. Liaise with your local government regarding which areas need to be included in this section and for practical advice on how dangerous situations may be avoided.
20.4. Developing a Student Road Safety Committee

**Rationale for developing a Student Road Safety Committee**

- A Student Road Safety Committee may be an alternative and more effective way to influence the road safety attitudes and behaviour of students and in turn the parents and caregivers in the school community. This committee can work alongside the School Road Safety Committee or OHS Committee or act as an alternative to these committees.
- A Student Road Safety Committee provides meaningful leadership roles for 6 to 8 senior students. The strategies implemented by this student group reinforce classroom based road safety curriculum and other education strategies that may have been implemented by the School Road Safety Committee. Student Road Safety Committees also promote a greater awareness and commitment to school road safety by the whole school community.

**Tips for effective coordination of a Student Road Safety Committee**

**The committee**

- Particularly encourage boys to nominate for the Student Road Safety Committee as often it is boys who participate in risky road safety behaviour.
- Appoint six to eight Year 6 students to the committee and acknowledge their appointment in the same way as other student leadership roles (e.g. students receive name badges similar to student council or house captain badges).
- Nominate specific roles on the committee (e.g. chairperson, events coordinator, secretary, treasurer, data collector, journalist or photographer). Outline responsibilities of these roles and rotate the roles each term.
- Appoint an adult to supervise the committee on a regular basis, ideally a teacher or parent from the School Road Safety Committee.
- Hold weekly or fortnightly meetings during school time to monitor progress of action plan.

**Developing an action plan**

- Encourage students to develop an action plan that complements or reinforces the action plan developed by the School Road Safety Committee. If no such committee exists, use the data from the School Road Safety Survey Form (section 19) to help students determine road safety issues around the school that need addressing.
- Encourage students to identify no more than three key issues for the committee to plan strategies to address each term.
- Use the action plan (sections 16 and 20) provided to plan strategies that the committee will undertake.

**Implementing the action plan**

- Consider who the plan will need to be authorised by before strategies are implemented.
- Consider allocating a budget to the committee so that student road safety events can be catered for and promoted.
- Encourage the secretary to write letters of thanks to any agencies (e.g. DLP, local councils) who may have assisted with school road safety issues and supply regular minutes to the principal.
- Encourage the school reporter to contribute regular articles to the school assembly, newsletter or website.
• Ensure that the workload is evenly shared among the committee representatives and encourage those students who are not contributing to reconsider their role on the committee.
• Review the committee’s action plan at each meeting.

Possible activities for a Student Road Safety Committee to undertake:

• special road safety events at school such as cycle to school or walk to school days, launch of the School Road Safety and Traffic Guide, Kiss and Go bays, white ribbons for road safety or blessing of the roads Easter campaign, followed by breakfast. These should be implemented in accordance with your school or DET risk management and duty of care guidelines.
• in assembly each term, include some aspect of school road safety such as reports by the Road Safety Committee, songs and skits by other students or guest speakers.
• committee to encourage parents and students to do the right thing with regard to road safety by awarding regular safe driver and safe pedestrian and cyclist awards at assembly
• buddy road safety activities with Year 6 students and Year 1 and transition classes, such as correct crossing of the road with a traffic warden
• organisation of a visit from NT Government RSOs. These RSOs offer informative and educational age specific presentations to school children. For more information contact roadsafety@nt.gov.au or phone road safety on 08 8924 7019
• fortnightly road safety snippets in school newsletter (see section 21)
• development of illustrations or graphics to make the School Road Safety and Traffic Guide pamphlet more visually appealing (remember to get permission to use photographs of children)
• poster or colouring competitions or lunch time song or rap competitions to promote road safety issues or events
• coordination of working bees to cut down any trees or vegetation that may be interfering with driver or pedestrian sight lines and repair or replace bicycle racks
• lobbying support from local agencies for environmental strategies that may be needed in the school road environment or wider community
• student evaluation of classroom and whole school road safety strategies that have been implemented
• free dress days that promote the message that safer pedestrians wear bright clothing and raise money for future school road safety activities in accordance with established school and DET policies.

20.5. Safer pedestrian and cyclist programs

School Education Program

The NT Transport Group School Bike Education Program is conducted at the two Road Safety Centres (Parap in Darwin and Newland Park in Alice Springs). The program encourages children to participate in both practical and theoretical sessions. RSOs deliver the program. It covers acceptable bike safety practices, selecting the correct bike size, and use of helmets. Children are then given the opportunity to practice road awareness skills in a controlled, safe environment.
21. Suggested engineering strategies to address key road safety issues

Engineering strategies are not always the best or only solution to school road safety issues. Education and encouragement strategies should always be considered first, however a number of engineering measures can be used to regulate traffic flow and make school environments safer. When considering engineering strategies consider the following aspects of the school environment:

- Traffic speeds should be low – 40 km/h or less is desirable.
- Parking should be adequate to allow safe drop off and pick up of children, ideally through indented on-road parking or restricted speed off-road parking.
- Paths should be provided on the school side of the road and cycle access paths should be separate from entrances for vehicles and pedestrians.
- Roads should be generally free from high levels of congestion this can be achieved when appropriate through the use of one way traffic flow and roundabouts or turning areas.
- Sight lines for drivers and children should be clear. Ensure that vegetation and other obstructions at all entry points, drive ways and road crossings are lower than a small child.
- Road crossings for children and school warning signs should be safely located and clearly visible on all approaches to the school.
- Staff parking should be away from other parking and on school grounds.

Refer to Part B Section 9: Finding solutions for further detail on engineering strategies. Section 9 addresses such strategies as school zones, warning signs, roundabouts, median islands, traffic calming devices, parking, bus facilities, road crossings, bicycle safety and fencing.

21.1. Road crossing strategies

Children’s crossings

Children’s crossings afford children the highest level of protection at road crossings. This is because an adult trained crossing monitor operates the crossing and traffic is controlled by stop banners held by this adult.

Applications for a children’s crossing need to be made by the principal or president or secretary of the School Council to the local roads authority. Refer to the NT Transport Group website www.nt.gov.au/transport and follow the links to NT Roads for a listing of declared roads under the Local Government Act.

DLP has developed children’s crossing guidelines available online (www.nt.gov.au/transport/safety/road/sandp/documents/Childrens%20Crossing%20guidelines%202010%20Final.pdf). These guidelines include the criteria required for being eligible to apply for a children’s crossing, the necessary road markings and signage for children’s crossings and schools’ key responsibilities when a children’s crossing is established.
Essentially a school should:

- liaise with the School Council and Road Safety or OHS Committees to identify a need for the children’s crossing
- work with the local road authority to establish the children’s crossing
- educate students, parents and staff about using the crossings safely
- ensure the crossing flags are put up at the beginning of the day and removed at the end of the day
- contact the local road authority or NT Police if the school becomes aware of frequent infringements (e.g. illegal parking or speeding)
- reassess the need for a children’s crossing every five years.

![Children's crossing diagram](image)

**Figure 26** Children’s crossing diagram

### 21.2. Road safety audits

A road safety audit is a process whereby the safety potential of proposed projects is maximised and hazards of existing roads are identified. It is looking at a system from the perspective of the safety of all road users and identifying the potential risks and hazards posed by the project as proposed (or as is in the case of an existing road). Road safety audits are commissioned by the road owner and are conducted by a qualified, independent senior road safety auditor.
22. School road safety survey and cover letter

The following letter is an example of a letter sent to families from the school principal inviting them to participate in the school road safety survey.

School letterhead

SCHOOL ROAD SAFETY SURVEY

Dear Family

As part of our commitment to the safety of our children, <School Name>’s School Road Safety Committee will be implementing a range of road safety strategies around our school and local community.

To determine what the key road safety issues are for our school we are collecting vital information from you through the attached data collection form. In addition, drop off and pick up times will be monitored and reviewed to address key road safety issues.

Your cooperation in the completion and return of these forms is greatly appreciated. Should you have any queries, please do not hesitate to contact <contact name> on 08 <phone number>.

We look forward to working with you in creating a safer environment for our children.

Yours faithfully

{Name>

Principal
22.1. School Road Safety Survey

The following survey is an example of a road safety survey that families are invited to complete to assist schools in planning their road safety strategies.

(One form per family to be completed by a parent or carer in reference to the student with the next birthday.)

SCHOOL: ___________________________________________________________

By completing this questionnaire you will be providing important information to assist in the development of strategies to improve road safety around your school. We will collate the information you provide and will then use this information to develop our school’s road safety action plan.

Please fill in the questionnaire and return it to school by INSERT DATE.

STUDENT’S NAME ______________________ YEAR LEVEL _______ AGE______

MALE ☐ FEMALE ☐

If you have other children at this school please list for each their year level and age.

<table>
<thead>
<tr>
<th>Year level</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>Year 5</td>
</tr>
<tr>
<td></td>
<td>10 years</td>
</tr>
</tbody>
</table>

Q1. How does your child get to and from school on MOST DAYS:
   (Please tick one box only)

   In dry weather?
   ☐ CAR
   ☐ WALK OR CYCLE
   ☐ BUS
   ☐ OTHER ________________

   In wet weather?
   ☐ CAR
   ☐ WALK OR CYCLE
   ☐ BUS
   ☐ OTHER ________________

Q2. How many times LAST WEEK did your child travel to and from school by:
   (Indicate by placing a number in each box)

   ☐ CAR
   ☐ BUS
   ☐ WALK
   ☐ OTHER ________________
3. **Please estimate the distance your child travels from home to school.**
(Use the map on the last page as a guide. Please tick one box only.)

- □ 5 km
- □ 1 to 2 km
- □ 3 to 5 km
- □ .5 to 1 km
- □ 2 to 3 km
- □ 5 km or more

4. **Please list any reasons that might prevent you from walking or cycling to school.**
__________________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________________

5. **If your child walks or cycles, are they accompanied to school?**

- □ NO (go to question 6)  □ YES

BY:
- □ ADULT (parent/carer/other)
- □ OLDER BROTHER OR SISTER - AGE: _____________
- □ YOUNGER BROTHER OR SISTER - AGE: _____________
- □ OTHER STUDENT/S - AGE: _____________

6. **Please indicate on the scale below how important you believe road safety is compared to other issues at the school?**
(Please circle one only)

<table>
<thead>
<tr>
<th>Very important</th>
<th>Important</th>
<th>Moderately important</th>
<th>Somewhat important</th>
<th>Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

7. **How would you rate your understanding of road safety issues?**
(Please circle one only)

<table>
<thead>
<tr>
<th>Very high</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
<th>Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
8. In your opinion, how safe is the road environment and the people who use the road near your school? (Please tick one box only)

☐ Very safe  ☐ Fairly safe  ☐ Not sure  ☐ Fairly unsafe  ☐ Very unsafe

9. (A) INSERT STREET NAME: Do you believe there are any traffic problems affecting road users (drivers, cyclists and pedestrians) in the drop off and pick up area in this street next to the school? (Tick as many boxes as apply)

☐ CONGESTION  ☐ DOUBLE PARKING
☐ PARKING IN NO STANDING OR NO PARKING ZONES
☐ PARKING ON THE VERGE
☐ PARKING IN THE BUS BAY
☐ PARKING OR DRIVING THROUGH THE TEACHERS CAR PARK
☐ U-TURNS IN FRONT OF THE SCHOOL
☐ LACK OF PARKING
☐ CHILDREN CROSSING THE ROAD TO CARS PARKED ON THE OPPOSITE SIDE OF THE ROAD TO THE SCHOOL
☐ PULLING INTO AND REVERSING OUT OF PRIVATE DRIVEWAYS
☐ OTHER (Please specify below)

________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________

9. (B) INSERT STREET NAME: Do you believe there are any traffic problems affecting road users (drivers, cyclists and pedestrians) in the drop off and pick up area in this street next to the school? (Tick as many boxes as apply)

☐ CONGESTION
☐ DOUBLE PARKING
☐ PARKING IN NO STANDING OR NO PARKING ZONES
☐ PARKING ON THE VERGE
☐ PARKING IN THE BUS BAY
10. Please mark your normal route to and from school on the map below. Please use different colours to specify mode of transport (red for car, blue for bicycle and green for walking).

<Insert map>

11. Have you noticed any other road safety danger spots in the area or on your regular route to and from school? (Please use the map provided should you wish to indicate the exact location/s.)

________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS FORM, PLEASE RETURN IT TO INSERT WHERE AND WHO BY INSERT DATE DUE.
23. School road safety action plan

Below is an outline of the key headings to consider when developing a school road safety action plan.

Table 6 Action plan template

<table>
<thead>
<tr>
<th>What are the key issues?</th>
<th>How will we address this issue?</th>
<th>Who will do this?</th>
<th>By when?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
24. Newsletter tips

Contained in this section are a variety of articles with a road safety theme that may assist in reducing road safety issues at your school or broader community. These short articles can be reproduced in weekly school newsletters, in your School Road Safety and Traffic Guide or wherever the committee decides that this education strategy is appropriate. These articles target parents and carers and schools are advised to consider including student-led articles in their school newsletters that support the issues presented in this section.

An electronic version (that can be cut and pasted) is available online at www.roadsafety.nt.gov.au.

24.1. Information about your School Road Safety Committee

Welcome from your School Road Safety Committee

Recently our school formed a School Road Safety Committee. This committee consists of ______________________ , ______________________ , ______________________ , ______________________ , ______________________ , ______________________ (names and position in school community e.g. teacher, parent, students etc.). The committee members with your help will be identifying and addressing local road safety problems around our school. To do this task effectively we ask that you complete the School Road Safety Survey that will be sent home this week with your child. For more information please contact (school contact number).

Road Safety Action Plan

Thanks for the information you provided the School Road Safety Committee. The committee has developed an action plan for road safety around our school which includes:

- List key aspects of action plan
- Amend with any additional activities

For more information please contact <insert school phone number>.

24.2. Information about Vehicle Movement around Schools

School 40 km/h zones

40 km/h speed limits are in place around our schools.

These 40 km/h school zones are working towards the aim of a reduction in road trauma for school aged children. The zones are applicable from 7 am to 5 pm on school days and normal speeding penalties apply.

If you do speed you can expect a fine and demerit points. Please take care when driving around our school and observe the 40 km/h limit for the safety of all children.

For more information please contact (insert your local road authority’s contact details).
No Stopping signs

No Stopping signs are located around our school to help your children stay safe. They mean that cars cannot park or drop off or pick up children at all or in some instances during the hours specified on the sign. It may seem convenient to park or stop in these areas but it may also endanger the lives of children, especially small children, who cross the road or walk through this area to school. This sign consists of a red S in a circle with a line through it.

Double parking

Double parking is unfortunately a problem that places the lives of our young children at unnecessary risk. Double-parked vehicles are visual obstructions for young children trying to cross to the other side of the road. They also place children getting in or out of the car at risk, as they must venture to the middle of the road to do so. Please refrain from double parking around our school and use the other safer parking options available to you.

Park on which side?

Many of us never give a second thought as to which side of the road we should drop off or collect our children. It is safer if you park on the school side of the road. Please take care not to park in the No Parking and No Stopping areas marked around our school as this places children at unnecessary risk. When dropping your children at school it is much safer for your children and other motorists if your children leave the car from the rear kerb side door. Your child will know this door as ‘the safety door’. This stops children getting out of the car into oncoming traffic and reduces their risk of them being injured.

Pick up areas

When picking up children in the afternoon here are a few suggestions for you to help ease traffic congestion around our school.

- Pre-arrange a pick up place with your children.
- If possible arrange to meet your children a little further away from the school.
- Arrange to meet your children 5 to 10 minutes later than school finish time to avoid congestion.
- If this is not possible then always attempt to park on the school side of the road to collect your children.
- Use the Kiss and Go pick up area. If your child is not there, move through the area and drive around the block.
- Otherwise park your car further away and walk into the school ground to meet your children.
How do *Kiss and Go* bays work?

We have recently installed some *Kiss and Go* bays along <insert street name> to help overcome the traffic congestion that occurs before and after school.

**In the morning:**

- move to the most forward bay in the *Kiss and Go* area
- ask your children to get out of the rear left hand side door (the safety door)
- parents and carers must remain in the vehicle
- when children are clear of the vehicle, indicate and enter traffic flow.

**In the afternoon:**

- only enter the *Kiss and Go* area if you can see your child is ready to be picked up
- remain in the car with your engine running and handbrake on
- if you cannot see your child, drive on around the school and rejoin the queue.

Please discuss with your children your most preferred pick up point.

**Designated children’s crossings**

When driving around schools motorists need to be aware of children’s crossing locations. When the orange children crossing flags are displayed the crossing is in operation and all drivers should be prepared to stop. Here are a few rules to adhere to:

- Look out for the advanced warning children crossing signs and flags.
- When you see the children’s crossing monitor entering the road, you must prepare to stop your vehicle at the stop line just before the crossing.
- Remain stationary until all pedestrians and the monitor are safely on the kerb or median.
- Do not overtake any other vehicle stopped at a designated children’s crossing.
- For further information please contact your local roads authority or the DLP.

**Disabled parking**

We have disabled parking bays reserved near our school. Please do not park or stop in these bays if you do not have an Australian Council for the Rehabilitation of the Disabled (ACROD) sticker in your vehicle. Even dropping your children off in these bays can be inconvenient for those people who need to use these bays. Please be considerate when around these reserved bays for the safety and convenience of others.

**School holidays**

School holidays are a time to relax and enjoy the break from school however they are also a time when many children are injured on our roads. As parents we have a responsibility to ensure our children are properly supervised when on or near roads, car parks and driveways, as this is where many injuries and fatalities occur. Please keep watch over children during this time as we want to see you and your family all back safely after the break.
School road safety reminder

As we embark on a new school term it is important to remember the importance of some basic road safety rules around school. Please drive carefully remembering the 40 km/h speed zones. Be mindful of children and their parents walking and cycling to school, as well as those students catching buses or waiting to be picked up by parents in vehicles. Schools can be very busy places at drop off and pick up time and your courtesy and patience are appreciated.

24.3. Information about pedestrian and bus safety

Walking to school

While walking to school is encouraged for school children, here are some hints for parents to follow to ensure children enjoy a safe trip to and from school every day.

- Where possible walk to school with your children, especially if children are under the age of 10.
- Arrange for another adult or a group of older friends to walk with your children.
- Identify the safest route to school. Look for such things as the presence of designated crossing areas and footpaths.
- Walk your children along the safest route to school and identify hazards and appropriate crossing locations along the way.

Crossing at a marked pedestrian crossing

Pedestrian crossings are designated by road markings (either painted white lines or concrete centre islands) that warn motorists that a crossing is ahead, to take care and give way to pedestrians.

To use a crossing safely you must:

- walk up to the crossing
- stop
- look
- listen
- think
- keep looking and listening whilst crossing
- do not run, ride or skate across.

Crossing at a designated children’s crossing

Following are some simple steps to ensure you and your children use guard-controlled children’s crossings safely.

- When approaching a children’s crossing, stop back from the edge of the kerb.
- Wait for the attendant to blow the whistle for you to cross.
- Keep your eyes on the traffic and warden whilst crossing.
- If you are on a bike, skateboard or scooter get off the vehicle and wheel or carry it across the road.
Safer playing areas

Most of us know that children will play anywhere at any time. However there are places where children should be discouraged from playing. Playing in driveways, car parks and even local cul de sacs should be strongly discouraged as these have all been designed for vehicle movement not child play areas. Suggest that your children play in the back yard, in a local park or skateboard facility instead.

Picking up your children from the bus stop

When picking up children at a bus stop, there is a few tips for you to follow to get your children home safely.

• Park your car on the same side of the road as the bus stop.
• If you are not driving or cannot park your car on the same side as the bus stop, ensure you wait for your child at the bus stop and accompany them across the road.
• Encourage your children to get off the bus, take five steps away from the road and wave goodbye to the driver as a signal they have alighted safely.
• If required always cross the road with your child after the bus has driven away.

Dropping your children off at their bus stop

Below are some hints for dropping your children off safely at their bus stop.

• Always arrange for an adult to accompany your child to the bus stop.
• Always drop your children off on the same side of the road as the bus stop.
• Encourage your child to wait quietly for the bus and refrain from playing games or with toys by the side of the road.

Getting off the bus

It is extremely important that children are taught how to get off a bus safely to avoid confusion for the driver. Small children can be very hard for the driver to see and often cross the road in front of a bus without the driver seeing them. Here are some tips for your children.

• Get off the bus once it has stopped moving.
• Take 5 steps away from the bus.
• Wave goodbye to the driver.
• Wait away from the bus for it to leave, then find a safe place to cross the road.

Bus rules

Bus safety is extremely important and your child should be aware of how to travel safely on buses. All children catch a bus, either to or from school or on excursions. The following are good tips to remind your children about bus travel.

• Always sit quietly on the bus.
• Do not distract the driver.
• Do not put any part of your body outside the bus windows.
• Stay seated.
• Place schoolbags etc. out of other people’s way.
Road trains

Road trains can weigh up to 170 tonnes or the same amount as 113 cars and therefore can take more time to stop. This is why our children need to take special care when road trains are approaching. The following are some tips to give to your children.

- Stand well back from the side of the road when the road train is passing to avoid the wind draught.
- If you are riding your bike, get off your bike and wheel it off the road to avoid the wind draught.
- Allow plenty of time for a road train to pass.
- Always look for cars behind the road train before crossing.

For further information please visit the NT Government Transport Group website www.nt.gov.au/transport.

Crossing at railway lines

Do your children have to cross a railway line to get to school? The following tips will help you and your children reach school safely.

- Only ever cross at designated crossing points.
- Obey all warning bells, signs and boom gates.
- Wait until the boom gate has risen and the bells and lights stopped before crossing.

Ask your children if they know these rules and if not take them out to the nearest railway crossing and demonstrate the correct way to use the crossing.

Where to walk on gravel roads

If there is no footpath along a gravel road that your children use often, the following tips may be useful for them to ensure they get home safely.

- Walk on the right hand side of the road to face any oncoming traffic.
- The adult or older child should walk closest to the road.
- Always keep your eyes and ears open for approaching traffic.

Crossing between parked cars

Crossing the road between parked cars is not recommended. The potential for being hit by a car while crossing between parked cars is enormous. Drivers cannot always see pedestrians, particularly small children, waiting to cross the road. Parents and children should plan their route to and from school to allow them to cross roads at the safest possible locations such as school crossings, pedestrian islands or traffic lights with pedestrian phasings.
School crossings

For the safety of children and parents across the Northern Territory, children’s crossings have been installed at many locations. Pedestrians and motorists alike share responsibility for using the crossing appropriately.

- Pedestrians must wait one metre back from the crossing and wait for two short blasts of the whistle before crossing.
- When crossing, all pedestrians are required to cross in front of the traffic warden and keep to the left.
- Motorists must not park or stop in the area 20 metres before and 10 metres after a school crossing.

For further information, please contact (insert the contact details for your local road authority).

24.4. Safety on wheels information

Cycling to school

Road safety experts recommend that children under the age of 10 should not be cycling to and from school unaccompanied. Here are some tips for you to ensure that your children get to and from school safely every day.

- Cycle to school with your children.
- Arrange for another adult to cycle to school with your child.
- Encourage your child to ride with older children.
- Cyclists can legally ride on footpaths unless there is a No Bicycles sign. Cyclists must give way to pedestrians.
- Always make sure that your child is wearing an approved helmet that is fitted correctly.

Bicycle helmets

In 2001, one third of cyclists seriously injured were not wearing a helmet at the time of the crash. Studies show helmet use decreases the risk of head injury by 85 per cent and brain injury by 88 per cent. The following will help to ensure that your children are adequately protected.

- Adults and children alike must wear approved bike helmets when cycling.
- The helmet should fit the child’s head securely without being too tight or too loose.
- A helmet should not be worn if it has been previously involved in a crash or fall.
- The outer shell of the helmet should not be cracked or broken.
- The polystyrene foam lining should be uncracked and should not be able to be depressed with a finger.
- It is important to adjust the straps and buckles to ensure correct fit.
- All helmets bought must carry the Australian Standards Mark™ AS2063.2 and logo.
Bicycle maintenance

A bike is just like a motor vehicle and should be constantly maintained to ensure it will perform as designed while riding. Below are some of the things you and your children should check regularly.

- Check brakes are working by wheeling the bike forward and activating the brake
- Check wheel nuts are not loose
- Check tyres for pressure and wear
- Check pedals turn smoothly and are not broken
- Ensure bike has wheel and pedal reflectors and a rear red reflector
- Check chain works smoothly and is free of excess grease.

If you have any concerns about your child’s bike please see your local police or bike shop.

Bicycle statistics

From 2000 to 2009 school aged children represented more than one in four people hospitalised due to cycling injuries in the Northern Territory. It is interesting to note that a majority of the fatalities and an enormous 80 per cent of the bicycle hospitalisations were males.

In recent years there has been some reduction in bicycle-related injury. Some of this reduction can be attributed to the increase in shared paths and on-road cycling lanes, bicycle helmet legislation and education of children about bike safety.

Cycling on gravel roads

Cycling on gravel and unsealed roads can be made safer by following these helpful hints.

- Don’t ride narrow tyred bicycles on loose surfaces.
- Avoid riding along ridges and hollows in the road or path.
- Try to avoid turning sharply on loose surfaces.
- Concentrate on the road surface ahead, ride at lower speeds and avoid rapid braking.
- Always wear a helmet and where practical, clothes that protect the arms and legs in the event of a fall and closed-in shoes.

Bike, skateboard and scooters

Where can they play?

For most children riding on their bike, skateboard or scooter with their friends is a great past time. Quiet streets and driveways have been popular choices in the past, but these are designed for cars not play areas. Here are some places you can suggest your children play on their bikes, skateboards and scooters:

- Backyard
- Oval or park
- Bike training tracks or facilities
- Bike paths.
Rollerblades, skateboards, scooters

Under the *Road Traffic Code 2000* the use of scooters, skateboards and rollerblades is not permitted on:

- a carriageway with a dividing line or median strip
- a one way carriageway with more than one marked lane
- a carriageway with a speed limit exceeding 60 km/h
- a carriageway during the hours of darkness.

24.5. General road safety information

What’s your rush?

- One of the most common contributing factors in fatal and serious car crashes is speed. Speeding not only puts you at risk but also endangers the life of your passengers, other motorists, pedestrians, your car and your wallet.
- Figures show that speed was a major factor in the majority of fatal crashes in the Northern Territory. Remember every 5 km/h makes a difference.

Drink driving

Alcohol and driving do not mix. In 2000, 35 per cent of all fatal crashes that occurred had at least one driver (or rider) involved in the crash with a blood alcohol concentration (BAC) over 0.05 per cent.

Even small amounts of alcohol can affect your reaction time, stopping distances, can impair your vision and severely affect your coordination.

Remember some hangovers last a lifetime.

For more information please contact the road safety section of the NT Transport Group on roadsafety@nt.gov.au or phone 08 8924 7019 in Darwin and 08 8951 5354 in Alice Springs.

First aid

It is most important that you establish some rules with your children if they are ever the first on the scene of a road trauma.

- Always make sure you will not be in danger before you offer help.
- Make sure the injured person is away from any danger (e.g. help to protect them from further injury).
- Always get an adult to help straight away.
- Call an ambulance if necessary.
- Stay with the injured person until an adult arrives to help you.

All children should be taught the basics of first aid. For more information please contact Australian Red Cross on 02 9325 5111, your local St John Ambulance sub-branch or the Road Trauma Counselling Service on 131 114.
Child restraints
Every person travelling in a motor vehicle must use an appropriate approved restraint.
Penalties apply for drivers carrying an unrestrained passenger. Drivers are to ensure all child passengers under 16 years are appropriately restrained in their vehicle.

Selecting an appropriate child car restraint
Child car restraints offer crash protection appropriate for the age and size of your child. The following is a guide. Always check the restraint manufacturers’ guide for exact weights.

- Birth to six months: rearward facing restraint

![Figure 27 Rearward facing restraint](image)

- Six months up to at least four years: either a forward or rearward facing restraint

![Figure 28 Forward facing restraint](image)

- Four years up to at least seven years: forward facing restraint or booster seat

![Figure 29 Booster seat](image)

Side impact studies have shown it is safer to use a rigid booster seat with a back, side wings and sash guide to keep the belt in place. When a child’s eyes are higher than the top of the booster seat it no longer provides protection for the child’s head and neck and the child should be moved to a larger booster seat or if appropriate the next level of restraint.
Accessory child safety harnesses (or H-harnesses) are add-on devices used either with booster seats or adult seats and are not recommended if a lap-sash belt is available. Studies have shown that the harnesses are easy to misuse and provide no greater protection than a lap-sash belt even if used correctly. H-harnesses are only recommended for use if a lap-only-belt is the only option and should be used with an anti-submarine device, which is designed to keep the lower part of the harness positioned low across the strong bones of the pelvis.

- From 145 cm - adult seatbelt
  Best practice shows that an adult seatbelt is designed for a person with a height of 145 cm or higher. When using lap sash belts it is important to tighten the belt and remove the slack. A lap sash belt offers more protection than a lap only belt.

**Braking distances**

To ensure you have enough stopping distance between you and the car in front, it is recommended you leave at least a 2 second gap under ideal conditions. But a 3 second gap is recommended to ensure safety. To estimate this:

- pick a stationary object that will soon be passed by the vehicle ahead of you
- once that vehicle passes the object, count 2 to 3 full seconds
- it should take at least 2 to 3 seconds for you to reach that same object
- when roads are wet it’s a good idea to keep a 4 second gap behind the car in front.

**Riding in the open space of utes and trucks**

Travelling as a passenger in the open load space (on the back of utes or trucks etc.) is illegal and extremely dangerous. The risk of death or serious injury is much greater than passengers correctly restrained inside a vehicle.

**A parent’s influence on their children’s future driving**

New research being conducted by road safety experts suggests that children begin to develop their road safety behaviours and attitudes as young as three or four years of age. Most parents know that children are very keen to learn at this age, but may not consider that their driving habits may influence their child’s attitudes and behaviours towards road safety in the future. Next time you get in the car, think about practising appropriate road safety behaviours and encourage your children however old to do the same.

**Driving on gravel roads**

Below are some tips for driving on gravel roads:

- always drive to the conditions at the time
- don’t brake excessively
- don’t make sudden steering changes
- stay a reasonable distance behind another vehicle to avoid dust and stones
- be careful of soft verges in the wet season and in winter
- ensure you fill your windscreen washer bottle to allow you to regularly clean your windscreen.
After heavy rains many roads (especially gravel roads) are closed by local councils or DLP. This is to stop the road surface from being needlessly damaged.

Before heading off on your trip, take a minute to call the road report number below (it’s free). This will ensure that you do not have a stressful trip and inadvertently damage our roads.

Call the Road Condition Report on 1800 246 199 or visit the NT Transport Group website: www.roadreport.nt.gov.au.

**Fatigue**

Fatigue, often dubbed the hidden killer, is a major problem on our roads. Fatigue has earned this name because we often do not know that we are tired until it is too late.

To help avoid fatigue on long trips you can:

- have a good night sleep before travelling
- start your trip early in the morning
- don’t travel more than 8 hours in one day
- take breaks at least every 2 hours
- share the driving
- don’t drink any alcohol before or during the trip
- drink plenty of fluids.

**Driving on local streets**

Many serious crashes occur on our local residential streets. Research shows a lower speed limit in built-up areas will save lives and reduce injury from road trauma.

Local streets are the smaller roads in built-up areas that carry neighbourhood traffic or give direct property access. Remember unless otherwise signed the speed limit on local streets is 50 km/h.
Part E:
Useful resources and references
25. Useful road safety agencies and websites

The following table presents a summary of useful websites and agencies that provide relevant road safety information and resources that could be useful for road safety educators.

<table>
<thead>
<tr>
<th>Australian based websites</th>
<th>Interactive</th>
<th>For children</th>
<th>For parents</th>
<th>For teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.nt.gov.au/transport">www.nt.gov.au/transport</a></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Information for parents and teachers on road safety. Interactive site for children to use at home and school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.nt.gov.au/transport/safety/road">www.nt.gov.au/transport/safety/road</a></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Information for parents and teachers on road safety. Interactive site for children to use at home and school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides quality information and resources about Aboriginal and Torres Strait Islander road injury.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.kidsafent.com.au">www.kidsafent.com.au</a></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Fact sheets covering a variety of safety issues including road safety.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.sdera.wa.edu.au">www.sdera.wa.edu.au</a></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Information for parents and teachers on road safety. Interactive site for children to use at home and school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.kidsandtraffic.mq.edu.au">www.kidsandtraffic.mq.edu.au</a></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Information for parents and teachers on road safety including resources, fact sheets, information for families, FAQs and useful links.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.giddygoanna.org">www.giddygoanna.org</a></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Resources covering a variety of safety issues for parents and teachers to order.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Part E: Useful resources and references

<table>
<thead>
<tr>
<th>Australian based websites</th>
<th>Interactive</th>
<th>For children</th>
<th>For parents</th>
<th>For teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.roadwise.asn.au/resources/resources/schools">www.roadwise.asn.au/resources/resources/schools</a></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Interactive web-based resource covering all issues of road safety including games for children and fact sheets for parents and teachers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fact sheets on road safety issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>International based websites</th>
<th>Interactive</th>
<th>For children</th>
<th>For parents</th>
<th>For teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.roadsense.co.nz">www.roadsense.co.nz</a></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Interactive web-based resource covering road safety issues for New Zealand primary schools.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.bmweducation.co.uk">www.bmweducation.co.uk</a></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Interactive web-based resource covering road safety issues for UK primary schools.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.aap.org/family/bicycle.htm">www.aap.org/family/bicycle.htm</a></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Information about use of bicycles and encouraging children to wear helmets. Minimal games for older primary school children.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
25.1. Websites consulted in developing these guidelines

For further reference, details of websites consulted in developing these guidelines are summarised in this section.

**ARRB Group**
Home page: www.arrb.com.au

**Australian Government Department of Infrastructure, Transport, Regional Development and Local Government**

**Austroads**

**Australian Red Cross**
www.redcross.org.au

**Automobile Association of the Northern Territory**
www.aant.com.au

**Children’s Crossing Guidelines:**

**Department of Lands and Planning**
www.dlp.nt.gov.au/

**Department for Transport** (United Kingdom)
www.dft.gov.uk (accessed August 2010)

**Department of Education and Training**
www.det.nt.gov.au

**Kidsafe NT Safety in Driveways Factsheet** (2005)

**Main Roads WA**

**NRMA Driver visibility**

**NT Transport Group**

**Pedestrian Council of Australia**

**RoadWise-What is the RoadWise Program**
Safer Road Use
www.saferroaduse.nt.gov.au (for statistics and reports)

St. John Ambulance
www.stjohnnt.org.au

25.2. Contact details

The contact details of key departments and city councils are provided below.

| Safety hazards (e.g. damaged signs, traffic signal faults, potholes etc.) | Online Reporting Department of Construction and Infrastructure website: www.nt.gov.au/infrastructure/construction/roads/faults/roads.shtml |

Table 8 Contact detail for Councils and Department of Education and Training

<table>
<thead>
<tr>
<th>Contact</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>DARWIN CITY COUNCIL</td>
<td>8930 0300</td>
</tr>
<tr>
<td>LITCHFIELD CITY COUNCIL</td>
<td>8983 0600</td>
</tr>
<tr>
<td>KATHERINE TOWN COUNCIL</td>
<td>8972 5500</td>
</tr>
<tr>
<td>CITY OF PALMERSTON</td>
<td>8935 9922</td>
</tr>
<tr>
<td>ALICE SPRINGS COUNCIL</td>
<td>8950 0500</td>
</tr>
<tr>
<td>LOCAL GOVERNMENT ASSOCIATION OF THE NORTHERN TERRITORY</td>
<td>8936 2891</td>
</tr>
<tr>
<td>DEPARTMENT OF EDUCATION AND TRAINING <a href="http://www.det.nt.gov.au">www.det.nt.gov.au</a></td>
<td>8999 5659</td>
</tr>
</tbody>
</table>
26. References

The following is a complete list of the references referred to throughout these guidelines.


National Road Transport Commission 2009 *Australian Road Rules* February 2009 version.


Part E: Useful resources and references


