

SCHOOL ENVIRONMENT SAFETY GUIDELINES

A guide for the improvement of road safety near schools

including

An outline of the SafeST package

and

Guidelines for the provision of road safety facilities near schools

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Foreword

The safety of students travelling to and from school is one of the most important, and often emotive, issues faced by government and school communities. Injuries to students are not acceptable within our society, and there is an on-going demand to make school travel safer.

Improving the safety of school travel is dependent on involvement and commitment, not only from road and transport authorities, but also from school communities, parent associations, educational authorities and police. Everyone needs to accept ownership.

The Queensland School Transport Safety Taskforce stated that school travel safety depends on commitment from everyone in the community, individually and collectively. The challenges confronting students, and young children in particular, as they travel on and across ever busier and more crowded traffic situations are increasing daily. Their safety involves us all, in roles as diverse as drivers around schools, transport planners, policy-makers, school educators, police, bus operators, parents and carers.

As part of its commitment to safe school travel, Queensland Transport developed the Safe School Travel (SafeST) package. SafeST is an integrated collection of programs, schemes and initiatives developed after wide consultation and in partnership with the State Government's School Transport Safety Consultative Committee.

The *School Environment Safety Guidelines* have been developed as part of the SafeST package to provide a systematic approach to the assessment and improvement of road safety near schools.

The *School Environment Safety Guidelines* are intended for use by all organisations with an interest in safe school travel, including road and transport authorities, school communities, parent associations, educational authorities and police. It has been recognised by road and transport authorities that one of the most important factors in ensuring safe school travel is ensuring a high level of road safety near schools.

Therefore school communities are encouraged to use the guidelines to develop a Local School Travel Safety Action Plan.

It is hoped that these guidelines will foster a whole-of-community ownership of, and involvement with, issues associated with the improvement of road safety near schools.

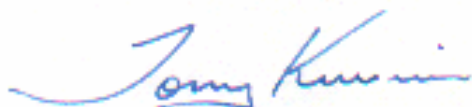
To ensure that all interested organisations and authorities have ready access to the *School Environment Safety Guidelines*, they are available on the Queensland Transport web site at www.roadsafety.qld.gov.au.

Queensland Transport values your feedback

The School Environment Safety Guidelines is intended to be a complete resource for communities interested in improving road safety around their local schools; every effort has been made to include all relevant programs and schemes. However, because of the dynamic nature of road safety, updates to these guidelines may be necessary. Queensland Transport is always willing to consider any feedback. If you have any suggestion for improving these guidelines please call Queensland Transport on 1800 818 202 or email sesg@transport.qld.gov.au.

Important notice

Part C of these guidelines has been prepared in accordance with Section 166 (2) of the *Transport Operations (Road Use Management) Act 1995*. Part C constitutes an approved notice about designs, methods, standards and procedures for official traffic signs used around schools, and supplements information contained in Queensland's *Manual of Uniform Traffic Control Devices*.



Tony Kursius

Executive Director (Land Transport and Safety)

Dated at BRISBANE this 22nd day of December 2004.

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ABOUT THESE GUIDELINES

1 PURPOSE OF THE GUIDELINES

Traffic conditions near schools can seriously affect the safety of school children. In light of this Queensland Transport supports schools in managing traffic in the school environment through a range of safety interventions including, education, enforcement, and engineering treatments.

Further to this, the traffic environment around schools is one of the most complex road transport environments normally encountered by motorists, and the most complex traffic environment encountered by children. This is because traffic density and pedestrian movements are concentrated in short periods of usually 30 minutes in the morning and 15 minutes in the afternoon.

As a high proportion of school children are exposed to road safety dangers in their travel to and from school, they are particularly at risk when they are pedestrians. This is when they are either being dropped off or picked up by their parents or carers at school, or they are walking to and from school.

Ensuring a high level of road safety near schools is a major exercise involving considerable commitment in both time and funding. Queensland Transport's Safe School Travel package (SafeST) is a collection of programs, schemes and initiatives that are designed to improve travel safety for Queensland school students. The SafeST package was developed after wide consultation and in partnership with the State Government's School Transport Safety Consultative Committee. The *School Environment Safety Guidelines* have been developed as part of the SafeST package to provide a systematic approach to the assessment and improvement of road safety near schools.

The guidelines are intended to provide a single point of reference for any organisation or authority involved with, or seeking information about, road safety near schools, including road and transport authorities, school communities, parent associations, educational authorities and police.

The guidelines include the SafeST Process, a defined process that has been developed to assist these organisations to identify road safety problems near schools and to consider appropriate solutions.

Information is provided to school communities about the need to form a SafeST Committee, and the role of that committee in addressing road safety issues in conjunction with Queensland Transport road safety staff, the Main Roads Department, local governments, police and education authorities.

School communities are encouraged to use the SafeST Process to develop a Local School Travel Safety Action Plan.

2 STRUCTURE OF THE GUIDELINES

The structure of the guidelines is outlined below:

2.1 Part A – The SafeST Process

Part A of the guidelines addresses the SafeST Process that has been developed to provide a systematic approach to the assessment and improvement of road safety near schools.

This part of the guidelines discusses:

- the formation of SafeST Committees, and the role that these committees play in ensuring safe school travel
- the use of the *SafeST Checklist for School Communities* for the identification of road safety problems near schools
- a range of possible solutions for each of the safety problems identified in the Checklist
- preparation of a Local School Travel Safety Action Plan
- information about obtaining funding where necessary to implement identified solution
- the implementation of identified solutions.

2.2 Part B – The SafeST Package

Part B of the guidelines provides an outline of the SafeST Package, together with detailed descriptions of the various components of the package. It also provides information on other useful resources.

2.3 Part C – Guidelines for the Provision of Road Safety Facilities Around Schools

Part C of the guidelines provides detailed information about the availability and application of engineering based road safety facilities that may be suggested as possible solutions.

Much of the information contained in Part C has been reproduced from other sources, including the Manual of Uniform Traffic Control Devices (MUTCD) and the Traffic and Road Use Management Manual. For the convenience of users of these guidelines, it was considered preferable to reproduce information rather than simply refer to other sources. Queensland Transport will issue amendments if major changes occur.

Note: Before implementing any infrastructure based solutions, road authorities must check that the information contained in Part C is current. (See Section 21 for details)

3 WHO SHOULD USE THE GUIDELINES

These guidelines are intended to provide a single point of reference for any organisation or authority involved with, or seeking information about, road safety near schools. However, the relevance of particular parts of the guidelines for each organisation or authority is dependent on the role of that organisation or authority.

School Community and SafeST Committee

The School Environment Safety Guidelines have been predominantly prepared for the use of the school community and local SafeST Committees.

Part A of the document explains a process that can be used to identify road safety problems, the steps to identify solutions and what to include in a Local School Travel Safety Action Plan.

Part B of the document provides information on various road safety programs and initiatives that are available to the school community.

Part C provides information on engineering solutions, which may be considered by the school community. It informs the community on suitable engineering measures and what conditions have to be met before road authorities will use the measures. With the information contained in Part C the school community will be in an informed position to negotiate possible solutions with their relevant road authority. However, for engineering or infrastructure based solutions, the final determination and provision of appropriate road safety facilities are the responsibility of the relevant road authority.

Local Government/Main Roads

All interested organisations and authorities need to have an understanding of the SafeST process described in Part A. It is important that everyone understands the role of SafeST Committees and how they can provide assistance in determining solutions to identified road safety problems.

Road authorities should have an understanding of the components of the SafeST Package and other programs outlined in Part B. These programs include initiatives that have direct input from road authorities such as the SafeST Subsidy Scheme. Part C of the Guidelines will help road authorities explain some of the available engineering solutions to the school community.

Queensland Transport

The School Environment Safety Guidelines are a resource that can be used by regional road safety staff to help school communities to investigate and solve their own road safety problems.

PART A - THE SafeST PROCESS

4 PURPOSE

Ensuring a high standard of road safety around schools requires a community based approach to injury prevention as a whole. It is imperative that involvement and commitment is sought from a number of different groups, including road and transport authorities, school communities, parent associations, educational authorities and police. The purpose of the SafeST Process is to provide these groups with a formal and systematic approach to assessing and improving road safety around schools, and developing a Local School Travel Safety Action Plan.

Implementation of a Local School Travel Safety Action Plan will help to ensure that road safety initiatives at a school reflect the current needs of the school, serve the purpose for which they were intended, and are consistent with best practice.

5 OVERVIEW OF THE SafeST PROCESS

The SafeST Process involves the following steps:

1. The school community recognises a need to improve road safety around the school.
2. The school community contacts their local Queensland Transport Road Safety Advisor or Council Road Safety Officer for advice on forming a SafeST Committee, as described in Section 6.
3. The SafeST Committee initiates a review of road safety around the school, and should identify and analyse any problems using the *SafeST Checklist for School Communities* as described in Section 7.
4. After the SafeST Committee has identified the problems the committee then considers possible solutions to address the identified road safety problems. An Application Matrix has been provided to assist in determining appropriate solutions as described in Section 8.
5. Recommended solutions and actions are included in a Local School Travel Safety Action Plan as discussed in Section 9.
6. Funding submissions are prepared where necessary, as discussed in Section 10.
7. The appropriate authority or organisation, as discussed in Section 10, implements recommended solutions and actions.
8. Implemented solutions are monitored to assess their effectiveness in addressing the identified road safety problems, as discussed in Section 11.

All stages of the SafeST Process should be carried out in close consultation with the school community.

The SafeST Process is summarised in the flowchart on Figure 1.

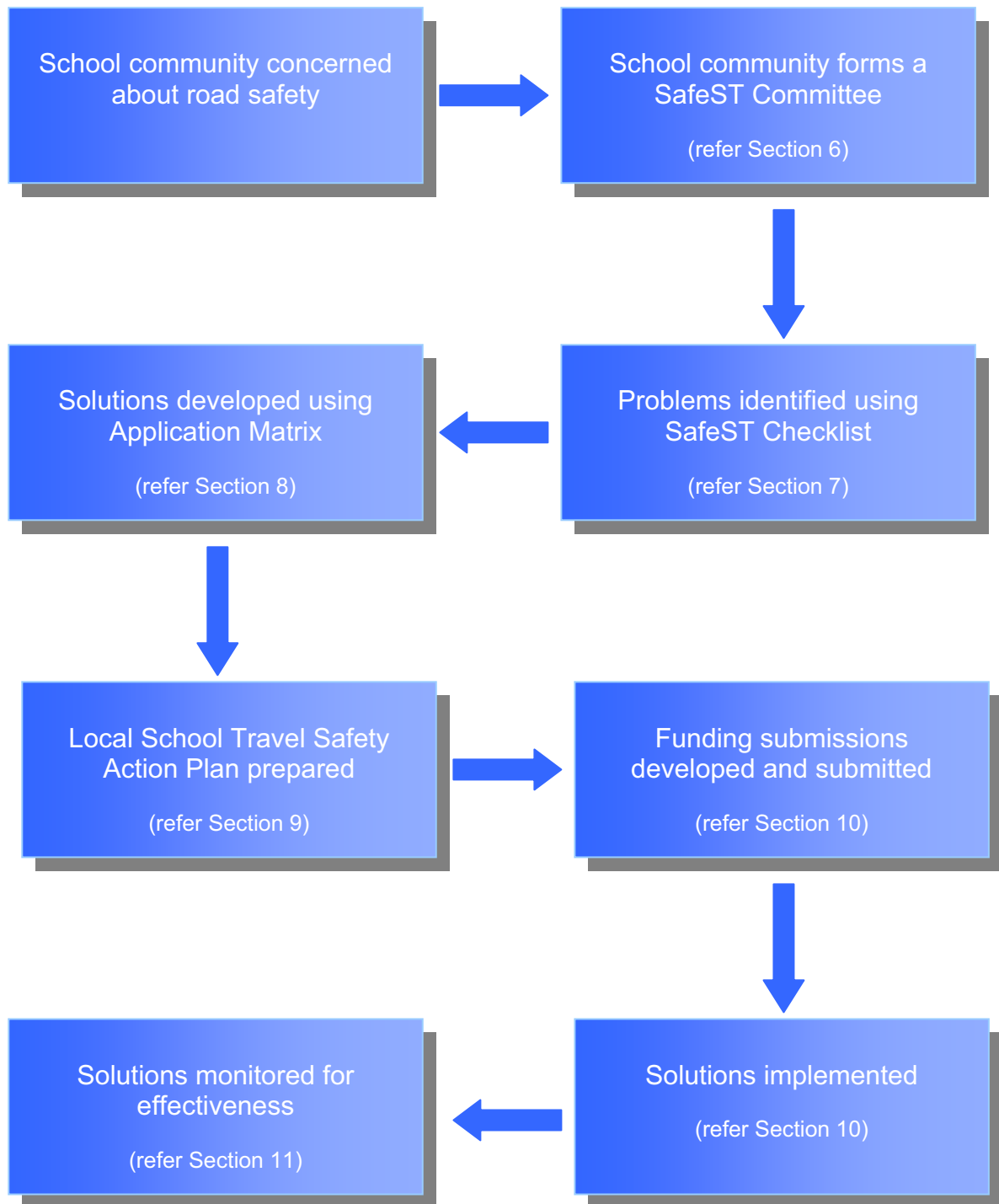


Figure 1 - FLOWCHART OF THE SafeST PROCESS

6 THE SafeST COMMITTEE

6.1 Purpose

If members of a school community have concerns about road safety near their school, and want to take an active role in helping to improve the situation, the first step in the process is to form a SafeST Committee. It is intended that the SafeST Committee will be ongoing, and not formed only to address a specific problem. It is important that parents and carers become involved by taking lead roles and ownership of road safety issues around schools their children attend.

The committee should provide a forum for the discussion of these road safety issues. Considerations should not be limited to the provision of road safety facilities requiring funding, but should include issues such as student behaviour on buses, timetabling, parent's pick-up/set-down behaviours and illegal parking.

6.2 Forming a SafeST Committee

For assistance in forming their SafeST Committee, members of the school community should first contact their local Queensland Transport Road Safety Advisor or Council Advisor. The Road Safety Advisor will provide guidance and advice to that committee. Contact details for Road Safety Advisors and the Brisbane City Council (BCC) are provided in Appendix A.

The core SafeST Committee should generally include the following on-going members:

- Students
- Parents/carers
- School staff –Teachers/Registrar (preferably including the principal).

The following representatives could be invited to join the committee as needed:

- Queensland Transport Road Safety Advisor/Officer
- bus operators
- local government representative (irrespective of whether or not the school faces a local government controlled road) preferably an engineer or traffic technician
- Department of Main Roads representative (if the school faces a state-controlled road)
- Queensland Rail representative (if appropriate)
- local police.
- local neighbours
- clubs and societies such as Lions, Rotary, Apex and Neighbourhood Watch
- local MP

A chair for the committee should be selected from the on-going group of members.

In some areas more than one school is located in the same area. In these cases it may be desirable to form a joint committee. This will assist in making sure the best result is achieved for the whole community and one school will not benefit at the expense of a nearby school.

6.3 The role of the SafeST Committee

Although each SafeST committee is unique and requires individual solutions to road safety problems, the following will give the SafeST Committee a guide to its role. The role of the committee is to:

- identify and analyse road safety issues (including using the SafeST Checklist);
- collect data
- manage the expectations of community groups
- consider possible solutions that maximise the benefits (using local knowledge and Application Matrix)
- consider solutions that are low cost (having recognised funding constraints) or that have a high cost benefit ratio (CBR)
- consult with the school, community, local government, Department of Main Roads, Queensland Transport and other relevant authorities over actions to be taken
- recommend safety programs to be implemented at the school, and by the school community
- make funding submissions to local governments and other authorities
- Assist in the introduction, monitoring and evaluation of road safety programs.

Table 1 provides more information about the roles and responsibilities of the SafeST Committee and the authorities with which the Committee will have the most contact.

| SCHOOL/ COMMUNITY | SAFEST COMMITTEE | LOCAL GOVERNMENT/ DMR | QUEENSLAND TRANSPORT |
|--|--|---|---|
| <ol style="list-style-type: none"> 1. Gather data and identify problems. 2. Seek advice from Road Safety Advisor or Council to address problems. 3. Establish SafeST Committee. 4. Inform the SafeST Committee of safety problems. 5. Provide comments on the proposed Local School Travel Safety Action Plan. 6. Participate as required in the implementation of the Local School Travel Safety Action Plan. 7. Provide feedback on the effectiveness of the solutions. | <ol style="list-style-type: none"> 1. Coordinate completion of the SafeST Checklist. 2. Seek advice from community on possible solutions to identified problems. 3. Consider solutions to identified problems. 4. Provide comments on solutions proposed by other agencies such as Queensland Transport, Main Roads and Queensland Police Service. 5. Develop the school's Local School Travel Safety Action Plan. 6. Consider funding options and prepare suitable funding submissions. 7. Ensure that the Local School Travel Safety Action Plan is implemented. 8. Keep the school and community informed throughout the SafeST Process. 9. Monitor and review the school's road safety performance, including updating checklist information. | <ol style="list-style-type: none"> 1. Provide a representative to be a member of SafeST Committee as required. 2. Contribute data and technical expertise. 3. Assist in analysing data prepared by SafeST Committee and other relevant data. 4. Provide possible solutions for road environment issues to the SafeST Committee. 5. Liaise with Education and Public Works Departments as required. 6. Provide advice to the SafeST Committee on how to prepare funding submissions for infrastructure works if required i.e. provide details of proposals, costs, benefits etc. 7. Consider funding for infrastructure submissions (taking into account other priorities & funds availability (if required)). 8. Ensure facilities are properly maintained. | <ol style="list-style-type: none"> 1. Road Safety Advisor to provide advice to the SafeST Committee as required. 2. Contribute data and technical expertise. 3. Liaise with Education and Public Works Departments. 4. Assist in analysing data prepared by SafeST Committee and other relevant data. 5. Provide possible solutions for behavioural road safety issues to the SafeST Committee. 6. Provide advice on the development of the Local School Travel Safety Action Plan. 7. Continue to liaise with SafeST committee as needed. 8. Approve funds under the SWAP Program for minor infrastructure works & educational road safety initiatives |
| QUEENSLAND POLICE SERVICE | | | |
| <ol style="list-style-type: none"> 1. Provide a representative to be a member of SafeST Committee as required. 2. Contribute data and technical expertise. 3. Assist in analysing data. 4. Provide possible solutions for road enforcement issues to the SafeST Committee. | | | |

Table 1 - Roles and Responsibilities

6.4 Community Engagement

Safety around schools depends on commitment from everyone in the community, individually and collectively. The challenges confronting students and young children as they travel on and across busier and more crowded traffic situations are increasing daily. Their safety involves us all, in roles as diverse as drivers around schools, transport planners, policy-makers, school educators, police, bus operators, parents and carers.

School road safety is a whole-of-community problem that requires whole-of-community awareness and commitment to ensure the success of solutions.

The working relationships or the mechanism by which the community and government stakeholders successfully move through the problem-solving stages is the process of community engagement. Accordingly, community engagement plays an important part in the SafeST process. The SafeST Committee is responsible for ensuring that both the school community and people outside of the school community are kept well informed, and are consulted about proposed solutions that could affect them. For example, residents from surrounding houses should be consulted about proposed changes to traffic patterns at the school.

The process of community engagement can be achieved in a variety of ways ranging from information sharing, consultation and active participation.

Community involvement is usually needed:

- at initiation - to explain the review procedure and set up a SafeST Committee (if not already formed)
- following completion of the SafeST checklist - to explain how information was collected and what safety problems were identified
- when developing solutions
- after development of the draft Local School Travel Safety Action Plan - to obtain feedback from stakeholders on the draft plan
- after implementation - to obtain an early assessment of the effectiveness of the implemented solutions.

7 IDENTIFYING ROAD SAFETY PROBLEMS AROUND SCHOOLS – The SafeST Checklist for School Communities

7.1 Introduction

The *SafeST Checklist for School Communities* (the checklist) was developed as a result of frequent requests by school communities for a tool that they could use to identify road safety issues around their schools. Too often, solutions were offered to the authorities, before correct problem identification processes undertaken. Therefore the checklist has been designed to enable a SafeST Committee to diagnose possible safety concerns, consider priority projects and establish further directions for school transport safety work around the school.

The checklist highlights road safety issues for pedestrians, cyclists, car and motorcycle drivers and car, train and bus passengers. It also takes into consideration the school's surrounding traffic environment.

A copy of the Queensland Transport *SafeST Checklist for School Communities* is enclosed in Appendix B.

7.2 When to Use the Checklist

When a new SafeST Committee is formed, its first role should be to initiate a review of road safety around the school, using the checklist as a guide.

Where a SafeST Committee has existed at a school for some time, it may be appropriate to use the checklist for further safety reviews if:

- the committee is notified of road safety problems at the school
- a significant change has occurred that alters the established travel arrangements i.e. increased enrolment, commercial development of surrounding land, etc.
- safety initiatives have been implemented, and it is necessary to monitor and review the effectiveness of these initiatives
- it has been three years since the last review.

7.3 Completing the Checklist

7.3.1 Preparation

Queensland Transport's Road Safety Advisors can provide advice to the committee on how to complete the checklist. The SafeST Committee is however responsible for completing the review using the checklist.

Although the checklist has been designed to be user friendly, it is important that all members of the SafeST Committee read the document carefully before beginning a review to ensure that they understand the questions, and are focused on the appropriate issues.

Appropriate sections of the checklist should be photocopied and distributed to the members of the committee depending on their roles in the safety review, for example observing and assessing travel patterns, or checking road signs and markings.

7.3.2 Accessing Data

Data required for completion of the checklist, including crash data, can generally be obtained from a number of sources including:

- Queensland Transport
- local government or Main Roads representatives.

7.3.3 Summarising Results

To assist in the next step of the SafeST process, that is identifying solutions, it is necessary to summarise the problems and issues that have been identified during completion of the checklist. A simple table as shown in Section 8.6 – Application Matrix could be used.

8 FINDING SOLUTIONS - The Application Matrix

8.1 Introduction

Once the SafeST Committee has identified the road safety problems around the school, this is the best time to invite all the relevant people to the SafeST Committee meeting. Depending on the problems identified, your committee should consider having representatives from Queensland Transport, local government or Main Roads, Queensland Police Service and neighbours of the school. There are also many people and groups within the community who can contribute to the investigation and the possible solutions. Encourage as many members of your community as possible to participate in and take responsibility for road safety at your school.

An Application Matrix has been developed to assist in determining appropriate solutions to the road safety problems identified in the checklist. The matrix tabulates solutions against each of the issues considered in the checklist. The matrix is not a comprehensive list of all solutions possible but a starting point of some of the more common solutions used in a school environment. Each school will have their own unique problems that require unique solutions developed by the school community.

Road safety problems can be addressed by solutions based on education and encouragement, enforcement or engineering. The appropriate solution will be dependent on the nature of the specific problem. However, it is important to note that a combination of solutions is often necessary to achieve the best outcome. It is also the case that engineering solutions are often costly, and therefore peoples' expectations should be carefully managed during the process.

8.2 Education and Encouragement

Often the first solutions that a SafeST Committee considers are expensive engineering solutions. These works usually involve considerable cost and must be budgeted for, as funds are usually not immediately available. There are however many education and encouragement programs that can be implemented immediately for little or no cost. These programs can often be more cost effective than expensive engineering treatments.

Providing students, parents, teachers and local community members with educational material and conducting road safety classes can remedy many of the issues identified in the checklist.

Queensland Transport produces a range of road safety material targeted at common road safety problems. Some of the available educational and curriculum based resources are included in the SafeST package and discussed in Section B of these guidelines. The Road Safety Advisor will be able to provide advice to the SafeST Committee about educational resources including wording on relevant road safety issues for school newsletters. Many of the educational resources will soon be available at Queensland Transport's website, www.roadsafety.qld.gov.au or are available now by phoning (07) 3253 4264.

8.3 Enforcement

Enforcement may be required where the effectiveness of educational activities is limited or where the seriousness of the situation warrants immediate action.

Enforcement solutions include the issuing of traffic and parking tickets by police and local government officers. Enforcement may also include principal and teacher intervention to encourage student compliance with school policies.

Because enforcement is resource-intensive it is rarely viable on an ongoing basis and should be used in conjunction with other solutions.

Research has shown that the fear of enforcement is just as strong a motivator as the enforcement intervention itself. It is useful for the SafeST Committee to therefore highlight to the school community any enforcement interventions that may be planned or may have occurred near the school.

The Queensland Police Service has developed a complaints database in order to more effectively and efficiently record locations reported by members of the public as being deficient in terms of road safety. Written requests for police presence at a location will be recorded and prioritised in the database to assist police in meeting the community's needs.

Many of the councils in Queensland can also be contacted to dispatch parking and traffic officers to locations where motorists are repeatedly violating "no standing" or other parking regulations.

8.4 Engineering

Safe and effective control of vehicles and pedestrians can be obtained through the informed application of realistic policies, practices and standards that have been developed through traffic engineering studies. Warrants and guidelines for the use of facilities are set down in the Manual of Uniform Traffic Control Devices (MUTCD). However, even if a formal warrant or guideline is satisfied in a particular instance, it does not necessarily follow that the relevant facility should be installed on that basis alone. There are often a number of additional matters that need to be taken into account to justify the installation of such a facility. It would be impractical to include all of these matters into formal warrants or guidelines. A final decision on the appropriateness of a particular device therefore must always involve judgment by experienced professional road traffic engineers.

The particular type of facility or combination of facilities selected for use near schools depends upon consideration of a number of factors. Traffic studies will assist in determining numerical or quantitative warrants or guidelines that indicate the use of a particular device, for example pedestrian actuated mid-block signals. These warrants and guidelines are set out in the MUTCD. Observation of child pedestrian movement near the school is needed to assist in determining whether a specific measure is appropriate.

Part C of these guidelines gives advice on the use of various devices and interventions at schools and indicates where additional information relating to warrants may be found. For the convenience of users of these guidelines, relevant information from the MUTCD has been

reproduced in Part C. It will be necessary to discuss the appropriateness of the facilities with your road authority.

It is important to note that approvals and submissions take time to process. This can vary substantially as a lot depends on the scale of the project and whether there is an available budget. Consideration must also be given to the priority of the project in terms of cost and benefit, the complexity of design and implementation.

Submissions are not prioritised sequentially, committees should understand that after the engineering assessment and prioritisation is done, the project may not be accepted or that the project may take several years to be scheduled on a program of works.

8.5 Sustainable Solutions

Traffic congestion around schools is a problem that more and more schools have to grapple with. At some schools up to 77% of students are driven to school in dry weather and 95% during wet weather. The reasons for this are many and varied, including the perceived threat to the safety of children, both from traffic and "stranger danger". The irony is that the danger from traffic increases as more children are driven to school.

The usual response to traffic congestion around schools is to provide traffic-calming devices and/or larger and improved parking and drop-off areas. While these measures have their place in slowing the speed of traffic and improving safety, they are expensive and do not tackle the problems at the source.

When looking at solutions it would therefore be beneficial to look at the daily travel choices of students and consider the impact on health, safety and the environment that they make.

School travel programs such as TravelSmart Schools and Walking School Buses (see section 20.3 for explanation) can reduce traffic around schools by 10-20%, even if parents and students change to bike, walking or pooling just once or twice a week. This improves safety, reduces car parking requirements and students get regular exercise.

8.6 The Application Matrix

The following Application Matrix has been developed to assist in determining solutions to the safety issues identified in the checklist. The left hand columns of the matrix correspond to the safety issues identified in the SafeST checklist. The remaining columns of the matrix present solutions that may be considered for each issue. The solutions have been classified in the matrix as education and encouragement, enforcement and engineering solutions. It is important to note that a combination of solutions is often necessary to provide the best outcome.

The matrix is not a comprehensive list of all solutions possible but a starting point of some of the more common solutions used in a school environment.

APPLICATION MATRIX

| CHECKLIST ITEM | ISSUES IDENTIFIED | CONSIDERATIONS AND POSSIBLE SOLUTIONS | | |
|-------------------------------|--|---|--|---|
| | | Education/ Encouragement | Enforcement | Engineering |
| 1. Pedestrians | | | | |
| Crossing practices | <ul style="list-style-type: none"> • Poor behaviour when crossing the road. • Students don't use marked crossings and instead cross at any available point on the road. • Students fail to use safe crossing practices when moving to and from buses. • Students do not cross in safe locations i.e. dart out from between cars and buses. | <ul style="list-style-type: none"> • Safe Play Day curriculum – refer Section 15.2. • Adult supervision. • Various pedestrian information available at www.roadsafety.qld.gov.au. | <ul style="list-style-type: none"> • Adopt-a-cop to assist in educating students. | <ul style="list-style-type: none"> • Fencing - refer Section 22.9. • Paint yellow line on the footpath at crossing points - refer Section 22.11. • Check if the crossing at the school is appropriate or if an alternative facility is required. |
| Behaviour on footpaths | <ul style="list-style-type: none"> • Students do not use the footpath. • Students do not show due care and attention when using wheeled recreational devices on the footpath. • Students do not demonstrate safe and appropriate behaviour while waiting for buses/cars to arrive. | <ul style="list-style-type: none"> • Safe Play Day curriculum. • Education through the school newsletter. • Various pedestrian information available at www.roadsafety.qld.gov.au | <ul style="list-style-type: none"> • Adopt-a-cop to assist in educating students. | <ul style="list-style-type: none"> • Separate pedestrian and wheeled recreational devices and their movements. <hr/> <hr/> <hr/> |

| CHECKLIST ITEM | ISSUES IDENTIFIED | CONSIDERATIONS AND POSSIBLE SOLUTIONS | | |
|---------------------------|--|---|--|---|
| | | Education/ Encouragement | Enforcement | Engineering |
| Compliance | <ul style="list-style-type: none"> • Students fail to comply with the School Crossing Supervisor's instructions. • Students do not comply with general road rules. • Parent/carer pedestrians do not comply with road rules or display unsafe road user behaviour. | <ul style="list-style-type: none"> • Education through the school newsletter. • Principal to talk to offenders. • Various pedestrian information available at www.roadsafety.qld.gov.au | <ul style="list-style-type: none"> • Request QPS enforcement. | |
| 2. Cyclists | | | | |
| Behaviour | <ul style="list-style-type: none"> • Students fail to show due care and attention when using bicycles on footpaths. • Students do not apply competent handling skills while riding. • Students fail to demonstrate safe riding behaviours. • Students fail to maintain an awareness of other road users. | <ul style="list-style-type: none"> • BIKE ED • Lets Go Cycling curriculum – refer Section 15.2 • Bike Week • Various cycle information available at www.transport.qld.gov.au/cycling | <ul style="list-style-type: none"> • Adopt-a-cop to assist in educating students. | <ul style="list-style-type: none"> • Provision of separate facilities for cyclists. |
| Crossing behaviour | <ul style="list-style-type: none"> • Students do not demonstrate correct crossing behaviour when crossing the road. • Students fail to use marked crossings. • Students ride across crossings. • Students do not cross at safe locations. | <ul style="list-style-type: none"> • BIKE ED. • Adult Supervision. • Education through the school newsletter. • Bike Week • Lets Go Cycling Curriculum – refer section 15.2 • Various cycle information available at www.transport.qld.gov.au/cycling | <ul style="list-style-type: none"> • Adopt-a-cop to assist in educating students. | <ul style="list-style-type: none"> • Check if crossings appropriately placed. • Fencing - refer Section 22.9 • Provision of appropriate signs eg cyclists must dismount to cross road. |

| CHECKLIST ITEM | ISSUES IDENTIFIED | CONSIDERATIONS AND POSSIBLE SOLUTIONS | | |
|---|---|--|---|---|
| | | Education/ Encouragement | Enforcement | Engineering |
| Compliance | <ul style="list-style-type: none"> • Students do not wear helmets. • Students do not comply with general road rules. | <ul style="list-style-type: none"> • Education through the school newsletter. • BIKE ED • Various cycle information available at www.transport.qld.gov.au/cycling | <ul style="list-style-type: none"> • Request QPS enforcement. | |
| Other related issues | <ul style="list-style-type: none"> • Secure parking for bicycles is not available. • Bicycles are not generally maintained to a high standard. | <ul style="list-style-type: none"> • BIKE ED • Bike Week • Various cycle information available at www.transport.qld.gov.au/cycling | | <ul style="list-style-type: none"> • Provide bicycle storage facilities. • Cycle Notes C5 – Personal security and bicycle facilities. |
| 3. Bus passengers | | | | |
| Behaviour while on buses and while waiting for the bus | <ul style="list-style-type: none"> • Poor behaviour on bus. • Poor behaviour from the bus driver. • Poor behaviour by students while waiting for the bus. • Poor behaviour when alighting and boarding buses. | <ul style="list-style-type: none"> • Queensland Transport Code of Conduct. • Adult Supervision. • Kids and Buses program <hr/> • Managing Students Behaviour | <ul style="list-style-type: none"> • Queensland Transport Code of Conduct. | |

| CHECKLIST ITEM | ISSUES IDENTIFIED | CONSIDERATIONS AND POSSIBLE SOLUTIONS | | |
|---|--|--|---|---|
| | | Education/ Encouragement | Enforcement | Engineering |
| 4. Car passengers | | | | |
| | <ul style="list-style-type: none"> • Passengers fail to wear seat belts. • Unsafe behaviour by passengers in cars. • Children getting out of car on driver's side on to road. | <ul style="list-style-type: none"> • Education through the school newsletter. | <ul style="list-style-type: none"> • QPS Enforcement. | <ul style="list-style-type: none"> • Provision of off street parking facilities.* <p>* NB This may necessitate the usage of school property to create car parks should the adjacent road corridors be too narrow. All representations would need to be made to Ed Qld.</p> |
| 5. Car drivers and motorcycle riders | | | | |
| Compliance | <ul style="list-style-type: none"> • Failure to adhere to road rules. | | <ul style="list-style-type: none"> • QPS Enforcement. | |
| Other Issues | <ul style="list-style-type: none"> • Parents/carers call children to run across the road. • Students not dropped off on the school side of the road. • Student drivers fail to demonstrate safe driving behaviour. • Teachers and parents/carers fail to park in their respective car parks. | <ul style="list-style-type: none"> • Encouragement of safe parking behaviour. • Education through school newsletter. • Student driver education materials – refer Section 15.4 • RAW Health materials – refer Section 15.3 | <ul style="list-style-type: none"> • QPS Enforcement and Local Law Officers. | <ul style="list-style-type: none"> • Check if there is sufficient parking available or other facilities to allow parents/carers to drop children of on the school side of the road. |

| CHECKLIST ITEM | ISSUES IDENTIFIED | CONSIDERATIONS AND POSSIBLE SOLUTIONS | | |
|---|---|--|--|--|
| | | Education/ Encouragement | Enforcement | Engineering |
| 6. Rail Passengers | | | | |
| On-train behaviour | <ul style="list-style-type: none"> School bags not stored safely. Students behave in an inappropriate manner. | <ul style="list-style-type: none"> Request QR educational material and carry out educational activities. | <ul style="list-style-type: none"> QPS Enforcement. Queensland Rail Code of Conduct. | <ul style="list-style-type: none"> Queensland Rail to consider engineering solutions. |
| Off-train behaviour | <ul style="list-style-type: none"> Students fail to demonstrate safe behaviours around the train. Students use poor boarding and alighting practices. Students behave inappropriately on the platform. | <ul style="list-style-type: none"> Request Queensland Rail educational material and carry out educational activities. Queensland Rail Code of Conduct. | <ul style="list-style-type: none"> QPS Enforcement. Queensland Rail Code of Conduct. | <ul style="list-style-type: none"> Queensland Rail to consider engineering solutions. |
| 7. Road Environment (includes traffic) | | | | |
| Traffic | <ul style="list-style-type: none"> Posted speed limit appears to be exceeded. | <ul style="list-style-type: none"> Queensland Transport Speed Awareness Program. | <ul style="list-style-type: none"> QPS Enforcement. | <ul style="list-style-type: none"> Speed Limit Review in accordance with Part 4 - MUTCD. Check appropriateness for a school zone. Consistent Colour Threshold treatments |
| | <ul style="list-style-type: none"> High crash rate. | | | <ul style="list-style-type: none"> Crash Investigation or Safety Audit. |
| | <ul style="list-style-type: none"> Motorists rat running. Presence of buses. Presence of heavy vehicles. | | | <ul style="list-style-type: none"> Traffic studies. Bus Route Analysis. |

| CHECKLIST ITEM | ISSUES IDENTIFIED | CONSIDERATIONS AND POSSIBLE SOLUTIONS | | |
|-----------------------|---|---|-------------|---|
| | | Education/ Encouragement | Enforcement | Engineering |
| | <ul style="list-style-type: none"> • Insufficient room for buses and cars to manoeuvre. • Lack of turnaround areas. • Lack of pick-up and set-down facilities provided outside school. | <ul style="list-style-type: none"> • Staggered time for dropping and picking up students. • Carpool program. • Walking Bus. | | <ul style="list-style-type: none"> • Additional parking or pickup/set down facilities. • Provision for turnaround areas etc. |
| Infrastructure | <ul style="list-style-type: none"> • Steep road. • Presence of sharp curves and blind corners. | | | <ul style="list-style-type: none"> • Warning signs. • Clear vegetation. • Parking restriction. |
| | <ul style="list-style-type: none"> • Inappropriate or inadequate warning signs around schools. • Poorly located signs - obscure visibility; - not visible to drivers. • Signs in poor condition. | | | <ul style="list-style-type: none"> • Provide required signs - refer Section 25 • Relocate/replace signs where necessary. • Regular sign maintenance. |
| | <ul style="list-style-type: none"> • Poor condition of footpaths & kerbing. | | | <ul style="list-style-type: none"> • Maintenance for existing footpaths and kerbing. • Additional footpaths. |
| | <ul style="list-style-type: none"> • Inadequate crossing facilities & medians. | | | <ul style="list-style-type: none"> • Provision of appropriate crossing facilities - refer Section 22 |
| | <ul style="list-style-type: none"> • Insufficient area for motorist to pull over safely. | <ul style="list-style-type: none"> • TravelSmart Schools - www.transport.qld.gov.au/travelmart • Walking buses | | <ul style="list-style-type: none"> • Additional parking at another location. • Widening/Sealing shoulders. • Local Area Traffic Management |

| CHECKLIST ITEM | ISSUES IDENTIFIED | CONSIDERATIONS AND POSSIBLE SOLUTIONS | | |
|----------------|---|--|---|--|
| | | Education/ Encouragement | Enforcement | Engineering |
| | <ul style="list-style-type: none"> Inadequate road width for free-flowing driving at schools. | <ul style="list-style-type: none"> TravelSmart Schools - www.transport.qld.gov.au/travelsmart Walking buses | | <ul style="list-style-type: none"> Relocate on street parking. Parking restrictions. Local Area Traffic Management |
| | <ul style="list-style-type: none"> Poor road condition. <ul style="list-style-type: none"> - dusty; - slippery; - water ponding. | | | <ul style="list-style-type: none"> Resealing Investigate drainage Appropriate warning signs |
| | <ul style="list-style-type: none"> Unmarked bike lanes. Line marking in poor conditions. | | | <ul style="list-style-type: none"> Line marking. Replace old and fading traffic control devices. |
| | <ul style="list-style-type: none"> Inadequate on and off street parking areas. Inadequate pick-up and set-down areas. Lack of signs for these areas. | <ul style="list-style-type: none"> Consider staggered start and end times. Keep the parents informed on the difficulty experienced around these areas. TravelSmart Schools - www.transport.qld.gov.au/travelsmart | <ul style="list-style-type: none"> QPS and Council enforce parking restrictions. | <ul style="list-style-type: none"> Parking restriction signs. Construct more pick-up and set-down areas (on the school side of the road). Improved signage. |
| | <ul style="list-style-type: none"> Bike lanes and paths in poor condition. | | | <ul style="list-style-type: none"> Improve bike lanes and paths. Improve signing of bike lanes and paths both for cyclists and motorists. |
| | <ul style="list-style-type: none"> Inadequate pedestrian fencing to prevent school children entering the road at various locations. | <ul style="list-style-type: none"> Education through the school newsletter. | | <ul style="list-style-type: none"> Investigate provision of appropriate pedestrian fencing - see Section 22.9. |

| CHECKLIST ITEM | ISSUES IDENTIFIED | CONSIDERATIONS AND POSSIBLE SOLUTIONS | | |
|----------------|---|---------------------------------------|-------------|---|
| | | Education/ Encouragement | Enforcement | Engineering |
| Other issues | <ul style="list-style-type: none"> Lack of visibility around crossing facilities. Overgrowing vegetation, restricting visibility for motorists near facilities. | | | <ul style="list-style-type: none"> Advance warning signs. Clear vegetation. |
| | <ul style="list-style-type: none"> Inappropriate access for people with disabilities. | | | <ul style="list-style-type: none"> Construct wheelchair ramps. |

9 PREPARING THE LOCAL SCHOOL TRAVEL SAFETY ACTION PLAN

The next step in the SafeST Process is the preparation of a Local School Travel Safety Action Plan. The aim of the Local School Travel Safety Action Plan is to identify the key transport safety issues that have emerged as a result of the review and problem identification phase. The SafeST committee would then provide a number of strategies to address the issues.

The purpose of the Action Plan is to:

- document the identified requirements for improving road safety around the school
- establish priorities and timeframes for implementing the required actions
- assign responsibility for implementing the required actions
- establish a framework for evaluation and review of implemented solutions
- establish an on-going process for the review of road safety around the school.

The format of the action plan can be flexible to meet the needs of the school but generally a table format with the following headings would be sufficient in most cases:

- Objective
- Target group
- Action
- Priority
- Responsible person
- Timeframe
- Cost
- Funding Source
- Expected Outcome
- Evaluation (Performance Indicator).

For example:

| Objective | Target Group | Action | Priority | Responsible Person | Timeframe | Cost | Funding Source | Expected Outcome | Evaluation (Performance Indicator) |
|---|--------------------|--|----------|--------------------|-----------|---|---|---|--|
| To reduce crashes and near misses outside the school due to illegal parking | Parents and Carers | Review suitability of drop-off and pick-up zones | High | Road Authority | By August | Nil for review but if changes are needed there may be costs | Road Authority if changes to zones are needed | Better flow of traffic to discourage the need for illegal parking | 10 percent decrease of number of vehicles illegally parked |

* Please note with this objective you may have a number of different actions to deal with the problem including education and enforcement strategies.

10 FUNDING SUBMISSIONS AND IMPLEMENTING SOLUTIONS

Once your committee has decided on your solutions, some of them may require the SafeST Committee to seek funding to implement the solutions. The Road Safety Advisor will be able to provide advice on where to seek funding and how to complete any funding submissions.

The SafeST Committee is responsible for implementing the solutions outlined in the Local School Travel Safety Action Plan, and for monitoring and following up on solutions implemented by other organisations such as road authorities.

11 MONITORING AND EVALUATION

The most important reason for monitoring and evaluating the effectiveness of your road safety project is to discover if your committee is making progress towards achieving your expected outcome.

Monitoring is essential to:

- check how a project is progressing
- provide a measure and direction for continuous development and planning
- ensure objectives are met
- design suitable and useful evaluation tools.

Evaluation is essential to:

- adequately identify a problem in a program and improve that program in the future
- effectively use the resources available to achieve goals
- identify a project's strengths and weaknesses
- provide evidence that a program was successful and that the interventions achieved the desired result
- provide evidence that a program was unsuccessful so as to avoid wasting further resources
- communicate activities to the school community and other stakeholders
- win support for continuing funding
- critically assess other evaluation plans and reports.

Evaluation should be considered prior to beginning a road safety project. The project can then be structured to provide indicators before implementation (baseline data), during implementation (monitoring) and post implementation (impact). The following model provides a simple demonstration of the steps involved in effective evaluation.

Before Implementation

Identify and analyse currently available information to provide a baseline measurement, that is, the situation before intervention. It is essential to determine baselines, in order to be able to measure the impact of the program. The process of designing a project should at least include analysing available data (such as road crash statistics, traffic/pedestrian counts, etc.).

During the development of the Local School Travel Action Plan, performance indicators should be determined. Performance indicators are measures that can be repeated, which indicate performance in terms of efficiency or effectiveness. Performance indicators show what progress has been/has not been made against the project objectives.

One of the primary purposes of evaluation is to identify cost effective interventions that are beneficial. Evidence of effectiveness will show that a strategy is based on sound theory. Efficiency data will provide a cost-benefit ratio, and should be considered in terms of the cost of other activities not implemented.

During Implementation

Monitoring of performance indicators: This will involve an examination of what activities have been implemented, how many people the project has reached, how much of the target audience has been reached, any short-term impact the project has had and whether it has aligned with the project's objectives.

After Implementation

The final phase of evaluation involves examination of the information/data to determine the extent to which the project has met its objectives and the likely effect of the intervention on the target group.

PART B – THE SafeST PACKAGE

12 INTRODUCTION

Queensland Transport's Safe School Travel package (SafeST) is a collection of programs, schemes and initiatives that are designed to improve travel safety for Queensland school students. The SafeST package was developed after wide consultation and in partnership with the State Government's School Transport Safety Consultative Committee. The SafeST package includes the following sections:

- SafeST Subsidy Scheme
- School Crossing Supervisor Scheme
- Educational Resources
- Safe School Bus Routes Program
- Safe Walking and Pedalling Program
- Speed Awareness at Schools Program
- SafeST Public Information
- Other SafeST Initiatives.

There are also many other programs that may be used by school communities that are not part of the SafeST Package. Examples include:

- TravelSmart Schools Program
- Bicycle Information
- Walking School Bus.

13 SafeST SUBSIDY SCHEME

The SafeST Subsidy Scheme aims to improve road safety in the vicinity of existing schools. It is funded from the State Roads Program and provides a 50% subsidy to Queensland local governments for approved school transport related infrastructure works. Funding available under this scheme is limited.

Projects include safety improvements such as crossing facilities, pickup and set-down facilities, pedestrian refuge islands and other traffic management devices.

All existing Queensland schools are eligible for funding with priority given to those projects that have the greatest road safety benefits.

Applications for SafeST funding should be made to your local government. Road Safety Advisors can provide advice to the SafeST Committee on how to complete a submission to the local government. Local governments are then responsible for making project submissions to the Department of Main Roads.

Local councils and sponsors may offer an additional funding source.

14 SCHOOL CROSSING SUPERVISOR SCHEME

The School Crossing Supervisor Scheme assists primary aged school children and special needs children to safely cross roads outside schools. Schools may apply for a supervised crossing under this scheme. The school principal should make an application for a supervised crossing to Queensland Transport. Limited funding is available for the program, and applications must meet established criteria largely based on risk.

If a supervised crossing is approved, the Principal will undertake operational responsibilities in conjunction with Queensland Transport including the selection of a suitable School Crossing Supervisor. The need for ongoing provision of the supervisor will be reviewed periodically.

Application forms and details relating to the School Crossing Supervisor Scheme are available from your local Queensland Transport Road Safety Advisor.

15 EDUCATIONAL AND INFORMATION RESOURCES

A number of educational and information resources are available to address school transport safety concerns and to support the integration of road safety education within the school curriculum. A brief outline of these resources and their availability is provided below:

15.1 Bike Ed Program

The "Bike Ed" Program aims to teach 8 -13 year old students, knowledge and practical skills for safe cycling. Bike Ed is a nationally developed program that is delivered in school and community settings by trained instructors. Links have been made between the program and the core learning outcomes of the Queensland Studies Authority (QSA) Years 1-10 Health and Physical Education Syllabus. A train-the-trainer program and manual have been developed to support the introduction of Bike Ed in Queensland. Schools, community groups and individuals interested in conducting the Bike Ed program should contact their local Road Safety Advisor.

15.2 Years 1-10 Road Safety Curriculum

Queensland Transport has developed modules that support the new syllabus documents being progressively released by the QSA. For teachers, most modules published to date are available on the Queensland Studies Authority website - www.qsa.qld.edu.au/yrs1to10/index.html and support the Years 1-10 Health and Physical

Education Syllabus or Arts Syllabus. The modules may also be obtained by phoning Queensland Transport on 3253 4264.

Examples of modules are:

Let's Go Cycling;

- Links to Health and Physical Education syllabus – Level 3
- The purpose of the module is for students to identify the consequences of taking risks when cycling, and the benefits of cycling for health.

Safe Play Day

- Links to Health and Physical Education syllabus – Level 2
- Students research physical and recreational activities that contribute to different dimensions of health. They identify opportunities that exist for participating in physical and recreational activities, demonstrate actions to reduce risk when participating in physical and recreational activities and explain potentially unsafe aspects of local recreational facilities. Specific examples include suggestions for safe operations of bicycles, and places that are not conducive to safe play, for example, on roads. Encouraged to learn the skills necessary for the proper use of bicycles, skateboards and skates.

Don't Get Smashed

- Links to Health and Physical Education syllabus – Level 6
- The purpose of the module is to encourage students to develop personal and community action plans to promote the health of themselves and others in response to road safety issues, particularly where alcohol is involved. They investigate the influence of peers, family and the environment on their decision-making abilities in risk situations, and plan and demonstrate strategies for establishing independence and responding to potentially unsafe road-use situations and behaviours.

Media and Road Safety

- Links to the Arts syllabus – Level 5
- The purpose of the module is for students to develop an understanding of the role data plays in influencing the production of road safety media texts for campaigns. In this module, students examine a variety of media texts such as road safety messages. This analysis will help to develop students' understanding about the way industry produces, promotes and displays meaning to target audiences.
- The resource is available at –
[http://www.roadsafety.qld.gov.au/qt/LTASinfo.nsf/ReferenceLookup/Media_roadsafety.pdf/\\$file/Media_roadsafety.pdf](http://www.roadsafety.qld.gov.au/qt/LTASinfo.nsf/ReferenceLookup/Media_roadsafety.pdf/$file/Media_roadsafety.pdf)

Road Safety for Young People with Intellectual Impairment

- This program was developed to cater for secondary students with an intellectual impairment age 12 to 18 years. It contains three modules: navigating the road traffic environment, travelling safely on the road and, dealing with peer pressure on the road. Each module contains life long

learning attributes, core-learning outcomes linked to syllabus documents, sample learning program, and Bloom Carter planning framework.

- The resource is available at http://education.qld.gov.au/tal/curriculum_exchange/teachers/cross-curriculum/road-safety/. Resources at this site are password protected but all schools in Queensland have been given a free subscription.

TravelSmart

- Links to the Arts syllabus – Level 3 & 4
- There are currently three modules developed with more resources currently being researched for release in June 2004.
- The current modules are:
 - Airhasted – Students investigate the major causes of air pollution and how travel choices can influence its creation.
 - Exploring our car dependency through media texts (Level 3 & Level 4) – The purpose of these modules is to explore car dependency and analyse its impact on society and the environment.
 - The resources are available at www.transport.qld.gov.au/qt/ptinfo.nsf/index/tsschools.

15.3 RAW in the Classroom and RAW Health

A Health and Physical Education Key Learning Area resource to support "RAW in the Classroom" has been developed. It complements Level 5 and Level 6 curriculum outcomes in the Health and Physical Education Years 1 – 10 Syllabus.

It contains messages to promote positive attitudes and behaviours towards issues such as risk taking, peer group pressure, mortality, self-concept, self-esteem and relationships. It represents a subtle approach to road safety.

RAW was developed in partnership with the Transport Accident Commission (Victoria) to meet a need in secondary school road safety education.

The total resource contains two videos, a CD Rom for teacher use, Level 5 and Level 6 materials for Health and Physical Education and English.

The kit can be purchased from Infosentials on 03 9882 8333 or email info@infosentials.com.

15.4 Student Driver Education Program

A website is available for teachers and students on student driver education. This is a theory only course that can be taught within the classroom. The resource is available at – www.transport.qld.gov.au/Home/Safety/Road/School/Student_driver_education/.

Information for teachers delivering student driver education programs to secondary school students is available for download from this site. A range of student activities and worksheets

can be accessed.

The web site has a distinct learner centre focus, providing teachers with a range of suggested activities for their students, as well as several student worksheets.

A range of links has been built into the web site to enable teachers to easily access other road safety/student driver education sites within Australia.

The resource provides teachers with a range of suggested activities, with an emphasis on attitude, and risk taking. The topics include:

- Why study student driver education?
- Alternative travel – do you need to drive?
- In the driving seat
- But it was an accident
- Attitude is everything
- A drink for the road
- Living on speed
- Buying your first car.

15.5 Kids and Buses Program

The Kids and Buses program focuses on aspects of bus safety and involves students, parents, teachers and bus operators. This is a comprehensive bus safety program for primary students.

There are five sections aimed at different people:

- Teachers (curriculum links, activities and resources)
- Students (identifying hazards, using bus time tables and riddles)
- Parents and Carers (safety checklists)
- Bus Drivers (checklist)
- Gus at School (information about how to organise a bus safety session using a school bus and bus driver).

The Kids and Buses resources are available at www.transport.qld.gov.au/kidsandbuses.

15.6 Queensland Transport Web Site

The www.transport.qld.gov.au website is the gateway to a vast amount of useful information for school communities.

It contains a range of information on SafeST initiatives and fun activities for children as well as road safety data, contact information for people within road safety and information about brochures, publications and other marketing initiatives. It is also the link to the road safety, pedestrian, TravelSmart and cycling websites.

15.7 Chartering A Bus - A Guide for School Communities

Bus travel is one of the safest ways to travel in Queensland. After many years experience, bus operators and transport authorities have worked together to establish a set of rules for the bus industry.

Chartering A Bus - A Guide for School Communities explains the current rules and standards that charter bus services must meet. It answers frequently asked questions about how to charter a bus for school activities. It also outlines important travel details required by the bus operator so that a successful and safe school trip can be planned. Further information can be obtained through the local Road Safety Advisor.

16 SAFE SCHOOL BUS ROUTES PROGRAM

The Safe School Bus Routes Program provides for safety reviews of school bus routes identified as having safety concerns. It is a state-wide program, with a limited budget, which allows for a restricted number of reviews to be conducted each year. In recent years bus route reviews have been conducted from the NSW border to Cooktown and as far west as Longreach.

A Safe School Bus Route review team conducts an on-site review of the bus route. On completion of the on-site review, results are detailed in a summary report with recommendations for improving the safety of the route. Further consultation is undertaken to prioritise recommendations. Once agreements have been reached between Queensland Transport and the local government and/or Main Roads, selected recommendations are implemented and funded.

The routes are nominated by Queensland Transport's Regional Public Transport Officers for review based on:

- type of road surface (bitumen, dirt, gravel)
- road geometry and visibility
- condition of the road surface (bumpy)
- presence of the shoulders/condition of shoulders
- steepness of the route
- presence of standees
- curvature of the route
- speed limit on the route
- traffic volume on the route
- percentage of heavy vehicles on the route
- conditions of pick-up and set-down areas on the route
- suitability of the particular bus for the particular route
- community concerns.

Budget permitting, there are approximately 15 bus route reviews conducted annually. Please contact your local Queensland Transport public transport officer to discuss any issues on bus routes (see Appendix A).

17 SAFE WALKING AND PEDALLING PROGRAM

The Safe Walking and Pedalling program targets the pedestrian or cyclist journey to and from school within 3.2 km of the school. This is in contrast to the SafeST Subsidy Scheme that primarily focuses on the immediate area around the school.

The objectives of the Safe Walking and Pedalling program are to:

- involve Queensland Transport, Main Roads, local government, and primary school communities in the identification of children's road safety problems with regard to walking and cycling to school
- involve local government and primary school communities in developing and providing behavioural, educational and engineering road safety interventions for school children
- identify and improve major routes children use to walk or cycle to school and to other community facilities
- raise local community awareness of child safety issues
- encourage walking and cycling as safe and healthy forms of transport to and from school.

School communities are encouraged to work with surrounding schools and to involve officers from local government, Queensland Transport, Main Roads, and the Queensland Police Service.

Funding up to \$10 000 may be available for some minor engineering works and for non-engineering interventions including training programs or other innovative initiatives. Submissions will be prioritised according to factors such as crash history, level of assessed risk, and speed environment, as well as Queensland Transport objectives.

For more information on how to apply for Safe Walking and Pedalling funding contact your local Road Safety Advisor.

18 SPEED AWARENESS AT SCHOOLS PROGRAM

The Speed Awareness Program uses a radar-activated variable message speed sign to show motorists their speed. The program is run within school zone hours and aims to inform motorists they are in a school zone and to encourage motorists to stay within the speed limit.

Due to sight distances and road shoulders some schools may not be able to use these devices.

The program is run by volunteers from the school community and can be accessed through the local Road Safety Advisor.

19 OTHER SafeST INITIATIVES

The SafeST Program encourages the development of new initiatives and trial programs that aim to improve road safety around schools. Your local Road Safety Advisor can let you

know of any new initiatives that are available to your school community.

20 OTHER USEFUL RESOURCES

20.1 TravelSmart Schools

The TravelSmart School Program is an education resource developed for use across all primary year levels. TravelSmart is the name for a range of voluntary behaviour change projects and general awareness campaigns undertaken by Queensland Transport to encourage people to use more environmentally friendly transport such as public transport, cycling, walking and ride-sharing.

The program aims to raise students' awareness about air pollution and the other impacts of high car use.

The program has been designed to run over a number of weeks where students explore their own car use behaviour, and the school and possibly the school community's own car use. From these knowledge points, students implement ways to change their behaviour and to encourage others to do so.

The outcomes from the program could include:

- safe travelling for all children
- reducing local pollution
- reducing local congestion
- improving student and parent fitness
- reducing car dependency
- reducing accidents
- giving children better road awareness
- maximising public transport usage.

Schools need to register with the Education Project Officer for TravelSmart before commencing the program. The Education Project Officer can assist in providing planning assistance and resources used in the program, and can be contacted on telephone (07) 3253 4327. Additional information on TravelSmart programs can also be found at www.transport.qld.gov.au/travelmart.

20.2 Bicycle Information

Queensland Transport has extensive information on cycling issues on its website, www.transport.qld.gov.au/cycling. Information available includes the following topics:

- Safe cycling
- Share the road
- Share the paths

- Personal security
- Road rules
- Buying a bike and helmet
- Maintaining your bike
- Bikes and public transport
- Kids and bikes
- Why encourage cycling?
- Promoting cycling
- Improving facilities
- For parents and teachers.

Additional information can be obtained by contacting Queensland Transport on telephone number (07) 3253 4437.

20.3 Walking School Buses

Walking school buses are a great way for children to walk to school safely with parental or volunteer supervision. Just like a normal bus, walking buses follow a set route and pick up 'passengers' along the way.

There are a number of variations to the program that can be made by the school community. Some schools have successfully implemented a Walk from School program to ease congestion around the school. In this program students walk with a teacher or volunteer to a nearby location where they can be met by their parents or carers.

The benefits of walking school buses include:

- reduced congestion around schools
- health benefits for students who walk
- increase road awareness and road rules knowledge of students
- reduce traffic around the school gate
- increased student alertness in the classroom.

Bicycle trains can be organised along similar lines as walking school buses. Such a program could be introduced along with Bike Ed training.

There are a number of useful resources on walking buses including:

- www.justwalkit.com.au
- www.walktoschool.info/
- www.waytogo.icbc.bc.ca
- www.walkingbus.com
- www.eeca.govt.nz - and search under "Transport" for "walking school bus".
school bus Guide to setting up a walking school bus.

For more information on walking school buses contact your local Road Safety Advisor.

PART C - GUIDELINES FOR THE PROVISION OF ROAD SAFETY FACILITIES AROUND SCHOOLS

Important Note

Detailed warrants and guidelines for the application of traffic control facilities which can be used to improve safety around schools are set down in the Manual of Uniform Traffic Control Devices (MUTCD) and the Traffic and Road Use Management Manual (TRUM Manual). For the convenience of practitioners involved with school travel safety, relevant warrants and guidelines from the 2003 edition of the MUTCD and the 2002 edition of the TRUM Manual have been reproduced in the remaining sections of this part of the School Environment Safety Guidelines. Information contained in this document was current at the time of printing. However, the MUTCD and the TRUM Manual are subject to on-going review and update. It is essential that, before any particular solution is adopted, the information contained in this document be checked against the current MUTCD and the TRUM Manual.

21 INTRODUCTION

Drivers need to recognise that children are impulsive, unpredictable and inexperienced, and that caution should be exercised in the vicinity of a school. However, pedestrian/vehicle interaction to improve safety around schools can be managed by means of devices from one or more of the following categories.

- (a) School Pedestrian Facilities.
- (b) School Parking Facilities.
- (c) School Cyclist Facilities.
- (d) School Warning Facilities.
- (e) Speed Management.

The types of facilities provided in each category include:

School Pedestrian Facilities

- (i) Children's crossings.
- (ii) Pedestrian crossing (zebra) at schools.
- (iii) Pedestrian-actuated traffic signals (mid-block) at schools.
- (iv) Traffic signals at intersections.
- (v) Subways and bridges.
- (vi) Pedestrian refuges, medians and kerb extensions.
- (vii) Pedestrian fencing.
- (viii) Placement of entry/exit points.
- (ix) Yellow pedestrian holding line.

School Parking Facilities

- (i) On-street parking.
- (ii) Off-street parking and pick-up and set-down facilities.
- (iii) On-street bus stops.

School Cyclist Facilities

School Warning Facilities

- (i) Warning signs.
- (ii) Pavement markings.
- (iii) Flashing lights.
- (iv) Consistent Colour Scheme
- (v) Threshold treatments.

Speed Management

- (i) School Zones.

22 SCHOOL PEDESTRIAN FACILITIES

22.1 General

The following sections provide guidance on the use of the various mid-block pedestrian crossing facilities at schools. Explanations of these terms can be found in the glossary on page 70. Table 2 provides an overall guide to the selection of particular crossing facilities for various road types.

| Type of Road | Facility | | | | |
|------------------------|--|-----------------------------|---------------------|--------------------|----------------|
| | Pedestrian Actuated Traffic Signals at Schools | Pedestrian (Zebra) Crossing | Children's Crossing | Pedestrian Refuges | Kerb Extension |
| Primary Arterial * | A | C | C | B | C** |
| Secondary/Sub Arterial | A | B | B | B | B |
| Collector Road | B | B | A | A | A |
| Local Street | Pedestrian device should not be needed | | | | |

* Non - Freeway
** Kerb Extension may be appropriate on primary arterial in rural towns
A Most likely to be appropriate
B May be an appropriate treatment
C Inappropriate treatment

Table 2 - Selection of Pedestrian Crossing Facilities for Various Road Types

(Derived from AustRoads Part 13 - Pedestrians)

22.2 Children's Crossings

22.2.1 Installation

The distinctive feature of a children's crossing is its part-time nature, being designed to operate as a crossing only at such times as when one or more CHILDREN CROSSING flags (R3-3) are displayed to vehicular traffic.

Children's crossings are usually installed near school locations where the requirements for such a facility arise only during specific and limited times of the school day.

A crossing at a school may be supervised (refer Section 14) during the times when it is operational, in which case the hand STOP Banner (R6-7) is used.



A Children's Crossing

Children's crossings should not be installed on roads where the posted speed limit is greater than 70 km/h or where there is inadequate sight distance to the pavement at the crossing for the motorist from one of the approaches.

A typical installation of a children's crossing is illustrated in Figure 2.

22.2.2 Guidelines for Installation

Children's crossings are warranted at schools where pedestrian crossings (zebra) are not warranted, and where:

- (i) numbers of school children cross a roadway; and
- (ii) the crossing can be located within 200m of the school; and
- (iii) an undertaking can be obtained to:
 - (a) operate and maintain a school crossing supervisor during normal crossing periods while displaying CHILDREN CROSSING flags (R3-3) and hand STOP banner (R6-7), (see section 22.4); or
 - (b) display the CHILDREN CROSSING flags (R3-3) during the period when school children are likely to be crossing the roadway proceeding to or from school (see section 22.4). It is strongly recommended that a school crossing supervisor operate at crossings of this nature during periods when the CHILDREN CROSSING flags (R3-3) are displayed. This would necessitate the use of a hand STOP banner as in (a) above;

with the exception that school crossing supervisors do not operate on crossings that are used only by high school students, or where Queensland Transport undertakes a risk assessment and decides that a school crossing supervisor is not warranted.

22.3 Pedestrian Crossing (Zebra) at Schools

22.3.1 Installation

Pedestrian crossings (zebra) may be installed at schools where there is substantial pedestrian use other than school children during and outside school hours. Where such pedestrian use is not substantial, a children's crossing is installed.

For information relating to signing and marking for pedestrian crossings (zebra) at schools refer to Figure 3.

22.3.2 Guidelines for Installation

Pedestrian crossings (zebra) are warranted at schools:

- (i) on high volume roads; or
- (ii) where pedestrian use other than school children occurs during and outside of normal school hours, and where:

- (i) numbers of school children cross a roadway; and
- (ii) the crossing can be located in the near vicinity of a school; and
- (iii) an undertaking can be obtained to:

- (a) on high volume roads, operate and maintain a school crossing supervisor during normal school crossing periods while displaying CHILDREN CROSSING flags (R3-3) and hand STOP banner (R6-7); or
- (b) elsewhere, display the CHILDREN CROSSING flags (R3-3) during the periods when school children are likely to be crossing the roadway proceeding to or from school. It is strongly recommended that a school crossing supervisor operates at crossings of this nature during periods when the CHILDREN CROSSING flags (R3-3) are displayed. This would necessitate the use of a hand STOP banner as in (a) above;

with the exception that school crossing supervisors do not operate on crossings that are used only by high school students, or where Queensland Transport undertakes a risk assessment and decides that a school crossing supervisor is not warranted.

Careful consideration should be given before installing a pedestrian crossing (zebra) on a high volume road. Pedestrian crossings (zebra) are not recommended for use on multilane roads (undivided or divided) for safety reasons.

22.4 Display of CHILDREN CROSSING Flags (R3-3)

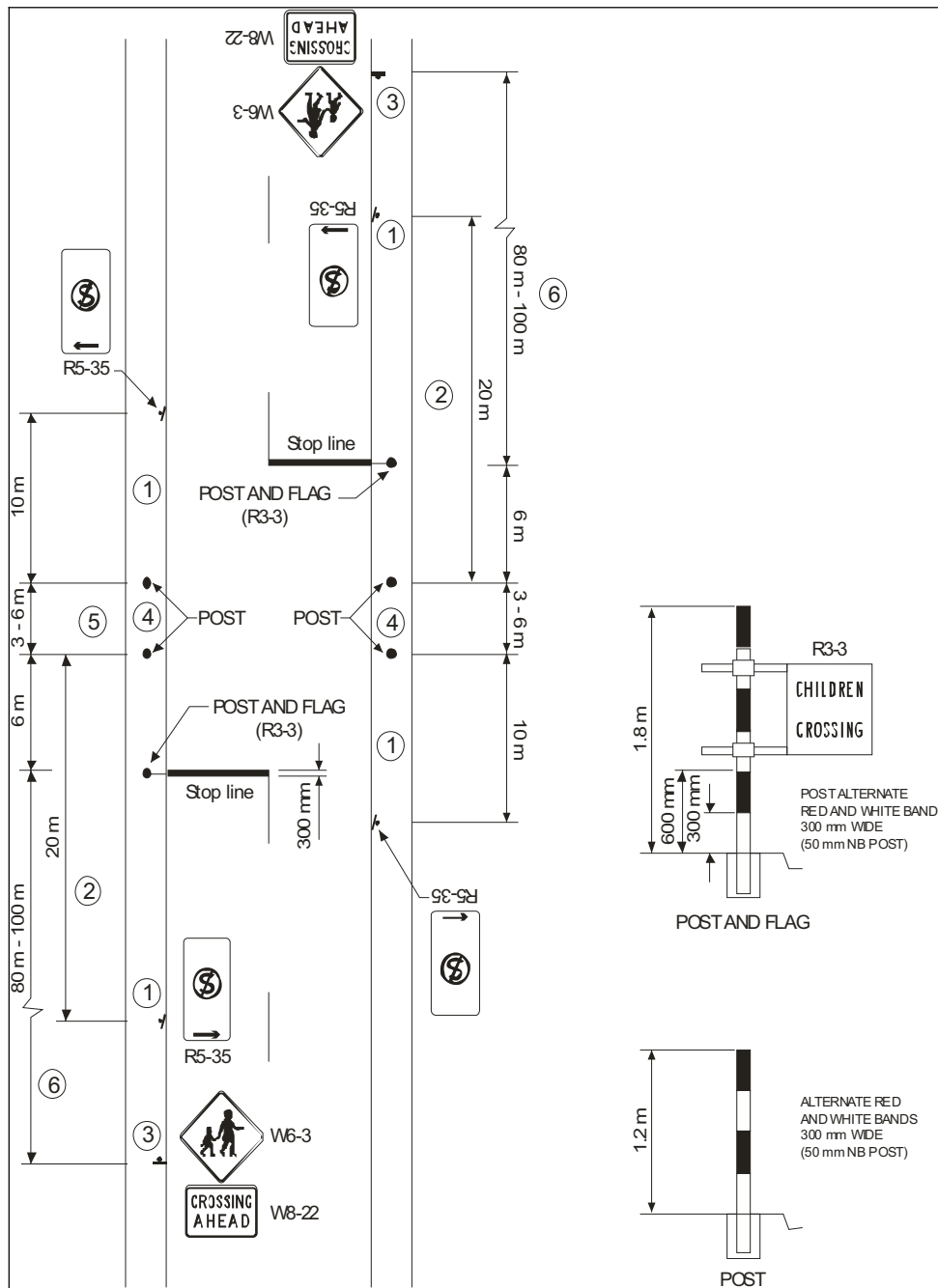
It is very important that CHILDREN CROSSING flags (R3-3) are displayed only during times when motorists are likely to see students using the crossing. If the flags are displayed when students are not present, motorists will question the credibility of the flags, and tend to disregard them. This can lead to a more widespread disregard of the flags even when students are present. Any disregard of the flags will have an adverse effect on the safety of



A pedestrian crossing (Zebra)

students using the crossing. Accordingly, CHILDREN CROSSING flags may be displayed only in accordance with the following requirements:

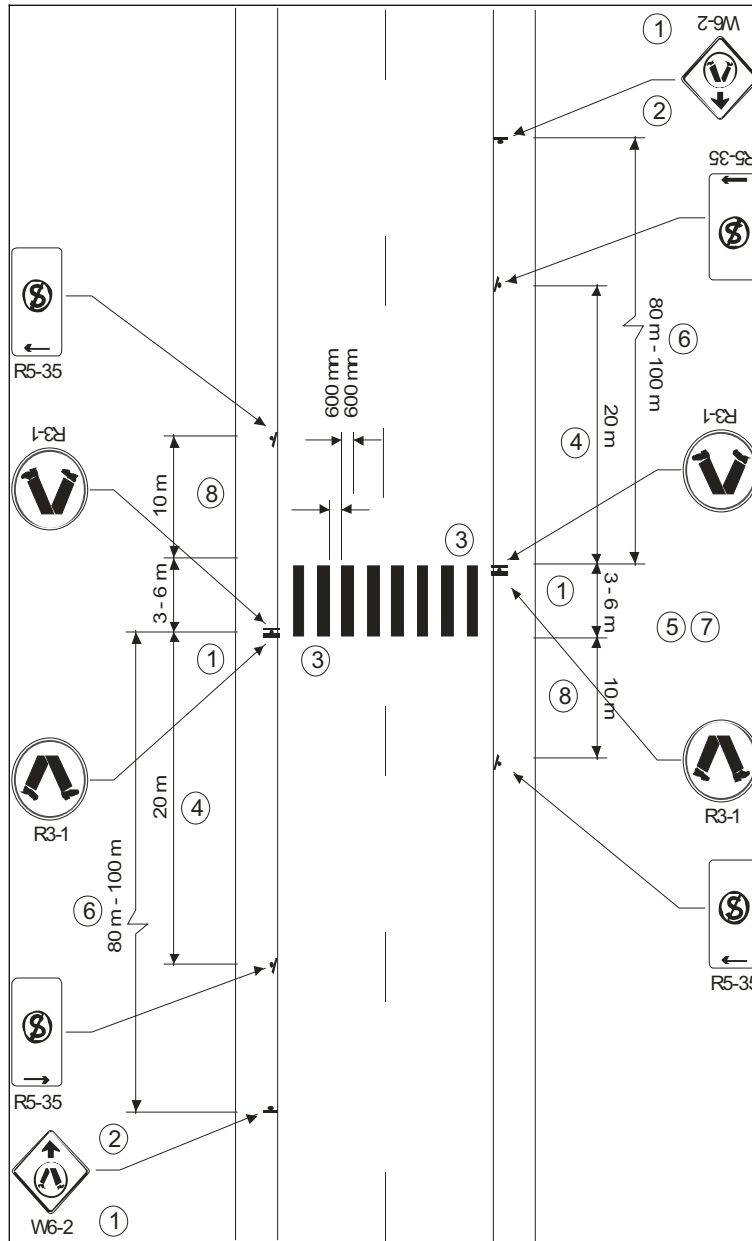
- (i) Where there is a school zone, CHILDREN CROSSING flags should be generally displayed during the hours of operation of the school zone.
- (ii) Where there is no school zone, CHILDREN CROSSING flags should generally be displayed only between 7:30am – 9:30am and 2:00pm – 4:00pm on schooldays.
- (iii) CHILDREN CROSSING flags may be displayed "all day", generally between 7:30am – 4:00pm, only if a school has facilities on both sides of the road and students cross the road regularly throughout the day.
- (iv) CHILDREN CROSSING flags shall not be displayed outside school hours.



NOTES:

1. Times of operation may be specified by use of sign R5-36 (see Clause 10.1.9 in the MUTCD) if required.
2. Where stationary vehicles near a crossing seriously limit visibility between drivers and pedestrians, an increase in these distances may be required.
3. Advance signs may be supplemented with advance pavement messages (see Clause 11.5 - MUTCD).
4. A line (approximately 100 mm wide) may be painted on the footpath - 0.5 m behind the face of the kerb - to indicate the position where pedestrians should wait until directed to cross the roadway. Where used, this line extends the width of the sealed apron connecting the footpath and kerb or a distance of 3-6 metres i.e. between the crossing posts (without flags).
5. Pram/bicycle ramps should be installed.
6. The Children (W6-3)/CROSSING AHEAD (W8-22) sign assembly should be located 80-100m in advance of the crossing. This distance may be reduced to 30m minimum in very low speed environments.

Figure 2 - CHILDREN'S CROSSING



NOTES:

1. Pedestrian crossings (zebra) at schools.
 - a. The Pedestrian Crossing Ahead sign (W6-2) may be supplemented with a SCHOOL plate (W8-14), or SCHOOL warning sign (W6-4) shall be erected in advance of the Pedestrian Crossing Ahead (W6-2) sign.
 - b. If the crossing is supervised, a CHILDREN CROSSING flag (R3-3) shall be mounted on each of the Pedestrian Crossing (R3-1) signs and the supervisors shall use hand STOP banners (R6-7). The CHILDREN CROSSING flags (R3-3) shall be mounted as for Children's Crossings; a line may be painted on the footpath to indicate where pedestrians should wait (see Figure 2 – note 4).
2. The Pedestrian Crossing Ahead sign (W6-2) is always used in advance of pedestrian crossings. The sign may be supplemented with advance pavement messages (see Clause 11.5 - MUTCD)
3. No stop line is to be used.
4. In "Central Traffic Areas", may be reduced to 9 m, subject to visibility requirements.
5. Where there is significant night time use, street-lighting should be provided (see Clause 14 - MUTCD).
6. The Pedestrian Crossing Ahead sign (W6-2) should be located 80 m-100 m in advance of the crossing. This distance may be reduced to 30m minimum in low speed environments.
7. Pram/bicycle ramps should be installed.
8. In 'Central Traffic Areas', may be reduced to 6 m.

Figure 3 - PEDESTRIAN CROSSING (ZEBRA)

22.5 Pedestrian Actuated Traffic Signals (Mid-Block) at Schools

22.5.1 Installation

The line marking and signing arrangement for a mid-block pedestrian actuated traffic signal installation is shown in Figure 4. The principles for installation of the signals are outlined in Part 14 of the MUTCD.

Under special circumstances, for example, where a supervised crossing has been upgraded to pedestrian actuated traffic signals, a signalised crossing may be supervised during the times it is used by school children. This would generally be a transitional arrangement. The hand STOP Banner (R6-7) is NOT used at traffic signals.



*Pedestrian actuated traffic signals
(mid-block)*

Other measures which may improve safety at a signalised crossing include:-

- (a) increasing the width of the crossing. While 2m is the minimum width used, the preferred width of crosswalks near schools is 3.5m.
- (b) increasing the distance from the crosswalk to the stop line. This distance is desirably 3m, but may be increased to 6m in certain circumstances, for example, where there are concerns that motorists are stopping past the stop line.

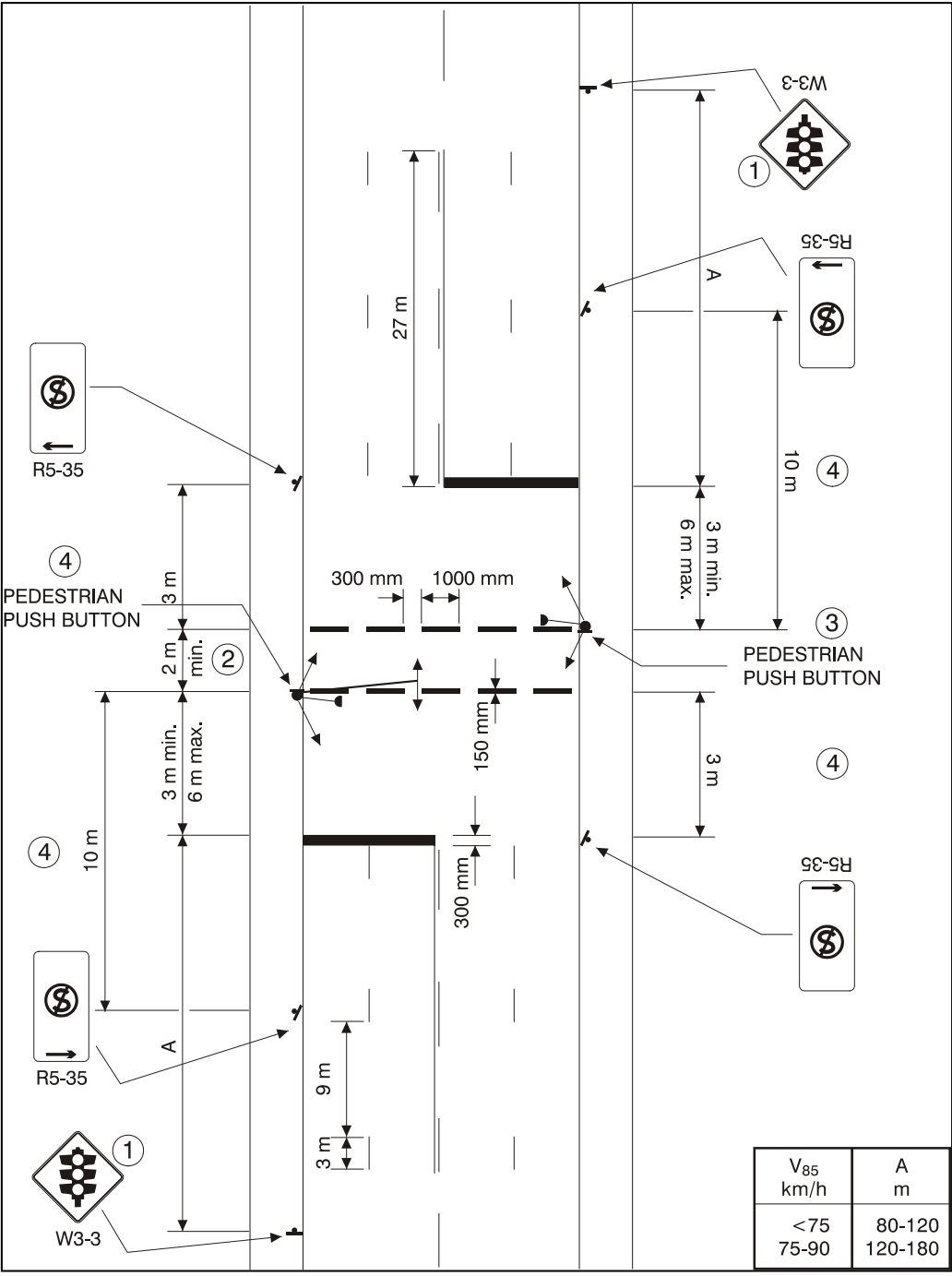
A typical signalised mid-block crossing is shown in Figure 4.

22.5.2 Guidelines for Installation

Pedestrian-actuated traffic signals at schools may be provided where:

- (a) in two separate 1 hour periods of a typical school day, there are no fewer than 50 persons crossing the roadway and at least 600 vehicles pass the site subject to the product of the number of pedestrians per hour and vehicles in the same hour exceeding 40,000; or
- (b) the pedestrian and traffic volume is sufficient to justify a pedestrian crossing but an unsignalised crossing would cause hazard to school children by reason of the width of the roadway or the speed or the volume of vehicles, and the number of adequate gaps in the traffic stream during the period the children are using the crossing is less than the number of minutes in the same period.

At schools, which cater for a significant number of children with particular disabilities, for example vision or hearing impaired or disabled persons, the above guidelines may be modified to make allowance for the different needs of the children.



NOTES:

1. Sign W3-3 to be used only when required, see Clause 10.2.1 - MUTCD (Sign W6-2 is not to be used).
2. Normal crosswalk width, 3.5 m.
3. Pram/bicycle ramps should be installed.
4. Where parking of vehicles close to the crossing may cause difficulties (viz. reduced sight distance, activation of traffic detectors), this distance may be increased.
5. For pedestrian-actuated traffic signals (mid-block) at schools, a SCHOOL warning sign (W6-4) shall be erected in advance of the SIGNALS AHEAD sign.

Figure 4 - PEDESTRIAN ACTUATED TRAFFIC SIGNALS

22.6 Traffic Signals at Intersections

22.6.1 Installation

Traffic signal facilities for pedestrians may be provided at intersections as follows:-

- (a) installation of new intersection signals on the basis of pedestrian warrants;
- (b) installation of crosswalk facilities at an existing signalised intersection.

22.6.2 Guidelines for Intersection Signals

To assist the safe and efficient movement of pedestrians, intersection signals may be considered where, for each of four hours of an average day, 600 or more vehicles enter the intersection from the major road and 150 or more pedestrians cross this movement, and provided that there is no alternative and reasonably accessible pedestrian crossing facility.

Where there is a raised median island 1.2 m or more in width, a vehicular volume of 1000 veh/h applies. Where the 85th percentile speed or the upper limit of 15km/h pace on the major road exceeds 70 km/h, the above vehicular volume requirements may be reduced to 450 veh/h and 750 veh/h respectively.

22.6.3 Guidelines for Crosswalks at Existing Signalised Intersections.

Pedestrian facilities may be provided at existing signalised intersections where occasional pedestrian movement exists and there is inadequate opportunity to cross a road without undue delay, or where pedestrian movement exists but would not have adequate crossing time during the green interval.

Pedestrian volumes of 60 or more over two separate 1 hour periods of an average day would normally indicate the provision of a crosswalk. Crosswalks may be installed at locations where pedestrian volumes are lower, particularly where children or disabled pedestrians use the crosswalk, or where the roadway is excessively wide.

22.7 Subways and Bridges

22.7.1 General

Subways and bridges provide the highest degree of protection from traffic for pedestrians and minimum disruption to road traffic, but there are practical limitations to their installation. They are usually expensive, their cost being considerably influenced by site restrictions such as existing buildings and major utility services. They may require pedestrians to travel up to twice the distance they would otherwise have to walk if crossing the road at grade.



A pedestrian bridge with caging

Careful consideration needs to be given to the installation of subways, particularly in relation to ensuring individual security for users. A perceived lack of personal safety may well result in poor usage of the facility notwithstanding the provision of measures to discourage pedestrians from crossing the road at grade.

The provision of subways and bridges can be facilitated if they are to be part of the initial road construction in developing areas and where they can form part of pedestrian ways. Access for people with a disability should also be considered.

Also, pedestrian bridge incidents have been reported with students throwing objects off pedestrian bridges, on to passing vehicles. The risk of similar incidents occurring at any proposed overpass location should be considered and the need for caging should be assessed during the design period.

22.7.2 Guidelines for Installation

In the design of subways and bridges, due consideration should be given to the need to make access attractive so as to encourage pedestrian usage. Adjustment of property access points such as school gates, and of bus zones, may be necessary. In some cases, it may be necessary to provide fences to prevent pedestrians crossing the road without using the subway or the bridge. Pedestrian Direction signs G5-7 or G5-8 are used to direct pedestrians to the subway or bridge.

In assessing the need for subways and bridges, site volumes and delays, and likely usage by school children and people with a disability should be taken into account.

When comparing the cost with that of possible alternatives, savings attributable to the following should be taken into account:-

- (a) reduction of accidents;
- (b) reduction of delay to vehicular and pedestrian traffic; and
- (c) elimination of any existing pedestrian facility, if appropriate.



A high standard underpass

22.8 Pedestrian Refuges, Medians and Kerb Extensions

22.8.1 General

Pedestrian refuges, medians and kerb extensions have the effect of narrowing the road, thereby reducing the time that pedestrians are exposed to traffic when crossing the road. Provision of these devices may also have the added benefit of helping to reduce the speed of passing motorists by providing additional visual cues of the need to reduce speed.

When designing physical pedestrian aids, it is important to ensure that the device will not create a hazard for other road users. The following issues must be considered:

- (a) devices must not encroach on the travel routes of other road users, particularly cyclists;
- (b) devices must be well lit, delineated and appropriately signed to ensure they do not become a hazard at night;
- (c) bollards, fencing or vegetation installed on these devices must not obscure child pedestrians;

- (d) appropriate kerbing must be used i.e. semi-mountable where the island is very close to the through lane; and
- (e) the facilities must be usable by people who use wheel chairs or with prams.

22.8.2 Pedestrian Refuges and Medians

If pedestrian refuges are needed at a number of successive closely spaced intervals along a street, consideration should be given to providing a continuous median treatment instead of a number of separate islands. However, an assessment would need to be made of the potential impact of a continuous median on access to adjacent properties.

Approach line-marking is needed to ensure that vehicles are safely guided past the island. Refuges should not unexpectedly constrict the road width. The number of traffic lanes should be maintained past the island by modifying line-marking. Also, parking controls must be introduced to provide a clear area for children to cross the road and adequate visibility of the crossing area (see Figure 5).

As discussed in Section 22.9, fencing on the footpath can be used in association with pedestrian refuges to ensure that children cross directly to the refuge and to deter vehicles from parking too close to the crossing point. Fencing can also be provided on the refuge to control and direct the children.

Where a refuge has a gap at roadway level for the pedestrians to walk through, the edge lines adjacent to the islands should be continued across the gap. This will clearly define the area in which it is safe for children to stand while waiting to complete the crossing, and deter them from waiting on the roadway.



Typical Pedestrian Refuges

Refuge islands are particularly useful where:

- (a) Four or more traffic lanes have to be crossed in any one stage of the crossing, or on wide roadways (15 m or more in width).
- (b) At signalised crossings, where the pedestrian interval is insufficient to allow all pedestrians to cross the full width of the roadway.
- (c) Numbers of pedestrians wish to cross the road, but the guidelines for installation of a pedestrian crossing (zebra) are not met.
- (d) The 85th percentile speed or the Upper Limit of 15km/h Pace of traffic is greater than 60 km/h.
- (e) At a pedestrian crossing, the two-way traffic volumes or width of the roadway make the crossing difficult.
- (f) The conditions exist to justify the installation of a pedestrian crossing (zebra) but, due to the traffic volume or the speed or visibility of approaching traffic, such a crossing may increase the potential hazard to pedestrians. In this case, a pedestrian refuge may be a more suitable facility.

22.8.3 Kerb Extensions

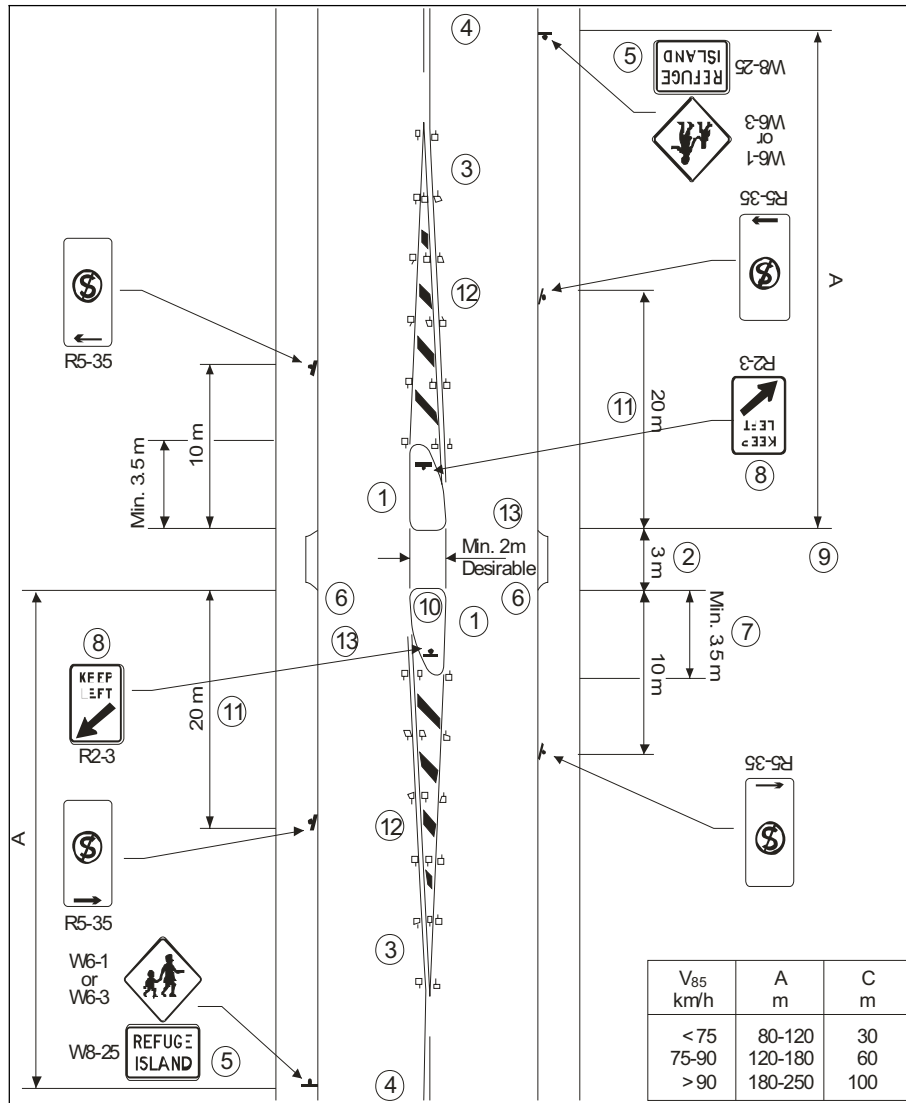
Kerb extensions can be constructed at any point along a kerb where the kerbside lane is required neither for moving traffic nor as a bicycle lane. Kerb extensions are most common at intersections and at mid-block sites where a crossing facility exists. They minimise the width of roadway to be crossed, and they usually place the pedestrian in a position where visibility of approaching traffic is not impeded by kerbside obstacles or parked vehicles.

It is not normally necessary to sign kerb extensions unless the signs are required for an associated pedestrian facility. However, they should be suitably delineated to avoid vehicles colliding with them.

Where kerb extensions are used in association with a pedestrian crossing facility, the parking restrictions specified in the MUTCD associated with such a facility may be reduced. Sufficient visibility must be provided between approaching drivers and pedestrians about to cross the road on the facility (refer to Part 2 of MUTCD).



Typical Kerb Extensions



NOTES:

1. Island kerbs may be painted white. Minimum width island should be 1.6 m (preferred width 2 m or greater). **For refuges at schools, the edge line should be continued across the crossing point.**
2. If refuge is used in conjunction with a marked crossing, the spacing between the islands should be increased accordingly.
3. Length of painted median should be increased or other delineation devices considered if visibility to the island is reduced by vertical or horizontal alignment. Raised retro-reflective pavement markers are provided at 5.0 m spacings.
4. Painted median is preceded by barrier line extending for a distance 'C' shown in the table.
5. Where isolated refuges are used, Pedestrians or Children warning signs W6-1 or W6-3 (minimum size B) (see Clauses 10.2.2 and 10.2.4 - MUTCD), as appropriate, are erected together with supplementary plate REFUGE ISLAND (W8-25) (see Clause 10.2.6 - MUTCD) in advance of the refuge.
6. Pram ramps should be constructed if practicable.
7. When used at intersections, the length of the innermost island may be reduced to accommodate turning traffic. A suggested minimum length is 1.8 m.
8. A hazard marker D4-3 may be used under the Keep Left (R2-3) sign. Mounting heights need to be selected so as to avoid obscuring visibility of child pedestrians.
9. Street lighting where provided should be in accordance with AS 1158.1. (see Clause 14 - MUTCD)
10. Pedestrian assist handrails may be provided on the island at the pedestrian crossing point provided the island is at least 2 m wide. If provided they shall be frangible.
11. In "Central Traffic Areas" the approach No Standing zone may be reduced to 9 m and the depart No Stopping zone to 6m.
12. Consider the need to break double barrier line opposite access driveways to permit crossing.
13. On two lane roads, the minimum width past the island is 3.3 m. For four lane roads, the minimum width past the island is 6.0m.

Figure 5 - PEDESTRIAN REFUGE

22.9 Pedestrian Fencing

Pedestrian fencing is generally used at schools in association with other pedestrian facilities to direct children to crossing points and prevent crossing at uncontrolled locations nearby. Fencing may also be used on pedestrian refuges or medians to encourage pedestrians to wait in the middle of the road before completing the crossing. Fencing on the kerb line also discourages motorists from parking close to a crossing point.

At some locations it may be possible to avoid installation of pedestrian fencing outside the school grounds by relocating school gates to appropriate locations relative to pedestrian crossings or school transport facilities.

At locations where visibility is not a problem, and where the fencing is intended to direct pedestrians, rather than create an impenetrable barrier; landscaping may be an attractive alternative to mesh or chain fencing. Maintenance issues of this option must be considered. Fence material and construction should also be such as to minimise injuries to road users in the event of a collision, for example horizontal rails must not be used. Fencing on medians at staged crossings should be aligned so that pedestrians will face oncoming traffic, as they are about to leave the median.



Pedestrian fencing on a median

Particular attention should be given to the height and placement of the fence, and to the material used in its construction to minimise the potential sight obstruction between drivers and children about to cross the road. Fencing should be considered as a last resort because of the restrictions it imposes on pedestrians.

22.10 Placement of Entry/Exit Points

The location of entry and exit points to the school is very important for directing pedestrians, cyclists and vehicles to the desired locations. Gates should be located so that children waiting to be collected by parent/carers can stay inside the school fence. This has benefits in terms of road safety, by preventing children playing near or on the road, well as personal safety. Further, good placement of gates may remove the need for pedestrian fencing outside the school.

Intended routes from inside the school to various transport facilities such as bus stops, car parks and foot and cycle paths should be clearly established to avoid conflicts and maximise efficiency of the other facilities. In particular note that:

- (a) children should not have to cross the main entry/exit point or walk through the off-street parking in order to access other facilities;
- (b) gates should be placed at locations that direct children to the designated crossing points; and
- (c) bike racks and cycle access gates should be placed at locations where child cyclists can safely access cycle paths.

22.11 Yellow Pedestrian Holding Line

Yellow pedestrian holding lines can be used at crossing facilities to encourage school children to wait behind the line before directed to cross the road. This method may be useful at locations where school children tend to encroach onto the roadway while waiting to cross the road.

Part 10 of the MUTCD currently allows a line approximately 100 mm wide to be painted on the footpath, 0.5 m behind the face of the kerb at children's crossings. It is recommended that this line be yellow, and that the use of the yellow line be extended to any type of crossings at schools where school children are observed standing too close to the edge of the traffic lanes while waiting to cross the road.

Where there is a yellow "no parking" line extending across the crossing facility, a yellow holding line must be installed to ensure that children do not attempt to stand at the yellow "no parking" line.

23 SCHOOL PARKING FACILITIES

23.1 General

Many school children travel to and from school in private motor vehicles and buses. It is important that adequate parking and pick-up and set down facilities are provided to ensure that safety problems do not arise due to conflict between pedestrians and vehicles.

Car and bus parking facilities can be provided on-street or off-street. Off-street facilities are the preferred option where the availability of land and funds permit, particularly where schools are on roads with higher traffic volumes. Whichever option is adopted, bus and car parking facilities should be separated where possible.

When determining the need for parking facilities or pick-up and set-down facilities, and the type of facility to be provided, consideration should be given to factors such as:

- (a) number of students attending the school;
- (b) location of the school and its catchment area;
- (c) trip lengths and modes of travel;
- (d) age of students;
- (e) potential for use as a bus interchange area as well as a parking facility;
- (f) the type and function of adjacent roads; and
- (g) adjacent land use.

The number of car parking spaces required can be determined by estimating the maximum number of cars likely to arrive at any one time. Heaviest demand usually occurs on wet days and may be up to 20% greater than normal. At schools where car travel is predominant, approximately 10 spaces per 100 children at the schools may be required. Elsewhere 4-5 spaces per 100 children at the school may be adequate. Where the facility also serves a pre-school, additional parking spaces may be required. Pre-schoolers must be escorted to their classrooms, requiring their parents or carers to park for a longer time.

However, before committing funds to the provision of parking facilities, consideration should be given to the desirability of encouraging and supporting the use of alternative transport modes, such as buses, trains, cycling or walking. This has the potential to reduce private motor vehicle usage and hence reduce the need for parking facilities. Queensland Transport, through the TravelSmart program, can help the school community to look at alternative ways to travel to school.

The following sections provide guidance for the design of:

- (a) on-street car parking facilities;
- (b) off-street parking and pick-up and set-down facilities for cars and buses; and
- (c) on-street bus stops.

23.2 On-Street Car Parking

The type of on-street car parking that can be provided is generally dependent on a combination of the widths of the roadway, the road shoulder or verge and the footpath. Parallel parking requires the least available width, but provides the minimum number of parking spaces. Where sufficient width is available, angle parking provides a greater number of parking spaces. In some cases parking bays need to be indented, that is set back into the footpath, to avoid disruption to through traffic on the roadway.

At many schools, problems are common at on-street parking areas, particularly during the afternoon collection time when a large number of vehicles converge on the school over a relatively short period. Parking near the school gate is very popular, resulting in a concentration of activity in the area surrounding the gate.

Many of the problems that occur at on-street parking areas are the result of poor driver behaviour and non-compliance with parking restrictions. Education and enforcement activities can help to address these problems.

The following general principles should be considered when installing or assessing on-street parking facilities. These principles can help to achieve safer parking activity and improved compliance with parking restrictions.

- (a) Car parking areas should be clearly separated from on-street bus stops.
- (b) Regulatory parking signs must be clearly visible to drivers. It is essential that vegetation, buildings, poles or other signs do not obstruct signs. On-going maintenance is required to ensure that vegetation does not obstruct signs.
- (c) Yellow edge lines can be more effective than regulatory signs to prohibit parking in some situations.
- (d) Pavement markings can help to reinforce parking restrictions. Wide yellow or white diagonal or chevron markings may be applied to areas of the pavement, which are not intended for use by vehicles.



Chevron markings to deter parking

- (e) Raised pavement markers in combination with the above pavement markings can further deter inappropriate parking.

However, pavement markings and raised pavement markers are generally only effective when used to supplement regulatory parking controls.

Part 11 of the MUTCD provides guidance on the application and placement of regulatory parking signs and pavement marking.

23.3 Off-Street Parking and Pick-Up and Set-Down Facilities

A large proportion of road safety problems at schools are related to off-street parking and pick-up and set-down activities. The main areas of concern are:

- (a) safety of child pedestrians walking to and from parked cars; and
- (b) safe operation of the entry and exit points, particularly during the peak traffic times.

To minimise the conflicts that can arise from the unmanaged combination of children and vehicular activity, careful consideration needs to be given to the placement and layout of off-street parking and pick-up and set-down areas for parents and carers.

The design of off-street parking or pick-up and set-down facilities depends on many factors, including the amount of land available, the shape and topography of the land and the available funds. Hence, most layouts will be unique and designed to suit specific circumstances.

The following general principles should be considered when providing off-street parking and pick-up and set-down facilities at schools.

- (a) Off-street parking and pick-up and set-down facilities should be located as close to the school buildings as possible. Off-street facilities will not be fully utilised if people consider that they have to walk too far to reach the buildings. However, the facility should not be so close that it will cause disturbance for people in the school buildings.
- (b) Entrances and exits to the off-street facilities should be located clear of pedestrian access gates and crossing facilities. Entrances should be readily visible to motorists and clearly signed. Exits should be designed and signed to ensure that drivers do not attempt to enter through the exit.
- (c) Adequate visibility must be available at exits from off-street facilities. This could require the establishment of No Parking zones each side of the exit. Trimming of vegetation may also be needed, as may be the installation of convex mirrors to allow the observation of oncoming traffic.
- (d) Where there is a combined entrance and exit, traffic movements should be separated by a median where possible.
- (e) Bus and car parking areas should be separated, and each area should be clearly signed. Where possible a median should be installed to separate the areas.
- (f) Pick-up and set-down areas for parents and students should be separated from parking facilities for teachers and staff.

- (g) Parking bays must be clearly marked, and designed in accordance with guidelines in the MUTCD and Austroads. Where there are parking bays on only one side of the facility, they should be on the side closest to the school, to reduce the need for children to cross roadways within the parking area.
- (h) Intended pedestrian paths through the parking facility need to be clearly identified for pedestrians and motorists. Pedestrian movements should be separated from vehicle movements.
- (i) One-way traffic flow through the facility can improve pedestrian safety because it makes it easier for pedestrians to predict vehicle movements.
- (j) Textured or raised pavements can help to define pedestrian paths through parking facilities.
- (k) Where possible, footpaths should be provided so that children do not need to walk along the roadways within the parking area.
- (l) Crossings should be provided on roadways within the parking area. The crossings should be on the route that most pedestrians will want to use, and should lead pedestrians to a footpath or school gate. Fencing can be used to direct pedestrians to crossings and prevent uncontrolled crossing of roadways.
- (m) Because motorists can tend to ignore painted markings, kerbing is preferable to painted lines and painted traffic islands to define parking areas and roadways within off-street facilities.
- (n) Appropriate signs, for example NO ENTRY, and pavement arrows should be used to reinforce the permitted directions of travel on roadways within the parking area.
- (o) Adequate drainage should be provided. Unless there is no alternative, people will generally not use the facility if they need to walk through storm water.

Figure 6 illustrates some of the above principles for an off-street pick-up and set-down facilities

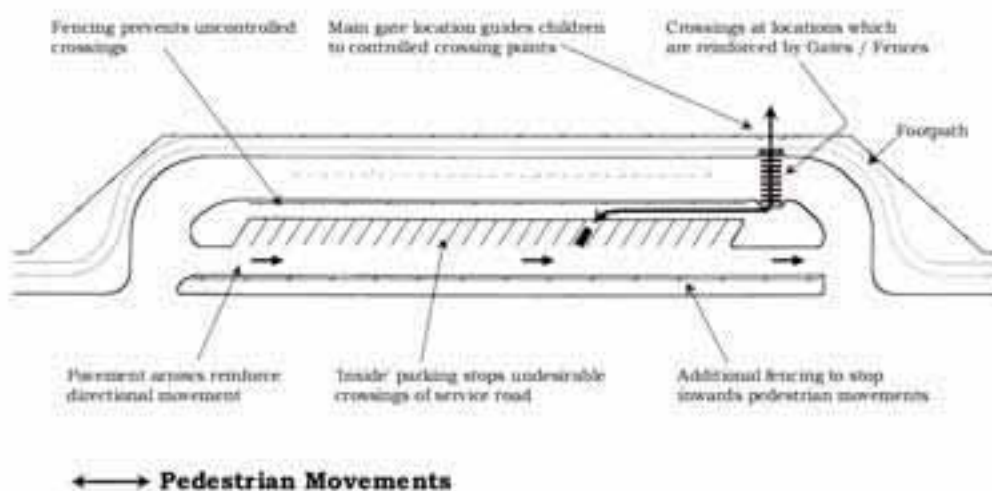


Figure 6 - A PICK-UP AND SET-DOWN FACILITY

23.4 On-Street Bus Stops

23.4.1 General

On-street bus stops should be separated from all other activities such as pick-up and set-down facilities, gates and general short-term parking. Bus stops need to be clearly signed so that motorists do not use them for parking for their own convenience. Bus stops are a particular instance where pavement marking including “BUS STOP” may assist to achieve the desired result. Where a bus stop is located just in advance of a crossing, consideration may be given to the installation of a kerb extension. This would increase the difficulty of re-entering the stream for motorists who disregard the parking controls and thereby discourage illegal parking in the bus stop and increase the visibility of children pedestrians using the crossing.

In some cases, it may be necessary to relocate the bus stop and/or alter the bus route to eliminate conflicts with children, bicycles and other vehicles near the school. Buses generally need to arrive at the school, deposit or collect children and leave in a very limited amount of time. The pressure to be efficient combined with any or all of the issues listed below can lead to road safety and traffic problems:

- (a) Insufficient kerb space for all buses that must access the school at a particular time.
- (b) Illegal parking by parents and carers in designated bus stops.
- (c) Difficulties in pulling in and out of the bus stop because of the site layout or traffic congestion.
- (d) Visibility restrictions.
- (e) Children arriving late at the bus stop.

Bus stops near school crossings, pedestrian-actuated signals and marked pedestrian crossings should be installed on the far side of the facility as buses are less likely to obscure the visibility of pedestrians on such facilities.

The mid-block stop uses more kerb space, but moves the run-in/run-out manoeuvres as far from intersections as possible, generally causing less interference to traffic. Where the full width of the roadway between kerbs is required for moving traffic, bus bays can be indented into the adjacent footway or reservation up to a depth of 3.7 m over an appropriate length. Run-in and run-out tapers should be provided for deceleration and acceleration.

The length of a bus stop depends upon the number of buses likely to use it at any one time. Minimum lengths may be obtained from the following expressions:

- (a) For nearside or far side of intersections: $18 + L(n - 1)$
- (b) For mid-block stops in parallel parking areas: $24 + L(n - 1)$
- (c) For mid-block stops in angle parking areas: $27 + L(n - 1)$

Where

L = the length of bus, in metres

n = number of buses likely to use a stop at the one time

Bus stands are areas where buses may remain for some time before commencing a trip. They should be located clear of the through traffic lanes or at a more distant location where parking demand is not high and obstruction of traffic does not occur.

24 SCHOOL CYCLIST FACILITIES

Bicycles are a popular mode of transport to and from school, and it is important that adequate provision is made for the cyclists to enter and exit the school grounds safely. The following general principles should be considered when assessing safety for cyclists around schools.

- (a) Where facilities such as bicycle lanes, bicycle paths, shared paths or students that cycle to school use segregated paths, there should not be any break in connectivity of the facility when students reach the school. Bicycle paths and lanes should lead the cyclists to a designated school entry, via an appropriate crossing facility where necessary. Connectivity will encourage use of facilities, which might not otherwise be used by students to cycle to school.
- (b) Wherever possible, cyclists should be separated from pedestrians and vehicles when entering the school grounds and within the school grounds. Consideration should be given to locating entry points for cyclists away from vehicle and pedestrian entry points, and providing separate paths for cyclists within the school grounds. Where a school has more than one road frontage, it may be appropriate to provide the cycle entry point on a different frontage from the vehicle entry.
- (c) Concrete, paved or sealed footpaths, can remove the need for primary school students to ride on the road during the very busy pick-up and set-down times. Wider paths will help to reduce conflict between pedestrians and cyclists.
- (d) Secondary school students generally prefer to ride on the road. On-road bicycle lanes will help to reduce conflict between cyclists and motorists. Provision of bicycle lanes can result in narrower traffic lanes which may have a secondary benefit of encouraging slower speeds.
- (e) Any LATM devices, such as kerb extensions, near the school must be designed so that they do not restrict movement of cyclists, or create squeeze points that cause the cyclists to move suddenly into the traffic lane.
- (f) Crossing facilities provided for pedestrians can also be used by cyclists, provided they dismount, for example children's crossings, zebra crossings, signalised crossings and refuges.
- (g) Where a bridge or subway is to be provided, the needs of both pedestrians and cyclists must be considered during design of the facility. If the bridge or subway is to be used by cyclists, ramps of the appropriate gradient will be required rather than steps. Facilities designed to accommodate people with a disability would be usable by cyclists. Fencing may be required to prevent cyclists attempting to cross the roadway directly rather than travel via the bridge or subway.
- (h) If a bridge or subway cannot be designed to accommodate cyclists, an alternative on-road route must be available. The route must be appropriately signed and student cyclists must be educated in its use. Fencing may be required to prevent cyclists attempting to cross the roadway directly rather than travel via the alternative route.



A bridge with a ramp suitable for cyclists

- (i) At the entry and exit to subways, sufficient visibility must be provided to allow for the higher speeds at which cyclists will be travelling compared to pedestrians. Added visibility will also contribute to the security of the users of the subway.
- (j) Pedestrian refuges or medians at crossing points must be wide enough to allow safe waiting with bicycles. Staggered fencing on refuges and medians must be designed to allow bicycles to be wheeled through.
- (k) Only bicycle friendly grates, that is grates with the bars at right angles to the direction of travel, should be used on roads both around the school and within the school grounds.
- (l) Adequate secure storage facilities should be provided for bicycles close to classrooms. These facilities should be located clear of any internal vehicle facilities, to minimise conflict between cyclists and vehicles.
- (m) During planning for new schools, education and council authorities should consider safety issues when providing facilities for cyclists within the school environment.
- (n) Education and council authorities should establish appropriate maintenance programs to ensure on-going effectiveness of the safety facilities.

Users of these guidelines are also referred to the following publications for additional guidance on the provision of facilities for cyclists:

- (a) *Cycle Notes A reference tool for cycle planning & design*, Queensland Transport 2002.
www.transport.qld.gov.au/cycling.
- (b) *Guide to Traffic Engineering Practice Part14 – Bicycles*, Austroads 1999
- (c) *Queensland Cycle Strategy*, Queensland Transport 2003

Traffic signs and pavement markings provided at bicycle facilities must be provided in accordance with the Manual of Uniform Traffic Control Devices - Part 9 - Bicycle Facilities.

25 SCHOOL WARNING FACILITIES

25.1 Warning Signs

25.1.1 General

Warning Signs that may be used to warn motorists of the likely presence of school children on or crossing the road near schools include:-

- (a) Children (W6-3)
- (b) SCHOOL (W6-4)
- (c) Pedestrians (W6-1)
- (d) Bicycles (W6-7)

These signs may be used with one of the following supplementary plates, where appropriate:-

- (a) SCHOOL (W8-14)
- (b) BLIND (W8-19)
- (c) PRESCHOOL (W8-24)
- (d) DISABLED (W8-20)
- (e) CROSSING AHEAD (W8-22)

25.1.2 Guidelines for Installation

Warning signs are installed in accordance with the requirements of Part 2 of the MUTCD. The following Tables 3 and 4 are designed to assist in the selection of appropriate warning signs at schools.

| Crossing Facility | Warning Sign |
|-----------------------------|---|
| Pedestrian Crossing (Zebra) | Pedestrian Crossing Ahead sign (W6-2) with a SCHOOL supplementary plate (W8-14), or SCHOOL sign (W6-4) in advance of a Pedestrian Crossing Ahead sign (W6-2) |
| Children's Crossing | Children sign (W6-3) with a Crossing Ahead supplementary plate (W8-22), with/without a SCHOOL sign (W6-4) in advance |
| Pedestrian Actuated Signals | Signals Ahead sign (W3-3) if warranted, with/without a SCHOOL sign (W6-4) in advance. |

Table 3 - Warning Signs for Use in Advance of Crossing Facilities

Other than in advance of a crossing facility, warning signs should generally only be used where:

- (a) a number of children (or children and adults) cross the road but the numbers are insufficient to justify a specific pedestrian facility;

- (b) there is significant pedestrian use at nights;
- (c) the presence of pedestrians might be unexpected; or
- (d) the pedestrian demand extends over a length of road.

| Site Conditions | Warning Sign |
|---|--|
| Significant number of pedestrians throughout the day, not only associated with the school | Pedestrians sign (W6-1) |
| At schools without pedestrian crossing facilities | SCHOOL sign (W6-4), or Children sign (W6-3) with a SCHOOL supplementary plate (W8-14) |

Table 4 - Warning Signs for Different Site Conditions

Care must be taken to avoid overuse of warning signs. Signs should only be installed where warranted. School communities in the belief that they will reduce vehicle speeds or improve safety often request additional signs. However, this is not necessarily the case. Improperly used or unnecessary warning signs lose effectiveness and can lead to disregard of signs by motorists. Sign clutter should also be avoided.

25.2 Pavement Markings

25.2.1 General

Pavement markings and threshold treatments may be used to highlight road facilities at schools. All pavement markings associated with pedestrian crossings as shown in Figures 2, 3, 4 and 5 shall be white and be reflectorised.

25.2.2 Pavement messages

The use of pavement messages in advance of pedestrian facilities at schools should be restricted to sites where driver awareness of the facility may be reduced by the horizontal or vertical alignment or by volume of traffic.

Word messages for use on road pavements near crossings at schools are as follows:

- (a) SCHOOL ZONE
- (b) PED X
- (c) SCHOOL X
- (d) SCHOOL

“SCHOOL ZONE” is the only pavement message approved for use with a School Zone Speed Limit sign. Pavement markings indicating the speed limit or the times of operation of a school zone speed limit are not approved for use in Queensland. The school zone pavement message may be incorporated with a threshold treatment for added emphasis at the discretion of the local government. Refer Section 25.4 Threshold Treatments.

The following table provides guidance on use of pavement messages at schools.

| Sign | Associated Pavement Message |
|--|------------------------------------|
| SCHOOL ZONE SPEED LIMIT sign (R4-Q01) | SCHOOL ZONE |
| Pedestrian Crossing Ahead sign (W6-2) with or without a SCHOOL supplementary plate (W8-14) | PED X with or without AHEAD |
| Children sign (W6-3) with a CROSSING AHEAD supplementary plate (W8-22) | SCHOOL X with or without AHEAD |
| Children sign (W6-3) with a SCHOOL supplementary plate (W8-14), or SCHOOL sign (W6-4) | SCHOOL |

Table 5 - Pavement Messages

25.3 Flashing Lights (wig wags) on Warning Signs

25.3.1 General

The MUTCD and the TRUM Manual provide for the use of two alternately flashing lights (wigwags) installed above warning signs when the message being conveyed on the warning sign is one of extreme severity of hazard, or there is a lack of adequate stopping sight distance to the hazard.

Trials conducted at school zones throughout Queensland, showed that flashing lights of this type were effective in reducing vehicle speeds in school zones. However, these studies also concluded that widespread use of such flashing lights at school zones is highly likely to reduce the effectiveness of these devices where used at other high risk road locations.

Flashing lights (wig wags) installed above warning signs may therefore be used at schools only in accordance with the following guidelines.

The use of smaller in-built flashing lights on Enhanced and Changeable School Zone Speed Signs is discussed in Section 26.

25.3.2 Guidelines for Installation

Flashing lights (wigwags) may be used on warning signs at schools only where:

- (a) there is a children's or pedestrian crossing; preferably with a school crossing supervisor; and
- (b) where driver sight distance to the crossing is less than the stopping distance; and
- (c) Enhanced or Changeable School Zone Speed Limit signs (see Section 26.6) have not been installed; and

- (d) the flashing lights are programmed to flash (wig wag) only during the hours of operation of the school crossing supervisor, or if no crossing supervisor, for the times when children are likely to be using the crossing on school days.

Note that where compliance with the speed limit is an issue, stopping distance should be calculated from the posted speed limit plus 10km/h.

25.4 Threshold Treatments

25.4.1 General

Threshold treatments may be provided at entrances to school zones to create a change in driver perception of the speed environment. In the absence of a school zone, threshold treatments may be used to define the school precinct.

25.4.2 Guidelines for Installation

Threshold treatments similar to those used at the perimeter of Local Area Traffic Management (LATM) areas may be used to define the start and end of school precincts. However, threshold treatment for school precinct shall not include any vertical displacement device, unless the school precinct is located within an LATM area.

The purpose of threshold treatments is to inform road users that they are entering a school environment and that they should modify their driving behaviour, and reduce their speed where required.

Threshold treatments around schools will provide the greatest benefits at school zones where it is difficult for drivers to identify the need to reduce speed, for example, on wide, open straight roads or where the school is set back from the edge of the road. Threshold treatments should generally not be used on multi-lane arterial roads.



A typical threshold treatment

Where used at school zones, threshold treatments shall be located adjacent to the School Zone Speed Limit signs. Where used at schools without a school zone, threshold treatments shall be located adjacent to the Pedestrian Crossing Ahead (W6-2) or Children (W6-3) warning signs.

Where used at school zones, threshold treatments shall include the words SCHOOL ZONE. Where used at schools without a school zone, threshold treatments shall include the word SCHOOL.

A typical threshold treatment for a school zone is shown on Figure 7.

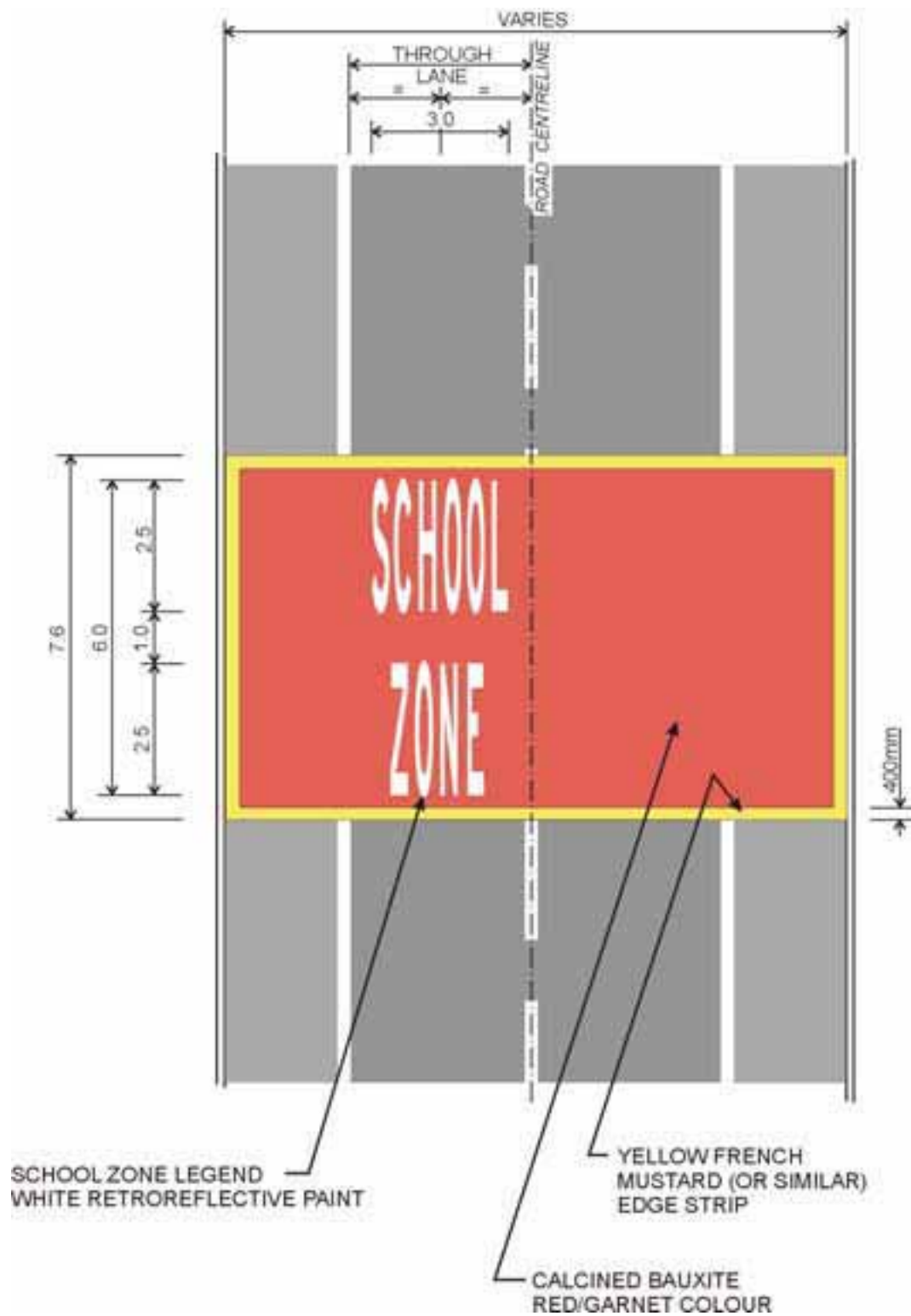


Figure 7 - TYPICAL THRESHOLD TREATMENT FOR A SCHOOL ZONE

25.5 Consistent Colour Scheme

25.5.1 General

Road safety around a school can be improved if motorists' awareness of the presence of the school is increased. To help to draw motorists' attention to the presence of schools, a unique colour scheme, called Consistent Colour, has been developed for use on regulatory and warning signs used at schools.

Consistent Colour signs have a fluorescent yellow/green sign face with a fluorescent orange target board of the same shape as the sign it highlights. The consistent colour scheme is applied to the following signs:

- (a) SCHOOL (W6-4)
- (b) Children (W6-3)
- (c) Pedestrian Crossing Ahead (W6-2)
- (d) Pedestrian Crossing (R3-1)

Supplementary plates used with these signs are fluorescent yellow/green (as per the MUTCD), but without a target board.



A consistent colour sign

The standard School Zone Speed Limit sign (R4-Q01), refer Section 26.6, has a fluorescent orange target board. A fluorescent yellow/green sign face is applied only to the SCHOOL ZONE (R4-8) component, but not the Speed Restriction (R4-1) or Times of Operation (R9-1-2) components.

25.5.2 Guidelines for Installation

Use of the Consistent Colour Scheme is restricted to school areas. Consistent colour should be applied to all relevant signs in a school area when introducing the scheme.

It is not intended that all existing signs should be replaced immediately with consistent colour signs. Consistent colour signs should generally be phased in as existing signs become due for replacement. However, it is desirable that priority should be given to schools without school zones and to school zones where driver awareness of the facility may be reduced by the horizontal or vertical alignment or by volume of traffic.

A typical consistent colour scheme application is shown in Figure 8.

25.5.3 Consistent Colour Scheme for School Buses

The Consistent Colour Scheme can also be applied to school buses at locations where visibility of the buses is likely to be restricted frequently, or for extended periods, by fog or rain.

High visibility strips are attached to the front, back and each side of the bus. The strips consist of alternating bands of fluorescent yellow/green and fluorescent orange with a black border.



High visibility strips

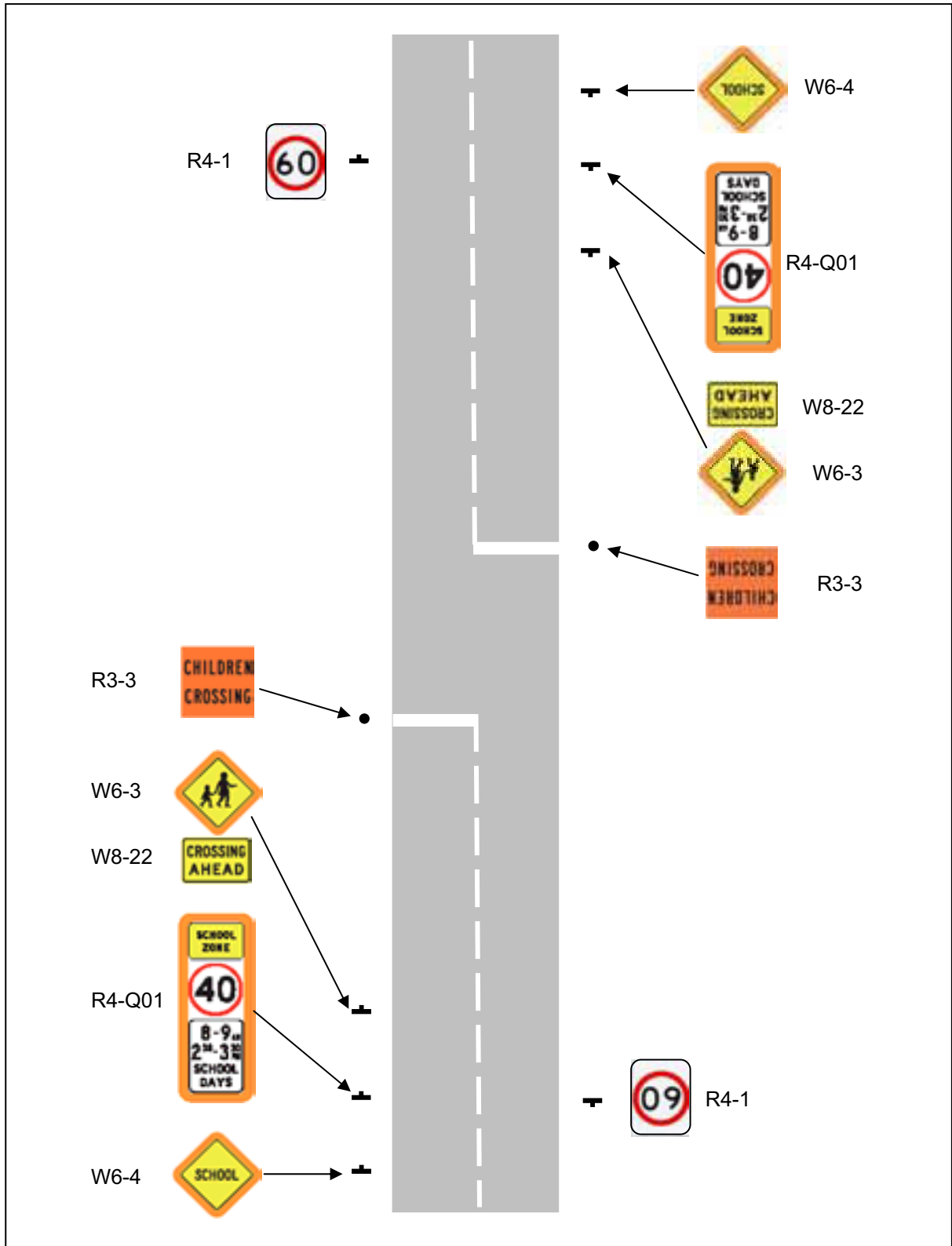


Figure 8 - A TYPICAL APPLICATION OF CONSISTENT COLOUR TREATMENT

26 SCHOOL ZONES

26.1 General

A school zone is a time based linear speed zone that may be installed to regulate vehicle speeds in the vicinity of schools. The use of additional engineering treatments such as pavement messages and threshold treatments, while not essential to the installation of a school zone, may improve driver compliance with the reduced speed limit.

While school zones would generally be installed to support facilities such as children's or pedestrian crossings, the absence of such facilities at a school would not preclude installation of a school zone.

26.2 Application of School Zones

School zones are only permitted on roads adjacent to schools where the school is readily visible to motorists and there is significant school related activity on and beside the road. However, a school zone may be permitted on a road from which the school is not readily visible if:

- (a) the school has direct access to the road; and
- (b) the access is a main student entry to the school; and
- (c) there is significant school related activity on and beside the road.

School zones are not permitted:

- (a) on multi-lane arterial roads or dual carriageways/divided roads, except where a divided road has only one traffic lane in each direction and the speed limit is not more than 60km/h;
- (b) on roads where kerb side parking is not permitted during the proposed school zone times over a substantial section of the proposed school zone and pedestrian actuated signals, or grade separated facilities have been installed; or
- (c) at tertiary institutions, pre-schools, kindergartens or day care centres. An exception would be where one of these facilities is next to an eligible school, in which case the school zone may be extended to include the facility. However, the times of operation of the school zone shall not be extended beyond the times required for the adjacent school.

At the excluded locations other traffic engineering treatments such as consistent colour signs, threshold treatments, kerb extensions and pedestrian refuges, are considered more effective in improving safety of school children.

A typical school zone is shown in Figure 9.

26.3 Speed limits

Table 6 shows the speed limits for use at school zones in Queensland.

| Posted Speed Limit ⁴ (km/h) | Site conditions | School Zone Speed Limit (km/h) |
|---|---|-----------------------------------|
| 50 and 60 | All | 40 |
| 70 | All | 40 (see Notes 1 & 2) |
| 80 | All | 60 (see Notes 1 & 2) |
| 90 and 100 | Where the road authority perceives there is sufficient risk associated with student pedestrian activity on or near the road. | 60 (see Notes 2 & 3) |
| 90 and 100 | Where the road authority perceives there is insufficient risk associated with pedestrian activity on or near the road, but a lower speed limit is considered necessary due to the presence of school buses or other school associated vehicular activity. | 80 (see Notes 2 & 3) |
| 110 | All | 80 (see Notes 2 & 3) |

Notes:

1. In a 70km/h or 80km/h speed zone, the SCHOOL ZONE SPEED LIMIT signs (R4-Q01) shall be at least size B.
2. In speed zones of 70km/h and above, the minimum length of a school zone should be 300m.
3. In 90 to 110km/h speed zones, the following requirements shall apply:
 - a SCHOOL ZONE AHEAD sign (R4-Q03) shall be installed at least 300m in advance of the school zone on each approach; and
 - the SCHOOL ZONE SPEED LIMIT signs (R4-Q01) shall be size C. In some situations it may be necessary to install these signs (R4-Q01 and R4-Q03) on both sides of the road.
4. This is the posted speed limit that applies outside the school zone hours of operation.

Table 6 - School Zone Speed Limits

26.4 Times of Operation

Times of operation for school zones must be for a minimum of 1 hour in the morning and 1 hour in the afternoon, but the recommended period is 2 hours morning and afternoon with the recommended hours being between 7:30am – 9:30am and 2:00pm – 4:00pm on school days. These hours may vary in accordance with local requirements, taking account of peak times when students are entering and leaving school grounds.

To minimise confusion for motorists, all schools in a local area should have the same school zone times wherever possible, particularly for schools on the same road.

Extended, "all day" times of operation for school zones, generally within the hours of 7:30am – 4:00pm, may be considered where:

- (a) a school has facilities on both sides of a road; and
- (b) significant numbers of students cross the road regularly throughout the day.

It is recommended that Enhanced or Changeable School Zone Speed Limit signs (see Sections 26.6.2 and 26.6.3) be used at "all day" school zones to draw motorists' attention to the extended times.

Times of operation must be in multiples of half an hour.

26.5 Length of a School Zone

School zones should extend for at least the length of the school frontage. However, in 50 and 60km/h zones, the minimum length of a school zone should be 200m and the school zone should not extend more than 100m beyond the limits of the school frontage in either direction. Longer school zones are considered necessary where approach speeds are greater than 60km/h. Accordingly, in speed zones of 70km/h and above, the minimum length of a school zone should be 300m (see also Table 6).

Where possible, the school zone on the main school frontage should be installed such that the point where most children cross is centred within the school zone.

26.6 Signs at School Zones

26.6.1 General

A standard School Zone Speed Limit sign (R4-Q01) generally designates the start of a school zone.

In specific circumstances where it is necessary to increase driver awareness of the school zone, an Enhanced or Changeable School Zone Speed Limit sign may be used in accordance with Sections 26.6.2 and 26.6.3.

Where a school zone begins at an intersection, and the normal speed limit on the road is 60km/h or higher, a Speed Restriction sign (R4-1) generally need not be installed in advance of the School Zone Speed Limit sign. However, at major intersections or where a significant volume of non-local traffic is expected, a Speed Restriction sign should be installed. Alternatively, a Changeable School Zone Speed Limit sign (see Section 26.6.3) can be used.



School Zone Speed Limit sign (R4-Q01)

Where a school zone is longer than one minute of travel time, or where there are major intersections within the school zone, repeater signs should be installed at appropriate locations through the zone to remind drivers of the school zone speed limit. Where Enhanced School Zone Speed Limit signs are used, repeater signs may be standard School Zone Speed Limit signs. Where Changeable School Zone Speed Limit signs are used, repeater signs shall be Changeable School Zone Speed Limit signs.



Speed Restriction sign (R4-1)

The end of a school zone is indicated by a Speed Restriction sign (R4-1) showing the speed limit applying beyond the zone.

For school zones in 90 to 110km/h zones only, a SCHOOL ZONE AHEAD sign (R4-Q03) shall be installed at least 300m in advance of the school zone on each approach. In some situations it may be necessary to install these signs (R4-Q01 and R4-Q03) on both sides of the road.



School Zone Ahead Sign (R4-Q03)

Where a side road intersects within a school zone, a School Zone Speed Limit sign is not installed on the side road on the approach to the school zone (see Note 6 on Figure 9).

Where a side road terminates within a school zone, a School Zone Speed Limit sign (R4-Q04) may be installed opposite the terminating road, facing drivers on the terminating road (see Figure 9) if:

- (a) there are significant volumes of non-local traffic using the terminating road; and
- (b) it is considered necessary to advise drivers on the terminating road that they are entering a school zone; and
- (c) repeater School Zone Speed Limit signs are not required within the school zone.



School Zone Speed Limit sign (R4-Q04) with double arrow

Where installed opposite a terminating road, the School Zone Speed Limit sign (R4-Q04) incorporates a double arrow on the SCHOOL ZONE component.

26.6.2 Enhanced School Zone Speed Limit Sign

An Enhanced School Zone Speed Limit sign consists of a standard School Zone Speed Limit sign incorporating a flashing inner annulus that can be controlled to operate only during the times of operation shown on the sign. Although only one flashing device/component is required, multiple flashing devices/components may be used. Externally mounted flashing lights are not permitted.

It is not intended that all existing school zone signs where externally mounted alternating flashing lights are installed be replaced immediately by the Enhanced School Zone Speed Limit signs. Enhanced School Zone Speed Limit signs should be phased in where existing externally mounted flashing lights are due for replacement.

Enhanced School Zone Speed Limit signs may only be used:

- (a) at "all day" school zones; or
- (b) where driver awareness of the school zone may be reduced by the horizontal or vertical geometry or by the volume of traffic; or
- (c) where speed surveys have shown unsatisfactory levels of compliance with the standard School Zone Speed Limit sign; or
- (d) where there are significant numbers of motorists who are not regular users of the road, and the presence of a school zone could be unexpected.



Typical Enhanced School Zone Speed Limit sign

In addition, Enhanced School Zone Speed Limit signs shall not be installed at any site unless full Consistent Colour signage has previously been installed and, in a properly conducted assessment, found to be ineffective in controlling vehicle speeds.

Sections 26.6.4 and 26.6.5 outline the technical requirements and approval process for Enhanced School Zone Speed Limit signs.

26.6.3 Changeable School Zone Speed Limit Sign

The following two formats are permitted for Changeable School Zone Speed Limit signs:

- (a) a variable speed limit sign incorporating a flashing inner annulus. The sign shall be able to be controlled to show the school zone speed limit only during the times of operation of the school zone. The *School Zone When Flashing* sign (R4-Q08) shall be mounted below the variable speed limit sign to indicate to motorists that the school zone is in operation when the lower speed limit is displayed and the annulus is flashing.



Variable Speed Limit sign



- (b) a variable speed limit sign surmounted by a changeable message sign showing the words SCHOOL ZONE and incorporating a flashing device/component. The sign shall be able to be controlled to show the school zone speed limit and the words SCHOOL ZONE only during the times of operation of the school zone.



Changeable School Zone Speed Limit sign

Outside the times of operation of the school zone, the display on a Changeable School Zone Speed Limit sign shall be as follows:

- (a) For roads to which the 50km/h local street speed limit applies, the display shall be blank;
- (b) Elsewhere, the display shall show the usual speed limit for the road.

The flashing device/component on a Changeable School Zone Speed Limit sign shall flash only during the times of operation of the school zone. Two typical examples of flashing devices/components are a flashing red annulus and inbuilt flashing yellow lights. Externally mounted flashing lights are not permitted. Although only one flashing device/component is required, multiple flashing devices/components may be used.

Changeable School Zone Speed Limit signs may only be used:

- (a) at "all day" school zones; or
- (b) where driver awareness of the school zone may be reduced by the horizontal or vertical geometry or by the volume of traffic; or
- (c) where speed surveys have shown unsatisfactory levels of compliance with the standard School Zone Speed Limit sign; or
- (d) where there are significant numbers of motorists who are not regular users of the road, and the presence of a school zone could be unexpected; or

- (e) where the school zone starts at a major intersection and it is not practical to provide both a Speed Restriction sign and a standard School Zone Speed Limit sign (see also Section 26.6.1).

In addition, Changeable School Zone Speed Limit signs shall not be installed at any site unless full Consistent Colour signage has previously been installed and, in a properly conducted assessment, found to be ineffective in controlling vehicle speeds.

Sections 26.4.4 and 26.6.5 outline the technical requirements and approval process for Changeable School Zone Speed Limit signs.

26.6.4 Technical Requirements for Enhanced and Changeable School Zone Speed Limit Signs

Enhanced and Changeable School Zone Speed Limit signs must comply with all relevant Main Roads technical requirements, including:

- (a) requirements for variable message signs and variable speed limit signs;
- (b) colour and brightness of LEDS and flashing lights;
- (c) flash rates;
- (d) accuracy of timing and control devices;

Enhanced and Changeable School Zone Speed Limit signs may be mains powered, solar powered or battery powered. However, mains powered and solar powered Changeable School Zone Speed Limit signs must incorporate a battery back-up so that, in the event of a power failure, the school zone speed limit is still displayed during the school zone hours of operation.

Where used, inbuilt flashing lights shall not exceed 100mm diameter.

26.6.5 Approval and advice process for Enhanced and Changeable School Zone Speed Limit Signs

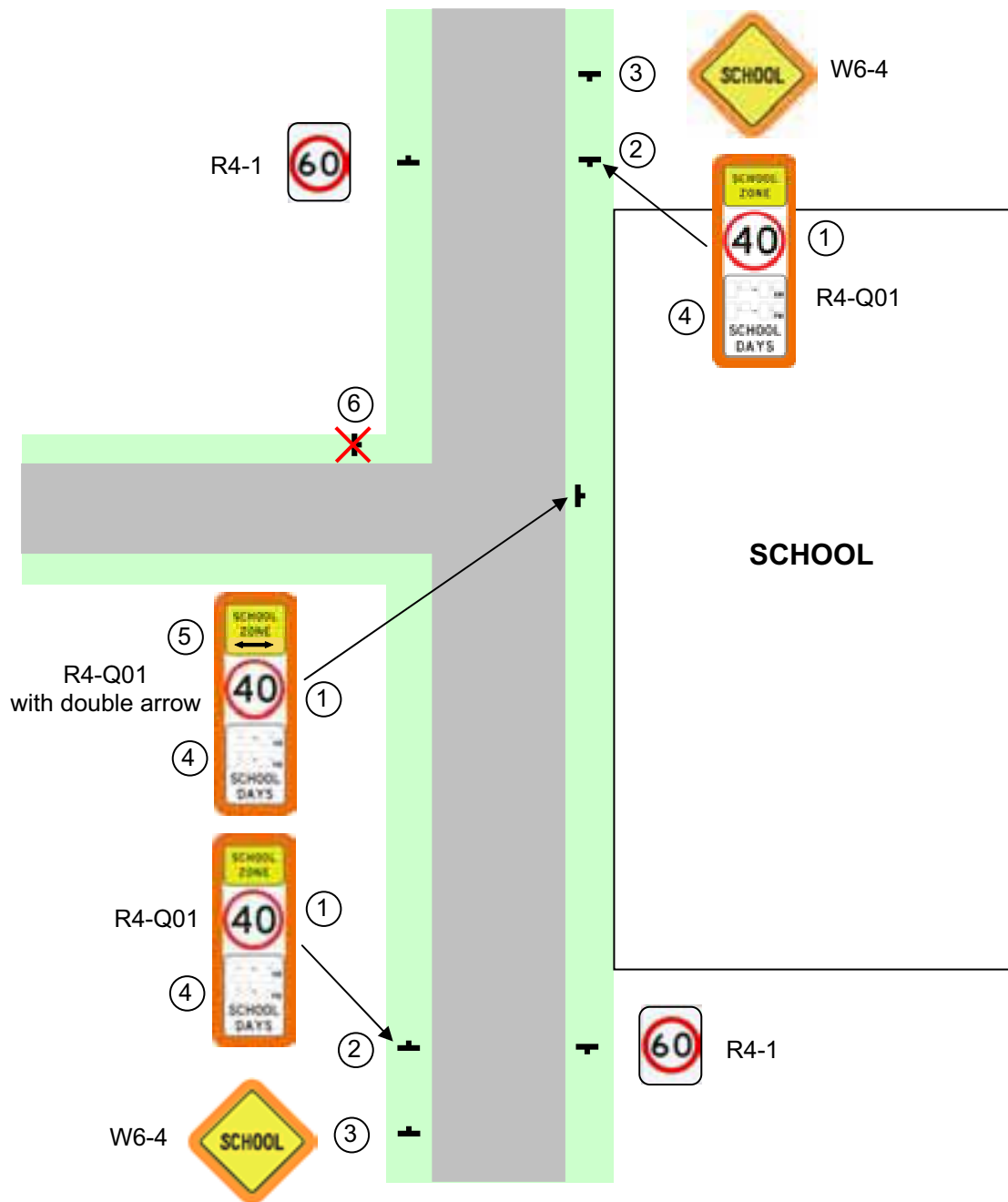
To ensure that overuse of these high impact signs does not reduce their effectiveness, each installation of Enhanced and Changeable School Zone Speed Limit signs requires independent assessment and endorsement. Queensland Transport provides separate advice to Main Roads and local governments about the required assessment and endorsement process.

As part of an overall evaluation of the effectiveness of high impact signs, Queensland Transport maintains a database of all installations of Enhanced and Changeable School Zone Speed Limit signs. Main Roads and local governments are required to provide details of all installations of Enhanced and Changeable School Zone Speed Limit signs to Queensland Transport. Information can be sent by email to sesg@transport.qld.gov.au.

26.7 Pavement Markings and Threshold Treatments

Pavement markings may be used in association with School Zone Speed Limit signs at sites where driver awareness of the school zone may be reduced by the horizontal or vertical geometry or by the volume of traffic. Threshold treatments may also be considered for use at

the entry to a school zone as discussed in Section 25.4. Pavement markings indicating the school zone speed limit or times of operation are not permitted.



NOTES:

1. For appropriate school zone speed limit see Section 26.3.
2. The SCHOOL ZONE SPEED LIMIT sign (R4-Q01) should be located not less than 0.6V (V=85th percentile speed in km/h) in advance of any advance crossing signs e.g. W6-3/W8-22.
3. Advance warning signs e.g. SCHOOL sign (W6-4), should be located not less than 0.6V (V=85th percentile speed in km/h) in advance of the SCHOOL ZONE SPEED LIMIT sign (R4-Q01).
4. For times of operation refer to section 26.4.
5. A double arrow is added to the SCHOOL ZONE SPEED LIMIT sign when used opposite a terminating road. Refer to Section 26.6.1.
6. SCHOOL ZONE SPEED LIMIT signs (R4-Q01) are not installed on side roads on the approach to the school zone.
7. For length of school zones see Section 26.5

Figure 9 - TYPICAL SCHOOL ZONE

Glossary of Terms

Children's crossing: A roadway crossing intended for part time use, mainly by school children, indicated by the use of CHILDREN CROSSING flags, red and white posts, and stop lines on the road.

Collector road: A road whose main function is the distribution of traffic between sub-arterial roads and local streets within suburbs, and which can also provide access to adjacent property.

Crossing supervisor: - An authorised person, appropriately trained, who controls vehicle and pedestrian movements at children's crossings at schools.

Footpath: Along a roadway, the strip of land between the property boundary and the kerb of the roadway. There may be a concrete, paved or sealed path within the footpath.

Kerb or Kerbing: A raised border of rigid material along the edge of a roadway. Used to separate the roadway from an adjacent footpath or median.

Kerb extension: A local widening of the footpath, which reduces the width of roadway to be crossed by pedestrians.

Local Street: The main function of a local street is to provide access to an adjacent property.

MUTCD: Manual of Uniform Traffic Control Devices

Median or Median strip: A strip of road, not normally intended for use by traffic, which separates roadways carrying traffic in opposite directions. A median can be bounded by kerbing.

Multi-lane road: A road with two or more traffic lanes in one direction.

Pedestrian crossing (zebra) at schools: A pedestrian crossing (zebra) at which CHILDREN CROSSING flags are displayed at times when school children cross the roadway.

Pedestrian crossing (zebra) or Zebra crossing: A roadway crossing indicated by a series of white stripes parallel to the centre of the roadway and by the display of Pedestrian Crossing signs (R3-1).

Pedestrian refuge: An island installed in the roadway to allow pedestrians to cross the roadway in two stages.

Pick-up/set-down facilities: Short-term parking areas designed for safely picking up and dropping off children.

Arterial road or Primary arterial road: A road whose main function is to carry traffic across metropolitan areas or from one region to another.

Roadway: That part of a road or street normally used for vehicular traffic, including bicycles.

School zone: A section of roadway, adjacent to or in the vicinity of a school, along which a reduced speed limit applies during specified times.

Secondary arterial or Sub-arterial road: A road whose main function is to carry traffic between suburbs and between arterial roads.

Sight distance: The distance at which a driver/pedestrian/cyclist has an unobstructed view of other road users, road side hazards and traffic control devices.

Speed zone or Linear Speed Zone: A length of roadway on which the speed limit is defined by speed limit signs.

Stop line: A transverse line marked on a roadway at a traffic control device, at which vehicles are required to stop in accordance with relevant regulations.

Stopping Distance: The distance travelled by a vehicle between the time when the driver receives a stimulus signifying a need to stop and the time when the vehicle comes to rest.

Subway: With regard to pedestrians and cyclists, a structure, or tunnel, taking a footpath or cycle path under a road or railway.

TRUM Manual: Traffic and Road Use Management Manual

Threshold treatment: At a school, a broad coloured band across the road, on which the words SCHOOL ZONE or SCHOOL are painted.

Traffic control device: Any sign, signal, pavement marking or other installation installed for the purpose regulating, warning or guiding road users.

Visibility: See sight distance.

Wheeled recreational devices (WRD): includes rollerblades, roller skates, scooters and skateboards.

Wheeled toy: includes a child's pedal car, scooter, tricycle or similar toy used by a child under 12 years old.

APPENDIX A – Queensland Transport and BCC Road Safety Staff and Public Transport Offices

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Fortitude Valley
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Road Safety Advisor
Brisbane South
MacGregor
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Ipswich
Ipswich
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Road Safety Advisor
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Mooloolaba
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Road Safety Advisor
Gold Coast
Southport
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School Road Safety
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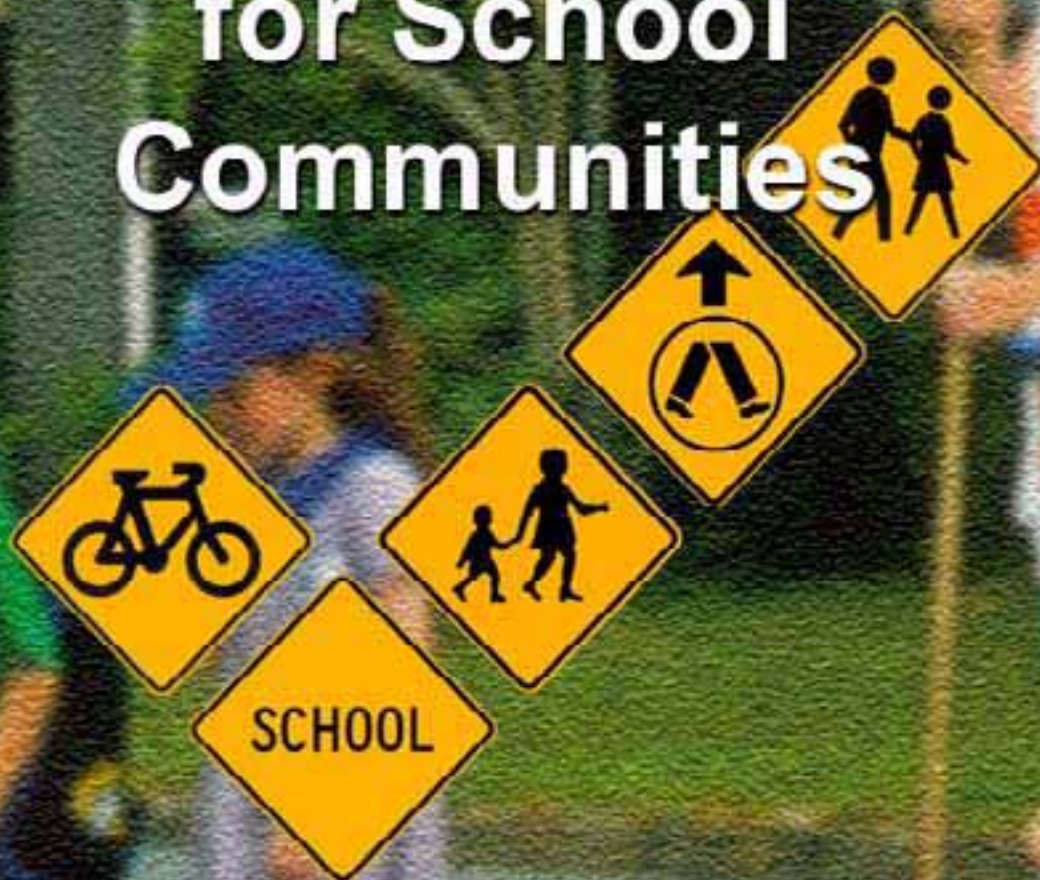
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SafeST Checklist for School Communities



Name of School : _____
Location of School : _____
Date Compiled : _____
Compiled by : _____
Contact No. : _____





SafeST Checklist for School Communities

In October 1996 a new school transport safety package called **Safe School Travel (SafeST)** was launched. With the launch of the package, Queensland Transport made an ongoing commitment to helping school communities with their school travel safety concerns. As part of this commitment, Queensland Transport has produced the **SafeST Checklist for School Communities**.

The need for this checklist arose from frequent requests by school communities for a tool that they could use to identify road safety issues around their schools. The checklist has been designed to enable you, **the school community**, to diagnose possible travel safety concerns and, with Queensland Transport, to determine priority projects and establish further directions for school transport safety work around the school. It needs to be noted that the purpose of this tool is to **identify** school transport related safety problems, not necessarily to generate solutions. Formulating solutions is a separate process and should not be undertaken until completing the checklist. This process will require some assistance from your local Road Safety Consultant. You should have received this checklist from a Road Safety Consultant. If not, you will find a list of phone numbers and locations of Road Safety Consultants on the last page.

The Nature of the SafeST Checklist

Queensland Transport has attempted to develop a checklist which has the following characteristics :

- *Easy to use and understand.*
- *Able to be used by non-professionals.*
- *Covers all relevant issues.*
- *Identifies problems broadly.*
- *Leads to direct outcomes.*
- *Allows the community to identify the next step in addressing concerns.*
- *Gathers data that may be relevant at a later point in time.*

If you have any suggestions for improving the checklist in line with these desirable characteristics, please talk to your local Road Safety Consultant.

Instructions for Use

The most effective way to use this checklist is to work within your **SafeST Committee**. You will need individuals to conduct on-site audits, investigations and local observations of the traffic situation. You will have to consider a wide range of road users, namely pedestrians, cyclists, car passengers, car drivers, motorcycle riders, bus passengers and rail passengers.

Although this checklist will require a large amount of work from those members carrying out the investigations, the results of the process will help you to determine if your school community has any **school transport safety** concerns.

It must be remembered that the focus of this survey is, in most instances, on the safety of the **child/student** pedestrian, cyclist, passenger or driver, unless otherwise specified.

SafeST Checklist for School Communities

The checklist is divided into **seven** parts, one for the **road environment** and one for each of the following road users :

- *Pedestrians*
- *Bus passengers*
- *Car drivers or motorcycle riders*
- *Cyclists*
- *Car passengers*
- *Rail passengers*

Each part specifies a number of issues that may be a concern for school communities.

For each item make an assessment based on your perceptions. In most instances, there are five possible outcomes for each item, namely the behaviour/situation occurs never, seldom, sometimes, often, or always. Other items call for yes/no responses or other information. A “Not Applicable” box is provided for many of the items. You may wish to provide further information in the “Additional Comments” section.

Some General Information

Most children begin pre-school in the year that they turn five and generally remain at school until they are at least 15 years old, with most students remaining until the ages of 17 to 18. In this broad age band there will be a wide range of abilities and attitudes in dealing with travel to and from school.

Whether they are pedestrians, cyclists or passengers in a vehicle there are strong arguments to suggest that children respond to the world around them differently to adults. Previous research has noted three characteristics about children as road users :

- *They are socially vulnerable. That is, they are frequently reliant, to varying degrees, on the community for their safety.*
- *They have additional limitations in faculties such as skills, attention span, cognitive abilities and mobility relevant to road use which contribute to increased risk. Children may also act unpredictably.*
- *Their transport related injuries occur in familiar areas usually close to home. Pedestrian crashes in particular are often associated with carrying out routine activities, and programs targeting these types of situations will be most effective.*

Researchers have found that children’s intellectual, psychological and cognitive abilities have not yet matured and, as such, the understanding and integration of the traffic situation is often difficult for them. Therefore, when children are involved in an activity such as travel to and from school, they may encounter difficulties stemming from their developmental limitations.

SafeST Checklist for School Communities

These limitations mean that it may be difficult to respond to issues of school transport safety by placing the responsibility for change with the students. It may be that we need to consider new ways to change their behaviour, to examine strategies for changing the behaviours of other road users and to create an environment that reduces exposure to risk situations.

This would suggest that in dealing with children and school transport, we have two important responsibilities :

- *To help develop the student's ability to deal with traffic.*
- *To ensure that the student's exposure to traffic is as risk free as possible.*

Success in meeting these responsibilities will require a cooperative effort involving parents, school communities, government and students.

Background School Information

In order to accurately assess the transport related safety of your school environment, it is important to gather some background information which will help you at a later date if you cooperate with your Local Government to make a submission for works carried out under the SafeST Subsidy Scheme.

1. Name of school : _____

2. Location of school : _____

3. Number of students attending the school : _____

4. An outline of the traffic incidents and/or crashes that the SafeST Committee is aware of (list dates and circumstances and as much detail as possible) :

5. Road safety measures that have previously been undertaken by the school community :

6. Transport related infrastructure work carried out by the local government and/or Department of Main Roads :



Pedestrians

There are a number of factors and behaviours which place young pedestrians at risk of being involved in a crash. These include :

- *stepping out onto the road from behind obstacles*
- *darting out from the footpath*
- *immature information-processing abilities*
- *playing in the streets*
- *limited understanding of the pedestrian-motorist interaction*
- *careless crossing.*

Please tick or cross the box which best describes how frequently you observe the following safe behaviours of **student pedestrians** around the school.

Crossing Practices

1. Using correct crossing behaviour when crossing the road

| | Never | Seldom | Sometimes | Often | Always | N/A |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students cross in safe locations (i.e. can be seen by approaching motorists)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students look both ways for traffic? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students cross straight across the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do students walk (not run) across the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Do students use marked crossings, when available (as opposed to crossing at any available point on the road)?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Pedestrians



3. Using safe crossing practices when moving to and from the bus

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students wait until the bus has stopped before approaching it to board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students wait until the bus leaves before crossing the road after alighting? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students cross in safe locations (i.e. can be seen by approaching motorists)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do students look both ways for traffic? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Do students cross straight across the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Do students walk (not run) across the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4. Do students cross in safe locations and not dart out from between cars and buses?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Behaviour On Footpaths

1. Do students use footpaths, when available (as opposed to walking on the road)?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Showing due care and attention when using rollerblades/skateboards/rollerskates while on footpath

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students travel at a safe speed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students take care not to harm other pedestrians and cyclists? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students slow down and stop if necessary when leaving the footpath and crossing a road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Pedestrians

3. Practicing safe and appropriate behaviour while waiting for buses/cars to arrive

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students wait quietly on the footpath (i.e. no pushing, running and other unsafe behaviours)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students stand away from the kerb? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students wait until cars/buses have stopped before approaching them? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Compliance

1. Do students comply with School Crossing Supervisor's instructions (if applicable)?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Do students comply with general road rules while crossing and walking in the traffic environment (e.g. waiting for the 'walk' signal, walking on the footpath or off the road)?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

*The previous questions referred to students. This question refers to **parents/carers**. Please tick or cross the box which best describes how frequently you observe the following safe behaviours of **parent/carer pedestrians** around the school.*

3. Parent/carer pedestrians comply with road rules and display safe road user behaviours

| | Never | Seldom | Sometimes | Often | Always | N/A |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do parents/carers cross the road correctly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do parents/carers hold the hands of young children while walking and crossing the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do parents/carers obey the School Crossing Supervisor's instructions? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Cyclists

The majority of bicycle crashes involving children up to 12 years are caused by controller error rather than by mechanical defect. This suggests that while bicycle engineering is important there may be more effective solutions to be found in the environmental, educational and enforcement areas.

There has been a significant volume of work done in Queensland regarding bicycle helmets and programs are already in place to encourage and promote the use of this safety equipment. Helmet wearing is a simple and effective measure to improve the safety of cyclists. Evaluations show that helmet wearing provides considerable crash benefits. Helmets are relatively inexpensive to buy, comfortable to wear, and the benefits they indirectly provide through savings in medical treatment and economic output will benefit the community overall. Queensland has had compulsory helmet legislation since July 1991. Since January 1993 failure to wear a helmet has attracted a penalty.

*Please tick or cross the box which best describes how frequently you observe the following safe behaviours of **child cyclists** around the school.*

Cycling Behaviour

1. Showing due care and attention when using bicycles on the footpath

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students travel at a safe speed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students take care not to harm pedestrians? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students slow down when leaving the footpath and crossing the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do students look for cars entering or leaving driveways? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Do students look out for traffic at the intersection of footpaths and roads? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Do students apply competent handling skills while riding?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



3. Using safe riding behaviours

| | Never | Seldom | Sometimes | Often | Always | N/A |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students only ride one person per bicycle (i.e no doubling)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students ride in single file? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students ride with both hands on the handlebars? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do students strap bags to bag racks and avoid having things hanging from the handlebars and other parts of the bicycle? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4. Maintaining an awareness of other road users

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students ride as if they are aware that car doors could open suddenly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students ride as if they are aware that cars and buses pull in to pick-up and set-down areas? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students ride as if they are aware of pedestrians and their activities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Crossing Behaviour

1. Using correct crossing behaviour when crossing the road

| | Never | Seldom | Sometimes | Often | Always | N/A |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students cross in a safe location? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students look both ways for traffic? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students cross straight across the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Do students use marked crossings when available (as opposed to crossing at any available point on the road)?

| | Never | Seldom | Sometimes | Often | Always | N/A |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Cyclists

3. Do students cross the road in safe locations and not from between cars and buses?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Compliance

1. Wearing of helmets

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students use helmets whenever riding? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Are the helmets fastened correctly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Compliance with general road rules

| | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students stop at traffic lights? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students give way to pedestrians? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students obey all road rules if riding on the road (e.g. riding in the same direction as the rest of the traffic, obeying all traffic signals)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do students dismount from the bike when using crossings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Other Related Issues

1. Is secure parking for bicycles at schools available?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Are bicycles generally maintained to a high standard?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Bus Passengers

Research into Queensland’s crash statistics has revealed that travelling by bus is the safest form of transport to and from school. The 1993 Parliamentary Travelsafe Committee Report on the ‘Safety and Economic Implications of Permitting Standees on Urban and Non-Urban Bus Services’ concluded that the bus safety issue about which the authorities and the community should be most concerned is the crash problem off the bus. Travelsafe expressed the opinion that efforts to enhance bus safety should be directed at educating bus passengers and other road users, limiting the need to cross busy roads, and providing safe crossing facilities where roads must be crossed.

Behaviour On Buses And While Waiting For Buses

Queensland Transport, in consultation with the Department of Education, the Queensland Police Service, Brisbane City Council, Queensland Rail, the Catholic Education Commission, the Association of Independent Schools, the Bus and Coach Association (QLD), the Bus Operators Association (QLD), the Queensland Council of Parents’ and Citizens’ Association and the Federation of Parents’ and Friends’ Association, has developed a Code of Conduct for students travelling on buses. The Code of Conduct prescribes standards of behaviour for students and sets out appropriate guidelines for bus operators in dealing with any misbehaviour.

The objective of the Code is to achieve consistent management of student misbehaviour throughout the State.

*Please tick or cross the box which best describes how frequently you observe the following safe behaviours of **student bus passengers** around the school.*

1. Students’ on-board behaviour

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students show respect for one another by not bullying other students? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students sit properly on the seats? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students behave politely by not fighting, spitting or using offensive language? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do students keep all objects within the bus and not throw them out the window? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Do students refrain from smoking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Do students refrain from eating or drinking on the bus? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Bus Passengers



1. Students' on-board behaviour

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| G. Do students keep body parts within the bus? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H. Do students stand behind the front seat of the bus and stay out of the driver's platform area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I. Do students respect the authority of the bus driver? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please tick or cross the box which best describes how frequently you observe the following safe behaviours of **bus drivers** around the school.

2. Bus driver behaviour

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Does the bus driver use pleasant, polite language? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Does the driver use force on students only in emergency situations which threaten safety, property or life? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Does the driver leave the bus while students are on board only in cases of emergency or when the bus is stopped (engine off and handbrake on)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Does the driver use safe driving practices? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please tick or cross the box which best describes how frequently you observe the following safe behaviours of **student bus passengers** around the school

3. Management of waiting students

| | Never | Seldom | Sometimes | Often | Always | N/A |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students stand quietly (i.e. without calling, shouting, pushing, fighting and/or running) while waiting for the bus to arrive? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students wait well back from the bus until it stops? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students respect bus shelters, signs and other property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Bus Passengers

4. Alighting and boarding behaviour

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students wait until the bus has stopped before approaching it to board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students wait until the bus has stopped before standing to get off? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students walk off the bus in a quiet and orderly manner? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do students cross the road only when it is safe to do so? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Do students cross the road in a safe location (i.e. can be seen by approaching motorists)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Do students look both ways for traffic? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G. Do students cross directly across the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H. Do students walk (not run) when crossing the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



ANY OTHER COMMENTS

If Problems Are Detected

If you have identified any on-bus behaviour concerns it may be of use to familiarise students with correct and appropriate actions. Students should know and understand which behaviours are unacceptable and be made aware of the consequences of misbehaviour during school bus travel.

If you have detected problems with either waiting, alighting and/or boarding behaviour, it may be worthwhile to conduct road safety classes or information sessions that teach students the correct practices. The Code of Conduct is a useful resource and Queensland Transport Road Safety Consultants are also a valuable source of information when conducting such lessons.

Another option is to have bus monitors or supervisors who wait for the bus with the students to point out safety concerns and help to ensure appropriate behaviour.

The type and number of particular facilities (e.g. handholds) on a bus are defined by the Passenger Transport Act. Your Road Safety Consultant will be able to provide you with further information about these requirements. You should note that as these requirements are a legal necessity, most buses will be fitted with correct and appropriate facilities.



Car Passengers

According to Queensland's Transport Operations (Road Use Management) regulations a person must not drive a motor vehicle in which a child or an infant is a passenger unless the child or infant is protected by a restraint which has been approved to Australian Standards. A child is defined as an individual under the age of 16 years. A driver will be fined if detected by police while driving a car in which a child is unrestrained.

*Please tick or cross the box which best describes how frequently you observe the following safe behaviours of **student passengers** around the school.*

1. Seat belt wearing

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students wear seat belts? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Are restraints fitted and worn properly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Alighting from the car

| | Never | Seldom | Sometimes | Often | Always | N/A |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students leave the car from the side against the kerb? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students look before opening the door? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students move onto the footpath away from the car once they have left the vehicle? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. If parents/carers are dropping the students off, do students wait until the car has moved off before walking across the road? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. In-car behaviour of passengers

| | Never | Seldom | Sometimes | Often | Always | N/A |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students sit quietly and not distract the driver? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do passengers keep body parts or objects inside the car? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do passengers keep objects in the car and not throw them out of the window? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Car Drivers & Motorcycle Riders

It is often thought that children cause their own crashes through irresponsible or inappropriate road behaviour. However, observational studies have indicated that children often behave more cautiously than adults when crossing roads. These studies provide evidence to suggest that drivers place most of the responsibility for avoiding a crash on the pedestrian and are ill prepared for unpredictable pedestrian behaviour. As noted earlier, children often display unpredictable behaviour.

*Please tick or cross the box which best describes how frequently you observe the following safe behaviours of **drivers/riders** around the school.*

Compliance

1. Adherence to the road rules

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Are cars parked legally, at the correct distance from crossings and bus stops? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Are 'No Standing' or 'No Parking' zones complied with? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do drivers travel within the speed limit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do drivers comply with traffic signals? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Do drivers comply with the School Crossing Supervisor's instructions? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Do drivers give way to pedestrians on crossings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G. Do drivers drive safely (e.g. not cutting corners etc.)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H. Are drivers parked correctly (e.g. no double parking)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Car Drivers & Motorcycle Riders



Other Issues

1. Do parent/carer drivers act safely and not call for their children to run across the road?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Where possible, are students dropped off and picked up on the school side of the road to avoid having to cross the road?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. Do students exhibit safe driving behaviour when driving to and from school?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4. Do teachers and parents/carers park only in their respective carparks?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Rail Passengers



Queensland Rail is currently developing a Code of Conduct for students travelling on trains. The major safety problem with respect to trains is the behaviour of students while waiting for, boarding and alighting from the train.

*Please tick or cross the box which best describes how frequently you observe the following safe behaviours of **student rail passengers from your school** around the local rail station and/or on the train.*

Off-train Behaviour

1. Students display safe behaviours around the train

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Are students behaving safely by not throwing objects onto the train track? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Are students using correct crossing procedures when approaching and leaving the train station? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Are students behaving safely by not surfing (standing) on the train roof? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Boarding and alighting practices

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Are students standing behind the 'yellow line' while waiting for the train? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Are students waiting until the train has stopped before attempting to open the doors? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Are students only entering the train when it is safe to do so (i.e. not when the doors are closing)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Rail Passengers

3. Platform behaviour

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Do students behave safely and not fight on the platform? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Do students behave safely and not throw items while waiting for the train? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students stay away from the edge of the platform? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do students behave safely and not push one another on the platform? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

On-Train Behaviour

1. Are school bags stored in a safe position on the train?

| Never | Seldom | Sometimes | Often | Always | N/A |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Students behave in a responsible and safe manner on the train

| | Never | Seldom | Sometimes | Often | Always | N/A |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Are students behaving safely and not throwing items inside the train? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Are students behaving responsibly and not damaging any part of the train? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Do students use the emergency stop device only when it is a genuine emergency? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Do students stand clear of the doorway and not block it? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Road Environment (includes traffic)

When many people think of safety concerns at schools, they also think about providing infrastructure (e.g. crossings, overpasses, parking bays) in the hope that this will eradicate the problem. While infrastructure can play a very valuable role in some situations, it is not the answer to every problem. As can be seen from the previous checklists, there are many road safety issues that can be addressed by the school community through educational programs and other innovative schemes.

The road environment does form an important part of the traffic situation and as such should still be considered when undertaking a review of school transport related safety concerns.

Please tick or cross the box which best describes how frequently you observe the following factors in the road environment around the school.

Traffic

1. Crash history of the area (in relation to incidents involving school children travelling to and from school)

| | Never | Seldom | Sometimes | Often | Always | N/A |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. Have there been any major crashes in the immediate traffic environment around the school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Have there been any minor crashes in the immediate traffic environment around the school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Have there been any near crashes in the immediate traffic environment around the school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2. Posted speed limit

| | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| A. What is the general speed limit? | _____ km/h | | | | | |
| B. What is the school zone limit? | _____ km/h | | N/A | <input type="checkbox"/> | | |
| | Never | Seldom | Sometimes | Often | Always | N/A |
| C. Does there appear to be compliance with the school zone speed limit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Higher | | Lower | Same | | |
| D. Do you believe the school zone speed limit should be different? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | |
| (please state desired speed) | _____ km/h | | | | | |

Road Environment (includes traffic)

3. Volume of Traffic (if the school fronts onto more than one road, provide details for each road)

- A. What is the approximate traffic volume in the mornings when student activity on the roads is greatest (e.g. 8.00am to 9.00am)? _____ Vehicles
- B. What is the approximate traffic volume in the afternoons when student activity on the roads is the greatest (e.g. 2.30pm to 3.30pm)? _____ Vehicles
- C. What is the approximate traffic volume during the day while the children are at school (e.g. the average hourly volume)? _____ Vehicles

4. Traffic mix

- A. Do many buses drive through the area? Yes No
- B. Is the area used by heavy vehicles other than buses? Yes No

If yes, approximately what percentage of the total traffic do the heavy vehicles represent? _____ %

5. Manoeuvring room

- A. Is there room for buses and cars to manoeuvre? Yes No
- B. Are there turn-around areas for buses and/or cars where necessary? Yes No
- C. Are pick-up and set-down facilities (where provided) outside the school designed to allow the traffic to flow freely? Yes No

Infrastructure

1. Road gradient and alignment

- A. Is the road steep? Yes No
- B. Does the road have many sharp curves? Yes No
- C. Does the road have blind corners? Yes No

Road Environment (includes traffic)

2. Signing around the school area

| | Too many | Too few | About right | None |
|---|------------------------------|--------------------------|-----------------------------|--------------------------|
| A. Are there signs warning drivers of the presence of the school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Are there signs warning drivers that pedestrians are crossing the road ahead? | Yes <input type="checkbox"/> | <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |
| C. Are signs placed such that they don't decrease visibility for students and other road users, or distract drivers from concentrating on the road? | Yes <input type="checkbox"/> | <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |
| D. Are the signs in good condition? | Yes <input type="checkbox"/> | <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |
| E. Are the signs clearly visible to drivers? | Yes <input type="checkbox"/> | <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |

3. Footpaths and kerbing - presence and quality

| | | | | |
|--|------------------------------|------------------------------|-----------------------------|--------------------------|
| A. Are there sufficient footpaths provided for pedestrians? | | Yes <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |
| B. Are the footpaths adequate for the number of student pedestrians that need to use them? | N/A <input type="checkbox"/> | Yes <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |
| C. Are the footpaths in a good state of repair? | N/A <input type="checkbox"/> | Yes <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |

4. Crossing facilities and medians

| | | | | |
|---|------------------------------|--------------------------|-----------------------------|--------------------------|
| A. Are there adequate crossing points for students? | Yes <input type="checkbox"/> | <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |
| B. Are there kerb extensions at crossing points? | Yes <input type="checkbox"/> | <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |
| C. Is there an intermediate stopping point (median) for students at a half way point across the road? | Yes <input type="checkbox"/> | <input type="checkbox"/> | No <input type="checkbox"/> | <input type="checkbox"/> |

5. Are road shoulders (pull-off space on the side of the road) present and in good condition?

| No shoulders | Poor | Adequate | Good | Excellent |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Road Environment (includes traffic)

6. Width of the road

- A. Is the width of the road adequate to permit free-flowing traffic? Yes No
- B. Is the road too wide for students to cross safely? Yes No
- C. Is the road too wide, thus encouraging drivers to form lanes of traffic other than those intended? Yes No

7. Road surface characteristics

- A. Are the roads in good condition? Yes No
- B. What are the roads made of? Dirt Gravel Bitumen
- C. Are the roads dusty? Yes No
- D. Are the roads slippery? Yes No
- E. Does water collect on the surface of the roads? Yes No

8. Line marking/traffic control devices

- A. Are the road lines marked (e.g. centre line, edge lines)? Yes No
- B. Are the line markings easy to see? N/A Yes No
- C. Are there traffic lights in busy traffic flow areas? Yes No
- D. Do the traffic lights allow enough time for road users to cross? N/A Yes No

Road Environment (includes traffic)

9. Parking areas/pick-up and set-down areas

- A. Are there adequate off street parking and pick-up and set-down areas? Yes No
- B. Are there adequate on street parking and pick-up and set-down areas? Yes No
- C. Are these areas in appropriate locations? N/A Yes No
- D. Are these areas appropriately signed? N/A Yes No

10. Presence and quality of bike paths and/or lanes

- A. Are bike paths and lanes provided? Yes No
- B. Do most cyclists use the bike paths instead of the road? N/A Yes No
- C. Are the bike paths and lanes in good condition? N/A Yes No
- D. Are the road crossing points for bike paths and lanes adequately signed, both for cyclists and motorists? Yes No

11. Pedestrian fencing

- A. Is there pedestrian fencing to prevent students entering the road at particular points? Yes No
- B. Does this fencing appear to be structurally sound? N/A Yes No
- C. Does this fencing create visibility problems for motorists and pedestrians? N/A Yes No

12. Road intersections

- A. Are road intersections clearly visible when being approached? N/A Yes No
- B. If the intersection is not visible, are there appropriate warning signs? N/A Yes No
- C. Are the intersections controlled by signs/traffic signals? Yes Some No

Road Environment (includes traffic)

Other Issues

1. Influence of weather/geographic/climatic conditions

- A. Does a particular weather condition occur, at least several times a year, that creates an increased safety hazard (e.g. high occurrence of heavy rain, fog)? Yes No

What is this condition : _____

- B. Do road user behaviours change in these conditions (e.g. when it rains, children are driven to school instead of walking) N/A Yes No

How do they change : _____

2. Are there early warning signs (including school zone signs) alerting road users to the school's presence? Yes No

3. Visibility

- A. Is the amount of infrastructure on the side of the road restricted such that it doesn't obstruct road users' vision? Yes No

- B. Are crossing areas easily identifiable and easily seen? Yes No

- C. Are bushes trimmed and overhanging trees cut back so that students and drivers can see one another? N/A Yes No

- D. Is the placement of objects (such as poles, billboards) on the edge of the road avoided? Yes No

- E. Are there signs that block the visibility between drivers and other road users? Yes No

- F. Is there enforcement of the prohibition of cars/buses parking close to crossing points? Yes No

Road Environment (includes traffic)

4. Access for people with disabilities and/or for people using prams

A. Are there footpath ramps? Yes No

B. Are there median crossings? Yes No

5. Is the land around the school used for the following functions?

A. Commercial land use - shops, retail environment Yes No

B. Industrial land use Yes No

C. Recreation Yes No

D. Housing Yes No

