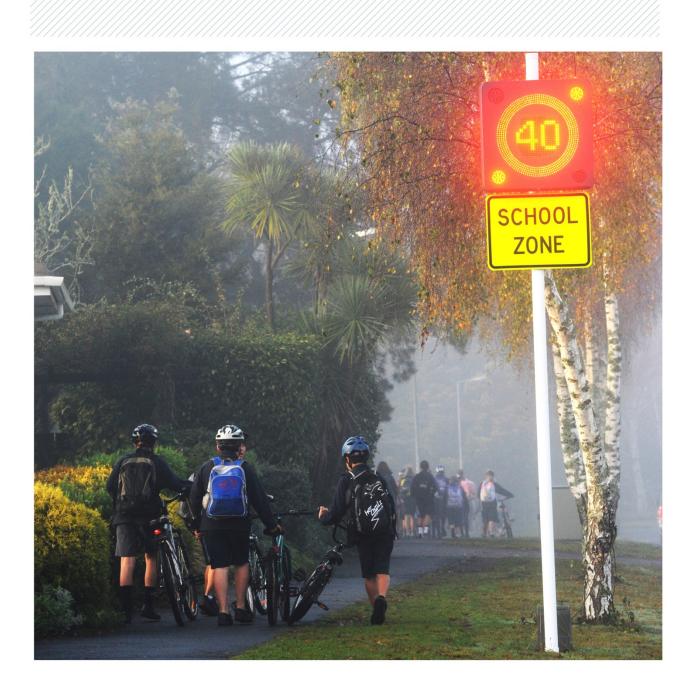
Safer journeys for schools

Guidelines for school communities









New Zealand Government



NZ Transport Agency Safer journeys for schools: Guidelines for school communities



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The NZ Transport Agency is part of, and contributes to, the Safer Journeys programme. Safer Journeys is the government's strategy to guide improvements in road safety over the period 2010–2020. The strategy's vision is a safe road system increasingly free of death and serious injury.

It is a coordinated effort across partner agencies to improve each aspect of road safety - better behaviours, a safer road environment, safer speeds and higher vehicle standards.

For more information visit www.saferjourneys.govt.nz

Understanding school road safety

1. The purpose of these guidelines

The safety of students travelling to and from school is one of the most important issues for school communities. Road environments around schools are complex and children are not always equipped to deal with the challenges.

Improving road safety can seem challenging. However, road controlling authorities (RCAs), New Zealand Police and other key road safety partners are committed to working with schools to improve safety. But school road safety is everyone's responsibility and so we also need commitment from parents, teachers, boards of trustees, along with road safety professionals to address the issues.

These guidelines are designed to help parents, school staff, boards of trustees and students to improve road safety in their local community. It contains a clear process that school communities can follow, guidance on how to communicate with relevant road controlling authorities and a range of good practice solutions to address school road safety issues. As part of the process of understanding and communicating school road safety concerns, a School Road Safety Survey is included to help with the problem solving process. This should be used alongside more objective data gathered by RCAs to identify road safety issues.

These guidelines are not intended to provide comprehensive technical information. Instead it is a userfriendly companion to the more technical guide *Safer journeys for rural schools* (<u>www.nzta.govt.nz/resources/safer-journeys-for-schools</u>) which is designed for use by road safety professionals within RCAs. Some members of school communities may have an interest in this more technical guide if they are working with road safety professionals to develop specific solutions for their local school.

Each school faces unique road safety issues based on location and the surrounding environment. This guide has been designed to help schools develop a way forward to address their concerns in the most appropriate way. The appropriate road safety solution for each school is likely to be different and may require a number of approaches and possible solutions to improve road safety.

What is a road controlling authority?

Road controlling authorities are organisations that are responsible for managing roads. In New Zealand the NZ Transport Agency is responsible for managing the state highway network and local councils are responsible for managing local roads. The type of road that a school fronts determines whether the Transport Agency or your local council is the key contact for school road safety.

2. Issues associated with school travel

From time to time, school students are injured in traffic crashes on their way to and from school. Some parents do not feel it is safe to allow their children to walk or cycle to school due to traffic dangers, even in urban environments with footpaths and crossings present. Although fatal or serious casualties related to rural school travel are relatively rare, road safety is still of high concern. In urban areas the safety of children walking or cycling to school are often a high priority, whereas in rural environments (80 km/h and higher) issues tend to be associated with car travel and students getting to and from buses.

3. Safety at school zones vs routes to school

While road safety issues often exist outside schools, they are also often present on students' route to school, some distance from the school itself where the presence of school children is not as obvious to motorists. For urban schools, road safety risk may take the form of a troublesome intersection or inadequate crossing points for pedestrians and cyclists. For rural schools, bus stops on the route home or high risk intersections may be areas of risk. A key part of the process of providing safer road environments for schools is to understand the nature of the risks to students.

4. Underlying principles

The New Zealand Government has adopted a 'Safe System'¹ approach to road safety where the key vision is a safe road system increasingly free of death and serious injury. Four key principles underlie the Safe System approach adopted in New Zealand, all of which are highly relevant to school travel:

- Human fallibility People make mistakes. Young people can be impulsive and do not always behave in a rational way like adults do. School travel must be designed with the capabilities of young people in mind. Adults taking children to and from school and also make mistakes.
- Human vulnerability The human body has a limited ability to withstand crash forces. Pedestrians and cyclists (especially young ones) are much more likely to be killed or seriously injured when crash forces exceed approximately 30km/h. For vehicle side impacts, serious injury or fatality risk increases significantly above 50km/h.
- Shared responsibility We all need to share responsibility for managing crash forces to a level that does not result in death or serious injury. School road safety is EVERYONE's responsibility, including road controlling authorities, school communities and the Police.
- All of system approach We need to strengthen all parts of the system. For schools, there are a number of areas that can be addressed. Road signs are only part of the solution.

New Zealand's Safe System approach also has four areas of focus:

- Safe roads and roadsides that are predictable and forgiving of mistakes. They are 'self-explaining' in that their design encourages safe travel speeds.
- **Safe speeds** travel speeds suit a road's function, use and safety level. Drivers understand and comply with speed limits and drive to the conditions.
- **Safe vehicles** that prevent crashes and protect road users, including pedestrians and cyclists, in the event of a crash.
- **Safe road use –** road users that are skilled and competent, alert and unimpaired. They comply with road rules, take steps to improve safety, and demand and expect safety improvements.

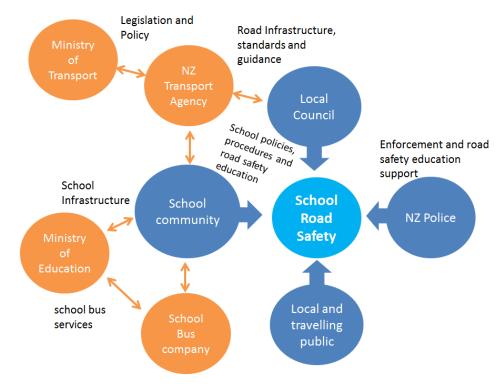
¹ Explained in the government's Safer Journeys Road Safety Strategy http://www.saferjourneys.govt.nz/



For school road safety, the Safe System approach might mean that roads near schools and on school routes as well as school property are designed to be more user-friendly for school commuting, traffic speeds take account of school drop-off and pick-up times and all road users (through traffic, students, parents, teachers) behave in a way that reflects safe practices.

5. School road safety is everyone's responsibility

A Safe System for school travel is everyone's responsibility. Schools and their communities can play their part by improving school property and procedures, but road controlling authorities also have a significant role to play to improve the safety of roads near schools as resources allow. Designing safe pick up and drop off areas on school property and enforcing school road safety policies are also very important, as are high quality road safety education initiatives. NZ Police also have an important education and enforcement role. It is important to remember that school road safety can only be achieved if all parts of this system are working together.



6. What can you do if you have a road safety concern?

There are different ways in which a school can raise road safety concerns:

- By parents approaching the school Board of Trustees
- Through existing initiatives such as the safe school travel planning process. <u>http://education.nzta.govt.nz/resources/school-community-partnerships/school-travel-plans</u>
- By contacting your road controlling authority directly
- By talking with your local school community constable who can then approach your road controlling authority if needed

Your concerns about road safety at your school will always be treated seriously. However, the programme of intervention that may follow will be based on the risk and priority that has been determined for your school. Your local road controlling authority will communicate the decision process clearly and openly with you or your school.

7. Common road safety problems for schools

The process of working together with your road controlling authority will identify areas of concern that are specific to your school. The next section explains a three step process that can be used by school communities to work with road controlling authorities to communicate road safety concerns and work towards suitable solutions. But it is worth remembering that there are commonly a number of different issues at schools that are not always obvious. These are shown in the table below:

Area of road safety	Specific road safety risks
The road environment	• High speed traffic
	 Traffic overtaking near schools
	 Parking allowed on opposite side of road (rural schools especially)
	 Link with school entrances and exits
	Unsafe crossing facilities

	 Road safety issues on the route to school 	
	Unsafe intersections	
The school		
environment	 Inadequate or poorly designed drop-off/parking (rural schools especially) leading to conflicts between vehicles and pedestrians 	
	 Lack of cycle ways and footpaths 	
	 Inadequate use of adjoining facilities such as community hall car parks (rural schools especially) 	
Road users	 Lack of clear school policy and procedures that are followed 	
	 Not driving to the conditions 	
	 Overtaking near schools 	
	 Unsafe and illegal parking near the school 	
	 Inattention from motorists 	
Bus safety	 Motorists not obeying the 20 km/h speed limit, in both directions, past a stationary school bus that is picking up or dropping off children 	
	 Unsafe pedestrian activity to and from school buses 	
	 Unsafe bus stopping locations (rural schools especially) 	

8. Identifying road safety risk in your school environment

It is important that road safety risks at schools are considered and analysed systematically so that effort can be targeted to the schools that need it most. The following steps outline a clear and transparent process that school communities can follow to work through their school road safety concerns with local authorities.

- 1. Understand what is already planned for your school If your school is participating in the school travel planning process road safety will be considered as part of the process. Your RCA can advise of any road safety initiatives that are planned for your school.
- 2. Complete and submit the School Road Safety Perceptions (SRSP) survey (See Appendix). Along with data collected by your RCA, this will help you and your road controlling authority to understand more specific information about your road safety concerns at your school so that any improvements can be focussed on the areas that matter most.

3. School visit and meeting

If demonstrated road safety issues at your school have been identified and the school ranks as a high priority^{*}, road safety personnel from your area will visit and meet with school staff and parents to more closely understand the issues. From there a plan for making improvements will be developed.

*Methods for prioritising rural schools based on a range of risk factors are explained in the technical guide Safer journeys for rural schools.

9. Making changes at your school

The toolbox of road safety improvements in the next section provides a brief overview of the types of initiatives that could be considered to improve school road safety. Every school is unique and it is important that school representatives and road controlling authorities work together to solve road safety issues. Road safety professionals will investigate your concerns and advise you on the relative priority of your school compared with others using a fair and transparent method. They will also provide guidance as to the most appropriate options for your school.

It is very important that RCA resources are prioritised for schools with the greatest road safety risk.

Road controlling authorities should apply these tools in a consistent manner so that people understand what they mean and they know what to expect. Rules for the use of the toolbox items are set out in national guidelines and standards. It is the job of road safety professionals to decide the appropriate road safety option for each situation. This is why it is important to work in partnership with your road controlling authority.

10. Making sure changes are working

Once changes have been made to improve road safety at a school, a period of monitoring will be carried out to ensure that the changes are having the desired benefit and there are no adverse effects. The changes will be monitored for two to five years with particular focus on the first year. Monitoring may take the form of a formal report for higher risk environments or informal monitoring by checking speed/crash data, observations and discussing effectiveness with the school directly.

A toolbox for a school road safety system

This section outlines some of the techniques that can be used to improve road safety at your school. At this stage, the improvement options are focussed mainly on those that are applicable to rural environments, to match the technical document *Safer journeys for rural schools*. They are grouped as follows:

School users - initiatives that can improve the road safety behaviour of parents, children and teachers

Roads (for vehicles) – Some of the things that can be changed in the road environment to improve driver behaviour

Roads (for pedestrians) - Some of the things that can help pedestrian safety

School property - within the boundaries of the school

Vehicles - behaviour inside cars and buses and getting to and from them

The toolbox items to be used at any school are to be considered and developed carefully between relevant stakeholders.

School users

There is a lot of parents, children and other members of school communities can do to keep themselves safe when travelling to and from school. Clear policies and procedures, enforcement and embedded education taking Transport Agency's 'Whole of School' approach (<u>http://education.nzta.govt.nz</u>) are key examples.

School policy and procedures

Establishing and practising school road safety policy and procedures for parents, teachers, staff and students to follow can provide clear expectations for safe behaviour. Examples include:

- \Rightarrow rules for separating pedestrians from vehicle traffic
- \Rightarrow clear and regularly enforced expectations about parking behaviour
- \Rightarrow following Transport Agency procedures for walking school buses and Kea crossings
- \Rightarrow a policy of parents and teachers modelling safe behaviour
- \Rightarrow communicating with heavy transport operators so they can avoid school areas during commuting times
- \Rightarrow regularly checking compliance with policies and procedures and reviewing them as needed.

Enforcement

What is it?

- ⇒ Ensuring that parents and students comply with road rules and school policies and procedures.
- \Rightarrow Important that not only NZ Police are involved in enforcement. Teachers, parents and students all have important roles.



Considerations

 \Rightarrow It is important to reinforce the reasons for enforcement and establish 'norms' of compliance.

 \Rightarrow It is also important to make sure that appropriate behaviour is easy and obvious to people.

Road safety education and training

What is it?

- \Rightarrow Leading practice road safety education, taking an integrated school / community approach.
- \Rightarrow For more information see <u>http://education.nzta.govt.nz/</u>.
- ⇒ Road safety education professional development for schools and communities.

Considerations

⇒ It is important to consider the approach that is likely to be effective. Evidence based approaches with clear goals that focus on students learning needs within the school curriculum and targeting the causal factors underpinning risky behaviour tend to be more effective.

School bus safety

Enhanced school bus signage

What is it?

- \Rightarrow Warning signs picture of two children with flashing beacons.
- \Rightarrow 20km/h speed limit signs to reinforce the legal speed limit for passing a school bus that has stopped to drop off or pick up children in both directions.



Considerations

 \Rightarrow Speed limit signs are currently being trialled and special permission is needed to use them.

Selection and use of safe school bus stops

What is it?

 \Rightarrow Planning bus stops for maximum safety.

Considerations

- ⇒ Children are often unpredictable even with appropriate training and education. Parents and schools should work towards an inherently safe school bus system where errors don't results in serious injury or death.
- \Rightarrow Good policies and procedures for adults and children for rural school bus stops can make them safer.

NZ Transport Agency Safer journeys for schools: guidelines for school communities





Roads (for vehicles)

Changes to the road environment can effectively improve road safety on the journey to school, however, these changes are often costly and they need to be used carefully. A consistent approach to road changes is also needed across the country so that people know what to expect.

School warning signs - static What is it? ⇒ Fluorescent yellow/green children crossing warning sign (PW-32) with 'School' plate informing drivers they are approaching a school. ⇒ Can be used on rural and urban school approaches.

Either one or two signs can be used (on opposite side of road) and backing boards can be added for further impact.

Variable speed limit signs

What is it?

- ⇒ Sign with flashing lights illuminates during morning and afternoon school times to enforce a temporary reduced speed limit.
- \Rightarrow Speed limit is legal while the sign is activated.

Considerations

⇒ Require training of school staff, and licence imposes strict conditions of use.

 \Rightarrow 40 km/h speed limits are common at urban locations and 40, 60 and 70 km/h speed limits are used at rural schools, with the speed depending on the risks present.



Active school warning signs

What is it?

- \Rightarrow LED illuminated or retro reflective warning sign with flashing lights when activated.
- \Rightarrow improves driver awareness of a school which may otherwise be inconspicuous.

Considerations

 \Rightarrow More effective when installed with other physical features and initiatives. \Rightarrow Should only be activated during school commuting times.

Static advisory variable speed limit signs

What is it?

- \Rightarrow Lower cost static sign that reminds motorists of an appropriate travel speed at school zones when children present.
- \Rightarrow Improves driver awareness of a school which may otherwise be inconspicuous.

Considerations

- \Rightarrow May be appropriate for lower traffic volume local roads.
- \Rightarrow Trial still underway and not yet widely used yet.

School thresholds

What is it?

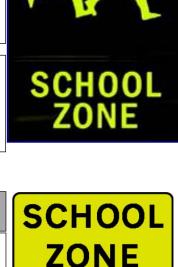
- \Rightarrow A visual narrowing of the road, associated road markings and signage on approach to a school.
- ⇒ Treatment can include a reduced speed limit, place name signs, road markings, kerb extensions, median islands, plantings, coloured road surfacing etc.

Considerations

 \Rightarrow Sufficient visibility of entry treatment.

 \Rightarrow May not reduce speed significantly if they are not associated with a speed limit change and/or enforcement.





WHEN

CHILDREN

PRESENT

Road markings - 'School'

What is it?

- \Rightarrow White text marked on the road on the approach to a school or entry to a school zone.
- \Rightarrow Informs drivers of school ahead.

Considerations

- \Rightarrow Marked on approaches to all rural and urban schools. Can be repeated if needed.
- \Rightarrow Low cost but repainting may be needed.

	No stopping/parking lines	
Wh	at is it?	
⇒	Dashed yellow lines marked on the edge of the road, to inform drivers they may not park or stop.	
⇒	Good for maintaining clearways near school gates, intersections and crossings.	
Considerations		
\Rightarrow	Reduces parking opportunities so alternative travel modes or parking provisions should be made available.	
	Lack of alternative travel options or parking may encourage non-compliance.	

SCHO

Road markings - dragons teeth

What is it?

- \Rightarrow White triangular road markings on each side of the traffic lane on the approach to school zones and at key locations within the zone.
- \Rightarrow Aims to suggest a different road environment and remind motorists of school zones.

Considerations

- ⇒ Relatively new to NZ and currently being trialled in Hastings, Hawke's Bay. Used throughout New South Wales, Australia. Work best when used in conjunction with threshold treatments.
- \Rightarrow Not yet widely used in NZ so special consideration needed for their use.

Roads (for pedestrians)

Footpaths and shared paths

What is it?

- ⇒ A well connected and good quality pathway system is essential for pedestrian and cycle trips to school.
- \Rightarrow In rural areas, well considered pathways can facilitate pedestrians and cyclists trips where they are unlikely to otherwise happen.



Considerations

 \Rightarrow It is important that pathways are of sufficient quality and well connected with safe crossing points.

Overbridges and underpasses

What is it?

- ⇒ Overbridges or elevated walkways constructed for pedestrians to cross over a section of busy road, railway line or other obstacle.
- ⇒ Underpasses tunnel or subway constructed for pedestrians to cross under a section of road or railway.
- ⇒ Removes pedestrian conflict with other traffic and maintains community links that may be severed by a busy road or railway.

Considerations

- \Rightarrow Only effective if pedestrians perceive the route easier, faster or substantially safer than an at-grade option
- ⇒ Pedestrians can feel vulnerable using poorly designed underpasses due to limited natural surveillance

School property

Making schools more visible to drivers

What is it?

- ⇒ Signs, flags or trimming vegetation to make a rural school is more visible to motorists, thereby increasing likelihood of safe behaviour.
- ⇒ Drivers are generally more careful and tend to go slower if they know they are approaching or passing a school.

Considerations

⇒ Signs, flags or other attention grabbing devices should not obscure or compromise the effectiveness of road signs, nor unduly distract drivers.





Improved parking/drop off infrastructure

What is it?

- \Rightarrow Well-designed parking and drop off areas.
- \Rightarrow Providing sufficient parking or very clear drop off areas that prevent congestion and conflicts.
- \Rightarrow Possibly moving school entrances to lower speed side road.

Considerations

- \Rightarrow Continuing to supply ever-increasing parking supply may not be appropriate in all cases.
- \Rightarrow Technical guidance should be sought to help schools with parking and drop off facility design.

Making good use of nearby facilities

What is it?

⇒ In rural schools in particular, nearby community halls and carparks and provide useful drop off or pick up points, especially with good pedestrian connections to the school.



Considerations

- \Rightarrow Important that nearby facilities are on same side of busy roads as school.
- \Rightarrow The use of nearby facilities often requires active encouragement by the school.

Appendix

School Road Safety Survey

Alongside data collected by your RCA, this survey will help to identify the road safety issues that exist at your school. Together with objective data, the survey findings can be used as a starting point for identifying solutions for your school.

General	
Name of school	
MOE school number	
School number	
Student years	

Your school and road layout

In the box below, please draw and label a picture of the road and school property environment. Please include any roads near your school, pick up and drop off areas, parking areas, car/bus/cycle/pedestrian accesses, crossings, and highlight any areas of road safety concern.

School road safety policies, practices and education

1. What road safety policies and practices are actively employed at the school?

Please describe: _____

2. What road safety education initiatives commonly take place within the school?

Please describe: _____

Driver behavi	our
3. Do parents use th	e opposite side of the main road for parking or drop off/pick up?
	\Box Never \Box Sometimes \Box Often \Box Always \Box N/A
↓. If so, are parents/	guardians taking children across the road? 🛛 Yes 🗆 No
5. How often do you	witness unsafe parking or drop off/pick up practices?
	□ Never □ Sometimes □ Often □ Always □ N/A
Please describe:	
5. How often have y	ou witnessed near misses between vehicles or between vehicles and ists near the school?
5. How often have y	ou witnessed near misses between vehicles or between vehicles and
5. How often have y pedestrians/cycl	ou witnessed near misses between vehicles or between vehicles and ists near the school?
5. How often have y pedestrians/cycl 7. If you can recall a	ou witnessed near misses between vehicles or between vehicles and ists near the school?
 5. How often have y pedestrians/cycl 7. If you can recall a above: 	ou witnessed near misses between vehicles or between vehicles and ists near the school?
 5. How often have y pedestrians/cycl 7. If you can recall a above: 8. How would you rate 	rou witnessed near misses between vehicles or between vehicles and ists near the school? Never Sometimes Often Always near-miss or incident, please describe it below and possibly using your drawing near-miss or incident, please describe it below and possibly using your drawing
 6. How often have y pedestrians/cycl 7. If you can recall a above: 	rou witnessed near misses between vehicles or between vehicles and ists near the school? Never Sometimes Often Always near-miss or incident, please describe it below and possibly using your drawing te traffic speed past the school during pick-up and drop-off times?

10. Please describe in your own words any driving behaviours near the school that you feel are unsafe?

Vehicle safety

11. How often have you noticed vehicle occupants NOT wearing safety belts or using incorrect child restraints while leaving or entering the school?

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□ Never □ Sometimes □ Often □ Always
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12. Have you witnessed students exiting the vehicle from the road side instead of the kerb side?

 \Box Never \Box Sometimes \Box Often \Box Always \Box N/A

Pedestrians and cyclists

13. Do some children walk or cycle to school?
Q Yes ONO

14. If they do, are they well separated from traffic?
Q Yes ONO

School site & visibility

15. Is the school clearly visible from the road by passing traffic'? \Box Yes \Box No

If No, what is causing the visibility problem?

Layout of car parks & bus stops

16. Is there sufficient parking available for parents during pick up and drop off?

 \Box Never \Box Sometimes \Box Often \Box Always \Box N/A

17. Is there a suitable alternative option for vehicle parking nearby that could be utilised when designated parking overflows? (eg community hall)

□ Yes □ No □ Possibly

Please describe: ______

18. Is there a separate area for buses to park and students to access safely without encountering other traffic?

Yes	🗆 No
-----	------

19. Is there a well organised and safe pick up and drop off system for buses, cars and pedestrians?

🗆 Yes	🗆 No
l res	

Route to school

- 20. Are there adequate footpaths linking the school to nearby houses?
 - □ Never □ Sometimes □ Often □ Always □ N/A
- 21. Please list any troublesome locations on routes parents/students take to school

Bus routes

22. Around the bus route students are picked up and dropped off at locations within good visibility of approaching vehicles?

□ Never □ Sometimes □ Often □ Always □ N/A

23. Is there a system in place to ensure bus stops along bus routes are safe for students?

🗆 Yes 🗆 No

If yes, please describe the system that is used, below:

24. Are any children who are picked up and dropped off by school buses required to cross the road to reach their homes?

□ Never □ Sometimes □ Often □ Always □ N/A

