BUS
SAFETY
VICTORIA

A branch
of Transport
Safety
Victoria

Managing safety at bus stops: guidance for sharing responsibility

Please note: The document 'Example risk register for managing safety at bus stops' should be read in conjunction with this guidance.

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Glossary

Term	Definition
Bus	A motor vehicle which has been built with seating positions for 10 or more adults (including the driver) and complies with the requirements specified in the Australian Design Rule for a passenger omnibus (within the meaning of those Rules, a motor vehicle prescribed to be a bus and a motor vehicle which the Safety Director has declared to be a bus under the BSA).
BSA	*Bus Safety Act 2009 (Vic)*
Bus Safety Victoria (BSV)	BSV is a branch of Transport Safety Victoria.
Bus safety work	An activity that may affect the safety of bus services including: (a) driving a bus or activities associated with driving a bus (b) designing, constructing, supplying, repairing, modifying, maintaining, monitoring, examining or testing a bus (c) designing, constructing, supplying, installing, repairing, modifying, maintaining, monitoring, examining or testing equipment in or on a bus (d) setting or altering a schedule or timetable for a bus service (e) prescribed activity.
Bus safety worker	A person who has carried out, is carrying out or is about to carry out bus safety work (as defined in the BSA) including a person who is: (a) employed or engaged by a bus operator to carry out bus safety work (b) engaged by any another person to carry out bus safety work (c) a trainee (d) a volunteer. Bus safety work includes, but is not limited to, driving a bus (or activities associated with driving a bus), repairing, testing, modifying or maintaining a bus or its equipment and setting bus schedules and timetables.
Consequence	An outcome or impact of a hazard or incident. In the context of this publication, consequences relate to injury (minor, serious or fatal).
Decision basis	A rationalised basis for deciding that risks are eliminated or reduced so far as is reasonably practicable (SFAIRP).
Duty holder	A person who may have a share of risk responsibility but is not a risk owner
Likelihood	The chance of something happening.
Operator	The person who is responsible for controlling or directing the operations of a bus service in connection with a business or activity for, or involving, the transport of passengers by road by that bus service, but does not include a person who merely arranges for the registration of a bus or maintains or arranges for the maintenance of a bus.
Procurer	A person who charters a bus service or otherwise engages with an operator of a bus service (regardless of whether or not the bus service is provided on a commercial basis).
Risk	The effect of uncertainty on organisational objectives. In this publication, it is measured in terms of the combination of the consequences of an event and their likelihood, that is, risk = consequence x likelihood.
Risk cause	Something that results in a risk source/event being realised.
Risk identification	A process of finding, recognising and describing risks. This involves the identification of risk sources, events, and their causes.
Risk manager	A person with overall responsibility to develop and manage a risk management framework
Risk owner	A person with the accountability and authority to manage a risk.
Risk register	A formatted list that records identified risks, assesses their impact and describes the actions (controls) to be taken to mitigate them. Typically, it describes the risk, the causes for that risk and the responsible person or group for managing it.
Risk source	An element which alone or in combination has the intrinsic potential to give rise to risk.
Risk treatment	A process, device, practice or other action that minimises risk, that is, a way to eliminate or reduce risk.
Stakeholder	Any group, organisation or individual which has an interest in the performance or success of a business. Depending on their individual or collective roles in the organisation they can potentially be involved in the risk identification and management process.
TSV	Transport Safety Victoria is Victoria's integrated safety regulator for bus, maritime and rail transport and promotes the continuous improvement of transport safety.

1. Introduction

The Bus Safety Act 2009 (Vic) (BSA) states that "a person who determines the location of, designs, constructs, installs, modifies or maintains a bus stopping point or any bus stop infrastructure, or who engages a person to do any of those things, must ensure, so far as is reasonably practicable, that the location, design, construction or condition of the bus stopping point or bus stop infrastructure is safe" (BSA).

Bus stops are an area where responsibility for ensuring safety is generally shared among a number of persons. Safety at bus stops can be complicated by this sharing and the fact that some persons who have safety duties may not be aware of their responsibilities.

To ensure safety risks are effectively managed it is necessary that everyone who has a safety responsibility at bus stops is aware of, and accepts, their responsibility and works with others to manage safety risks.

1.1 Purpose of this guide

This guide is intended to provide guidance for persons who may manage the shared risks to safety at bus stops. Where an effective process for managing safety risks already exists, it may be simply amended to incorporate this guidance.

This guide is intended to:

- explain the concept of *so far as is reasonably practicable (SFAIRP)*
- advise readers of appropriate resources for developing safety risk management frameworks in relation to managing shared risks to bus stop safety.
- propose a method by which a risk management framework could be developed and implemented

This guide is relevant to anyone who has safety duties under the BSA which imposes a duty on certain persons within the Victorian bus industry to ensure safety SFAIRP.

1.2 Risk management responsibility and principles

The BSA identifies that the safe operation of bus services is the shared responsibility of:

- operators;
- bus safety workers;
- procurers;
- persons who determine the location of bus stopping points, or who design, construct, install, modify or maintain a bus stopping point or bus stop infrastructure;
- the Safety Director; and
- members of the public.

Further, it documents the following principles:

- the level of a party's responsibility depends on the nature of the risk their actions pose and their capacity to manage the risk;
- managing risks associated with the provision of bus services is the responsibility of the person best able to control the risk; and
- parties responsible for the safe operation of bus services should be involved the formulation and implementation of measures to manage risks to safety associated with the provision of bus services.

The BSA also imposes a duty on those persons who determine the location of bus stopping points or those who design, construct, install, modify or maintain them (or bus stop infrastructure) to ensure that bus stopping points are safe so far as reasonably practicable. Failure to do so may be seen as a breach of safety duty and result in significant penalties. The duty extends to persons who engage others to do any of these things.

All parties with safety responsibilities need to realise and accept this shared responsibility and be involved in decision-making. This is particularly crucial at bus stops where multiple parties share risk-management responsibilities.

One method responsible parties may use in risk management decision-making around bus stops is via the use of a formal, shared risk management process. With this in mind, TSV has developed this guidance material.

1.3 Documentation

The ability to carry out a comprehensive process to manage all risks arising from operations at bus stops is impossible without a written assessment, even if such an assessment is not expressly required by the BSA. It is recommended that the information relating to risk assessment, including aspects of this guidance, be documented.

The documentation should show that a thorough and detailed assessment has been conducted. When making decisions on risk consequence and likelihood, persons should ensure that assumptions, differences of opinion, uncertainty and limitations are recorded.

1.4 Use of appropriate references

This guide shows a framework which may be used to manage bus stop risks. We recommend AS/NZS ISO 31000:2009-*Risk Management Principles and guidelines* be used as a reference to support the development, implementation and maintenance of a risk management framework.

There are a number of publications available which may inform stakeholders of bus stop safety guidelines and these should be used as references for risk management activities. Examples of these include:

- AS/NZS ISO 31000:2009 *Risk Management-Principles and Guidelines;*
- ISO/TR 31004 *Risk Management-Guidelines for the implementation of ISO 31000;*
- VicRoads Supplement to AS 1742.12:2000 *Manual of uniform traffic control devices Part 12: Bus, transit, tram and truck lanes,* October 2015
- VicRoads *Shoulder Bus Stop Guidelines,* March 2007;
- VicRoads *Cycle Notes No.20,* August 2007;

Stakeholders should familiarise themselves with, and make use of, appropriate technical references when making decisions on managing safety risks at bus stops.

1.5 Monitoring and review

Risk owners should regularly review all components of the risk management framework to ensure it remains current and valid. TSV also recommends that the effectiveness of treatment options is reviewed on a regular basis by the risk owner to ensure that the assumed benefits are being delivered.

1.6 Disclaimer

TSV makes this information available on the understanding that users exercise their own skill and care with respect to its use.

Compliance with the Guide is not compulsory or prescriptive in nature and the information it contains is for general information only and is not an exhaustive treatment of the subject. It is an example only of how a person may undertake managing risks so far as is reasonably practicable. Compliance will not ensure compliance with statutory requirements including but not limited to the BSA, nor limit a person's obligations and responsibilities under it.

Users will need to consider their own individual circumstances. They are encouraged to seek professional advice (including but not limited to legal advice) relevant to their circumstances before taking any course of action related to information, ideas or opinions expressed in this guide.

TSV makes no representation or warranty implied or otherwise that, among other things, the content contained in this guide is free from error or omission.

2. The concept of so far as is reasonably practicable (SFAIRP)

'So far as is reasonably practicable' is a well-known legal concept referred to in both Australian and international jurisdictions. It generally requires weighing a risk against the resources needed to eliminate or reduce it. It generally does not require every possible measure to be implemented to eliminate or reduce risk. It does, however, place the onus on the person holding the duty to be able to demonstrate that any additional measures to control the risk would be grossly disproportionate to the benefit of the risk reduction achieved by the additional risk treatment.

In simple terms, risks do not need to be managed at all costs. Risk owners however should do all they reasonably can, considering the nature of the risk and the nature of risk treatment options.

The nature of the risk

This is what the person knows, or ought reasonably to know, about the risk source or event, the likelihood of the risk eventuating and the degree of harm that would result if the risk eventuated. An understanding of the nature of the risk can be gathered by using a risk register or similar tool.

The nature of risk treatment options

This means any ways of eliminating or reducing the risk and the availability, suitability and cost of these.

An understanding of the risk treatment options may be complex and involve:

• learning more about the risk source
• gaining an understanding of applicable established practice, codes or standards
• learning more about new or alternative treatments.

A risk holder should then consider the risk treatment options and satisfy him/herself that he/she has done all that is reasonably practical to eliminate or reduce safety risks by applying all appropriate controls.

Consideration should include an analysis of their benefit versus cost. It may be reasonable to reject a treatment option if the cost versus benefit is grossly disproportionate, that is, the cost of treatment implementation grossly outweighs the benefit to be gained by its implementation.

Lessons can be learnt from the occupational health and safety context because that law is relevant to the bus industry, given the similarity in the wording of the legislation and the common principal of ensuring public safety.
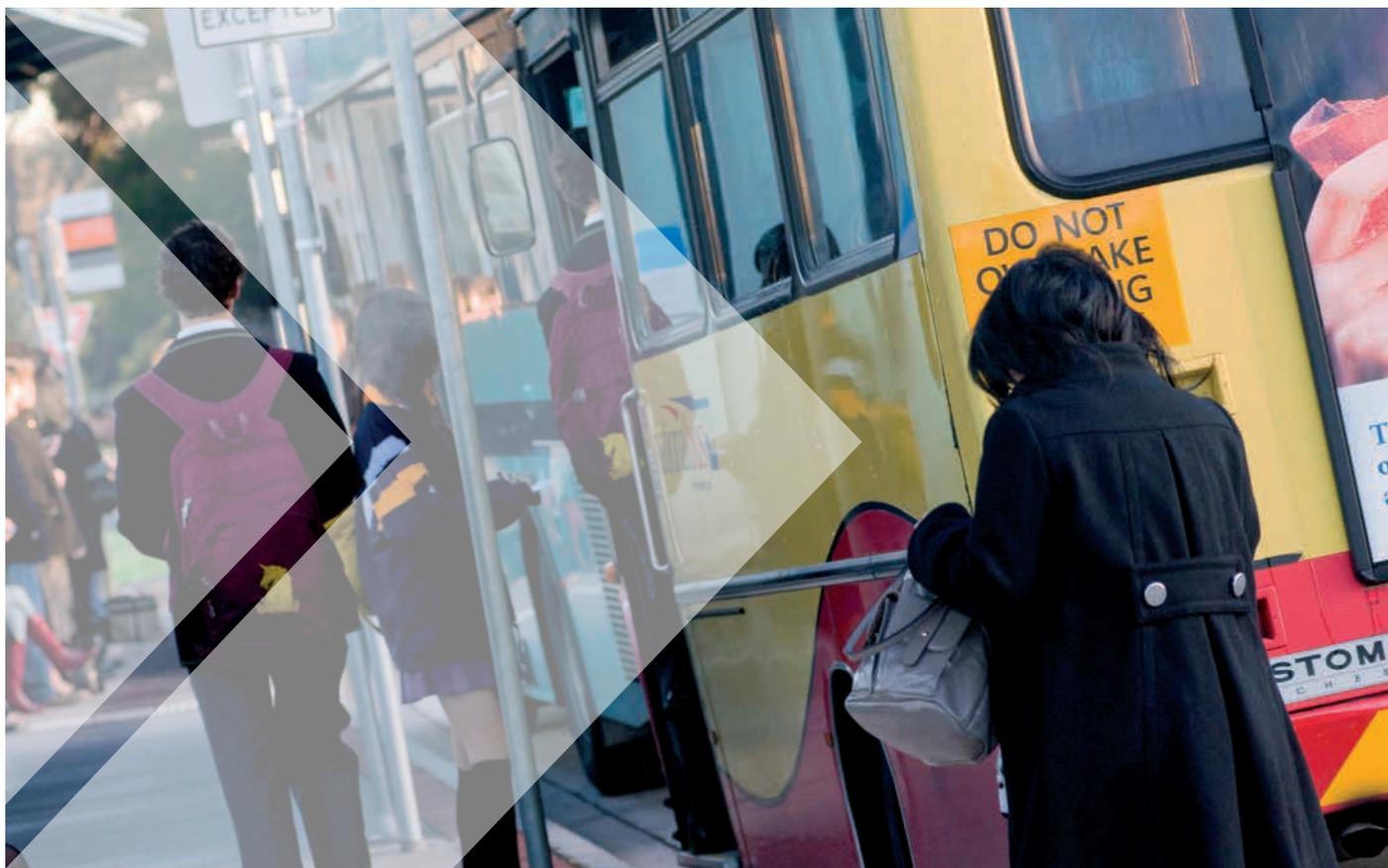
2.1 Demonstrating that a risk is being managed SFAIRP

Several things help demonstrate a risk is being managed SFAIRP.

1. The treatments in place meet recognised codes and standards, and they have been applied. Use of engineering, operational or maintenance codes and standards, for example, may form grounds for demonstrating safety is ensured SFAIRP. Ultimately however, this depends on the circumstances of the case and the context in which the code/standard has been applied.
2. Good practice in terms of considering new or alternative known controls has been adopted or considered.
3. The risk source and associated risk have been evaluated by competent persons using appropriate knowledge.
4. The effectiveness and availability of the controls can be validated or proven within their company.

If a process or practice involves more complex scenarios or there is some uncertainty about the risk, for example, new engineering practices or management principles that are not well established, further analysis may be required. It may include increased reliance on risk based assessments, for example, quantitative risk assessment and cost benefit analysis, although codes and standards, good practices and engineering judgement remain significant.

2.2 Points to note

- If a measure is practicable and the cost of the measure is not grossly disproportionate to the expected benefit, then the measure is considered reasonably practicable and should be implemented. For example, spending $1 million to prevent a major bus crash capable of killing 50 people is obviously proportionate.
- A measure is not reasonably practicable if the sacrifices or costs grossly outweigh the risk benefit. For example, spending $1 million to prevent five staff suffering bruising is obviously grossly disproportionate.
- If risk owners can't afford to implement a treatment that is reasonably practicable, they should not engage in the activity that gives rise to that risk.
- Any assumptions relating to costs or risk benefit should be documented as these significantly affect the robustness of the outcome.
- The lowest risk option should generally be preferred but if this is not the case, it should be demonstrated why the higher risk level is as low as reasonably practicable. If there are options available for eliminating or reducing a risk that achieve the same level of reduction in likelihood or consequence, risk owners may choose the least costly option. However, choosing a low cost option that provides less protection simply because it is cheaper is unlikely to be considered a reasonably practicable means of eliminating or reducing risk.
- Risk holders may reject a treatment if it is considered not reasonably practicable, but should summarise the reasons for rejecting the treatment. The reason for rejecting a treatment may change in the next review, for example, it may become significantly easier to implement. It is good risk management practice to record when safety treatments have been rejected for any reason.
- The documentation of SFAIRP decision-making on a risk register is important to demonstrate that risks have been eliminated or reduced SFAIRP. An example is included in the appropriate column of the sample risk register. The comments/SFAIRP Summary of a risk register should record any rejected treatments and the justification for rejection.
- Risk owners should summarise why they believe their risks have been eliminated or reduced SFAIRP. If a risk source is well understood because it is an established practice, there is nothing new or unusual and there are no major stakeholder implications, it can be demonstrated or argued that the risk is reduced SFAIRP.
- Until tested directly in the courts, uncertainty remains as to what would be considered reasonably practicable.

3. Implementing a safety risk management framework for bus stops

- **Gather stakeholders**
- **Identify obligations**
- **Develop a risk management framework**
- **Review the risk environment regularly**

Risk management is defined by AS/NZS ISO 31000:2009 as 'coordinated activities to direct and control an organisation with regard to risk.' The frameworks for risk management are similar in nature across all operating environments and it may be useful to revise an existing risk management framework to incorporate bus stop safety risk management.

Managing the risk to safety at bus stops begins with a decision by duty holders to implement a framework and to provide the necessary commitment and resources. The commitment can be obtained through gathering stakeholders who have an interest in safety at bus stops. The gathered stakeholders should then begin by considering the legal, regulatory, customer, contractual or certification requirements that the organisations have to meet.

In implementing a risk management framework it is necessary to identify risk owners who have the accountability and authority to manage risks. This is likely to be a subset of the stakeholders who have an interest in safety at bus stops. Once this has been established a framework for managing risks can be developed.

In the implementation of a framework to manage risk at bus stops, TSV recommends that duty holders consider ISO 31000:2009 Risk Management - Principles and Guidelines, and ISO 31004:2013 Risk Management – Guidance for implementation of ISO 31000. Much of the guidance in this document is referenced from these publications.

3.1 Identifying stakeholders, risk owners and duty holders

There are a number of principles in the BSA with regard to the responsibility for managing the risks to bus safety, including safety at bus stops.

The level of a person's responsibility for managing risk depends on the nature of the risk their actions pose and their capacity to manage the risk.

The responsibility for risk management rests primarily with the person best able to control a risk. However, the person managing the risk framework need not necessarily be the best person controlling a particular risk.

Persons responsible for the safe operation of bus services should be involved in the formulation and implementation of measures to manage risks to safety associated with the provision of bus services.

3.1.1 Gathering duty holders

Before a risk management framework can be established, duty holders should be identified. In order to do this, the person who determines where buses shall stop for a particular bus service should gather all people who are believed to be duty holders. Duty holders can be identified as others who may have an interest in, or responsibility for, safety at the applicable bus stops.

3.1.2 Risk manager

Once gathered, stakeholders should identify those with accountability and authority to manage risks. This group needs to make a positive decision to implement a risk framework for managing bus stop risks and to provide the necessary commitment and resources.

TSV recommends the person who determines where buses shall stop for a particular bus service takes responsibility for implementing a risk framework that incorporates all duty holders (that is, becomes the risk manager). This person is likely to be the risk owner for a number of risks, and will be responsible for the setting of objectives and determining scope, timeframes, accountabilities and resources.

The risk manager can share or transfer these responsibilities for documenting and managing the framework. This must be documented and agreed to by the party who is constructing and managing the risk framework.

Risk managers should monitor and review each stage of the framework development and associated processes, and make any necessary adjustments. In this way, the development of the risk management framework is subject to continuous improvement. It may be initially challenging for the risk manager to identify and engage with all risk owners but the best practicable safety outcome should be sought based on the principles of shared responsibility and participation/consultation.

3.1.3 Risk owners

Stakeholder consultation and risk register development should follow and result in the identification of a person who is best able to manage the risks to safety for each risk cause. We shall call this person the " risk owner".

It is likely that risk owners are those who determine the location of bus stopping points, or who design, construct, install, modify or maintain bus stopping points or bus stop infrastructure. Risk owners may typically include:

• local council representatives
• Public Transport Victoria representatives
• VicRoads representatives
• school representatives.

Again, risk owners will be recognised as the persons best able to control individual risk causes.

3.1.4 Duty holders

Section 13 of the BSA highlights the importance of all people involved in the provision of a bus service being involved in the planning and implementation of risk management processes. The risk manager should identify other parties who may have a share of the responsibility at bus stops. The principle of shared responsibility requires that other people who have a responsibility for managing safety risks be included in safety risk management process. We shall call these persons "duty holders".

Duty holders may typically include:

• representatives of persons procuring bus services
• other school representatives (including parents)
• bus operators.

Consultation with duty holders will greatly assist in developing a proper understanding of the risks associated with bus stops.

3.2 Designing the framework

The risk manager should ensure that they document and communicate how risks will be managed at bus stops after consultation with all duty holders. The duties and required competencies of all persons with risk management accountabilities at bus stops should be clearly defined and agreed between duty holders, then documented.

ISO 31000:2009 recommends that the following elements be included in the design of a framework for managing risk:

• understanding the organisation and its context;
• establishing a risk management policy;
• accountability;
• integration into organisational processes
• resources; and
• establishing communications and reporting.

It is recommended that those organisations with accountability and authority to manage risks evaluate their approaches to risk management to determine whether they are suitable for the management of risk at bus stops or whether any tailoring of their design is required.

There is no single way to design or implement a framework and when designing a new one, or tailoring an existing one, it is recommended that:

- the framework is documented and includes a mandate and commitment for duty holders to reduce the risks to safety at bus stops
- consideration be given to all legal, regulatory, contractual obligations and certification requirements that arise from management systems and standards that stakeholders have chosen to adopt
- appropriate risk criteria should be established that are consistent with the objectives of managing risk at bus stops, and reflect risk attitudes and objectives of those with accountabilities and authority to manage risk
- the principles and attributes of ISO 31000:2009 are assessed and included, as appropriate, including the use of a risk register (an example of which has been produced as a separate document to support this guidance.)
- those with accountabilities and authority to manage risk determine if existing processes provide them with the risk information they need to make the decisions that will successfully manage safety at bus stops
- a framework document should be produced explaining how risks at bus stops will be managed and should reflect the organisational culture and context of those with accountabilities and authority to manage risk
- the framework document acknowledges that there are different levels of accountability for managing risks at bus stops
- the competencies and duties of all persons with risk management accountabilities are defined
- duty holders are involved as appropriate
- information about risks and the output of risk management processes are recorded in a consistent manner and are accessible to all parties with accountabilities and authority to manage risk
- Evidence based decision making should be the ultimate goal of a framework, but where this isn't possible, expert judgement should be used in a way that avoids bias in decision-making.
- Assumptions and uncertainties (e.g. volatility in demand, traffic conditions, changes to parking regulations etc.) should be documented in the framework. Past events may not accurately predict the future.
- The framework should include methods for collection of information and ensuring duty holders have access to the information they need to make quality decisions.
- The framework should have a method for capturing and considering incidents and near misses and incorporating them into risk management decision-making.
- there are processes to review the framework and respond to changes. Reviews should consider:
  - measures to test if the framework is meeting is intended purpose and adding value
  - opportunities for improving the framework
  - if there have been any deviations from the framework
  - how changes in duty holder are managed
  - how new knowledge is managed
  - improving the quality of risk assessment
  - improving the speed of decision-making.

3.3 Implementing and monitoring the framework

TSV recommends that an implementation plan is developed and activated to ensure resources are provided and applied to implement the risk management framework. The plan itself should also be subject to risk assessment and any necessary treatment actions implemented. Specifically, it is recommended that the plan:

- details specific actions to be taken, when they should be taken, and by whom
- defines responsibilities for implementation
- incorporates mechanisms for communications and reporting progress, problems and completion
- identifies criteria that will trigger a review or revision of the plan (including control performance monitoring) and how the success of controls is communicated to duty holders
- includes a process for considering bus stops individually

It is recommended that performance is monitored in respect to the effectiveness of change and risk management, as well as identifying lessons learnt and opportunities for improvement. TSV would appreciate communication on these issues so that they may be communicated to the wider industry.

4. Conclusion

Bus stops are an area where responsibility for ensuring safety is shared among a number of persons.

It is necessary that everyone who has a safety responsibility at bus stops is aware of, and accepts, their responsibility and works with others to ensure safety risks are effectively managed.

Information used to manage risks at bus stops and the outputs from application of the risk management process should be recorded in a consistent and controlled manner that is accessible to all duty holders.

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