National Guidelines for the Risk Assessment of School Bus Routes

Australia is diverse in its geography and climate. School buses traverse mountains, deserts and everything in between, on roads that include dirt tracks, highways and freeways. School buses may face traffic conditions in which small and large vehicles interact at anything from 40kph to unlimited speeds. Australia's climate creates everything from sandy desert environments to torrential rain, fog, snow and ice. For these reasons it is important that any framework for school bus risk assessment remains flexible in its definitions and implementation options.

What the working group has developed is a simple tool which will enable all jurisdictions to classify their school bus routes according to the conditions which are experienced. Three environments have been identified and for each the conditions which might be encountered are described.

The approach to risk assessment needs to accommodate the full range of conditions affecting school bus transport in States and Territories. Risk can be affected by:

- geography (road and road environment conditions);
- traffic; and
- climate.

Each of these conditions may be experienced as **consistent**, **variable** or **extreme**. This framework allows safety improvements in any State or Territory to first address school bus routes facing extreme conditions (Environment 3).

National Framework for Risk Assessment of School Bus Routes

Recognising the diversity of Australia's school bus transport environments, following are descriptions of three environments in which buses can operate, incorporating *consistent*, *variable* and *extreme* geographic, traffic and climate conditions.

Environment 1	Environment 2
Urban	Non-urban
High population density	Lower population density
Generally lower speed limits and vehicle speeds	Higher speed limits (>70kph) and vehicle speeds
Shorter journeys	Longer journeys
Consistent road and road environment conditions (predominantly sealed roads)	*Variable* road and road environment conditions (for example, narrow, undivided unsealed roads; winding roads; roads with hazards such as livestock, wildlife, irrigation spraying or causeways; roadside hazards like trees close to the road; sandy desert roads)
Consistent traffic conditions (traffic is generally highly regulated and there are identifiable peak periods of slow, dense traffic)	*Variable* traffic conditions (for example, school bus routes are shared with heavy vehicles at higher speeds; freight routes; roads with heavy tourist traffic)

Environment 3
Extreme road or road environment conditions (for example, long steep or very steep roads, roads with precipitous drop offs).
Extreme traffic conditions (for example, non urban roads school buses share with a high volume of heavy vehicle traffic on narrow, undivided roads; open speed limited roads).
Extreme climate conditions (for example, fog, snow or ice for extended periods of the year).
Other identifiable high risk locations determined on a jurisdictional basis, for example blackspots.

Policy Responses To Risk Assessment

The framework recommended here does not prescribe specific policy solutions which are the responsibility of individual States and Territories. It is important that policy responses remain flexible and relate to risk. Relevant existing Australian Design Rules may be applied subject to each jurisdiction's policy approach. Policy responses may range from accreditation and authorisation practices, through to engineering solutions. For example:

Accreditation/ Authorisation	Policy/ Procedures	Initiatives	Engineering Solutions
- background checks – financial & criminal - standards – driver competence, vehicle, etc	- standee carriage - speed limits - school student behaviour	- community involvement - drug and alcohol interventions - fleet procurement	- rollover strength - additional brakes - seatbelts - bus stops - interchanges