SAFE SYSTEM SOLUTIONS

ROAD SAFETY · AUDITING · ENGINEERING · PROJECT DEVELOPMENT

Raised Safety Platforms

Fact Sheet

The grade, or slope, of the ramps can be designed to achieve different travel speeds.

The design takes into account travel comfort and efficiency for all users including heavy vehicles, motorcycles, emergency vehicles and buses.

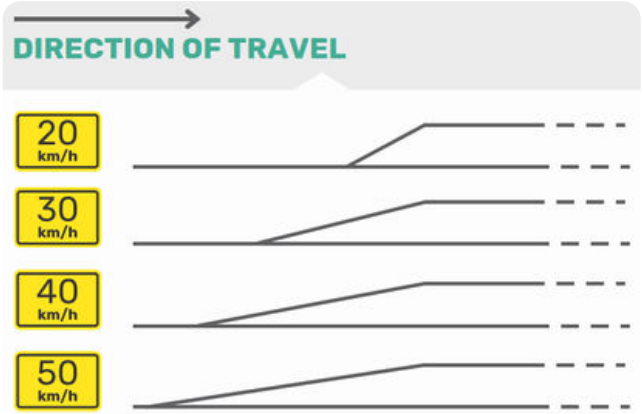

Figure 1: Indicative slope profile for travel speed

WHAT ARE THEY?

Raised Safety Platforms (RSPs) are elevated sections of road that aim to reduce vehicle speeds on the approach to areas of higher risk, such as intersections.

RSPs are like speed humps, but having a much gentler gradient (ramp slope) means they can be safely used in higher speed environments.

BENEFITS

- Vertical deflection is used to manage vehicles speeds. The reduction in travel speeds, reduces the risk of crashes occurring
- The severity of a crash, should it occur, is reduced because impact forces are lower
- Can be implemented in higher-speed and heavy vehicle networks; as well as eithed at mid-block or at intersections
- Strong alignment with Safe System principles

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SAFETY RATING

iRAP provides a tool to objectively measure the level of safety of road environments for vehicle occupants, motorcyclists, bicyclists, and pedestrians. Star ratings are used to denote the level of safety provived (with 5 stars indicating the lowest risk). The below scenarios were analysed using iRAP[1].

T-intersection

T-intersection with Raised Safety Platforms

1 Based on a modified iRAP scenario for demonstration purposes, visit www.iRAP.org for details.

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QUICK FACTS

Pedestrians and cyclists

Lower speeds improve road safety, especially for vulnerable road users like pedestrians and cyclists.

Lower speeds help to make streets enjoyable places to be, rather than just thoroughfares for traffic.

Lower speeds encourage active transport and can reduce driver hoon behaviour.

Emergency Vehicles

Emergency vehicles need to slow down at Raised Safety Platforms. But they also need to slow at roundabouts, traffic lights and other intersections.

Raised Safety Platforms do not significantly impact response times.

Emergency services should be consulted as part of installing Raised Safety Platforms.

Heavy Vehicles

Raised Safety Platforms are designed so that large vehicles are not destabilised or damaged.

Ramp slopes and height are adjusted to suit the vehicles that will travel over them.

There are operational Raised Safety Platforms on major arterial freight routes (Surf Coast Hihgway, Belmont; Bass Highway, Wonthaggi)

Travel time / congestion

Evaluations of recently installed Raised Safety Platforms have shown little evidence of any significant impact on intersection capacity.

Journey times are hardly affected because speed reductions are focuses on a short length of road (the point of risk) rather than over a wide area.

Noise

Community concerns about noise from vehicles crossing the platform have not played out in recent installations.

A small increase in noise is often offset by less noise from speeding and hoon behaviour.

Further, recent tests have shown a decrease in noise, mainly due to road resurfacing.

Vehicle Speeds

Raised Safety Platforms can be designed to reduce speeds to desired levels.

Evaluations of implemented Raised Safety Platforms show they generally reduce approach travel speeds by up to 28%.

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FURTHER READING

GUIDANCE / NOTES:

- Austroads, Effectiveness and Implementation of Raised Safety Platforms
- Austroads, Understanding and Improving Safe System Intersection Performance
- Department of Transport and Planning, Road Design Note 03-07 Raised Safety Platforms

GOOGLE MAPS:

- Surf Coast Highway x Kidman Avenue
- Rundle Street x The Parade West
- The Boulevard, Ivanhoe East

WATCH HERE TO LEARN MORE

Hamilton City Council (NZ) installing Raised Safety Platforms