



Image source: Safe System Solutions Pty Ltd

FACTSHEET 7

VEHICLE ACTIVATED SYSTEMS

This factsheet considers vehicle-activated systems that target speed reductions. At intersections, the concept uses vehicle-activated measures to reduce speeds on the major road approaching a priority-controlled intersection. Activation can be triggered by either turning vehicles or by approach speeds on the major road. Activation may provide either a temporarily reduced speed limit or a warning message or both.

The concept may also be applied at other locations, such as curves, where an activation is triggered by approach speeds above a certain threshold.

Application

Vehicle activated systems at intersections are typically suited to sites with an original posted speed limit of 80 km/h or greater. The suitability of the system is dependent the volume of traffic on the major road and side road, though guidance on effective vehicle volumes varies.

Implementation considerations

- Deployment of vehicle activated systems is more easily achieved at intersections with simple layouts and geometry. Multiple lanes in one direction and vertical or horizontal curves or gradients may adversely affect the system operation.
- Systems may be operated in different ways, such as activation only when speed limits are exceeded, or only during certain times of the day.
- Vandalism and power supply issues in remote areas are potential issues.
- Factors affecting the function of a system may include the location of driveways, parking bays, vegetation, and overtaking lanes. These may impede vision of the sign by a driver or the detection of approaching vehicle speeds by the system.

Safe system category

Supporting

Effectiveness

High (up to 65% CRF)

Target road user groups

Passenger Vehicles, Motorcyclists,
Heavy Vehicles

Target crash type

Intersection

Indicative cost

Usually less than \$0.1M. Can be up to \$0.5M per site for complex side road activated systems.

Inter-pillar link

Safe Speeds



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