Intelligent Speed Adaptation Systems. (ISAS)

GPS vs Radar

	GPS Systems	***Radar Safety Systems***
Types Used in Australia	Navman GPS, Road Angel, Alert GPS	Radar Safety Detectors with SWS
Speed Camera Warning - Fixed Speed Camera	Yes	No
- Radar Speed Cameras	No	Yes
- Laser Speed Camera	No	Yes
- Red Light Camera	Yes	No
- Bus Lane Camera	Yes	No
Road Safety Warnings - Blackspots	Yes	Yes
- School Zones	Yes	Yes
- Railway Crossings	Yes	Yes
- Emergency Ambulance	No	Yes
- FESA Vehicles	No	Yes
- Accidents	No	Yes
- Police Pursuits	No	Yes
- Highway Road Crews	No	Yes
- Road Trains Approaching	No	Yes
- Passenger Trains Approaching	No	Yes
Car GPS Speed Reading (GPS Odometer)	Yes	Yes with GPS enabled units
Electronic Compass	Yes	No
Users in WA	No data	50,000 users

GPS Systems can include the Alert and Road Angel GPS Speed camera and road hazard warning system, or GPS Navigation systems with speed camera data and road hazards.
A Radar Safety Detector user cannot avoid an SWS transmitter alert unless the system is unplugged or K Band and SWS turned off.

Users:-

GPS Systems - Professional drivers who need to protect their safety, licence and livelihood will benefit most. [1]

Radar Safety Systems – Age and driver type of average detector user [3]

- 25 – 54 years old,
- Manager, salesman, self-employed or tradesman,
- Most common vehicle Commodore or Falcon
- Licence is critical to work

Reasons for using system

GPS System - GPS Navigation.
To avoid speeding and red light camera fines.
To warn of road hazards.

Radar Safety Systems - To protect against unfair "low speed" speeding fines [3]
To reduce likelihood of getting a speeding fine.
To warn of road hazards and emergency vehicles.

Reported effect on driver behaviour

GPS Systems

Customers report that they drive more carefully and more slowly using GPS systems because they become more aware of hazards that lie ahead. The GPS unit is designed to 'wake up' a driver by emitting an audible and visual alert when approaching a road safety hazard area – giving drivers advanced warning of what lies ahead. [1]

"In overseas and interstate jurisdictions where the GPS systems have been trailed, the results have been positive in terms of driver awareness of posted speed limits." [5] WA Minister for Police, Michelle Roberts

Radar Safety Detectors

Drivers are more alert, are more aware of the posted speed limits and in many cases drive slower and more carefully. [3]

When used with an SWS system, an average drop of 5 to 7kph was recorded through road hazard areas. [4]

References

1. Sentinel Geo Systems Pty Ltd, Frequently Asked Questions – Road Angel

2. Bruce Simpson GIS Manager, Sentinel Geo Systems Pty Ltd, email response 13th December 2005

3. see MORI 2001, Radar Detector Survey, UK; ADRA 2000, Radar Deetctor User Survey, Western Australia; Yankelovich, Clancy and Shulman 1987, Comaprison of Accident Rates of Radar Detector User and Non Users.

4. see Rush, David, 1997, Study of Effectiveness of Unmanned Radar – A Speed Control Technique in Freeway Work Zones, Virginia Department of Transport, Best Practice Policy; Freedman, M., Teedm N., Migletz, J., 1994, Effects of Radar Drone Operations on Speeds at High Crash Risk Locations, Transportation Research Record 1464; McCoy, P.T., Bonneson, J.A.; Kollbaum, J.A. 1995, Speed Reduction Effects of Speed Monitoring Displays with Radar in Work Zones on Interstate Highways, University of Nebraska-Lincoln

5. WA Minister of Police, Hon Michelle Roberts, letter dated 3rd January 2006.