

# FINANCIAL REVIEW

## Australian technology to feature in US crash research

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An Australian-developed precision location system has been chosen to underpin research at a new crash avoidance test facility being added to America's world-leading road safety Vehicle Research Centre near Washington DC.

The centre, funded by the Insurance Institute for Highway Safety, has been involved in a string of road safety initiatives over the years, from front-end collision testing, bumper bar rating and roof rollover occupant protection to child safety restraints, airbags, side impact tests and truck braking.

It has played a key role in inducing automotive manufacturers to introduce a sequence of design improvements which have collectively improved the safety of drivers and passengers. Dramatic film and video of head-on smashes, dummies being thrown around in collisions and air bag activation have been widely aired around the world.

The institute is spending \$US30 million on an upgrade to permit detailed evaluation of new vehicle crash avoidance systems. It has selected a terrestrial positioning system developed by Canberra-based Locata Corporation to control the deployment of test vehicles to allow rigorous, consistent and repeatable scientific evaluation of new vehicle crash avoidance systems.

The results can be expected to influence Australian government-mandated vehicle safety standards in due course. It is one more success for Locata, whose technology is now under consideration by several Australian governments.

Locata has developed a radio-linked system of ground-located positioning stations, designed to be totally compatible with GPS satellite-based positioning systems but providing much stronger signals to extend coverage to areas where the weak GPS signals are blocked.

It has already been adopted by the US Air Force as the standard positioning facility for establishing aircraft locations with pinpoint accuracy.

The newly expanded road test facility at Ruckersville, in the foothills of central Virginia, includes a continuous vehicle test track that transverses not only open-air roadway areas but also a vast 90 by 210 metres fully covered testing area.

Locata's unique ability to provide reliable indoor positioning, accurate to centimetres, will allow the IIHS to have a seamless, locally controlled positioning system across all of the covered as well the outdoor test areas. It will allow easy upgrade and expansion in the future.

The Vehicle Research Centre will have to research and install new state-of-the-art robotic and positioning technology to enable the required level of precision. To do this, tests must be conducted under identical, controlled conditions.

With Locata, IIHS researchers will be able to ensure precise positioning data is available in all of its test areas. In parts of the new facility where GPS signals would be unreliable or unavailable, the Locata technology will seamlessly deliver consistent, reliable and accurate positioning, available everywhere.

“GPS satellites are in a constant state of motion,” said Locata CEO Nunzio Gambale. “In many environments this makes it impossible to achieve the level of reliable positioning required for meaningful scientific testing.

“Locata readily steps into these environments to deliver an always-on, unfailing and superbly accurate positioning signal. We are honoured to be chosen as the positioning technology which helps the IIHS research, test and drive forward the development of life-saving automotive initiatives.

“This Locata installation at the legendary Vehicle Research Centre will be the most publicly visible jewel in our crown to date.

“Relationships like this confirm the value of years of hard work we put in to invent this amazing and unique technology.”

The US Insurance Institute for Highway Safety is an independent, non-profit, scientific, and educational organisation dedicated to reducing the losses – deaths, injuries, and property damage – from vehicle accidents.

Locata is now being trialled by government bodies in urban areas as a locally-controlled positioning infrastructure for transport, first responders, surveyors and container port automation. Areas covered range from parking lots to thousands of square kilometres.

Current work on miniaturisation is expected to extend the role of Locata in indoor, mobile phone and smartphone applications in the next couple of years.

*The Australian Financial Review*

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