Case Study

# Smart Rest Area Trial

The Australian and NSW Governments are working together on a Smart Rest Area Trial to allow heavy vehicle drivers to receive instant information about nearby rest areas.

The Smart Rest Area system developed by Spatial Vision for Roads and Maritime Services and Transport for New South Wales, compromises an in-vehicle Android app running on a Nexus 7 tablet, teamed with a cloud-hosted management system. This trial was started in late May of 2014.

The real time parking information is provided by another vendor who has wired up a number of trial rest areas on the Newell Highway and publishes this data in real time via web services. The trial will run for certain period of time, with UNSW Transport and Road Safety Research personnel interviewing and even accompanying some drivers on their journey to determine the effectiveness of the system.

## Customer Profile

www.rms.nsw.gov.au

## Company

NSW Roads and Maritime Services

## Location

New South Wales

## Industry

Government

## Product

Smart Rest Area Trial

## Solution

An in-vehicle Android app running on a Nexus 7 tablet, teamed with a cloud-hosted management system

## Benefits

- Improved fatigue management for heavy vehicle drivers
- Improved heavy vehicle road safety

## The Issue

The Australian and NSW Governments have recognised a need for an app that will aim in improving road safety for heavy vehicle drivers, by taking rest opportunities frequently to avoid accidents.

## The Solution

The Smart Rest Area system developed by Spatial Vision for Roads and Maritime Services and Transport for New South Wales, compromises an in-vehicle Android app running on a Nexus 7 tablet, teamed with a cloud-hosted management system. This trial was started in late May of 2014.

The Nexus 7 tablet, installed on the truck's dashboard, reads the trucks current location and direction and sends this to the management system via the mobile phone network. The central server uses spatial technology to determine which road the truck is on, which direction it's travelling and which rest areas are ahead on the road.

It calculates the distance to each rest area, the approximate travel time and queries the vacancy measurement system to determine how much parking space is currently available. This information is returned to the truck, along with details of what facilities are available at each rest area, such as water, toilets and bins.

Spatial Vision developed the system using mainly open source technologies, with the NSW roads, rest area and speed limit data being processed and loaded into a PostGIS database. The management system provides a dashboard to RMS administrators and registered users, which has the ability to update the rest area database and view reports showing use of the system, including map reports.

## The Benefits

- Improved fatigue management for heavy vehicle drivers
- Reduced fatigue-related heavy vehicle crashes
- Improved heavy vehicle road safety
- Better trip planning
- Improved transport industry productivity
- Better integration of in-vehicle systems

**Can we turn your idea into an app?**

**Get in touch.**

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