The future of our road network

Each day, millions of people use roads, freeways and tunnels across the country. Road networks must now undergo major infrastructure upgrades to ensure drivers continue to have a safe, fast and reliable journey.

Visionstream works with public and private sector operators to provide innovative and sustainable transport solutions. We deliver cutting edge design, construction and operation of critical communication networks supported by intelligent transport systems (ITS) on road networks across the country.

Intelligent solutions for Victoria’s roads

With traffic volumes increasing on Melbourne’s roads, motorways and tunnels, VicRoads sought a solution to ease traffic congestion and improve driver safety.

In 2006 the Victorian Government approved the first of these major infrastructure upgrade projects, to improve the operating efficiency of the Monash-City Link-West Gate (MCW) corridor between Werribee and Naree Warren.

Visionstream partnered with VicRoads to deliver a whole-of-life solution to design, construct and maintain the intelligent transport system (ITS) on the MCW upgrade including Freeway Management Devices and Communications Networks.

The result was the creation of a communication backbone which VicRoads can now expand upon moving forward.

Working with VicRoads we delivered:

• Overhead electronic lane management signs to display speed limits and lane availability

Highlights

• Introduced performance management to motorways.
• Introduced active monitoring and fault management.
• Consistently met and exceeded KPIs to maximise VicRoads Network availability.
• Maximised fault attendance times, through pre-prepared and authorised Traffic Management Plans.

The Monash City Link Westgate Upgrade was awarded the National ITS Award 2010 and the Australian Engineering Excellence Award 2011.
• Electronic on-road message boards to inform drivers about travel times, road works, and incidents
• Freeway Data Stations including non-intrusive wireless vehicle detectors and in-road stud pairs
• Signal controller processors to activate freeway ramps signalling
• Closed circuit TV cameras to allow operators to view live traffic conditions
• Supporting ICT infrastructure including active equipment, fibre network, pits, roadside cabinets and conduits linked back to custom built node cabins
• Power systems and reticulation (including UPS)
• The amalgamation of existing City Link ITS system and numerous standalone ramp traffic controls and current traffic monitoring cameras into one seamless flow.

Visionstream also designed and deployed the first wireless backhaul solution in Australia for roads applications covering 22km across areas where communications infrastructure was not available

The Operations and Maintenance component of the project is performance based, with an element of prescribed routine maintenance activities.

State-of-the-art transport solutions

With state-of-the-art systems to allow our customers to make more informed decisions, Visionstream helps optimise network performance and maintenance spend and ensures drivers are benefiting from the best, real-time information available.

Our solutions address key issues facing road network operators including accessibility, efficiency, reliability, safety, equity and security.

We partner with you to deliver real measureable value, while ensuring driver and employee safety and minimising impacts on local communities and the environment. The breadth of our services and our ability to scale across Australia and New Zealand means we can provide any organisation a complete turnkey approach, reducing risk and whole-of-life project costs.