Smart Traffic Management

Presented by Stephen Hewett
Co-Authors Darren Wu and Nick Guo

BECA
Los Angeles braces for weekend of "Carmageddon"

(Reuters) - A city renowned for its traffic is about to face a jam of biblical proportions.
The Basics - Stakeholder Drivers

Assurance of network integrity
Management of risk
Best methodology that increases time efficiencies and minimises disruption
The well being of the road user

- Be informed about journey experience
- Be thought of and considered
- Health and safety of workers
- Get work done with least fuss
- Fastest time and least cost
Five Golden Keys

- Monitoring Plan
- Traffic Management
- Construction Methodology
- Communication Plan
- Ongoing Plan
Five Golden Keys – The process explained

A plan for monitoring operations during peak times to assess for improvements or activation of contingency plans.

Components required to develop key messages on how they can be most effectively delivered to target groups to achieve highest compliance with requested behaviours.

The components which make up the understanding of the network operations such that the traffic management implemented ensure that acceptable conditions are provided to road users.

A series of backup plans to manage the network conditions should operations become unstable.

The construction activity that will ensure the work has the highest chance of being completed on time or earlier.
Five Golden Keys – Benefits of the process

- Time savings for contractor and road users
- Improved public satisfaction
- Improved construction methodology
- Mitigation of Client’s / Stakeholders’ risks
- Improved safety

The components which make up the understanding of the network operations such that the traffic management implemented will ensure that acceptable conditions are provided to road users.

- Monitoring plan for monitoring operations during peak times to assess for improvements or activation of contingencies.

- Communication plan of backup plans to manage the network conditions should operations become unstable.

- Components which make up the development of key messages and how they can be most effectively delivered to the target groups to achieve highest compliance with behaviour requests.

- Provide added value to the contractor.
The Basics - Traffic Analysis Components

TIA

A technical assessment of the likely impacts by the proposed network disruptions

TM Strategy

The deliverable. It is formulated out of the Five Golden Key Principles process and may comprise the following:

- TMPs
- Construction Methodology
- Communications Plan
- Contingency Plan
- Monitoring Plan
- Summary TM Strategy Report
Case Study #1 – North Auckland and Northland Power Grid Upgrade (Transpower)

Project Brief: Installation of upgraded power grid cable on Fanshawe Street Auckland, removing one of two general traffic lanes for over one month. This impacted commuter peaks on the busiest connecting arterial route into the CBD from the North Shore.

Successful Outcomes:

- Unsolicited positive feedback from AT Public Transport Team on the process and achievement of minimal delays to bus services;
- Zero complaints
- Early finish and uplift of work areas
Project Brief: Closure of Neilson Street On Ramp for critical gas main work. Three to four 24 hour working days were required with the ramp serving a heavy industrial area and is a key route to the airport.

Successful Outcomes:

Traffic Management Plan
Construction Methodology
Communication Plan
Contingency Plan
Monitoring Plan

TMP and construction activities occurred without any events;
Zero complaints
Earlier finish and stakeholders were happy that none of the risk occurred