Proactive Road Network and Incident Management

Where are we, and where are we heading?

Lachlan Faulkner and Edward Beak (Road Operations) | Department of Transport and Main Roads
The key idea

Active Traffic Management
Pro-Active Transport Network Management
The need for network management
Our customers expect …

Our customers

Seamless

Informed

Reliable

Efficient

Connected

Safe
Challenge 1: Increasing demands

Supply (lane km) vs Demand (VKT) increase

Demand increase 22.6% over nine years

Supply increase 6.6% over nine years
Challenge 2: Increasing incidents

Thousands of Incidents

2006 2007 2008 2009 2010 2011 2012 2013 2014
Opportunity – State Infrastructure Plan

• Real-time travel data to empower customers

• Utilise the latest and most accessible technology … to improve resilience, efficiency, safety and operation of Queensland’s transport networks.
Network management in action
Positively influencing demand and optimising capacity

Transport demand

- Model and destination choice
- Route and time choice
- Lane choice

Transport capacity

- Mode capacity
- Planned events
- Unplanned incidents

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Opportunities to be more proactive
Network management

• How are unplanned traffic incidents currently managed?
Things we’re doing
Situational awareness (cont.)

- Location of TRU1
- Location of TRU2
- Location of QPS
- CCTV Cameras
- Roadworks
- IMS Incident Location
- Jam reported by WAZE
- Heavy traffic by Tom Tom
- Variable message sign
- WAZE incident report

Accident ahead – seek alt route

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Visualising real-time data
Real-time network monitoring

TMR Travel Time Dashboard

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Improved situational awareness

• Public transport monitoring prototype
Improved operational analytics

- Causes of congestion
- Business Intelligence
Prediction

Predict and prevent that something

Anticipate the impacts

Find out about something

Do something about it
Where to from here
Thank you