Perspectives on OBM Systems and their use

Weigh-in-Motion Forum – on-road and in-vehicle
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Our values, our diversity

Customers first

Unleash potential

Be courageous

Ideas into action

Empower people

diversity

inspire create innovate
Queensland Government’s objectives for the community

- Creating jobs and a diverse economy
  - increasing workforce participation
  - ensuring safe, productive and fair workplaces
  - stimulating economic growth and innovation
  - delivering new infrastructure and investment

- Delivering quality frontline services
  - achieving better education and training outcomes
  - strengthening our public health system
  - providing responsive and integrated government services
  - supporting disadvantaged Queenslanders

- Protecting the environment
  - protecting the Great Barrier Reef
  - conserving nature and heritage
  - ensuring sustainable management of natural resources
  - enabling responsible development

- Building safe, caring and connected communities
  - ensuring an accessible and effective justice system
  - providing an integrated and reliable transport network
  - encouraging safer and inclusive communities
  - building regions

Advance Queensland
Made for innovation
Our strategic plan

Customer focus
Objective:
A customer-centric organisation that better meets the needs of our customers

Innovation
Objective:
An organisation that embraces change and adapts to external influences to minimise the impact of disruption

Contemporary workforce
Objective:
A prepared and capable workforce that meets the future mobility needs of Queenslanders

Liveable regions and active cities
Objective:
A network that connects communities and contributes to Queensland’s quality of life

Our vision
Creating a single integrated transport network accessible to everyone

Sustainable funding
Objective:
Responsive finance and investment arrangements that deliver value for money

Building prosperity
Objective:
A network that advances economic prosperity across our cities and regions
About us

Creating a single integrated transport network accessible to everyone

We manage:
- 33,343km state-controlled roads
- 3,029 bridges
- 20 ports

There were:
- 3.5m drivers licensed
- 5m vehicles registered
- 3,260 taxis licensed
- 256,151 recreational vessel registrations
- 997,289 boat licenses

Services provided:
- 180m in SEQ
- 12.1m outside SEQ
  - trips taken annually on bus, rail, ferry and light rail
- 2.5m go cards in use
- Over 490,000 passengers travel on the south-east Queensland network on average each day

We serve:
- 3.63m customers served face-to-face at 59 Customer Service Centres
- 6.68m online services

Statistics sourced from the Department of Transport and Main Roads Annual Report 2015-16
Scope of Presentation

- What prompted OBM requirement in Queensland?
- National and state context
- How TMR uses the system and data
- What are the benefits (road manager / industry)?
- Case study – PBS A-doubles (Toowoomba to Port of Brisbane)
- Future opportunities
What prompted OBM in Queensland?
What prompted OBM requirement in Queensland?

- Introduction of PBS vehicle fleet, especially A-doubles.
- Closer examination of bridge stock condition.
- Need to manage risk / provide certainty of load on the Toowoomba to Port of Brisbane Corridor (in excess of 100 structures).
- OBM allowed reduced load factors for assessment purposes.
- A-doubles would not have otherwise been allowed to operate in this corridor at requested mass limits.
- Freight efficiency envelope extended from 68.5 tonnes to 85 tonnes in a 4m longer envelope.
National and state context
National and state contexts

• The Intelligent Access Program (IAP) platform provided obvious opportunity for national OBM framework
• National specification required for OBM.
• Queensland worked with TCA to develop interim OBM specification.
• National specification is now completed.
• TMR has a Telematics Strategy for guiding policy decisions, aligned with the National Telematics Strategy.
• New spec may require some minimal changes to be made under new Type approval requirements.
• Mature / proven management processes in Queensland (calibration / installation requirements).
• Still limited numbers of providers (responsiveness can be an issue).
• Other jurisdictions – RMS and TMR major players
How TMR uses the OBM system and data
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• TMR receives OBM data from certified Service Providers
• Includes calibration reports.
• This information is reviewed using our analytical tools (Altryx / Tableau).
• Very significant proven compliance and reliability outcomes (around 95 percent).
• Compliance reports provided to key internal stakeholders.
• Moving to non-compliance reports, rather than ‘all data’.
What are the benefits (road manager / industry)
What are the benefits for road managers and industry?

- **Road Managers:**
  - load compliance certainty
  - reduced load factors
  - reduced on-road compliance effort
  - reduced impact on structures and pavement
  - safety performance risk managed
  - configuration certainty

- **Industry:**
  - increased access and productivity (increased margins)
  - significant cost savings (drivers and operating costs)

- **Disbenefits:**
  - cost of installation and operation
  - responsiveness for installation / calibration / maintenance
  - fleet down time
  - data analysis impost (for road manager)
Case Study – PBS A-doubles (Toowoomba to the Port of Brisbane)
Case Study – PBS A-doubles

Typical 26m B-Double -> Has access to PBS 2A network

1 x 20 ft container and 1 x 40 ft container / 3 TEU – 68.5 tonnes (HML)

30m PBS A-Double -> Has access to PBS 2B network

2 X 40 ft containers / 4 TEU – 85 tonnes (HML)
Case Study

A-doubles - Toowoomba to Port of Brisbane

• Operation from November 2010, PBS 2B access under permit.
• Some bridges were assessed as deficient under standard assessment procedures (insufficient operating margin) – load certainty required.
• Very significant freight and cost efficiencies:
  - truck trips halved for some freight tasks
  - operating cost savings (fuel, drivers, maintenance).
• Potential rail contestability issues.
• 186 combinations and increasing.
Future opportunities
Future opportunities

• Use on heavy load platforms and heavy mobile cranes with hydraulic suspension.

• Opening up road access more broadly, where previously limited (risk management – likely to be more need).

• Managing vehicle performance risks (especially under PBS).

• HML access management?

• Asset maintenance and management (perhaps in conjunction with other information, such as IAP data).
Summary
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- OBM has had a profound impact on provision of road access in Queensland.
- Efficiencies for industry strongly outweigh costs.
- Excellent outcomes for mass compliance.
- Mass compliance certainty and ability to manage configuration is of growing importance for increasing access.
- A number of significant future opportunities exist.
Thank you and stay connected

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