Delivering Value for Money

Auckland Motorway Alliance
Trevor Yeoman (Opus)
Background

• Organisation started 1\textsuperscript{st} Oct 2008
• Comprised of NZTA, Fulton Hogan, Opus, Beca, Resolve, Armitage

Some Stats:
• 3.7 million square meters of pavement
• 230km of centre line
• 1891km of line marking
• 348km of guardrail
• 4300 lighting poles
• 5774 signs
• 230 minor and 40 major bridges,
• 4 weighbridges and Huts, numerous gantries, subways and overhead walkways
• 2500 ITS assets
Background (cont.)

• 1250 Resource Consent conditions
• 200 centreline km of vegetation
• 900,000 vehicles movements per day

........and counting!

• The Alliance was the first of its’ kind when it started
• Savings of $10 million through formation
Early Interaction

• Large number of capital projects coming online
  - SH20-1, Manukau Harbour Crossing, Hobsonville
• Increased need for interaction between maintenance and design teams
  - Understanding future maintenance costs
  - Building relationships
• AMA Operations and Maintenance Guide
  - First point of call for projects
• Key Account managers for each project
  - Conduits for communication
• No surprises at handover
  - Well structured handovers to those individuals who need the information
Innovation

- Network size drastically increasing annually but budgets don’t increase at the same rate
- Need for accurate data – make accurate decisions
- Creation of appropriate Levels of Service and Key Result Areas
- 100 Innovations per annum
- Technological advancements, better data usage, pragmatic solutions
Innovation (cont.)

- Data Desktop Validation
  - Validation of all signs, lighting, delineation, and barriers
- Stormwater As-built mapping
  - spatially enabled hard copy as built
- SCRIM Mapping
  - Surfacing condition data mapped for analysis against FWP
- AMATRAC
  - Job tracking, reporting and accountability/Levels of Service
- Forward Works Programme spatially enabled
  - Matching areas of concern with appropriate dates
- Highway Information Sheets online
  - Summary of highway assets updated monthly
- Surfacing by lane
  - Sealing of lanes in stead of carriageway widths
- Planting of hard to reach slopes – formerly grassed
Levels of Service

- Associated Levels of service for all tasks
  - Development of LOS/performance management
- Need to track all jobs and closure thereof
- Development of AMATRAC
  - Job management, LOS and Performance
- Dashboard reporting system
  - Large visual displays, accountability
- Easy to understand, one touch reporting
  - Ability to see at a glance current performance and areas for improvement
Geographic Information Systems (GIS)

- Ability to combine multiple data sources
- Breaking down the silos

- Overlaying of different layers i.e. Forward works programmes with closures to avoid additional costs

- Internal viewer for all users
  - over 150 layers in the system
  - Multiple data sources from multiple systems
  - 26000 map views per month
  - 60 people average 22 maps per day
Network Issues From RAMM

- Spatially display RAMM Linear faults
- Mapped Surfacing by type, age etc.
Breaking the Silo’s

- Multiple layers of assets
- Easy to co-ordinate works & understand which assets may be affected
- Holistic understanding
Works Co-ordination

- Multiple FWP’s to allow for better co-ordination
- Less inconvenience to road users
- Improved user experience and surface condition
In Summary

Its been quite an amazing year with some giant steps forward, we’ve learnt a lot too

“Our data is not good enough”

The tools offer the opportunity to work a lot smarter and force a whole lot of integration between sections...

Which can only be good for the customer and the asset.
Thank You