Risk management in action –
Transport Network Reconstruction Program

Recovering from multiple high-magnitude natural disasters

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Queensland’s disaster events

Between January 2010 and March 2013, Queensland experienced natural disaster events unprecedented in Australia’s history

- Tropical Cyclones (TCs) Olga, Neville, Ului and Paul rainfall total **3765 mm**
- TCs Tasha and Anthony rainfall total **5383 mm**
- Severe TC Yasi
  The second most costly cyclone in Australian history; rainfall total **900 mm**, wind speeds recorded over **285 km/h**
- TC Oswald rainfall total **2087 mm**
Our communities felt the damage
Over $6 billion damage to state owned transport network
Over 27,000 kms of roads closed or limited access
1720 bridges and culverts washed away
70 towns and more than 200,000 people displaced
30 confirmed fatalities
Reconstruction was enormous
# Damage to our network

**Our network**

- 33,381 kms of state controlled roads
- 6596 kms of rail corridor
- 20 shipping ports

**The damage**

- 9000 kms of road requiring reconstruction
- 3100 kms of rail network closed temporarily
- 7 ports
- 50 navigation aids damaged
Responding in partnership

- The priority was to reconnect Queensland to ensure vital supply and aid community and economic recovery
- The Transport Network Reconstruction Program (the Program) was established to coordinate these recovery works.

We partnered with:
- Industry
- Federal government
- Other government departments

to keep Queensland moving
- Mining
- Agriculture
- Tourism
Planning and responding

• To meet the challenges of this highly complex program, seven program objectives were established:
  - Coordination across lines of construction
  - Resilience
  - Immunity
  - Value for money
  - Timely completion
  - Communication and engagement
  - Transition back to business as usual.
Risk Management framework

- Transport and Main Roads already had a comprehensive enterprise-wide *Risk Management Framework* based on ISO 3100:2009 before the Program was formed.
- This framework was applied without modification.
- The Program Risk Management was conducted entirely within this framework.
Risk Management evolution

Risk management requirements – legislation, standards, governance

- Financial Accountability Act 2009
- Risk Management – Principles and Guidelines AS/NZS ISO 31000
- TMR Governance Framework
- Financial and Performance Management Standard 2009
- Queensland Treasury Guidelines

Roles and Responsibilities
- Director-General (DG)
- Executive Leadership Team (FLT)
- Audit and Risk Committee (ARC)
- Strategic Risk Group (SRG)
- General Managers (GM)
- Risk Advisory Services (RAS)
- Branch Risk Representatives Group (BRRG)
- Employees within TMR, including contractors

Resources
- TMR Risk Management Framework
- Risk Management Organisational Policy
- Risk management process
- Risk Management Practice Guide
- TMR Risk Register
Program Risk Management

• Key program risk management philosophies applied were to
  - Maintain a determined and unwavering focus on objectives
  - Map all risks wherever they appear against objectives
  - Focus every function through a risk management lens.

• Statewide plan articulated
  - Objectives
  - Roles and Responsibilities
  - Reporting and assurance requirements.
Risk management in action

Delivery Structure

Statewide Program Office

- Far North RPO
- North West RPO
- Northern RPO
- Mackay/Whitsunday RPO
- Fitzroy RPO
- Central West RPO
- Wide Bay/Burnett RPO
- North Coast RPO
- Darling Downs RPO
- South West RPO
- Metropolitan RPO
- South Coast RPO
Assessments and ratings

- All risks were assessed and rated against agreed and standardised department-wide Risk Dimensions
  - Workplace Health and Safety
  - Environment and Cultural Heritage
  - Media and Reputation
  - Financial
  - Performance and Capability
  - Time and Schedule Delay
  - Legal and Compliance
  - Assets, Operations and Services.
Recording, tracking and reporting

- Activities were recorded, tracked and reported through a Program Risk Log comprising separate but related registers
  - Risk Register (Active Risks)
  - Risk Register (Inactive Risks)
  - Treatment Register
  - Opportunities Register
  - Issues Register
  - Lessons Learned Register.
Recording, tracking and reporting (cont.)

<table>
<thead>
<tr>
<th>Program Objectives</th>
<th>Description</th>
<th>Risk Owner</th>
<th>Stakeholders</th>
<th>Current Rating</th>
<th>Treatment</th>
<th>Residual Rating</th>
<th>Risk Review Date</th>
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<tbody>
<tr>
<td>W1</td>
<td>Program of works not completed within program timeframe.</td>
<td>Program Manager (MCMP)</td>
<td>Recreational boaters, Local Government Association (LGA), Minister for Transport and Main Roads, Marine Infrastructure Program Steering Committee, Program Owner (GM PD&amp;C)</td>
<td>Medium</td>
<td>4. Update Program Delivery Plan for 2015-16.</td>
<td>Medium</td>
<td>10/02/15</td>
</tr>
<tr>
<td>W1</td>
<td>Allocation of funding is reduced or not maintained at current level.</td>
<td>Program Manager (MCMP)</td>
<td>Recreational boaters, Queensland Recreational Boating Council, Local Government Association (LGA), Individual councils and port authorities, Minister for Transport and Main Roads, Local MPAs, Marine Infrastructure Program Steering Committee, DC/G Infrastructure Management and Delivery Division, Program Owner (GM PD&amp;C), Bridge and Marine Section (ET), State Boat Harbour Unit (Policy, Planning, and Investment Division)</td>
<td>Low</td>
<td>4. State-wide dredging fund to be extended beyond July 2016.</td>
<td>Low</td>
<td>10/09/15</td>
</tr>
</tbody>
</table>
Recording, tracking and reporting (cont.)

• Examples of program-level include
  - ‘Safety incident’
  - ‘Program not delivered within funding deadlines’
  - ‘Ineffective relationships between the Program Management Office and Regional Project Offices’
  - ‘Environment and Heritage incident’
  - ‘Works being executed and funding not approved’. 
Successes and achievements

- Cross-functional achievements and improvements in many areas
  - Safety at roadworks
  - Program management
  - Program delivery
  - Procurement
  - Employment
  - Economy
  - Traffic management
  - Program close-out.
Successes and achievements (cont.)

- Program completed **six months ahead of schedule**
- Completed **under budget**
- Enhanced Transport and Main Roads’ reputation with government and the public as an effective and efficient deliverer of programs
- State-wide Native Title Register created to prioritise assessment prior to commencement of works
- Legacy for future programs and projects:
  - The department’s Risk Management Framework proven reliable, robust, and comprehensive
  - Executive ‘buy-in’ sets the foundation
  - Importance of relationship management in risk management
  - Integrated, ‘whole of program’ approach to risk management.
Achievements and awards

• National recognition – three top awards at the 2014 Australian Institute of Project Management

• International recognition – PIARC XXVth World Road Congress, South Korea
  - Sole invited presenter on enterprise or program risk management
  - First prize for risk management paper in ‘Road Maintenance and Operation’ category.
Cardwell foreshore
Esk-Hampton Road
Gregory River
Completed in 2015

the largest reconstruction program in Queensland’s history.
Thank you