Infrastructure – the big picture

In Australia, total engineering construction is declining …

... but not in NSW
NSW roads infrastructure

Roads engineering construction in NSW is picking up …..

… led by the mega road projects
Major Projects 2020

... but it’s not just the mega projects

Rocks and Maritime Major Projects Expenditure

Forecasts are based on 2015-16 Budget TAM and best estimate cash flow of SIS projects.

- Western Sydney Infrastructure Program
- Western Sydney Growth Roads
- Sydney Commuter Wharf Upgrades
- Regional NSW Major Road Upgrades
- Princes Highway
- Port Botany and KSA
- Moorebank Intermodal
- M1 Productivity Package
- Hunter Roads
- Great Western Highway & Bells Line of Road
- Established Sydney Roads
- Easing Sydney’s Congestion
- Central Coast Roads
- Bridges for the Bush
- Bridge Rebuilding
- Pacific Highway

every journey matters
## Major Projects 2020

### The Wave unpacked

<table>
<thead>
<tr>
<th>Project size</th>
<th>No. projects</th>
<th>WAVE 5yr spend $m (incl. ‘in flight’)</th>
<th>Projects to be procured $m WAVE (excludes ‘in flight’)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(incl. ‘in flight’)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to $50m</td>
<td>26</td>
<td>600</td>
<td>700</td>
</tr>
<tr>
<td>$50m - $150m</td>
<td>45</td>
<td>2,800</td>
<td>3,100</td>
</tr>
<tr>
<td>$150m - $500m</td>
<td>28</td>
<td>5,200</td>
<td>6,700</td>
</tr>
<tr>
<td>Over $500m</td>
<td>13</td>
<td>6,500</td>
<td>8,200</td>
</tr>
<tr>
<td>Rolling programs*</td>
<td>6</td>
<td>800</td>
<td>1,100</td>
</tr>
<tr>
<td>(ongoing development &amp; delivery)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>116</strong></td>
<td><strong>15,900</strong></td>
<td><strong>19,800</strong></td>
</tr>
</tbody>
</table>

Total project values, includes Roads & Maritime costs. Includes Pacific Highway Woolgoolga to Ballina

*Includes portfolio of over 400 Sydney congestion easing projects
## Major Projects 2020

**Procurement – 60 projects $14b**

<table>
<thead>
<tr>
<th>Project status</th>
<th>No. projects</th>
<th>Total value (\text{projects to be procured}) $m</th>
<th>WAVE 5yr spend $m</th>
</tr>
</thead>
<tbody>
<tr>
<td>In flight</td>
<td>30</td>
<td>0</td>
<td>4,100</td>
</tr>
<tr>
<td>Under construction or contract awarded</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funded but not yet contracted</td>
<td>46</td>
<td><strong>10,200</strong></td>
<td><strong>8,200</strong></td>
</tr>
<tr>
<td>Includes Pacific Highway, Woolgoolga to Ballina</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Infrastructure Strategy</td>
<td>16</td>
<td>3,500</td>
<td>2,400</td>
</tr>
<tr>
<td>Development funded but delivery funding dependent on “poles &amp; wires”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development funded but delivery funding not yet confirmed</td>
<td>24</td>
<td>6,100</td>
<td>1,200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>116</strong></td>
<td><strong>19,800</strong></td>
<td><strong>15,900</strong></td>
</tr>
</tbody>
</table>

Total indicative project values, includes Roads and Maritime costs
Major Projects 2020
Forward Work Plan

The Wave
Transparency

Roads and Maritime’s current state

The Wave is acknowledged as a challenge

• Historic ‘run rate’ of $2b spend per annum
  – ‘non Pac Hwy’ = $1b per annum

• Steps towards the Wave have commenced
  – Woolgoolga to Ballina - *Delivery Partner* model (> $3b over 4.5 yrs)
  – Northern Beaches Hospital – *accelerated D&C*

• Immediate run rate looks OK
  – Under assessment $300m
  – Commenced $750m
  – FY16 tenders to be released $1.4b

• But … there is a challenge ahead…
Current state

... the challenges

Roads and Maritime:

• The ‘non Pac Hwy’ run rate needs to lift by 250% (FY15 $1b to $3b in FY18)
  – Many of these projects are NSW regionally based (42 projects)
  – There is also a significant backlog of smaller projects (pinch point, etc)
• Workforce capacity – 50% of senior projects people are over 55 yrs

Plus:

• NSW Transport cluster major projects are also ramping up
Our objectives

Government’s mandate … deliver!

• Deliver the program:
  
  ON TIME, ON BUDGET

• Build capability for the future:
  
  Roads and Maritime remains a ‘good and informed client’
Our delivery strategy

Current state to future state

Key components:
1. Delivery methodology
2. People
3. Procurement
4. Engagement
5. Partner Performance
1. Delivery methodology

- Leverage current run rate, systems, processes
- Programs of projects
  - Program Offices accountable for delivery
  - Fully resourced, co-located, high performance team culture
  - Roads and Maritime has done it before (Pacific Highway, Hume Highway)
  - Western Sydney Infrastructure Program is underway
- ‘Freedom within a Frame’

* Nb. Easing Sydney’s Congestion contains 400+ smaller projects

5 program offices accountable for delivery
## 1. Delivery methodology

### Program offices

<table>
<thead>
<tr>
<th>Program Office</th>
<th>No. projects (incl in flight)</th>
<th>WAVE 5yr spend $m (incl in flight)</th>
<th>15/16 NSW Budget Paper 2 Allocation $m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easing Sydney's Congestion</td>
<td>7</td>
<td>1,300</td>
<td>300</td>
</tr>
<tr>
<td>Freight &amp; Regional</td>
<td>42</td>
<td>3,500</td>
<td>300</td>
</tr>
<tr>
<td>Greater Sydney</td>
<td>32</td>
<td>2,000</td>
<td>200</td>
</tr>
<tr>
<td>Pacific Highway</td>
<td>11</td>
<td>5,800</td>
<td>1,100</td>
</tr>
<tr>
<td>Western Sydney</td>
<td>24</td>
<td>3,300</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>116</strong></td>
<td><strong>15,900</strong></td>
<td><strong>2,200</strong></td>
</tr>
</tbody>
</table>

Total indicative project values, includes Roads and Maritime costs
2. People

‘Professional resources’ demand model

• Model contains:
  – 20 disciplines
  – 4 phases (initiation, development, procurement, delivery)
  – All resources (white collar)

• Benchmarked – Pacific Highway office:
  – Roads and Maritime resources
  – Delivery Partner resource forecasts
3. Procurement
Pacific Highway – W2B indicative dates

<table>
<thead>
<tr>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>JUL</td>
<td>AUG</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Detailed Design</td>
<td></td>
</tr>
<tr>
<td>Wave 4 (Soft Soils Treatment)</td>
<td></td>
</tr>
<tr>
<td>Harwood Bridge D&amp;C</td>
<td></td>
</tr>
<tr>
<td>Strategic Materials - Quarry, Precast, Concrete, Fuel etc</td>
<td></td>
</tr>
<tr>
<td>Site Compound and Facilities</td>
<td></td>
</tr>
<tr>
<td>Early Works - Site Clearance, Access Roads, Drainage, Fencing and Utilities</td>
<td></td>
</tr>
<tr>
<td>Wave 3 (Soft Soils Treatment)</td>
<td></td>
</tr>
<tr>
<td>Richmond River Bridge D&amp;C</td>
<td></td>
</tr>
<tr>
<td>Main Construction Works</td>
<td></td>
</tr>
<tr>
<td>Industry Engagement</td>
<td></td>
</tr>
<tr>
<td>Start of Construction</td>
<td></td>
</tr>
</tbody>
</table>
3. Procurement

Non Pacific Highway

- Significant increase in procurement activity
  - approximately 85 projects to be procured in next 5 years
  - total procurement value of circa $10b
- A high level procurement strategy in progress
- Procurement to be led by program offices
  - Central coordination and guidance
- Current plans
  - 8 major contracts to market in next 6 months, a further 8 in following 6 months
  - Western Sydney development and Easing Sydney’s congestion will require innovative models.
3. Procurement (non Pac Hwy)

- There are procurement challenges with the current forward program.
  - 5 projects in the $150m to $500m bracket in 3 month period
  - Clusters that are sub optimal (for Roads and Maritime and industry): resources and costs

Projects Commencing Procurement Each Quarter, by Total Est. Project Value (incl RMS costs, design, property, planning, etc)
### 3. Procurement

**Procurement strategy – 7 elements**

<table>
<thead>
<tr>
<th>1 - Adopt a portfolio (rather than project by project) approach</th>
<th>1. Roads and Maritime will adopt a portfolio (rather than project by project) approach. When appropriate, groups of projects or specific services for groups of projects will be procured together.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - Maximise available industry delivery capacity</td>
<td>2. Roads and Maritime intends to make use of and provide opportunity for all parts of the market.</td>
</tr>
<tr>
<td>3 - Compress traditional RMS development and procurement timeframes</td>
<td>3. Roads and Maritime intends to reduce the project life cycle duration by: reducing development duration; removing delays between development completion and delivery; bringing forward procurement in the project life cycle; and/or reducing procurement duration (eg Northern Beaches Roadworks)</td>
</tr>
<tr>
<td>4 - Expedite competitive tender processes</td>
<td>4. Roads and Maritime intends to maximize procurement efficiency, adopting single procurement processes for multiple packages of work, within or even across multiple Program Offices, fast-tracking evaluation and negotiation and reducing the tender documentation requirements. In some circumstances, Roads and Maritime may contribute to tender costs.</td>
</tr>
<tr>
<td>5 - Retain high performing suppliers/resources using performance based competitive procurement in the award of further projects</td>
<td>5. Roads and Maritime intends to measure and reward good performance. Roads and Maritime may invite competitive proposals from incumbent, high performing service providers to deliver additional packages or projects (without going to the open market)</td>
</tr>
<tr>
<td>6 – Provide alternate delivery paths for emerging priorities and changing market conditions</td>
<td>6. Roads and Maritime will maintain flexibility and continue to respond proactively by using multiple procurement approaches as the Roads and Maritime / Transport Wave accelerates</td>
</tr>
<tr>
<td>7 – Use non-traditional methods to expedite priority projects and achieve Capital Program objectives</td>
<td>7. Where appropriate, RMS will continue to adopt alternative delivery methods for priority projects including for example project or program Alliances or Delivery Partners.</td>
</tr>
</tbody>
</table>
4. Engagement

Industry engagement strategy

Whole of industry

Major Projects 2020 Forum

- Industry Forums (IPA, RA, ACA, CCF etc)
- Tailored interactions - tba

Partner Performance

- Easing Sydney’s Congestion
- Greater Sydney
- Freight and Regional
- Pacific Highway
- Western Sydney
- Tailored interactions - tba

Program Office specific

In development – looking for feedback
5. Partner performance

Transparency

- Contractor Performance Report and cycle to continue – with enhancements
- WHS emphasis to increase:
  - New Roads and Maritime WHS Strategy (yet to be launched) – focus on elimination
  - Localised WHS forums
  - Increased reporting (SafeR)

Performance matters
Panel Q&A

Jeff McCarthy - Director Infrastructure Development
Ken Kanofski - Chief Operating Officer
Kevin Doherty - General Manager Western Sydney Program Office
Bob Higgins - General Manager Pacific Highway Program Office