WestConnex

Industry Engagement Briefing

October 2013
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword from the NSW Minister for Roads and Ports</td>
<td>1</td>
</tr>
<tr>
<td>1.0  Context setting – Sydney’s transport network</td>
<td>2</td>
</tr>
<tr>
<td>2.0  WestConnex – What is it?</td>
<td>3</td>
</tr>
<tr>
<td>3.0  WestConnex project objectives and economic appraisal</td>
<td>4</td>
</tr>
<tr>
<td>4.0  WestConnex Governance</td>
<td>6</td>
</tr>
<tr>
<td>5.0  WestConnex – How it will be built and financed</td>
<td>7</td>
</tr>
<tr>
<td>6.0  Timeline</td>
<td>15</td>
</tr>
<tr>
<td>7.0  Industry engagement process</td>
<td>17</td>
</tr>
<tr>
<td>8.0  Next steps</td>
<td>19</td>
</tr>
</tbody>
</table>
Foreword from the NSW Minister for Roads and Ports

The NSW Government welcomes industry input into the development of WestConnex.

WestConnex is the largest transport infrastructure project in Australia. Costing $11-11.5 billion it will be developed in three stages over 10 years, it will deliver more than $20 billion in economic benefits to the NSW economy. It will transform Sydney by connecting communities, creating jobs and easing congestion.

It is therefore essential that we maximise the opportunities for innovation to ensure we get the best possible project outcomes for users and the taxpayer.

That is why we are now seeking your ideas and feedback on the project.

The NSW Government has identified a number of non-negotiable elements for WestConnex, including a 10 year timeframe for completion and the broad Reference Scheme route. There are many other elements of the project where your views and ideas are sought.

This is an opportunity for you to share your views and provide feedback on the project, particularly in relation to:

- The Reference Scheme, including the reference delivery scheme and reference financing strategy; and
- All potentially viable and value enhancing alternatives that increase the benefits to the project

However you think you can assist in delivering this scheme, the NSW Government encourages you to share your views and ideas with us.

Following completion of the Industry Engagement Process, the NSW Government will make its final decisions on the scope and delivery strategy. In the meantime, we are proceeding with project development activities to ensure that we meet our commitments to the project program.

Thank you for your participation in this important process.

The Hon. Duncan Gay MLC
Minister for Roads and Ports
NSW Government
1.0 Context setting – Sydney’s transport network

NSW has a $30 billion infrastructure backlog. This is placing an unnecessary restriction on economic growth and the creation of jobs.

Congestion costs the NSW economy an estimated $5.1 billion each year, or nearly $1,100 for every person living in Sydney.

Sydney’s population is expected to increase by 1.3 million people over the next 20 years, placing additional demand on the city’s road, rail, light rail, public bus and ferry systems.

By 2020 the cost of congestion is expected to rise to $8.8 billion as Sydney’s population grows and travel demand increases.

Without significant improvements in motorway infrastructure, congestion will increase, driving up the cost of living for Sydneysiders.

Car journeys are overwhelmingly the most popular form of transport in Sydney, surpassing the combined total of all other forms of movement, including walking, rail, bus, taxi, bicycle and light rail.

This trend is expected to continue with car journeys making up 74% of all increased travel demand in Sydney to 2036.

**Number of Sydney trips by main mode for a 24 hour average work day**

<table>
<thead>
<tr>
<th>Mode</th>
<th>2011</th>
<th>2036</th>
<th>2011</th>
<th>2036</th>
<th>2011</th>
<th>2036</th>
<th>2011</th>
<th>2036</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Rail</td>
<td>1.06M</td>
<td>1.08M</td>
<td>0.06M</td>
<td>0.06M</td>
<td>0.06M</td>
<td>0.06M</td>
<td>0.06M</td>
<td>0.06M</td>
</tr>
<tr>
<td>Bicycle</td>
<td>0.01M</td>
<td>0.02M</td>
<td>0.01M</td>
<td>0.02M</td>
<td>0.01M</td>
<td>0.02M</td>
<td>0.01M</td>
<td>0.02M</td>
</tr>
<tr>
<td>Taxi</td>
<td>0.02M</td>
<td>0.04M</td>
<td>0.02M</td>
<td>0.04M</td>
<td>0.02M</td>
<td>0.04M</td>
<td>0.02M</td>
<td>0.04M</td>
</tr>
<tr>
<td>Bus</td>
<td>0.06M</td>
<td>0.09M</td>
<td>0.06M</td>
<td>0.09M</td>
<td>0.06M</td>
<td>0.09M</td>
<td>0.06M</td>
<td>0.09M</td>
</tr>
<tr>
<td>Rail</td>
<td>0.06M</td>
<td>0.12M</td>
<td>0.06M</td>
<td>0.12M</td>
<td>0.06M</td>
<td>0.12M</td>
<td>0.06M</td>
<td>0.12M</td>
</tr>
<tr>
<td>Walk</td>
<td>1.25M</td>
<td>2.5M</td>
<td>1.25M</td>
<td>2.5M</td>
<td>1.25M</td>
<td>2.5M</td>
<td>1.25M</td>
<td>2.5M</td>
</tr>
<tr>
<td>Car/Truck</td>
<td>7.2M</td>
<td>12.1M</td>
<td>7.2M</td>
<td>12.1M</td>
<td>7.2M</td>
<td>12.1M</td>
<td>7.2M</td>
<td>12.1M</td>
</tr>
</tbody>
</table>

**Proportion of increased travel demand in Sydney 2011 – 2036**

- Car* – 73.9%
- Taxi – 0.6%
- Bicycle – 0.5%
- Rail – 6.5%
- Bus – 3.2%
- Walk – 16.0%
- Light Rail** – 0.3%

* Includes motorcycles, cars, 4WDs, vans, utes and trucks.

** Forecast includes the Inner West and the CDB Light Rail extensions and not the South East Light Rail.
2.0 WestConnex – What is it?

WestConnex is the largest transport project in Australia, linking Sydney’s west and south-west with the city, airport and port in a 33 km continuous motorway. WestConnex will transform Sydney and be the trigger for urban revitalisation that will make the Parramatta Road corridor a more attractive place to live, work and socialise.

The 33 km route includes about 14 km of surface works and up to 19 km of tunnels. Private sector global specialists have combined with the WestConnex project team to develop a robust Reference Scheme for WestConnex that will transform Sydney.

WestConnex will transform Sydney by making it easier for cars and trucks to move between employment hubs (predominantly in the city’s east) and the vast residential suburbs and growth centres that house millions of people (predominantly in the city’s west).

It will:
- cut forecast travel times between Parramatta and Sydney Airport by up to 40 minutes
- effectively halve bus travel times between the city’s inner west and the CBD
- create 10,000 jobs during the construction phase, including hundreds of apprenticeships
- bypass up to 52 sets of traffic lights
- remove 3,000 trucks a day from Parramatta Road and put them underground, leading to revitalised neighbourhoods on the surface
- improve north-south travel times across Parramatta Road for public buses accessing the Western Rail line at Burwood and other stations
- provide the environment for 25,000 new jobs and 25,000 residences to be created over the next 20 years along Parramatta Road
- deliver more than $20 billion in economic benefits to NSW

This industry engagement process follows the extensive work that has been undertaken during the Business Case phase of the project, and the industry engagement process undertaken for the Stage 1 M4 Widening from Church Street to Homebush Bay Drive (shown in block green on the map below).

This document outlines the project objectives, the industry engagement objectives and process, details of the Reference Scheme and critical next steps.

Figure 1: WestConnex Reference Scheme
3.0 WestConnex project objectives and economic appraisal

**Project objectives**

The project objectives were utilised to guide the development of the Reference Scheme:

- Support Sydney’s long-term economic growth through improved motorway access and connections linking Sydney’s international gateways, Western Sydney and key places of business across the city.
- Relieve road congestion so as to improve the speed, reliability and safety of travel in the M4, M5 and CBD/airport/port corridors, including parallel arterial roads.
- Cater for the diverse travel demands along these corridors that are best met by road infrastructure.
- Create opportunities for urban renewal, improved liveability and public and active transport improvements along and around Parramatta Road.
- Enhance the productivity of commercial and freight generating land uses strategically located near transport infrastructure.
- Fit within the financial capacity of the NSW and Australian governments, in partnership with the private sector.
- Optimise user pays contributions to support funding in a way that is affordable and equitable.

**Economic appraisal**

WestConnex will deliver benefits of more than $20 billion to NSW, with a benefit cost ratio of 2.55.

The economic appraisal in the business case was based on standard NSW and Australian government guidelines for the consideration of major transport projects.

Identified benefits include:

- Travel time savings
- Travel time reliability improvements
- Savings in vehicle operating costs
- Reductions in air pollution, greenhouse gas emissions, noise pollution
- Reductions in road accidents
- Reductions in local road maintenance
- Removal of surface traffic, enabling improvements to public transport

The appraisal highlights the benefits across the Sydney road network, both within the immediate corridor and across the wider region through improved travel times and reliability.

The economic appraisal has taken a conservative approach and does not capture additional benefits such as those arising from the urban renewal potential provided by WestConnex.
### Table 1: Benefit Cost Analysis results

<table>
<thead>
<tr>
<th>Benefit – Cost outcomes</th>
<th>Discounted ($m)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>Time travel savings</td>
<td>15,410</td>
</tr>
<tr>
<td>Reliability benefits</td>
<td>2,603</td>
</tr>
<tr>
<td>Vehicle operating cost savings</td>
<td>3,099</td>
</tr>
<tr>
<td>Environmental and indirect benefits and residual value</td>
<td>931</td>
</tr>
<tr>
<td>Productivity benefits</td>
<td>3,402</td>
</tr>
<tr>
<td><strong>Total benefits</strong></td>
<td><strong>25,445</strong></td>
</tr>
<tr>
<td><strong>Costs</strong></td>
<td></td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>9,402</td>
</tr>
<tr>
<td>Operating expenditure</td>
<td>1,465</td>
</tr>
<tr>
<td><strong>Total costs</strong></td>
<td><strong>10,867</strong></td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td></td>
</tr>
<tr>
<td>Benefit cost ratio</td>
<td>2.55</td>
</tr>
<tr>
<td>Net present value</td>
<td>14,578</td>
</tr>
</tbody>
</table>

#### Benefit analysis results

- Time travel savings
- Reliability benefits
- Vehicle operating cost savings
- Indirect impacts and residual value
- Environmental and indirect benefits residual value

#### Cost analysis results

- Capital expenditure
- Operating expenditure
4.0 WestConnex Governance

The NSW Government has approved the establishment of a project specific agency to facilitate the further development and delivery of the WestConnex Motorway. The new agency will be known as the WestConnex Delivery Authority (WDA), and will be established as a public subsidiary corporation of Roads and Maritime Services (RMS).

WDA will be led by a Chief Executive and overseen by a board reporting directly to the NSW Minister for Roads and Ports.

At a broad strategic level the role of WDA will be as:

i. **Owner’s Representative** in ensuring fit for purpose products and outcomes, fully integrated with the road network and appropriate elements of the transport system, including an asset capable of achieving agreed commercial objectives.

ii. **Developer** – delivering through the private sector the required physical and operating transport assets and facilitating urban revitalisation objectives with other Government agencies and the private sector.

iii. **Coordinator** – managing the multiple interfaces with government, industry stakeholders and the community to achieve (i) and (ii) above.

iv. **Assurance** – provide assurance to the Government that the project is on track and each major step in planning and delivery is appropriate.

In addition, NSW Department of Premier and Cabinet chairs a Customer Requirements Group that provides a whole of Government interface.
WestConnex will cost $11-11.5 billion ($2012) to build and will be delivered in three stages over 10 years.

- **Stage 1:** M4 East – Parramatta to Haberfield
- **Stage 2:** M5 Airport Link – Beverly Hills to St Peters
- **Stage 3:** M4 South – Haberfield to St Peters

The $11-$11.5 billion investment will require tolling on the new and upgraded roads to be financially viable and will include a $1.8 billion contribution from the NSW Government.

The Australian Government has committed $1.5 billion over the next four years starting with $250 million in 2013–14.

### Table 2: Staging description

<table>
<thead>
<tr>
<th>Stage</th>
<th>Location</th>
<th>Key features</th>
<th>Estimated Capital Cost ($2012) (including contingency)</th>
</tr>
</thead>
</table>
| 1     | Parramatta to     | M4  
> - Widening 7.5 km of the existing M4 to 2x4 lanes between Church Street, Parramatta and Homebush Bay Drive.  
> - Widening 1 km and new 5 km 2x3 lane tunnels to extend the M4 from Homebush Bay Drive to Parramatta Road and the City West Link. | $3.4 billion – $3.6 billion |
|       | Haberfield        |                                                                             |                                                        |
| 2     | Beverly Hills     | M5 East Airport Link  
> - Widening the existing M5 East to 2x4 lanes between King Georges Road, Beverly Hills and Bexley Road.  
> - An up to 6 km tunnel from St Peters to join the widened M5 East surface section.  
> - A 2x3 lane surface and viaduct connection to St Peters and Sydney Airport. | $3.6 billion – $3.8 billion |
|       | to St Peters      |                                                                             |                                                        |
| 3     | Haberfield to     | M4 South  
> - A new 8.5 km 2x3 lane tunnel from Haberfield to St Peters, near Sydney Airport via Camperdown.  
> - This will link Stages 1 and 2 and complete the 33 km WestConnex network. | $4.0 billion – $4.1 billion |
|       | St Peters         |                                                                             |                                                        |
| Total |                   |                                                                             | $11 billion – $11.5 billion                            |
5.0 WestConnex – How it will be built and financed (continued)

5.1 WestConnex reference delivery strategy

The reference delivery strategy maximises the value to the NSW Government by proposing to deliver WestConnex in three discrete stages:

- **Stage 1** – M4 corridor expansion from Parramatta to Haberfield;
- **Stage 2** – M5 corridor expansion from Beverly Hills to St Peters; and
- **Stage 3** – M4 corridor extension from Haberfield to St Peters.

Stage 1 includes two distinct projects:
- M4 Widening (Church Street to Homebush Bay Drive); and
- M4 East (Homebush Bay Drive to Parramatta Road and City West Link)

The timing of each stage is shown below.

Figure 3: Delivery timeline

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M4 Widening (Church Street to Homebush Bay Drive)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M4 East (Homebush Bay Drive to Parramatta Road and City West Link)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M5 East Airport Link (Beverly Hills to St Peters)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M4 South Haberfield to St Peters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The strategic plan has been derived by taking into consideration the following evaluation criteria:

Table 3: Evaluation criteria

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport benefits and traffic management</td>
<td>The interim implications for the transport network during WestConnex’s construction need careful consideration</td>
</tr>
<tr>
<td>Timing of pre construction activities</td>
<td>The level of design certainty and complexity of construction varies by stage. Some stages are likely to achieve statutory planning approvals sooner than others</td>
</tr>
<tr>
<td>Government funding requirement</td>
<td>Stages with high revenue/capex ratios will allow funding to be recycled into the later stages of the scheme, thereby minimising Government funding requirements</td>
</tr>
<tr>
<td>Infrastructure market capacity</td>
<td>Packages should be staged and packaged to meet time and cost objectives (eg, create competitive tension, capture scale of economies, limit interfaces) and provide practical intermediate stop-points</td>
</tr>
</tbody>
</table>
Interface issues

The reference delivery strategy generates a number of interfaces that will need to be effectively managed to ensure the successful delivery and operation of WestConnex. These include contract packaging interfaces (e.g. M4 Widening construction works and M4 East construction works, M5 East construction works and M4 South construction works, construction works and tolling works), operational interfaces (e.g. potential for different operators, tolling providers) and other third party (public and private) interfaces.

The reference financing strategy assumes that during operations, there may be separate owners of the different stages of WestConnex and potentially separate operators, maintainers and tolling systems for each stage. Market feedback is sought in relation to dealing with the interfaces associated with this.

Table 4: Stage 1 reference delivery model

<table>
<thead>
<tr>
<th>Work type</th>
<th>Delivery model</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4 Widening construction works</td>
<td>Design and Construct</td>
</tr>
<tr>
<td>M4 East construction works</td>
<td>Potentially:</td>
</tr>
<tr>
<td></td>
<td>• Design and Construct (publicly funded)</td>
</tr>
<tr>
<td></td>
<td>• Design and Construct (construction finance)</td>
</tr>
<tr>
<td></td>
<td>• Availability PPP</td>
</tr>
<tr>
<td>Operations and maintenance works</td>
<td>Combined or separate Operations and Maintenance contracts for Stage 1</td>
</tr>
<tr>
<td>Tolling works</td>
<td>Separate Tolling services contract</td>
</tr>
<tr>
<td>Funding</td>
<td>Government</td>
</tr>
</tbody>
</table>

Reference delivery strategy for Stages 2 and 3 are similar.
5.0 WestConnex – How it will be built and financed (continued)

**Risk allocation**

The table below sets out Stage 1 risk allocation between the NSW Government and the private sector.

Table 5: Risk allocation

<table>
<thead>
<tr>
<th>Government risk</th>
<th>Private sector risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and environmental approvals (M4 Widening lodged)</td>
<td>Design risk</td>
</tr>
<tr>
<td>Project specifications and performance requirements</td>
<td>Construction risk</td>
</tr>
<tr>
<td>Project funding risk</td>
<td>Commissioning</td>
</tr>
<tr>
<td>Patronage risk (prior to sale)</td>
<td>Maintenance risk</td>
</tr>
<tr>
<td></td>
<td>Operations risk</td>
</tr>
<tr>
<td></td>
<td>Tolling services risk</td>
</tr>
<tr>
<td></td>
<td>Brownfield patronage risk (post sale)</td>
</tr>
</tbody>
</table>

*Note: Risk allocation strategy for Stages 2 and 3 are similar structures.*

**Planning approval**

The key proposed milestones for planning and environmental assessment and approvals are detailed below. The M4 Widening assessment and approval process has commenced, while the M4 East process is expected to commence by the end of 2013.

Table 6: Proposed milestones for planning and environmental assessment and approval

<table>
<thead>
<tr>
<th>Stage</th>
<th>Lodge Application</th>
<th>Public Display of Environmental Assessment</th>
<th>Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M4 Widening</td>
<td>Sep 2013</td>
<td>Early 2014</td>
</tr>
<tr>
<td></td>
<td>M4 East</td>
<td>Late 2013</td>
<td>Late 2014</td>
</tr>
<tr>
<td>2</td>
<td>M5 East Airport Link</td>
<td>Mid 2014</td>
<td>Late 2015</td>
</tr>
<tr>
<td>3</td>
<td>M4 South</td>
<td>Mid 2016</td>
<td>Late 2017</td>
</tr>
</tbody>
</table>
5.2 WestConnex reference and financing strategy

The reference financing strategy was developed with financial advice from strategic financial advisors and draws on successful precedent international funding structures.

An assessment process was undertaken to identify the financing strategy that demonstrates the potential to provide the best value and delivery outcomes for the NSW Government, taking into consideration key financing objectives and financing sources and options. Select key objectives are provided in the table below:

The reference financing strategy is to be applied using the following approach:

- Stage 1 (Parramatta to Haberfield) is assumed to be predominantly financed by the NSW and Australian governments
- As tolls are introduced on WestConnex and traffic volumes are established, non-recourse private sector debt will be raised against this toll revenue to help finance subsequent stages
- Once Stage 1 is complete and traffic volumes are established, the NSW Government’s equity investment is sold with proceeds recycled to support construction of Stages 2 and 3
- Under the reference financing strategy, the NSW Government retains ownership of Stages 2 and 3 until after project completion

Public Private Partnership (PPP) models could also be applied in conjunction with the non-recourse project financing model. This is being considered as part the further development of the reference financing strategy and reference scheme procurement strategy.

As part of the industry engagement process, the NSW Government is seeking feedback and proposals on ways in which the reference financing strategy can be improved or augmented.

Table 7: Financing objectives

<table>
<thead>
<tr>
<th>Financing objective</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value delivered to the NSW Government</strong></td>
<td>• Maximising value delivered to the NSW Government from WestConnex (e.g. Net Present Value of NSW Government’s cash flows during and post construction)</td>
</tr>
<tr>
<td></td>
<td>• Optimising public and private sector contributions</td>
</tr>
<tr>
<td><strong>No adverse impact on the NSW Government’s credit rating</strong></td>
<td>• No adverse impact on the NSW credit rating</td>
</tr>
<tr>
<td><strong>Sufficient confidence in market capacity and minimising financing cost to the NSW Government</strong></td>
<td>• Confidence in the financing markets’ available capacity to fully provide the required finance for the project</td>
</tr>
<tr>
<td></td>
<td>• Minimising cost of overall financing structure</td>
</tr>
<tr>
<td></td>
<td>• Implement financing structure within the necessary timeframes</td>
</tr>
<tr>
<td></td>
<td>• Flexibility to respond to changes in the financing market, particularly given the long term nature of the financing and development phase</td>
</tr>
<tr>
<td><strong>Appropriate risk allocation</strong></td>
<td>• Achieving the optimal risk allocation and a value for money risk outcome</td>
</tr>
</tbody>
</table>
5.0 WestConnex – How it will be built and financed (continued)

Figure 4: Financing strategy

<table>
<thead>
<tr>
<th>Stage 1 construction</th>
<th>Stage 1 operations</th>
<th>Stage 1 selldown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial government funding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- NSW Government equity of $1.8bn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Australian Government grant of $1.5bn</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2 / 3 development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 2 and 3 works undertaken concurrently with Stage 1</td>
</tr>
<tr>
<td>Construction operations asset sale and capital recycling</td>
</tr>
</tbody>
</table>

Stage 1:
- Project funding
- Construction phase
- Operations
- Asset sale and capital recycling

Stage 2 / 3:
- Stage 2 and 3 works undertaken concurrently with Stage 1
- Construction operations asset sale and capital recycling

- Toll road operations commence
- Traffic ramp-up phase
- Non-recourse debt raised once volumes are established

- Government equity investment sold
- Sale proceeds recycled into subsequent project stages
5.2.1 Tolling and traffic strategy

A reference tolling strategy has been developed taking into account precedent toll roads. This has been incorporated into the WestConnex traffic model which has been developed by external advisers.

The WestConnex traffic model has been used to generate traffic forecasts for the Reference Scheme.

Table 8: Tolling principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum and maximum tolling</td>
<td>• Minimum toll: A minimum toll will apply to mitigate underpricing of short distance/high value trips</td>
</tr>
<tr>
<td></td>
<td>• Maximum toll: Tolling on the 33 km WestConnex will be capped after motorists have travelled about 16 km, to ensure equity for people travelling longer distances each day, with a Reference Scheme cap of $7.35 ($2013). This is consistent with the M7</td>
</tr>
<tr>
<td>Distance based</td>
<td>• Distance-based approach already operates on the M7</td>
</tr>
<tr>
<td></td>
<td>• Longer trips provide greater benefits</td>
</tr>
<tr>
<td>Cars pay less than heavy trucks</td>
<td>• Cars will pay one third of the heavy truck toll, reflecting the greater wear and tear trucks have on the motorway</td>
</tr>
<tr>
<td></td>
<td>• This is consistent with the M2 and M5</td>
</tr>
</tbody>
</table>

Based on the tolling principles described above, a reference tolling scenario has been created balancing the WestConnex commercial proposition with the needs of the road network and wider transport planning goals. These are indicative tolls only.

Table 9: Reference tolling scenario

<table>
<thead>
<tr>
<th>Stage</th>
<th>Indicative average toll ($2013, incl GST)</th>
<th>Indicative min/max toll ($2013, incl GST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4 Widening (Church Street to Homebush Bay Drive)</td>
<td>$3.00</td>
<td>Min: $1.50, Max: $3.90</td>
</tr>
<tr>
<td>M4 East (Homebush Bay Drive to Parramatta Road and City West Link)</td>
<td>$2.40</td>
<td>Min: $2.00, Max: $3.60</td>
</tr>
<tr>
<td>Stage 2 – M5 East Airport Link (Beverly Hills to St Peters)</td>
<td>$2.70</td>
<td>Min: $1.70, Max: $4.80</td>
</tr>
<tr>
<td>Stage 3 – M4 South (Haberfield to St Peters)</td>
<td>$3.00</td>
<td>Min: $1.80, Max: $4.10</td>
</tr>
<tr>
<td>WestConnex average toll</td>
<td>$4.50</td>
<td>Min: $1.50, Max: $7.35 (cap)</td>
</tr>
</tbody>
</table>
5.0 WestConnex – How it will be built and financed

The tolling system procured for the WestConnex scheme will need to allow for:

- Trip information sharing between stages
- A free flowing closed tolling system under freeway conditions with the avoidance of delays typically associated with toll plazas or cash toll systems
- Interoperable tags with other electronic toll roads throughout Australia

5.2.3 Traffic

Detailed traffic analysis has been undertaken which includes analysis of historical volumes and forecast of future potential traffic volumes for the WestConnex Reference Scheme. The modelling has been developed using the Sydney Strategic Travel Model, toll choice based upon a distributed value of time multi-class equilibrium assignment methodology and other primary inputs.

The below table presents actual volumes presently observed on WestConnex corridors.

<table>
<thead>
<tr>
<th>Road</th>
<th>Nearest cross street</th>
<th>Suburb</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4 West</td>
<td>Hill Road</td>
<td>Homebush</td>
<td>143,000</td>
</tr>
<tr>
<td>Parramatta Road</td>
<td>Telopea Avenue</td>
<td>Homebush West</td>
<td>35,000</td>
</tr>
<tr>
<td>Parramatta Road</td>
<td>Taylor Street</td>
<td>Croydon</td>
<td>78,000</td>
</tr>
<tr>
<td>Parramatta Road</td>
<td>Franklyn Street</td>
<td>Concord</td>
<td>101,000</td>
</tr>
<tr>
<td>General Holmes Drive</td>
<td>Foreshore Road</td>
<td>Botany</td>
<td>143,000</td>
</tr>
<tr>
<td>M5 East</td>
<td>King Georges Road</td>
<td>Beverly Hills</td>
<td>110,000</td>
</tr>
</tbody>
</table>

Source: Roads and Maritime Services permanent count data, based on 2012

5.2.4 Non-negotiables

Innovative ideas that improve value for money, delivery timeline and transport outcomes will be considered.

Any Alternative Proposal must meet the following non-negotiable factors:

I. **Time** – all three stages must be completed within the stated 10 year timeframe

II. **Cost** – proposals must meet the $11-$11.5 billion cap, including the $3.3 billion in government contributions. State financial support must be minimized.

III. **Scope** – proposals must adhere to the route connecting Parramatta with Beverly Hills via the city’s inner west and airport, and must meet transport and WestConnex objectives

IV. **Tolling** – must adhere to the tolling principles outlined elsewhere in this document.

5.2.5 Negotiables

Innovative industry ideas are invited that challenge the current Reference Scheme on the following parameters:

I. Staging and programming

II. Scope and technical solutions

III. Delivery and finance/funding model(s)

IV. Construction methods

V. Procurement processes.
6.0 Timeline

Figure 5: WestConnex Motorway – Stage 1 timeline

Stage 1

<table>
<thead>
<tr>
<th>M4 WIDENING</th>
<th>M4 EAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Church Street to Homebush Bay Drive</td>
<td>Homebush Bay Drive to Parramatta Road and City West Link</td>
</tr>
</tbody>
</table>

- **Oct 2012**: WestConnex a key recommendation in the State Infrastructure Strategy
- **Jun 2013**: Construction funding confirmed in 2013/14 NSW Budget
- **Sep 2013**: Industry briefing and sounding to test reference case in market
- **Sep 2013**: Lodge planning application
- **Oct 2013**: Concept design display and community consultation
- **Nov 2013**: Expressions of interest from construction contractors
- **Early 2014**: Display Environmental Impact Statement (EIS) and community consultation
- **Late 2014**: Planning approval decision
- **Late 2014**: Award construction contract
- **Early 2015**: Start of detailed design work
- **Early 2015**: Start of major work
- **Early 2017**: Open to traffic

**Timeline Key Events**

- **Oct 2013**: Industry briefing and sounding to test reference case in market
- **Late 2013**: Lodge planning application
- **Early 2014**: Display Environmental Impact Statement (EIS) and community consultation
- **Late 2014**: Planning approval decision
- **Late 2014**: Award construction contract
- **Early 2015**: Start of detailed design work
- **Early 2015**: Start of major work
- **Early 2017**: Open to traffic
Figure 6: WestConnex Motorway – Stage 2 and 3 timeline

**Stage 2**

**M5 East Airport Link**

- Early 2014: Community consultation on alignment and access
- Mid 2014: Identify preferred option and lodge planning application
- Mid 2014: Commence environmental impact assessment (EIS)
- Late 2015: Display EIS and community consultation
- Early 2016: Lodge submissions report on EIS feedback
- Mid 2016: Planning approval decision
- Mid 2016: Start of design and construction
- Mid 2020: Stage 2 of WestConnex opens to traffic

**Stage 3**

**M4 South (Haberfield to St Peters)**

- Late 2015: Concept design display community consultation
- Mid 2016: Lodge planning application
- Mid 2016: Commence environmental impact assessment (EIS)
- Late 2017: Display EIS and community consultation
- Late 2017: Lodge submissions report on EIS feedback
- Mid 2018: Planning approval decision
- Late 2018: Start of design and construction
- Mid 2023: Stage 3 of WestConnex opens to traffic
7.0 Industry engagement process

The industry engagement process undertaken to date has included:

- **Industry partners involvement:** Four leading Australian and international design and construction companies were selected as development partners to develop and improve the design and construction solutions for specific sections of the northern and southern corridors for the business case development.

- **Gateway process:** A gateway process was undertaken during the Business Case, where feedback was received on the emerging Reference Scheme from key industry experts.

- **Early industry engagement for M4 Widening:** Market briefing and workshops were undertaken in September and October 2013 to inform the industry and get feedback on the scope and program, reference delivery model and timing alternatives to fast track the widening of the existing M4 Motorway.

On 19 September 2013, the Minister for Roads announced that the project team would be conducting the next phase of industry consultation for WestConnex.

**Industry engagement objectives**

The objectives of the WestConnex industry engagement process are to:

- Inform industry of the current status of the project and provide information in terms of the project’s Reference Scheme, including:
  - Reference scope and technical requirements
  - Reference delivery strategy
  - Reference financing strategy
  - Reference procurement program and process

- Obtain industry feedback on ways to optimise the scope and delivery of the Reference Scheme; and

- Consider any Alternative Proposals that meet the NSW Government’s non-negotiables but which may offer improved Value for Money.

Following this process, WestConnex Delivery Authority will finalise and submit the project delivery plan to the NSW Government in early 2014, with the commencement of the procurement process anticipated in accordance with the public timelines. This industry engagement process is therefore a precursor to, and not part of, any formal procurement process of the project.

**Approach A**

- **Workshops**
- **Written submissions**

**Approach B**

- **Alternative Proposals** *(Confidential protection)*

* Alternative Proposals will be received and assessed by WDA in accordance with the NSW ‘Unsolicited Proposals Guide for Submission and Assessment’.
The phases and timetable for the industry engagement process are shown in Figure 8 below.

**Figure 7: Industry engagement timeline**

1. **Announcement**
   - Business Case Industry Partners: 19 Sep 13
   - Industry Briefing: 31 Oct 13

2. **Market Sounding Workshops**
   - 11 Nov – 6 Dec

3. **Written Submissions**
   - To 24 Dec 2013

4. **Assess Feedback**
   - To mid Feb 2014

5. **Confirm Delivery Plan for M4 East**
   - To late Feb 2014

6. **Enable Delivery of M4 East**
   - March 2014
8.0 Next steps

**Additional information**

Companies can request to register for additional information at info@westconnex.com.au email subject ‘Registration Request’.

Registered organisations will have access to background technical documents, as well as further details on the industry engagement process and a template for written submissions. In addition, the project team has publicly released a large amount of work which is available at www.westconnex.com.au

Participants are also encouraged to review the publicly available documents.

**Workshops**

Workshops with industry are currently scheduled for **11 November to 6 December 2013**. Companies can request a workshop at info@westconnex.com.au email subject ‘WestConnex Market Sounding’. Request for Workshops close **6 November 2013**.

**Written submissions**

Participants may provide optional written submissions no later than close of business on **24 December 2013**. All written submissions will be provided on a voluntary process.

**Alternative Proposals**

Alternative Proposals will be reviewed and assessed by WDA in accordance with the NSW ‘Unsolicited Proposals Guide for Submission and Assessment’.

Alternative Proposals must satisfy the WestConnex non-negotiables criteria.

**Finalise project definition**

Following the industry engagement process, WestConnex Delivery Authority will finalise the project definition documentation for consideration by the NSW Government.

**Contacts**

Any queries on the above process can be directed to:

1300 660 248
info@westconnex.com.au (subject ‘Industry engagement’)
www.westconnex.com.au