New South Wales Auditor-General’s Report
Performance Audit
WestConnex: Assurance to the Government

Roads and Maritime Services
WestConnex Delivery Authority
Infrastructure NSW
Transport for NSW
NSW Treasury
Department of Premier and Cabinet
The role of the Auditor-General

The roles and responsibilities of the Auditor-General, and hence the Audit Office, are set out in the Public Finance and Audit Act 1983.

Our major responsibility is to conduct financial or ‘attest’ audits of State public sector agencies’ financial statements. We also audit the Total State Sector Accounts, a consolidation of all agencies’ accounts.

Financial audits are designed to add credibility to financial statements, enhancing their value to end-users. Also, the existence of such audits provides a constant stimulus to agencies to ensure sound financial management.

Following a financial audit the Audit Office issues a variety of reports to agencies and reports periodically to parliament. In combination these reports give opinions on the truth and fairness of financial statements, and comment on agency compliance with certain laws, regulations and government directives. They may comment on financial prudence, probity and waste, and recommend operational improvements.

We also conduct performance audits. These examine whether an agency is carrying out its activities effectively and doing so economically and efficiently and in compliance with relevant laws. Audits may cover all or parts of an agency’s operations, or consider particular issues across a number of agencies.

Performance audits are reported separately, with all other audits included in one of the regular volumes of the Auditor-General’s Reports to Parliament – Financial Audits.

In accordance with section 38E of the Public Finance and Audit Act 1983, I present a report titled WestConnex: assurance to the government: Roads and Maritime Services, WestConnex Delivery Authority, Infrastructure NSW, Transport for NSW, NSW Treasury, Department of Premier and Cabinet.

Grant Hehir
Auditor-General
18 December 2014

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WestConnex involves 33 kilometres of upgraded and new motorways linking the M4 and M5 corridors and provides connections to the Sydney CBD and Airport/Port Precinct. WestConnex is expected to also create an opportunity for a 20-kilometre urban revitalisation corridor to be developed progressively between Camperdown and Parramatta over the next 20 years. The WestConnex final business case was completed in July 2013 and estimated its capital cost at $11.5 billion in 2012 dollars.

The WestConnex concept was developed by Infrastructure NSW. The business case was developed by the Sydney Motorways Project Office overseen by the Sydney Motorways Steering Committee. In October 2013, after approving the final business case, the Government established the WestConnex Delivery Authority to deliver the WestConnex project. WestConnex is a key infrastructure priority for the Government, and agencies have worked to relatively tight deadlines.

The objective of this audit was to assess how effectively project assurance processes have been applied to WestConnex to provide independent assurance to Government and thus improve project development and delivery. We assessed performance against the two key audit criteria below.

The WestConnex assurance processes:
1. are consistent with key principles underlying NSW Government major projects assurance frameworks
2. have been effectively implemented to provide sound, independent assurance to Government and project sponsors.

The audit did not examine the merit of the project or whether it represented value-for-money.

The period we examined was from the development of the concept (published in October 2012) through to the pre-tender phase for Stage 1 (March 2014). We expected to find internal controls that provided assurance to project management over the delivery of the WestConnex project. We also expected to find, running in parallel, processes and procedures which provided to the Government assurance that was independent of those responsible for delivering the project. The principles we used for this external assurance to the Government are the Major Projects Assurance Framework approved by the Government in December 2011, and in summary are:

- arm’s length and independent Gateway reviews at key points in the project lifecycle
- regular monitoring by and reporting to Infrastructure NSW (the Government’s key independent major capital project advisory agency).

The objective of the Framework is to increase the Government’s confidence and assurance in planning and implementation of major projects through their entire lifecycle.

Much of the material we needed to examine for this audit is considered by the Department of Premier and Cabinet to be Cabinet-in-confidence. The convention followed in this instance has been to provide this information to the Auditor-General on request. This audit report follows the convention that such material should not be publicly disclosed. The report therefore excludes such information but uses it to draw conclusions and make recommendations.
Conclusion

In the period covered by this audit, the processes applied to WestConnex to provide independent assurance to Government did not meet best practice standards. The agencies concerned adopted a number of good practice internal governance and assurance arrangements for WestConnex. However, the Government would have received greater assurance about the risks, costs and benefits of the project had these agencies devoted time and effort to also implementing the Major Projects Assurance Framework effectively as designed.

The Government and agencies concerned were of the view that the WestConnex project warranted governance and assurance arrangements designed specifically to suit its size, duration and complexity.

The Government established special purpose vehicles, steering committees and boards to manage and oversight the project at various stages. A number of aspects of the WestConnex governance and assurance arrangements were well designed and well managed, and a number of good practice internal controls were adopted.

The implementation of these arrangements, however, created some confusion and a lack of clarity in relation to the applicable assurance processes, which in turn led to some shortcomings in the level of independent assurance provided to the Government.

The agencies concerned understood the assurance arrangements endorsed by the Government replaced externally managed Gateway reviews required under the Government’s Major Projects Assurance Framework. It is not clear that this understanding was correct. In any event, if that was the intent, the Government should have been specifically advised that the assurance processes for its highest priority infrastructure project would fall short of best practice.

As a result, only one independent, externally managed Gateway review was conducted during the period covered by this audit. Externally managed Gateway reviews are an important supplement to good internal controls. They provide a fresh set of eyes and arm’s length independence not available from even the best internal controls. This is a key principle of the Government’s Major Projects Assurance Framework. If this Framework had been fully implemented, four additional Gateway reviews should have been conducted in the period covered by this audit.

Reliance was placed on steering committees and boards with responsibility for project delivery to also provide independent assurance to the Government. There is a fundamental conflict in such an arrangement. A steering committee or board with delivery responsibility cannot provide truly independent advice to government. If the Major Projects Assurance Framework had been fully implemented, there would have been regular, formal monitoring by and reporting to Infrastructure NSW in the period covered by this audit to enable it to provide independent assurance to the Government.

The confusion and lack of clarity noted above occurred despite the Major Projects Assurance Framework being developed and announced concurrently with the WestConnex concept. It is surprising that the agencies concerned held the view that the Major Projects Assurance Framework would not apply to such a major project as WestConnex.

Further, while many of the good practice aspects of the internal governance and assurance arrangements were implemented effectively as designed, some were not.

These shortcomings have had practical implications. The preliminary business case submitted for Gateway review had many deficiencies and fell well short of the standard required for such a document. Further, on our analysis, the business case put to the Government still included some deficiencies that independent Gateway reviews and external assurance arrangements, if they had occurred, should have identified.
The post-business case governance arrangements did not clearly separate board-level responsibilities for commissioning from responsibilities for delivering the WestConnex project. After not separating the roles, they also failed to provide mechanisms to effectively manage the conflict between these roles.

The WestConnex project offers several lessons. While good internal controls are critical, they are not a substitute for externally managed Gateway reviews. Steering committees and boards cannot be responsible for both project delivery and independent assurance and reporting to the Government. Responsibility for commissioning should be clearly differentiated from the responsibility for project delivery. Challenging deadlines heighten the need for good assurance but, paradoxically, also the risk of departure from best practice.

While our audit did not seek to establish whether the WestConnex project represented value-for-money, nothing came to our attention during the audit which led to significant concerns with respect to this issue.

Recommendations

1. Infrastructure NSW should ensure the Major Projects Assurance Framework is fully and effectively implemented for all major capital projects ($100 million or more), including:
   - Gateway reviews with Infrastructure NSW involvement using the Government- endorsed methodology
   - regular monitoring by and reporting to the Government through Infrastructure NSW (pages 18, 33 and 36).

2. NSW government sector agencies should, commencing June 2015, develop Governance and Assurance Plans at the beginning of all major capital projects and submit these for endorsement by Infrastructure NSW. These plans should clarify assurance steps and responsibilities including the management of potential conflicts (page 18).

3. Infrastructure NSW, NSW Treasury and Transport for NSW should introduce a ‘review readiness’ hold point for Gateway reviews by June 2015, so that Review Panels can put a review on hold until required documentation and personnel are available to them (page 33).

4. The WestConnex Delivery Authority should develop, by March 2015, a project plan for approval by Infrastructure NSW which:
   - sets out the various project components and the associated Major Projects Assurance Framework review and reporting requirements
   - provides for the business case to be formally and thoroughly revisited for Stages 2 and 3 of the project as well as any other major changes to the scope (page 36).

5. The WestConnex Delivery Authority should, by June 2015, either:
   - more clearly separate roles and responsibilities for delivery, commissioning and assurance or
   - develop and document robust processes and procedures to manage the conflicts that arise from a lack of such separation (page 41).

6. NSW government sector agencies should ensure the governance arrangements for future major capital projects include a clear separation of those responsible for delivery, commissioning and assurance (page 41).
Mr Grant Hehir
Auditor-General
Audit Office of NSW
Level 15, 1 Margaret Street
SYDNEY NSW 2001

Dear Mr Hehir

Performance Audit: WestConnex - Assurance to the Government

Thank you for the opportunity to respond to the WestConnex: Assurance Performance Audit dated 27 November 2014 (Audit).

This letter is provided on behalf of the agencies listed below, and conveys responses to each of your recommendations (Attachment 1).

The Audit considers the process undertaken by Government between October 2012 and March 2014 in relation to the development and assurance of the WestConnex projects. During this period, Government:

- approved a business case, the purpose of which was to demonstrate the overall viability of the WestConnex scheme and to focus on the funding and delivery of Stage 1 (the M4 corridor);
- established the WestConnex Delivery Authority to further develop, lead and provide assurance to the Government to secure the delivery of the WestConnex projects; and
- approved the delivery plan for Stage 1A (M4 Widening) developed by the WestConnex Delivery Authority.

WestConnex is a complex program of works to be developed, funded and built over the next decade. We are confident that the processes adopted for the development of the WestConnex business case were robust and effective, complied with the Cabinet-approved assurance framework, incorporated appropriate independent assurance and achieved their aims.

The activities and governance frameworks that applied during the period of your Audit have proven themselves appropriate for the early first stages of the project. Consistent with the business case and the subsequently approved delivery plan, Stage 1A (M4 widening) is now underway. Contracts were signed last week for the commencement of the M4 widening, following a competitive tender.

The Audit makes a number of recommendations for the future more complex stages, and these are largely accepted by the agencies.

Yours sincerely,

[Signatures]

Deputy Secretary, Premier and Cabinet

Chief Executive Roads and Maritime Services

cl/- Roads and Maritime Services

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Locked Bag 928, North Sydney NSW 2059 |

www.rms.nsw.gov.au | 13 22 13
## Attachment 1 – Response to recommendations

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<th>Recommendation</th>
<th>Response</th>
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</table>
| 1. Infrastructure NSW should ensure the Major Projects Assurance Framework is fully and effectively implemented for all major capital projects ($100 million or more), including:  
- Gateway reviews with Infrastructure NSW involvement using the Government-endorsed methodology  
- Regular monitoring by and reporting to the Government through Infrastructure NSW. | Infrastructure NSW supports this recommendation.                                                                                                                                                                                                                          |
| 2. NSW government sector agencies should, commencing June 2015, develop Governance and Assurance Plans at the beginning of all major capital projects and submit these for endorsement by Infrastructure NSW. These plans should clarify assurance steps and responsibilities including the management of potential conflicts. | The agencies support this recommendation for new projects covered by Infrastructure New South Wales remit, and will co-operate with Infrastructure NSW in the implementation of this initiative.                                       |
| 3. Infrastructure NSW, NSW Treasury and Transport for NSW should introduce a ‘review readiness’ hold point for Gateway reviews by June 2015, so that Review Panels can put a review on hold until required documentation and personnel are available to them. | The agencies support this recommendation.                                                                                                                                                                                                                              |
| 4. The WestConnex Delivery Authority develop, by March 2015, a project plan for approval by Infrastructure NSW which:  
- sets out the various project components and the associated Major Projects Assurance Framework review and reporting requirements  
- provides for the business case to be formally and thoroughly revisited for Stages 2 and 3 of the project as well as any other major changes to the scope. | WestConnex Delivery Authority supports this recommendation.                                                                                                                                                                                                               |
| 5. The WestConnex Delivery Authority should, by June 2015, either:  
- more clearly separate roles and responsibilities for delivery, commissioning and assurance, or  
- develop and document robust processes and procedures to manage the conflicts that arise from a lack of such separation. | This recommendation is supported in principle, and potential methods and processes are under consideration.                                                                                                                                                         |
| 6. NSW government sector agencies should ensure the governance arrangements for future major capital projects include a clear separation of those responsible for delivery, commissioning and assurance. | The agencies support this recommendation noting that they will also need to follow government decisions and directions in relation to these arrangements.                                                                                                              |
1. Background

Overview

The WestConnex concept was developed by Infrastructure NSW. The business case was developed by the Sydney Motorways Project Office overseen by the Sydney Motorways Project Steering Committee. The WestConnex final business case was completed in July 2013 and estimated its capital cost at $11.5 billion in 2012 dollars.

After approving the final business case, the Government established the WestConnex Delivery Authority to deliver the WestConnex project.

The objective of this audit was to assess how effectively project assurance processes have been applied to WestConnex to provide independent assurance to Government and thus improve project development and delivery.

Project at a glance

The WestConnex project involves 33 kilometres of upgraded and new motorways linking the M4 and M5 corridors and providing connections to the Sydney CBD and Airport/Port Precinct. WestConnex will also create an opportunity for a 20-kilometre urban revitalisation corridor to be developed progressively between Camperdown and Parramatta over the next 20 years.

In October 2012, the Sydney Motorways Project Office was established to develop the business case for WestConnex. The Australian Government provided $25 million to assist the NSW Government to advance planning and develop a business case for WestConnex. The NSW Government provided $30 million for this purpose.

The WestConnex project business case, which was completed in July 2013, included a Reference Scheme with an estimated capital cost of $11.5 billion in 2012 dollars. It defined the scope, funding arrangements and a delivery strategy for WestConnex. After consultation with industry experts, the scope of WestConnex was varied from the previous concept in Infrastructure NSW’s 2012 State Infrastructure Strategy in that the M4 East extension will be predominantly in tunnels rather than a mix of tunnels and road cuttings or slots. This decision was based on construction cost, community impact and urban renewal considerations.

The Sydney Motorways Project Office used the Reference Scheme to assess the economic and transport benefits of the overall WestConnex motorway program. The Reference Scheme segments the overall program into three stages.
Exhibit 1: WestConnex stages

<table>
<thead>
<tr>
<th>Stage</th>
<th>Projects</th>
<th>Construction</th>
<th>Estimated Cost</th>
</tr>
</thead>
</table>
| 1     | M4 Parramatta to City West Link | M4 Church Street to Homebush Bay Drive  
M4 Homebush Bay Drive to City West Link | Early 2015-17  
Mid 2015-19 | $3.4 to $3.6b |
| 2     | M5 East Airport Link | Airport Link St Peters to Arncliffe  
M5 East duplication King Georges Road to Arncliffe | Mid 2016-19 | $3.6 to $3.8b |
| 3     | M4 City West Link to St Peters | M4 City West Link to Taverners Hill  
M4 Taverners Hill to Camperdown and St Peters | 2018-23 | $4.0 to $4.1b |


After the Government approved the final business case, it established the WestConnex Delivery Authority to lead the delivery of the WestConnex project. The WestConnex Delivery Authority is undertaking the procurement of the M4 Widening and M4 East Tunnel, and will shortly commence the procurement process for the M5 East Tunnels.

The Government has committed $1.8 billion from Restart NSW towards WestConnex, while the Australian Government has confirmed $1.5 billion in grant funding. In addition, the Australian Government has signed a memorandum of understanding with the NSW Government for a $2.0 billion subordinated debt facility to accelerate the delivery of WestConnex Stage 2.

The balance of the funding for the project will come from private sector debt and equity capital raised against tolls on completed stages of the project, with the recycling of Government capital invested in the individual stages of WestConnex once actual traffic volumes are established.

To implement the financing strategy, the NSW Government is establishing a new company, the Sydney Motorway Corporation Pty Limited, to manage the State’s financial interests in WestConnex. It will be capitalised with seed capital of $2.65 billion to enable delivery of the WestConnex project. A majority independent board of directors will govern this company. The Treasurer and the Minister for Roads and Freight will be joint shareholders.

Subsidiaries of the Sydney Motorway Corporation will be established to contract with the private sector to design, build and finance the individual stages of the WestConnex project. They will also enter into long-term contractual arrangements with Roads and Maritime Services to grant tolling rights, as well as long-term property leases.

Construction of the M4 Widening will commence in early 2015. This will provide four lanes in each direction between Church Street, Parramatta and Homebush Bay Drive, Homebush.

Construction of Stage 2 will commence in mid-2015. Significant private sector involvement will be sought. Stage 2 increases capacity along the M5 East corridor, and extends the motorway to St Peters. It will also include a new access link to the Sydney Airport area. Completion of all stages of WestConnex is expected in 2023.

The WestConnex Delivery Authority will provide a project management/advisory function for the Sydney Motorway Corporation Subsidiaries, including design development, managing procurement processes, planning approvals, contract administration and community engagement.
WestConnex will involve a distance-based tolling system similar to the M7. There will be a minimum toll, allowing tolls to be capped at around 16km. Cars will pay less than trucks, reflecting the greater wear and tear trucks have on the motorway, which is consistent with M2 and M5 tolling.

In June 2014, the NSW Government announced that the WestConnex Delivery Authority will prepare a business case for two extensions to WestConnex. The extensions are planned to provide a north-south corridor to the west of the CBD. The NSW Government has asked the WestConnex Delivery Authority to report back by the end of 2014 on the feasibility and affordability of this scope change.

**Exhibit 2: WestConnex Map – 2013**

Source: Business case executive summary 2013.

**Expected benefits of building WestConnex**

The WestConnex business case executive summary identified the following anticipated benefits:

- reduced travel times between Parramatta and Sydney Airport by up to 40 minutes, bypassing up to 52 sets of traffic lights
- halved bus travel times between the Inner West and the city and improving north-south travel times for public buses accessing the Western Rail Line at Burwood and other stations
- creation of around 10,000 jobs during construction
- 3,000 trucks a day removed from Parramatta Road and put underground, creating an opportunity for neighbourhood revitalisation
- provide the environment for 25,000 new jobs and 25,000 residences to be created over the next 20 years along Parramatta Road
- delivery of more than $20 billion (nominal) in economic benefits to New South Wales.
The NSW Government’s Major Projects Assurance Framework


**Exhibit 3: Major Projects Assurance Framework**

The objective of the Framework is to increase the Government’s confidence and assurance in planning and implementation of major projects through their entire lifecycle, specifically:

- prevent projects failing or not realising their stated objectives/benefits
- improve clarity in the feasibility phase of projects
- drive better governance
- inform Cabinet Infrastructure Committee intervention.

A key component of the Major Projects Assurance Framework is the Gateway review system. The Gateway system is a series of structured reviews at key decision points (gates) in a project’s lifecycle. Gateway gives the Government a level of independent assurance on:

- whether an investment in a project is warranted
- the strategic options considered
- the agency’s capacity to manage and deliver the project on time, on budget and achieve desired project outcomes
- whether a project is on track and ready to move to the next phase.

Gateway reviews are a feature of project assurance in many jurisdictions including most Australian States, the UK, and Canada.

**Exhibit 4: Evolution of Gateway and major projects assurance in New South Wales**

<table>
<thead>
<tr>
<th>Treasury Circular TC 04/07 and Treasury Policy and Guidelines Paper TPP 04-1, dated 1 July 2004, introduced the use of Gateway reviews as part of reforms to the capital project assurance process. The reformed assurance process for capital projects costing more than $50 million included:</th>
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<tr>
<td>• introduction of a six stage independent Gateway review process</td>
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<tr>
<td>• mandatory Gateway reviews on the final business case used to inform any funding decision, irrespective whether this is by Cabinet or internal to an agency</td>
</tr>
<tr>
<td>• agencies encouraged to apply Gateway reviews at other five stages, particularly at pre-tender award stage</td>
</tr>
<tr>
<td>• recommended review teams being independent of the project and of the sponsor agency</td>
</tr>
<tr>
<td>• final business case Gateway reviews being linked to the budget process by sponsor agency submitting Gateway review reports together with the final business case to Treasury with their bid for capital funding</td>
</tr>
<tr>
<td>• Gateway reviews facilitated by the then Department of Commerce</td>
</tr>
<tr>
<td>• sponsor agencies to submit to Treasury the procurement strategy and pre-tender estimate reports which reconfirm the business case prior to calling tenders</td>
</tr>
<tr>
<td>• sponsor agencies to submit to Treasury post tender review report reconfirming the business case prior to contract award</td>
</tr>
<tr>
<td>• sponsor agencies to submit to Treasury after contract award material variations reports highlighting major changes to project scope, cost and time as they occur.</td>
</tr>
<tr>
<td>These reforms applied to all Government agencies, statutory authorities, trusts and other Government entities other than State Owned Corporations (SOCs).</td>
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Treasury Circular TC 08/06 dated 29 May 2008 introduced a new process for developing the State’s ten-year infrastructure strategy. Together with Total Asset Management (TAM) submissions, General Government agencies were required to submit to Treasury:

- for projects planned to commence in the next two to four years both a Preliminary business case and a Strategic Gateway review report
- for projects proposed for funding approval in the coming year, a Final business case and its Gateway review report.

Treasury Policy and Guidelines Paper TPP 08-5, dated December 2008, introduced detailed guidelines and templates for preparing preliminary and final business cases for capital projects.
Treasury Circular TC 10/13, dated 2 November 2010, advised that the Treasury Gateway Unit would facilitate Gateway reviews. Preliminary business case submissions, together with strategic Gateway reviews, were to be provided to Treasury prior to projects being included in the budget forward estimates, the State Infrastructure Strategy publication, or other public statements.

In July 2011, the *Infrastructure NSW Act 2011* established Infrastructure NSW. One of its roles was to review and evaluate proposed major infrastructure projects costing $100 million or more, and to oversee and monitor the delivery of such projects.

In December 2011, the Government endorsed the Major Projects Assurance Framework. This involved Infrastructure NSW conducting mandatory Gateway reviews on all seven stages of a project life cycle and regular reporting to Cabinet on project status.

On 3 October 2012, Infrastructure NSW released its State Infrastructure Strategy. It said:

- Infrastructure NSW has established an enhanced project assurance and review process, Major Projects Assurance, to review and evaluate major infrastructure projects with a capital investment value of more than $100 million.
- for projects over $100 million, Infrastructure NSW will now strengthen the assurance process by applying a mandatory Major Projects Assurance process across the full project lifecycle.
- Infrastructure NSW’s assurance framework will assist Government with this project development and prioritisation process by providing independent advice on project merit and risks.
- an important new component of the Major Projects Review process is an initial “gate zero” for project justification, which occurs at the time of initial project inception.

On 12 June 2012, Budget Paper 4 of 2012-13, the Budget’s Infrastructure Statement, was released. It said: “In consultation with Treasury, INSW is further developing a Major Projects Gateway Review process for its review of major infrastructure projects valued over $100 million.”

On 18 June 2013 Budget Paper 4 of 2013-14, the Budget’s Infrastructure Statement was released. It said, “The Gateway Review system is the Government’s assurance program for capital projects over $10 million. INSW is now responsible for the Gateway review of projects over $100 million.”

Factors that distinguish Gateway reviews from other reviews include:

- Gateway consists of defined stages (gates), which are aligned with a project’s lifecycle
- they have a defined and documented methodology (workbooks)
- the arrangements are coordinated by an agency which is at arm’s length from those responsible for project development and delivery
- they are short, intensive reviews at critical points by a team of independent experts (the Gateway review team) appointed by the arm’s length coordinating agency
- the composition, skills and experience of appointed members to the Gateway review team for a project reflects the complexity and risk level of the project identified.

Infrastructure NSW is responsible for Gateway reviews on projects costing $100 million or more and can determine the role it will take in such reviews. It may select the review team, act as a reviewer, or participate as an observer.

The Government has agreed that Infrastructure NSW use the Transport for NSW Investment Gating and Assurance System for Transport for NSW infrastructure projects.

Source: Audit Office research 2014.
The other key component of the Major Projects Assurance Framework is regular monitoring by and reporting to Infrastructure NSW so that it can perform its role of providing independent advice to the Government on major capital infrastructure projects. This includes the provision of Gateway review reports and acquittals to Infrastructure NSW by agencies on a timely basis, and regular reporting on project progress. Such monitoring and reporting allows Infrastructure NSW to assess the extent of progress and any obstacles to achieving project benefits or cost estimates, and whether there is a need to make recommendations to the Cabinet Infrastructure Committee on the need for intervention or remedial action.

Audit objective and scope

The objective of this audit was to assess how effectively major project assurance processes have been applied to WestConnex to provide independent assurance to Government and thus improve project development and delivery. In assessing the effectiveness of WestConnex major project assurance we examined performance against two key audit criteria:

1. the WestConnex assurance processes are consistent with key principles underlying NSW Government major projects assurance frameworks
2. the WestConnex assurance processes have been effectively implemented to provide sound, independent assurance to Government and sponsors.

The principles we used to assess performance against these criteria were derived from the Government's Major Projects Assurance Framework. These were:

Criterion 1

- Independent reviews coinciding with the key gates in the Major Projects Assurance Framework are conducted
- Reviews are facilitated by a body at arm’s length from the project sponsor and those responsible for project delivery
- The facilitator nominates a panel of qualified reviewers whose expertise is suited to the project and its stage, with these independent from the sponsor agency and those delivering the project
- Review reports and acquittals are formally provided to Infrastructure NSW
- Regular, formal reports on project progress are made to Infrastructure NSW.
Criterion 2

- Reviews have the same or similar scope to a Gateway review
- Reviewers are provided with sufficient time and access to the right documents and the right people to properly perform the reviews
- Findings and recommendations are appropriately acquitted by the project sponsor and those delivering the project with oversight from the assurance facilitator
- Reports and acquittals provided to Infrastructure NSW are accurate, clear and timely
- Infrastructure NSW monitors progress and intervenes where appropriate by advising the Cabinet Infrastructure Committee of concerns.

In determining how well assurance reviews have been implemented, the audit examined key project documents together with any supporting analysis and assumptions. The audit also examined how findings and recommendations raised by assurance reviewers were addressed. The audit focused on the period from WestConnex concept development to the Stage 1 pre-tender phase.

We also engaged an independent expert in major capital projects assurance to review and advise us on:

- the preliminary business case
- the Gateway review of the preliminary business case
- the peer review of the acquittal of recommendations of the preliminary business case Gateway review
- key aspects of the final business case.

See Appendix 1 for more information about the audit.
2. The WestConnex Concept

Overview

The creation of a multi-agency team with private sector experts to develop the WestConnex concept, with the Infrastructure NSW Board providing oversight, was in line with good practice.

The Major Projects Assurance Framework includes a mandatory Gateway review of the concept, known as Gate Zero. This did not occur.

The agencies concerned consider that the processes for developing the State Infrastructure Strategy recommendations and the development of the WestConnex concept adequately dealt with the matters a Gate Zero Gateway review is designed to cover, and therefore a Gate Zero Gateway review was unnecessary.

This position has some merit, but on balance we concluded a Gateway review would still have been worthwhile.

The absence of a Gate Zero Gateway review strengthened the need for a Gateway review early in the business case development phase. No such Gateway review occurred.

Infrastructure NSW was also conflicted in its roles of developing the concept and providing independent assurance to Government.

A governance and assurance plan for the project, considered and endorsed by Infrastructure NSW, may have clarified assurance steps and responsibilities including the application of the Major Projects Assurance Framework.

This phase

The NSW Government asked Infrastructure NSW to provide advice on Sydney’s next motorway priority as part of its work in developing the State Infrastructure Strategy (SIS). In December 2011, Infrastructure NSW’s Major Projects Assurance Framework was endorsed by the Government. This gave Infrastructure NSW responsibility for monitoring all NSW capital projects valued at $100 million or more, reporting bi-monthly on progress and any issues to the Cabinet Infrastructure Committee. In October 2012, the Government announced it would proceed with Infrastructure NSW’s recommendation to develop a business case for WestConnex.

Exhibit 6: Abridged chronology of the concept development phase

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 December 2011</td>
<td>Infrastructure NSW’s Major Projects Assurance Framework was endorsed by the Government giving Infrastructure NSW responsibility for monitoring all NSW projects valued at $100m or more and reporting bi-monthly on progress and any issues to the Cabinet Infrastructure Committee.</td>
</tr>
</tbody>
</table>
| 2 October 2012  | The Government considered the Infrastructure NSW State Infrastructure Strategy and WestConnex concept paper, and agreed to:  
|               | immediately announce commitment to WestConnex  
|               | establish the Sydney Motorways Project Office overseen by the Sydney Motorways Project Steering Committee. |
| 3 October 2012  | Infrastructure NSW released State Infrastructure Strategy, recommending WestConnex and outlining Major Projects Assurance Framework.  
|               | Infrastructure NSW, Transport for NSW and Roads and Maritime Services released the WestConnex concept paper.  
|               | The Government announced it will proceed with Infrastructure NSW recommendation to deliver WestConnex. |

Source: Audit Office research 2014.
Audit expectations

Based on the Major Projects Assurance Framework, we expected a Gateway review (or similar arm’s length, independent review) either during the concept phase or early in the development of the business case.

The Major Projects Assurance Framework introduced a Gate Zero to provide assurance that projects are well justified after considering a wide range of options. A Gateway review or similar should therefore be conducted early in a project’s life cycle to provide assurance around whether:

- the need for a project is properly defined
- there is justification for addressing that need
- the best value means of servicing that need are being proposed after considering a broad range of alternatives and their associated costs and benefits.

We also expected that Infrastructure NSW or some other body would have recognised the need for a Gateway review during the concept phase, or early in the development of the business case and taken steps to ensure this occurred, including reporting to the Cabinet Infrastructure Committee.

Findings

Infrastructure NSW brought together a project team from key Government agencies to determine infrastructure priorities and develop a draft State Infrastructure Strategy. Public and private sector expertise was used to develop the WestConnex concept and help determine its priority. Some key team members were involved with other recent major projects and brought their expertise from those projects. The Infrastructure NSW State Infrastructure Strategy recommended the WestConnex concept as the State’s number one infrastructure priority.

An integrated team from Infrastructure NSW, Transport for NSW, Roads and Maritime Services and the private sector developed the concept paper. The multi-agency team approach enhanced internal project assurance by creating a healthy internal tension and scrutiny, as members with diverse perspectives and expertise debate and cross check each other’s analysis and thinking.

The Infrastructure NSW Board provided oversight to the project team, and was ultimately responsible for recommending that the Government adopt the WestConnex concept as its number one infrastructure priority. The Board comprised senior public servants and leading private sector people experienced in major infrastructure projects.

Exhibit 7: Infrastructure NSW Board membership at concept stage

| Nick Greiner AC, Chairman, Private Sector |
| Paul Broad, Chief Executive Officer, Infrastructure NSW |
| Roger Fletcher, Private Sector |
| David Gonski AC, Private Sector |
| Carolyn Kay, Private Sector |
| Max Moore-Wilton AC, Private Sector |
| Rod Pearse OAM, Private Sector |
| Chris Eccles, Director General of the Department of Premier and Cabinet |
| Sam Haddad, Director General of the Department of Planning and Infrastructure |
| Philip Gaetjens, Secretary of the Treasury |
| Mark Paterson AO, Director General of the Department of Trade and Investment, Regional Infrastructure and Services |

Source: Infrastructure NSW annual report 2011-12.
There was no independent Gateway review or equivalent undertaken at the concept stage. Infrastructure NSW has indicated that the concept paper it prepared to advise Government before WestConnex was publicly announced was not subjected to any independent assurance reviews. The first gateway review was of the preliminary business case late in the business case development phase.

We saw no evidence that:

- the Government specifically exempted WestConnex from the Major Projects Assurance Framework Gate Zero
- provided an explanation or justification for the variation from the Major Projects Assurance Framework
- the alternative approach adopted was assessed as being equivalent to, or better than, the Major Projects Assurance Framework.

It could be argued that a Gateway review was not necessary at this stage because Infrastructure NSW:

- worked closely with Roads and Maritime Services and Transport for NSW to develop the WestConnex concept
- recommended the project to Government, and is the independent body charged with recommending capital project priorities to Government.
- would not have been in a position to provide arm’s length independent assurance to Government about a concept which Government had asked it to develop.

On the other hand:

- Infrastructure NSW’s own Major Project Assurance Framework (for projects estimated to cost $100 million or more) introduced the concept of a ‘Gate Zero’ to provide greater assurance that concepts are sound before starting to develop a business case
- we have seen nothing to suggest that it is the Government’s intent to exempt projects recommended by Infrastructure NSW from Gate Zero reviews
- in practice, there was no further Gateway review until the preliminary business case
- this is one of the largest transport infrastructure project in Australia, so assurance arrangements should be of the highest calibre.

On balance, we believe that a Gate Zero Gateway review should have been conducted. It would have provided independent assurance that the project was justified.

Infrastructure NSW has advised that its role for this phase of the project was to lead the development of the WestConnex concept and that once the concept was passed on to the Government, it was up to the Government to seek independent assurance around that concept before moving to the business case development phase.

Infrastructure NSW’s roles at this stage of the WestConnex project were in conflict. It was responsible for developing the WestConnex concept and at the same time it was the key agency responsible for providing assurance to Government over major capital projects including WestConnex. A fundamental principle is separation between those providing independent assurance and those developing and delivering a project.

Having said this, we found no evidence that Infrastructure NSW or any other body took steps to ensure that a Gateway review was undertaken before or soon after the concept was accepted by the Government.

At the time the concept was being developed, we found no evidence of documented planning for independent assurance of the WestConnex project. We have not seen evidence to suggest consideration was given to the need for a formal Gate Zero Gateway review or which agency would play the role of independent assurance facilitator for this phase of the project.
Conclusion

Bringing staff from various agencies and the private sector together to develop the concept, and oversight by the Infrastructure NSW Board, provided some assurance that the concept was sound.

However, the Infrastructure NSW Major Projects Assurance Framework requires greater independent assurance than that in the form of a Gate Zero Gateway review. No explicit decision to do without a Gate Zero review was documented. Given the size and expected cost of WestConnex, and its high priority for the Government, on balance we believe a Gate Zero review should have been conducted.

Infrastructure NSW had at this time a conflict between its roles as concept developer and independent assurer.

The development of a governance and assurance plan to clarify assurance steps and responsibilities at the very early stages of a project is a good practice which may have highlighted the need for and benefits of Gateway reviews for this and future stages.

As discussed later in this report, only one Gateway review was conducted prior to the submission of the final business case to the Government.

Recommendations

Infrastructure NSW should ensure the Major Projects Assurance Framework is fully and effectively implemented for all major capital projects ($100 million or more), including:

- Gateway reviews with Infrastructure NSW involvement using the Government-endorsed methodology
- regular monitoring by and reporting to the Government through Infrastructure NSW.

NSW government sector agencies should, commencing June 2015, develop Governance and Assurance Plans at the beginning of all major capital projects and submit these for endorsement by Infrastructure NSW. These plans should clarify assurance steps and responsibilities including the management of potential conflicts.
3. Developing the Business Case

Overview
In line with our expectations of good practice, a special purpose office was established to develop the business case, multi-agency teams with private sector experts were used, and a steering committee of key agency representatives provided oversight.

A detailed Business Case Implementation Plan for WestConnex was developed and approved by Government. This outlined governance and assurance arrangements for that stage of the WestConnex project. It was created in recognition of the size, scope, scale and timeframe of the WestConnex project.

A number of aspects of the WestConnex governance and assurance arrangements were well designed and well managed, and a number of good practice internal controls were adopted.

The implementation of these arrangements, however, created some confusion and a lack of clarity in relation to the applicable assurance processes which led to some shortcomings in the level of independent assurance provided to the Government.

The agencies concerned operated on the understanding that the assurance arrangements endorsed by the Government replaced externally managed Gateway reviews required under the Government’s Major Projects Assurance Framework. This interpretation is open to question as the approval documents we have seen do not make this clear.

Only one independent, externally managed Gateway review was conducted during the period covered by this audit. If the Major Projects Assurance Framework had been fully implemented, the Gate Zero Gateway review not undertaken in the concept phase plus two additional Gateway reviews should have been conducted in this phase of the WestConnex project.

Reliance was placed on the Sydney Motorways Project Steering Committee to provide assurance to the Government despite it being responsible for project delivery. There is a fundamental conflict in such an arrangement. A steering committee with delivery responsibility cannot provide independent advice to the Government.

The confusion and a lack of clarity noted above occurred despite the Major Projects Assurance Framework being developed and announced concurrently with the WestConnex concept. It is surprising that the agencies concerned held the view that such a major project as WestConnex would be effectively exempt from the Major Projects Assurance Framework.

Further, while many of the good practice aspects of the internal governance and assurance arrangements were implemented effectively as designed, some were not.

These shortcomings had practical implications. The preliminary business case had many deficiencies and fell well short of the standard required for such a document. Further, on our analysis, the business case put to the Government still included some deficiencies that independent Gateway reviews and external assurance arrangements, if they had occurred, should have identified.

This phase
In October 2012, the Government announced it had accepted the recommendation of Infrastructure NSW to give number one priority to WestConnex.

In September 2013, the Government announced that it had approved the business case and released the business case executive summary.
## Exhibit 8: Abridged chronology of the business case development phase

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
</table>
| 24 October 2012 | The Government was briefed on WestConnex project governance progress:  
  • Sydney Motorways Steering Committee being formed  
  • Sydney Motorways Project Office starting work on business case. (Director, Sydney Motorways Project Office and 18 staff appointed).                                                                                     |
| 28 November 2012 | The Government endorsed the Business Case Implementation Plan which:  
  • indicated the project was in the business case development phase of the Transport for NSW framework  
  • envisaged, bronze, silver and gold business case reviews by a team led by a Project Director and other Sydney Motorways Project Office project leads  
  The Plan did not indicate that it was in lieu of the Major Projects Assurance Framework.                                                                                                     |
| 15 May 2013   | The Government confirmed its support for one consistent Gateway review system for capital projects and for proposed arrangements for conducting Gateway reviews on capital projects. Infrastructure NSW would be responsible for Gateway reviews on projects costing $100 million or more using Transport for NSW’s Investment Gating and Assurance Framework for Transport for NSW infrastructure projects. Infrastructure NSW would be able to determine its role in such reviews, such as selection of the review team, acting as a reviewer, or participating as an observer. |
| 28 May 2013   | The Government approved the inclusion in the Budget of $1.8 billion in capital expenditure over the forward estimates to 2016-17, subject to Government consideration of the business case.                                         |
| 14 June 2013  | The Silver (preliminary) business case Gateway review was finalised, commenting that the business case was less developed than expected and raising 39 recommendations to be addressed.                                                                 |
| 21 June 2013  | Two peer reviewers were appointed from the previous Gateway Review Panel to “carry out WestConnex business case peer review and assist Sydney Motorways Project Office complete the business case in accordance with the revised delivery plan”. |
| 25 June 2013  | The preliminary (Silver) business case review outcomes were discussed at the Sydney Motorways Project Steering Committee Meeting.                                                                                                                                   |
| 9 July 2013   | The Project Director emailed traffic analysts expressing concerns about late Stream 2 traffic data delaying the business case (Stream 2 is investment grade analysis, stream 1 is a lesser grade of analysis).                                                                 |
| 16 July 2013  | A Business case overview was presented to the Sydney Motorways Project Steering Committee with an invitation to comment by 17 July. Minutes noted that following the inclusion of any outstanding comments, the Steering Committee will have endorsed the business case as complete against the overall objectives and suitable for delivery to the NSW Government for its consideration. |
| 17 July 2013  | Date of the financial appraisal attached to the final business case, based on Stream 1 traffic data.                                                                                                                                                                      |
| 19 July 2013  | Peer reviewers sent to Roads and Maritime Services and Sydney Motorways Project Office comments on the final business case as at 17 July 2013. Actions on many of the recommendations raised in the Silver (Preliminary) business case Gateway review were listed as incomplete.  
  The two peer reviewers met with the Chief Executive Officer, Roads and Maritime Services (in his capacity as chair of the Sydney Motorways Project Steering Committee) and the Sydney Motorways Project Office Director to provide final advice on progress on addressing preliminary business case review recommendations.  
  Roads and Maritime Services advise that outstanding actions identified on recommendations table were closed out and there was no formal sign-off.                                                                                     |
| 24 July 2013  | Date of economic appraisal report attached to the business case, based on Stream 1 traffic data.                                                                                                                                                                         |
| 25 July 2013  | Date of final Stream 1 traffic analysis attached to the business case.                                                                                                                                                                                                  |
| 26 July 2013  | Traffic peer reviewer raised concern about his inability to do any progressive peer reviews on traffic data to date.                                                                                                                                                        |
### Date | Event
--- | ---
26 July 2013 | Sydney Motorways Project Office Director formally submitted the final business case to the Chief Executive Officer, Roads and Maritime Services (in his capacity as chair of the Sydney Motorways Project Steering Committee) indicating: “the business case is suitably complete, and the Project Office’s work has undergone the following rigorous reviews:
• independent experts have been engaged to peer review the infrastructure solution, traffic data analysis and capital cost estimates
• a formal gate review of silver business case resulting in 39 recommendations to complete the final version of the business case
• two peer reviewers engaged to ensure the final version of the business case addressed the 39 recommendations of the Gateway review
• Sydney Motorways Project Steering Committee and its delegates reviewed and commented on the final business case.”
26 July 2013 | Business case submitted to the Minister for Roads and Ports.
31 July 2013 | Business case was delivered to the NSW Government.
2 August 2013 | Traffic analyst provided a draft version of Stream 2 traffic analysis.
7 August 2013 | The Government endorsed the WestConnex reference scheme and proposed funding and financing strategy, and agreed to proceed to build Stage 1 of WestConnex.
19 Sept 2013 | Public announcement that Cabinet has approved business case, and business case executive summary released.
November 2013 | Peer review of Stream 2 traffic data received by WestConnex Delivery Authority.

Source: Audit Office research 2014.

### Audit expectations

Given no Gate Zero Gateway review was conducted during the concept phase, we expected one (or an equivalent arm’s length, independent expert review) at the beginning of this phase.

In line with the Transport for NSW Investment and Gating System we also expected to see the following Gateway reviews (or equivalent arm’s length, independent expert reviews)

- a strategic business case review (Gate One)
- a preliminary business case review (Gate Two)
- a final business case review (Gate Three).

We expected there would be acquittals of each of these reviews, and that the review reports and acquittals would be provided formally to Infrastructure NSW and followed up in each subsequent Gateway review or equivalent.

We also expected regular progress reports to, and monitoring by, Infrastructure NSW.

### Findings

#### Project governance

A separate office – the Sydney Motorways Project Office (Project Office) – hosted by Roads and Maritime Services was established to develop the WestConnex business case based on the concept developed by Infrastructure NSW and endorsed by the Government. The Project Office incorporated a mix of public sector expertise from agencies (including Roads and Maritime Services, Transport for NSW, Infrastructure NSW, Urban Growth NSW and Department of Planning and Infrastructure) and private sector expertise from contractors, designers and specialist advisers. Relevant senior public sector staff had prior experience in recent major infrastructure projects.
The Project Office, under the direction of the Project Director, undertook a number of Work Streams overseen by Control Groups in each of the disciplines of Infrastructure and Environment, Transport Planning, Road Network, Urban Renewal, Commercial and Finance, and Communications.

The Sydney Motorways Project Steering Committee, convened by Transport for NSW and chaired most often by Roads and Maritime Services, provided oversight to the Project Office, and was ultimately responsible for preparing the business case recommended to the Government. The Steering Committee was multi-disciplinary and comprised senior officials from NSW and Australian Governments. Some Sydney Motorways Project Steering Committee members worked on Project Control groups responsible for oversight of key aspects of the business case.

Sitting above the Steering Committee was the Major Projects Executive Committee, another multi-disciplinary body that provided oversight.

The key governance arrangements were set out in the Business Case Implementation Plan which was approved by the Government.

**Exhibit 9: Key governance arrangements**

![Sydney Motorways Project Governance Diagram](image)

Source: Business Case Implementation Plan.

The Business Case Implementation Plan also outlined the roles of the key governance bodies.
Exhibit 10: Key governance bodies during business case development

<table>
<thead>
<tr>
<th>Governance Body</th>
<th>Key Members</th>
<th>Key Governance Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Projects Executive Committee</td>
<td>Secretary, Department of Premier and Cabinet</td>
<td>Oversee the development and delivery of all major infrastructure projects.</td>
</tr>
<tr>
<td></td>
<td>Deputy Secretary, Department of Premier and Cabinet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director General, Transport for NSW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secretary, NSW Treasury</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chief Executive, Infrastructure NSW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director General, Department of Planning and Infrastructure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director General, Department of Trade and Investment, Regional Infrastructure and Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Director General, Department of Finance and Services</td>
<td></td>
</tr>
<tr>
<td>Sydney Motorways Project Steering Committee</td>
<td>Director General, Transport for NSW</td>
<td>Provide oversight and strategic direction to the program. The oversight function is to provide assurance to the Minister, Cabinet and the Major Projects Executive Committee that the program is being efficiently conducted toward achieving the program objectives. The strategic direction function is to provide critical expertise, capabilities, knowledge and guidance to the Project Office to help it succeed.</td>
</tr>
<tr>
<td></td>
<td>Chief Executive, Roads and Maritime Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secretary, NSW Treasury</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Executive Director, NSW Treasury</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chief Executive, UrbanGrowth NSW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Executive Director, Infrastructure NSW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deputy Director General, Department of Premier and Cabinet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deputy Secretary, Commonwealth Department of Infrastructure and Transport</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two independent Members</td>
<td></td>
</tr>
<tr>
<td>Project Office</td>
<td>Director and staff</td>
<td>Ensure the program is properly resourced with clear accountabilities. Monitor project teams and agencies to guarantee effective integration and collaboration. Ensure the program is conducted with a common way of working, and is both efficient and effective.</td>
</tr>
</tbody>
</table>


The creation of the Project Office, bringing together expertise from within Government and the private sector, working to a Steering Committee representing key Government agencies and with private sector membership, was an appropriate governance arrangement for this phase of WestConnex.

Peer reviews and other internal controls

Rather than the Gateway process required by the Major Projects Assurance Framework, the WestConnex business case was subject to a multi-disciplinary assurance process, with ongoing review of assumptions. The agencies concerned advised that this was a conscious approach to project assurance that they considered was appropriate for the size, complexity and multi-agency nature of the program.
This was encapsulated in the Business Case Implementation Plan endorsed by the Government. The Business Case Implementation Plan created two assurance review processes:

- Workstream Assurance
- Business Case Assurance.

**Workstream controls**

The Workstream Control Groups covered the three critical areas of the WestConnex business case. They were composed of a mixture of individuals who were internal to the Project Office (but which itself was a multi-disciplinary body) and external peer reviewers. Steering Committee members had standing invitations to attend Workstream Control Group meetings.

The following diagram shows the organisational structure of the Project Office, illustrating the relationship between the Workstream Control Groups, external advisers, work groups and the Project Control Group.

**Exhibit 11: Project Office organisational structure**

The outputs of the Workstream Control Groups were a series of presentations to the Steering Committee by the Project Control Group. The Workstream Control Groups had a series of review points which would be considered on an on-going basis. The agencies concerned submitted to us that the “work produced addressed these review points in a fluid way, and they were kept at the forefront of the Workstream Control Groups’ minds”.

### Exhibit 12: Workstream Control Groups, advisers and peer reviewers

<table>
<thead>
<tr>
<th>Workstream Control Group</th>
<th>External Advisers (Role)</th>
<th>Adviser outputs</th>
<th>Peer Reviewers (Role)</th>
<th>Peer review outputs</th>
</tr>
</thead>
</table>

Source: Roads and Maritime Services 2014.

We found some examples in these arrangements of good practice internal control implemented by the Steering Committee and Project Office. The reference scheme is one such example.
**Exhibit 13: Development of the WestConnex reference scheme**

Due to the size, complexity and challenges presented by the WestConnex scheme, there was an opportunity to engage industry partners early in the business case development to assist the Project Office to identify innovative schematic options and solutions in the area of design and construction.

At the direction of Steering Committee, two parallel processes were established to develop an optimum scheme for WestConnex. The processes involved:

- ongoing work by an internal Project Office team to develop the concept design and continue environmental planning processes
- engagement of four external Industry Partners development teams (IPs) to develop strategic design options.

The plan was to evaluate and select the best strategic design options developed by the IPs to incorporate in further development of the scheme by the internal team.

The four IPs appointed by the Project Office each consisted of a major civil engineering contractor supported by a number of consultants. Each IP included the skills and experience required to develop reference designs and identify opportunities for scope and cost innovation. The Project Office appointed an External Project Development Manager to manage the four IPs.

An Infrastructure Solutions Review and Challenge Team (ISCART) was established to acted as a ‘peer reviewer’ of both the internal team and IP processes. The IS CART answered to the Sydney Motorways Project Steering Committee. It produced a detailed report of the peer review.

Source: Audit Office analysis of WestConnex documentation 2014.

We also found some weaknesses in these arrangements.

We expected to see outputs from the other peer reviewers but detailed reports were limited to infrastructure solutions, capital costs and traffic analysis. Even here, timing was a concern. The peer reviewer engaged to review the traffic analysis produced a report, but not until November 2013 after the business case went to the Government. The reviewer’s report indicated that the review was supposed to be continuous throughout the process of modelling, but the traffic modellers were too pressed for time to consult on a continuous basis with the peer reviewer. The reviewer described the exercise as more an audit than a peer review. The reviewer concluded that the traffic data he received in early August 2013 ‘raises questions about the underlying quality of the modelling’.

The agencies concerned advised us that significant analysis and review of traffic numbers was undertaken by the specialist work streams established within the Project Office. However, we have seen no evidence of an independent, arm’s length review of the traffic analysis used for the final business case, by someone technically qualified to do so, before the business case was presented to the Government.

We did not find peer review outputs for land use, urban planning or transport planning.

NSW Treasury performed a similar role to a peer reviewer for the financing strategy and economic appraisal. Again, we did not find peer review outputs of the work performed by NSW Treasury.

**Business case controls**

A business case review team was established to review the business case prior to submission to the Steering Committee. The business case review team carried out three reviews during the business case development phase.
## Exhibit 14: Business case review and assurance

<table>
<thead>
<tr>
<th>Review Stage</th>
<th>Review Team</th>
<th>Output</th>
</tr>
</thead>
</table>
| Early draft business case     | Infrastructure NSW, Steering Committee member  
  Project Director, Sydney Motorways Project Office  
  Work Stream Leader – Finance and Commercial, Sydney Motorways Project Office  
  Principal Manager, Communications, Sydney Motorways Project Office  
  Senior Program Manager, Sydney Motorways Project Office  
  Leader, Sydney Motorways Project Office  
  Work Stream Leader – Transport Planning, Sydney Motorways Project Office  
  Work Stream Leader - Infrastructure, Sydney Motorways Project Office  
  Project Development Manager, Roads and Maritime Services  
  Procurement Manager, Roads and Maritime Services  
  Seconded Financial Analyst  
  UrbanGrowth NSW; Work Stream Leader – Urban Renewal, Sydney Motorways Project Office | Formal workshops were undertaken so that findings could be taken to the Steering Committee. The substance of necessary information was compiled. The review team analysed the available information, however, their ability to generate a final report was impacted by inconsistent traffic modelling data. Nonetheless, an extensive body of work was generated with an accompanying document that indicated how various reports and reviews fit together. The review team believed that despite the traffic data related gaps, the work that needed to be done at this point in time was complete. |
| Preliminary draft business case | Gateway Review Panel.  
  Review led by above workstream leaders continued. | An external review was undertaken with a formal, consolidated report produced. Pursuant to the cross-agency governance structure established by the Business Case Implementation Plan, a collective decision was made to have Transport for NSW perform the silver review for the purpose of having a fresh set of eyes review the business case to date. Infrastructure NSW endorsed this decision as it ensured an extra check/balance was implemented in the review process. This Gateway review is discussed later in this section. |
| Final business case           | No formal review team, but review led by workstream leaders continued, as well as peer review noted to the right. | A peer review was conducted by two members of the Gateway Review Panel. A table of issues was produced following which a meeting was held between the reviewers and the chair of the Sydney Motorways Project Steering Committee. This peer review is discussed later in this section. |

Source: Roads and Maritime Services 2014.
The Business Case Implementation Plan, approved by the Government, included a number of good practice internal controls.

We expected these internal controls to be supplemented by independent, arm’s length reviews such as Gateway reviews at key gates.

That only happened with the preliminary business case. As discussed below, the Gateway review of the preliminary business case provided a fresh set of expert eyes leading to a valuable critique of the preliminary business case. The Gateway review identified a number of shortcomings in the preliminary business case that the WestConnex governance arrangements and internal controls had not previously resolved.

We expected that Gateway reviews or similar would have also been conducted at the concept, early and final business case stages. These would have provided an added layer of independent review by experts not otherwise involved in the project. They did not happen.

We also found that not all controls were implemented as planned and limited evidence of the output of some other internal controls.

Gateway review of a preliminary business case

One formal, independent Gateway review was conducted during the development of the business case. This was of a preliminary business case.

The Gateway review of the preliminary business case was arranged at arm’s length by the Investment Programs Branch, Transport for NSW. The Project Office established terms of reference for the Review and also required it to be conducted using the Treasury NSW Business Case Gate Review Workbook Gate Two.

The Gateway Review Panel consisted of five members who together possessed a wide-range of relevant expertise.

An objective of the preliminary business case Gateway review was to provide feedback on “the adequacy of the WestConnex business case in achieving the overall Scheme objectives to give confidence to the NSW Government that the project meets the needs of the Sydney community and delivers value for money”.

In its report to the Sydney Motorways Project Office (dated 14 June 2013), the Gateway Review Panel concluded that “due to lack of key information presented for the review, the Gateway Review Panel was not able to form a view on whether the project is a worthwhile and prudent investment (both economically and financially viable) for the NSW Government”.

It does not appear that there was any capacity for the Gateway Review Panel to put the review on hold until the required documentation was available to it.

Further, the Gateway Review Panel stated that:

“A number of key documents were delivered later than anticipated and the Review Panel had very limited time to review the Silver business case.

Relevant documentation relating to a number of critical areas of the business case was not available for review - these included the Governance Section, Financial Plan and Communications Plan. The absence of these documents did impact on the ability to review related sections.

The Review Panel did not have access to a number of Stakeholders or documents that were considered essential in order to satisfactorily complete the review.

The Review Panel noted that not all key benefits nor all key risks were adequately documented, and that the business case would benefit from these and other inclusions”.
The Gateway Review Panel also found the preliminary business case should have been more advanced than it was and would have benefited from previous iterations and review processes which had not occurred.

The Gateway Review Panel’s ‘traffic light’ risk ratings against the Gateway criteria were all red and yellow, with no greens.

**Exhibit 15: Preliminary business case Gateway review ratings**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business needs and benefit (Service) delivery</td>
<td>Yellow</td>
</tr>
<tr>
<td>Funding and value for money</td>
<td>Red</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Yellow</td>
</tr>
<tr>
<td>Governance</td>
<td>Red</td>
</tr>
<tr>
<td>Risk Management</td>
<td>Yellow</td>
</tr>
<tr>
<td>Project Delivery</td>
<td>Red</td>
</tr>
<tr>
<td>Stakeholder management</td>
<td>Red</td>
</tr>
<tr>
<td>Change management</td>
<td>Red</td>
</tr>
<tr>
<td>Cost management</td>
<td>Yellow</td>
</tr>
</tbody>
</table>

Red: critical and urgent – project strategy to address the shortcomings/recommendations is to be established before project is further progressed.

Yellow: Important and urgent – project should go forward with action on recommendations.


Some of the Gateway Review Panel’s critical observations were not ‘rolled up’ into recommendations and the focus of the acquittal process was on the Gateway Review Panel’s recommendations.

The Gateway Review Panel report was provided to the:

- Investment Programs Branch, Transport for NSW, in line with the requirements of its Investment Gating and Assurance System
- Chief Executive Officer, Roads and Maritime Services (in his capacity as chair of the Sydney Motorways Project Steering Committee).

A presentation on the report was made by staff of the Project Office to the Sydney Motorways Project Steering Committee.

We found this was a thorough and independent Gateway review, even though the review could not fully access essential documents. It demonstrated clearly the value of such reviews and provided valuable advice on unresolved issues.

**Peer review of the final business case**

There was no full Gateway review of the final business case.

Two reviewers (from the Gateway Review Panel for the preliminary business case) were engaged to provide comments on the:

- revised delivery plan
- proposed structure and contents for the WestConnex business case
- proposed actions to address the preliminary business case recommendations.

This was referred to by the Project Office as the ‘peer review’.
The two reviewers were not engaged to comment on whether the final business case was robust enough or that other issues raised by the Gateway Review Panel had been acquitted. The Sydney Motorways Project Office did not see it was the role of the peer reviewers to review the detailed analysis and technical information that supported the business case.

The peer review provided a level of assurance to the Project Office that fell short of the level that a full and independent Gateway review of the final business case, conducted in line with the Transport for NSW Gateway System, would provide to Government.

The peer review was not able to provide independent assurance on two grounds. First, to be recognised as providing independent assurance reviewers must be chosen (or at least approved) by an arm’s length body such as Investment Programs Branch in Transport for NSW, Treasury’s Gateway Unit or Infrastructure NSW. While Investment Programs Branch was advised of the peer review, it did not endorse the approach or have any involvement in the reviewer selection.

Second, the Sydney Motorways Project Office compromised fundamentally the independence of the peer review by also engaging the reviewers in an advisory role to assist in finalising the Business Case.

The peer review fell short of a Gateway review in terms of coverage and approach. For example:

- its scope was constrained compared to a Gateway review, which would have revisited whether the project was a worthwhile and prudent investment rather than focusing solely on the recommendations arising from the previous (incomplete) review
- while the depth of expertise of the two reviewers is not in question, their breadth of expertise was much narrower than that offered by a full Gateway review panel, such as the one that undertook the preliminary business case Gateway review
- it did not use Gateway’s established better practice methodology similar to that adopted in many other jurisdictions
- it did not examine whether problems identified by the Gateway Review Panel which did not result in recommendations were addressed adequately, including areas where the Panel was provided with little or no information
- it did not examine whether changes to the business case between its preliminary and final versions had created any additional issues.

The peer review concluded on 19 July 2013, with a meeting between the peer reviewers, the Chief Executive Officer, Roads and Maritime (in his capacity as chair of the Sydney Motorways Project Steering Committee) and the Project Director.

The peer review, under cover of email dated 19 July 2013 to the Chief Executive Officer, Roads and Maritime Services, made a number of ‘global’ comments (see comments on the Procurement Strategy Report below) and noted that:

- 14 recommendations were addressed
- 13 recommendations were not fully addressed or ‘incomplete’
- 12 recommendations were either not applicable or deferred.

The Sydney Motorways Project Steering Committee and nominated delegates reviewed and provided comments on the final version of the business case.

Roads and Maritime Services advised that the two peer reviewers:

- reported to the Chief Executive of Roads and Maritime Services (in his capacity as chair of the Sydney Motorways Project Steering Committee) who was charged with providing the completed business case to the Minister
- provided their final advice and recognition of the issues being closed out at the meeting on 19 July 2013.
No formal peer review report was prepared. The reviewers were not asked to formally sign-off that recommendations were adequately addressed or on the result of their assurance role.

It is not evident what information from the peer review was reported or provided to the full Sydney Motorways Project Steering Committee.

Matters a Gateway review may have identified

We reviewed the final business case and identified some issues with the underlying analysis which we believe a full Gateway review should have identified.

These deficiencies related to the way the business case dealt with risks around traffic projections, project cost, economic benefits, financial analysis, governance arrangements and the procurement strategy.

We have discussed these deficiencies with the auditees. We have chosen to follow the established convention and not publish information that would reveal Cabinet decisions or deliberations. Most of the information would reveal Cabinet-in-confidence matters.

Having said this, based on the information we received our analysis found that the project is still likely to have a positive benefit-cost ratio using industry standard economic modelling techniques, although this could be lower than identified in the publicly released business case executive summary.

Purpose of the business case

Roads and Maritime Services say that the assurance provided to the Government on the WestConnex business case was appropriate for its purpose. It submits:

- the final business case needs to be seen as a ‘living document’ and part of an ongoing and broader major project assurance and development process for WestConnex
- the WestConnex Motorway is a program of works or a scheme with different component elements being at different stages of development at any point in time
- planning and development of the WestConnex Motorway is ongoing and that the Business Case Implementation Plan and the business case anticipated that further development work would be required post-business case on components of the project.

It says the overall objective outlined in the Business Case Implementation Plan was to “produce a business case that demonstrates the overall technical and financial viability of the WestConnex scheme, consistent with the State’s Fiscal Strategy”.

Roads and Maritime Services advised that at the conclusion of the business case in July 2013, Stage 1 was regarded as being sufficiently developed to proceed to procurement and environmental planning phases. For the other stages, the business case outlined a pathway for their further development and planning. It says that it was always envisaged that there would be additional Gateway reviews conducted on the component parts of the scheme.

Roads and Maritime Services’ arguments do not justify the lower level of independent assurance provided on WestConnex than that offered by the Major Projects Assurance Framework. The objective was to “produce a business case that demonstrates the overall technical and financial viability of the WestConnex scheme, consistent with the State’s Fiscal Strategy.” Approval of the business case was the key decision point so far for this project, and arguably the stage at which independent assurance was most critical.

Monitoring by and reporting to Infrastructure NSW

During this phase of the WestConnex project, there was no formal monitoring by or reporting to Infrastructure NSW. We believe that the Gateway review report and the results of the peer review should have been formally provided to Infrastructure NSW so that it could offer independent advice to Government.
We also found no evidence that Infrastructure NSW or any other body specifically advised Government on the absence of Gateway reviews, the problems identified by the one Gateway review undertaken, and the response of the Sydney Motorways Project Steering Committee and the Sydney Motorways Project Office to that review.

Infrastructure NSW was represented on the key governance bodies for the WestConnex business case development phase. The Chief Executive Officer, Infrastructure NSW was on the Major Projects Executive Committee. Infrastructure NSW was involved in Workstream Control Groups through a secondee program. An Executive Director of Infrastructure NSW was on the Sydney Motorways Project Steering Committee which was tasked by the Government to provide assurance to it regarding the WestConnex Project.

Infrastructure NSW’s membership of these bodies, however, did not provide independent assurance to government.

The Infrastructure NSW member could not be expected to provide independent assurance because the Sydney Motorways Project Steering Committee was also responsible for delivering the project. Separating responsibility for steering and delivering a project from providing independent assurance to Government is a fundamental principle.

The terms of reference for the Sydney Motorways Project Steering Committee did not make it clear that the Infrastructure NSW member was to be a conduit for independent assurance between the project and the Infrastructure NSW Board. The Steering Committee member concerned also did not consider his role was to provide assurance.

Conclusion

The creation of a special purpose office, the use of multi-agency teams with private sector experts, and a steering committee of key agency representatives all accorded with our expectations. The Business Case Implementation Plan, approved by the Government set out a range of good practice internal control processes.

In our view, however, the Government would have received greater assurance about the soundness of the business case had:

- independent Gateway reviews occurred at all three gates in this phase
- formal monitoring by and reporting to Infrastructure NSW occurred.

Aside from being a key component of the Major Projects Assurance Framework, the value added by the one Gateway review conducted confirmed our view that Gateway reviews or similar independent, arm’s length reviews at other key gates would have been valuable. Gateway reviews at all key gates, had they been conducted, should have identified and helped resolve the deficiencies in the final business case put to Government which we identified.

A number of good practice controls were implemented, such as the peer review of the recommendations arising from the one Gateway review conducted and the process for developing infrastructure solutions. But not all of the good practice internal controls were implemented as planned. For example, the peer review of traffic data did not occur as planned and it reported after the final business case was submitted to the Government.

The agencies concerned argue Infrastructure NSW carried out its role as independent assurer to the Government through its representation on the Sydney Motorways Project Steering Committee. But such an arrangement contravenes the fundamental principle that responsibility for steering and delivering a project needs to be separated from responsibility for providing independent assurance to Government.

The agencies concerned argue that the Government’s approved Business Case Implementation Plan replaced the Major Projects Assurance Framework. We accept they understood this to be the case. In our view, however, the documents we have seen do not make it clear that approval of the Plan by the Government would result in the Major Projects

...
Assurance Framework not being implemented. If that was the intent, this should have been made clearer and the Government specifically advised that the assurance processes on its highest priority infrastructure project would therefore fall short of best practice.

Further:

- minutes of meetings show that Gateway reviews were being contemplated by the Steering Committee after the Business Case Implementation Plan was approved by the Government
- one Gateway review was conducted, despite it not being part of the Business Case Implementation Plan.

**Recommendations**

Infrastructure NSW should ensure the Major Projects Assurance Framework is fully and effectively implemented for all major capital projects ($100 million or more), including:

- Gateway reviews with Infrastructure NSW involvement using the Government-endorsed methodology
- regular monitoring by and reporting to the Government through Infrastructure NSW.

Infrastructure NSW, NSW Treasury and Transport for NSW should introduce a ‘review readiness’ hold point for Gateway reviews by June 2015, so that Review Panels can put a review on hold until required documentation and personnel are available to them.
4. Pre-tender phase (Stage 1A)

Overview

The WestConnex Delivery Authority arranged a pre-tender peer review which exhibited some but not all of the elements of a formal gateway review conducted in line with the Major Projects Assurance Framework.

The reviewers were not from the Authority or otherwise involved in the project but were selected by the Board. The review utilised a pared-back version of the Gateway methodology.

Infrastructure NSW was not involved in the review, but received the results of the review. The pre-tender peer review should have been a Gateway review overseen by Transport for NSW, using the Transport for NSW methodology.

The WestConnex Delivery Authority has advised that it is now adhering to the Government’s Major Projects Assurance Framework and will continue to do so.

This phase

The Government announced it would proceed with WestConnex on 19 September 2013. The Government approved governance arrangements for delivery of WestConnex included establishing the WestConnex Delivery Authority under the WestConnex Delivery Authority Board. The Board would, where appropriate, function as a peer review panel and delegate for Gateway requirements. On 27 March 2014, the WestConnex Delivery Authority Board agreed Stage 1A should proceed to tender.

Exhibit 16: Abridged chronology of the pre-tender phase (Stage 1A)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 August 2013</td>
<td>The Government approved governance arrangements for delivery of WestConnex including establishing WestConnex Delivery Authority under the WestConnex Delivery Authority Board. The Board would, where appropriate, function as a peer review panel and delegate for Gateway requirements.</td>
</tr>
<tr>
<td>19 Sept 2013</td>
<td>Public announcement that the Government had approved the business case and the business case executive summary released.</td>
</tr>
<tr>
<td>21 October 2013</td>
<td>Minister made a direction giving the WestConnex Delivery Authority Board governing powers. The Chief Executive of WestConnex Delivery Authority is to manage and control the affairs of the WestConnex Delivery Authority in accordance with the specific policies and specific directions of the WestConnex Delivery Authority Board from 1 November 2013.</td>
</tr>
<tr>
<td>1 November 2013</td>
<td>The Regulation establishing the WestConnex Delivery Authority with an advisory Board comes into effect. One of the objectives of the Regulation is to “provide for a board of the WestConnex Delivery Authority to provide advice in connection with the WestConnex program of works”.</td>
</tr>
<tr>
<td>3 November 2013</td>
<td>Peer review of Stream 2 traffic data received by WestConnex Delivery Authority.</td>
</tr>
<tr>
<td>March 2014</td>
<td>Draft Stage 1A Delivery Plan Independent Review completed. Limited scope, compared to a full Gateway review. Reviewers formed a view that no insurmountable issues existed but that a number of issues remained unresolved regarding Stage 1A.</td>
</tr>
<tr>
<td>27 March 2014</td>
<td>WestConnex Delivery Authority Board Meeting noted the WestConnex independent review recommendations and agreed that the project should proceed to tender.</td>
</tr>
</tbody>
</table>

Source: Audit Office research 2014.
Audit expectations

We expected to see:

- a pre-tender Gateway review or equivalent undertaken by or on behalf of Infrastructure NSW
- an acquittal of this review
- the review report and acquittal provided formally to Infrastructure NSW
- regular monitoring by, and reporting to, Infrastructure NSW.

Findings

A peer review of WestConnex Stage 1A Delivery Plan was conducted.

The peer review was to provide assurance that the proposed approach: (a) has been adequately researched and can be delivered, and (b) has appropriate consultation and stakeholder engagement and communications to minimise the chance of adverse community reaction.

The three reviewers were engaged by WestConnex Delivery Authority on behalf of the WestConnex Delivery Authority Board.

The review focused on four primary areas: delivery plan; capital costs; risks and communications.

The peer review team formed the view that no insurmountable issues existed that were incapable of being addressed and rectified to enable the “M4 Widening Design and Construct Request for Tender” to go to market by the programmed date of 17 April 2014.

The review indicated a number of issues needed to be resolved prior to tender regarding Stage 1A.

The peer review team also raised concerns about some aspects of Stage 1A and the project overall. Some of these were broadly consistent with the issues identified by us regarding the final business case mentioned in the previous chapter. We cannot discuss these in this report as it risks breaching Cabinet and commercial confidences.

The review report was provided to the Board by the reviewers and management. We are advised Infrastructure NSW received the peer review report.

The review utilised a pared-back version of the Transport for NSW gating review methodology. The scope was more limited than a full Gateway review, with no traffic-light ratings, and no recommendations.

The peer review had a number of similarities to a Gateway review. It did not, however, have the same arm’s length independence as a full Gateway review. The peer review did not involve Infrastructure NSW or Transport for NSW. Infrastructure NSW should have overseen and been consulted in the selection of the panel and the scope of the review, and the review should have been administered by Transport for NSW using its Gateway process.

WestConnex Delivery Authority advised that it has refined its Gateway procedures since this pre-tender review and Gateway reviews will now be undertaken in accordance with the Major Projects Assurance Framework and facilitated by Treasury. The WestConnex Delivery Authority Board will ensure that WestConnex Delivery Authority follows the Major Projects Assurance Framework set by Infrastructure NSW and the NSW Treasury Gateway Review System. The Board will be the sponsor for the Independent Assurance Review process associated with Gateway reviews.
WestConnex Delivery Authority also intends to invite a representative of Infrastructure NSW to sit on each Gateway Review Panel.

We are also advised that Gateway review reports are now being provided to Infrastructure NSW, and regular progress reporting to Infrastructure NSW is occurring. This is in line with the Major Projects Assurance Framework.

Given Roads and Maritime Services’ comments (outlined in Section 3) about the approved business case being a living document, we would expect the Authority to develop a project plan to provide for the business case to be formally and thoroughly revisited at key project milestones.

Conclusion

The pre-tender peer review approached, but ultimately fell short of, the level of independent assurance that a full and effectively implemented Gateway review would provide. Our key concerns relate to:

- the absence of third-party involvement in the engagement of reviewers and facilitation of the review
- the limited scope of the review compared to a full Gateway review
- Gateway workbooks and methodology were not fully used, including no traffic-light reporting.

WestConnex Delivery Authority has indicated it plans follow the Major Projects Assurance Framework using Treasury’s Gateway system. This approach represents a departure from the Government’s decision that the Transport for NSW Gateway Review System should be used for transport projects. The Government, or at least Infrastructure NSW, should be asked to approve this arrangement.

Recommendations

Infrastructure NSW should ensure the Major Projects Assurance Framework is fully and effectively implemented for all major capital projects ($100 million or more), including:

- Gateway reviews with Infrastructure NSW involvement using the Government-endorsed methodology
- regular monitoring by and reporting to the Government through Infrastructure NSW.

The WestConnex Delivery Authority should develop, by March 2015, a project plan for approval by Infrastructure NSW which:

- sets out the various project components and the associated Major Projects Assurance Framework review and reporting requirements
- provides for the business case to be formally and thoroughly revisited for Stages 2 and 3 of the project as well as any other major changes to the scope.
5. Current governance arrangements

Overview
Following approval of the business case the WestConnex Delivery Authority was created to focus specifically on the delivery of WestConnex. Establishment of a stand-alone entity overseen by a board was in line with our expectations.

The WestConnex Delivery Authority Board, however, was given responsibility by the Government to manage the project and provide independent assurance to it. This is a fundamental conflict. A governing board with delivery responsibility cannot also provide independent advice to Government. This is the role of Infrastructure NSW.

The current membership allows the Board's deliberations to be informed by senior and well-informed public sector officials. However, it fails to clearly separate delivery and commissioning roles. A clear separation of deliverer and commissioner represents better practice in the management of major Government capital projects. It allows the deliverer to focus only on how best to deliver the project, leaving the commissioner to specify its requirements for the project taking into consideration the broader needs of the road network and Government.

Delivery, commissioning and assurance roles and responsibilities should ideally be clearly separated. At a minimum, robust mechanisms need to be implemented to manage the conflicts arising from the current overlap.

Future infrastructure projects of this scale should adopt governance arrangements that separate delivery, commissioning and assurance to the Government.

Audit expectations
Once the business case was approved by Government, we expected to see a body created to focus specifically on the delivery of WestConnex.

We expected to see a clear separation between the delivery agency and the Government agencies and staff responsible for providing assurance to Government over the WestConnex project.

We also expected to see clear separation between the delivery agency and the Government agencies and staff responsible for commissioning the WestConnex project

Findings
The Government created a stand-alone body as a subsidiary of Roads and Maritime Services to allow it to focus specifically on the delivery of WestConnex. This is in line with contemporary good practice. The WestConnex Delivery Authority brought together staff from several key agencies and the private sector to deliver WestConnex based on the business case endorsed by the Government. Some staff were involved with other recent major projects and brought their expertise from those projects. Some staff had worked for the WestConnex Project Office, but some new staff were appointed bringing new ideas and perspectives.
The WestConnex Delivery Authority Board is established under clause 51C of the *Transport Administration (General) Regulation 2013*. The Board is principally accountable to the Minister for Roads and Freight and has an oversight and assurance role for WestConnex Delivery Authority and the WestConnex Works. The Board is specifically responsible for:

1. (a) “advising and making recommendations to the Minister with respect to any matter relating to the WestConnex Works
2. (b) advising and making recommendations to the WestConnex Delivery Authority with respect to any matter relating to the WestConnex Works, and
3. (c) to provide advice on such matters as are referred to it by the Minister”.

The WestConnex Delivery Authority Board is classified as an Advisory Board in accordance with the Public Service Commission Directive, ‘Classification and Remuneration Framework for NSW Government Boards and Committee, December 2013’.

The Minister has, however, issued a direction to the Chief Executive of the WestConnex Delivery Authority to manage the day to day affairs of the WestConnex Delivery Authority in accordance with “any general policies or specific directions of the Board”. In a practical sense, by virtue of this direction, the Board is more of a governing board. The Minister may rescind or amend this direction at his or her discretion.

The WestConnex Delivery Authority Board has an independent private sector chair and majority highly experienced private sector members, with Government members drawn from the Department of Premier and Cabinet, Roads and Maritime Services and Transport for NSW. Some members were on the Sydney Motorways Project Steering Committee but others, including the Chair, are new.

**Exhibit 17: WestConnex Delivery Authority Board membership**

<table>
<thead>
<tr>
<th>Name</th>
<th>Role and Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tony Shepherd AO</td>
<td>Chair, private sector</td>
</tr>
<tr>
<td>Peter Brecht</td>
<td>private sector</td>
</tr>
<tr>
<td>Rod Pearse OAM</td>
<td>private sector</td>
</tr>
<tr>
<td>Robert Hamilton</td>
<td>private sector</td>
</tr>
<tr>
<td>David Stewart</td>
<td>Director-General of Transport for NSW.</td>
</tr>
<tr>
<td>Peter Duncan AM</td>
<td>Chief Executive of Roads &amp; Maritime Services.</td>
</tr>
<tr>
<td>Peter Regan</td>
<td>Executive Director, Head of Infrastructure Finance at NSW Treasury (replaced by Simon Smith)</td>
</tr>
<tr>
<td>Simon Smith</td>
<td>Deputy Director General at NSW Department of Premier and Cabinet.</td>
</tr>
</tbody>
</table>

Source: WestConnex Delivery Authority website.

The current WestConnex Board structure means the Board's deliberations are directly and immediately informed by the expert input of its senior public sector members concerning Government strategic directions, priorities, policies and procedures. This has the potential to improve the quality of decision-making and to prevent the Board pursuing matters or approaches destined not to be feasible.

The problem with this board structure is that it does not provide the clear separation we expected to see between the delivery agency and those commissioning the WestConnex project and providing assurance to Government over the WestConnex project.

We expected a separation similar to the following diagram.
Exhibit 18: Separating commissioner from delivery and assurance

Instead we found the arrangement illustrated below.

Exhibit 19: Current governance and assurance arrangements

Source: Audit Office 2014.

Key
DPC    Department of Premier and Cabinet
TfNSW  Transport for NSW
RMS    Roads and Maritime Services
INSW   Infrastructure NSW
DPC    Department of Planning and Environment
INSW   Department of Trade and Investment, Regional Infrastructure and Services

Source: Audit Office 2014.
As can be seen, there is no clear separation between those responsible for commissioning and delivery. The Secretary, Transport for NSW, the Chief Executive, Roads and Maritime Services and arguably the Deputy Director-General, Department of Premier and Cabinet are responsible for commissioning WestConnex yet are also on the WestConnex Delivery Authority Board.

Clear separation is desirable, because the deliverer is accountable for use of resources in accordance with the requirements of the commissioner, whereas the commissioner has a broader accountability for the operation of the network as a whole and the delivery of overall policy outcomes.

There is also no clear separation between those responsible for assurance and delivery. The current arrangements create conflicts for the public sector members of the WestConnex Delivery Authority Board in that variously they are responsible for advancing and working in the best interests of the project and providing independent assurance to Government in respect of the project. This is a concern because what is best for the project will not necessarily always align with the best interests of the Government.

In the absence of clear separation, we expected to find evidence that:

- the roles and responsibilities of people and agencies are clearly set out
- conflicts arising from a lack of separation have been recognised and mechanisms are in place to manage these conflicts.

The WestConnex Delivery Authority has been working closely with Roads and Maritime Services to develop processes and procedures to guide implementation of the commissioner/deliverer relationship. Recently, this resulted in a memorandum of understanding on this matter.

Governance arrangements for WestConnex were considered and determined by the Government through a separate, albeit parallel, process to its consideration of the WestConnex business case. The agencies concerned submit that this was due to the complexities around the structured financing arrangements envisaged for the project. A Gateway review of the governance arrangements when they were proposed may have, however, highlighted some of the issues discussed above in relation to commissioning, delivery and independent assurance.

Conclusion

While we recognise there can be some advantages to having the Board's deliberations directly informed by its senior public sector members, better practice is to clearly separate delivery, assurance and governance. This is currently not the case. The current governance arrangements blur responsibility and accountability for delivery, commissioning and assurance and thereby create a conflict.

It is important that either this conflict is removed, or that there are robust mechanisms in place to effectively manage the conflict. There have been some efforts recently to clarify and establish mechanisms to guide the commissioner/deliverer relationship, but more needs to be done to establish mechanisms to manage the inherent conflict at Board level.

The business case approved by Government did not effectively consider governance and there was no Gateway review covering governance. While governance was dealt with in a separate process and the arrangements implemented were endorsed by the Government, thorough consideration of governance in the final business case with an expert independent Gateway review may have raised the issue of separating commissioner, assurer and deliverer.
Recommendations

The WestConnex Delivery Authority should, by June 2015, either:

- more clearly separate roles and responsibilities for delivery, commissioning and assurance or
- develop and document robust processes and procedures to manage the conflicts that arise from a lack of such separation.

NSW government sector agencies should ensure the governance arrangements for future major capital projects include a clear separation of those responsible for delivery, commissioning and assurance.
Appendix

About the audit

Audit Objective
The objective of this audit was to assess how effectively project assurance processes have been applied to WestConnex to provide independent assurance to Government and thus improve project development and delivery.

Audit Criteria
We assessed performance against two key audit criteria.

The WestConnex assurance processes:
- are consistent with key principles underlying NSW Government major projects assurance frameworks
- have been effectively implemented to provide sound, independent assurance to Government and project sponsors.

Audit Focus and Scope
The audit considered whether the assurance processes implemented for the initial phases of WestConnex aligned with the key principles and requirements of the Government’s major projects assurance frameworks currently in place, specifically the:
- Government’s Major Projects Assurance Framework
- Transport for NSW Investment Gating and Assurance System.

The audit particularly focused on independent Gateway reviews and external reporting and monitoring which are key elements of these major projects assurance frameworks.

The audit examined key project documents and interviewed a range of relevant people from the key agencies involved in the WestConnex project covering the period from WestConnex concept development to the pre-tender phase (Stage 1A).

The audit utilised expert advice to review the quality of Gateway reviews conducted during the business case development phase and to identify any deficiencies in the final business case that a thorough and well-conducted Gateway review should have identified.

Audit exclusions
The audit did not:
- assess the WestConnex project’s value-for-money
- conclude on the merit of project-related decisions
- conclude on the accuracy or reliability of project related estimates.

Audit selection
We use a strategic approach to selecting performance audits which balances our performance audit program to reflect issues of interest to Parliament and the community. Details of our approach to selecting topics and our forward program are available on our website.

Audit methodology
Our performance audit methodology is designed to satisfy Australian Audit Standards ASAE 3500 on performance auditing. The Standard requires the audit team to comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance and draw a conclusion on the audit objective. Our processes have also been designed to comply with the auditing requirements specified in the Public Finance and Audit Act 1983.
Acknowledgements

We gratefully acknowledge the co-operation and assistance provided by Roads and Maritime Services, the WestConnex Delivery Authority, the Department of Premier and Cabinet, NSW Treasury, Infrastructure NSW and Transport for NSW.

Audit team

Rod Longford and Gordon Eastwood conducted the performance audit and were assisted by Edward Shestovsky. Expert advice was provided by Ted Smithies, Value Network Pty Ltd. Sean Crumlin and Kathrina Lo provided direction and quality assurance.

Audit cost

Including staff costs and overheads, the estimated cost of the audit is $338,000.
Performance auditing

What are performance audits?
Performance audits determine whether an agency is carrying out its activities effectively, and doing so economically and efficiently and in compliance with all relevant laws.

The activities examined by a performance audit may include a government program, all or part of a government agency or consider particular issues which affect the whole public sector. They cannot question the merits of government policy objectives.

The Auditor-General’s mandate to undertake performance audits is set out in the Public Finance and Audit Act 1983.

Why do we conduct performance audits?
Performance audits provide independent assurance to parliament and the public.

Through their recommendations, performance audits seek to improve the efficiency and effectiveness of government agencies so that the community receives value for money from government services.

Performance audits also focus on assisting accountability processes by holding managers to account for agency performance.

Performance audits are selected at the discretion of the Auditor-General who seeks input from parliamentarians, the public, agencies and Audit Office research.

What happens during the phases of a performance audit?
Performance audits have three key phases: planning, fieldwork and report writing. They can take up to nine months to complete, depending on the audit’s scope.

During the planning phase the audit team develops an understanding of agency activities and defines the objective and scope of the audit.

The planning phase also identifies the audit criteria. These are standards of performance against which the agency or program activities are assessed. Criteria may be based on best practice, government targets, benchmarks or published guidelines.

At the completion of fieldwork the audit team meets with agency management to discuss all significant matters arising out of the audit. Following this, a draft performance audit report is prepared.

The audit team then meets with agency management to check that facts presented in the draft report are accurate and that recommendations are practical and appropriate.

A final report is then provided to the CEO for comment. The relevant minister and the Treasurer are also provided with a copy of the final report. The report tabled in parliament includes a response from the CEO on the report’s conclusion and recommendations. In multiple agency performance audits there may be responses from more than one agency or from a nominated coordinating agency.

Do we check to see if recommendations have been implemented?
Following the tabling of the report in parliament, agencies are requested to advise the Audit Office on action taken, or proposed, against each of the report’s recommendations. It is usual for agency audit committees to monitor progress with the implementation of recommendations.

In addition, it is the practice of Parliament’s Public Accounts Committee (PAC) to conduct reviews or hold inquiries into matters raised in performance audit reports. The reviews and inquiries are usually held 12 months after the report is tabled. These reports are available on the parliamentary website.

Who audits the auditors?
Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards.

Internal quality control review of each audit ensures compliance with Australian assurance standards. Periodic review by other Audit Offices tests our activities against best practice.

The PAC is also responsible for overseeing the performance of the Audit Office and conducts a review of our operations every four years. The review’s report is tabled in parliament and available on its website.

Who pays for performance audits?
No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament.

Further information and copies of reports
For further information, including copies of performance audit reports and a list of audits currently in-progress, please see our website www.audit.nsw.gov.au or contact us on 9275 7100
## Performance audit reports

<table>
<thead>
<tr>
<th>No</th>
<th>Agency or issues examined</th>
<th>Title of performance audit report or publication</th>
<th>Date tabled in parliament or published</th>
</tr>
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<td>247</td>
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**Performance audits on our website**

A list of performance audits tabled or published since March 1997, as well as those currently in progress, can be found on our website [www.audit.nsw.gov.au](http://www.audit.nsw.gov.au).
The role of the Auditor-General

The roles and responsibilities of the Auditor-General, and hence the Audit Office, are set out in the Public Finance and Audit Act 1983.

Our major responsibility is to conduct financial or ‘attest’ audits of State public sector agencies’ financial statements. We also audit the Total State Sector Accounts, a consolidation of all agencies’ accounts.

Financial audits are designed to add credibility to financial statements, enhancing their value to end-users. Also, the existence of such audits provides a constant stimulus to agencies to ensure sound financial management.

Following a financial audit the Audit Office issues a variety of reports to agencies and reports periodically to parliament. In combination these reports give opinions on the truth and fairness of financial statements, and comment on agency compliance with certain laws, regulations and government directives. They may comment on financial prudence, probity and waste, and recommend operational improvements.

We also conduct performance audits. These examine whether an agency is carrying out its activities effectively and doing so economically and efficiently and in compliance with relevant laws. Audits may cover all or parts of an agency’s operations, or consider particular issues across a number of agencies.

Performance audits are reported separately, with all other audits included in one of the regular volumes of the Auditor-General’s Reports to Parliament – Financial Audits.

In accordance with section 38E of the Public Finance and Audit Act 1983, I present a report titled Fitness of firefighters: Fire and Rescue NSW and NSW Rural Fire Service.

Grant Hehir
Auditor-General
1 April 2014
New South Wales Auditor-General’s Report
Performance Audit
Fitness of firefighters
Fire and Rescue NSW
NSW Rural Fire Service