AUDITOR-GENERAL'S REPORT

PERFORMANCE AUDIT

The Cross City Tunnel Project

The Legislative Assembly
Parliament House
SYDNEY NSW 2000

The Legislative Council
Parliament House
SYDNEY NSW 2000

In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled **The Cross City Tunnel Project.**

R J Sendt
Auditor-General

Sydney
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Contact officer
Sean Crumlin, Director Performance Audit
Tel (02) 9275 7286
email: sean.crumlin@audit.nsw.gov.au

Foreword

The NSW Government has encouraged private investment in major social infrastructure projects such as schools, and economic infrastructure projects such as toll roads. This has been an important part of the Government strategy to deliver services while constraining public debt.

Recently we examined the awarding of contracts for privately financed public schools. In this audit we examine the awarding of a contract for a privately financed toll road, the Cross City Tunnel project.

The approaches adopted in these projects are different, each bringing different risks, which need to be identified, understood and managed.

The Cross City Tunnel is part of Government strategy to reduce surface traffic in Central Sydney. At this time, it is not achieving its patronage targets and there is significant public criticism of the toll and the traffic management changes.

This audit raises issues relevant to agencies involved in privately financed projects. It highlights the importance of:

- having value for money for motorists as an explicit objective of the bidding process
- the need to define project costs
- separate funding of costs not directly related to a project so the user-pays principle can apply in a fair way
- handling contract variations transparently
- effective community consultation
- patronage projections in determining project impacts.

I believe the lessons learnt from this project would contribute to better management of future projects involving private investment.

Bob Sendt
Auditor-General

May 2006

Executive summary

The focus of our audit

The Cross City Tunnel (CCT) has been marked by controversy since its opening. About 30,000 cars a day are using the tunnel so far, about one-third of the expected traffic volume. The road changes have resulted in slow, tangled traffic.

There has also been substantial public concern since the CCT opened over whether: road closures and changes were necessary; the toll is too high; the contract was awarded to CrossCity Motorway Pty Ltd (CCM) fairly.

This audit is one of several reviews and inquiries into the CCT with each review addressing various aspects of the project. In this report we have focused on three key issues:

- was the upfront payment a legitimate reimbursement of necessary expenditure?
- were the variations to contract in the amending deed of December 2004 reasonable, and were they handled appropriately?
- were the changes to surface roads based on a robust assessment against stated objectives?

Audit opinion

In our opinion the Government's 'no net cost to government' requirement was a legitimate (but not the only possible) basis for the tunnel bid process. The Government was entitled to decide that tunnel users meet the tunnel costs.

Structuring the bid process on the basis of an upfront reimbursement of costs incurred (or to be incurred) by the Roads and Traffic Authority (RTA) was therefore appropriate.

Whether these costs should have included 'public domain' costs not relating directly to the tunnel (and hence passing those costs on to tunnel users) was a decision the Government was entitled to make. A core and common role of government is to redistribute income between different groups in the community.

In our opinion, however, the Government, Treasury and the RTA did not sufficiently consider the implications of an upfront payment involving more than simple project cost reimbursement (i.e. the 'Business Consideration Fee' component).

While the RTA may have genuinely believed it was in the public interest to 'capture' some of the proponent's 'surplus' through the Business Consideration Fee, no real thought was given to:

- foregoing the fee to reduce the toll charges on tunnel users, or
- how this amount was to be used (e.g. retained by the RTA for use on other roadworks or used by Treasury for allocation to other areas of government).

In one sense this issue ultimately became academic. The RTA's project-related costs will eventually absorb all of the upfront payment, once all claims are settled. No Business Consideration Fee will remain.

However, the principle of requiring a Business Consideration Fee remains an issue to be resolved.

In our opinion such a fee would need strong justification where:

- **the cost of it is met, in effect, by people not party to the contract (in this case the tunnel users), or**
- **it achieves a current benefit to be paid for by future tunnel users (i.e. it distorts inter-generational equity).**

In our opinion the RTA was wrong to change the toll escalation factor late in 2002 to compensate the tunnel operator, CCM, for additional costs.

This action distorts inter-generational equity between tunnel users. If it was appropriate for tunnel users to fund these costs, this should have been done by changing the base tolls. Escalation factors should do no more than reflect underlying cost movements or inflation.

In our opinion the variations in the amending deed were reasonable.

The net present value of the 15 cents toll increase accurately reflected the $35 million incurred by CCM in doing the extra work required after the signing of the original contract. But it made an already expensive toll even more expensive. By 2018, the toll will be about 35 per cent higher than it would have been due to this increase and the change to the escalation formula.

The handling of the amending deed also lacked transparency:

- it was not made public until late 2005
- no clear breakdown of the costs has been made available publicly, even to date
- it was done without full probity assurance.

A widely held view is that **the road changes** were not necessary, but were introduced to force motorists into the tunnel to profit the tunnel operator.

When the project was put to tender, only limited road changes were specified. All bids were made on this basis.

In our opinion the RTA and the Department of Planning (DoP) communications and community consultation over road changes were sound at the detailed level but not effective in conveying the overall impact of the package of changes. We cannot say that the road changes were robustly assessed, either collectively or on a road-by-road basis.

Consultation with stakeholders about the road changes failed to clarify the cumulative impact of the changes, especially in eastern Sydney. It was not inclusive enough to capture the significant resentment the changes caused. Any loss of patronage from this resentment will further hinder the tunnel's main objective of reducing traffic in the City.

In our opinion the concept behind the road changes was to implement long-standing Government planning objectives to reduce congestion in and around Central Sydney, and to improve public transport routes and urban amenity.

The initial strategy was to make car travel on surface roads 'unattractive' and could therefore be described as 'funnelling' traffic into the tunnel. But the motivation was primarily to clear up the congestion on surface roads rather than to make the tunnel profitable. The financial viability of the tunnel, and the RTA's interpretation of 'no net cost to government', did however influence some important planning decisions.

Maintaining direct toll-free alternative routes was a key principle in the DoP Director-General's requirements, but was lost as the project developed.

Summary of recommendations

We recommend that the RTA:

- define project costs and development costs more clearly (page 38)
- require transport consultants to provide a clearly defined range of likely patronage outcomes (page 62)
- consider the impact of various patronage outcomes on a project's viability (page 62)
- assess the affordability and public acceptability of any proposed tolls in future projects (page 47).

We recommend that Treasury and the RTA:

- review the bidding model used for Public Private Partnership projects, including the CCT (page 33)
- limit the upfront payment sought from the private sector to recovery of development costs, and abandon the option of a Business Consideration Fee (page 33)
- consider receiving upfront payments progressively as project development costs are incurred (page 38)
- consider making the toll level the point of competition in the bidding process (page 33)
- make value for money for motorists an explicit objective of the assessment of bids for future tollway projects (page 33)
- consider alternative funding methods for subsequent project cost increases, and ensure decisions are made with regard to motorists price sensitivity (page 38)
- develop guidelines for setting any future tolls equitably, related to distance travelled and the cost of the project (page 51).

We recommend that Treasury and the Budget Committee of Cabinet:

- clarify for any future contracts what 'no net cost to government' means, including whether agencies should use their capital budgets to cover any cost increases (page 36)
- develop guidelines for the use of any surplus from current or future upfront payments (page 33)
- consider direct funding of public domain improvements (page 38).

We recommend that Treasury and Premier's Department require agencies to:

- keep the full tender evaluation and review panels involved in complex high risk projects until the project deed is signed, and re-convene them if amending deeds are needed (page 52)
- make any contract amendments subject to the same level of probity checks and scrutiny as the original contract process (page 52)
- make any contract amendments, and their summaries, public in a timely manner (page 52).

We recommend that the DoP and the RTA:

- improve the consultation process for major projects (page 70)
- conduct a joint review of road changes that are not consistent with current traffic volumes (page 72)
- resolve the inconsistency between current traffic arrangements and the stated objective of maintaining at least one direct toll-free alternative route on all sectors affected by the CCT (page 72).

We recommend that the DoP, in conjunction with Treasury:

- review the use of open-ended conditions of approval of projects (page 38).

Audit findings

Chapter 2 **Was the upfront payment a legitimate reimbursement of expenditure?**

CCM offered the RTA $100.1 million as an upfront payment for the CCT project. The offer comprised a Development Fee of $54 million for the RTA's initial estimate of its project development costs, and a Business Consideration Fee of $46.1 million. The actual payment reduced to just under $97 million on finalisation of the contract, mainly due to movements in interest rates.

The Business Consideration Fee was the price a proponent was willing to pay for the right to build and operate the tunnel. It was distinct from the estimated development costs. There were no government directions on its use.

The bidding model developed by Treasury allowed the bidders to compete on a number of variables. They could bid on the upfront payment, the concession period or the toll. CCM offered the highest upfront payment, and this became a decisive criterion in the assessment of bids.

The advantage of making the upfront payment a point of competition is that it makes it easier to compare bids. Difficulty in comparing bids has been the subject of past criticism. However, allowing the upfront payment to be a point of competition also presented significant risks, particularly the risk of higher tolls. If motorists perceive the level of tolls as unreasonable, they may avoid using the tunnel. Therefore, we consider that the Budget Committee of Cabinet should have reviewed and assessed the implications of this approach.

All of CCM's bids predicted a higher number of cars using the tunnel than the RTA and the rival bidders. CCM's projections for 2006 ranged from 12 per cent to 50 per cent higher than other bidders. This should have concerned the evaluation panel sufficiently to cause greater scrutiny of the projections. Actual patronage to date has been under a third of the CCM estimates.

After receiving the $97 million upfront payment in December 2002, the RTA used part of it to recover its project development costs, and committed another part to future CCT project costs. By April 2005, the RTA had not spent or committed about $9.0 million of the upfront payment, earmarked for the finalisation of outstanding project costs. The RTA used only $3.1 million of the unspent portion of the upfront payment on the subsequent cost increases, which largely flowed from the Planning Minister's Project Conditions of Approval.

To recover subsequent cost increases, preserve the upfront payment, and avoid using funds from its capital expenditure budget, the RTA negotiated two deals with CCM. The first deal resulted in a change to the way the toll escalates. This was incorporated in the original contract. The second deal resulted in a 15 cents toll increase. This was incorporated in the First Amendment Deed.

CCM delivered the project to the RTA on time. The RTA delivered the project at 'no net cost to government' because it passed on all increased costs to motorists by way of toll increases. This was because it interpreted 'no net cost to government' to mean no net cost to the RTA budget. The RTA did not adequately consider using its capital expenditure budget to meet cost increases.

Chapter 3 **Were the contract variations in the amending deed appropriate?**

The $38.1 million cost increases identified at the amending deed stage were legitimate and were the responsibility of the RTA, not CCM.

After the contract was signed, new costs arose, totalling $38.1 million. The RTA accepted responsibility for these costs. It funded $3.1 million from the upfront payment, and CCM carried out the remaining $35 million worth of work. The RTA compensated CCM by allowing an increase of 15 cents in the base toll of $2.50 (in 1999 prices). The change was formalised in the First Amendment Deed (FAD), signed in December 2004. This is the only variation to the original contract.

The 15 cents base toll increase was an appropriate amount to reflect the net present value of the $35 million of work that CCM undertook. It will result in a 5.6 per cent increase in toll revenues to CCM.

The 15 cents base toll increase and the change to the toll escalation formula have a major and continuing impact on the toll:

- the 15 cents increased the base toll for the main tunnel by 6.0 per cent, and for the shorter run (vehicles from the east exiting at Sir John Young Crescent) by 13.6 per cent. The RTA did not apply a pro rata increase
- the change to the escalation formula has the biggest influence on the tolls; an increase of around $1.12 for the main tunnel by 2018. Adding the 15 cents to the base toll brings that up to around $1.43. Together, this means the toll would be 35 per cent higher than originally planned by 2018
- the effect of the two changes is more severe for the shorter run, with an increase in the planned toll (base toll plus CPI) of 44 per cent by 2018.

There was a total of $110 million of extra project costs ($75 million at the Supplementary EIS stage resulting in changes to the toll escalation, and $35 million resulting in the 15 cents increase to the base toll). These were separate and additional to the upfront payment. If the Government had contributed this $110 million rather than pass it on to the users, the tolls could have been 51 cents lower on tunnel opening and more than one third lower by 2018.

The RTA obtained proper approval for the amending deed and instituted procedures to manage the works covered in the deed. But the handling of the amending deed is open to criticism:

- it was not made public, amidst lack of clarity about whether the RTA was required to publish a summary, until late 2005

- there is still no clear breakdown of the costs available publicly
- it was entered into after all the protective structures set up to ensure fairness around the contracting process had been dismantled
- the Treasurer's consent to the amendment was sought in a short timeframe, which may have worked against full analysis of the issues.

Chapter 4 **Were the road changes based on a robust assessment?**

The RTA developed 73 road changes to integrate the CCT with the road network. Most are not road closures as such, but changes to lanes and road use. By May 2006, 63 had been completed, six reversed and four were still pending. Of the 73 road changes:

- 28 were in response to the EIS and 45 to the Supplementary EIS
- 22 are specified in the contract as Materially Adverse Events (MAEs) and so may trigger compensation to CCM if reversed.

There is uncertainty over whether any reversal of the other 51 road changes not specified as MAEs would trigger compensation.

A widely held view is that the road changes were not necessary, but were introduced to force motorists into the tunnel in order to profit the tunnel operator.

In our view this was not the case. We found that the objective of the road changes was to reduce through traffic in and around Central Sydney and to improve the public domain, not to be a tunnel funnel.

Both the RTA and the DoP relied on patronage estimates of over 80,000 vehicles a day using the tunnel in their decision to implement immediate road changes. This was because the agencies believed that such a large reduction in above ground traffic would immediately attract more cars and lose the benefits of reduced congestion. Actual usage has been below 25,000 vehicles a day (when the full toll has applied). Since the half-price period began, usage reached an average of 34,000 vehicles a day.

Maintaining toll-free alternative routes was a key principle in the DoP Director-General's requirements. But road restrictions were added as the project developed because there was no mechanism to judge the cumulative magnitude of the road changes. This key principle was lost as the project progressed.

We cannot say that the road changes were robustly assessed, either collectively or on a road-by-road basis because:

- the patronage scenario was not robustly assessed
- ensuring the financial viability of the tunnel, and the RTA's interpretation of 'no net cost to government', affected important planning decisions.

There was extensive consultation with stakeholders about the road changes. It did not however capture the significant resentment among prospective toll payers. This is a group which was admittedly diffuse and difficult to survey. Any loss of patronage from this resentment will further hinder the tunnel's main objective of reducing through traffic in the City.

Response from the Roads and Traffic Authority

Thank you for your letter dated 5 May 2006 attaching a draft of the Auditor-General's proposed Report concerning the Cross City Tunnel project. This letter constitutes RTA's submission for inclusion in the Report pursuant to Section 38C of the Public Finance and Audit Act 1983.

The RTA will ensure that the findings in the draft Report are carefully reviewed in its planning for and delivery of future Motorway projects. In particular, the RTA will carefully review the recommendations set out in the draft Report in light of existing Government policy and in particular the recommendations of the Motorways Review undertaken on behalf of the NSW Government by David Richmond, AO.

The RTA notes that the Performance Audit did not extend to a full review of the RTA's involvement in the Cross City Tunnel project. In delivering this project the RTA paid careful regard to previous reports and recommendations of Auditors-General relating to other Motorway projects, as well as to ensuring regular communication with your office during the negotiation and finalisation of the project. The RTA was pleased to see recognition of this fact in the draft Report.

The RTA will continue to strengthen its processes associated with the development and delivery of privately financed projects.

The RTA would also emphasise that in delivering the Cross City Tunnel project as a whole it ensured that it acted within the parameters of then Government policy, including the Treasury's "Working with Government: Guidelines for Privately Financed Projects", that its tender process was thorough and transparent and that it obtained key Cabinet, planning and other statutory approvals for all aspects of the transaction.

The draft Report focuses on three key aspects of the Cross City Tunnel Project, namely: the requirement for an upfront payment, the December 2004 Amending Deed and the surface road changes introduced as part of the project.

The RTA has reviewed the Audit opinion and findings and notes in particular that the Audit Office has reached positive conclusions in relation to the RTA's role in project development and contract administration including the management of project variations.

The RTA also takes this opportunity to register three significant facts that:

- *There is no financial exposure to the tax payer associated with levels of patronage. That is, the taxpayer has not accepted the 'patronage risk' associated with this project;*
- *The CCT will be in public ownership in less than 30 years time – again achieved at no net cost to Government; and*
- *As a result of the project there are now more than 30,000 fewer cars on Sydney City roads causing city congestion. In years ahead this number will continue to rise.*

The RTA notes that the Audit Office has raised concerns in relation to the extent to which the implications of an upfront payment were appropriately considered by Government, the toll escalation regime, the veracity of patronage projections for the project, the transparency associated with the execution of the Amending Deed and the extent to which the surface road changes were understood by road users. While the RTA does not propose to respond formally to each of these matters individually, it would make the following points:

1. *RTA obtained appropriate approval to the inclusion of a toll escalation regime;*

2. *RTA gave appropriate consideration to the expenditure of its own capital budget in connection with cost increases associated with the Cross City Tunnel Project. Evidence from the former Premier and Treasurer to the Joint Select Committee Inquiry into the Cross City Tunnel made it clear that it was not a course open to the RTA. Further, the Treasurer approved both the initial transaction and also the Amending Deed without any requirement that the RTA expend funds from its own Budget;*

3. *The RTA does not accept criticisms in the Report that the differences in patronage projections between the RTA, CCM and the other bidders were such that more rigorous testing of them should have taken place. The RTA's evaluation of tenders thoroughly examined the patronage analysis put forward by CCM and other bidders and the RTA notes that CCM's bid was supported by expert traffic modelling advice as well as detailed traffic studies. The figures shown in the draft Report themselves indicate that the RTA's patronage forecast, and that of another bidder, were both within 10% of CCM's patronage forecast for the main tunnel in 2006. This figure is well within any shortfall in traffic volume that may have been necessary to put the validity of CCM's proposal at risk;*

4. *RTA notes comments in the report in respect of patronage predictions. The comparisons of estimated actual patronage compared to CCM's projections do not adequately recognise the impacts of motorway ramp up for Cross City Tunnel. It is likely that the Cross City Tunnel ramp up period will be in the order of 2 or 3 years and the appropriate time to make a comparison of actual versus projected traffic is after ramp up when equilibrium traffic has been achieved. We also note that your report recognises the issues relating to ramp up and includes an opinion that Cross City Tunnel is not experiencing a standard ramp up;*

5. *The RTA queries the validity of the 'intergenerational equity' argument put by the report. To be a valid point it must assume that tunnel users will cease to be tunnel users after that period of time which defines a generation. Given that a substantial majority of motorists are active drivers for more than 30 years this 'intergenerational equity distortion' referred to in the report is overstated. It needs also to be appreciated that private sector delivery of the project enables its benefits to be provided decades earlier than may have otherwise been the case.*

The RTA also reiterates that in each case it ensured that it carefully consulted with the key government agencies to ensure that all applicable guidelines and policies were met.

(signed)

Brett Skinner
Acting Chief Executive

Dated: 23 May 2006

Response from Treasury

Thank you for providing me with a copy of the final draft of the Performance Audit – The Cross City Tunnel Project *and inviting me to comment on the report.*

A number of the recommendations you make are generally consistent with the Premier's Department recent Review of Future Provision of Motorways in NSW *and the* Joint Select Committee's Inquiry into the Cross-City Tunnel. *As such Treasury is already in the process of implementing changes to address some of your recommendations.*

In particular, your recommendation that Treasury publicly disclose contract amendments is being implemented by revising Ministerial Memorandum 2000-11 Disclosure on Information on Government Contracts with the Private Sector.

Also, Treasury is currently updating and revising the Working With Government Guidelines for Privately Financed Projects *to address a number of your recommendations. In particular, the revised version will emphasise the importance that any user charges and/or taxpayer contributions for projects should be value for money and Budget Committee approval will be required prior to amending any contract.*

I would also like to take the opportunity to clarify and elaborate on a few areas that you mentioned in your report.

Firstly, I would like to clarify your suggestion that the Government required the project to be delivered at no net cost to government (p2). There is ***not*** *a general principle that required privately financed projects to be delivered at no net cost to government. The need for a Government funding contribution in addition to any user charges associated with a project is determined on a case by case basis, taking into account the Budget situation and the Government's expenditure priorities.*

The Government's approval to proceed with the Cross-City Tunnel project was ***not*** *conditional on there being 'no cost to Government'. As your report points out, the Treasurer wrote to the Minister for Roads on 14 March 2002 stating that where additional funds were needed for the project they should come from the RTA's existing forward capital program.*

Secondly, your report infers that the CrossCity Motorway Consortium (CCM) won the tender on the basis of contributing the highest up-front payment (p26). Whilst the up-front was one of the main financial *points of comparison in the competition, there were other important non-financial evaluation criteria. CCM's winning bid was assessed to be a technically superior bid because there would be reduced traffic disruption during construction and the design enabled an increase in the speed limit to 80 kilometres per hour.*

Thirdly, your report states that the high patronage estimates of CCM's winning bid should have received greater scrutiny (p29). The patronage estimates of all bids were interrogated in detail. In addition, the financial models of all bidders were stress tested to determine the impact of much lower than forecast revenue projections and CCM's bid performed well on these tests.

The traffic forecasts of CCM's winning bid were only about 6 per cent higher in 2006 than the Public Sector Comparator (a tunnel with a 60 kilometre per hour speed limit) and 9 per cent higher in 2016. Given the challenges in accurately forecasting toll-road patronage particularly in the early ramp-up stages, it would have been difficult to conclude that these estimates were unreasonable. These challenges are evident from a Standard and Poor's publication which found that traffic forecasts for various toll-roads around the world were underestimated on average by around 30% during the ramp-up phase (refer Global Project Financing Yearbook, October 2005). Whilst traffic flows are difficult to predict in the ramp-up phase, traffic on most of Sydney's toll-roads have, after the first couple of years, been consistent with or exceeded initial forecasts.

It is also interesting to note that in contrast to the Cross-City Tunnel experience, Transurban, part owner of the Westlink M7, have made statements that their traffic forecasts "have proved extremely accurate" (refer Transurban Investor Briefing, February 2006).

Finally, I would like to thank you and your staff for the co-operative approach taken during the course of the audit and the opportunity to comment on the report.

(signed)

J Pierce
Secretary

Dated: 23 May 2006

Response from the Department of Planning

I refer to your letter of 5 May 2006 and the attached "Performance Audit – The Cross City Tunnel Project".

You would be aware that the Department held discussions with the Audit Office at the officer (2 May 2006) and executive level (4 May 2006) to outline the issues raised in its review of the performance audit. These issues were outlined in a letter dated 5 May 2006.

The Department has reviewed the "Auditor-General's Report Performance Audit – The Cross City Tunnel Project – Final Report to Agencies" dated 5 May 2006. The Department's key issues are outlined in Attachment A.

I thank you for the opportunity of commenting on the Performance Audit report and trust that the Department's comments are of assistance.

(signed)

Sam Haddad
Director General

Dated: 24 May 2006

Attachment A

1. Strategic Issues

(a) Public Domain Improvements

The issue of public domain improvement is twofold – whether these should be included as part of a project such as the Cross City Tunnel and secondly, how these should be funded.

As discussed, the Department's policy framework at the time of assessing the Cross City Tunnel was one of integrated transport networks, intended to address the range of transport options of car use, public transport, pedestrians and cyclists. In response to the first question, and in partial response to the issue raised in the report of a new road being able to stand on its own merits, it is difficult in many situations, particularly in road construction to not include such public domain improvements. Road projects by nature bring opportunities where traffic switches are predicted to occur where a new, more efficient route is said to be provided. A significant component of such a project's justification is how these benefits can be 'captured' and converted to broader public benefit in the form of improved public transport facilities and services. In order to address issues of government policy, including reducing car dependency by measurable indices such as vehicle kilometres travelled, it would be considered difficult to not include such public transport, pedestrian, cyclist and general community benefits such as those proposed for the Cross City Tunnel in justifying the proposal.

In response to the second component relating to funding of such public domain improvements, this matter is not a key consideration in the Department's role in project assessment and is largely assumed to have been resolved by the time a proponent is seeking the Minister's approval. The Richmond Report into the future funding of motorways, the recommendations of which have been adopted by the Government, recommends that:

> *"In some circumstances, an alternative means of achieving public domain benefits might be followed. This would involve capturing some funding upfront (either from the project or Government sources) and quarantining this funding for local benefits, with the use of such funding being decided following public consultation at a stage closer to, or following, the completion of the project. Delivery could remain the responsibility of the PPP private sector partner."*

(b) Provision of Alternative Routes

The key issue in relation to the alternative route policy relates to east to north moving traffic wishing to access the harbour crossings. The Department recognises that most of the previously available routes from William Street to the Domain tunnel are no longer available. Alternative toll-free routes do remain via Macquarie Street to the Cahill Expressway and Harbour Bridge or via Cowper Wharf Roadway to the Domain Tunnel, albeit that these are less direct.

Despite extensive consultation by the RTA, the immediate closure of access routes to the Harbour crossings on opening of the tunnel and the wider road users' lack of understanding of these impacts is acknowledged. With the exception of the Cowper Wharf Roadway closure, there were few concerns raised in consultation regarding access to the Harbour crossings and this issue may have been 'lost' due to the focus on the proposed changes to air quality management and public domain improvements.

The provision of alternative toll-free routes has been a standard policy of the Department in assessing road projects and it is considered that this policy has been retained to some degree for this project. It is recognised that there are clearly toll-free routes available for east-west traffic, the traffic direction which the tunnel was largely constructed to address. These remain as surface routes through the CBD as were previously available to motorists.

2. Other Comments

Action for Transport

On page 56, the audit report states:

> *"The Government's strategic plan, Action for Transport 2010 saw the tunnel as …. part of a larger plan to improve life in the Central Business District. The plan envisaged one lane would be closed on William Street to enable widening of pavements and landscaping work …"*

***Comment**: The Department acknowledges that the development of the Cross City Tunnel saw the project area extend further from the CBD than was acknowledged in the CBD, particularly with the modification (the "Long 80" tunnel) to the approved project. Notwithstanding this, Action for Transport 2010 is a strategic planning document providing an overview of the project and the types of changes that were likely to be included as the project was known at the time and would not have been intended to present a final project. Naturally more detailed plans developed over time as the project objectives were further refined and results of community consultation were taken into account. This will continue to be the case where strategic planning documents identify key projects and the broad objectives to be further refined over time.*

3. Recommendations

With regards to the recommendations of the draft audit report relating to road changes, the Department provides the following:

Recommendation	***Comment***
We recommend that the Department of Planning (DoP) and the RTA: ▪ *conduct a joint review of all road changes and consider reversing those that are not appropriate to current traffic volumes*	*The reversal of road changes may or may not require a modification to the Minister's approval for some or all of any proposed changes. It is the responsibility of the proponent agency to determine the need for and to initiate a modification to a Minister's approval. The Department is obliged to consider any such request on its merits. The Department is happy to co-operate with the RTA regarding the implications of any suggested road changes in the context of the Minister's approval. Notwithstanding, it should be noted that the decision to make road changes should not be based on projected or actual traffic volumes alone but on a wider range of environmental impacts related to the project as a whole that may result from those changes.*
▪ *restore at least one direct toll-free alternative route on all sectors affected by the CCT*	*As discussed above, any changes which may be required in relation to this recommendation would need to be considered in the context of the Minister's approval and the potential impacts. The need for a modification to enable reinstatement of a direct toll-free route would need to be initiated by the RTA.*

Recommendation	***Comment***
We recommend that the DoP, in conjunction with the Treasury: ▪ *review the use of open-ended conditions of approval of projects.*	*The Department acknowledges the argument regarding the use of open-ended conditions and potential funding implications. In particular open-ended conditions have tended to deal with issues related to air quality management, future changes in standards and the need for other actions including upgrading or retrofitting to meet those standards. The Department recognises the need to have flexible conditions in these instances to enable future standards to be applied. Like the issue for funding of public domain improvements, there may be scope for a more holistic approach to funding components of projects through mechanisms other than a toll such as the public domain improvements.*
We recommend that the DoP and the RTA: ▪ *improve the consultation process for major projects.*	*The commencement of Part 3A of the Environmental Planning and Assessment Act provides opportunity for the Minister to approve concept plans for projects. This process is intended to enable greater community and other stakeholder input at an early stage of a proposal's development than is currently the case.* *The Department also recognises that, in the case of the Cross City Tunnel, a comprehensive consultation process was undertaken and the impacts of the proposal were relatively well understood, the broader community and road users general particularly those wanting to access the harbour crossings were not understood until the road changes had been made.* *The Department is willing to work with the RTA and other agencies to identify mechanisms to ensure that the potential implications of future projects are appropriately communicated.*

1. Background to the Cross City Tunnel (CCT)

1.1 The original CCT concept - reduce cross city traffic

The CCT was one of the five major road infrastructure projects in the Government's *'Action for Transport 2010'* strategic plan.

Short cross city tunnel proposed

In 1998 the RTA released a design, *The Cross City Tunnel: Improving the Heart of the City*. This proposed a tunnel under William, Park and Druitt Streets, from Sussex Street in the west to College Street and the Eastern Distributor under Palmer Street in the east. This is shown in Exhibit 1.1A. The tunnel was to connect major new roads (Western Distributor, Eastern Distributor and Anzac Bridge). The Government wanted to reduce City congestion, travel time and the competition between east-west and north-south traffic.

The CCT was also to improve the public domain. It would reduce surface traffic and reallocate road space to public transport, pedestrians and cyclists. The RTA proposed removing one lane in William Street and closing, or restricting vehicles in, Park Street.

The RTA estimated that the project would cost $273 million, to be paid for by tunnel users, and that it would open in 2004.

1.2 The initial design – include the transformation of William Street

Following extensive consultation, there was general consensus to build a longer tunnel and further restrict William Street traffic. Exhibit 1.1 compares the original tunnel concept (1.1A), the longer tunnel (1.1B), and the final 'Long 80' design (1.1C).

Longer tunnel announced

In September 1999 the then Premier and the then Minister for Roads announced that the CCT's length was to double. The CCT was to run from Harbour Street in the west to the Kings Cross Tunnel in the east. An exit tunnel coming out at Sir John Young Crescent (SJYC) was added to reduce westbound William Street traffic going to City North and cross-Harbour. We refer to this as the SJYC exit tunnel. The final tunnel configuration including this exit tunnel is outlined in Exhibit 4.2 in Chapter 4.

The project was to take 51,000 cars a day off Central Business District (CBD) streets. It would turn William Street into a boulevard with only one through lane for general traffic (plus a transit, cycle and limited turning lanes) in each direction. A $2.50 toll each way ($1.10 for SJYC) (both in 1999 dollars) was to cover the increased project cost of $400 million.

In August 2000 the RTA released an EIS for the CCT. The EIS reduced the lanes available to general traffic on Druitt, Park and William Streets to make more space for pedestrians, cyclists and buses. The EIS did not otherwise alter traffic arrangements in Woolloomooloo or Kings Cross.

Immediate traffic restrictions

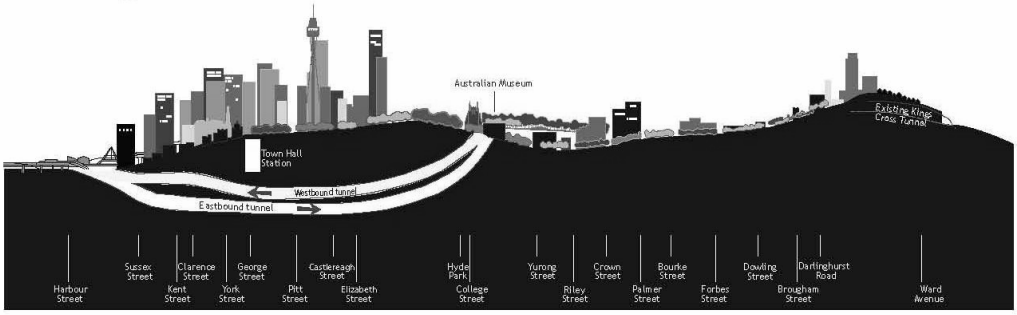
The DoP reviewed the EIS and approved the design. It required the immediate traffic changes upon the CCT's opening. Without such restrictions on surface traffic, there was a risk that the CCT would add to vehicle numbers and worsen congestion in Central Sydney.

The DoP also required:

- Local Area Traffic Management (LATM) measures in Paddington
- the inclusion of public domain improvement (e.g. Hyde Park development and William Street urban design and landscaping).

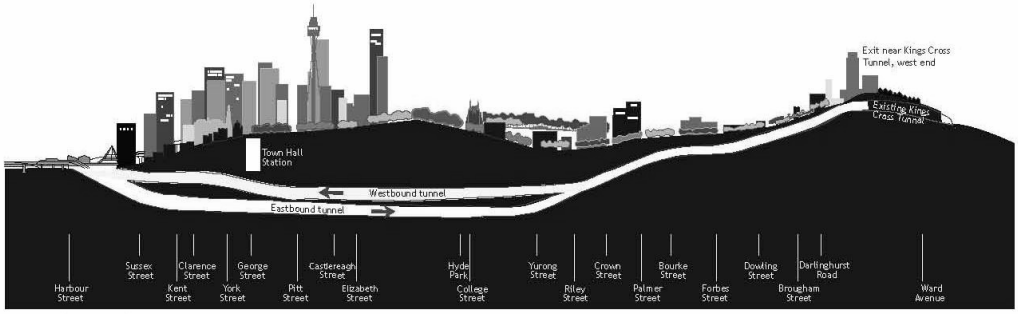
Exhibit 1.1: Three tunnel designs compared

A. 1998 Original short tunnel



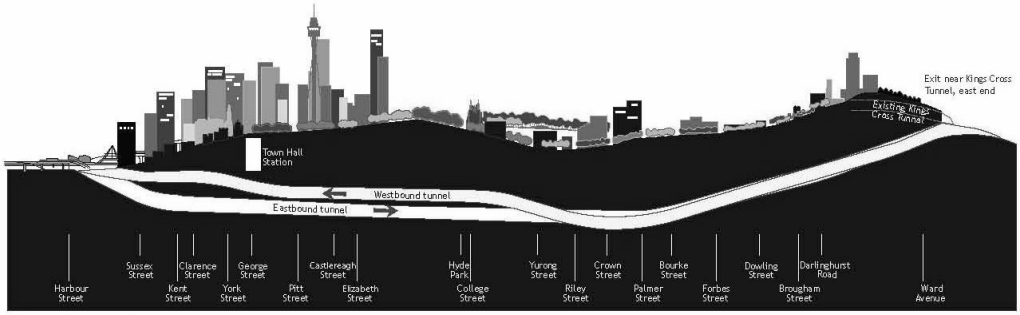
Length: 1.2 km
Tunnel cost: $273m
Base toll: $2.00

B. 2000 Put to tender tunnel



Length: 1.8 km
Tunnel cost: $400m
Base toll: $2.50

C. 2002 Winning tunnel: the Long 80



Length: 2.1 km
Tunnel cost: $680m
Base toll: $2.65
Toll at opening: $3.56

Not to scale
Base toll = charge per car in 1999 prices
Toll at opening: actual toll charged for cars in the main tunnel after escalation of the base toll

Source: based on *Cross City Tunnel Supplementary EIS*, RTA

1.3 The tendering process

The Government has promoted Public Private Partnerships (PPPs) as a means of providing large infrastructure projects, including the CCT, without incurring public debt.

The RTA invited the private sector to register interest in financing, constructing and operating the CCT. Eight consortia responded and the RTA asked three of these to submit detailed proposals.

CCM selected preferred tenderer

In February 2002 the CrossCity Motorway Pty Ltd (CCM) was announced as the preferred proponent. CCM is a private consortium with three major shareholders: Bilfinger Berger BOT, Cheung Kong Infrastructure and clients of Deutsche Asset Management. The cost of the CCT is approximately $680 million funded by user-pays tolls. This cost is for development, design, construction, fitout and commissioning. The total cost funded by CCM (including financing costs) is just over $1.0 billion. CCM will operate the tunnel for 30 years until 2035 when it transfers to public ownership.

1.4 The final design - transform Kings Cross and Woolloomooloo too

Non conforming bid chosen

The RTA selected a non-conforming 'Long 80' bid from CCM because it 'clearly represents better value for money than the proposals submitted by other Proponents'.

The 'Long 80' proposal was for a longer and deeper tunnel than the approved EIS design. It could be built without digging up William Street. This avoided the expected major disruption to traffic, business and the community during the three-year construction period. The 'Long 80' design also allowed a vehicle speed of 80 kilometres per hour (km/h), hence its name.

In addition the proposal provided the best financial outcome for the Government with an upfront payment offer to the RTA of $100.1 million.

The 'Long 80' design (see Exhibit 1.1C) differed from the approved EIS design in the following ways:

- increased tunnel length from 1.8 km to 2.1 km
- increased tunnel depth allowed 80 km/h travelling speed
- changes to the horizontal and vertical alignment
- changes to the connection to the Market Street viaduct
- changes to the connection to the Eastern Distributor and associated access changes to William and Palmer Streets
- new ramp connection from Ward Avenue providing access to Nield Avenue
- reduction of the Kings Cross land bridge from 30 metres to 6 metres
- changes to traffic connections in Woolloomooloo, including loss of direct access from Cowper Wharf Roadway to the Domain Tunnel.

CCM proposal required new approval

A Supplementary EIS was then prepared on the 'Long 80' option and other changes to the approved project. It was on public display for four weeks up to 31 August 2002. As a result of representations from stakeholders, the RTA:

- partially restored access to the Harbour crossings and City North from Cowper Wharf Roadway for local residents
- further restricted surface roads to traffic travelling through Woolloomooloo and Kings Cross.

At the same time the RTA accepted CCM's proposal to carry out about $75 million worth of additional work (discussed in Chapter 2) in return for more revenue by increasing the annual escalation of the toll.

The project deed was executed in December 2002.

1.5 Tunnel construction and operations

In December 2004 the contract was amended to allow CCM to increase the base toll by 15 cents to fund a further $35 million of additional project costs.

Public criticism when tunnel opened

The opening of the tunnel in August 2005 was accompanied by unanticipated public criticism. It centred on the cost of the toll ($3.56 main tunnel and $1.68 for the SJYC exit) and the extent and impact of road alterations. The daily CCT patronage in the first weeks of fewer than 20,000 vehicles was a fraction of the 70,000 vehicles a day forecast by CCM.

In October 2005 CCM announced a toll-free period. Also, the Premier commissioned the Infrastructure Implementation Group in his Department to report on motorways (the Richmond Report).

Nile Inquiry

In December 2005 the Parliamentary Inquiry into the Cross City Tunnel chaired by Reverend the Hon. Fred Nile commenced.

In March 2006 CCM announced that the toll would be halved for an indefinite period. At the same time, the Government reversed a small number of road changes (mainly relating to bus lanes in the CBD).

A summary of the chronology of the CCT is in Appendix 3.

2. Was the upfront payment a legitimate reimbursement of expenditure?

At a glance

The legitimacy of the upfront payment from the successful bidder to the RTA has been widely questioned. However, we found that the upfront payment was legitimate and was an explicit part of the bidding process. Its key strength was that it made it easy to compare bids, but its key weakness was the risk of increasing the toll.

We consider that the risks of this approach should have been explicitly notified and discussed at an appropriately senior level of government. That discussion should have canvassed how to handle any amounts above project development costs and what delivering the project at 'no net cost to government' meant.

The RTA's view is that it was expected to deliver the project at no cost to government and this meant no cost to its own capital budget. It achieved this by passing on all costs to motorists through higher tolls. The costs included public domain improvements not directly related to the tunnel.

CCM offered the RTA an upfront payment of $100.1 million for the winning bid. The offer comprised a Development Fee of $54 million (for the RTA's initial estimate of its project development costs), and a Business Consideration Fee (BCF) of $46.1 million.

We found that:

- the RTA sought an upfront payment in other recent projects, but this was the first project where the upfront payment included a BCF, that is an amount to be paid on top of the RTA's estimated development costs
- the upfront payment was a point of competition between bidders and therefore was a decisive criterion in the assessment of bids
- other aspects, including affordability of the tolls for motorists and how achievable the patronage projections were, received less attention than the upfront payment
- CCM's bids offered the only positive upfront payments: other proponents instead sought a payment from the RTA
- the RTA faced costs of $110 million beyond what it thought could be covered from the $97 million upfront payment. It financed $75 million by negotiating a deal with CCM, which changed the way the toll escalates. It financed a further $35 million by another deal that increased the base toll by 15 cents.

2.1 Is seeking upfront payments an unusual practice?

In NSW, the practice of seeking upfront payments from proponents has been a common feature of recent privately financed road infrastructure projects.

GOOD PRACTICE

The Eastern Distributor was an earlier example of privately financed infrastructure that used a form of upfront payment. Our Performance Audit report on it made some criticisms of the bidding process used. We note that the RTA has implemented a number of the recommendations in that report, including establishing internal financial modelling expertise, requiring proponents to fully disclose their financial models, and having a Treasury representative on the tender Review Panel.

The bidding model used in the three latest projects (see Exhibit 2.1) 'auctions' the concession to build and run the toll road. The upfront payment offered was the 'bid' at these auctions. Other factors being equal, the highest bidder will win the tender.

Exhibit 2.1: Upfront payments in recent road infrastructure projects			
Project	**Cost of project* ($ million)**	**Year opened**	**Upfront payment ($ million)**
Cross City Tunnel	680	2005	97
Westlink M7	1,540	2005	194
Lane Cove Tunnel	1,142	2007	79

**Note costs include development, design, construction, fitout and commissioning only.*

Source: Audit Office research.

The upfront payments for the Westlink M7 and the Lane Cove Tunnel projects have included a Development Fee to cover the RTA's estimated project development costs.

The upfront payment for the CCT project included an additional component, a 'Business Consideration Fee', that the RTA used for the first time in a privately financed project. This is a fee payable by the proponent to the RTA for the right to operate the business. It represents the amount each proponent was prepared to pay the RTA for the perceived value of the project.

Concession fee not required in future

The RTA advised that it will not seek a Business Consideration Fee in future projects as a result of lessons learnt from the CCT. We agree with this new direction which was a key recommendation in the Richmond Report. The reason for this change in approach will become evident later in this chapter.

2.2 Was the upfront payment a decisive criterion in the assessment of the bids?

The upfront payment was a decisive criterion in the assessment of bids, but not the only criterion. CCM's winning bid offered the RTA the highest upfront payment. The evaluation process focused more on the upfront payment than on achieving the lowest toll for motorists. It did not sufficiently scrutinise the underlying patronage projections.

This bidding model for this infrastructure project contained significant risks. But the model was not put to the Budget Committee of Cabinet.

We now examine the bidding and tender assessment processes in more detail.

The Request for Proposals (RFP) for the CCT project indicated to proponents that:

- a maximum base toll level of $2.50 would be levied on all vehicles, but a lower toll, or different tolls for heavy and light vehicles, would be considered
- the toll would be adjusted according to inflation (i.e. the CPI increase was the toll escalation formula)
- the combined construction and operation period would be about 30 years (i.e. the 'concession period').

However, the RFP also indicated that:

- proponents could offer options based on a zero Business Consideration Fee if the option minimised the combined construction and operating term
- the RTA's preference was to have proposals with a shorter concession period in preference to higher Business Consideration Fees
- proponents could submit proposals and options or alternatives to the approved or reference project (i.e. non-conforming proposals).

This model was expected to make the evaluation of tenders less complex, more transparent and more efficient.

The RTA selected three of the eight proponents to submit detailed proposals. Each proponent submitted a proposal that conformed to the reference project. Most also submitted several non-conforming proposals. As said above, the RFP allowed this. Non-conforming proposals included changes to the design, construction, operation and/or financing options.

CCM offered highest upfront payment and won

The RTA selected nine proposals from the three proponents. These nine were considered throughout the evaluation process. Each of these proposals was based on the $2.50 maximum toll and 30 year concession term. Proposals other than these nine, which suggested alternative tolls and concession terms, were ruled out earlier as not feasible. The result was that the evaluation process focused largely on the upfront payment. A viable proposal that had the highest upfront payment was difficult to reject. Therefore, the upfront payment was a decisive criterion in the evaluation of bids. This gave a clear result in favour of CCM's non-conforming bid which offered the highest upfront payment.

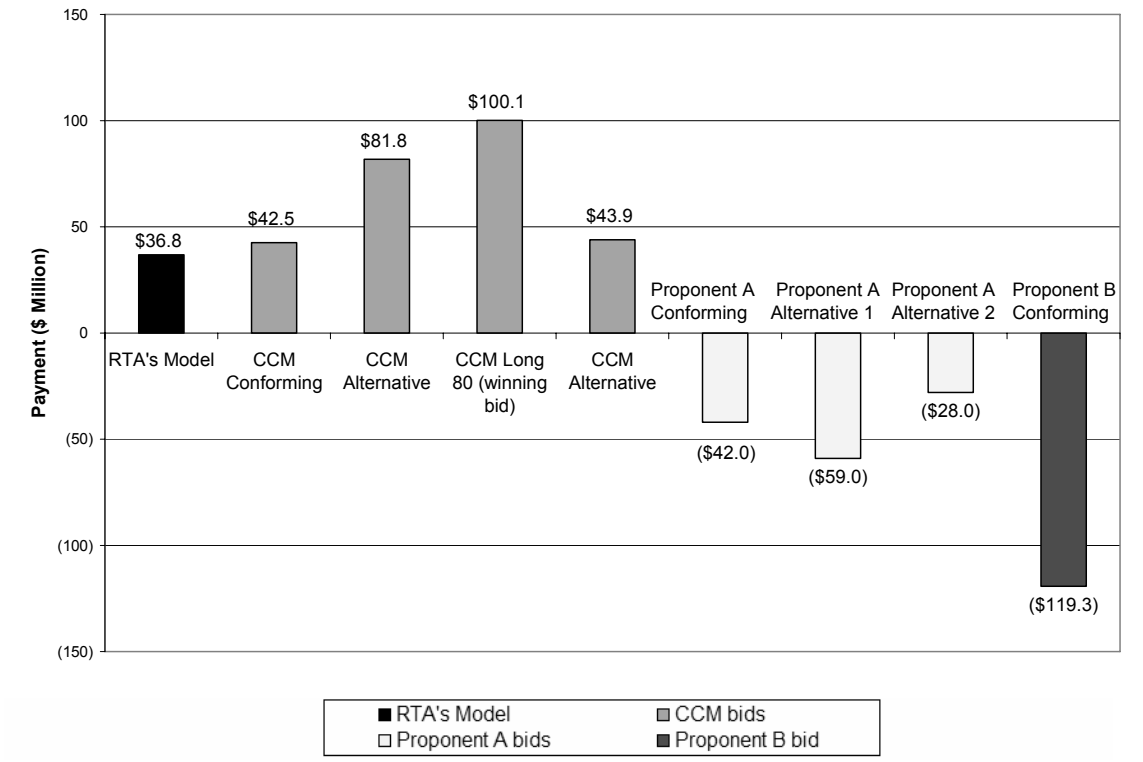
The advantage of this tendering process (once the bids proposing different tolls or concession terms were ruled out) was that it made it easy to compare the bids. The weakness was the risk of pushing up the toll. We consider that the risks of this approach should have been explicitly notified and discussed at an appropriately senior level of government. That discussion should also have included consideration of what to do with the Business Consideration Fee component of the upfront payment. This is examined further in Section 2.5.

Bids assessed against the Public Sector Comparator

The RTA compared all the detailed proposals to the 'Public Sector Comparator' (PSC). This estimated the cost of the Government undertaking the project itself. The PSC assumes that the RTA would undertake the project on equivalent conditions to the private sector. It represents the most efficient form of public procurement.

Exhibit 2.2 compares the upfront payment offered by each of the three bidders for their short-listed proposals and to the RTA's benchmark (i.e. the PSC).

Exhibit 2.2: Upfront payments for detailed proposals compared



Source: Cross City Tunnel Evaluation of Proposals 2002. Note: these upfront payments include any Business Consideration Fee offered.

This Exhibit shows that:

- based on the PSC, the RTA would have only recovered $36.8 million of the $54 million Development Fee
- CCM's conforming bid offered $42.5 million towards the Development Fee and did not include a Business Consideration Fee
- Proponents A and B required contributions from the RTA of $42.0 million and $119.3 million for their respective conforming bids
- of all the options submitted, CCM offered the highest upfront payment of $100.1 million for its winning bid (non-conforming 'Long 80' option). This represented $54 million for the Development Fee and $46.1 million for a Business Consideration Fee
- there was no alternative to the CCM proposals that would have delivered the project at 'no net cost to government'. The Government would have had to cancel the project or contribute to it, either to the RTA or to a private sector developer.

Other criteria used in bids assessment

In addition to comparing all bids to the PSC, the RTA assessed all bids against a range of evaluation criteria, summarised below. The RTA gave a weighting to each criterion according to its importance before receiving the bids.

The key evaluation criteria used in the assessment of bids included:

- appropriate structure, the strongest parent or related company support and the most secure financial capacity
- certainty of delivery of new infrastructure which is fit for its intended purpose
- certainty of delivery of the prescribed environmental outcomes both during the construction and operation phases of the Project
- certainty of delivery of the prescribed road user requirements, including the minimisation of disruption to traffic
- value for money at the end of the term
- value for money in terms of timely completion and early delivery
- preservation of existing access during project delivery
- delivery of workplace initiatives including safety, training and industrial relations
- expertise and experience in similar projects
- value for money in respect of risk to government including the RTA
- financial outcomes for government including the RTA.

Assessment focused on upfront payment

However, we noted that the financial evaluation of bids focused largely on the upfront payment, with maintaining the maximum payment to the RTA the overriding concern. This is highlighted in the following extract from the report on the financial evaluation of bids. Value for money for motorists - achieving the lowest toll - was of less concern.

The report noted that:

> … the Evaluation Team have identified three mechanisms which may result in an increase in the amount paid to RTA … The mechanism most likely to generate a material improvement in the amount payable to RTA is a minor adjustment to base tolls … As an example, it is estimated that, in the case of the recommended Preferred Proposal, adjustment of heavy vehicles (to be double the toll for cars) would increase payments to RTA by an amount in the order of $40M … Similar analysis for CCM's conforming design Proposals indicate that an increase in the toll for cars of $0.25 (east/west) and $0.40 (SJYC) would increase payments to RTA by an amount in the order of $56M.

Also, the ex-Premier stated at the Nile Inquiry that '… three bids and two of them require the taxpayer to put in money and one of them says "no", you go for the bid that offers the best deal for the taxpayer'. This reinforces the earlier point made about the upfront payment being a decisive criterion. Having offered the highest upfront payment gave a clear result in favour of CCM.

Victoria uses lowest toll as point of competition

The Victorian model used for some privately financed projects, such as the new East Link tollway project, has the toll level as the point of competition in the bidding process. This makes value for money for motorists, not the size of the upfront payment, the decisive criterion in the assessment process.

There is a close link between the capacity of a proponent to offer an upfront payment and the patronage projections underlying a proposal.

Patronage projections needed more scrutiny

As Exhibit 2.2 shows, two out of the three private sector bidders thought the project, as put to tender, was not financially viable without significant government funding. This should have prompted greater scrutiny and challenge of the patronage projections underlying CCM's bids, particularly its winning bid.

In fact, the differences in patronage projections between CCM and the two other bidders were so significant that the assessment panel should have seriously questioned the viability of all the CCM bids.

On the surface, the risk of over-estimating patronage appears to lie only with the bidder. We will analyse later how getting the patronage wrong impacts adversely on government and on tunnel users.

We compared the patronage projections for 2006 and 2016 for the short-listed conforming bids and the RTA's benchmark for the main tunnel, the SJYC exit tunnel, and the combination of both.

As Exhibit 2.3a shows:

- for 2006, CCM's patronage projections for the main tunnel were six per cent higher than the benchmark, ten per cent higher than proponent A, and 54 per cent higher than proponent B
- for 2016, at nearly ten years of operation, CCM's patronage projections for the main tunnel were ten per cent higher than the benchmark, 12 per cent higher than proponent A, and 33 per cent higher than proponent B.

Exhibit 2.3b shows that the patronage projections for the SJYC exit tunnel were even more divergent:

- for 2006, CCM's patronage projections were 40 per cent higher than the benchmark, 17 per cent higher than proponent A, and 41 per cent higher than proponent B
- for 2016, at nearly ten years of operation, CCM's patronage projections were 62 per cent higher than the benchmark, 32 per cent higher than proponent A, and 54 per cent higher than proponent B.

Exhibit 2.3a: Main tunnel. Comparison of patronage projections by the RTA and in the conforming bids

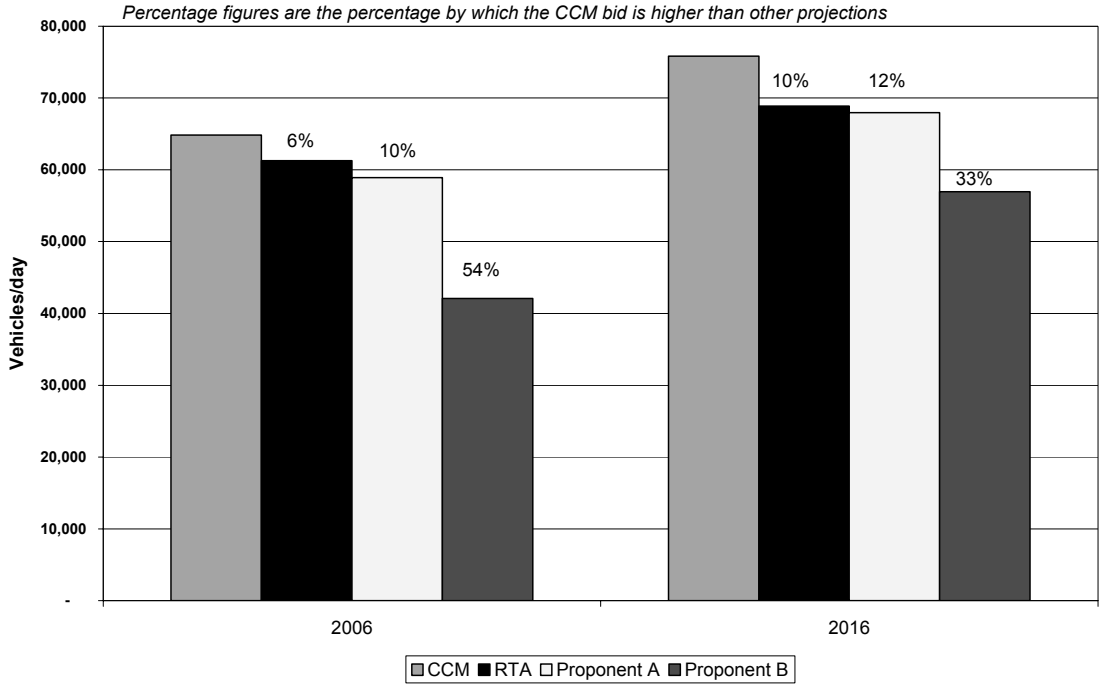
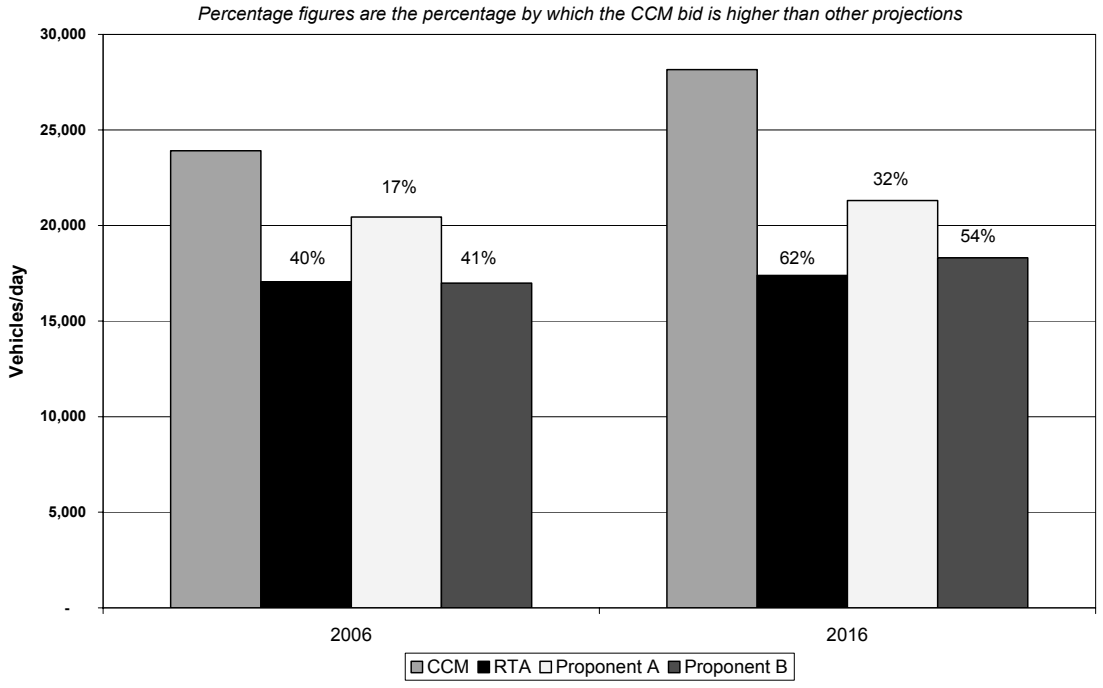


Exhibit 2.3b: Sir John Young Crescent Exit tunnel. Comparison of patronage projections by the RTA and in the conforming bids



Source: CCT Evaluation of Proposals report

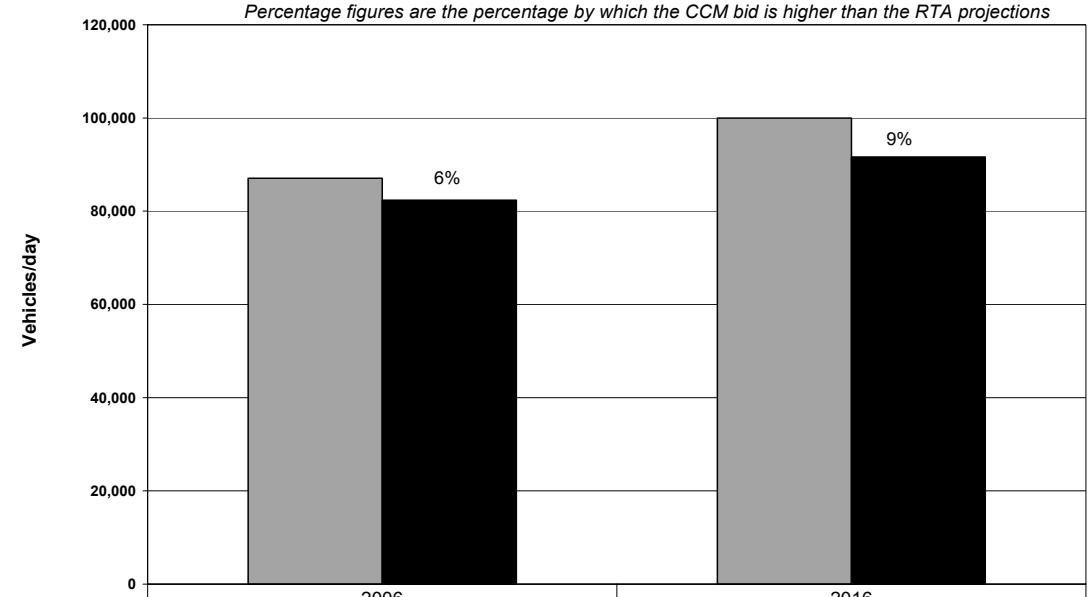
Adding the main and short exit tunnel projections, the differences for the conforming bids are larger. CCM's bid was:

- 13 per cent higher than the RTA benchmark for 2006, and 21 per cent higher for 2016
- 12 per cent higher than Proponent A for 2006, and 17 per cent higher for 2016
- 50 per cent higher than Proponent B for 2006, and 38 per cent higher for 2016.

Exhibit 2.4 compares CCM's patronage projections for its winning 'Long 80' bid to the RTA's revised projections for the longer tunnel:

- for 2006, CCM's figures were still six per cent higher than the RTA
- for 2016, CCM projections were still nine per cent higher than the RTA.

Exhibit 2.4: CCM's patronage projections for the 'Long 80' compared with the revised projections of the Public Sector Comparator – 2006 and 2016



	2006	2016
CCM Long 80	87,088	99,967
RTA	82,347	91,628

Source: Information provided by the RTA to the Audit Office

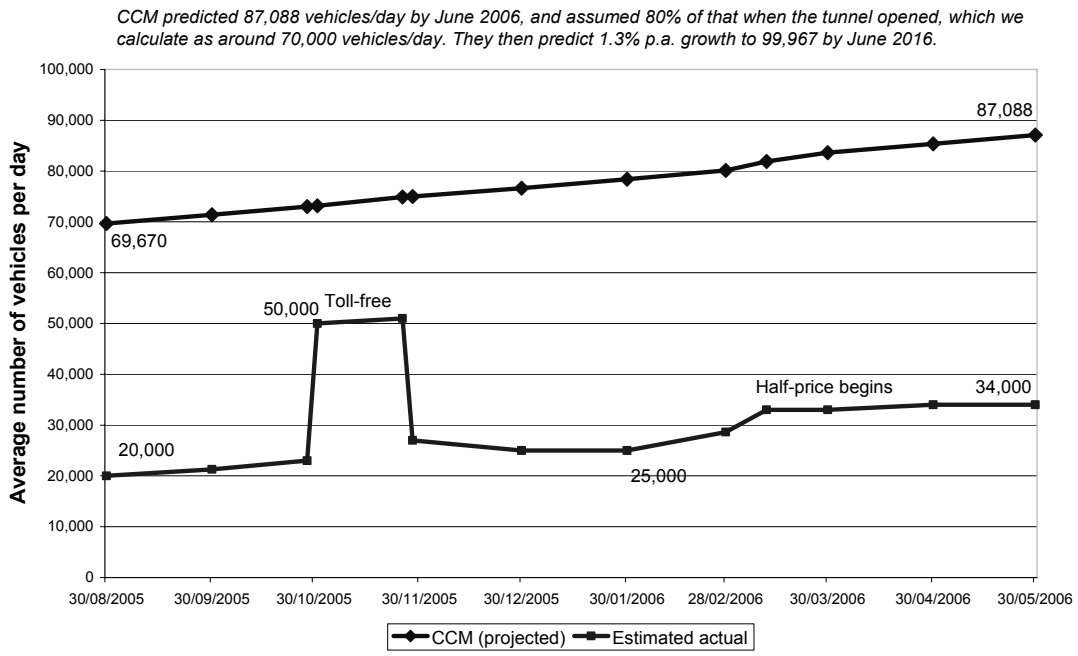
It is still early to judge the longer-term accuracy of projections. We show in Exhibit 2.5 that since the opening of the tunnel, an average of fewer than 25,000 vehicles per day have used the tunnel while the toll has been at full price. This is less than a third of CCM's forecast and of the patronage the RTA predicted.

All major transport projects go through a 'ramp-up period'. This is the time it takes potential users to get to know the routes, and make the decision to use the new project as their best alternative. It is commonly estimated as between 18 months and three years.

Exhibit 2.5 shows that even during the toll-free and half-price periods, the increase in patronage has been well below predictions. It appears that the reluctance to use the tunnel extends well beyond unfamiliarity, and indicates a pattern of resistance to using the CCT. Because of this, we do not think that the CCT is experiencing a standard ramp-up period.

The company could make further changes to the toll levels and the way it markets the project. These might lead to increases in traffic volumes.

Exhibit 2.5: Estimated actual patronage compared to CCM's projections – nine months



Source: Audit Office research. Information on CCM projected patronage obtained from RTA documents. Estimated actual patronage based on research plus CCM statements where available.

The approach taken in this type of privately financed projects is that the operator bears the patronage risk. That is, if fewer cars use the tunnel, CCM will make less money, but the Government will not lose any. This approach presents two significant risks to government.

Patronage projection affects road changes

First, the RTA's own projections are used in modelling traffic impacts and are therefore critical in deciding what road changes would be required. The fewer cars there are using the tunnel, the more will still be using the surface roads. So if the RTA's tunnel projections are too optimistic, and the road changes have gone ahead on this basis, there is a risk of congestion remaining on the surface roads.

Second, if CCM does not achieve its optimistic projections, its financial viability would be at risk. Under a worst case scenario the Government might need to step in to keep the tunnel open amid potentially significant traffic disruption. Also, CCM's projections influenced the RTA's revised projections for the 'Long 80' tunnel.

These are significant risks. We consider that there should have been more rigorous evaluation of the patronage projections, including those commissioned by the RTA. We discuss the impact of the patronage projections further in Chapter 4.

Recommendations

Treasury and the RTA should:

- review the bidding model used for PPP projects, including the CCT
- limit the upfront payment sought from the private sector to recovery of development costs, and abandon the option of a Business Consideration Fee
- make value for money for motorists an explicit objective of the assessment of bids for future tollway projects
- consider making the toll level the point of competition in the bidding process.

2.3 Was the basis for reimbursement of the RTA's expenditure clear in advance?

The basis for reimbursement of the RTA's development costs was specified to the bidders in advance and an estimate of $54 million given. However, the RTA had received no clear and explicit directions then (or since) on how to use the BCF. Nor were there any guidelines on how the RTA should handle project cost increases.

The RTA understood that the project was to be delivered at 'no net cost to government'. It saw seeking an upfront payment to recover at least its project development costs, as estimated at the time, as fundamental to achieving this objective.

The RTA estimated its development costs for the 'project concept' put to tender. This indicative figure of $54 million would be revised as the project scope was further refined, especially if a non-conforming proposal was selected.

Use of Business Consideration Fee not specified

The Business Consideration Fee was not specified in the invitation to bid, to create a point of competition in the bidding process, as discussed earlier.

The most specific guidance came in the then Treasurer's letter approving the project, although this refers only to the Development Fee.

> I note that there are a number of risks to the project's final cost outcome, including … RTA's ability to manage and control the costs it is required to fund out of the preferred proponent's Development Fee, including land acquisition and utility adjustments.

In particular, it was not made clear whether the RTA should use the Business Consideration Fee for any increase in its development costs, or other costs. Also, it was not clear how the RTA should deal with any surplus or deficit from this fee.

Recommendation

Treasury and the Budget Committee of Cabinet should develop guidelines for the use of any surplus in current or future upfront payments to recover agency costs. The guidelines should define points when an agency should seek directions from the Budget Committee of Cabinet if the payments are likely to be significantly different to what was anticipated.

2.4 Was payment to the RTA only reimbursement for costs incurred?

Upfront payment not only for the RTA's costs

The basis for the reimbursement of the RTA's expenditure was not intended to be only for costs incurred. The BCF was an amount to be paid on top of the Development Fee. However, as the development costs rose, there was little distinction made between the two fees.

The RTA accepted responsibility for significant cost increases later. To cover these costs, preserve the upfront payment, and avoid using its funds, the RTA negotiated two deals with CCM. The first deal changed the way the toll escalates and the second increased the base toll by 15 cents.

CCM offered $100.1 million upfront payment

CCM offered the RTA an upfront payment of $100.1 million for the winning bid (i.e. the non-conforming 'Long 80' option), as shown earlier in Exhibit 2.2. This payment comprised:

- a Development Fee of $54 million
- a BCF of $46.1 million.

The Development Fee was intended to reimburse the RTA for the cost of works connected with the tunnel. The RTA is using the total payment to cover its costs. Once all claims have been settled, the costs will exceed the upfront payment and no BCF will remain. See Section 3.3, Chapter 3.

Winning bid needed new approval

CCM's 'Long 80' proposal was selected as the preferred project. The Evaluation Panel concluded that this proposal best met the evaluation criteria and represented the best value for money. However the 'Long 80' differed significantly from the tunnel put to tender. As a result, a Supplementary EIS (or SEIS) and a modified Planning Minister's approval were considered necessary. These caused major changes to the project's scope and costs. In particular:

- the Department of Health required more stringent in-tunnel carbon monoxide standards
- representations and further modelling resulted in significant changes to the Domain connection between the CCT and the Eastern Distributor, Cowper Wharf Roadway connections and East Sydney traffic arrangements, as well as adjustments at the William Street ramp
- tunnel facilities required changes, particularly the signage
- infrastructure owners additional requirements (such as moving a power sub-station) became apparent
- additional community urban design treatments were required.

Toll escalation changed to cover added costs

These changes resulted in adjustments to the price of the tunnel, and affected projections of traffic patronage and of CCM's revenue. The total net value of resolving these post-Supplementary EIS issues was about $75 million. The RTA faced the prospect of a reduced upfront payment.

To keep the project on a 'no net cost to government' basis, the RTA negotiated a financial package with CCM. CCM carried out the $75 million worth of additional work in return for the application of a new toll escalation regime. This regime entitles CCM to minimum defined annual increases in tolls for a fixed portion of the term of the contract. See Exhibit 2.6.

Exhibit 2.6: Change to the toll escalation formula	
Pre SEIS process	**Post SEIS process**
Toll to increase by CPI	Toll to increase by: ▪ 4 per cent up to 2012 or CPI, whichever is the greater ▪ 3 per cent from 2012 to 2018 or CPI, whichever is the greater ▪ CPI thereafter

Source: Audit Office research

This action distorts inter-generational equity between tunnel users. If it was appropriate for tunnel users to fund these costs, this should have been done by changing the base tolls. Escalation factors should do no more than reflect underlying cost movements or inflation.

Base toll increased 15 cents

After the signing of the contract, the RTA identified additional work required for which it accepted responsibility. It estimated this work at $38.1 million. The RTA used $3.1 million of uncommitted funds from the upfront payment, and so needed an additional $35 million. After lengthy negotiations, CCM agreed to carry out the $35 million worth of changes. In return, the RTA allowed CCM to increase the base level toll by 15 cents for cars and 30 cents for heavy vehicles.

The contract was amended to reflect this change and this is commonly referred to as the First Amendment Deed. See Exhibit 2.7. We discuss this deed and the implications of the changes to both the toll escalation formula and the base level toll in some detail in Chapter 3.

Exhibit 2.7: Changes to the base level toll				
	Base toll at the signing of the contract December 2002		**Base toll after the First Amendment Deed December 2004 (retrospective change to 1999)**	
	Cars	**Heavy vehicles**	**Cars**	**Heavy vehicles**
Main tunnel	$2.50	$5.00	$2.65	$5.30
Short tunnel (SJYC exit)	$1.10	$2.20	$1.25	$2.50

Source: Audit Office research

The RTA passed on all added costs to motorists

These changes allowed the RTA to deliver the project at 'no net cost to government'. It did so by passing on all subsequent cost increases to the tunnel users, in the form of toll increases. It is clear that the RTA did not adequately consider using its forward capital budget to recover some of these costs, an option the Treasurer had suggested. The Treasurer was specific in how the RTA was to handle such cost increases.

The RTA could have used its own funds

On 14 March 2002 the then Treasurer wrote to the then Minister for Roads stating:

> A key objective of the project has been its development at no net cost to Government … I note that there are a number of risks to the project's final cost outcome, including … RTA's ability to manage and control the costs it is required to fund out of the Development Fee … It is not certain at this time that the project can achieve a 'no net cost to Government' outcome. If the project cannot proceed without a Government contribution, any such contribution would need to be funded out of the RTA's existing forward capital program.

The Executive Director, Private Projects and Asset Management, NSW Treasury further spelt out the meaning of 'no net cost to government' in evidence at the Nile Inquiry, viz:

> There is a bit of confusion about the no net cost to Government position. Treasury's position, which has been set out in writing in a number of documents, was that for this project there should be no net cost to Government, which meant that there should be no cost to other areas of Government. But if the RTA wished to put additional money into the project it was to come from within its own budget. At no time was the RTA advised not to do that. So it was an RTA decision whether it took money from its budget for this project or, indeed, from some other project that it was working on.

Despite this, the RTA has advised on several occasions that its understanding of 'no net cost to government' meant no net cost to the RTA. Our reading is that at this point the Treasurer anticipated project cost rises, and wanted the RTA to pay for them itself once the Development Fee had been exhausted.

Recommendation

For any future contracts, Treasury and the Budget Committee of Cabinet should clarify what 'no net cost to government' means, including whether agencies should use their capital budgets to cover any cost increases.

2.5 Was the reimbursement of the RTA's expenditure applied as intended?

How the reimbursement of the RTA's expenditure was intended to apply was not spelt out. There were no explicit directions on the use of the BCF, or any surplus or deficit from the upfront payment. This arose from not having the structure of the bidding model spelt out clearly and approved by the appropriate level of government. The intent to use the Development Fee of $54 million from the upfront payment for the RTA's development costs was clear from the start, although these costs were also not well defined.

Components of upfront payment used without distinction

The RTA used the upfront payment to recover its development costs and a small part of the subsequent cost increases. Once the cost increases exceeded the total upfront payment, the toll increased so the 'no net cost to government' position could be preserved. This action was endorsed by:

- the tender review and evaluation panels, the Minister for Roads, Treasury and the Treasurer for the $75 million increase resulting in the change to the toll escalation formula
- the Minister for Roads, Treasury and the Treasurer for the $35 million resulting in a 15 cents increase in the base toll level. The tender review and evaluation panels had been dismantled by this stage.

There were no clear and explicit directions given in advance on the use of the Business Consideration Fee. It had not been formally approved by the Budget Committee of Cabinet as part of the bidding model. On the three occasions that the CCT project went to the Budget Committee of Cabinet, we found no evidence that there was any specific presentation of the bidding structure, including no mention of the concept of an upfront payment or of a BCF. However, the Budget Committee of Cabinet was made aware in 2000 that a positive payment to government may be possible. But in practice, all the payment was needed to cover the development cost increases, so the RTA received no separate BCF.

For toll projects where the 'user-pays' principle generally applies, it is essential to have guidance on the treatment of cost increases, and effective monitoring and management of costs.

We noted that there was no definition or guidance on:

- what constitutes a development cost?
- which cost increases are necessary and directly attributable to the project?
- who pays for cost increases not directly related to the project?

In fact, both the $75 million and the $38.1 million cost increases captured significant public domain improvements. The Richmond Report also made this observation. We discuss this issue further in Chapter 3.

The RTA had no incentive to manage its costs

Irrespective of whether the cost increases related directly or indirectly to the CCT, effective monitoring and management of project costs is critical. The focus on protecting the financial offer and delivering the project at 'no net cost government' meant that all cost increases were passed on to motorists. We found no evidence of mismanagement of costs. But, our concern is that there was no strong incentive for the RTA to effectively manage its costs while it could pass them on to motorists.

It is also uncertain how future cost increases that are the responsibility of government will be dealt with.

First, costs may increase as a result of government policy changes. For example, if the Government required the tunnel to meet higher air quality standards, how would the Government pay for this? Under the structure of the deal, it might have been through further toll increases. Now that the Premier has accepted the Richmond Report recommendation to abandon 'the policy of motorway procurement at no cost to government', it is more likely that the Government would pay these costs.

Second, costs may increase as a result of open-ended conditions of approval. Some of the Conditions of Approval of the project are still unfinished. Their costs will presumably continue to increase, and it is not clear how they should be paid for.

Recommendations

- The RTA should establish clear definitions for project costs and its own development costs. These should have a set end date and be clear about what is within the direct scope of the project.
- The DoP, in conjunction with Treasury, should review the use of open-ended conditions of approval of projects in terms of impact on project costs and sources of funding.
- Treasury and the Budget Committee of Cabinet should consider direct funding of any public domain improvements.

2.6 How did the upfront payment influence the tolls?

The upfront payment influenced the tolls directly and indirectly at different stages of the project, as summarised below and highlighted in Exhibit 2.8.

The upfront payment added $100.1 million to the total cost of the transaction to CCM; other costs being for the design, construction, operation and maintenance of the CCT. This additional cost affected the toll directly and is reflected in CCM's proposed differential toll structure. See Exhibit 2.7.

The 'Business Consideration Fee' of $46.1 million in the $100.1 million offered, is particularly concerning. This fee increased the price of the transaction to CCM without this amount having any clear link to project costs. The toll would have been lower if the RTA had only asked for its $54 million estimated development costs.

Upfront payment added to operator's costs

Paying an upfront BCF is particularly onerous for the selected bidder. If it is paid before the cash flow from the project starts, it needs to be raised as capital or borrowed. If it is borrowed, the repayments will add significantly to the operator's costs. The motorist will eventually pay these costs as increased tolls.

Recommendations

Treasury and the RTA should:

- consider alternative funding methods for subsequent project cost increases, and ensure decisions are made with regards to motorists price sensitivity
- consider receiving upfront payments progressively as project development costs are incurred.

In Section 2.4 we discussed that the total net value of the expanded project scope from the Supplementary EIS was about $75 million. CCM agreed to fund these costs in return for an adjustment to the toll escalation regime.

Toll formula was changed to protect the upfront payment

Key factors that influenced the toll escalation formula at that stage included:

- the RTA's decision to protect the financial offer (upfront payment) and not use its capital expenditure budget

- the lack of definition of project costs meant that the $75 million included costs unrelated to the project, especially some public domain improvements.

We discuss the implications of the change to the escalation formula at that stage in some detail in Chapter 3.

The effect of the escalation on the tolls highlights the impact of the way 'no net cost to government' was applied. Many of the public domain improvements benefit others, not the motorists using the tunnel. These include bus commuters enjoying improved travel times, and pedestrians, tourists and cyclists enjoying the improved William Street 'boulevard'.

The upfront payment had an indirect influence on the base level toll increase.

The increase in the base level toll could have been lower than 15 cents if the RTA used more than $3.1 million from the upfront payment. In other words, the RTA could have funded more of the $35 million worth of works that CCM carried out.

The RTA could have funded increased costs and avoided toll increase

Again, the RTA could have funded the $35 million from its capital expenditure budget instead, to avoid all or some of the 15 cents increase in the base level toll. It chose not to. We discuss the implications of this toll increase, and what remained of the upfront payment, in some detail in Chapter 3.

Exhibit 2.8 summarises all the changes to the toll that have occurred during the project.

Exhibit 2.8: Changes to the toll at key stages compared to the original project concept

Toll component	Approved activity/ original project concept	CCM's 'Long 80' Tunnel option	Reason for change
Toll Structure	One toll for all vehicles	Differentiated toll structure for heavy and light vehicles. CCM proposal at the Preferred Proponent selection stage, Oct 2001	RFP allowed proposals with differentiated toll structure
Toll Escalation Formula	CPI adjusted toll escalation	A toll escalation formalised in the original contract in Dec 2002: greater of 4 per cent or CPI up to mid 2012, 3 per cent or CPI up to mid 2018, and CPI thereafter	To avoid the RTA paying an extra $75 million costs following the Supplementary EIS and associated additional Conditions of Approval
Base Toll Level	$2.50 for main tunnel $1.10 for exit at Sir John Young Crescent (SJYC)	Increase in base toll to: ▪ $2.65 (main tunnel) and $1.25 (SJYC) for light vehicles ▪ $5.30 (main tunnel) and $2.50 (SJYC) for heavy vehicles Agreed in the FAD	Allowed in return for CCM carrying out $35m of additional work identified for the RTA

Source: Audit Office research

CCT highlights important lessons

Changes to the toll have occurred as the scope and cost of the project increased over time, while the focus was on enhancing the financial transaction to the RTA and delivering the project at 'no net cost to government'. The development of the CCT project highlights two important issues.

First, there is a need for a clear definition of core project costs so that other public domain costs are not necessarily borne by the toll payers.

Second, the concept that Treasury has used for this and other recent privately financed projects is incompatible with a 'no net cost to government' approach. It is inevitable that project costs will change as the project develops. Imposing Conditions of Approval alone will always have a cost, and some of those costs will not be the responsibility of the successful tenderer. If the Government rules out absorbing such cost increases, there is no alternative but to allow changes to the 'fixed' elements of the contract. However, the integrity of the concept breaks down when any of these elements are changed. Changes happened twice in the CCT project: altering the escalation formula, and the First Amendment Deed allowing the 15 cents increase in base tolls.

2.7 Did the upfront payment change over the project development stages?

Interest rate changes reduced upfront payment

CCM's offer of a $100.1 million upfront payment to the RTA fell to just below $97 million by the time of the signing of the contract. This was mainly due to interest rate changes. This is an acceptable reason for such a change.

3. Were the contract variations in the amending deed appropriate?

At a glance

Soon after the tunnel opened, documents tabled in Parliament revealed that there had been an amendment to the contract that had not been made public. We examine whether the variations in this amending deed were reasonable and whether they were handled appropriately.

After the contract was signed, further changes to the CCT were necessary. The RTA accepted responsibility for the additional costs associated with these changes. CCM carried out $35 million of work on these changes for the RTA. The RTA compensated CCM by allowing an increase of 15 cents in the base toll of $2.50 (1999 prices). The change was formalised in the First Amendment Deed (FAD), signed in December 2004.

We consider that the variations in the amending deed were reasonable. The net present value of the 15 cents toll increase accurately reflected the $35 million of work carried out by CCM. But the 15 cents contributed to making an already expensive toll even more expensive. By 2018, the toll on the main tunnel will be about 35 per cent higher than originally planned.

The RTA obtained proper approval for the amending deed and instituted procedures to manage the works it covered. But the handling of the amending deed left room for improvement. For example, there is still no clear breakdown of the costs available publicly.

We found that:

- the RTA did not apply the 15 cents increase on a pro rata basis. The base toll for the main tunnel increased by 6.0 per cent, and for the shorter run (vehicles from the east exiting at SJYC) by 13.6 per cent
- this increase and the escalation formula change could have been avoided if the RTA had funded the cost increases rather than pass them on to the tunnel users.

The long-term effect on patronage of the toll increases is the big question. Any reduction in patronage can only make the likelihood of achieving the main objective, reducing surface traffic in the City, less achievable.

3.1 What was the Amending Deed about?

By December 2004, a set of changes to the CCT were required. The RTA accepted responsibility for the costs, totalling $38.1 million. Believing it was constrained by 'no net cost to government', the RTA negotiated a solution with CCM. CCM would carry out the bulk of the changes at their cost and the RTA would allow CCM to charge a higher toll. The RTA met the other $3.1 million from the upfront payment (as covered in Chapter 2).

Toll started 20 cents higher

The base toll of $2.50 in 1999 prices was increased by 15 cents (to $2.65 then) for cars, and by 30 cents for heavy vehicles. This higher base has also been subject to escalation of four per cent a year. So the toll at the time of the tunnel opening was approximately 20 cents, not 15 cents, higher for cars.

The RTA and CCM formalised this change in the First Amendment Deed (FAD), signed in December 2004. This is the only variation to the original contract.

3.2 Could the changes have been identified earlier, and who was responsible?

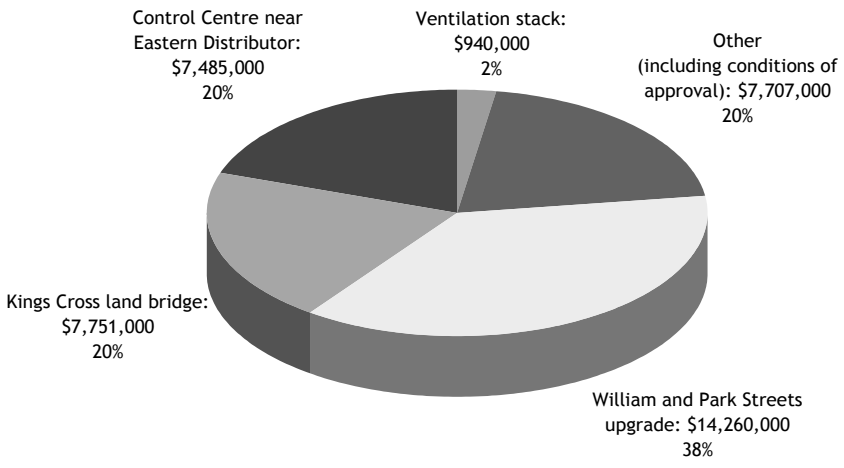
No clear explanation of the FAD

There has been no clear public summary about what was covered in the First Amendment Deed. The best explanation to date came in the RTA submission to the Nile Inquiry:

> The three main such changes related to the redevelopment of William and Park Streets, the extension of the land bridge at the eastern end of the Kings Cross Tunnel, and a requirement to change the Tunnel Control Centre for the Cross City Tunnel to ensure the capacity of the roof of the Eastern Distributor was sufficient to carry the Tunnel Control Centre.
>
> Source: RTA submission to the Nile Inquiry, page 5

Exhibit 3.1 gives a breakdown of the work covered by the $38.1 million based on documents from the RTA. The $38.1 million includes the $35 million covered in the First Amendment Deed, and $3.1 million that the RTA funded from the upfront payment.

Exhibit 3.1: First Amendment Deed funds by project



Source: RTA information provided to the Audit Office

The RTA was responsible

This shows that the three items cited by the RTA at the Nile Inquiry took the bulk of the funds ($29.5 million or 77.4 per cent of the total funds). Legal advice at the time indicated that the RTA was responsible for these items, not CCM. We next discuss the main components covered by the Amending Deed and the reasons for the changes.

Redevelopment of William and Park Streets

The redevelopment of William and Park Streets took 38 per cent of the $38.1 million. This is the final part of the 'Gateway Project' – taking the opportunity of the projected reduction of traffic on William Street to beautify and redevelop this street as a gateway approach to the CBD. This phase includes changes to parking arrangements, removal of a median strip, and widening of footpaths.

This redevelopment is the main example of 'public domain improvements' that the Richmond Report said should not be funded by the users of the CCT. It could not have been covered in the original contract, as it implements the results of consultations that the Minister for Urban Affairs and Planning's approval required be carried out after the contract was signed.

Continuing dispute about the cost

We note that at the time of writing, the cost of the redevelopment was far from settled. Ongoing negotiations between the RTA and CCM about two disputed items could see the cost increase by more than $20 million. See Exhibit 3.2.

Exhibit 3.2: Value of disputed work for William and Park Streets

Disputed item (All figures in $million)	RTA's estimate (at 20/1/06)	CCM's estimate (2 items, totalled)	Disputed amount
Park and William Streets - construction	$9.1	$30.6	$21.5

Source: RTA advice to the Audit Office, May 2006

It is not clear how the RTA would cover any further costs, except from a remaining amount from the upfront payment. In theory, the RTA could negotiate a Second Amendment Deed, and again pass the costs on to motorists using the CCT. The Premier has accepted the Richmond Report recommendation to abandon 'the policy of motorway procurement at no cost to Government'. So, if this cost does blow out, the RTA is more likely to request an additional budget allocation from Cabinet.

The extension of the Kings Cross Tunnel land bridge

The land bridge widened in response to community concerns

The land bridge is a landscaped strip over the eastern portal of both the CCT and the Kings Cross Tunnel. It took 20 per cent of the $38.1 million. It was originally designed to be 30 metres wide to reduce noise and improve local amenity. It was reduced to six metres wide in the Supplementary EIS. But it was extended to 40 metres wide following the Supplementary EIS stage in response to community concerns. Condition of Approval 166A required the RTA to do a detailed plan and consult further with the community. The costs reflect the change to a wider land bridge. The original contract did not include these costs because they arose from consultations after the Supplementary EIS and the signing of the contract.

This work is clearly the responsibility of the RTA.

Changes to the Tunnel Control Centre for the CCT

Work necessary for safety reasons

Changes to the Tunnel Control Centre for the CCT became necessary to ensure the roof of the Eastern Distributor could carry the weight of the Control Centre. These also took 20 per cent of the $38.1 million.

Earlier advice wrong

The RTA advised that Airport Motorway Limited (owner of the Eastern Distributor) provided 'incorrect information … regarding the load bearing capacity of the Eastern Distributor cut and cover roof'. This led to the redesign of the Tunnel Control Centre as two different buildings so as not to exceed load limits.

CCM was clearly not responsible for this change. While it appears that the RTA could have had grounds for an action to recover its additional expenses for this component, but legal advice did not support such action.

This change is also a later development which could not have been foreseen at the signing of the contract.

Other cost components covered by the Amendment Deed

Work on the tunnel ventilation stack, at just under one million dollars, was the next largest component. The Deed also included some costs for land acquisition. Most of the other costs came from complying with the Conditions of Approval arising from the Supplementary EIS. We have not examined these other costs in detail. Together, they took the remaining 22 per cent of the $38.1 million FAD funds.

Widening Anzac Bridge – not part of the Amendment Deed

There is a concern that the RTA charged the costs of widening the Anzac Bridge to the CCT. This was heightened by evidence to the Nile Inquiry from the then Chief Executive of CCM, Peter Sansom, suggesting that CCM did the widening work as a 'contra arrangement':

> That was a contra arrangement with the RTA undertaking works on Anzac Bridge and CCM undertaking and paying for all the works associated with change orders on the project.

The RTA paid for the Anzac Bridge work

The RTA advised that the wording Mr Sansom used in the Parliamentary Inquiry did not accurately reflect the First Amendment Deed. The RTA identified that the CCT could cause traffic to queue back about two kilometres from Anzac Bridge. So, the RTA increased Anzac Bridge's capacity by providing an additional westbound lane. The RTA advised that it funded and carried out this work. This was not part of the First Amendment Deed or otherwise funded by the CCT project. CCM did however work on another approach, the Western Distributor:

> The CCM provided an additional lane on the Western Distributor near Harris St at no cost to the RTA and without a change in tolls charged to users. This involved adjustments (value estimated at $1.68 million) to a bus crossover provision.
>
> RTA had initially considered funding the Anzac Bridge works from First Amendment Deed funds, however the capacity of the Anzac Bridge and its relationship with the broader road network had been the cause of the traffic issue, so the RTA formed the view that whilst this work was necessary it was not reasonably connected to the CCT project. It was considered inappropriate for tollway users to bear the cost of the Anzac Bridge works through increases to the toll.
>
> Source: Advice from the RTA to the Audit Office

GOOD PRACTICE

This is an example of the RTA drawing a boundary around the CCT project, and excluding work that was too remote from the project. It is also an example of the RTA funding further work from its capital expenditure budget.

3.3 Was increasing the toll the best option?

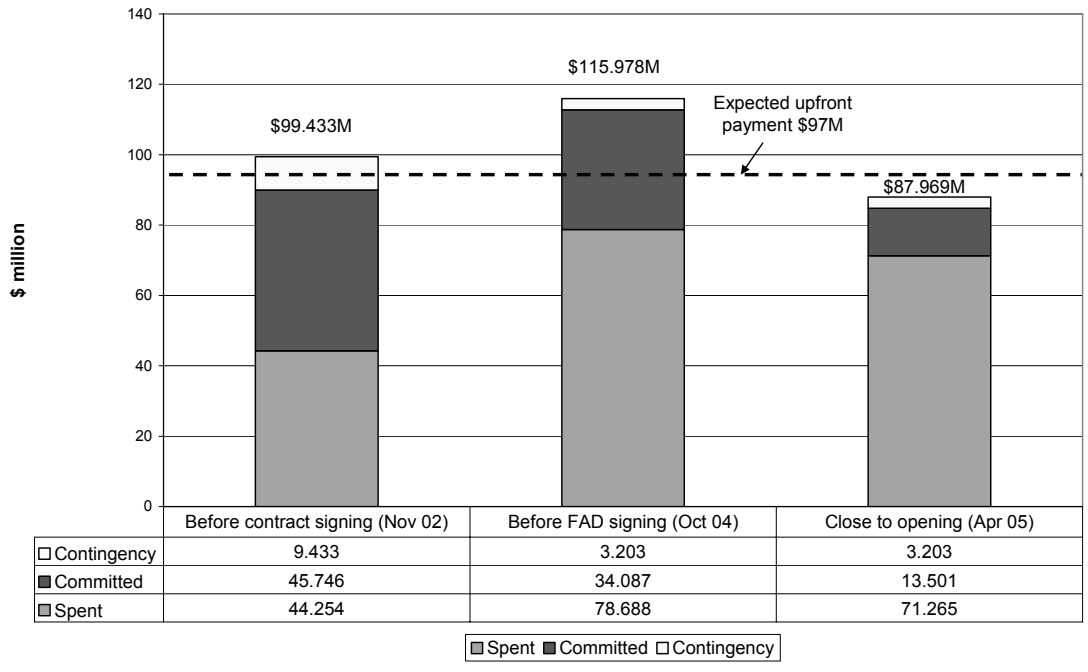
We are not convinced that increasing the toll was the best way to cover these cost increases. In our view, the RTA underestimated the likely reluctance of motorists to pay the extra amounts from both toll changes.

The information in the previous section makes it clear that there were legitimate cost increases which were the responsibility of the RTA totalling $38.1 million.

At the time of the First Amendment Deed, the RTA used $3.1 million from the upfront payment. The RTA applied it to the outstanding $38.1 million costs, leaving the balance of those costs totalling $35 million.

Exhibit 3.3 shows how the RTA expected to use the upfront payment at three key stages: the signing of the initial contract, the signing of the FAD, and just before the opening of the CCT.

Exhibit 3.3: Could the RTA have used more of the upfront payment to cover FAD costs?



	Before contract signing (Nov 02)	Before FAD signing (Oct 04)	Close to opening (Apr 05)
Contingency	9.433	3.203	3.203
Committed	45.746	34.087	13.501
Spent	44.254	78.688	71.265

Source: Advice from the RTA to the Audit Office, and Audit Office analysis

Exhibit 3.3 shows that at the signing of the contract, and the FAD stage, all of the upfront payment had been allocated – i.e. no BCF would remain. This Exhibit also shows about $9 million ($97 million minus $88 million) not allocated close to the tunnel opening in April 2005. The RTA advised that this $9 million will be used for unsettled claims. Clearly, the RTA could not have contributed more to the FAD costs from the upfront payment.

A clear choice: charge the motorists or pay itself

At the point of signing the FAD, the RTA faced a clear choice. It could pass these costs on to the motorists or pay them from its own capital budget. The RTA says the option of paying itself was not possible because its capital funds were fully committed to other projects.

In our view, the option of re-prioritising the RTA's own funds was possible. The Treasurer had clearly put it to the RTA in writing. If the RTA considered that this option would have delayed other vital projects, it might have gone back to government for new guidance.

It was in the interests of both the RTA and CCM to pass cost increases on to the motorists. CCM wanted to preserve the business case it had submitted. The RTA wanted to avoid cost to government, preserve as much of the upfront payment as it could, and not use its own funds. There was no one representing the tunnel users in these negotiations.

A key part of the patronage assumptions is the affordability of the toll. What will motorists pay to realise the benefits of the tunnel? By the time the tunnel opened, the toll had reached nearly $35 a week for a commuter using it in both directions. It is reasonable to assume that a significant proportion of potential users will have been put off. This may detract from the objective of removing traffic from the surface streets.

We saw no evidence that the RTA robustly assessed this risk. We also saw no evidence that the RTA reviewed the affordability of the toll as it made the two decisions to increase the toll.

Recommendation

The RTA should rigorously assess the affordability and public acceptability of any proposed tolls before setting or altering the tolls in future projects.

Is it simply 'user-pays'?

The decision to pass the costs on to the motorists can be seen as applying the 'user-pays' principle. However, this brings up the issue of which costs should be borne by the users which we discussed in Chapter 2. The Richmond Review recommended that 'urban domain improvements' should not be charged to such projects.

The redevelopment of William and Park Streets, and a number of the smaller items complying with the Conditions of Approval, are examples of desirable urban domain improvements.

However, at the time of the FAD being drawn up, this distinction was not made. All these elements were accepted as direct project costs.

Passing the charges on to the motorists to fund the further work necessary in 2004 required changes to one or other of the 'fixed' elements of the CCT contract. This could also have been funded by varying the escalation formula again, or by increasing the length of the concession period.

3.4 Did the added $35 million reflect the scope of the changes?

There could be more costs

Our review of documents indicates that $35 million was the amount required (after the RTA contribution) for the change orders, as best estimated at the time. We did not examine the costings of the various components as this was outside the scope of this audit. As noted previously, the Amendment Deed funds might not cover an unresolved dispute about the cost of the William and Park Streets works. This dispute has the potential to increase the cost of the changes well beyond the amount covered in the Deed.

3.5 Was 15 cents an appropriate toll increase?

Ernst & Young advised the RTA that the 15 cents base toll increase was an appropriate amount to offset the $35 million worth of works that CCM carried out. Independent financial analysis provided to us supports this. The Ernst & Young report notes that over the life of the project the 15 cents change equates to an increase of 5.6 per cent in toll revenues.

The $35 million is small in terms of the overall cost of the CCT project. In our view, however, the resulting 15 cents increase in the base toll impacted on the affordability and hence public acceptance of the tunnel, and was not applied equitably. These adverse effects were not explored fully. See Exhibit 3.4.

Exhibit 3.4: The 15 cents increase to the base toll

	Original base toll	After 15 cents added	Change (per cent)
Main tunnel - cars	$2.50	$2.65	6.0%
Sir John Young Crescent exit - cars	$1.10	$1.25	13.6%
Main tunnel - heavy vehicles	$5.00	$5.30	6.0%
Sir John Young Crescent exit - heavy vehicles	$2.20	$2.50	13.6%

Source: analysis by the Audit Office. All amounts in 1999 base terms.

Two things need to be noted about the 15 cents increase.

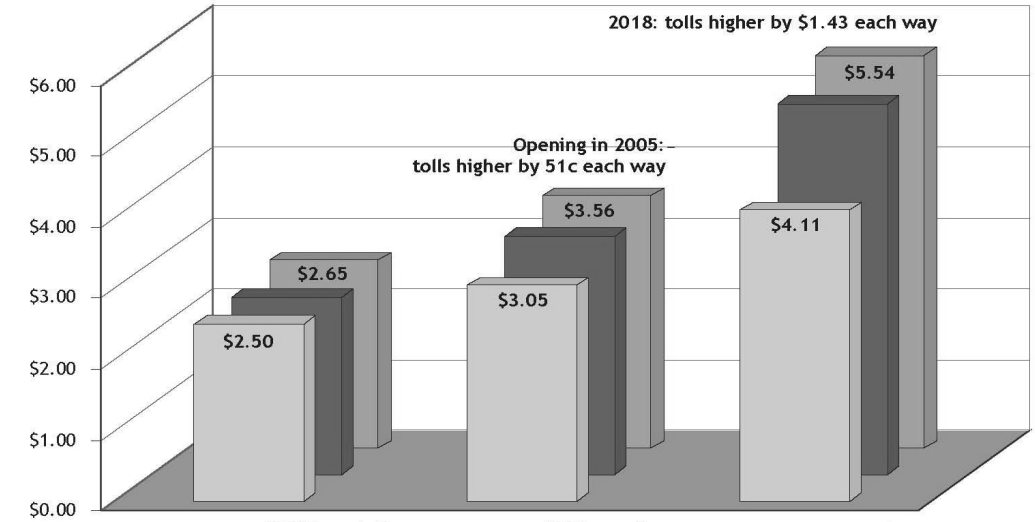
First, the base toll for heavy vehicles went up by 30 cents.

Shorter tunnel had higher percentage increase

Second, the base toll of $2.50 for the main tunnel increased by 6.0 per cent. The RTA applied the same increase to the toll on the shorter run (vehicles from the east exiting at SJYC). The toll changed from $1.10 to $1.25, an increase of 13.6 per cent. In our view, the RTA should have considered the impact of this on the attitudes of potential users, and also applied a pro rata increase to the main tunnel and the SJYC exit.

Exhibit 3.5 shows the continuing effect of the two changes to the tolling structure for the main tunnel. It assumes an average CPI increase to illustrate how the toll might have increased without the two changes agreed. The exact amounts shown clearly depend on this assumption.

Exhibit 3.5: How the toll for the CCT main tunnel goes up as a result of the two deals



	1998 base toll	2005 opening	2018: faster escalation ends
Original toll formula (CPI increase)	$2.50	$3.05	$4.11
New escalation formula (4% then 3%)	$2.50	$3.36	$5.23
First Amendment Deed (adds 15c to base toll)	$2.65	$3.56	$5.54

Projected tolls

Source: Advice from the RTA to the Audit Office, and Audit Office analysis

The escalation formula change has the biggest influence on the tolls. Increasing by a set 4 per cent a year for 12 years, then by a set 3 per cent a year for the next 6 years, would increase the toll by around $1.12 by 2018. Adding the 15 cents FAD increase to the base toll brings that up to around $1.43 each way. Together, these mean the toll would be 35 per cent higher than originally planned by 2018. The long-term effect on patronage of these increases is a significant issue.

The toll for heavy vehicles remains double the toll for cars shown in the exhibit. This may have a discouraging effect on the rate at which heavy vehicles use the tunnel.

The effects of the changes are more severe for the short tunnel (the exit via SJYC). See Exhibit 3.6.

Exhibit 3.6: Toll increases - short tunnel (exit at Sir John Young Crescent)

Period/Year	Original toll formula (CPI increase only*)	New escalation formula (4% then 3%)	Difference (escalation formula only)	15 cents increase in base toll (FAD)	$ Difference (both changes)	Per cent Increase (both changes)
Base toll (Sep. 1998)	$1.10	$1.10	$0.00	$1.25	$0.15	14%
CCT Opens (Sep. 2005)	$1.34	$1.48	$0.14	$1.68**	$0.34	25%
Future toll (June 2018)	$1.81	$2.30	$0.49	$2.61**	$0.80	44%

* Future CPI increases estimated based on the average CPI increase between 1998 and 2005

**The 15 cents base toll increase becomes a 20 cents increase by 2005, and a 31 cents increase by 2018 after the application of the new escalation formula.

Note: After 2018, the toll escalation goes back to CPI only, so the main effect of the two changes will have been felt by then.

Source: Advice from the RTA to the Audit Office, and Audit Office analysis

The increase in the planned toll (base toll plus CPI) for the short tunnel is 44 per cent by 2018. Motorists would be paying 80 cents more per journey through it.

First cashless toll road

The CCT opened as the first cashless toll road in Australia. Casual users paid $5.16 if they did not have an e-tag. This caused resentment and controversy, and was abandoned in October 2005 when CCM introduced the first toll-free period. Users without e-tags now pay the standard toll of $3.56 for the main tunnel.

Other Australian toll roads (especially CityLink in Melbourne and Sydney's M7) have clear and well-marketed ways for casual users to pay their tolls. It appears that there has been little or no work done since October to explain or promote ways for casual users to pay the CCT toll.

Continuing deterrent to use

Not having cash toll options appears to be a significant deterrent for motorists who might otherwise use the CCT. Some of these motorists told us that they did not use it because:

- they did not have an e-tag because they would not be regular users
- they did not know how to get a casual user pass
- they had not set up an e-tag account because they did not have a credit card.

The significant public resistance to using the tunnel is partly due to the level of the tolls. It can be argued that allowing both the escalation formula change and the FAD toll increase has heightened that resistance, and so may be a factor in reducing tunnel patronage.

Any reduction in patronage would make the likelihood of achieving the main objective, reducing surface road traffic in and around the City, less achievable.

The development, design and construction cost of the tunnel was around $680 million. The total cost of the tunnel on opening was over $1.0 billion. This is the amount paid by CCM. The two changes to the tolls were to avoid paying for two sets of cost increases, totalling $75 million and $35 million respectively. If the Government had contributed this $110 million directly, a construction cost increase of 16 per cent, rather than passed it on to the users, the tolls in 2018 could have been:

- up to one third lower for the main tunnel
- up to 44 per cent lower for the SJYC exit tunnel.

The Government has various options available to achieve the desired reductions in surface road traffic. For example, it could seek to lower the toll. It could also make the use of public transport more attractive.

Recommendation

Treasury and the RTA should develop guidelines for setting any future tolls equitably for all parts of toll roads, related to distance travelled and the cost of the project, including any cost increases.

3.6 Why was the amending deed not made public?

Room for improvement

The RTA obtained proper approval for the amending deed and instituted procedures to manage the works covered in the deed. But the handling of the amending deed is open to criticism. The RTA and CCM negotiated the deed after the probity mechanisms were dismantled. The deed was not made public, amidst lack of clarity about whether the RTA was required to publish a summary. The RTA was not required to table a summary of the FAD in Parliament, and so the FAD was not made public until Parliament demanded all the project documents. We expand on these concerns below.

The existence of the FAD was not made public until the second release of CCT documents to the Parliament in late 2005.

For all Public Private Partnership projects, the agency is required to prepare a contract summary, which is checked by the Auditor-General and then tabled in Parliament within 120 days of signing the contract. There is no similar requirement applying to any amendment of the substantive contract.

There was considerable delay in tabling the CCT contract summary - until February 2004.

Volume Four of the Auditor-General's 2005 Report to Parliament noted this delay in the tabling of the substantive CCT contract summary. It also recommended that any contract amendments be subject to similar summary and checking provisions as the substantive contract.

We understand that the Government has indicated that it will accept this recommendation, but has not yet acted on it.

We also have concerns about how the decisions around the FAD were made. There was no detailed cost itemisation available. Even now there is insufficient information publicly available in an understandable form.

Protective structures dismantled

The FAD was agreed after all the protective structures set up to ensure fairness around the contracting process had been dismantled. These structures included a probity auditor, and the evaluation and review panels. The FAD was effectively a negotiation between the two principal parties (the RTA and the CCM). The apparatus for cross-government oversight was no longer functioning. Our particular concern is that the tender evaluation and review panels, incorporating representatives from other government agencies, had been disbanded by this time.

Once the deal was agreed, the RTA sought government approval through a submission to its Minister. Once he approved it, the RTA obtained the Treasurer's consent on the basis of a submission. We are advised that this consent was sought on a short timeframe, which may not have allowed time for in-depth analysis of the issues. In particular, the alternative of using the RTA capital expenditure budget may not have been fully canvassed with all parties concerned.

Recommendations

Treasury and the Premier's Department should require agencies to:

- make any contract amendments subject to the same level of probity checks and scrutiny as the original contract process
- make any contract amendments, and their summaries, public in a timely manner
- keep the full tender evaluation and review panels involved in complex high risk projects until the project deed is signed, and re-convene them if amending deeds are needed.

4. Were the road changes based on a robust assessment?

At a glance

We examined the robustness and reasonableness of the RTA's decisions to change surface road conditions related to the CCT. A widely held view is that the road closures and changes are not necessary, but have been introduced to force motorists into the tunnel to profit the operator. In our view this was not the case.

We found that the main objective of the road changes was to reduce through traffic in and around Central Sydney and to improve the public domain. However, the financial viability of the tunnel, and the RTA's understanding of 'no net cost to government', did influence some important planning decisions as the project progressed.

High patronage estimates also influenced the road changes, and to date have not been met. It was believed that the emptier roads would immediately attract other cars. So, roads were restricted causing considerable congestion and resentment.

Maintaining toll-free alternative routes was a key principle in the original design. But road restrictions added progressively meant that, in the end, there were no direct, convenient toll-free alternatives left.

There was extensive consultation with stakeholders about the road changes. But it did not capture the significant resentment among prospective toll payers. Loss of patronage from this resentment will hinder the achievement of the tunnel's main objective of reducing through traffic in the City.

4.1 Who proposed the road changes?

The RTA developed 73 road changes for the CCT as the project progressed through the EIS and Supplementary EIS processes. In March 2006 the Government announced the reversal of six road changes, mainly for creating new bus lanes. By May 2006, 63 road changes have been completed, six reversed, and four were still pending. There is uncertainty over which reversals of road changes would trigger compensation to CCM.

The EIS allowed right turns from William Street into the three north-south roads through Woolloomooloo giving access to the Harbour crossings. All bidders built their business cases on these conditions. We explain below how these progressively altered as the project progressed.

The RTA proposed road changes

The RTA developed all of the 73 road changes as the tunnel's design evolved:

- first through the EIS process for the original tunnel design put to tender
- second through the Supplementary EIS for the final project design (i.e. CCM's alternative design, the non-conforming 'Long 80' tunnel).

CCM proposed one road change, closing the right turn from Cowper Wharf Roadway to the Harbour crossings. The DoP denied this request following community consultation. It considered that it would unnecessarily force motorists to use the CCT.

The role of the DoP was to validate the assessment of the likely environmental impacts from the proposed road changes. It also specified any mitigating measures required through the Conditions of Approval for the project.

The road changes fall into four categories of work, defined as follows:

- category A are permanent works to be constructed by CCM which may expose the RTA to Material Adverse Event (MAE) liability if removed
- category B are permanent works that CCM must design and construct, which would not expose the RTA to Material Adverse Event liability if removed
- category C are temporary traffic arrangements during construction of the tunnel
- category D are traffic arrangements that the RTA proposes to implement that are neither covered by the project deed nor the planning approval.

A Materially Adverse Event is a change brought on by the RTA that will cost CCM, as the operator, money. Exhibit 4.1 below summarises the status of road changes by category.

Exhibit 4.1: Status of road changes by category

Status (May 2006)	**Category of road changes**		
	A (MAE)	**Other (B, C, D)**	**Total**
Completed	22	41	63
Outstanding	0	4	4
Reversed	0	6	6
Total	22	51	73

Source: Based on information provided by the RTA in May 2006.

The project deed does not restrict the RTA's (or the Government's) statutory powers to manage, extend, upgrade or change the road transport network. However, category A road changes could trigger MAEs. Appendix 4 provides a brief description of each road change, which, if reversed, could create an MAE. It also shows the stage at which each MAE was introduced.

In the event of an MAE occurring, the project deed requires the RTA to negotiate with CCM in good faith. The negotiation would aim to restore CCM's financial position to what it would have been had the changes not happened. The compensation may mean a payment of money. However, the contract requires a flexible approach in negotiations. This could see the term of the concession or the tolling regime altered, instead of a direct compensation payout.

Uncertainty over reversal of road works

We found that there is uncertainty over which reversals of the other road changes would trigger compensation to CCM. There is also a lack of clarity about the extent of the Government's liability for changes to the project's Conditions of Approval.

Legal advice to the RTA states that reversal of any category B, C or D work would not necessarily incur any potential liability to provide MAE relief. However, the advice also notes that should any category B, C or D works be altered, MAE relief may be payable if the changes are inconsistent with the planning approval. The planning approval generally includes the EIS and the Supplementary EIS, and the associated Representations Reports and Conditions of Approval.

Peter Sansom (then CEO of CCM) said in his testimony at the recent Parliamentary Inquiry that CCM bid for the project on the basis of the road changes that resulted from the planning approval. He added that if the Government was to propose a reversal of road changes, CCM would seek legal and technical advice about the impacts. His answer covered changes to both MAEs and categories B, C, and D.

4.2 Were there stated objectives on changing road conditions?

Woolloomooloo not part of government's original intention

The DoP assessed proposed changes in road conditions against clear planning objectives for the project, which encompassed the broader Central Sydney area (see Exhibit 4.2). The focus on Central Sydney was a shift from *Action for Transport 2010* plan which saw the tunnel as part of improving life in the CBD only. The shift in focus from the CBD to Central Sydney was necessary as the tunnel concept design evolved through public consultation. This shift in focus was not well understood by the public.

Action for Transport 2010 envisaged one lane would be closed on William Street to enable pavement widening and landscaping work. The tunnel envisaged in this plan did not affect areas in Central Sydney such as Woolloomooloo.

Central Sydney includes Pyrmont, Ultimo, Chippendale, Surry Hills, Paddington, Kings Cross, Woolloomooloo and Rushcutter's Bay, as well as the CBD. See Exhibit 4.2.

Exhibit 4.2 The CBD is only part of 'Central Sydney'

Source: based on *Cross City Tunnel EIS* map, RTA

The tunnel concept grew from a CBD focus to a broader area that encompassed parts of Central Sydney as a result of community consultation. A central criticism of the original short 'Museum' tunnel (refer to Exhibit 1.1A) put on public display was that the project would not achieve a long-term vision of improving William Street. The Sydney City Council put this view strongly.

Community pressure to extend tunnel

Another critic, the Member for Bligh, said in a 1999 media release:

> The Government's short-sighted tunnel proposal will destroy the long-term vision for a pedestrian-friendly William Street boulevard linking the city with the important tourist destinations of Kings Cross and acting as a gateway to the eastern suburbs … Any attempt to beautify William Street is a waste of time unless traffic is removed by a tunnel and height restrictions are imposed for developments to prevent overshadowing and loss of views to Sydney and the Harbour … Extending the tunnel under William Street will avoid the need for additional ugly tunnel portals next to the Australian Museum, with traffic from the eastern suburbs entering and exiting the tunnel from the existing Kings Cross Tunnel.

In response to public comments, the Government decided to extend the original tunnel concept to the end of William Street, on the western side of the Kings Cross Tunnel. It also decided to add a short exit tunnel coming out at SJYC in Woolloomooloo. The planning objectives for this longer tunnel reflected this expansion of the tunnel concept into Central Sydney area. It appears that this was not well understood by the public. See Exhibit 1.1B in Chapter 1.

The primary and secondary planning objectives for the project reflected community input. They were consistent throughout the EIS and Supplementary EIS. These were:

Primary objectives

- to improve the environmental quality of Central Sydney
- to improve ease of access and reliability of travel within Central Sydney
- to improve the reliability and efficiency of travel between areas to east and west of **Central Sydney**.

Secondary objectives

- to identify and enhance the potential beneficial effects and to identify and manage potential adverse environmental impacts
- to achieve acceptable economic and financial outcomes.

Additional objectives

Additional objectives to those listed above were introduced at the Supplementary EIS for CCM's 'Long 80' proposal. Some aspects of this proposal differed from the reference project that had been approved (the Approved Activity) at the EIS stage, and put to tender. The Supplementary EIS assessed and quantified the benefits and impacts of only the proposed modifications to the Approved Activity. The planning objectives of the modifications were:

- to enhance the environmental and transport-related benefits of the Approved Activity
- to reduce the construction impacts of the Approved Activity
- to maintain acceptable economic and financial outcomes.

Discouraging surface traffic, reallocating surface road space and improving public space were clearly fundamental to the development and approval of the project. These flowed from long-standing government aims, more than from any desire to make the tunnel profitable. The CCT was therefore used as part of a larger plan to improve Central Sydney.

Changes to reduce (and prevent CCT attracting more) traffic in the central east-west corridor were integral to the initial concept and its implementation by the RTA and acceptance by the DoP. Of the 73 road changes:

- 10 related to tunnel openings onto surface roads, and
- 33 reallocated road space to pedestrians, cyclists and public transport along the central William, Park, and Druitt Street corridor.

Eighteen of these 43 (10 plus 33) changes were developed after approval of the original design.

The financial viability of the tunnel, and the RTA's interpretation of 'no net cost to government', did however influence some important planning decisions. We discuss this in Section 4.5.

4.3 Who proposed the changes after the release of the Conditions of Approval?

About 60% of changes stemmed from CCM design

Changes to surface roads were developed as the tunnel's design evolved. A total of 73 road changes were eventually approved in response to the EIS and Supplementary EIS. Twenty-eight changes resulted from the EIS process for the initially approved design. A further 45 changes were introduced on accepting CCM's 'Long 80'. Of these 45 changes, nine were new MAEs. They were all proposed by the RTA.

The RTA proposed the road changes based on assumptions of high traffic volumes using the tunnel. The DoP accepted the proposals because of concerns about 'induced traffic' effects if so many cars used the tunnel. Induced traffic means if the surface streets became relatively empty, they would attract new drivers to use them to get into the City.

The surface roads would only become relatively empty once large numbers of vehicles start using the tunnel. If the assumptions are wrong, fewer vehicles will be using the tunnel and more than anticipated will still be using the surface streets.

In view of the high traffic volume estimates for the tunnel, the RTA and the DoP decided that road restrictions (beyond those originally planned for the central corridor of William, Park and Druitt Streets) would be necessary from the outset. This was because the agencies believed that there would be a significant immediate reduction in surface traffic, which would immediately attract more cars, and hence the benefits of reduced congestion would be lost.

If there was greater emphasis placed on expanding, improving and marketing public transport from the opening of the CCT, the threat of attracting new road traffic would be less. Enhancement of public transport may involve some further road changes.

The RTA developed the road changes in response to the EIS and the Supplementary EIS. It aimed to integrate the tunnel with the road network and benefit the environment and transport within Central Sydney. CCM requested one change which was denied, as discussed earlier. Exhibit 4.3 summarises the road changes introduced at the EIS and the Supplementary EIS stages.

Exhibit 4.3: Road changes introduced at the EIS and SEIS stages

Stage at which road changes were initiated	**Category of road changes**		
	A (MAE)	**Other (B, C, D)**	**Total**
EIS process - initial approved design	13	15	28
SEIS process – 'Long 80' modified approved project	9	36	45
Total	22	51	73

Source: RTA advice to the Audit Office, December 2005

The 45 changes introduced as a result of the Supplementary EIS and the DoP revised Conditions of Approval were as follows:

- 3 related to changed tunnel portals (i.e. tunnel openings to surface roads)
- 15 related to the central Druitt, Park, William Street corridor (i.e. the central corridor)
- 27 affected surrounding surface streets particularly in Kings Cross and Woolloomooloo (i.e. approaches to the tunnel).

The DoP required a number of changes to traffic flow arrangements. These were influenced by the large traffic volume projections by CCM and the RTA for the 'Long 80' design.

Road changes based on traffic projections

The RTA proposed most of the restrictions on traffic from the east accessing the Harbour crossings and the Domain Tunnel at the Supplementary EIS stage. The Supplementary EIS report says this is 'due to increased traffic volumes forecast under the Modified Activity' (i.e. the 'Long 80' proposal). In other words, the DoP accepted the very high initial traffic forecasts in the CCM proposal and the RTA-commissioned patronage study.

The strategy behind the DoP Conditions of Approval was to restrict the use of roads from the east giving access to the Domain Tunnel and Sydney Harbour crossings. The RTA would implement these road changes immediately upon the opening of the tunnel. This was to make travel on alternative surface roads unattractive for motorists wishing to avoid the toll, and prevent any 'induced traffic' effects.

Perhaps this is an area which was not well understood by the public. The CCT project was used to improve amenity throughout Central Sydney. Its aim was to get motorists off surface streets and into the tunnel. The forecast number of vehicles that would use the tunnel was the critical factor in deciding the necessary road changes.

The RTA developed and implemented the road changes based on its revised forecast patronage for the longer tunnel. This forecast gave a picture of 82,347 vehicles a day using the tunnel in the first year, leaving the surface alternative routes relatively free. If this was correct, the logic of restricting roads to prevent the 'induced traffic' effects would also be correct.

Traffic overestimated

We estimate that the daily average usage of the CCT in the first six months of operation, when the toll was at full price, at less than 25,000 vehicles a day. See Exhibit 2.5 in Chapter 2. This means the RTA overestimated initial patronage by more than 300 per cent. However, traffic has increased to an average of 34,000 vehicles a day since the half-price toll period began in March 2006.

The patronage forecaster that the RTA commissioned was quoted in the press as saying 'we're out on this one'. He called the higher projections in the CCM bid 'pretty strong stuff'. The DoP relied on the RTA-commissioned study. A rival bidder said that the tendering model used in this project provided 'a perverse incentive to bid on high patronage'.

The RTA and the DoP did not robustly challenge the assumptions behind the patronage projections they used in deciding the road changes. The agencies considered patronage to be a commercial risk to be shouldered by the consortium.

Our audits of a series of projects over the years confirm that patronage projection is inexact at best, and can be critical to the success or failure of a project. See Exhibit 4.4.

Exhibit 4.4: Examples of early patronage projections and actual usage for road projects

Project	Patronage projection	Comments
Harbour Tunnel	Under-estimated initially	Continuing high demand now
M2 Motorway	Too high initially	Now at high capacity
Airport Rail Link	Far too optimistic	Company collapsed
M5 Motorway	Under-estimated initially	Continuing high demand now
Eastern Distributor	Too high initially	Now at high capacity
Liverpool to Parramatta Bus Transitway	Too high initially	Actual use still lower than forecast

Source: analysis by the Audit Office

This experience strongly suggests that taking a risk management approach to patronage projection would be prudent. This could involve requiring transport consultants to express their opinions as a clearly defined range of projected patronage outcomes. This could mean defining a minimum and maximum number of vehicles per day. Project approval would then assess the viability of the project, taking into account the range of patronage scenarios.

For the CCT, the RTA needed to more carefully consider the impact if traffic volumes were lower than predicted.

Recommendations

The RTA and any other agencies proposing or approving transport projects should exercise a high level of caution before relying on patronage projections. This should include:

- requiring transport consultants to express their opinions as a clearly defined range of likely patronage outcomes
- considering the impact of various patronage outcomes on a project's viability.

4.4 Was there a robust evaluation of each proposed road change?

No assurance of robust assessment

The RTA and the DoP assessed the road changes against the initial three broad objectives of the project. They assessed road changes that followed the Supplementary EIS against the expanded set of objectives. We cannot say that the road changes were robustly assessed, either collectively or on a road-by-road basis because:

- the patronage scenario was not robustly assessed, as discussed earlier
- ensuring the financial viability of the tunnel, and the RTA's interpretation of 'no net cost to government', affected important planning decisions.

We did not assess the evaluation for all 73 road changes, but selected a sample.

The RTA developed engineering and traffic solutions to integrate the CCT and the road network. It used an iterative and consultative process with CCM, the DoP, local government and residents. For example, as Exhibit 4.5 shows, the RTA assessed the changes related to Bourke Street against a range of criteria.

Exhibit 4.5: Criteria for later changes to Bourke Street

In 2004 the RTA consulted with stakeholders about traffic management measures in Bourke Street as required by the DoP Condition of Approval 288.

The RTA assessed a range of alternatives against the following criteria:

- reduce traffic congestion on William Street
- reduce through-traffic in Bourke Street
- improve accessibility to the Eastern Distributor on-ramp
- minimise impacts on other road users (pedestrians and cyclists)
- reduce impacts on the community.

The solution chosen was a compromise given the diversity of views amongst stakeholders. It included the following features:

- full-time right and left turns from William Street north into Bourke Street leading only to the southbound Eastern Distributor
- closure of Bourke Street on the south side of William Street
- no right turn from William Street north into Crown Street
- a review of the measures after 12 months.

The RTA did similar assessments against approved criteria to develop road changes in Kings Cross, Paddington and other areas.

However, the evaluation of road changes involved other issues unrelated to the initial primary objectives (listed in Section 4.2). For example, the DoP and the RTA justified the road changes in Woolloomooloo and Kings Cross on the basis of the primary objective of reducing surface traffic in Central Sydney. However, the changes were also important to the financial viability of the expanded project, which appears to have assumed greater importance.

Financial viability influenced planning decisions

The financial viability of the project was given as a secondary planning objective of the tunnel. Yet, it influenced important planning decisions as the project progressed through the approval process. Making the tunnel a viable business proposition for the private sector, and not spending government money, overrode some strategic concerns about the project's design.

We will illustrate this with three examples: allowing the Harbour Street exit, raising the median strip in the Cahill expressway, and reinstating the right turn from Cowper Wharf Roadway.

Harbour Street exit may cause congestion

The DoP was initially critical of the Harbour Street exit and its potential to increase congestion in the CBD. The concern was that this exit would relocate a significant amount of traffic to other parts of the City rather than remove the traffic entirely from the City. The DoP said the Harbour Street exit could erode the benefits of the CCT in the long term.

Despite these concerns, the project proceeded with the Harbour Street exit because the RTA argued that removing this exit would reduce the project's financial attractiveness. Removing the exit would reduce traffic by 23 per cent, hence significantly reduce toll revenues. However, to offset this impact a congestion toll on the exit is foreshadowed in the Condition of Approval as an option if infiltration of traffic into the City becomes a critical issue.

The DoP said in the Director-General's Report:

> The Department concludes that the strategic outcome of the Harbour Street exit has the potential to conflict with the benefits of a 'Cross-City' Tunnel. At best, the Harbour Street exit would relocate traffic to a different part of the CBD, but at worst, could lead to significant infiltration of traffic back into the CBD as well as potential pressure for more parking in the CBD. However, as indicated above, the RTA has expressed concerns that its removal would have serious implications for the financial viability of the project given its significant use, particularly if the principle of 'no cost to government' is to be preserved … Should infiltration become a critical issue, it is recommended that further traffic management measures be imposed including the option of a congestion toll on the exit.
>
> Source: Director-General's Report, Environmental Impact Assessment, Proposed Cross City Tunnel, Kings Cross to Darling Harbour Volume 1. Department of Urban Affairs and Planning, September 2001, page 22.

The viability of the tunnel was also a significant factor in the negotiated outcome and final configuration of the road change relating to access to the Cahill Expressway. See Exhibit 4.6.

Access to the Cahill Expressway

The RTA assessed that the large projected volume of traffic entering SJYC from the tunnel would increase congestion, unacceptably affect the privately operated Eastern Distributor (ED) and threaten safety on the Cahill Expressway, CCT and ED.

The RTA developed a solution that included:

- a dedicated CCT exit lane with raised median strips going to the Harbour crossings and Macquarie Street. This meant that other traffic using SJYC could not get to the Harbour crossings
- no access to the Domain Tunnel and the Sydney Harbour Tunnel from Cowper Wharf Roadway and Palmer Street. Traffic to these destinations would need to use the CCT exit at SJYC.

The DoP ordered the reinstatement of one of the two right hand turn lanes from Cowper Wharf Roadway to the Harbour crossings. This was after representations about the Supplementary EIS from local residents. But the other restrictions remained.

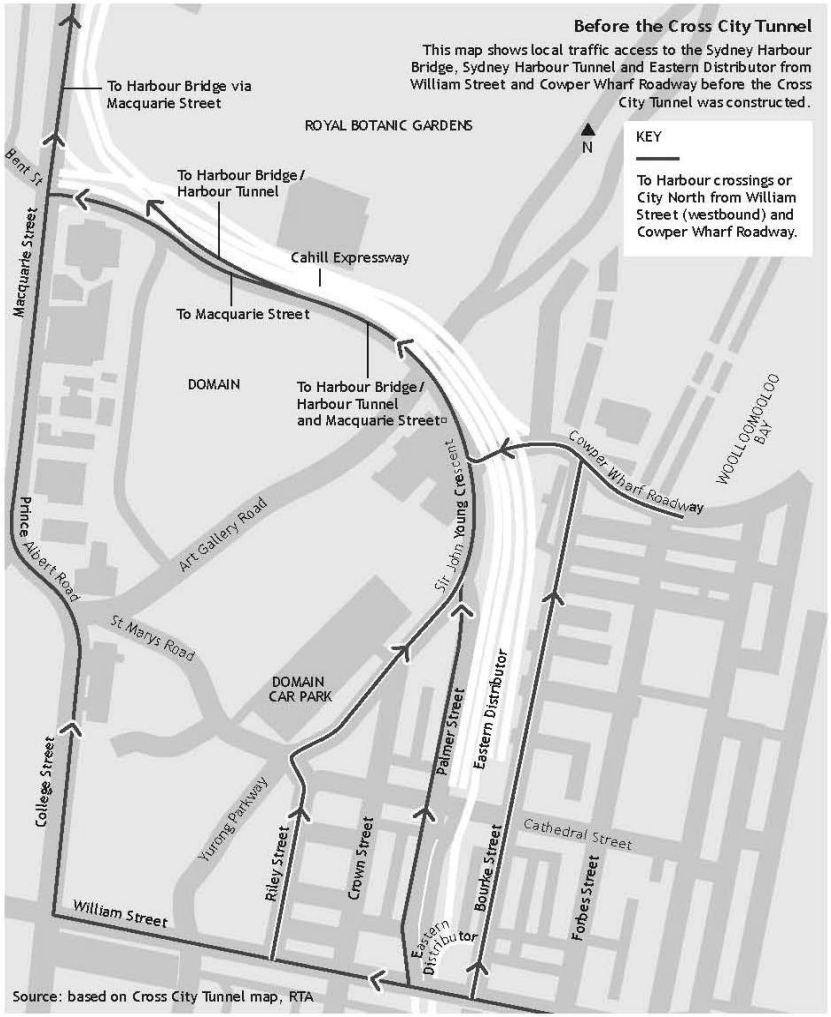
The RTA advised that installing the median strip on the Cahill Expressway was necessary for safety reasons – to stop cars cutting across other lanes. But it also has the effect of restricting access to the Harbour crossings for two of the former routes out of William Street: Riley and Palmer Streets. Therefore, the median strip had a secondary effect of forcing traffic wanting a convenient journey to use the tunnel, and so increased the financial viability of the CCT.

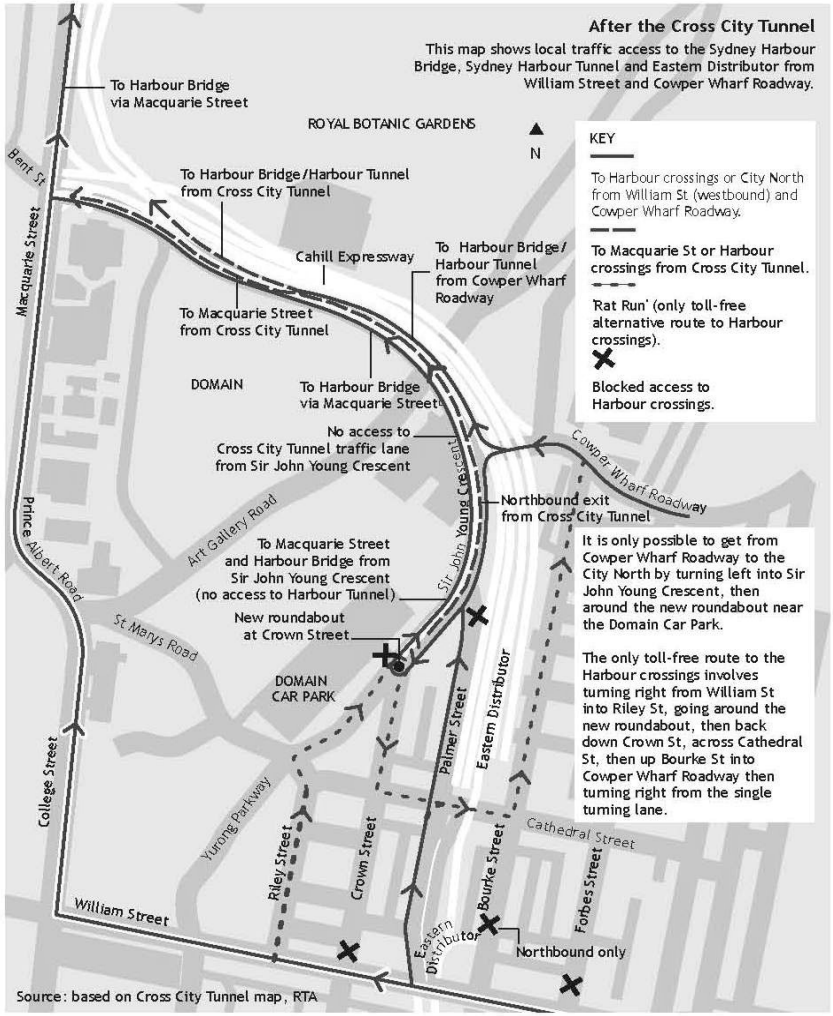
Allowing the turn from Cowper Wharf Roadway resulted in $22 million in compensation

Internal RTA reports highlighted the financial implication of road changes in Woolloomooloo. The RTA estimated that the DoP requirement to re-open one of the right-hand turn lanes from Cowper Wharf Roadway would lose the CCT 10,000 vehicles a day and $22 million in revenue. The agreement to increase the annual escalation of the toll (from CPI indexation to 4 per cent till 2012 and 3 per cent till 2018) was to compensate CCM for a number of changes. Twenty-two million dollars of that compensation was for the re-opening of one Cowper Wharf Roadway right-turn lane.

We found no evidence that the decisions about blocking William Street traffic from conveniently accessing the Harbour crossings were made to protect the tunnel revenue. However, as with the change to Cowper Wharf Roadway, those decisions could not be reversed without endangering the upfront payment to the RTA. That is why we conclude that protecting the financial viability of the project meant that the road changes could not be reversed.

Exhibit 4.6: Woolloomooloo before and after the CCT





CCM expected nearly half of the increased traffic to come from the Sir John Young Crescent exit

The favourable financial outcome offered for the 'Long 80' project was based on CCM's confidence that it would attract 18 per cent more traffic. See Exhibit 4.7. Almost half of the increase in patronage was expected from the SJYC exit portal bound for the Harbour crossings:

> Traffic destined for the Cahill Expressway/Sydney Harbour Tunnel would need to re-route to either use the CCT or surface routes such as William Street, College Street, Sir John Young Crescent, St Mary's Road, and Macquarie Street … In addition, some traffic that would have been using William Street and Palmer Street to the Cahill Expressway to avoid the CCT toll, would have added incentive to use the CCT with the proposed access restrictions.
>
> Source: The Cross City Tunnel Supplementary Environmental Impact Statement, Volume 2 Appendices, Appendix N, Traffic Assessment of Modified Activity. Cross City Tunnel Project, Modified Activity, Review of Traffic and Transport Implications. Page 6.

This differed markedly from the other two bidders. Both acknowledged that there would be higher construction costs for a longer tunnel. However, they did not predict that it would attract any additional patronage.

Exhibit 4.7: Changes in traffic volumes – comparing CCM's conforming and 'Long 80' bids

Tunnel	Approved Activity (vehicles/day)	'Long 80' (vehicles/day)	Difference (vehicles/day)	Difference (per cent)
Main Tunnel	68,900	77,100	8,200	12%
SJYC Tunnel	17,400	24,600	7,200	41%
Total	**86,300**	**101,700**	**15,400**	**18%**

Source: The Cross City Tunnel Supplementary Environmental Impact Statement, Volume 1 Main Volume, page S-9.

Note: These figures are earlier estimates at the SEIS stage. Exhibit 2.4 in Chapter 2 gives the updated figures.

The principle of retaining alternative toll-free routes in the eastern sector was weakened as the RTA and the DoP sought to:

- integrate the tunnel with the existing network
- meet the EIS objectives regarding the greater Central Sydney area
- ensure the financial viability of the project.

The maximisation of the RTA's financial benefit undermined the goal of getting vehicles off surface roads. The original objective may have been best served by making the tunnel accessible and affordable. But the approach adopted was to make surface travel unattractive and to increase the toll to pay for improvements to public space.

4.5 Was there a mechanism to judge the cumulative effect of the road changes?

There was no mechanism to judge the cumulative magnitude of the road changes. The one-by-one closures of the routes from the east to the Harbour crossings best illustrated this – it never became clear that all convenient toll-free alternatives were being lost. The RTA carried out an extensive consultation process. However, the consultation was not inclusive enough to capture the depth of resentment that the road changes would bring about.

A robust assessment of the cumulative impact of road changes would have:

- noted the strong impact of the tunnel on surface road traffic and amenities, and
- assessed the risk of motorists deciding not to use the tunnel.

Non-toll routes to be available

At the EIS stage, the plan was to leave a number of non-toll routes for motorists.

> The proposed tunnel would attract vehicles from the main east-west CBD streets … and from east-west routes away from the CBD. All of these routes would remain available for use by drivers that do not wish to pay a toll in the CCT. No special measures are proposed to compel drivers to use the CCT. However drivers wishing to avoid the CCT and still cross the CBD would be affected by necessary road changes at the CCT portals at each end, amenity improvements in the CBD, the extended T2 hours on William Street, and the closure of Druitt Street between Clarence and Kent Streets to general traffic.
> Source: The Cross City Tunnel Environmental Impact Statement, Volume 4 Traffic and Transport, Technical Papers 8-9, page 86.

The non-toll routes included:

- travelling eastbound via Bathurst, Elizabeth, Park and William Streets
- travelling westbound via William, Park, Druitt, Clarence and Market Street to the Market Street viaduct of the Western Distributor
- travelling northbound from William Street by right-turn lanes at Palmer and Riley Streets to SJYC. See Exhibit 4.6.

Removal of alternative non-toll routes

Much of the public debate about the CCT concerns the traffic arrangements from the eastern suburbs to City North, and particularly accessing the Harbour crossings. The RTA and CCM did not identify the risks of imposing a toll on motorists who already had a free route they considered adequate.

As Exhibits 4.6 and 4.8 show, a number of the alternative non-toll routes were removed as the project progressed.

Before the CCT opened, motorists coming down William Street had up to six alternative access routes to the Domain Tunnel and Harbour crossings.

Currently these motorists have one only access, other than the CCT, using Cowper Wharf Roadway. Those coming from William Street have to take an indirect 'rat run' (as shown in Exhibit 4.6).

It goes via Riley, Crown, Cathedral and Bourke Streets. When they get to Cowper Wharf Roadway, they now have only a single lane for the right turn to the Harbour crossings. We do not consider that this is a reasonable toll-free alternative to using the CCT.

Access routes to Harbour crossings reduced from 6 to 1

Exhibit 4.8 below summarises the cumulative effect of the changes on access to the City North and Harbour crossings through Woolloomooloo. The changes reduced the alternative routes (counted as lanes of traffic) from six to one when the tunnel opened. As noted previously, closing the turn out of Cowper Wharf Roadway was the one closure that CCM requested. Following the community consultation processes, this was not allowed. This is now the one alternative to access these points conveniently without using the CCT.

Exhibit 4.8: Alternative routes to City North and Harbour crossings through Woolloomooloo

Right-hand turn lanes to the north and ability to access Harbour crossings	Pre-CCT	2000 EIS	2002 'Long 80'	2005 Opening
Cowper Wharf into Sir John Young Cr	2	1	1	1
William into Riley	1	1	0 [a]	0 [a]
William into Crown [b]	0	0	0 [a]	0 [a]
William into Palmer	2	1	0 [a]	0 [a]
William into Bourke	1	1	0	0
Total	**6**	**4**	**1**	**1**

Notes

[a] indicates right turns from William Street are available into these streets. However previously motorists could access the Harbour crossings from these streets. With the introduction of the Tunnel motorists cannot conveniently access the Harbour crossings from these streets. In essence, the only non-toll route access available is via Cowper Wharf Roadway.

[b] the Crown Street turn was restricted in the Supplementary EIS and then removed under Condition of Approval 288 - see the Bourke Street case study in Exhibit 4.5 earlier in this chapter.

Source: analysis by the Audit Office

4.6 Was there effective consultation with stakeholders?

Agencies consulted widely

Throughout the project, the RTA consulted with various stakeholders about the road changes as required by law. Government agencies including the DoP and various Councils contributed to the tunnel's design. The RTA prepared and put on public exhibition the environmental impact statements, representations reports, and preferred activity reports. The RTA considered the public's comments, and made significant changes. For example, the single lane of access from Cowper Wharf Roadway to the Domain Tunnel and Macquarie Street was reintroduced following the Supplementary EIS.

Consultation did not reconcile opposing views

There was strong support for a reduction in surface road traffic in Woolloomooloo from residents, local government and business. However, other local stakeholders were more concerned with the accessibility of local streets. The consultative process was not successful in reconciling these opposing local views.

Consultation not inclusive enough

Also, the shift in focus, from reducing CBD congestion, to reducing surface traffic in the larger Central Sydney area, was not widely understood by the community. The views of motorists travelling to City North and the Harbour crossings from the east were not adequately brought out by the consultations. This is the area of greatest public resentment. These motorists may have thought that a **Cross City** Tunnel would have nothing to do with them.

The practice of always having an alternative non-toll route available has been a long-standing principle. It appears that the RTA and the DoP lost sight of this principle, set in the DoP Director-General's requirements, as the CCT project developed.

Recommendations

The DoP and the RTA should improve the consultation process for major projects to:

- better identify and reach stakeholders
- make the project's effects easier to understand
- raise public awareness of the project.

They should also do follow up consultation once the project opens.

4.7 Can and should the road changes be reversed?

Liability for reversing road changes

Under the contract the RTA retains control over the road network. It may have to compensate the company if the viability of the tunnel is adversely affected by MAEs.

The contract contains 22 specific MAEs of which:

22 MAEs in contract

- 9 relate to CCT's access to entry and exit lanes on surface roads (the tunnel portals, meaning the ways to get in and out of the tunnel)
- 10 restrict the use of road space by general traffic along the central Druitt, Park and William Street corridor
- 2 provide the CCT with access to the Cahill Expressway and the Domain Tunnel at the expense of local roads
- 1 restricts the use of road space by general traffic on Kings Cross Road.

In addition an MAE may arise if the CCT is adversely affected by changes to the project's conditions of approval. Exhibit 4.9 summarises the road changes by category and location.

Exhibit 4.9: Summary of the road changes by category and location

Category of road changes	Location of road changes			
	Tunnel portals	Corridor (Druitt, Park and William Streets)	Approaches to the CCT	Total
MAE	9	10	3	22
Other (B, C, D)	1	23	27	51
Total	10	33	30	73

Source: Based on information provided by the RTA, 23 December 2005. The RTA spreadsheets contained 79 changes but five were temporary changes for the CCT construction, which have been reversed, and one other was labelled 'deleted'.

Important issues in any review of road changes

There have been calls to reverse all road changes that are not MAEs, and negotiate the reversal of those that may trigger MAEs. Any reversals will need to take into account the following findings:

- a number of the changes are considered necessary to the tunnel operation (such as entry and exit lanes)
- many involve the introduction of bus lanes or other higher bus priority measures, and are clearly desirable in improving public transport access to the City
- a large number involve management of local traffic (to prevent 'rat-running'), and were established at the request of residents.

We note that the RTA has commenced a review of the possible re-opening of Bourke Street, and make no recommendation about this.

As we stated earlier, the consultation process did not draw out the overall impact of the road changes. Therefore, in our view, the other road changes need to be reviewed in the light of the lower than expected traffic through the tunnel, and resultant congestion on the narrowed surface roads.

The main area of public resentment is the restriction of access to the City North and Harbour crossings on roads other than the CCT. This flowed from accepting the very high initial traffic forecasts in the CCM proposal and the RTA assessment.

Toll-free route to the City North and Harbour crossings a priority

This is the main area of the road changes and associated traffic signalling that we recommend that the RTA and the DoP review as a priority. They should consider introducing at least one direct non-toll route to provide access to the City North and Harbour crossings.

Presumably this would be defined in the contract as an MAE, and trigger a negotiation about compensation. In this regard, we note that CCM's business case was built on planning conditions in the EIS. These allowed right turns from William Street into the four north-south roads through Woolloomooloo giving access to the Harbour crossings. However, when the DoP ordered traffic restrictions, CCM was not required to *increase* the upfront payment in recognition of the benefit it would potentially gain from significantly higher traffic volumes.

In considering reversal of road changes introduced as part of the CCT project, we suggest the Government consider the original objectives of the project. The Planning Minister noted in September 2001, for the CCT to achieve long-term improvements for traffic and public transport:

> There must be a strong commitment to the achievement of substantial accompanying public transport, pedestrian and cyclist initiatives and for these to be implemented as an integrated part of the project.
>
> Source: Environmental Impact Assessment, Proposed Cross City Tunnel, Kings Cross to Darling Harbour Volume 1. Department of Urban Affairs and Planning. Page 23.

Recommendations

The DoP and the RTA should conduct an urgent joint review of all road changes associated with the CCT. They should consider:

- if the road changes are consistent with current volumes of traffic using the CCT
- resolve the inconsistency between current traffic arrangements and the stated objective of maintaining at least one direct toll-free alternative route on all sectors affected by the CCT.

Appendices

Appendix 1: About the audit

Audit objective

The objective of this audit was to examine the awarding of the contract and the commissioning of the Cross City Tunnel (CCT).

Audit scope

The audit focused on the following aspects of the CCT:

- the upfront payment by the successful bidder to the RTA
- the December 2004 amending deed to the tunnel contract
- the decision-making processes used for changing road conditions.

The audit did not examine:

- value-for-money outcomes from the project
- patronage projections for all the bids
- the base case of the proponent - only aspects relevant to the audit scope.

Audit criteria

The audit reviewed:

1. in respect of the upfront payment, whether:
   - seeking such payment was an unusual practice
   - it was a decisive criterion in the assessment of bids
   - the basis for reimbursement of the RTA's expenditure was clear in advance
   - it was intended only for costs incurred
   - reimbursement of the RTA's expenditure was applied as intended
   - it influenced the setting of the level of tolls
   - the offer changed over time.
2. in respect of the First Amendment Deed:
   - the reason for the changes, why they were not identified earlier and who was responsible for them
   - whether increasing the toll was the best option to cover the extra costs
   - did the extra costs reflect the scope of the changes
   - was 15 cents the appropriate amount to increase the toll by
   - the reasons for not having made information about the Deed public.
3. in respect of the road changes, whether:
   - the RTA or the proponent, CCM, proposed them
   - there were stated objectives against which to judge decisions
   - there were any made after the Conditions of Approval
   - there was a robust evaluation of each of the changes
   - there was effective consultation with stakeholders
   - there was a mechanism to judge their cumulative effects.

Audit approach

The audit acquired subject matter expertise through:

- interviews with staff from the Roads and Traffic Authority, the Department of Planning, NSW Treasury and relevant stakeholders
- review and analysis of relevant laws, documents and guidelines
- comparisons where appropriate with other states and countries, including the Victorian approach to Public Private Partnership projects.

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 AUS 806 and 808 on performance auditing, and to reflect current thinking on performance auditing practices. We produce our audits under a quality management system certified to International Standard ISO 9001. 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 cooperation and assistance of representatives of the RTA, the DoP and NSW Treasury. We also would like to thank the Victorian Auditor-General's Office, Victorian Department of Treasury and Finance, Dr Christine Brown from Melbourne University, and Dr Rolf Bergmaier for sharing their expertise with us.

Audit team Our team leader for this performance audit was Henriette Zeitoun, who was assisted by Michael Johnston, Rod Plant and David Klein. Sean Crumlin provided direction and quality assurance.

Cost Including printing and all overheads the estimated cost of the audit is $406,066.

Appendix 2: Glossary

BCF	Business Consideration Fee
CBD	Central Business District
CCM	CrossCity Motorway Pty Ltd
CCT	Cross City Tunnel
CEO	Chief Executive Officer
DoP	Department of Planning
EIS	Environmental Impact Statement
FAD	First Amendment Deed
GST	Goods and Services Tax
LATM	Local Area Traffic Management
MAE	Materially Adverse Event
PPP	Public Private Partnership
PSC	Public Sector Comparator
RFP	Requests for Proposals
RTA	Roads and Traffic Authority
SEIS	Supplementary Environmental Impact Statement
SJYC	Sir John Young Crescent

Appendix 3: Chronology of the Cross City Tunnel

Date	Stage
1990s	Sydney City Council prepared early draft proposals for a cross city tunnel.
Oct 1998	The State Government proposed a tunnel to run from William Street (outside the Museum) under Park and Druitt Streets to Sussex Street.
Nov 1998	The State Government released the *Action for Transport 2010* plan which included a road tunnel crossing the CBD east-west.
Jul 1999	The Director-General of the Department of Planning (DoP), as the assessment authority for the Environmental Impact Assessment process, issued the requirements for the preparation of the initial Environmental Impact Statement for the Cross City Tunnel project.
Sep 1999	The State Government announced a modified proposal, a longer tunnel under William Street from Kings Cross to Sussex Street. The announced tolls were $2.50 each way cross city and $1.10 for vehicles exiting at Sir John Young Crescent (1999 prices inclusive of GST).
Aug 2000	The EIS was released for public comment, and 196 representations were received, including submissions by the Environment Protection Authority and the Department of Health about issues such as air quality and tunnel ventilation.
Sep 2000	The RTA invited the private sector to register interest in financing, constructing and operating the CCT.
Feb 2001	The RTA selected three from the eight consortia that registered an interest to submit detailed proposals for the CCT project.
May 2001	A Representations Report was submitted to the then DoP for approval.
Oct 2001	The Minister for Urban Affairs and Planning issued the Conditions of Approval for the CCT project.
Feb 2002	CrossCity Motorway Consortium (CCM) announced as the preferred tenderer. CCM's non-complying 'Long 80' bid was selected as the final project.
Mar 2002	The then Treasurer wrote to the then Minister for Roads stressing the need to deliver the project at 'no net cost to government', stating that the RTA should use its own capital budget to cover cost increases.
May 2002	The RTA developed a Supplementary EIS for CCM's 'Long 80'. The new Conditions of Approval added to the project scope and cost.
Jul 2002	The Supplementary EIS was released for public comment, reflecting CCM's 'Long 80' changes to the EIS design.
Dec 2002	The Project Deed (contract) was executed containing the change to the way the toll escalates to cover $75 million in extra costs.

Dec 2004	The First Amendment Deed was signed allowing CCM to increase the base toll by 15 cents in return for funding $35m worth of additional project costs.
Jun 2005	The NSW Auditor-General announced a Performance Audit of the CCT project.
Aug 2005	The tunnel opened.
Oct 2005	CCM announced a toll-free period. The extra fee for not using an e-tag was dropped. NSW Roads Minister announced the resignation of the CEO of the RTA. The Premier commissioned the Infrastructure Implementation Group led by David Richmond to advise on the delivery of government infrastructure projects. The report made specific comments on the CCT.
Dec 2005	A Parliamentary Inquiry into the CCT project chaired by Reverend the Hon Fred Nile MLC started.
Feb 2006	The Nile Inquiry released the part of its report dealing with the CCT.
Mar 2006	CCM announces that tolls will be halved for an indefinite period. Some bus lane road changes reversed.

Appendix 4: Potential Materially Adverse Events (MAEs) if road change reversed

Description	Project Deed reference	Stage of the project
MAEs – Relating to CCT approaches		
1. Sir John Young Crescent to Cahill Expressway. One lane northbound for access to Cowper Wharf Roadway only, one lane from CCT to Cahill Expressway and one lane to Macquarie St only. Previously two lanes northbound from SJYC to Cahill Expressway.	MAE 18.3.j	Supplementary Representations Report, page 7-7.
2. Cahill Expressway: Additional dedicated CCT lane with low concrete medians added.	MAE 18.3.j	Supplementary EIS, Section 2.4.2, page 2-10.
3. Kings Cross Road: Cycle lane created on Kings Cross Road east-bound between Darlinghurst Road and Ward Avenue.	MAE 18.2(a) (i) and MAE 18.2(a) (ii).	EIS, Section 6.5.1. Figure 6.11.
MAEs – Relating to the central road corridor		
4. Druitt Street: Contra-flow bus lane from Sussex Street to York Street introduced.	MAE 18.2.a.vi	EIS, Section 7.5.2, page 7-39.
5. Druitt Street: General traffic closed between Kent and Clarence Street. Bus lane in middle lane introduced.	MAE 18.2.a.v	EIS, Section 7.5.2, page 7-39.
6. William Street: One eastbound and one westbound lane removed from Yurong to Dowling Street.	MAE 18.2.a.i & MAE 18.2.a.ii	EIS, Section 7.5.1, page 7-28.
7. William Street: One westbound right turn lane from William into Palmer Street removed.	MAE 18.2.a.i	EIS, Section 7.5.1, page 7-34.
8. William Street: T2 transit lane from Forbes to College Street introduced. Prior to CCT there were two lanes westbound. One of these designated T2 lane.	MAE 18.2.a.(i) applies to shorter length between Forbes and Crown Streets.	EIS, Section 7.5.1, page 7-28.
9. William Street: T2 transit lane from College to Palmer Street introduced. Prior to CCT there were two lanes eastbound. One of these designated T2 lane.	MAE 18.2.a.(ii) applies to shorter length between Crown and Palmer Streets.	EIS, Section 7.5.1, page 7-28.
10. William Street: Cycle lane introduced eastbound and westbound between College Street, George Street and Darlinghurst Road.	MAE 18.2.a.(i) and MAE 18.2.a.(ii)	Supplementary Representations Report, Preferred Activity, Table 7.2.

Description	Project Deed reference	Stage of the project
11. Park Street: 24 hour bus lane westbound on Park Street between College Street and Hyde Park pedestrian signals. One lane for general traffic remained.	MAE 18.2(a)[iv]	EIS, Section 7.5.2, page 7-39.
12. Park Street: 24 hour bus lane eastbound on Park Street between Elizabeth and College Street. One lane for general traffic remained.	MAE 18.2(a)(iii) (Westbound half)	EIS, Section 7.5.2, page 7-39.
13. Kings Cross Tunnel (westbound): T2 transit lane introduced westbound in Kings Cross Tunnel. Prior to CCT there were two lanes westbound. One of these designated T2 lane.	MAE 18.2(a)(vii)	Supplementary EIS, Section 2.4.5, page 2-31.
MAEs – Relating to CCT portals		
14. Bathurst Street portal: introduction of dedicated lane and shared lane into CCT Bathurst Street portal.	MAE 18.3.e	EIS, Section 7.3.3, page 7-10.
15. Market Street: Widening of Market Street viaduct to accommodate extra CCT exit lane.	MAE 18.3.f	EIS, Section 7.3.3, page 7-13.
16. Introduction of CCT entry in Harbour Street northbound.	MAE 18.3.m	EIS, Section 7.3.3, page 7-9.
17. Introduction of CCT exit lanes to Harbour Street northbound, and Bathurst Street eastbound.	MAE 18.3.g	EIS, figure 7.6.
18. Introduction of CCT exit portal at Sir John Young Crescent.	MAE 18.3.j	Supplementary Representations Report, page 7.7.
19. Introduction of CCT entrance from ED northbound near Wisdom Lane.	MAE 18.3.h	Supplementary EIS, Section 2.4.2, page 2-13.
20. Introduction of CCT entry adjacent to Craigend Street.	MAE 18.3.l	Supplementary EIS, Section 2.4.4, page 2-23.
21. Introduction of eastbound CCT exit portal to Bayswater Road.	MAE 18.3.k	Supplementary EIS, Section 2.4.2, page 2-13.
22. Install final tunnel exit intersection configuration at Bathurst Street and Harbour Street. Introduced southbound access from CCT to Harbour Street.	MAE 18.3.g	EIS, Section 6.3.1, figure 6.4.

Performance Audits by the Audit Office of New South Wales

Performance Auditing

What are performance audits?

Performance audits are reviews designed to determine how efficiently and effectively an agency is carrying out its functions.

Performance audits may review a government program, all or part of a government agency or consider particular issues which affect the whole public sector.

Where appropriate, performance audits make recommendations for improvements relating to those functions.

Why do we conduct performance audits?

Performance audits provide independent assurance to Parliament and the public that government funds are being spent efficiently and effectively, and in accordance with the law.

They seek to improve the efficiency and effectiveness of government agencies and ensure that the community receives value for money from government services.

Performance audits also assist the accountability process by holding agencies accountable for their performance.

What is the legislative basis for Performance Audits?

The legislative basis for performance audits is contained within the *Public Finance and Audit Act 1983*, *Part 3 Division 2A*, (the Act) which differentiates such work from the Office's financial statements audit function.

Performance audits are not entitled to question the merits of policy objectives of the Government.

Who conducts performance audits?

Performance audits are conducted by specialist performance auditors who are drawn from a wide range of professional disciplines.

How do we choose our topics?
Topics for performance audits are chosen from a variety of sources including:

- our own research on emerging issues
- suggestions from Parliamentarians, agency Chief Executive Officers (CEO) and members of the public
- complaints about waste of public money
- referrals from Parliament.

Each potential audit topic is considered and evaluated in terms of possible benefits including cost savings, impact and improvements in public administration.

The Audit Office has no jurisdiction over local government and cannot review issues relating to council activities.

If you wish to find out what performance audits are currently in progress just visit our website at www.audit.nsw.gov.au/

How do we conduct performance audits?

Performance audits are conducted in compliance with relevant Australian standards for performance auditing and operate under a quality management system certified under international quality standard ISO 9001.

Our policy is to conduct these audits on a "no surprise" basis.

Operational managers, and where necessary executive officers, are informed of the progress with the audit on a continuous basis.

What are the phases in performance auditing?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team will develop audit criteria and define the audit field work.

At the completion of field work an exit interview is held with agency management to discuss all significant matters arising out of the audit. The basis for the exit interview is generally a draft performance audit report.

The exit interview serves to ensure that facts presented in the report are accurate and that recommendations are appropriate. Following the exit interview, a formal draft report is provided to the CEO for comment. The relevant Minister is also provided with a copy of the draft report. The final report, which is tabled in Parliament, includes any comment made by the CEO on the conclusion and the recommendations of the audit.

Depending on the scope of an audit, performance audits can take from several months to a year to complete.

Copies of our performance audit reports can be obtained from our website or by contacting our Office Services Manager.

How do we measure an agency's performance?

During the planning stage of an audit the team develops the audit criteria. These are standards of performance against which an agency is assessed. Criteria may be based on government targets or benchmarks, comparative data, published guidelines, agencies corporate objectives or examples of best practice.

Performance audits look at:

- processes
- results
- costs
- due process and accountability.

Do we check to see if recommendations have been implemented?

Every few years we conduct a follow-up audit of past performance audit reports. These follow-up audits look at the extent to which recommendations have been implemented and whether problems have been addressed.

The Public Accounts Committee (PAC) may also conduct reviews or hold inquiries into matters raised in performance audit reports. Agencies are also required to report actions taken against each recommendation in their annual report.

To assist agencies to monitor and report on the implementation of recommendations, the Audit Office has prepared a Guide for that purpose. The Guide, *Monitoring and Reporting on Performance Audits Recommendations,* is on the Internet at www.audit.nsw.gov.au/publications/better_practice/better_practice.htm

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards. This includes ongoing independent certification of our ISO 9001 quality management system.

The PAC is also responsible for overseeing the activities of the Audit Office and conducts reviews of our operations every three years.

Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament and from internal sources.

For further information relating to performance auditing contact:

Stephen Horne
Assistant Auditor-General,
Performance Audit
(02) 9275 7278
email: stephen.horne@audit.nsw.gov.au

Performance Audit Reports

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
78	State Rail Authority (CityRail) State Transit Authority	*Fare Evasion on Public Transport*	6 December 2000
79	TAFE NSW	*Review of Administration*	6 February 2001
80	Ambulance Service of New South Wales	*Readiness to Respond*	7 March 2001
81	Department of Housing	*Maintenance of Public Housing*	11 April 2001
82	Environment Protection Authority	*Controlling and Reducing Pollution from Industry*	18 April 2001
83	Department of Corrective Services	*NSW Correctional Industries*	13 June 2001
84	Follow-up of Performance Audits	*Police Response to Calls for Assistance* *The Levying and Collection of Land Tax* *Coordination of Bushfire Fighting Activities*	20 June 2001
85*	Internal Financial Reporting	*Internal Financial Reporting including a Better Practice Guide*	27 June 2001
86	Follow-up of Performance Audits	*The School Accountability and Improvement Model (May 1999)* *The Management of Court Waiting Times (September 1999)*	14 September 2001
87	E-government	*Use of the Internet and Related Technologies to Improve Public Sector Performance*	19 September 2001
88*	E-government	*e-ready, e-steady, e-government: e-government readiness assessment guide*	19 September 2001
89	Intellectual Property	*Management of Intellectual Property*	17 October 2001
90*	Intellectual Property	*Better Practice Guide* *Management of Intellectual Property*	17 October 2001
91	University of New South Wales	*Educational Testing Centre*	21 November 2001
92	Department of Urban Affairs and Planning	*Environmental Impact Assessment of Major Projects*	28 November 2001
93	Department of Information Technology and Management	*Government Property Register*	31 January 2002
94	State Debt Recovery Office	*Collecting Outstanding Fines and Penalties*	17 April 2002
95	Roads and Traffic Authority	*Managing Environmental Issues*	29 April 2002
96	NSW Agriculture	*Managing Animal Disease Emergencies*	8 May 2002

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
97	State Transit Authority Department of Transport	*Bus Maintenance and Bus Contracts*	29 May 2002
98	Risk Management	*Managing Risk in the NSW Public Sector*	19 June 2002
99	E-Government	*User-friendliness of Websites*	26 June 2002
100	NSW Police Department of Corrective Services	*Managing Sick Leave*	23 July 2002
101	Department of Land and Water Conservation	*Regulating the Clearing of Native Vegetation*	20 August 2002
102	E-government	*Electronic Procurement of Hospital Supplies*	25 September 2002
103	NSW Public Sector	*Outsourcing Information Technology*	23 October 2002
104	Ministry for the Arts Department of Community Services Department of Sport and Recreation	*Managing Grants*	4 December 2002
105	Department of Health Including Area Health Services and Hospitals	*Managing Hospital Waste*	10 December 2002
106	State Rail Authority	*CityRail Passenger Security*	12 February 2003
107	NSW Agriculture	*Implementing the Ovine Johne's Disease Program*	26 February 2003
108	Department of Sustainable Natural Resources Environment Protection Authority	*Protecting Our Rivers*	7 May 2003
109	Department of Education and Training	*Managing Teacher Performance*	14 May 2003
110	NSW Police	*The Police Assistance Line*	5 June 2003
111	E-Government	*Roads and Traffic Authority Delivering Services Online*	11 June 2003
112	State Rail Authority	*The Millennium Train Project*	17 June 2003
113	Sydney Water Corporation	*Northside Storage Tunnel Project*	24 July 2003
114	Ministry of Transport Premier's Department Department of Education and Training	*Freedom of Information*	28 August 2003
115	NSW Police NSW Roads and Traffic Authority	*Dealing with Unlicensed and Unregistered Driving*	4 September 2003
116	NSW Department of Health	*Waiting Times for Elective Surgery in Public Hospitals*	18 September 2003

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
117	Follow-up of Performance Audits	*Complaints and Review Processes (September 1999)* *Provision of Industry Assistance (December 1998)*	24 September 2003
118	Judging Performance from Annual Reports	*Review of Eight Agencies' Annual Reports*	1 October 2003
119	Asset Disposal	*Disposal of Sydney Harbour Foreshore Land*	26 November 2003
120	Follow-up of Performance Audits NSW Police	*Enforcement of Street Parking (1999)* *Staff Rostering, Tasking and Allocation (2000)*	10 December 2003
121	Department of Health NSW Ambulance Service	*Code Red:* *Hospital Emergency Departments*	15 December 2003
122	Follow-up of Performance Audit	*Controlling and Reducing Pollution from Industry (April 2001)*	12 May 2004
123	National Parks and Wildlife Service	*Managing Natural and Cultural Heritage in Parks and Reserves*	16 June 2004
124	Fleet Management	*Meeting Business Needs*	30 June 2004
125	Department of Health NSW Ambulance Service	*Transporting and Treating Emergency Patients*	28 July 2004
126	Department of Education and Training	*School Annual Reports*	15 September 2004
127	Department of Ageing, Disability and Home Care	*Home Care Service*	13 October 2004
128*	Department of Commerce	*Shared Corporate Services: Realising the Benefit* *including guidance on better practice*	3 November 2004
129	Follow-up of Performance Audit	*Environmental Impact Assessment of Major Projects (2001)*	1 February 2005
130*	Fraud Control	*Current Progress and Future Directions* *including guidance on better practice*	9 February 2005
131	Follow-up of Performance Audit Department of Housing	*Maintenance of Public Housing (2001)*	2 March 2005
132	Follow-up of Performance Audit State Debt Recovery Office	*Collecting Outstanding Fines and Penalties (2002)*	17 March 2005
133	Follow-up of Performance Audit Premier's Department	*Management of Intellectual Property (2001)*	30 March 2005
134	Department of Environment and Conservation	*Managing Air Quality*	6 April 2005
135	Department of Infrastructure, Planning and Natural Resources Sydney Water Corporation Sydney Catchment Authority	*Planning for Sydney's Water Needs*	4 May 2005
136	Department of Health	*Emergency Mental Health Services*	26 May 2005

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
137	Department of Community Services	*Helpline*	1 June 2005
138	Follow-up of Performance Audit State Transit Authority Ministry of Transport	*Bus Maintenance and Bus Contracts (2002)*	14 June 2005
139	RailCorp NSW	*Coping with Disruptions to CityRail Passenger Services*	22 June 2005
140	State Rescue Board of New South Wales	*Coordination of Rescue Services*	20 July 2005
141	State Budget	*In-year Monitoring of the State Budget*	28 July 2005
142	Department of Juvenile Justice	*Managing and Measuring Success*	14 September 2005
143	Asset Management	*Implementing Asset Management Reforms*	12 October 2005
144	NSW Treasury	*Oversight of State Owned Electricity Corporations*	19 October 2005
145	Follow-up of 2002 Performance Audit	*Purchasing Hospital Supplies*	23 November 2005
146	Bus Transitways	*Liverpool to Parramatta Bus Transitway*	5 December 2005
147	Premier's Department	*Relocating Agencies to Regional Areas*	14 December 2005
148	Department of Education and Training	*The New Schools Privately Financed Project*	8 March 2006
149	Agency Collaboration	*Agencies Working Together to Improve Services*	22 March 2006
150	Follow-up of 2000 Performance Audit	*Fare Evasion on Public Transport*	26 April 2006
151	Department of Corrective Services	*Prisoner Rehabilitation*	24 May 2006
152	Roads and Traffic Authority	*The Cross City Tunnel Project*	May 2006

* Better Practice Guides

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