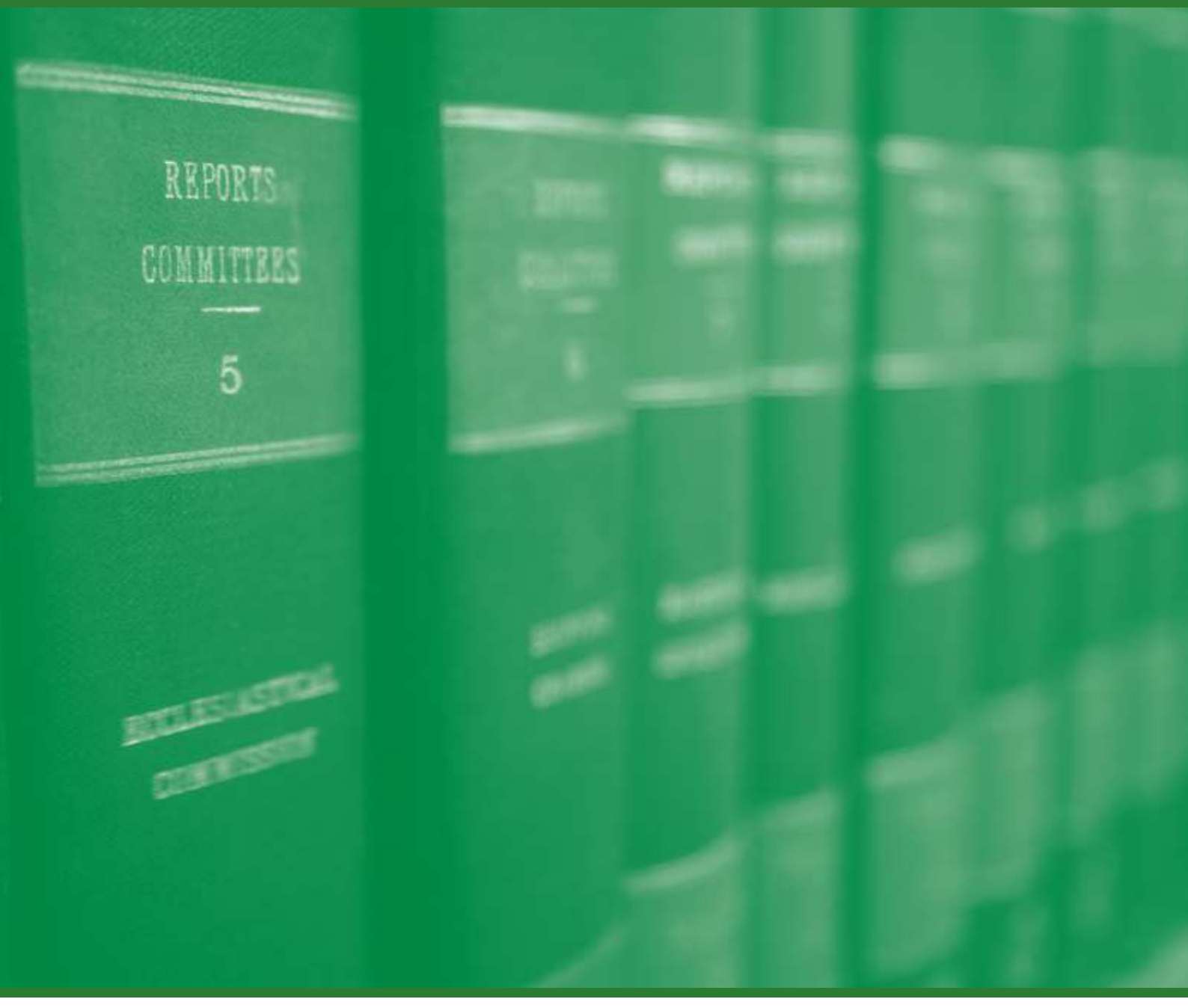




Public Accounts Committee

REPORT 16/55 – JUNE 2014

PLANNING NSW INFRASTRUCTURE FOR THE TWENTY-SECOND CENTURY





LEGISLATIVE ASSEMBLY

PUBLIC ACCOUNTS COMMITTEE

**PLANNING NSW INFRASTRUCTURE
FOR THE TWENTY-SECOND CENTURY**

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The motto of the coat of arms for the state of New South Wales is "Orta recens quam pura nites". It is written in Latin and means "newly risen, how brightly you shine".

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Membership

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Chair's Foreword

I am pleased to table this report of the Public Accounts Committee's forum entitled Planning NSW Infrastructure for the Twenty-Second Century.

The forum, held on Friday 9 May 2014, was a welcome opportunity for Members of Parliament and others to explore the vital issue of long-term infrastructure planning and delivery.

It is important to emphasise that the Committee is a parliamentary body. We seek to scrutinise the business of government in a nonpartisan way and identify improvements which benefit the whole NSW community, wherever they live, now and into the future.

Everyone agrees that improved infrastructure is a priority, just as everyone understands that the resources available to deliver infrastructure are much in demand. That is why this forum's focus on looking beyond the political cycle into the next century was so important, in that it allowed us to consider how we can plan for meeting the needs of future generations.

In some ways the elements of good long-term infrastructure planning and delivery – including community confidence, independent advice, transparent decision-making and value for money – might be seen as truisms. And a twenty-second century planning horizon can seem a long way off. Yet so much of the history of infrastructure planning is marked by short-termism, community disappointment, opacity and lost opportunities. Our forum indicated that we have lessons to learn and no time to waste.

I wish to thank everyone who participated in the forum, including the speakers and presenters, my fellow Committee members, the Members of Parliament and others who attended, and the parliamentary staff who provided organisational support, particularly David Hale. I especially wish to thank the SMART Infrastructure Facility and its Chief Executive Officer, Garry Bowditch for working with the Committee to ensure we had expert speakers and panellists, and a sound evidentiary footing for the forum and its outcomes. Finally, I wish to thank and acknowledge the presentation from the Premier and Minister for Infrastructure, the Hon Mike Baird, who was able to find time in his schedule to join us so soon after assuming the premiership.

I look forward to the Government's response.

Jonathan O'Dea
Chair

List of Findings and Recommendations

RECOMMENDATION 1

The Committee recommends that the NSW Government review the issues and themes outlined in this report and advise the Committee on NSW's long term infrastructure planning and delivery capabilities, with specific reference to:

- a) The current status of long-term infrastructure planning in New South Wales
- b) NSW's preparedness to plan, fund and deliver infrastructure in a timeframe beyond 20 years and up to 100 years
- c) Actions to achieve bipartisan support and community buy-in for NSW's infrastructure plans, including demonstrated commitment to ensuring the availability of independent advice, public consultation and transparent decision-making
- d) Regulatory reform of the planning system and metropolitan governance, and the adoption of Integrated Infrastructure Planning and Management
- e) Intergovernmental relationships and clarifying the roles of the three levels of government
- f) Financing reforms, developing innovative funding arrangements, and attracting long term investors in infrastructure
- g) Development of service standards and consumer benchmarks for asset performance
- h) Independent performance management and reporting.

Chapter One – Introduction

- 1.1 On Friday 9 May 2014 the Public Accounts Committee of the NSW Legislative Assembly held a forum entitled Planning NSW Infrastructure for the Twenty-Second Century.
- 1.2 The forum was conducted at Parliament House with the support of the SMART Infrastructure Facility at the University of Wollongong¹.
- 1.3 The SMART Infrastructure Facility is one of the largest infrastructure research institutions in the world. SMART stands for ‘Simulation, Modelling, Analysis, Research and Teaching’ and the facility is defining a new area of research called ‘integrated infrastructure planning and management’. SMART has recently released a Green Paper entitled Infrastructure Imperatives for Australia².
- 1.4 The Committee considered that the primary audience for the forum was Members of Parliament and all members were invited to attend. The Chair of the Committee also sent invitations to a cross-section of government, business and community representatives. Around 75 people attended the forum including members, representatives of the public and private sectors, community advocates, and academics, as well as the speakers and expert panellists.

PROGRAM

- 1.5 The forum program included six sessions made up of four presentations, an expert panel discussion and an interactive session with the audience.
- 1.6 The program for the forum is attached at Appendix One and the speakers’ biographies are attached at Appendix Two.

REPORT

- 1.7 When it resolved to hold the forum, the Public Accounts Committee also resolved to table a report of the forum. The Committee agreed that the report would contain the transcript of the proceedings, a summary of the issues and themes raised at the forum by both speakers and the audience, and a recommendation that the NSW Government respond to the report.
- 1.8 The transcript of the forum, including the Auditor-General’s presentation, is attached at Appendix Three.

¹ <http://smart.uow.edu.au/index.html>, accessed 5 May 2014.

² http://issuu.com/uniofwollongong/docs/infrastructure_imperatives_for_aust, accessed 5 May 2014.

Chapter Two – Issues and Themes

2.1 The presentations made to the forum broadly covered the following issues and themes:

- Long term planning and the political cycle, including community engagement
- Governance and institutional arrangements
- Funding.

LONG TERM PLANNING AND THE POLITICAL CYCLE

2.2 Several of the speakers identified the short term political cycle as an impediment to long term planning and project delivery³. They stated that bipartisan support for changes to the planning and delivery frameworks for infrastructure was essential for the success of long term planning. The speakers suggested that partisan politics is a barrier to infrastructure planning, citing the value of independent agencies, discussed below.

2.3 It was important to address appropriate timeframes for long term planning eg more than 20 years and up to 100 years. In planning for the longer term, the speakers believed that planners could rely on the following:

- Less land availability
- The discovery and application of new technologies
- A greater and an ageing population
- More intense economic activity⁴.

2.4 In acknowledging the political cycle, the speakers drew attention to the need for politicians to ‘sell’ long term planning to the community through demonstrating its worth in the short term. They suggested this paradox could be overcome and that political value would flow by building earlier dividends into longer term projects, and demonstrating good planning through the delivery of clear objectives⁵.

Community engagement

2.5 The speakers suggested that at the heart of successful long term planning and delivery was community confidence in the planning and delivery framework. Community confidence could be achieved from engagement through debate,

³ The Hon Nick Greiner AC, Member, SMART Advisory Council, Mr Michael Carapiet, Chair, SAS Trustee Corporation, Safety, Return to Work and Support Board, and Mr Les Hosking, Honorary Professorial Fellow, SMART Infrastructure Facility, University of Wollongong, Transcript of proceedings, 9 May 2014, pp24, 28, and 31.

⁴ Mr Garry Bowditch, Chief Executive Officer, SMART Infrastructure Facility, University of Wollongong, Transcript of proceedings, 9 May 2014, p14.

⁵ Mr Garry Bowditch, Transcript of proceedings, 9 May 2014, p15.

consultation and community priority setting, which would lead to community buy-in⁶.

- 2.6 It was important when engaging with the community to characterise infrastructure projects correctly. An example given was the West Connex project which one speaker described as not just a road, but as a community revitalisation project. By properly characterising the project and all its outcomes, the community would be invited to see the project as delivering a broad range of outcomes to a broad range of stakeholders⁷.
- 2.7 The speakers also addressed the question of who engages with the community to advocate for particular projects and noted there were relevant roles for government, investors and other stakeholders.

GOVERNANCE AND INSTITUTIONAL ARRANGEMENTS

- 2.8 The speakers advocated for the role of independent agencies in infrastructure planning and coordination, citing Infrastructure NSW as a source of independent advice and transparency in decision-making. The need for the independence of agencies to be upheld over time was highlighted⁸.
- 2.9 SMART introduced the concept of Integrated Infrastructure Planning and Management, which encompassed:
- Asking the right questions (what, where, when?);
 - Independent evidence-based argument; and
 - Transparency in decision-making⁹.
- 2.10 These elements were described as central to building community confidence and accountability.
- 2.11 Speakers also noted the role of the Auditor-General as a source of independent performance measurement and reporting. In this regard, they discussed the importance of measuring value and how to determine the best way to do this¹⁰.
- 2.12 The separate but complementary roles of the three levels of government were noted, with various governmental impediments highlighted, including:
- The current planning system and insufficient regulatory reform, and particularly the number of single purpose statutes¹¹; and
 - Poor metropolitan governance and the need for local government reform¹².

⁶ Mr Garry Bowditch, Hon Nick Greiner and Dr Tim Williams, Chief Executive Officer, Committee for Sydney, Transcript of proceedings, 9 May 2014, pp16, 25 and 33.

⁷ Mr Garry Bowditch, Transcript of proceedings, 9 May 2014, p16.

⁸ Hon Nick Greiner, Transcript of proceedings, 9 May 2014, p24.

⁹ Mr Garry Bowditch, Transcript of proceedings, 9 May 2014, p13.

¹⁰ Mr Grant Hehir, Auditor-General, Audit Office of NSW, Transcript of proceedings, 9 May 2014, p45.

¹¹ Ms Sonja Lyneham, Director, Lyneham Enterprises, Transcript of proceedings, 9 May 2014, p26.

¹² Professor Henry Ergas, Professor of Infrastructure Economics, and the Hon Nick Greiner, Transcript of proceedings, 9 May 2014, pp22 and 25.

FUNDING

- 2.13 The speakers proposed three main funding issues for consideration regarding infrastructure funding:
- The need to do more with current funding or to do more with less¹³;
 - The need to focus on funding the improvement of existing infrastructure, not just focussing on greenfield projects¹⁴; and
 - The need to attract new long term investment, including from superannuation funds¹⁵.
- 2.14 There was discussion of private and public funding options in a climate of diminished economic security, and a need to develop innovative funding arrangements such as bonds¹⁶.
- 2.15 The speakers also discussed the role of pricing and price signals, and how prices shape demand¹⁷. It was pointed out that 'infrastructure is not a free good'¹⁸, and that investors need to be able to recover costs through prices which provide an incentive to invest¹⁹.
- 2.16 On the consumer side it was emphasised that customers need service standards or benchmarks which govern the lifetime performance of assets and demonstrate value for money in return for the user charges which provide the return to investors²⁰.
- 2.17 During questioning from the audience, the question of 'who benefits and who pays' was raised. In this regard the roles of betterment taxes and tolls or other government charges were also discussed²¹.
- 2.18 The role of infrastructure as a foundation for economic activity and competitiveness, for both NSW and Australia, was also raised. As with the discussion on governance, speakers discussed the role of government funding and which level of government should fund which projects. This was part of a wider discussion of how to strike the right balance between public versus private-driven projects²².

¹³ Mr Jonathan O'Dea MP, Chair, Public Accounts Committee, Transcript of proceedings, 9 May 2014, p13.

¹⁴ Mr Garry Bowditch, Transcript of proceedings, 9 May 2014, p15.

¹⁵ Mr Gordon Noble, Director, Investments and Economy, Association of Superannuation Funds of Australia, Transcript of proceedings, 9 May 2014, p31.

¹⁶ Mr Garry Bowditch, Transcript of proceedings, 9 May 2014, p14.

¹⁷ Mr Garry Bowditch, Transcript of proceedings, 9 May 2014, p17.

¹⁸ Ms Sonja Lyneham, Transcript of proceedings, 9 May 2014, p26.

¹⁹ Mr Garry Bowditch, Transcript of proceedings, 9 May 2014, p17.

²⁰ Mr Garry Bowditch, Transcript of proceedings, 9 May 2014, p17.

²¹ Professor Henry Ergas, The Hon Catherine Cusack MLC, Dr Tim Williams and Ms Sonja Lyneham, Transcript of proceedings, 9 May 2014, pp21, 41 and 42.

²² Mr Jonathan O'Dea MP and Mr Garry Bowditch, Transcript of proceedings, 9 May 2014 pp12 and 14.

COMMITTEE COMMENT

- 2.19 In reviewing its intentions for and expectations of the forum, the Committee agreed that the forum usefully considered the issue of long-term infrastructure planning in New South Wales in an expert, objective and nonpartisan way. The Committee acknowledged both a broad consensus amongst those who attended the forum of the demand for infrastructure improvements in a climate of funding challenges, and the range of views amongst parliamentarians and the community about how these improvements might best be achieved.
- 2.20 The Committee noted the longstanding role of the Public Accounts Committee in scrutinising the Executive branch of government on behalf of the Legislative Assembly, and recommending improvements to the efficiency and effectiveness of government. While the forum was not held as part of a formal inquiry by the Committee under its terms of reference or statutory functions, the Committee resolved to table a report recommending that the NSW Government respond to the issues and themes raised at the forum.

RECOMMENDATION 1

The Committee recommends that the NSW Government review the issues and themes outlined in this report and advise the Committee on NSW's long term infrastructure planning and delivery capabilities, with specific reference to:

- a) **The current status of long-term infrastructure planning in New South Wales**
- b) **NSW's preparedness to plan, fund and deliver infrastructure in a timeframe beyond 20 years and up to 100 years**
- c) **Actions to achieve bipartisan support and community buy-in for NSW's infrastructure plans, including demonstrated commitment to ensuring the availability of independent advice, public consultation and transparent decision-making**
- d) **Regulatory reform of the planning system and metropolitan governance, and the adoption of Integrated Infrastructure Planning and Management**
- e) **Intergovernmental relationships and clarifying the roles of the three levels of government**
- f) **Financing reforms, developing innovative funding arrangements, and attracting long term investors in infrastructure**
- g) **Development of service standards and consumer benchmarks for asset performance**
- h) **Independent performance management and reporting.**

Appendix One – Program

Public Accounts Committee Forum: Planning NSW Infrastructure for the 22nd Century

Friday 9 May 2014
Macquarie Room, Parliament House

PROGRAM

Time		Speaker
9:15am		Registration
9:25am	Welcome and Introduction	Mr Jonathan O’Dea MP, <i>Chair, Public Accounts Committee</i>
9:35am	Infrastructure Imperatives for NSW and Australia: A Blueprint for Reform	Mr Garry Bowditch, <i>Chief Executive Officer SMART Infrastructure Facility University of Wollongong</i>
9:55am	Infrastructure in the 22 nd Century: A history lesson	Professor Henry Ergas, <i>Professor of Infrastructure Economics, University of Wollongong</i>
10:15am	Expert panel discussion: Is NSW prepared for its long-term future?	Facilitated by Mr Garry Bowditch Panel includes: <ul style="list-style-type: none"> • Mr Michael Carapiet <i>Chair, SAS Trustee Corporation, Safety, Return to Work and Support Board</i> • The Hon Nick Greiner AC <i>Member, SMART Advisory Council</i> • Mr Les Hosking <i>Honorary Professorial Fellow SMART Infrastructure Facility</i> • Ms Sonja Lyneham <i>Director, Lyneham Enterprises Ltd SMART Advisory Council</i> • Mr Gordon Noble <i>Director of Investments and Economy Association of Superannuation Funds of Australia</i> • Dr Tim Williams <i>Chief Executive Officer, Committee for Sydney</i>
11.15am		Morning tea
11:40am	Parliamentary Members: Open discussion and Q&A	Co-facilitated by: Mr Jonathan O’Dea MP and Mr Garry Bowditch
12:40pm	Future audits on infrastructure	Mr Grant Hehir <i>NSW Auditor General</i>
12:50pm	Premier’s Perspective	The Hon Mike Baird MP <i>Premier, Minister for Infrastructure and Minister for Western Sydney</i>
1:00pm	Close	Mr Jonathan O’Dea MP

Appendix Two – Speakers' Biographies

The Hon Mike Baird MP

Premier, Minister for Infrastructure and Minister for Western Sydney

Mike Baird was elected Leader of the NSW Liberal Party on Thursday 17 April 2014 and sworn in later that day by the Governor, Professor Marie Bashir AC, as 44th Premier of NSW.

Mike was appointed Treasurer of NSW after the election of the Coalition Government on 26 March 2011. In September 2012 he was also appointed Minister for Industrial Relations. Mike had served as Shadow Treasurer since December 2008 and previously as Shadow Minister for Energy, Finance and Youth Affairs.

Mike was elected Member for Manly in 2007 after an 18 year banking career which encompassed corporate banking, securitisation, debt capital markets and project finance in Australia, London and Hong Kong. Career highlights include managing corporate finance transactions across a range of industries for Deutsche Bank, and Head of Originations, debt capital markets in London for NAB. Prior to his election to Parliament, Mike was Head of Institutional Banking for HSBC in Australia and New Zealand.

Mr Jonathan O'Dea MP

Chair, Public Accounts Committee

Jonathan O'Dea is the Chair of the Public Accounts Committee and Member for Davidson. Prior to being elected to Parliament of NSW, Jonathan worked as a solicitor in private and corporate practice before moving into commercial and management roles. He has run various niche financial services businesses as a senior executive or General Manager and was a non-executive board director with the private health insurer HCF for 14 years.

In addition to his commercial and management roles, Jonathan was a North Sydney Local Government Councillor and Deputy Convenor of the Australian Classification Review Board. He has also provided honorary service on various not-for-profit boards.

Jonathan holds Bachelor degrees in Arts and Law, a Masters in Law and a Masters in Business Administration.

Mr Garry Bowditch

Chief Executive Officer, SMART Infrastructure Facility

Garry Bowditch is the inaugural Chief Executive Officer of the SMART Infrastructure Facility at the University of Wollongong, and brings to SMART almost 20 years of commercial and government experience spanning Australia, Asia and the OECD.

Garry was the Founding Executive Director of Infrastructure Partnerships Australia (IPA), established in September 2005. Garry built a corporate and government membership exceeding 160 organisations of leading financiers, builders, service providers and government to advocate greater private sector involvement in infrastructure. He is widely recognised as a leader in the infrastructure sector.

Garry has also held senior executive positions in commercial organizations including Tenix as Senior Vice President, Marketing & Business Development, and also founded Vmax Consulting in 1999.

Prior to entering the private sector Garry was Head of International Economics and Finance at the Department of Foreign Affairs and Trade. He served as Australia's Export Credit Trade and Finance representative at the OECD in Paris, and was a senior Commonwealth Treasury official where he focused on economic forecasting and policy development concerning macroeconomic and Commonwealth-State financial relations.

Professor Henry Ergas

Professor of Infrastructure Economics, University of Wollongong

Henry Ergas is a well-known regulatory economist who held a range of leading positions at the OECD before returning to Australia in the mid-1990s. He chaired the Australian Intellectual Property and Competition Review Committee for the Australian Government in 1999-2000 and was a member of the Prime Minister's Export Infrastructure Task Force in 2005 and the Defence Industry Policy Review in 2006. He has published extensively on infrastructure regulation and cost-benefit analysis.

Henry is the inaugural Professor of Infrastructure Economics at SMART where his focus is on the economic, regulatory and public policy research program. He takes a special interest in the development and application of cost-benefit analysis and in the analysis of pricing and investment decisions in regulated infrastructure industries. Henry is also a regular columnist in The Australian newspaper and Senior Economic Adviser at Deloitte Access Economics.

Mr Michael Carapiet

Chair, SAS Trustee Corporation, Safety, Return to Work and Support Board

Michael Carapiet is Chairperson of STC and Chairperson of the Safety, Return to Work and Support Board that comprises the WorkCover Authority of NSW, and the Lifetime Care and Support and Motor Accidents Authority. He is a Director of Southern Cross Media Limited, State Super Financial Services Australia Limited and Clean Energy Finance Corporation and is on the Advisory Boards of Norton Rose Australia and Transfield Holdings.

Michael has more than 30 years' experience in the financial sector and has held a number of senior roles with the Macquarie Group, where he was a member of Macquarie's Executive Committee from 2005. Prior to his retirement in July 2011, his roles included Global Head of Advisory and Specialised Funds, and Executive Chairman of Macquarie Capital and Macquarie Securities. Mr Carapiet has a Master of Business Administration from Macquarie University.

The Hon Nick Greiner AC

Member, SMART Advisory Council

Nick Greiner was Premier and Treasurer of New South Wales from 1988 to 1992. Since his retirement from politics he has been heavily involved in the corporate world.

Nick is currently Chairman of Bradken, The Nuance Group, QBE Australia and Accolade Wines as well as Deputy Chairman of CHAMP Private Equity. He is also Chairman of the Advisory Council for Degremont and Senior Advisor and Chairman, Council of Advisors, Rothschild Australia Limited. Nick is a Director of the European Australian Business Council (EABC) and a Member of the Board of Governors, Committee for Economic Development of Australia (CEDA). He is also a Trustee of the Sydney Theatre Company Foundation; a member

of the Advisory Committee of the Andrew & Renata Kaldor Centre for International Refugee Law; the Advisory Board for the John Grill Centre for Project Leadership; and also the Harvard Business School Asia-Pacific Advisory Board.

In the Queen's Birthday Honours List of 1994 he was awarded a Companion of the Order of Australia for public sector reform and management and services to the community.

Nick holds an Honours Degree in Economics from Sydney University and a Master of Business Administration with High Distinction from Harvard Business School.

Mr Les Hosking

Honorary Professorial Fellow, University of Wollongong

Energy and Finance business leader, Les Hosking has recently accepted an Honorary Professorial Fellowship with the SMART infrastructure Facility.

As a non-executive Director of AGL Energy Ltd, Australian Energy Market Operator (AEMO), Innovation Australia and Chairman of Adelaide Brighton Ltd and The Carbon Market Institute, his wealth of industry experience is a welcome addition to SMART.

Ms Sonja Lyneham

Director Lyneham Enterprises Ltd, SMART Advisory Council

Sonja Lyneham has extensive professional experience in urban development, including project management, master-planning, major infrastructure and development projects, and economic appraisal. Sonja completed the Property Audit for all NSW Government holdings for the NSW Commission of Audit. She undertook similar property audits and financial evaluations for individual agencies including Sydney City Council and Prospect County Council. She also undertook the property audit of NSW Department of Housing and now Landcom. From 1996 to 2009 Sonja was the Visiting Professor in the Faculty of the Built Environment at the University of New South Wales.

Sonja has directed the development approval process for a number of major infrastructure and development projects, including the Rhodes Peninsula and 255,600m² of development, Erskine Park, Bluescope Steel's new plant and projects within Eastern Creek – Sydney.

Mr Gordon Noble

Director of Investments and Economy, Association of Superannuation Funds of Australia

Gordon Noble is the Director of Investments and Economy at the Association of Superannuation Funds of Australia. Gordon is responsible for ASFA's investment strategy and stakeholder relations including relationships with the Federal Government. A core part of ASFA's work concerns investments which are focused on financial system stability, infrastructure, innovation, capital markets and fixed interest markets.

Gordon was formerly Deputy CEO of the Committee of Melbourne, a city based think tank, and has extensive experience in industrial relations, Federal politics, banking and superannuation.

Dr Tim Williams

Chief Executive Officer, Committee for Sydney

Dr Tim Williams is Chief Executive Officer of the Committee for Sydney. Prior to commencing with the Committee in 2011, Tim was senior Special Advisor to a number of UK cabinet ministers in the Department of Communities and Local Government. Between 2005 and 2007

Tim was a leading policy maker on urban regeneration and city development, and is recognised in Australia as a leading thinker on high speed broadband and the impact of digital media on communities, public services and businesses. His report, *Connecting Communities: the impact of broadband in the UK and its implications for Australia* was commissioned by Huawei, the world's second largest telecommunications company.

In London, Tim advised the two main Host Boroughs, the Olympic Delivery Authority, the London Development Agency, the Olympic Legacy Company, and was the advisor to the CEO of Lend Lease on the construction of the Olympic Athletes Village. Between 1998 and 2003, Tim was the CEO of the Thames Gateway London Partnership during which the Gateway in East London was a key urban regeneration project for the UK. Tim is a graduate of Cambridge University.

Mr Grant Hehir

NSW Auditor-General, Audit Office of NSW

Grant Hehir commenced as the Auditor-General of New South Wales from 5 November 2013 for a period of eight years. Prior to being appointed Auditor-General of New South Wales, Grant was Secretary of the Victorian Department of Treasury and Finance from 2006, and was Secretary of the Department of Education and Training from May 2003 to 2006. As Secretary of the Victorian Department of Treasury and Finance, he provided advice on economic and financial policy and resource allocation decisions. Grant has also worked in the Federal Department of Finance and Administration.

Appendix Three – Transcript of Proceedings

Public Accounts Committee Forum: Planning NSW Infrastructure for the 22nd Century

Friday 9 May 2014
Macquarie Room, Parliament House

The Forum commenced at 9.25 a.m.

PRESENT

Mr J. R. O'Dea (Chair)
Mr G. M. Piper
Mr J. D. Williams

OPENING

CHAIR (Mr JONATHAN O'DEA): Welcome everyone to this forum convened by the Public Accounts Committee of the New South Wales Parliament on planning New South Wales infrastructure for the twenty-second century. I acknowledge the Gadigal people of the Eora nation who are the traditional owners of the land on which we meet and pay respects to their elders past and present. I acknowledge and pay respects to a number of distinguished speakers—I will not identify them now but they will be introduced as they share their thoughts with us. I also acknowledge and welcome a number of important stakeholders in the infrastructure space, including a number of my parliamentary colleagues. As can be seen from today's program, there will be the opportunity to hear from expert infrastructure stakeholders, as well as the opportunity to share in discussion and a question and answer session. In that session parliamentary questions in particular will be encouraged and observers will also be able to make brief comments or ask questions as time permits.

The Public Accounts Committee is a statutory committee of the Legislative Assembly. It scrutinises the Executive branch of government on behalf of the Legislative Assembly. The Committee recommends improvements to the efficiency and effectiveness of government, and it attempts to do so in a nonpartisan way. That is the nature of our forum today. It is not a government forum: it is a parliamentary forum. Infrastructure is a topic that we all need to place at the forefront of our considerations as legislators in this State and it is something that should be above petty politics. Infrastructure is a priority topic for us all. This is reflected in the fact that it was a major topic at a recent Labor policy forum on jobs and the economy and in Premier Baird retaining the portfolio responsibility for infrastructure when he established his recent Cabinet. I am delighted that the Premier will be joining us later today.

After this forum it is intended to table a report in Parliament. That report will comprise a transcript of today's proceedings, which are being recorded by Hansard, a summary of issues

and themes from today and a recommendation that the Government respond to that report within six months, in accordance with the standing orders. People should be aware that what they say will be on the public record and that the media will also be making a recording or taking notes of what is said. You have all been given a program, which I have briefly outlined. I will not go into detail about today's proceedings other than to say that the role of the SMART Infrastructure Facility at the University of Wollongong has been enormously supportive and, in particular, I acknowledge the contribution of its chief executive officer, Mr Garry Bowditch, who we will shortly hear from.

When I became the member for Davidson in 2007 I adopted a logo with three arrows, representing the past, present and future, and accompanied by the phrase "building for tomorrow". Whilst we need to value our past and provide for today, it is in delivering a vision for the future that a government and a parliament can have the most lasting impact. In that respect, infrastructure planning and delivery is absolutely critical. It can facilitate greater economic activity and productivity, better competitiveness, jobs growth and higher living standards. A strategic approach to infrastructure is needed to plan funding and efficient delivery of the right infrastructure projects in the correctly prioritised order. Areas for major infrastructure projects include improved public transport and roads, upgraded regional locations that host mining operations, better health-related facilities and enhanced facilities and workplaces for front-line staff. There are also softer forms of social infrastructure, which are obviously also important, but whatever the area of infrastructure, negative outcomes can come from neglected or improper long-term planning and these may not be immediately obvious.

History certainly suggests that there is insufficient immediate political accountability for governments that focus on short-term media spin at the expense of long-term foresight and investment. The results of infrastructure incompetence are often not seen for many years as the legacy of short-sightedness moves to a future electoral cycle. Ultimately, the New South Wales public risks seeing public infrastructure projects repeatedly undelivered or mismanaged to the detriment of New South Wales, although backroom bureaucrats and political patrons can still prosper in that environment. Past treatment of the North West Rail Link, Rozelle metro and a second Sydney airport come particularly to mind. New South Wales cannot fund its entire infrastructure itself; it relies on a fair allocation of federal monies. The recent Federal Commission of Audit and the upcoming Federal budget are important influences.

The people have asked over recent years why fewer Federal funds have been allocated to New South Wales than elsewhere. New South Wales certainly did suffer knockbacks from the Federal Government when it made what could not unfairly be described as inadequate submissions to Infrastructure Australia. Infrastructure Australia has previously called for a deeper, more mature public debate about infrastructure planning and investment decisions, and today's forum should assist with that sort of discussion. A range of other funding sources help to deliver the State's infrastructure strategy, including Restart NSW and public-private partnerships. Restart NSW was established by the Government to help fund critical economic and social infrastructure projects across New South Wales, with 30 per cent of funding reserved for projects in regional areas. The New South Wales Government's assets transactions program has been the primary source of funding for Restart NSW. Future windfall revenues, which in the past have sometimes been mismanaged or wasted, and proceeds of the New South Wales Waratah Bonds are sources of additional funds. These initiatives complement the functions and activities of Infrastructure NSW, which has improved infrastructure governance in New South Wales.

With proper governance comes less waste and we are able to do more with less. Past bad public sector governance or inadequate governance has endangered the prospects of private sector allocations to infrastructure. The experience of the private sector with the Lane Cove Tunnel, the Cross-City Tunnel and the CBD Metro hardly inspired private investment in major infrastructure. There is no doubt that infrastructure expenditure accountability must be increased and the New South Wales Auditor-General has an important role in that regard. I am pleased that he is here today with a number of his staff and that we will hear from him later. To kick off the main proceedings we have Garry Bowditch from the SMART Infrastructure Facility at the University of Wollongong. Garry will be assisting with various sessions, and I thank him for that.

Garry has an impressive background. He is the inaugural chief executive officer of the SMART Infrastructure Facility and brings to SMART almost 20 years of commercial and government experience spanning Australia, Asia and the OECD. He was the founding executive director of Infrastructure Partnerships Australia, which was established in 2005. Garry built the corporate and government membership to more than 160 organisations of leading financiers, builders, service providers and government to advocate for greater private sector involvement in infrastructure. He is widely recognised as a leader in the infrastructure sector. He has also held senior executive positions in commercial organisations, including Tenix and Vmax Consulting. Prior to entering the private sector, Garry was head of International Economics and Finance at the Department of Foreign Affairs and Trade and he served as Australia's export credit trade and finance representative at the OECD in Paris. He was a senior Commonwealth Treasury official, where he focused on economic forecasting and policy development concerning macroeconomic and Commonwealth-State financial relations. Please join with me in welcoming Garry Bowditch.

Mr BOWDITCH: Thank you, Mr Chairman, for your kind invitation to address the Public Accounts Committee today. I acknowledge your leadership in bringing about this forum, which I think is very valuable for the future of New South Wales. The SMART Infrastructure Facility and the University of Wollongong are honoured by the opportunity to address the Committee and the members of Parliament present here today. The SMART Infrastructure Facility is one of the largest infrastructure research institutions in the world. It has been made possible in part by the generous funding of the New South Wales Government.

SMART is defining a new area of research called integrated infrastructure planning and management. This means that we are concerned with the health of the whole system over the very long term. Our focus is concerned with understanding the infrastructure system from the perspective of 40,000 feet rather than at the microscopic level. The practical implication of this is that we are seeking to better understand the way these networks, roads, ports, rail, electricity, water, schools and hospitals can work together to seamlessly meet the needs and expectations of both the community and business today and, of course, well into the future. The community simply expects these systems to work, for example, roads to get you to hospital quickly and safely, availability of water for living and for cooling and electricity generation plants, telecommunications systems to control the management of traffic in the peak hour and to respond to accidents, and so the list goes on.

The research and policy development effort at SMART is helping governments and businesses in Australia and around the world to make more cost-effective and astute infrastructure decisions drawing on the deep collaboration SMART has with the New South Wales

Government. This is evidenced by landmark research projects such as cost drivers of infrastructure and the path-breaking land-use and transport planning model entitled "Shaping the Sydney of Tomorrow". All these investigations look beyond specific projects to the broader infrastructure network and help policy-makers to be sure that their interventions make the best possible improvement to people's lives and to the competitiveness of the State and in turn the nation.

New South Wales, as Australia's first State, has from the beginning been at the frontier of the nation's infrastructure provision, carving out the arteries and the veins of the vast array of networks across energy, transport, water and telecommunications, all of which drive and grow prosperity. The quality of New South Wales infrastructure is often seen as a bellwether of the nation's health. Of course we are right to do that as New South Wales measured by size, either population size or the size of the State economy, is the engine room of the nation. The frontier status of New South Wales is today undiminished as it currently spends more on infrastructure than at any stage of its history. Yet governments are unable to meet demand and do not expect ever to do so.

The question we will be discussing today is: what can governments do about this situation? And can we do things better? While the twenty-second century feels a long way away, it is not. A child born today at Royal North Shore Hospital can expect that their life will reach into the next century. For policymakers concerned with infrastructure, this is exactly the time frame that we must be planning for. Of course, no-one can pretend to know what the twenty-second century has in store for us, particularly the challenges and opportunities for economic growth, living standards and fairness.

The uncertainty we face today about the future is of course no different from what our forebears faced. When Bradfield supervised the construction of the Sydney Harbour Bridge he would have had no inkling that Sydney would become a global financial centre for the world. On the other hand, Bradfield's transport system blueprint, which was never accurately activated, is a reminder to all here today that wise decisions taken—or, for that matter, decisions not taken—can and do shape the cities and the regions we live in for a very long time. I am sure we will hear more on this during the expert panel discussion.

Our task today for this forum is to avoid the pitfalls of trying to predict the future of New South Wales and Sydney in the twenty-second century. Instead we have to ensure that the right building blocks for growth are in place so that we can adapt to and thrive in whatever circumstances the future throws at us. To that end, we have much to do. While the task is large, we have the benefit of Infrastructure New South Wales—being a fundamentally important institution for the future of the State. It must provide the necessary scaffolding to assist policymakers in three ways. Firstly, to ask the right questions about infrastructure—the questions of what, where and when. Secondly, to bring independent evidence-based arguments, which have been missing for too long, to help correct the bias in the system that new, large and shiny infrastructure is always better. Thirdly, to ensure transparency in decision-making so that the community can build up confidence in the process and the Government and industry supporting infrastructure can be held to account for the proper allocation, and for achieving value for money, of the State's financial resources.

I think it is fair to say that the subtext of today's forum is: are we as a community, and is this Parliament, doing enough to plan for the long-term prosperity of New South Wales? To put this in context, the population of New South Wales has grown in the past 100 years from 1.9

million people to 7.4 million people; that is an increase of 5½ million people. However, that dramatic increase represents less than half of the growth that is about to occur over the next 100 years as the New South Wales population potentially approaches 17 to 20 million people. Our forebears made plans for the future, including by building a State highway system, rail systems and arterial road networks; creating metropolitan water and sewerage networks; and laying out a network of energy generation facilities and poles and wires to span the entire State—these to name just a few.

Today we have a much bigger job to do, and one that I think will be different from that of our past. The future model will be different because the availability of land on the coastal fringe and the requirements of people and industry will differ from that of our parents and grandparents generations. This reflects changing technology and the pervasive impact of the value and scarcity of time. The case I would like to make is that planning for the twenty-second century brings profound benefits to the current generations we serve. It helps citizens and institutions alike to see the future with more confidence and purpose. When these conditions of confidence and purpose are present, the sooner we are prepared to invest in the future. That brings immediate benefits today—greater confidence that the State can sensibly accommodate and adjust to a bigger population and more intense economic activity. Then the dividends of long-term planning can be achieved so much sooner. The urgency is to demonstrate good planning to the community, and for governments of all political complexions to value it and stick to its principles.

Historically New South Wales has been a large investor in infrastructure. Real, per capita, gross, fixed capital formation estimates adjusted to better reflect infrastructure are currently at around \$13,200 a year. That is up from \$7,888 per year in 1990. This compares favourably to the OECD average for industrialised nations. You might ask: what is the issue? Infrastructure New South Wales in its 20-year strategic plan accurately summed up the situation when it said:

New South Wales' problem is not so much the quantity of the investment but the quality.

This is where the infrastructure debate must focus. Foremost of the challenges facing New South Wales is the need to extract more value from each infrastructure dollar invested. This was the focus of the recent Simulation, Modelling, Analysis, Research and Teaching (SMART) Research Facility green paper entitled "Infrastructure imperatives for Australia". This is available in your folder. It sets 18 best-practice recommendations concerning the reform of infrastructure. Copies are available on your chairs here today.

Meeting the expectations of the community by providing more infrastructure but using fewer financial resources is fundamentally important to the future. To do that New South Wales must embrace sooner the significant benefits that come from improving existing infrastructure before prematurely rushing into commitments for more greenfield expansion. Planning for the future is not a licence to waste taxpayers' dollars on white elephant projects, which so often emerge when a lack of transparency enables policymakers to go on a random infrastructure walk. The message for New South Wales is crystal clear: New South Wales requires a vision and a plan for the twenty-second century that is built on solid foundations. Respect for transparency and accountability to the community, along with extracting the maximum value of infrastructure dollars spent each and every time, must be the core of this plan. This will do more to lift productivity, living standards and the competitiveness of this State than any other type of intervention.

Governments trying to fix the infrastructure backlog face a number of constraints, including money, access to suitable land, securing community buy-in and setting proper user charges. It is also a timely reminder that policymakers should be more circumspect with proponents who argue for the abolition of the so-called infrastructure deficit or infrastructure gap. The additional dollars required to limit the so-called gap become increasingly prohibitive, especially when demand is unconstrained—with either free access or pricing well below cost. Such investment would not represent the best use of the money of taxpayers or the private sector. Instead government should be concerned with the best possible allocation of public funds—for the highest benefit and for the smallest cost. When the highest benefit and the smallest cost are the driving force behind infrastructure planning, intractable problems such as traffic congestion can be approached in a new light without resorting to ever-bigger dollar projects with the diminishing impact of that money.

Congestion in Sydney continues to escalate, with gridlock on roads impacting on passenger and freight logistics. The persistence of this situation reflects poorly on project selection and asset management processes along with distortions that have arisen from poor interactions between the Commonwealth and the States. Reform is urgently needed—where there is less focus on ribbon-cutting ceremonies and greater use of well-targeted pinch point interventions. For example, decongesting and de-bottlenecking existing infrastructure, along with shifting a small amount of demand from the peak to the shoulder period, can often have superior productivity impacts compared to building expensive greenfield assets. The school holiday effect in Sydney is an example of this point—better traffic flow with less than five per cent of the traffic absent in the peak. Surely there must be a way to win community confidence so that we can make the peak hour work better by shaping demand through means other than just by pricing—for example, changing school operating hours and retail operating hours could be a starting point.

While New South Wales has a strong case to build new infrastructure, like WestConnex and NorthConnex, it must use these once-in-a-lifetime opportunities to do much more than build a new road. These megaprojects must kick off the new forces that can shape and form the Sydney of tomorrow. The reality is that the Sydney of today and yesterday is simply too land hungry to be sustainable into the twenty-second century. The appetite for land, unchecked by proper pricing signals from the provision of infrastructure, has seen an unvirtuous cycle demanding ever more capital and diminishing returns from that spending.

Many Sydneysiders have sought relief from the escalating land prices on the city fringe and have done so without the benefit of any genuine choice on where else they could live. Spacious residences on the fringe compared poorly, in their mind, to the expensive, compact living of the inner areas. New South Wales is in urgent need of finding Australia's unique solution to higher-density living. Just as the Akubra hat or the Hills Hoist were unique innovations to deal with unique Australian conditions, so must we find such solutions for higher-density housing. For this innovation to occur, New South Wales must strip away the unnecessary complexity and exorbitant costs of land-use regulation and make it simpler and less costly to experiment with market-driven design and amenity for medium- and high-density housing.

In the same vein, important projects like WestConnex can be a catalyst for triggering a new wave of innovative investment by optimising the interaction between what I see as the two personalities of WestConnex—that is, WestConnex, the road project and WestConnex, the urban revitalisation project. A critical question that needs to be answered is: How much extra

housing and urban revitalisation can and should we expect from WestConnex? Despite the best intentions of those tasked with delivering WestConnex, the public documentation suggests that the \$11.5 billion price tag will only deliver 25,000 new strategically located residences for Sydney over 20 years. Sydney requires at least 800,000 new residences by 2050. Given that WestConnex is developing such a valuable artery for the city, can it do more? Are we aiming high enough in making the most of WestConnex in addressing the urgent affordable housing challenge?

To answer these questions will help set up WestConnex as the benchmark project for the twenty-second century planning for New South Wales. The first step will require a governance model that breaks down traditional administrative silos and enables integrated land-use and transport planning to occur. Megaprojects like WestConnex can be great projects too. The litmus test will be the focus on its ability to deliver much more than a road by making a large instalment in clarifying the future urban shape and form of Sydney for the twenty-second century.

Better infrastructure for New South Wales should also be anchored with a clear objective of lifting State productivity. The clarity of objective has been missing, which has made it difficult for governments to be purposeful and consistent in their infrastructure decisions in recent decades. To accommodate an extra 3 million people by mid-century in New South Wales, the stock of transport infrastructure will need to expand by 60 per cent or its productivity must lift by a similar magnitude. Obviously, it will be some combination of the two, but anyone flying into Sydney can see that there is not a lot of room for new roads and rail systems, so productivity is going to matter a great deal. To that end, the regulatory system requires reform as it must provide the right price signals and incentives to make the best use of existing infrastructure. This means a willingness to allow prices to reflect the full cost recovery for the infrastructure provided and to permit prices to reflect the incentive to invest.

Tolls and user charges can have and do have a fundamental role to play in shaping demand and helping to direct where investment is needed to lift productivity growth. Of course, a toll should always be a fee for a defined level of service, and the community has a right to expect choice in the services available. The problem is that infrastructure often fails this test to the detriment of business and community confidence. It is notable that the M1, the M2, the M4 and the M5 toll roads in Sydney all originally demonstrated great benefit to commuters with fast travel time. However, the reality is that now each of these toll roads has a peak hour exceeding 10 hours a day. Slow speed and uncertain time are the norm. To address this situation, State and Federal government agencies need to enshrine customer service benchmarks that govern lifetime performance of major assets and networks. Governments and the private sector concession holders will then require a framework to sustain them together.

Citizens living in our global city expect globally competitive transit times during the peak hour, but the reality is Sydney has an average commute speed in the peak hour life that is 17 per cent lower than London's, at just 50 kilometres per hour. Given Sydney is a small city by comparison to London, this is a concerning signal about the health of the transport system. Using tolls to help fund transport infrastructure is reasonable, but without service benchmarks such as minimum speed guarantees in the peak then commuters are not assured of value for money and a toll becomes just another tax. Tolls and user charges are not a panacea without fundamental institutional reform. Infrastructure must perform a service to the community that

is relevant and compelling in order to justify a user charge in the first place. This is one of the missing ingredients to a successful infrastructure future.

In conclusion, there is much to do and time is short. I am reminded of a conversation between the great French Marshal Hubert Lyautey and his gardener. Standing in front of the marshal's grand estate, the gardener was inspecting a small tree in a pot that the marshal had recently purchased on a trip abroad. After inspecting it the gardener protested by saying that the tree species was slow-growing and by the time it reached maturity the marshal would be long dead. The marshal responded: "If that is the case, there is no time to waste, plant it this afternoon."

Mr JOHN WILLIAMS: On behalf of the Public Accounts Committee I thank Garry for a very informative presentation. This Government is all about forward vision. I would like you to accept a small gift from the Committee.

CHAIR: The next session features Professor Henry Ergas, Professor of Infrastructure Economics at the University of Wollongong. His presentation is entitled "Infrastructure in the twenty-second century: A history lesson". Professor Ergas is well known as a regulatory economist who has held a range of leading positions at the OECD, before returning to Australia in the mid-1990s. He chaired the Intellectual Property and Competition Review Committee for the Australian Government in 1999-2000, and was a member of the Prime Minister's Exports and Infrastructure Taskforce in 2005 and the Defence and Industry Policy review in 2006. He has published extensively on infrastructure regulation and cost-benefit analysis. Henry is the inaugural Professor of Infrastructure Economics at the Simulation, Modelling, Analysis, Research and Teaching [SMART] Infrastructure Facility of the University of Wollongong, where his focus is on the economic, regulatory and public policy research program. He takes a special interest in the development and application of cost-benefit analysis and in the analysis of pricing and investment decisions in regulated infrastructure industries. Henry is also a regular columnist for *The Australian* and senior economic adviser at Deloitte Access Economics. I welcome Henry.

Professor ERGAS: Let me start by bringing to your attention an anniversary that seems to have gone almost completely unnoticed, but that I believe falls this month. This is the 200th anniversary of the beginning of public transport in Australia. Public transport in Australia began 200 years ago—a few metres from where we now are—with a common stage cart service, as it was called. It began in 1814 connecting Sydney and Richmond. Those of you who are parliamentarians and have some government experience will be pleased to hear that almost as soon as it was inaugurated it gave rise to public complaints.

The early carriage services expanded rapidly as the city grew. There was a proliferation of them and quite a bit of competition. The carriage services soon became known as growlers. They were called growlers because of the noise they made as the ungreased carriage wheels went over the city streets. There was no shortage of complaints about the terrible noise nuisance and questions about what the Governor was doing to control and regulate the noise. Even worse than the noise was the fact that the carriages were all built to British design when they were imported. The British carriages were not really devised to take the strain of Sydney streets as they were and, according to some, remain. The result of it was that not only did they make a terrible noise as they went by they also tended to fall completely apart. When that happened there were very unfortunate consequences for the passengers who felt they had paid their money and deserved to make it in one piece to the other end.

I say this because some of you may think this is just proof that, as the French say, “plus ça change, plus c'est la même chose”. Certainly there is an element of truth to that. But in examining that element of truth—and this is what I hope to do in the few minutes that have been allocated to me—I want to look at what historically has made our infrastructure issues so challenging and what that implies for the future. I am going to delve into history and look a long way back to see whether that helps us look a bit forward. I am not sure whether it takes us into the twenty-second century, but it is the forecaster's boon that I will not be there to know whether I was right or wrong. Hopefully, some of you will. What can we learn from that history?

I am very surprised that there has not been any form of commemoration for 200 years of public transport. It is the sort of thing you would think would be perhaps not front page news in the papers, particularly in the lead-up to a Federal budget, but at least noticed somewhere and that people would be issuing stamps and little plaques and the fellow who set up the service would be remembered. I think he was a former convict. I am not sure whether he was sentenced after he set up the service for the poor quality of service that he provided. No doubt there are some contemporary regulators who believe he should have been. The point I want to make in looking at that story is to see whether there ever really was a golden age of Australian infrastructure and, if there was, what it consisted of and what we can learn from its existence or non-existence.

I suggested a moment ago that there was a significant element of “plus ça change” to my little anecdote, but the argument that would always be put against that to say it has not always been like that would be to look at the harbour bridge. The harbour bridge is clearly a significant achievement and it is truly remarkable that it was built and still seems to serve the city of Sydney very well, albeit obviously suffering to some extent from inherent capacity constraints. But I would suggest that despite the frequent references in the press to the harbour bridge as the kind of iconic project that we should have more of—and it just shows that if our politicians would stop talking and start digging we would all be better off—you do not need to know much about the history of the harbour bridge to realise that far from being an instance of farsighted vision leading to speedy resolution to infrastructure problems it was almost the opposite.

Start at the beginning. The first plan or design for a bridge linking the city to the north shore is drawn in 1815, one year after the first public transport begins in the colony. Francis Greenway designs a bridge and says that there is a very strong case—and Macquarie is absolutely convinced of this—to build a bridge going from the city to the north shore because some day that will be pretty valuable. Of course, at the time that was truly speculative, as was the future of the colony. But the speculative nature of the endeavour and the uncertainties then diminished, particularly after the gold rush brought a huge influx of population.

The population of the Sydney area increases seven-fold in the 40 years from 1851. You get this spectacular increase in the city's population. Of course Melbourne is formed really as a result of the gold rush, but Melbourne reacts to the gold rush by expanding extremely rapidly and, depending on how you measure it, it becomes the second or third largest city in geographical area in the British Empire. Actually, Melbourne is probably the first modern city in the sense of it being a city that grows by very rapid suburbanisation. Sydney, in contrast, for a range of reasons, grows by increased population density. That poses quite fundamental problems. There is a clear perception that something has to be done to facilitate its geographical

expansion and deal with very high density areas which are perceived as being the source of significant social problems as well as the city's periodic difficulties with health, poor water and sanitation.

From the 1850s on there is a series of projects to build a bridge. In 1880-81 Henry Parkes negotiates with British financiers to build a bridge. They agree that they will construct a privately tolled bridge that will go from the city to the north shore and it will be built on the so-called Canadian model. The Canadian model was a model in which the government guaranteed a minimum rate of return and capped the maximum return. But Parkes loses government in 1882—he suffers serious electoral defeat—and the project dies at that point. From then on there is a succession of private bills to build a bridge. Every two or three years there is a financial project to construct a bridge that will go to the north shore, it is put to New South Wales Parliament and, typically, defeated. The bills that envisage private construction with tolls are defeated but equally too all of the public ones. The public ones are basically defeated by what was known at the time as country interests, which believed that the important thing was to expand the rail network into regional New South Wales.

The most serious private proposal is a proposal in the late 1890s that would have built much the kind of bridge that was ultimately built at the beginning of 1925, and that was defeated on a combination of the country vote and the newly formed Labor vote—the country vote because they feared that the guarantee would erode the State's capacity to continue to provide loss-making rail services; the Labor Opposition, led by J. C. Watson, who then became Prime Minister, was based on the concern, and an understandable concern, that there was no regulatory framework that would protect consumers. So the combination of a wide range of sources of opposition condemned that bill. But at that point it was apparent that there were really serious problems with Sydney's urban form; it was far behind what was being done in Melbourne and was widely recognised to be far behind.

So what changed that situation? There were a couple of things. One was simply that the problems had become so acute that it was difficult to continue to ignore them—a recurring theme in the history of New South Wales, one might submit. The second element to it, which helped galvanise that, was that, in part, new forces had arisen, particularly in the City of Sydney, that felt that the city's future was being compromised and its difficulties needed to be addressed. That gave rise to a very important royal commission, which was set up in 1909, and that royal commission was the Royal Commission for the Improvement of the City of Sydney and its Suburbs. It makes very striking reading if you go back to look at the report of that royal commission. It was chaired by Thomas Hughes, who was the first Lord Mayor of Sydney, and it had a quite broad political basis and a variety of social and interest groups were reflected on it.

It makes startling reading because you go back over it and almost every problem, going from the need to reserve transport corridors through to the need to attract finance to build infrastructure, was covered in the minutes of evidence and dealt with one way or the other in the report. It stresses the fact that if the problems of the City of Sydney are not dealt with then the future of New South Wales will be very seriously jeopardised. It had a serious constraint imposed on it, which was that there was a royal commission, which reported just as it began, on connectivity between Sydney and the north shore, and that royal commission, which reported in 1909, had, for a range of reasons, recommended a tunnel instead of a bridge. It felt that a bridge would undermine the value of Sydney as a port by constraining flows in Sydney Harbour, and so it came out strongly against a bridge and strongly in favour of a tunnel.

Unfortunately, the Government seemed to accept that recommendation and in the terms of reference for the 1909 royal commission excluded it from considering the precise form of transport that would ultimately be built between the city and North Sydney. But the betterment commission took copious evidence, not least from Bradfield—who was, at the point early in his career, against the tunnel option—and made it as clear as it could that it believed that a bridge was the solution. Unfortunately, World War I intervened and it was only in 1922 that progress began on building the bridge. So if you take the whole history, you have 107 years between initial approval by Macquarie and the legislation to commence the construction of the bridge. Of course, the bridge began construction in 1925 and was completed in 1932.

When it was built the bridge was built on the plan that was largely derived from work done by Bradfield. Garry mentioned Bradfield's strategy for the transport of the City of Sydney and its suburbs. Again, that is a very interesting and important document because Bradfield was not only a terrific engineer he was also a pretty good economist in his own way, so he devoted an enormous amount of attention in his work to trying to quantify the costs and benefits of building the bridge as well as constructing the Eastern Suburbs Line and the City Loop, which were the other major components of his strategy. What he did for the bridge was he looked at the likely range of costs under alternative scenarios for building the type of cantilever bridge that at that time he believed was the right option and compared that to the increase in land values that was likely to occur in the CBD and on the north shore. He then calculated the tax that you could impose if you captured those land values, or some share of those land values, so as to finance the construction of the bridge.

When the bridge was legislated for and built, the policy approach was based on a betterment tax that was going to be imposed on the CBD and on the north shore. The betterment tax would be an efficient way of capturing for taxpayers the value that the bridge created while ensuring that users would still face charges associated with the operating and maintenance costs of the bridge. Bradfield was, of course, influenced by Henry George, a great American social reformer and advocate of land taxation, so his design for how you should finance public infrastructure had this Georgist element to it of a reliance on betterment taxes, and the betterment tax was, indeed, introduced as the bridge was built, and was intended to be in place until a core level of financing had been achieved.

What happened was that political competition destroyed the betterment tax, just as it destroyed the betterment tax that was imposed in Melbourne to finance the city loop. The result of it was that the betterment tax was rapidly lifted, creating a serious financing problem for the State. The construction of the harbour bridge was one of the factors together with a vast increase in social expenditure and reduction in revenues associated with the Depression that pushed New South Wales to the verge of bankruptcy, or rather of default, in 1932 and precipitated the Federal intervention that led to the dismissal of the government of Jack Lang.

I am going through all of this merely to show you that when you look at that history there are some elements that really are persistent throughout our experience with infrastructure. So what are the strengths and the weaknesses that one can draw from that and what are then their implications in terms of the future? One strength—and I would say the major strength really—that you can draw is that periodically, when the situation just gets untenable, the system does respond. That is a great strength, and it responds not too badly. But if the situation gets untenable, that is because the problems are so difficult to deal with. Those problems are partly problems that are inherent in the nature of our cities in that they are very

large and, in the case of Sydney, have difficult terrain to deal with, so constructing new infrastructure has always been and will always be costly, complex and disruptive.

But those difficulties are aggravated by other factors and, to my mind, those factors are ones that we still struggle to deal with. The first one is that the Australian economy is vulnerable to, and almost by its nature will remain vulnerable to or characterised by, periods of very rapid growth associated with resource booms, and those are, in turn, associated with rapid population growth. That puts enormous pressure on infrastructure, and it puts enormous pressure on infrastructure just as it increases the opportunity cost of devoting investment to infrastructure.

As well as that, we have I think the fundamental difficulty that we have never really evolved forms of metropolitan governance sufficiently comprehensive in terms of the geographical areas they cover and sufficiently independent in the range of powers to address the infrastructure problems of major metropolitan centres. That, in turn, is then complicated by persistent vertical fiscal imbalance between that level of government—State—and the Commonwealth. That means that you do not get a good alignment of financing and responsibility of costs and benefits, and that makes dealing with taking the right decisions and financing the right decisions extremely difficult. If we do not tackle those two problems of governance and financing in the future, whilst everything else will help, I think our problems will persist and it will take another 110 years before clear needs are ultimately dealt with, much as was the case with the harbour bridge.

CHAIR: I invite committee member Greg Piper to thank Henry Ergas.

Mr GREG PIPER: Professor Ergas, I found your speech fascinating, noting 200 years of public transport in New South Wales and the issues that confronted the leadership then, notably Lachlan Macquarie. I note that Lachlan Macquarie went on to do some amazing things for New South Wales and left a great legacy. I hope the same is able to be said for our current leadership. Your speech was fascinating and could probably only be improved over a couple of glasses of red wine, so I hope you enjoy this wine.

CHAIR: Our next session is an expert panel discussion. I am delighted to have such an eminent and distinguished group of people contributing to the discussion, which is posing the central question: Is New South Wales prepared for its long-term future? On the panel we have Mr Michael Carapiet, the Hon. Nick Greiner, who as former Premier is an inspiration to many in this room and it is great that he could make it here today. Obviously he appears in a number of capacities, but I particularly acknowledge him as a former Premier. We also have Mr Les Hosking, Professor Sonja Lyneham, Mr Gordon Noble and Dr Tim Williams. This session will be facilitated by Garry Bowditch.

Mr BOWDITCH: It is my pleasure to be the facilitator for the expert panel discussion. Firstly, I would like to acknowledge each of the panel members for their very generous giving of time to participate in this discussion today. As you can see, we have a very distinguished group of people, and I will just give very brief biographical details. Some of the panel members, including Mr Nick Greiner, require really no introduction at all. Mr Greiner was the Premier and Treasurer of New South Wales from 1988 to 1992 and, since his retirement from politics, he has had a very comprehensive involvement throughout the corporate world. I will not go into naming the many official office holdings that he has.

I would also like to introduce Mr Michael Carapiet. Michael is well known to many of us around Sydney. He has been one of the cornerstones of private sector funding and infrastructure in this city and indeed has been responsible for a great deal of innovation in infrastructure funding that has in some ways not only shaped Australia but indeed the world, particularly during his time in very senior roles at Macquarie Bank. Michael now has a number of roles involving work with the New South Wales Government, including SAS Trustee Corporation, State Super Financial Services, Clean Energy Finance Corporation and Southern Cross Media, where he is a director as well.

It is also my great pleasure to welcome to the panel Mr Les Hosking. Les has very graciously accepted an honorary professorial role at the SMART Infrastructure Facility and, amongst his very extensive commercial and corporate commitments, he is a director of AGL Energy and the Australian Energy Market Operator, and he is also Chairman of Adelaide Brighton and the Carbon Market Institute. He brings a wealth of experience in both infrastructure and market organisation.

It is also my pleasure to welcome Professor Sonja Lyneham. Sonja would be well known to many here in New South Wales in particular through her extensive involvement in urban development and project management, and master planning of major infrastructure projects, including her extensive leadership around the property audit for all New South Wales government buildings for the New South Wales Commission of Audit some time ago.

Mr Gordon Noble has been a very important stakeholder for the Smart Infrastructure facility and leads the debate, particularly around the growing call for increased investment of superannuation funds into infrastructure. Gordon brings a very astute and deep knowledge around this area and has added a great deal to what will constitute our very important policy area in the way that superannuation funds may in fact become more involved. Gordon was the former Deputy Chief Executive Officer of the Committee for Melbourne and has been extensively involved in Federal politics, banking and industrial relations. I welcome Gordon.

Dr Tim Williams, as we all know, is the Chief Executive Officer of the Committee for Sydney. It has been a great pleasure to have become more formally involved with the Committee for Sydney. I have seen the very fine work that is being done by the Committee for Sydney in terms of asking some of the difficult and more inspirational questions about the future of our city and how Sydney can continue to be a great global city well into the future.

I will ask each of the members to provide us with an opening statement of approximately five minutes. We will run through each of them, commencing with Nick Greiner and then Sonja Lyneham, Michael Carapiet, Les Hosking, Gordon Noble and concluding with Dr Tim Williams. That will take approximately half an hour. We will open up an interactive session and your comments and involvement are very much welcome in that process.

Mr GREINER: This is a case of if Mohamed will not go to the mountain, the mountain must come to Mohamed because after a previous SMART Infrastructure function I said to Gary, "It was a really good function, with really good attendance, but the problem was that the only group in the community who really are a problem were notably unrepresented." You will guess that they are the people who are in the front row. My theme is a direct segue from what Henry just said: the problem with infrastructure is politics and absolutely nothing else. The answers are almost universally not contested if you get away from politics. The reality is that you can go to unlimited numbers of infrastructure functions around Australia and around the world and

you will get 80 or 90 per cent agreement on everything—on governance, funding, institutional arrangements, which I will talk about in a minute in terms of approving things—but at the end of the day the truth has always been, and is more so now, that politics is short term. It has proved to be more short term by the nature of the media and polling and all the things we all know about.

My basic proposition is that we know the answers; they are spelt out with great humility, which I am known for, so that if you read the State Infrastructure Strategy it gives us essentially the answers. It does not mean everything that we said then was right, of course not, but the broad thrust of how you do better in infrastructure provision is spelt out there. It is spelt out in the paper produced by SMART that is here and there is just no shortage of advice on how to do it and what ought to be done. The problem overwhelmingly has been, as Henry described, and more so in the past 10 or 15 years, political will, political leadership. It applies equally on both sides, of Left and Right of politics, and it certainly applies to the crossbenchers who are even more difficult in this area. I think that is the reality and I think one is better to call it as one sees it.

Essentially it is short term versus long term. We are talking about the twenty-second century, which was deliberately chosen to give a sense obviously of long term. The truth is most people in this building and other buildings like it are worried about March next year and they are not willing to really genuinely look past that, and that applies across the board. The same applies to local versus public interest. Not surprisingly people worry about their electorates, and so they should. The truth is that one should be worrying about the overall interest of, in this case, New South Wales, and that will not mean that it will make every person in every electorate happy; of course it will not.

There is short term versus long term, local versus public and the dysfunction of the Federation to which Henry referred where it is clearly the case that the boundaries of responsibility and the fight for political credit tend to overwhelm everything else. So you have now got everyone involved in roads in Federal, State and local governments. They all build roads from the smallest to the biggest and it applies across the board. So it is federalism and its dysfunction and, again, no-one argues that the Federation works well. We will see in the next couple of years if there is a willingness of the body politic to actually improve it.

I will deal very quickly with the institutional framework, by which I mean the proliferation of bodies like Infrastructure Australia and Infrastructure NSW and there are now similar bodies right around Australia, or they are coming. I am afraid I am going to sound boring but the problem with those bodies is politics. The truth is that they were set up by Kevin Rudd in the Infrastructure Australia case, by Barry O'Farrell in the Infrastructure NSW case quite consciously and deliberately to provide independent, expert and long-term views. It is equally fair to say—while I am trying to be bipartisan—that both governments having created independent expert bodies were not always terribly keen on the advice of those independent expert bodies. That is not surprising and at the end of the day—I am not trying to take politics out of infrastructure—these are political decisions and they should be.

I said to what is now the new Federal Government, "Do not create things as independent if you do not want them to be independent." As someone put it to me the New South Wales Government got what it created not what it expected with Infrastructure NSW. I think that is reasonably true too. Enough of that, but I think it is important to have these independent expert bodies. As I say, it is a bipartisan problem. If you are going to create them then you

ought to allow them to operate as per their creation or alternatively do not create them and do not pretend.

Really, as Garry said, the what, where and when are the questions. They are also political questions. I think everyone is better off by having group bodies like Infrastructure NSW and Infrastructure Australia and others to answer those questions, and then if the governments want to do something different they should say so. There is not a problem. A project I do not much like is the tram down George Street, which the city council and the State Government wanted to have. That is fine, but they should not, in my view, pretend that it has got economic rationale and so on. They should say "We want to do this for the following particular reason." That is fine. That is what happens.

I do not want to go beyond my five minutes. I will address a couple of issues that I think in terms of long term are really right. Demography is destiny. The point I think everyone is going to make is about the future shape of Sydney and where people live. Urban renewal is the question. It will have the same political problems. The good people along Parramatta Road do not want more people living there even though it is a shocking place at the moment, and so on in all the areas that Urban Growth NSW is focusing on. But demography is coming; the tsunami is coming. You cannot send all the new people to the outskirts of the metropolitan area. There will be a significant increase in population in the existing boundaries and that applies to a degree in Newcastle and in Wollongong as well.

That is one of those things where you will need political strength and leadership because, clearly, in some local areas people's peace and harmony et cetera will be changed. Inevitably, it will happen; it is a question of how the body politic deals with it. The same is equally true with pricing the peak. We have made some movement on pricing. Every conference you go to people will say you have to price infrastructure. People like Henry Ergas will tell you that you have to price infrastructure, and it really is not surprising. That is another tough political call. At the end of the day the public is not stupid; it knows that if you are investing \$12 billion or more for three or four days of electricity generation someone is going to pay for it. They are all paying for it now as things come through the regulatory regime.

Finally, perhaps other things will arise in discussion. Henry described local government reform as what you do for the whole of Sydney, but local government reform has not happened in New South Wales. It has happened better in other States. Again, I am not pretending that it is easy and I am glad that I am not responsible. The reality is that our existing planning structures are inappropriate. Obviously, our local government structure is inappropriate in doing serious planning; it might not be inappropriate when doing some local activities. I think local government reform is very important. Likewise, and my final point, New South Wales now has a metropolitan plan, an infrastructure plan and a transport plan. I got into trouble for saying that the Government had it arse about because it had released those plans in the reverse order. I might have deserved to get into trouble but, of course, I was right. You have to have a logical sequence and more buy-in.

The metropolitan plan really is important: it deals with a whole lot of these issues about people, land use and so on. There is no point having it at the end or having it at the moment. It will be almost snuck out. I am not sure if I asked members of Parliament upfront to tell me about the metropolitan plan that I would get fantastic, informed responses, yet that really does shape the future of the State. So the metropolitan plan, the infrastructure plan and the transport plan are a really good framework, but you have to do it in the right order and you

have to actually make it work and not sort of make it hush-hush, put it out in a pretty book and then forget about it. It needs to be a living debated document. The Government should have done a better job in debating, as it said it would, the infrastructure plan et cetera. The truth is that at the end of the day it was a Clayton's debate. It should not have been, if you want to try to bring the body politic with the infrastructure of the twenty-second century. Thank you.

Mr BOWDITCH: We will move now to Sonja Lyneham, who will give a brief opening statement.

Ms LYNEHAM: Thank you for the opportunity to make observations largely based on my 45 years' experience in professional practice in the area. Over that period it is clear that the diagnosis of the problem has not been the issue; it has all been said before. The real challenge is how to implement those solutions of which each of us is very aware. The challenge of political ramifications, economic consequences and territorial imperatives by each of the relevant State agencies means that unless the centre of government, namely, Premier and Treasury, assumes prime responsibility for implementation and driving that change, it will not happen. That is an observation. Short-termism, in part, has been driven by fiscal and budgetary constraints and uncertainty as to availability of funding over the long term. Solutions that professional groups and agencies have come up with have been short-term, scalable individual projects rather than integrated systems with higher capital costs.

This short-termism also has very significant long-term consequences. A failure to really look at networks and not just bundle together a series of disparate projects, means that your project costs for implementation will be that much higher—namely, you will require solutions such as tunnelling rather than at-grade options being open to you. Second, it means also that there is a lack of readiness, as has been evident when New South Wales sought funding for its infrastructure projects. Unless you plan and are ready, ability to secure and justify spend will not be there. The main problem is that once you start on a particular road—I use that word "road" advisedly—it reinforces road-base solutions and it is very difficult to retrofit cities subsequently. Get corridors through those cities, increase their density and achieve solutions that will give you far more efficiency in outcomes for your infrastructure investment.

In my observation, there are a number of limitations with current long-term plans. Even the 20-year plan that we have for metropolitan Sydney and the infrastructure plan will not accommodate the next 50 years of growth. If we assume that Sydney grows by 100,000 per annum, it is going to be double the size and double the footprint. Why have we not included the area extending from Newcastle to Wollongong in that greater metropolitan area Sydney plan? A couple of years ago I completed a review for the Vietnam Government for its infrastructure strategy for Hanoi, which was a vision. They said, "Let's look at 50 to 100 years ahead" and the implementation plan. If emerging nations are capable of addressing these issues and political and financial challenges associated with resolving those problems, surely we should be able to do that in in such a wealthy nation, state and city.

There are major sources of government failure. It is not just a question of market failure being evident in various circumstances but of government failure. Where could that be? First is regulatory reform. Even if we have a cogent and compelling metropolitan infrastructure plan, nonetheless we do not have a harmonised regulatory framework to implement that infrastructure and development plan. We have a plethora of single-purpose legislation, whether it is the threatened species Act, the native vegetation Act, the Environmental Planning and Assessment Act et cetera. So even in this related area there is a need for major

regulatory reform and government failure arises because of our inability to harmonise regulations.

It has already been said that pricing and the costs of congestion are not paid for. We are treating infrastructure as a free good. It is not a pure public good. There are significant social costs and there is a political challenge, but there is no other real alternative in the long term, if we look 50 years ahead, to actually introducing pricing policy that more closely reflects the cost of both providing and maintaining infrastructure.

Another major source of government failure is our inability to recognise the magnitude of the costs associated with both maintaining and introducing innovation in existing infrastructure investment. So unless we have the centre of government engaged in reforms and taking a long-term perspective and an integrated approach, we will not be able to meet the challenges that will face us in the next 50 years.

Mr BOWDITCH: Thank you very much, Sonja. I now ask Michael Carapiet to speak.

Mr CARAPIET: Thank you, Garry, members of Parliament and ladies and gentlemen for this opportunity. I want to give you a bit of a personal perspective. My family came to Sydney 40 years ago. I can honestly say that the Sydney 40 years ago compared to the Sydney we have today is unrecognisable and the Sydney we have today is demonstrably better, by any standard that you wish to put on it, from my perspective. This is a personal view. You have heard that we have to expect that the population will actually continue growing and the only reason is that this is a really nice place to live so people are going to want to live here. Unless you put the barricades up, they are actually going to come.

You have the fundamental problem that you have to cater for all the people who are actually going to be here. But the reality is that over the last 40 years, if you look at the population growth, give or take about 60-odd per cent, from a personal perspective the demand for services by and large has pretty much matched the population growth but the demand for industrial services has far exceeded it. With 60 per cent population growth, the number of passenger trips now is around about double what it was 40 years ago—so 60 per cent population growth, double passenger growth. Freight growth on our roads is seven times what it was and rail growth is four times. Passenger growth on our rail is up about 80 per cent; so it is 80 per cent on the rail and about double on the road. The growth in freight is massive and we have been able to cope so far.

Looking at utilities, overhead cables have gone up by about 40 per cent over this period; underground cables have gone up about double or two to three times, so we are moving things more underground than overhead. The capital expenditure is a little bit greater but again we have been able to cope. Everybody says how much more power and water we use nowadays but my view is that is flattening out. The individual house power usage over the last 40 years has gone up by about 2½ times. That is quite a lot but when you compare it to transport growth, it is understandable. Industrial power growth has gone up about three times so again it is the industrial sites that you have to worry about.

Nick correctly mentioned that a lot of the issues rest with you, and that is right, but I do not think you should be overawed or intimidated by the challenge. You have been given lots of numbers that look massive and you just sit back and say, "My goodness, how are we ever going to do this?" The reality is that there is a lot to be said for incrementalism. There will be

periods in which you will have massive step-ups but as Henry mentioned earlier there will be a period where something becomes untenable and then, lo and behold, there is always a solution for that. But in the interim period there are lots of things you can do year-on-year that just incrementally improve what we have got now. Generally speaking, bang for buck improving what you have got now is inevitably a much more economically compelling proposition than building something new, usually.

The new stuff generally takes quite a lot of time before you see the benefit. Just in economic terms, improving what we have got, actually making it work better, generally does not cost as much and you get a much better bang for buck. Nick mentioned the tram down George Street. It is an interesting deal. You will have lots of people wanting to build it for you, lots of people wanting to supply you with the equipment and provide the services. I doubt you will have anybody who wants to invest in it.

Mr CHARLES CASUSCELLI: Clover Moore.

Mr CARAPIET: I mean from the private sector. However, having said that, there is no shortage of money. My simple advice is to focus on the planning; do not worry about the money. For most of the big things the money will follow sensible projects. There is more money than deals everywhere in the world. You can see it. Every time something sensible gets put up for sale the price that you get is almost double what you expected and that is not going to change any time soon. This is a highly attractive investment class for almost every sort of investor. Not every project will be suitable for the private sector to do; not every service will be suitable for the private sector to do but there is much more interest and there is much more capability—whether here or around the world we can get it, but do not underestimate the capability of this country to provide almost whatever infrastructure service you really need within a relatively short period of time.

Just to wrap up: my own view would be to think about the planning. Organisations such as Infrastructure NSW should have bipartisan support. I think it is very, very helpful. You have the plan. It is not especially deep actually. You actually have the bureaucracies now that have done enough of these sorts of projects and have enough knowledge out there to be able to manage the planning and implementation. What you need is similar to what they have got in Canada, which is a more regular and established flow of projects and services, et cetera, for infrastructure that everybody knows is coming, so it is not as ad hoc. You do not have a start and stop sort of system; people know. You will adjust things as the politics determine.

I think Nick hit it on the head. There is not a lot of disagreement between what has to happen and the thing about infrastructure is you cannot just build it. Even though the private sector notices the need, you cannot just build it. If the private sector noticed a need for hotel rooms in Sydney, it is not that hard. There are well-established procedures; you just build your hotels. If you think there is a residential need, it is not that hard. You just build more residential apartments, offices, shopping centres or whatever you like. It is well established that for all those things we are very happy for the private sector to do it, but if there is an overwhelming need for a road or a new power station you cannot do it without the State Government.

I would really encourage you not to be intimidated or overawed by the challenge because it is not that great. It might appear great and a lot of the numbers look huge, but it is not. Just focus on the planning. You have the resources, you have all the plans, you know exactly what has to happen. It is just a matter of prioritising what you want done when. Thank you.

Mr BOWDITCH: Thank you, Michael. With the permission of the chairman, we will continue with the opening comments, but we will also allow this session to roll over after morning tea so the panel can be part of the discussion with the members. Rest assured you will get your opportunity to interact with the expert panel. I know some of you may have to go, but I think most of you are good for that. Thank you, Les, you are welcome to have the floor.

Mr HOSKING: Good morning, ladies and gentlemen. I am going to talk about energy security and paint the picture as to where we have come from in New South Wales and where we are going. Along the way, I do not want you to be overawed by the challenges either, but there are some significant issues that New South Wales and the political environment must be aware of, otherwise there may be some mistakes made going forward into the twenty-second century. Indeed, the other issue I would like to emphasise is that the work and the activity and the planning need to happen now because of some urgency around some of those issues.

As some background and some history, and listening to Henry, there is a bit of déjà vu about what has happened in the energy sector over many years in respect to resistance to certain development. I remember back to the days when the national electricity market was developed by converging all of the States on the east coast into one central market manager. I was indeed managing director for a short period of time. New South Wales at that point of time was perhaps the major influence in the development of the national market. New South Wales was blessed by what we described as being energy rich. We had this magnificent seam of coal which ran down most of the State. We were able to utilise that coal into coal-fired generation and transmit the generation into our load centres such as Sydney, Newcastle, Wollongong, et cetera. Everything looked hunky-dory. With 400 years plus of coal and growing load centres, a sense of complacency perhaps emerged, "Well, we are okay for electricity and perhaps we could sell it interstate through the national electricity market."

However, things have changed. Climate change and clean energy issues have emerged whereby there are some attempts to reduce the amount of coal being burnt to produce electricity. On top of that, there have been incentives to go into renewable energy and to transition away from the fossil fuels that we have used. Some of that policy, if not most of it, has been poorly designed so that the transition from coal through what was meant to be a transition through gas to renewable energy has not worked. The reason I mention that gas was the transition is because there is so much reliance on coal-fired generation that you could not afford the investment to immediately flick to renewable energy. Even if the technology was there, you needed to use gas as that transition point. Unfortunately, over the past few years due to Australian dollar, gas demand increasing in the Asian region and a number of other factors, the price of gas has risen. A consequence of the Australian dollar and the price of gas plus solar development, technology development, have seen a reduction in demand.

We are seeing now a situation where the gas-fired generation fleet along the east coast of Australia is actually being wound back. Many gas-fired generators are not being used seven days a week; they are being wound back to three or four days a week. The coal-fired generation is enjoying a new summer in terms of what is happening because of that and there is a greater focus on the renewable side. There is a real issue that needs to be kept in mind as to how do we ensure that the coal-fired fleet that is left within the New South Wales Government's asset portfolio plus the sale of any of that fleet to the private sector is retained for a period of time where it is reliable and secure, and that is what energy supply is all about—reliable and secure energy. We have enjoyed it for so long that perhaps we do not

think we will ever be threatened by a lack of reliability and security. I am old enough to remember the days of the Bunnerong Power Station and failure of power on a very regular basis. That does not happen anymore, and with reduction in demand one might expect that the coal-fired fleet plus the extra renewables and partially gas will maintain reliable power for some time.

However, there are some bumps on the horizon. The gas side of the equation, even though it is not being used as much in New South Wales because of reduced demand and particularly in manufacturing, we must remember—and this is one fault in the national energy market design—that New South Wales was reliant upon more than 95 per cent of its gas supply from interstate. We have now learnt that most of the gas that is being produced at the moment is bypassing New South Wales in a sense that it is going through Gladstone to Asia. There are some academics and others who would forecast that gas supply in New South Wales, because it is all contracted and committed to Asia, may not be fully available in 2016, 2017, that there will be potential shortages. I am not saying there will be, but there are some who say that it is a possibility.

How do you overcome that in the short term? People are talking about domestic preservation policies or retention policies to ensure domestic usage first. New South Wales in the short term cannot do that because we do not produce any gas. We cannot go to Queensland and say, "Can you reserve your gas for New South Wales. Do not sell it to Asia for the price you are doing so." That will not happen, so there is a short-term problem. The solving of that problem, which has some very substantial community concerns and political concerns, needs to be addressed but it also needs to be addressed in the sense of New South Wales focusing on what is required for the future energy supply fleet within Australia in the context of the national electricity market but, in particular, focused on whether New South Wales will be able to ensure secure and reliable energy.

That takes me to the second area, technology. Because of the focus on some technology such as wind farms, et cetera, there has not been a great acceptance by the marketplace of what is called intermittent unreliable source of technology to replace the coal-fired generation or indeed the gas-fired generation. However just around the corner—over the next 30 years—we are looking at a scenario whereby there could be solar panels that will provide adequate electricity with a support of battery capacity for storage, plus the ability of smart grids to distribute the generation that is coming from those panels back through the local grids. What does that suggest? The redundancy of coal-fired generation and the redundancy of poles and wires. That ought to be put into the equation. I am posing a lot of "what ifs" here, but the long-term planning needs to start now because those sorts of things are 30 years away.

The technology issues will be solved. Already the transmission companies are looking at substituting their transmission poles and wires, or at least having a mitigating strategy of having their own substantial battery storage within their substations so they can back up what might be required in a shortfall of domestic on-site solar generation. There is a whole raft of things that need to be addressed in those areas. I am not suggesting you should be concerned about selling the poles and wires because the private sector will take that up at the right price and they will convert whatever they need over time and adequately. You should be conscious that this transition is going on and it is not going on down the track and we have time to address the community concerns about gas for a little while longer and we have time to address the sale of our transmission assets or the sale of our generation fleet for a little while longer.

It needs bipartisan consideration, addressing solutions now if New South Wales retains its position as one of the energy rich capable States within Australia. Some people in the industry would say, well, Victoria has the jump on New South Wales in these areas. It is self-sufficient in gas, has sold its generation assets and has already got rid of the problem about the transmission fleet because it has gone to the private sector. The coal fired fleet has gone to the private sector. It can tap into wind farms easier than New South Wales right through Victoria and South Australia. Queensland is gas rich and has got on with the job. There is a bit of a lag: That is a warning. Everything is solvable but it needs immediate bipartisan addressing.

Mr BOWDITCH: Thank you, Mr Hosking. We will move on to our fifth speaker, Gordon Noble.

Mr NOBLE: I am going to provide a perspective from the superannuation industry. The Association of Superannuation Funds of Australia [ASFA] is the peak body for super funds. As Mr Carapiet was suggesting, there is no shortage of capital globally that wants to invest in infrastructure. I want to unpack that and what that may mean. There have been a lot of calls for superannuation funds to invest in infrastructure. I would like to point out that it was Australian superannuation funds that were the first investors in infrastructure as an asset class pretty much globally and we have continued to invest in infrastructure going forward.

What has happened globally now is that you are seeing the low yield environment and changes around pension funds is creating strong incentives for pension funds to start to look at infrastructure as an asset class. What you have is a pool of capital globally. In pension funds in Organisation for Economic Co-operation and Development [OECD] countries you have over \$21 trillion. You have a pool of capital that is long-term investment focused that is starting to look at infrastructure assets. To answer the first question: There is no shortage of capital but there are some issues that go beyond that.

In terms of some of the action items that we need to address: Superannuation funds do have issues around liquidity. Our system has been designed as a short-term system where we have some issues. Our choice of fund environment means it is harder to hold assets for the long-term. It is not so much an issue in New South Wales but it is something hopefully the financial system inquiry can look at. In terms of what it is that superannuation funds can invest in: There is a debate about brownfield versus greenfield assets. One of the things we would say is that although our experience around greenfield assets has been ordinary in a number of projects where there have been losses, we would not say that greenfield as an investment opportunity is dead.

We have had issues post global financial crisis [GFC], but over the longer term horizon the amount of capital that wants to invest in long-term assets means, we think, with the right kind of structures that greenfield is an opportunity. That is not to say that there have not been opportunities in the past. Superannuation funds are the natural holders of infrastructure assets. If you have a long-term asset a long-term investor is an ideal partner. What you want is an investor that is not looking to flip out of the investment but is looking to hold that investment for the long term. Superannuation fund members are the community so there is a strong alignment between superannuation fund investment in infrastructure and the community.

In this regard the fundamental issue for us is good projects. We have had a lot of conversation about governance but without good projects superannuation funds have some real issues

going forward. There is a lot of talk about infrastructure almost as a short-term economic stimulus and we are concerned about that. It is not an ideal tool. I know SMART has done some work around this. It is not a good tool for economic stimulus. The issue for an owner of an asset long-term, and we have seen globally where there has been changes in tariff arrangements and regulations, things that happen in the long-term can have significant impacts on the value of assets for us.

A short-term honeymoon where the parties come together, it looks good, the economic stimulus was good, can lead to long-term unhappiness of customers if the project is not right and the customers are not happy. From our point of view, representing the millions of fund members in the superannuation system, if we get good projects we get happy customers, but the long-term is that we do not get the regulatory pressure and political pressure to change the actual projects. We have seen things happening in Europe where there have been regulatory changes that result in a loss of value to the asset owner. I think that is a significant issue for us going forward—how you create the environment.

As superannuation funds it is hard for us to have the conversations about the landscape and part of the problem is that in the public private partnership [PPP] processes that you create we are the long-term investors. We cannot put up speculative capital to come to a table and invest, so creating a partnership approach to infrastructure is an area where there are greater opportunities. There is a danger in some ways that the amount of money that can flow into infrastructure globally could almost lead to a bubble in pricing. We have seen strong pricing of infrastructure assets and that is not a bad thing. The infrastructure investment has to be a win-win for the long-term investors, for the superannuation funds and community. If you get a disconnect you will start to have a problem.

If there is a problem on the investor side it will make it difficult for us to invest in the future. If there are projects that lead to a loss of capital that does not create the environment that will support future investment. If you have projects where the community is unhappy that is not good for us either. It creates pressure for regulatory change and political pressure. What superannuation funds want to do is invest in projects for which there is community support. We have not really had a discussion about privatisation but it needs community support. That creates the environment for superannuation funds to invest.

Mr BOWDITCH: We will convene for morning tea after Tim Williams.

Dr WILLIAMS: I have broken two rules already in this event: First, you should never speak sixth because everything has been said; and secondly, I have broken the Hollywood actor's rule which is never to work with animals, children or Nick Greiner. He said most of what I was going to say. The only danger in the discussion is that we always focus on inputs rather than outcomes. The discussion should be about what kind of city we want in the twenty-second century. We realise, hearing from Professor Ergas, that unless we start doing it now we are already too late—it takes 100 years to get a bridge. We have to start thinking of the outcomes we want.

We have not played on the core issue of the default model of development in Sydney at this time, which is that it is ever westwards for residential development but not westwards for jobs. That forces people into their cars. That is the default model of development in Sydney at this point in time. Just to put an economic context to this for every 1 per cent growth in gross domestic product [GDP] internationally that has traditionally led to a 7 per cent growth in

vehicle miles travelled. We have to think fundamentally about the business and growth model in Sydney and the role of public transport in that, as well as roads.

Let us have a pipeline of projects for infrastructure—absolutely—otherwise they become very idiosyncratic bespoke things. We need a long-term strategy for that but it is also about getting community buy-in to that long-term strategy. Again, that is what is missing from the conversation. I have just come back from Denver where I had a look at their light rail project, of which I am a big supporter as I am of the one in the city. The discussion that has been had there, we need to have here. They got 10 or 15 of the mayors in metropolitan Denver together to campaign together with the public for a referendum to have a quarter per cent GST—essentially, a sales tax—hypothecated to a program of public transport over the next 30 years turned into a bond for \$5 billion. Effectively a public buy-in to a known program solves a lot of the problems. The private sector knows there is a 30-year commitment and the money is in place.

Those things are not rocket science or mystery. It is about making sure we have the institutions and the buy-in in place. My focus a bit is on getting the buy-in because there is no buy-in at the moment to the alternative growth model that we need for Sydney from the public. I think it could be there but it is not there at the moment. There is not enough to buy into the compact city model that many of us believe, not just for sustainability reasons but for economic reasons, is the model that we need to focus on to retrofit Greater Sydney. Professionals understand it. Many politicians understand it. People doing infrastructure understand it, but there needs to be a political buy-in from the public. I will provide facts about that and then I will talk about the Feds as well. We have heard about the dysfunctional federation, which I as a Welshman could never have said until I heard Australians say it: so I will say it now.

Just to put it in context, as the Committee for Sydney we discovered from the *Sydney Morning Herald* that 82 per cent of the tax base of Greater Sydney goes to the Feds—82 per cent. Why is that important? Firstly, we do not get it all back in the form of infrastructure. Secondly, we have become really important again as a national engine of economic growth in Australia. We already create 23 per cent of gross domestic product for the nation and it will only grow. A just amazing PricewaterhouseCoopers fact—and I will conclude on this—is that 1 per cent of Australian land creates 85 per cent of Australian wealth. That means that the cities matter as sources of economic drivers. The discussion with the Feds needs to be about, "Don't just give us roads between the cities as your productivity contribution. Give us investment for our cities. Work with us in a new kind of deal because we are going to create all the wealth for you going forward."

In conclusion, 7 million people will be living in Sydney in 2050 but I have to say to you that we have not discussed that 3 million of them will be living west of Parramatta. A more polycentric Sydney at the heart of our vision is completely unavoidable, but we are not seriously planning for it at this point. Just to suggest that we are not: the Metropolitan Strategy for 2030 is why many of us are looking beyond 2054, which by the way is the year that Melbourne overtakes Sydney as the biggest city in Australia. The reason that we are looking beyond it is we need to plan now for that growth. Three million people will be living west of Parramatta. How are we going to achieve that kind of city? We need to think now.

Mr BOWDITCH: Thank you very much. Just before we adjourn for morning tea, the Chairman would like to make a presentation to the panel.

CHAIR: Thank you, Garry, and thank you panel. I am aware that not all of you may be able to stay after morning tea, but to the extent you are able we ask you to return to your seats to be part of that discussion. The intelligent observations and comments that have been made as input are fantastic. I ask my fellow members of Parliament and others who are here to try to keep questions or comments you have, which have been facilitated by those excellent contributions, and bring them back after morning tea. Before we break for morning tea, symbolically I would like six of my parliamentary colleagues to hand a bottle across to the six expert panellists as a demonstration of our appreciation.

(Short adjournment)

CHAIR: The risk of having a break is that you lose a few people, but most people have returned to their seats and I imagine one or two might be coming back to the room as I speak. This session primarily is to allow people in the audience, with priority given to members of Parliament, to ask questions or make comments. I am co-facilitating this session with Garry. Although I probably will take the lead, Garry might give me some guidance—knowing as he does the people in the room and the stakeholders a little bit better than I do—in terms of where we might go if certain themes arise. To begin this session of open discussion and question and answer, I firstly ask whether any of my colleagues have questions of the panellists. We can take comments or questions, but I would particularly like to begin with questions from parliamentarians and start with the member for Gosford, Chris Holstein. As you are called, identify who you are and where you come from, as appropriate.

Mr CHRIS HOLSTEIN: Thank you very much for the opportunity to listen to your innovative comments today. Professor, my question is directed to you. You referred to the failure of including Newcastle to Wollongong in the metro plan. As you are well aware, Gosford is between Newcastle and Sydney. You referred also to the inability to be innovative with existing infrastructure. While we do not have a port to sell, as a regional area—but an area that has approximately 50,000 people who every day commute by car or train to Sydney—what are some of those innovative abilities? What are some of those things that you see for areas like us? I should also include my regional colleagues whose electorates are beyond where I am on the Central Coast. What are the innovative abilities for them to be able to try to address some infrastructure issues they have?

Ms LYNEHAM: As with Bradfield, the main concentration and focus on investment—sunk investment in infrastructure—has been in Sydney, in the smaller metropolitan area. Therefore, innovation and getting more returns out of sunk investment in existing infrastructure is much able to be achieved in those areas rather than in outlying areas such as Gosford and to an extent as well, but perhaps less so, Newcastle and Wollongong. Achieving innovation in those areas is very difficult. The real challenge is, firstly, how do we include consideration of the Central Coast, Newcastle and Wollongong so that at least in a metropolitan plan we have some statistics on levels of congestion between those outlying areas that will be part of metropolitan Sydney within 20 years' time and really are now? So it is far more difficult to achieve and implement new innovative measures in areas where you do not have the same level of sunk investment and you are not included as a primary consideration in the long-term planning.

Mr CHRIS HOLSTEIN: You are saying if you include it in the plan then you are going to get that investment?

Ms LYNEHAM: Yes.

Dr WILLIAMS: I have just come back from New York where I was doing a review of a regional plan—it was Connecticut, New Jersey and New York—and although everybody finds it hard to make everybody collaborate, essentially there is a regional plan that involves those three places. Interestingly, the New South Wales Government always counts the Central Coast and Newcastle population in the Sydney population for anyone who says that it is bigger than Melbourne. At one level it is really important that it is integrated, at another level it is not. We need to make sure that proper regional planning for the future of the area involves Newcastle and Wollongong. Lastly, do we think in the twenty-second century Newcastle will not have a 40-minute train ride to Sydney? I think it would be ludicrous that in the twenty-second century Newcastle would not have a very swift rail journey to Sydney—we need to plan for it now.

Mr JOHN WILLIAMS: I am the member for Murray-Darling and a member of the Public Accounts Committee. I was interested to note that most of the speakers have been fairly focused on us as politicians and our inability to react to demands on the type of scale that has been presented. On my understanding—I thought we did a great thing in setting up a structure called Infrastructure NSW. We separated ourselves from the politics. We gave an independent body the opportunity to make decisions that prioritised infrastructure in New South Wales. We worked with an organisation called IPART, which gives us pricing, and we removed ourselves from that debate. I thought this was a perfect opportunity for us to get on with business and to see an independent body making decisions on infrastructure for this State that removes the politics. Obviously that has not worked; that is disappointing.

Being in the engine room is another thing. Obviously the majority of us are backbenchers so we get communication from the engine room and the engine room tells us that a triple-A credit rating is an absolute priority. There seems to be this thing about not exposing yourself to any more debt. Debt is death for government and fiscal management is where we have to go. There is a fair bit of debate around that. Kevin Rudd had a different view—he poured in and borrowed whatever he could. I do not think that we got any benefits nationally for that but I also think there is another side of that debate. I would be interested in the panel's comments.

Ms LYNEHAM: We heard how long it takes to get from identification of a problem and a project specification to its realisation. We are also aware at the time of the GFC, when the Australian Government sought projects to be identified so that infrastructure at least could be considered as part of a countercyclical stimulus, that these projects were not specified. The challenge is to plan ahead now because it is going to take at least five to 10 years to get to the spend position—or at least five years by the time we get the approvals. The network corridors are such a critical area to delineate—those infrastructure corridors and where they should be located—and to get those approvals. I think if we could at least achieve that so that they are not general lines on a map but you really do not know where they go so that people are not going to adversely respond to it in the local community. But we need to get to a greater level of specificity rather than the generalised schematics where we want to be expanding. Infrastructure supply will drive demand and will affect the density of urban settlement and the pattern of urban settlement.

Mr NOBLE: If I could pick up the debt issue. Look at the Grattan Institute, the spending of Federal and State governments. We have known for a decade through the intergenerational report where our funding position was going fiscally and now it is starting. We have had the health costs that have been the major hit on budgets, but we know that the retirement of the

baby boomers in the next 15 years is going to fundamentally change the structure of workforces. So debt is a real issue; it is a real issue globally. I think there is an answer and it is about this pool of capital that I was referring to. It is \$21 trillion globally but it is long-term investors, not short-term speculators. There are partnership opportunities here. We have seen it with the sale of assets here in New South Wales—the recycling of capital model is a breakthrough—and we can leverage off that even further.

The monies that have been applied from the sales to local regions such as Wollongong and, of course, now Newcastle, can be leveraged. For the whole regional question there is a range of investment opportunities that super funds can be part of but it requires a new conversation. The States, the countries that get this right and get that partnership right with long-term investors I think will be the ones that go forward. The ones that get it wrong will find it difficult to access that kind of capital that can be the game changer. So within the pool of capital that we have got in this country I think there are opportunities, but debt is a reality that we all have to face.

Dr WILLIAMS: Can I just add to that? I used to be the UK special adviser to a number of Cabinet Ministers so I understand the political context. I was working on cities and public policy and I have to say to you that Australia does not really have a debt problem at all—it has a perception of a debt problem that I do not understand. Just to put it in context, the British proportion of public debt, the GDP, is something like 75 per cent, in Australia it is more like 20 per cent. The deficit we hear about is 3 per cent over here; in the US it has been 7 per cent for a long time. So I do not quite understand the debate. The second thing is that there is an argument that Australia is an undertaxed country internationally—that is not income tax, it is probably the GST discussion.

So there is probably a discussion to be had but it is not about public debt as much as people say; it is about private debt being a bigger problem in Australia. The other thing is around beneficiaries pay. We have not been either innovative enough or brave enough to talk to people about the true cost of transport development models. For example, I was involved in the Crossrail project in London, which is a \$30 billion rail project. There is a cocktail of funding there and part of it is about uplifting business rates of contribution to constructing the rail, but every ratepayer in London pays £20 a year for the next 10 years because everybody is going to benefit from Crossrail. It is the equivalent of like a crate of beer a year. People understand it and there has been no political revolution against it. So I think there are other devices in addition to borrowing.

Mr CHARLES CASUSCELLI: I am here in my capacity as chair of the Committee on Transport and Infrastructure. The Committee on Transport and Infrastructure is currently undertaking an inquiry into the issue of road access pricing, which has been the flavour of the past 10 or 12 years—it is unfortunate that Nick Greiner is no longer here because I was going to ask him a question about bipartisanship, given the fact that politics seem to be getting in the way of doing some of the stuff that we need to do. I am particularly disheartened by the fact that history teaches us that unless a problem gets so bad that it really affects everyone's life minute by minute then we seem to have an incapacity to deal with it.

However, that said, if I look at some of the major infrastructure, residential and mixed-use development that is planned to be done as part of urban renewal along the WestConnex transport corridor, most of my community would say, "Charles, we don't trust government, we don't trust you in particular because you say you are going to invest \$11 billion building this

road"—most people see WestConnex as a road—"but you haven't convinced us that you are making significant investment in all the supporting infrastructure." The reality is that in the past 20 or 30 years the perception of the infrastructure gap—that is, community expectation versus reality—is getting worse and worse.

My community is saying to me, "Charles, until you come up with the money and convince us that the Government will commit money to infrastructure, we don't want you to do anything associated with urban renewal and we don't want increased density until you convince us that you are serious about spending on infrastructure." Is it not true that that lag will persist regardless of what we do? We do not have the tax base or the potential revenue streams to meet community expectations about infrastructure. If that is the case, how do we deal with it in terms of engaging with the community and telling them that perhaps some of their expectations are unrealistic? Is that a role for government or other critical stakeholders in the process?

Mr CARAPIET: That is a tough call. I do not think that in 2014 you will win that argument. People's expectations will always be far in excess of what you are able to deliver. However, again, I do not think that should hold you back with whatever you have the power to do—you should do it. It is a vexed problem almost regardless of what you do. I have found people will always want more. In a business you can come to the problem with a different perspective. It is far more challenging as a political person to address that challenge and to have that sort of conversation other than promising people that things will get better when this road is built. It is unambiguous.

The best example I can show you is the M7, which is the last major bit of infrastructure road within the metropolitan Sydney. The M7 is a case study that is so overwhelmingly successful in terms of its cost and the benefits that have accrued to the local community. If you use that as the example, I think people would be more readily convinced. I am surprised that you are having problems at the local level and that people do not see the benefits of WestConnex as immediately as we do. I certainly think it is very long overdue. I thought it was overwhelming.

Mr CHARLES CASUSCELLI: Please do not misunderstand me, there is overwhelming support for the WestConnex. The issue for the community is that they will take the WestConnex but they will not take urban renewal and the 20,000 additional residences along the transport corridor. We have not convinced them that we are spending money to alleviate the adverse impacts of the urban renewal component of WestConnex.

Dr WILLIAMS: I said that we had not created a consensus to manage growth. That is the critical thing. You are absolutely right that part of the problem is the mismatch between timing of the infrastructure funding and growth, and people are over that. They simply want to be assured that it will happen up-front and that there will be proper planning. The good news is that before the planning reform got into difficulty there was an element in the new approach to planning in New South Wales that is about subregional infrastructure planning. That is probably going ahead as an approach.

First, that offers the prospect of much more coordination, which has been a problem between the various agencies. Secondly, will it be an opportunity for the community to get involved in shaping some of the infrastructure discussion? I think that has been missing. Thirdly, and very importantly, developers—I come from a development background—often complain that they are made to pay for all the cost of new development when a lot of it should be borne by the

rest of the community or, indeed, landowners. We hit the developers but not the landowners. There is a big question around the airport; there is a massive potential land value uplift around the second airport. How do we capture that for the public benefit to put into the other infrastructure that people require? I think we should.

The Hon. PAUL GREEN: I am the chairman of the Select Committee on Social, Public and Affordable Housing. I will first make a comment about decentralisation. I would have thought that it would be a good investment to deliver connectivity to the north, south, east and west. We are certainly calling on the Government for a SouthConnex. That should be part of the plan to release land for greater urbanisation. We must also consider the pressures on the most vulnerable in terms of providing social and affordable housing. Out of more than 700 properties in Wollongong only 22 are fit or affordable for young couples. Of course, affordable housing in central Sydney is also an issue. We have Millers Point on high-value land. We are pushing some of our most vulnerable people out further and further. My question comes to connectivity and productivity. If the sale of the poles and wires went through, what would be the priorities for investment in infrastructure?

Dr WILLIAMS: I think that getting to Parramatta in 15 minutes by train, perhaps on existing infrastructure. It requires modernisation and signalling is an issue. I am not only keen on the big shiny stuff, but how we do it. The second issue is how people will get to the new airport. We cannot have a twenty-first century airport and nineteenth century infrastructure.

Ms LYNEHAM: The infrastructure strategy has some notion of where the money from poles and wires could go. However, in my view one of the problems is that employers, businesses and freight do not win votes. That is the challenge for politicians. If you build a road, even if you build a railway, you will get electoral payback in terms of votes. The real challenge is how you get expenditure on improving that industrial infrastructure that Michael referred to and sorting out the freight and passenger movements on rail as well as road, particularly in the vicinity of Botany, and get connectivity with Bringelly. If Bringelly is going to be a major employment centre, do we need a connection and investment in infrastructure between the prospective second Sydney airport and the western line?

Mr NOBLE: Superannuation funds are good at investing in the icon projects. We do have some greenfield issues, but that is not where the challenges are. We have identified some of the challenges in small-scale infrastructure and the housing affordability around whether it is a social bond. It is a bond investment rather than an equity growth investment. From our perspective, super funds have a portfolio. There is an infrastructure play, which looks at equity and looks for particular returns, but there is also bond investment. So there is an opportunity here not so much around finding the icon project but rather around the whole investment environment so that you can leverage into areas such as housing affordability. We have not cracked that well at all as a nation. But with the right kind of framework and the right kind of alignment of investment interests—so we are looking here not at equity returns but rather at bond-like returns—there is the potential for capital to go into these areas.

Mr CARAPIET: I am a very firm believer that you have to do well before you can do good. It sounds trite but it is actually true. My involvement with the public sector happened after I retired from executive life, so it happened about three years ago. I found that, throughout the public service, there are thousands of people who want to do good. But the understanding is that you first do well. Then you have an almost unlimited option to do good. So if you had \$30 billion then it would be a no-brainer—if you did nothing with the money other than invest it

then you could make between \$2 billion and \$3 billion a year in perpetuity without taking terribly much risk. So you could spend the \$30 billion, but unless it is generating that sort of return for you then do not spend it. If you keep it then you can spend the \$2 billion or \$3 billion every year for ever without even touching the principal.

So the call is not what to spend the \$30 billion on but very much what gives you the longest term return once you have got this pot of money? Because you are not going to get it again. People are not going to throw \$30 billion at you. Someone mentioned earlier social housing. Interestingly, and some people would be aware of this already, the pool of social housing that the New South Wales Government owns is, coincidentally, \$30 billion. Many people do not realise that we have \$30 billion tied up in social housing, plus hundreds of millions of dollars being spent to manage it every year. That is a massive cost. It is essential that we provide that service but again the economics of the reasons behind it and the question of how best to do it have been assumed away—that is just how it has always been and that is how it is always going to be. We need to have a look at these very large assets. We are asset rich and yet the Government never looks at assets—it always looks at revenue and at liabilities, and assets are ignored.

Mr KEVIN CONOLLY: My name is Kevin Conolly. I am the member for Riverstone, an electorate in north-west Sydney which takes in most of Sydney's north-west growth centre. I would like to make a comment and then ask a question. My comment relates to that view from 40,000 feet that we heard about before. I was really pleased to hear Dr Tim Williams say earlier on that we first have to decide what we want—what we want our society to look like. That should then drive our strategy on how to get there. That is the role politicians have, I think, in this process as much as anything else. Yes, we should hand over responsibility to Infrastructure NSW to devise us a strategy, but only after telling them where we want to get to. We should never relinquish that responsibility.

I take up a point that Nick Greiner made in terms of the sequencing of the plans that were released. We need to start—with our metropolitan strategy or our State strategy or whatever it is—with what we want the place to be like. Even if we get them slightly out of order, they are rolling feasts anyway—they have to be done continually. It remains the responsibility of the political leadership to set that vision and that strategy for what we want the place to be like and what we want to achieve. From a Western Sydney point of view, I do agree that we need to keep putting some more oomph into moving jobs and moving other life opportunities into Western Sydney so that we do not have the big commute from west to east every morning, and then from east to west every evening. There will always be an element of that in Sydney, geography dictates that and history dictates that; but having an equality of opportunities across the whole metropolitan area is a goal worth stating and worth working towards in our strategies. So that is my comment at the start.

My question, if I drill down now from the view from 40,000 feet to something much more local, is around the comments that reserving transport corridors is a particularly valuable task for us to undertake in planning for the future, given that otherwise it could take 100 years and cost unnecessary extra billions of dollars to do things. To my great delight, this Government is doing that. We have already reserved a transport corridor through my electorate from the end of the North West Rail Link project to a future position, and we are now working on a corridor relating to the South West Rail Link now that we have a decision on the second airport. Hopefully those two will then join up. We also have a potential M9 corridor for a new freeway west of Sydney.

Those corridors are magnificent things but they create a particular problem for the individual landowners in those places—that is, when a corridor is placed on your land there are particular zoning restrictions and restrictions as to use. Maybe you can sell out because of hardship provisions, but many people will not qualify for those. Those restrictions have a real impact on their opportunity to enjoy or to dispose of their land, perhaps for many years until the Government actually decides to do something with that corridor. I am keen to explore ways in which we can treat the individuals affected by this equitably, and I would be interested in hearing any thoughts that people have, so that we do not place an unreasonable burden on those whose land is identified for a public good but who wear the burden of that for perhaps decades in between identification and construction.

Mr CARAPIET: I think that is an important point. When you looked at your own real estate—I think you were looking at selling some real estate that was viewed as non-core—basically the view was that if you are not going to use something in eight years then you should sell it. That was the rule of thumb that you used. I am not sure you can use that period of eight years if we are talking about the year 2100 as the time period. But I think you have to use some period of time. Really you have all kinds of resumption rights and the like. So to reserve land that you are unlikely to use for 50 years has an economic impact on a landowner today. If it is your land then you can reserve it for as long as you like. But if it is someone else's land and you know you are not going to use it for quite a long period of time into the future then why you have to reserve it is always a challenging call. I think you should have a time frame in which you either use it or you lose it.

Mr KEVIN CONOLLY: Or, from the Government's point of view, use it or buy it.

Mr CARAPIET: Yes, if you really want it then you should take it. But if you do not want it then you should not. You have a free option. In the private sector if you want an option over something then you generally have to pay for it. It is not free. A government can have it for free. That is great but I think there has to be a limit.

Ms LYNEHAM: We do have the Land Acquisition (Just Terms Compensation) Act and mechanisms for redressing that. We do have provisions in other legislation as to how you deal with those situations. We can look at the long-term planning in a number of those areas. For example, if we look at the connection between the south-west sector in Western Sydney and the north-west sector, particularly from the south-west to the western, then we see that there is a lot of land that is currently in rural and other use. So its highest and best use under the just terms compensation Act today would be for its current purposes. What gives that land that value is in fact improving accessibility to those particular areas. So it is government investment in that infrastructure that completely changes that paradigm. A lot of the land, because I recall some years ago actually mapping it out just out of interest, was in fact government-owned land—owned by different levels of government but in government ownership. There are development opportunities as well incurring a lesser cost by reserving the land when it is in agricultural use and to look at whether you can provide alignments that are on government-owned land—land that it presently owns or that different levels of government might own; some of it may be university land and the like. Then there is the just terms compensation Act to give redress to the individual owners.

Mr NOBLE: I was on the Committee for Melbourne for a time, and we looked at Melbourne hitting 8 million, a bit bigger than Sydney. I want to take a different perspective on this,

because from an investment perspective you need a time frame. Anything outside 10 years starts to get into the realm of needing a foresight exercise to understand what the city is going to be. We made a core assumption that cities will keep on growing and growing. We know from superannuation demographics that in the next decade or 15 years you will have the baby-boomer generation retiring. That will fundamentally shift what was a core part of our society for the last 20 or 30 years. Our population will shift to having more retirees, more people outside the workforce than in the workforce. This is a fundamental shift not just in Australia but also in other countries.

You then start to change the dynamics around cities. At that point we do not all have to live in a city or close to work. You have a huge population that can live in different parts, which opens up the regions. This will be a game-changer that will not go away in the next 30 to 40 years. Then it starts to be about what services we deliver where. It is about delivering the right kind of retirement services in the regions, for instance. That becomes critically important. It is also about connectivity between regions and cities. You have to have that foresight exercise. If you assume the cities will keep on getting bigger and bigger, you are forced into a way of thinking. But if you look forward and think about how broadband connectivity can change the way we work—which is already happening—and changes in retirement, what does that mean for Australia? My personal view is the next 20 to 30 years are going to have a story about the regions. That impacts on land-planning issues.

The Hon. CATHERINE CUSACK: A betterment tax has been talked about, particularly in relation to rezonings where a landowner can potentially make a massive windfall profit. On the other hand, when councils are doing development approvals, they might overload costs, which would make the development unviable. Is there a better approach that is more equitable for the public and still makes projects viable? Infrastructure projects have been spoken about as being a bridge; I am talking about the role of regulation of infrastructure.

Dr WILLIAMS: We have to look at examples internationally. There have been plenty examples of betterment taxes in Australia; Bradfield wanted to do it. I was thinking about what would happen to land values if we took away the bridge; I live in Manly and we would collapse. The private benefit accrued from public investment is an unavoidable discussion. I generally believe that the value uplift from the second airport is going to make this a live topic—that is the bridge discussion. The real discussion is with the community about the fact that we need a beneficiaries-pay approach. It is about understanding what the benefit actually is.

The Hon. CATHERINE CUSACK: Do you have any suggestions or models?

Dr WILLIAMS: A million, but not for now. Engineering consensus behind them is the issue. I want to take some blame away from politicians. There has been civic discourse around this; it is not the responsibility of just one group. The media have sometimes been very poisonous about some of these things. We need a calm view.

I dispute what my colleague from the Committee from Melbourne said—not just because he is from Melbourne. The evidence in Sydney is that people are retiring to the inner west. They are beginning to retire to inner areas rather than going to Port Macquarie. There is a bit of a shift and almost the smallest demographic in Sydney at the moment is the ones who want to live in suburban housing. The bigger demographic shifts are in the younger people who want to live closer to economic action and older people who are either selling or renting their bigger houses towards the edge of the city and coming into the inner city. That is an international

phenomenon. In America they call it the "great inversion". Where 50 years ago the middle classes went to the suburbs, now they want to come back to the inner city. I do not see any phenomenon at the moment that is outsourcing that to the regions. The opposite direction is happening.

The other part of the conversation we have not had today is that in 2050 half the children born in Sydney will be born to parents of an Asian background. This will be a vastly different place in 2050. We do not have enough conversations about that.

Ms LYNEHAM: In relation to betterment taxes, this is a very difficult issue. We had betterment taxes introduced in New South Wales in the 1970s and 1980s, I think, and then withdrawn. It has to be recognised that levying betterment taxes at the rezoning stage creates other probity issues. In particular, it assumes that it is someone colouring a map that determines the value, rather than recognising the underlying importance of demand and the investment in infrastructure that goes with it. Presently, Government receives substantial moneys through various other payments and taxes, so that requires a lot more detailed consideration and investigation rather than just saying yes, let us go with a betterment tax.

Ms MONICA BARONE: I am the chief executive officer of the City of Sydney. I am going to repeat some of what has been said because I think it is important. Both Garry Bowditch and Nick Greiner spoke about the need to discuss the what, where and when of infrastructure. Another gentleman said it was the role of leaders to describe the why, to make the case for the why and then to determine the best way to achieve it. The independent bodies, departments and the rest will all give advice as to how to achieve your vision, but if you do not have a vision then nothing can happen and you have no way of judging whether your ideas are good ideas or not. I am from local government and I want to put in a few words about local government. Nick Greiner went on to say clearly we know local government is not equipped to do this planning, and he is absolutely right. It is not the job of local government to do that planning. Local government simply implements the plans of the State Government, but if you do not have plans, what do you expect us to do?

There were comments about light rail, but that is an example of, in the absence of a transport plan, the city government recognising something has to be done so it will do the work and sort it out if it has to. That is because there was a planning vacuum above us. We heard about corridors. The only reason the light rail is possible on George Street is that for a decade the city did not allow driveways off George Street. That means there are only a few driveways and infrastructure can be put there. The only reason that the corridor in Green Square is being protected for future light rail is that the city has had to buy it because the State Government did not put it on a map. We are about to build Sydney's largest urban renewal site, \$8 billion of development without a corridor for mass transit. The City of Sydney is putting \$1 billion of enabling infrastructure into the city and Green Square so that development can happen.

I want to stress that we have a really big planning problem. We have a metro plan, which is sitting to the side. This plan has some good in it, but none of the policy work that needs to happen. We have a good transport plan now, but it is not integrated. Who knows what the energy policy is and what we are supposed to be doing? There is an awful lot of work to be done, but do not throw the baby out with the bathwater. If you do not fix the planning, how do you know how you are going to reform local government? That is just diverting attention from the real issue. The real issue is that metropolitan planning is not there and the policy work is not there.

Mr JEREMY KINROSS: I am the former member for Gordon. Many years ago I too had to deal with road reservations, being the F3 to the M2 as it was described under various guises. Sadly, it was used by many constituents as an issue to bargain with during my by-election. The Government relented, but I still think at the time it never was actually released. I am not sure. It probably will be now because of the announcements. The picture I am trying to paint is that sometimes, sadly, constituents do not get the bigger picture. They are only interested in the short-term and their own interests. Therefore, I pick up on your recent comments that the vision has to be explained better. However, in saying that, I am not sure it necessarily gets us much further. It has to be drummed in.

Tim, you made the comment never to work with children or animals or Nick Greiner. I can get away with saying, many would say nor Alan Jones. I have known Alan Jones for some 45 years, but my point is a serious one. Alan Jones epitomises the concerns of constituents. Do you think that is an impediment to growth in the sense that his two major issues, about which I think you have been interviewed possibly by him, have been around for many years in planning. In this Government's case, the part 3 amendments were well known but Alan has only begun to raise the issue in the past six months to a year at the most. It has been around for two years but he has now started to say, "Where has this law come from?" The answer is it has been around that long. Alan Jones has created a groundswell of public opposition from the wider constituency about that. Do you think that that in itself is an impediment, which is perhaps too strong a word, to growth and places limitations on investment in this State?

The second issue is coal seam gas, which we have known has been coming. We saw some of the difficulties in America. I have tried to get around some of the State to see it. I most recently visited Gloucester. Tim and Sonja, can you quantify the Jones factor, dare I call it, or the outrage that people express about development because they are not focusing on the vision and the bigger picture and the extent to which that impedes public funding, not to mention private funding and bonds and so forth and various other means?

Dr WILLIAMS: I will address the unique proposition that is Alan Jones. I think he speaks to something real. Those of us who have always advocated growth but yet have a political sense need to understand that there is a real reason why there has been opposition. There is self-interest in it, but I think there is also a failure of a civic dialogue on the evidence around this. Let me start the other way round. When you ask people what they like about cities it is usually the stuff that only density brings to a city. Everything they really like about cities—the amenity, the connectivity, the bars, the jobs, the services, the restaurants, the cafes and the environment—are usually only affordable in a city that has density and connectivity. That is a very important part of the discussion.

The second thing is we have not heard from other voices in this discussion. They are not going to get on Alan Jones; they have to use other means. For example, we on the committee have just started a relationship with a group that brings us young people under the age of 30 from all over Sydney to try to get them involved in social media discussions about the housing that they need and we hold a more positive dialogue. My answer to the question is: We may have to go round the Alan Jones phenomenon rather than through the Alan Jones phenomenon, but there is a bunch of people out there. To give you a number, 70 per cent of 35-year-olds cannot afford home ownership in this city at this time. That has doubled as a problem in a generation. They are a constituency for change. We need to find ways of accessing it.

Mr GREG BOYER: I am from InStruct Corporation. My question relates to futureproofing, which infrastructure is all about. We have heard today about historical issues with infrastructure. We have also heard about maximising our current assets and that private finance could be a way to get infrastructure investment in the future. The conundrum I see with this, especially for decision-makers within Parliament and also within the bureaucracy, is that when projects are determined a lot of the time is spent fighting for the capital expenditure budget between other projects. As such, by the time the first shovel gets in the ground a lot of the futureproofing components of the infrastructure are taken away.

As an example, motorways are built and tunnels are only built for the opening; instead of having six lanes open they may only open a tunnel for two lanes. The extra cost to do that at the present time is minuscule compared with what will happen in future when that road gets to capacity and our future generations will have to pay much more to get it done. From a government and decision-maker's perspective, what advice would the panel give decision-makers in trying to sell why you can invest in something today that may not show returns today but that will be there for 20, 30 or 50 years time for our future generation?

Mr NOBLE: We talk about it not so much as futureproofing but as additionality, which is the same kind of thing that you are talking about. You do a PPP process. It has been banks and constructors that pretty much come to the table and the super funds as long-term investors are not able to put up the speculative capital to do the bids in the first place, so we tend to play a minor role in the formation of PPPs. Our criticism has been that the PPPs have been short-term focused and they do not have the longer term focus like building an extra lane in this road that we are not going to need now but we are going to need at some stage. The short-term issue is that you do not want to be a little bit like Dubai where you build an eight-lane highway and there are only three cars driving down it. That is not sustainable. But in your thinking process when you construct the deal it has to be long-term focused. It cannot be a short-term consideration when you are building that PPP process in the first place. How you do that is an issue. The current dynamics do not necessarily support that particularly well.

Ms LYNEHAM: In the planning process I believe it is vital to build different redundancy levels into your infrastructure networks and to undertake a risk and benefit cost analysis that puts a value on those as well as outline the security and other risks that are involved.

The Hon. CATHERINE CUSACK: As to the tunnel issue that was raised, I cannot help but remind everybody what happened to the Greiner and Fahey governments over the issue of the M5 East. That was meant to be built with a toll so it could be fully funded. In the campaign a promise was made by Labor that they would not have the toll. They then won Badgerys Creek, which was a seat that put them into office. That is how we ended up with a cheap tunnel that has been plagued with problems ever since. When we are talking about the weak politicians not planning for the future it is an example of where a genuine attempt was made to do that. But at the end of the day we do live in a democracy and this is the constraint that the politicians have. We would welcome suggestions. Yes I understand the need for revision but please understand that there are real-world constraints that the politicians live under, and that was a very sobering problem and a very sad situation for Sydney's infrastructure because, in my opinion, it is not only that it was iconic but it just created a model that then crippled our infrastructure planning for a very long time—specifically that case.

Dr WILLIAMS: Can I just say one thing about the political challenge? There is no mention of the Denver thing at the beginning—and it is not perfect because you can never transfer things

across countries—that that was a way of, in a sense, having a 30-year PPP deal with the public, so that, essentially, the political risk was just the one event of winning a referendum with the public and then a 30-year deal is in place that cannot be changed. So the public is locked in to the program. I think there is no perfect answer but there are probably some devices about winning once rather than constantly having to return to this to renew support.

The other thing was about history. I think we started with Henry talking—I thought brilliantly—about the history of the bridge. Understanding the bridge and how it was done and what it has done is obviously the most important discussion in Sydney or in New South Wales, it seems to me, and the benefits. The bridge is an infrastructure that keeps on giving, and I think that anybody who tried to appraise it—it probably failed all appraisals for the first 20 years of its existence, but the first 100 years of its existence show massively what you can do.

Mr JONATHAN O'DEA: Can I ask you all to thank the expert panellists once more? I introduce Grant Hehir, who is the New South Wales Auditor-General. Grant is going to talk to us about some future audits on infrastructure which are planned for the not too distant future—certainly not for the next century. Grant commenced as the Auditor-General of New South Wales in November last year for a period of eight years. Prior to being appointed Auditor-General of New South Wales, Grant was secretary of the Victorian Department of Treasury and Finance from 2006 and was Secretary of the Department of Education and Training from May 2003 to 2006.

As Secretary of the Department of Treasury and Finance, he provided advice on economic and financial policy and resource allocation decisions. Grant has also worked in the Federal Department of Finance and Administration. I ask you to welcome him to the podium.

Mr HEHIR: I am going to break with the ways things have gone and I will put some power points up, but only two, and I probably will not talk to them very much. I am going to talk a little bit about the issues that we find in infrastructure and how that drives the work that we do. As you know, my role is to assist Parliament in holding Executive government to account for being efficient, economical and effective in the business it undertakes. Almost by definition, if you are in the business of holding someone to account you are going to find a pile of negative things. But in aggregate, I am quite positive about how the public service operates and the way it delivers services. So while there is a bit of negativity here I would like to start by saying that you have to balance this with the fact that I think overwhelmingly the public sector delivers very effectively for the community.

This slide basically talks about infrastructure. When we look at infrastructure and infrastructure delivery we try to split our analysis between two different factors: one is how a project is being managed and the other is how are they delivering value once they are put in place. Some of the common issues we find with delivery fall into those three categories around selection, scope creep and how we deal with lessons learned. A lot of this has been talked about today. Almost everything that goes wrong in an infrastructure project starts from day one in putting together the governance and the project selection. You can track almost everything back to that point.

I am not in a position to comment about policies. So when we look at projects we do not say whether one project is better than another or whether a policy was better; we talk about individual projects. I would like to start by saying that I have been involved in ERCs at Commonwealth and State level for 20 years and looked at the processes around decision-

making and overwhelmingly my view is that I would personally, as a citizen, prefer a process where politicians are making the decisions about where resources are allocated rather than technocrats. There has been a debate for a couple of years in this country about the role of independent advisory bodies and I think they have added a lot of value to it, but at the end of the day I think you can find as many errors when you look back in history of judgements of technocrats as you can find from judgements of politicians. At least you can hold the politicians to account more effectively than technocrats for it. I am overwhelmingly positive about our political processes in making generally pretty good decisions about resource allocation. I thought I would throw into the previous debate.

With respect to poor selection of delivery options, as I have described it there, the key thing to think about is that infrastructure is about service delivery—whether it is an economic service or a social service. When we talk about infrastructure we think social as well as economic infrastructure. The starting point is that if there is an outcome problem, the analysis should start from a serious sort of investment mapping, a serious consideration of what the problem is and what sorts of solutions should be available. Some of the problems that you identify with infrastructure decision-making are that sometimes the solution comes before the problem identification. There has been a lot of discussion this morning about new infrastructure versus getting more value out of existing infrastructure. At the front end, if those decisions are not put on the table and clearly articulated about what the outcome is that is trying to be achieved and what are all of the options for achieving it, then you are not going to get an optimal outcome and you are not going to be able to allocate your resources effectively.

Some of the things that we identify in projects which are not optimal are around people or the processes leading to a solution—building a piece of infrastructure before going through the process of identifying all of the options that are around about delivery and subsequent to that, putting in place the right governance structure. We identify that weak governance is something that tends to flow through into scope creep, cost blowouts—all of those types of factors. If you get the planning up front, get the right governance in place then you tend to have a better chance of getting better outcomes.

The third one in project management, which is an issue that we identify in a lot of cases, is that we are not always good at looking back at a project and learning lessons. I think Henry Ergas this morning was really good at identifying that a lot of the issues that we confront have been around a long time. He talked about the Sydney Harbour Bridge. I was quite fascinated to hear him talk about the Canadian model of financing, which in today's jargon I think is a PPP cap and collar approach, which is an innovation that has been developed in the last three or four years. But it seems that the Canadians were doing it 100 years ago. So learning lessons from the past and building them into the future is a common issue that we identify in a number of our audits.

Looking at infrastructure: You go from we have built the infrastructure to it is in place and operating. We regularly identify that the operational phase of an asset is not effectively managed. In a PPP environment that is how well you manage the contract of the PPP provider. Usually you have got some KPIs and that can be assessed and it is about the quality of the processes that go on in there. In a non-PPP environment it is largely about how you manage the internal provider, do you have the right KPIs, and what is the big issue which is a reflection on poor performance in that area. I think poor maintenance is the key one. You have organisations which do not have clear maintenance plans, do not have a significant total asset management framework in place, and you do not get the investment in the continuity of the

asset going forward. I think that is something that we have identified in a number of audits over a number of asset categories over a number of years, that organisations do not clearly identify the need for maintenance and manage those factors well. A lot of it is debated in terms of what is the size of the maintenance backlog. I think the key issue is: Are agencies and asset owners having a strategic approach to identifying what their asset management needs are and prioritising those things?

We released an audit yesterday on the operation of some road funding to local government. One of the findings in the audit was that, in that particular circumstance, the allocation of funding to regional roads was not being driven by a set of indicators which maximised the economic benefit of the investment but were being driven by how bad the road was—and those two things are not the same. Sometimes it is better to do preventative stuff on a road that is not too bad than to fix a road that is quite bad, simply because you get a better return from that investment. That type of investment logic was not being brought to bear.

We have an expectation in organisations that they should always build up those asset management strategies and put them in place. In 2009 we did an aggregate audit of the total asset management policies of agencies and found them lacking. This year we are doing an audit of the Government's infrastructure capital delivery program as a whole, that is, the gateway process, the decision-making process through to delivery, to analyse how that is being done.

How does that play out in terms of our infrastructure program? Infrastructure is a big thing, so we are doing a lot of audits in that space at the moment. On the screen is a list of audits on our books now which are looking at project management. We are trying to get a balance between looking at projects after they are finished so we can tell people what they got wrong—which is useful, but not completely useful—and looking at early stages of projects so we can analyse whether the planning and governance is appropriate. We also have a broad program which is looking at that sort of asset management structure of the business, so we get a balance between project delivery and whether the value is being driven out of that. I think I might end there, so thank you very much.

CHAIR: Thank you, Grant. I will ask John Williams, as a member of the Public Accounts Committee, to formally thank the Auditor-General.

Mr JOHN WILLIAMS: Thank you Grant, we appreciate your input today and, as a sign of our appreciation, we would like you to accept this bottle of wine.

CHAIR: We are honoured that the Premier has joined us. Mike Baird is also the Minister for Infrastructure, and it is in that capacity that he has agreed particularly to come along today. We have had a very intelligent and informed series of discussions and input which will be reported by Hansard and tabled in Parliament with a bit of a summary and, in turn, we will be asking for a government response in a very general sense. We are delighted that the Premier is able to join us and share his perspective.

For those who are not aware, only last month on 17 April Mike Baird was sworn in as the latest and greatest Premier of New South Wales—the "greatest" line may well be proven, but at the moment he has enormous potential. He is a man of vision and a man of courage, from my perspective, and I think he is somebody who will see the pace of activity and the planning for the long-term future of New South Wales pick up significantly. I have that confidence and I

know that the confidence is shared by all my colleagues in that regard. I will not go into great detail, but Mike previously was Treasurer in New South Wales. Before that he was shadow Treasurer and served in a number of other shadow ministerial capacities. He was elected to the seat of Manly in 2007 after an 18-year banking career which encompassed corporate banking, securitisation, debt, capital markets and project finance in Australia, London and Hong Kong. I will not go into his career highlights, but suffice to say he has the experience and the knowledge, and I believe he has the vision to lead New South Wales well and truly into a future which is one of prosperity based in large part on delivery of infrastructure. I ask you to welcome Premier Mike Baird to share his thoughts.

The Hon. MIKE BAIRD: Thanks for those kind words—captured by the ABC. It is great to be here. I know that you have had a big morning and you have heard a lot about infrastructure, and I am delighted to be able to speak for a few minutes—and my apologies that I have to run, I am already late to the next event, but there was an opportunity to talk to you about infrastructure and I am delighted to do that. I see good friends across the audience, many of whom have been involved in this space, and it is great to have my friends from the SMART Infrastructure Facility here. They do an amazing job in thought leadership, which is critical. I also acknowledge the Auditor-General. It is great to have the Auditor-General here. It is often better to follow him rather than go before him. He has brought a significant array of experience and is doing a great job in this State.

In terms of the infrastructure space, the important point I want to make is that often you do not realise the opportunity that is before you when you are sitting amongst it. Earlier this year, when I was in London meeting ratings agencies, investors and others, I had the opportunity to meet a group of infrastructure players that, across the world, are probably the biggest. Every single one of them said that, looking at the next five years, New South Wales—and more broadly Australia—is the infrastructure capital or opportunity in the world. We often hear those sorts of words and wonder if that could be true, but it is. If you look at the amount of spend and the infrastructure projects underway, it is undoubtedly the place for infrastructure players to come, participate and contribute, and help us deliver the infrastructure that the community has been desperately waiting for.

Just this week I opened a new facility for a global infrastructure player that has put their head office here. They are looking across New South Wales and Australia for infrastructure investments, and they are excited about the opportunities here. More than \$85 billion in construction is expected in the next five years. We have a huge array of projects including the North West Rail Link, the South West Rail Link which is almost done, and the WestConnex project which is underway. We have close to \$5 billion for hospitals and we also have the Darling Harbour Convention Centre—and we want to do more.

We made announcements this week alongside the Federal Government. The WestConnex project, which was initially widening and dealing with the M4, and the duplication of the M5 have merged. Before the election we said we would try to do one project, either one of those two or the F3-M2, which is what it used to be called before Duncan changed the names, but we are starting every single one of them, and the announcement made this week with the Federal Government was that the duplication of the M5 has been brought forward by at least 18 months. It is an incredibly exciting time to be in this State.

In order to fund these pieces of infrastructure various decisions have to be made. The budget does not have the capacity to do it. Indeed, we inherited revenues that have fallen

significantly, debt levels right against our triple-A limits, so we have said, "We have assets on the balance sheet. Can we recycle that capital and put it into the new assets?" That model has taken hold—the long-term leases of Port Botany and Port Kembla mean that WestConnex is funded in terms of the contribution from the State Government. That model is not popular at times but it is the right thing to do because in the long term the community has the benefit of infrastructure that otherwise we would all be sitting here talking about.

Just as important is how we have prioritised infrastructure. Infrastructure NSW has done its work. It has set a clear framework on the priorities, and once we have that priority list, as capital is released, we have a chance to bring them forward. We are excited by what the next five years looks like, and that is about our existing program. Our expectation is that we will be doing more than that. Obviously, I will not make any announcements here today—I can see Poppy and Liz ready to go—but that is the intent of the Government. Together with the Federal Government we have shown this week that if there is an opportunity to bring some of these projects forward we will. The example of the unsolicited proposal in terms of the F3-M2 shows it.

That was a longer term priority but there was a smart proposal that required a government contribution. And for a \$400 million State Government contribution we have close to a \$3 billion project that will renew that part of Sydney, and we will continue to look for those opportunities that we can deliver. I thank you for your contribution today. It is incredibly important that we are here and having this discussion. I congratulate the Public Accounts Committee and my other parliamentary colleagues who are here. It is great to have them supporting this initiative. I thank those on the panel who have contributed their time, we really appreciate it. I think you will agree with me that in five years time, my hair will definitely be greyer, but when we look back at what we have achieved we will be amazed at what this city and State looks like. It is exciting to think about what will happen. The State Government looks forward to participating again. I really appreciate this opportunity to say a few words.

Mr GREG PIPER: It is great to be now talking about asset recycling rather than privatisation so we are moving on. Thank you Premier.

(The Forum adjourned at 1.04 p.m.)

POWERPOINT PRESENTATION OF MR GRANT HEHIR, NSW AUDITOR-GENERAL



Issues Identified – TAO Audits

Common project management issues

- poor selection of delivery options
- scope creep and cost blowouts
- limited examples of post-implementation reviews

Common asset management issues

- poor planning, KPIs, data and systems
- inadequate understanding/focus on life-cycle costs
- asset portfolios misaligned with service need and available funds
- inadequate focus on managing contracts

Forward Audit Program Infrastructure project management

Topic	Phase	Tabling date	Agency cluster
Major Project Assurance - WestConnex	Planning	December 2014	Treasury / Transport
Transfer of community housing title/management to Community Housing Providers	Delivery	Jan / Feb 2015	FACS
Governance and performance of major capital works projects	Planning/delivery	Feb / March 2015	Treasury / Finance
Managing major urban redevelopment projects – Barangaroo	Delivery	2015-16	Premier
Planning major projects - business case, planning and governance for extensions of CBD and South East Light Rail	Planning	2015-16	Transport
Realising the benefits of integrated ticketing (Opal card)	Delivery	2015-16	Transport
North West Rail link - getting passengers to and from the city	Delivery	2016-17	Transport
Planning major urban redevelopment projects - Darling Harbour Exhibition Centre and Precinct	Planning	2016-17	Premier
Improving water and road infrastructure in remote Aboriginal communities	Delivery	2016-17	Education / DTIRIS / Transport
Delivering major projects - Pacific Highway	Delivery	2016-17	Transport
Planning for social infrastructure to meet changing community needs	Planning	2016-17	Education / FACS/ Premier

Forward Audit Program Infrastructure asset management

Topic	Tabling date	Agency cluster
Regional Road Funding	May 2014	Transport
Management and Maintenance of Water Infrastructure in Regional New South Wales	March / April 2015	DTIRIS
Water efficiency and demand management	2015-16	DTIRIS
Asset management in Health	2015-16	Health
Effectiveness of the traffic management system/traffic congestion	2016-17	Transport
Asset management in the Department of Attorney General and Justice	2016-17	Attorney General and Justice

Appendix Four – Extracts from Minutes

MINUTES OF MEETING 73

Thursday 27 March 2014
9:45am
Room 1043, Parliament House

Members present

Mr O’Dea (Chair), Mr Bassett, Mr Daley, Mr Piper, Mr Williams

Officers in attendance

Elaine Schofield, Abigail Groves, Meike Bowyer

1. Apologies

An apology was received from Dr Lee.

2. Confirmation of previous minutes

Resolved, on the motion of Mr Piper, seconded by Mr Bassett: That the minutes of meeting no. 72 held on 6 March 2014 be confirmed.

3. ***

4. ***

5. Future inquiries

- ***
- ***
- ***
- The Chair proposed that the Committee conduct a half-day forum regarding infrastructure in NSW.

Resolved, on the motion of Mr Bassett, seconded by Mr Daley: That the Committee conduct a half day forum on infrastructure in NSW on 9 May at Parliament House, and invite members of parliament and other relevant stakeholders.

6. ***

7. Next meeting

The meeting adjourned at 10.40am. Next meeting will be on Thursday, 8 May 2014 at 9.45am in Room 1043.

MINUTES OF MEETING 74

Thursday 8 May 2014

9:49am

Room 1043, Parliament House

Members present

Mr O’Dea (Chair), Mr Bassett, Mr Daley, Dr Lee, Mr Piper, Mr Williams

Officers in attendance

Elaine Schofield, David Hale, Leon Last, Meike Bowyer

1. Confirmation of previous minutes

Resolved, on the motion of Mr Piper, seconded by Mr Bassett: That the minutes of meeting no. 73 held on 27 March 2014 be confirmed.

2. Infrastructure forum – 9 May 2014

The Committee discussed the upcoming infrastructure forum being held on 9 May and noted the press release circulated by Mr O’Dea. An updated program for the forum was circulated.

Resolved, on the motion of Mr Williams, seconded by Mr Bassett: That the Committee authorise the draft program for the *Planning NSW Infrastructure for the 22nd Century* Forum to be held on Friday, 9 May 2014 at Parliament House.

Resolved, on the motion of Mr Williams, seconded by Mr Bassett: That the Chair prepare a report on the Forum for consideration by the Committee.

3. ***

4. ***

5. ***

6. ***

7. ***

8. ***

9. ***

10. Next meeting

The meeting adjourned at 11.11am. Next meeting will be on Thursday, 15 May 2014 at 9.45am in Room 1043.

MINUTES OF MEETING 75

Thursday 15 May 2014
9.45am
Room 1043, Parliament House

Members present

Mr O’Dea (Chair), Mr Bassett, Mr Daley, Mr Piper, Mr Williams

Officers in attendance

Elaine Schofield, David Hale, Abigail Groves, Leon Last, Meike Bowyer

1. Confirmation of minutes

Resolved, on the motion of Mr Piper, seconded by Mr Bassett: That the minutes of meeting no. 74 held on 8 May be confirmed.

2. Infrastructure forum

The Chair provided a verbal report on the PAC Infrastructure Forum which was held on 9 May 2014. The forum went well and feedback from attendees was very positive. However, the Chair was disappointed that more members did not attend. The report from the forum is currently being prepared and will be tabled before the winter recess.

3. ***

4. ***

5. ***

6. Next meeting

Thursday, 29 May 2014 at 9.45am in Room 1043.

MINUTES OF MEETING 76

Thursday 29 May 2014
9.45am
Room 1043, Parliament House

Members present

Mr O’Dea (Chair), Mr Bassett, Mr Daley, Mr Piper, Mr Williams

Officers in attendance

Elaine Schofield, Abigail Groves, David Hale, Leon Last, Meike Bowyer

1. Confirmation of minutes

Resolved, on the motion of Mr Williams, seconded by Mr Bassett: That the minutes of meeting no. 75 held on 15 May 2014 be confirmed.

2. ***

3. Infrastructure forum

The Chair gave a report. The transcript of the forum has been circulated to members and the draft report will be considered at the Committee's next meeting on 19 June.

4. ***

5. ***

6. ***

7. Briefing from Auditor-General

Mr Grant Hehir, Auditor-General, Mr Tony Whitfield, Deputy Auditor-General, and Mr Rob Mathie, Assistant Auditor-General, joined the meeting at 10.05am. The Auditor-General briefed the Committee about the following reports:

- The effectiveness of the new Police Death and Disability Scheme
- Auditor-General's Financial Audits 2014, vol. 2
- Auditor-General's Financial Audits 2014, vol. 1.

8. Next meeting

Meeting adjourned at 10.45am. The next meeting will be on Thursday, 19 June 2014 at 9.45am in Room 1043.

MINUTES OF MEETING 76

Thursday 29 May 2014
9.45am
Room 1043, Parliament House

Members present

Mr O'Dea (Chair), Mr Bassett, Mr Daley, Mr Piper, Mr Williams

Officers in attendance

Abigail Groves, Leon Last, Meike Bowyer

7. Apologies

8. Confirmation of minutes

Resolved, on the motion of Mr Piper, seconded by Mr Williams: That the minutes of meeting no. 76 held on 29 May 2014 be confirmed.

9. *****

10. Report on Planning NSW Infrastructure for the 22nd Century

Resolved, on the motion of Mr Williams, seconded by Mr Piper: That the draft Report be amended to omit informal comments from the transcript of the forum. The Committee further resolved that the draft report as amended be the report of the Committee, to be signed by the Chair and presented to the House; that the Chair and the secretariat be permitted to correct stylistic, typographical and grammatical errors; and that, once tabled, the report be published on the Committee's website.

11. *****

12. *****

13. *****

14. Next meeting

The meeting adjourned at 10.30am. The next meeting will be on Monday 23 June at 9.30am in the Macquarie Room.