# Unforgotten: Infrastructure Australia’s national audit and transport

*‘You bury this transport policy right.….’* [[1]](#endnote-1)

## Introduction

The purpose of this article is to assist readers to consider aspects of Infrastructure Australia’s 2015 national infrastructure audit and contribute to its ongoing work. It also provides some background to the author’s submission in response to the audit.

The article first considers the origins of the audit, then provides an overview of what has been done and identifies some issues in the work to date. Following this it discusses the potential relation of the audit to a pipeline of projects and draws some lessons from the exercise.

The article is limited to transport and, as usual, matters on the public record. It focusses on the audit report released in mid-May; the author did not access the background material until early July.

The audit, together with the northern Australia audit, provides an important opportunity to advance policies essential for the community to benefit from transport infrastructure. But this is not a fiat accompli; mere recitation of the ‘line’ as per most media reports is no help.[[2]](#endnote-2)

## Origins

The 2015 audits are not the first of Australia’s infrastructure, or even the first by Infrastructure Australia. Nor will they lead to a first ‘pipeline’ of projects or national plan; both already exist.[[3]](#endnote-3)

The origins of the 2015 audits can be traced to 2007, before the start of Infrastructure Australia. Then, as part of its election policies, Labor proposed a greater role for the Commonwealth in infrastructure and in cities. Transport would always be the crux. It is the infrastructure sector most reliant on taxpayer funding, where demand is largely unconstrained. The new Minister for Infrastructure, took a portfolio that included transport but not energy, communications or water. [[4]](#endnote-4)

Then, in pre Global Financial Crisis days, the expectation was that Commonwealth coffers would swell from growth and a resources boom. The problem for Labor would be how to spend, a contrast with the Coalition’s practice of tax cuts and concessions. Some countries, like Norway, invested proceeds from booms in sovereign wealth funds, but Australia had not followed that path.

Labor intended to set up a series of Budget funds; one, Building Australia, would be devoted to infrastructure. The simple view was that a new institution would recommend which projects the Government should fund from Building Australia. Even though the Government would continue to decide on spending, the established bureaucracy would be unlikely to welcome a new institution.[[5]](#endnote-5)

Viva Infrastructure Australia with Council members drawn from the heights of industry, academe and governments. Their role was essentially to work with a coordinator who, as a statutory appointment, would be and be seen to be independent from industry and the Government.[[6]](#endnote-6)

The first task set for the new organisation was to conduct a national infrastructure audit. The Prime Minister and Infrastructure Australia Chairman called for public submissions. Ideas would be assessed against criteria that boiled down to: national significance; economic merit; feasibility.[[7]](#endnote-7)

It is not clear what response was expected. However, since there was a reputed ‘infrastructure deficit’ and most governments boasted ‘plans’ a reasonable assumption may have been: many well thought out ideas. Infrastructure Australia’s job would be easy; check the thorough analysis with the detailed data and tick off the projects. It would focus on assessment.

The Commonwealth would help the plans to be delivered earlier, the States using less of their own money. How wrong this turned out to be.

Some 675 submissions covering more project proposals were put forward to Infrastructure Australia in the initial round; the vast majority were roads, with financial constraints often being the reason for the proposal. Only nine passed the tests; one of which, the Pacific Highway, was identified by Infrastructure Australia and not by State or Commonwealth departments. [[8]](#endnote-8)

Infrastructure Australia made its audit report to the Council of Australian Governments in December 2008. While that report highlighted thematic challenges, it did not spell out a less shining truth; there was almost no national relationship among proposals. Where was the national picture for Infrastructure Australia to advise the Commonwealth to act on?[[9]](#endnote-9)

Hence the report proposed a number of themes to assist in identifying nationally significant projects: energy; water; cities; trade gateways; national freight network; indigenous. The themes did not help enough; later rounds of proposals, while smaller than the first, had the same flaw. Some suggested the culprit to be lack of experience in writing project proposals.[[10]](#endnote-10)

Despite the 2008 audit report including a pipeline of projects, and despite its methodology being accepted by the Australian National Audit Office, the result gained media notoriety. Yet the paradox of only a few projects being acceptable while there was an (alleged) enormous infrastructure deficit was unremarked. One possible explanation was that many meritorious projects were not put forward to Infrastructure Australia. Was identification, rather than assessment of project proposals, deficient? The more rigorous approach to assessment had not helped to identify better ideas.[[11]](#endnote-11)

Infrastructure Australia embarked on developing ideas for national policies in water and transport. For transport there was an eye to identifying potential projects through a national transport policy, such as recently agreed by the Ministerial Council on Transport and Infrastructure. Infrastructure Australia sought to do so via ‘strategy’ publications between 2010 and 2013: national ports; national land freight; national urban transport. In my view the order of release is of the greatest significance: investment in infrastructure for freight should depend on surety about sea and air ports; policy and investment on urban transport should depend on surety about freight, and a market for road use.[[12]](#endnote-12)

But Commonwealth and State departments took, at best, a passive stance on Infrastructure Australia’s ideas. The strategy documents do not appear to have been used to assist in developing the existing pipeline of proposals.

Indeed, the idea of Infrastructure Australia identifying national policies and potential projects seemed anathema to the bureaucracies which had held a mortgage on this task, even if there was debate about whether they performed it. A key concern appeared to be suspicion about whether Infrastructure Australia views would limit what bureaucracies could put forward.[[13]](#endnote-13)

In late 2013 the Commonwealth Government changed. Prior to the election the Coalition said that all proposals for Commonwealth project funding over a certain amount would be assessed by Infrastructure Australia, and identified a number of projects it wished to fund. It claimed that Infrastructure Australia needed to be ‘independent’.

While there may be questions about the Coalition platform, the idea of a new national infrastructure audit was generally welcomed. It is the logical next step in identifying national infrastructure options after the experience to date. It is important for Australia that such audits are undertaken, and undertaken by an organisation capable of developing a credible national plan; an organisation like Infrastructure Australia. [[14]](#endnote-14)

## The 2015 national audit: overview

The case to conduct a national audit is clear. Prior to an audit the perspective of national significance would be ad hoc, as would identification of priorities; probably much better informed by Infrastructure Australia members than by departments but ad hoc nonetheless. A real issue if Commonwealth funding is limited.

The 2015 audit, unlike its predecessor but like an asset management plan, attempts a stocktake of infrastructure against defined service measures. It seeks to make an evidence base from which initiatives might be identified. Projections of the future are made. It has a more objective, and potentially comprehensive, methodology than the equivalent aspect of the 2008 audit which asked the public its opinion of problems.[[15]](#endnote-15)

The new methodology potentially has two great strengths. First, it allows a public comparison of the scale of issues across various locations within Australia. It helps to elevate the infrastructure debate above local introspection and bias and, being public, allows testing which can engender confidence.

Second, it permits identification of infrastructure issues that otherwise would be overlooked by an approach that merely aggregates wishes or complaints. It can work towards what is needed, not just what some might wish for. It can make a substantial contribution to the federation.

In the first respect, the new national audit succeeds at an aggregate level. It points out what should have been obvious but was often ignored; most Australians live in cities, population growth will be highest in cities. Therefore issues are likely to be greatest in cities. Especially in Sydney and Melbourne which dominate Australia’s population and will continue to do so.

Recitation by the press of parts of the report reinforced this obvious point. At the highest level this is very desirable. Well done! Even if the media brag how bad local infrastructure might be, some illusions have been shattered; not everyone can be top of the list of issues.

However, below the aggregate success is less clear. For some transport precise findings are made at specific locations. One difficulty, outlined later, is that the underlying ‘science’ is contentious.

The methodology suffers from two weaknesses. First it is incomplete. It has not included stages of the 2008 audit which dealt with opportunities not just problems. It deals with symptoms rather than causes and is unable to provide guidance as to what, if anything, should be done at specific locations. The report suggests this is for the next stages, and public feedback is sought to assist.

Second, it does not seem to build sufficiently on Infrastructure Australia’s knowledge. While relaying most previous messages, including the need for road use charging, the report could signal a shift in direction subtle though this may be. The next stages will tell the story.

Unaddressed both weaknesses could undermine subsequent work. More explanation and more work will be needed. Experience suggests that the audit’s general warning about higher transport user charges to pay for more infrastructure, now almost routine, will need to transform into a much more pointed outcome for many proposals.

## The issues

Beyond the importance of cities, the audit’s findings and inferences become progressively more contentious. For example, the highlight picked up by the popular press, of inexorably worsening road congestion to a $53billion cost, is suspect.[[16]](#endnote-16)

The report’s differentiation among cities is open to question. There is a compelling case for separating out at least Newcastle, Wollongong and Geelong from the State capitals in any list that includes places like Hobart and Darwin.[[17]](#endnote-17)

Perhaps these and the following types of issues can be addressed before the pipeline is settled?

### The story is incomplete

One matter is the coherence of the story that is told. Yes population is growing, even if the report did not present an historical comparison. The preferred projection is for growth just below the average of between 1901 and 2014; expected growth is hardly unprecedented and much below the rates of the post war boom.[[18]](#endnote-18)

So demand for transport infrastructure should increase? Maybe. Or maybe not, if due to an aging population the workforce (that determines peak demand and therefore infrastructure requirement) doesn’t increase much at all. The implications and result could be better explained.

Land use changes are pivotal but not wholly exogenous; what is done for infrastructure in the next 15 years will have enduring influence. Do the ‘models’ deal with this? My understanding: road models usually do not, nor do they deal with induced demand. I would be relieved to be corrected.

Another respect in which the told story is incomplete relates to direct economic contribution. One relevant question here is whether the analysis is based on past averages or on marginal benefit. Next: what is the degree of statistical accuracy and confidence in the results, noting that some are presented as significant to $10,000 15 years hence? A further question: why not show the contribution from rail segments, and the road value dependent on rail? Also: the implications of using ‘shadow tolls’ in congestion cost estimation. [[19]](#endnote-19)

The report considers road and rail separately. In reality the modes substitute or complement depending on situation. Would it be better to identify use and capacity by transport corridor rather than (just?) the traditional road or rail only analysis? For example for the ‘Pennant Hills road’ corridor, would it be more helpful to the next stage of the process, public submissions, if comments about road utilisation were augmented by noting the absence of a rail line?.

The tables used to show road congestion could easily be supplemented thus. An example is below, which also shows delays etc. as if road pricing was in place (as discussed later).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Corridor** | **Road / rail 2011** | **Delay cost observed** | **Delay cost if road pricing** | **Available rail capacity** |
| Parramatta-Hornsby | Pennant Hills Rd / no rail | $3.53m | **?** | nil |
| Parramatta-Sydney | Parramatta Rd, M4/ Western line | $1.51m | **?** | **X%** |

There are questions about capacity definition. In the report road volume capacity is expressed in units of cars, while rail measures are personal travel hours. It would be helpful for the audit to provide evidence of vehicle loading; car occupancy; truck loading; train loading. This would facilitate a discussion about the impact of vehicle utilisation on arguments about infrastructure ‘needs’.

The report acknowledges omission of rail delays, arguing they are relatively small. Perhaps so, but timetables aim to keep delays low; by trains that are slower and less frequent than possible. The effects can be material, not only within rail but also on road traffic. They also could be included.[[20]](#endnote-20)

### Missing?

Another matter is: what the audit report doesn’t deal with.

The report does not specifically deal with agglomeration other than by observing it relates to firms clustering in particular locations. It does not question the agglomeration effects of roads compared with railways. Casual observation, say of Sydney’s ‘global arc’, suggests services industry agglomeration to be more strongly related to public transport than to roads.[[21]](#endnote-21)

Parking spaces for the many additional cars, including in major metropolitan centres which are to be better ‘connected’ by road projects?[[22]](#endnote-22)

Some of the matters previously mentioned by Infrastructure Australia such as proper utilisation of the Hume Highway and roads to intermodal terminals are not prominent.[[23]](#endnote-23)

The lesson from energy is not yet applied. It is now clear that too much infrastructure, and/or infrastructure of the wrong sort, has been installed in that sector. The sector had a pricing problem, not just an infrastructure gap. Should transport be examined in this light?[[24]](#endnote-24)

Missing too is reference to the current rate of debt increase due to road spending exceeding road related revenue. This is a serious problem for road reform, and should cause hesitation in making any recommendation that leads to greater government spending on roads. If lobbying efforts are to be believed, the problem is much larger than the current figures show.[[25]](#endnote-25)

Background papers for the audit use economic size as the primary determinant of national significance. The risk of this is omission of some national and international characteristics.

One such notable omission is that of rail gauge standardisation. This is despite the break of gauge being the most notorious Australian transport issue for more than century. The States, understandably, are not eager to raise rail standardisation; they have other priorities including, historically, the business of their merchants. Yet standardisation had been a concern of Infrastructure Australia.[[26]](#endnote-26)

Potential inferences of this omission are that Infrastructure Australia sees: its role as to recommend Commonwealth funding; the Commonwealth’s role is to support States through specific purpose payments. In this view: the pipeline is to be an aggregation of State relevant projects; the Commonwealth is increasingly a bank or balance sheet for State projects as part of its vertical fiscal equalisation.

Defence strategic requirements do not figure prominently. In this respect the audit is substantially different to the national ports strategy.

There would be questions were such views to prevail.[[27]](#endnote-27)

So what is underdone to date are characteristics of what makes Australia a nation rather than a collection of localities. Such as identified in Infrastructure Australia’s ports and land freight strategy documents. Could there be an opportunity to make a contribution to the current consideration of federation, even if economic infrastructure has been largely overlooked so far by the agenda?[[28]](#endnote-28)

### Premature inference

A third matter is the inference drawn by many that more infrastructure is needed. In fact the audit does not prove this; it does not demonstrate that any identified ‘gap’ is worth filling.

This is because the 2015 audit stops short of its predecessor. It attempts to answer only the first two steps of Infrastructure Australia’s seven step process; goal definition and problem identification.

More infrastructure may be needed now, but this unproven. More infrastructure will be needed later, but how much, where and what remains an open question. As does: what needs to be done?

### A shift in direction?

Potentially one issue is whether there is an inference that primary responsibility for funding transport (road) infrastructure should be with governments or, more accurately, taxpayers.[[29]](#endnote-29)

The issue is fundamental, but not for reason proposed. The audit seems to argue that road charging is needed essentially to increase road funding. If so, this may involve a subtle shift from Infrastructure Australia’s previous thoughts.

Previously Infrastructure Australia expressed it: reform and investment. From inception; reform and investment together. Latterly; investment after, or assuming, reform. Reform means pricing, not charging just to gain funds. In fact efficient pricing may curb returns to investors in some infrastructure; those who rely on monopoly rents.[[30]](#endnote-30)

Infrastructure Australia made the point most recently in the urban transport strategy: should identification of needs for urban roads and public transport be assessed as if there was road pricing, even if governments do not have such a policy? What roads would be needed if road pricing was in place? What roads would be underused if road pricing was in place? This test is agnostic as to whether funding gifts should be provided in particular cases, so it is relevant whether the current government policy is for or against tolling or pricing. Very sensible for an organisation that supports road pricing.

More prosaically for the report: what would be the estimated cost of congestion in aggregate, and for each of the listed roads, if efficient road pricing was in place? As is the case with relevant rail capacity, this could neatly be included in the tables of congestion on individual roads.

### Others

There are other matters which merit attention. Without being exhaustive:

* The report references congestion projections previously questioned by Infrastructure Australia and which should now be considered wrong;
* The comments regarding committed projects should be more precisely spelt out, for example does the forecast for congestion on Pennant Hills Rd assume Northconnex is operating?;
* The implication of the roads fiscal deficit, an increase in road charges possibly in the order of 25% at some time to cover current infrastructure spending (nb not cost or cost recovery), merits detailed discussion;
* Some urban rail findings are debatable.[[31]](#endnote-31)

## And leading to a pipeline?

An audit should be a precondition for a project pipeline. The 2015 audit is an improvement on the initial stages of the first audit conducted by Infrastructure Australia in 2008. However, there are some questions about this 2015 audit. Because an audit is so important, there is a good argument that these be addressed in development of the pipeline of projects.

In making a pipeline, Infrastructure Australia’s views of the Commonwealth and federation could be spelt out; this goes to the central question of national significance. There would be merit in a separate consideration of infrastructure whose transport effects transcend State boundaries.

The intention appears to be that Infrastructure Australia receive submissions proposing resolution to the symptoms identified in the audit. Experience and recent events demonstrate risks in relying wholly on information from submissions and project proponents.

Among those experiences is the lack of proponents for some measures; the Pacific Highway being the first example, gauge standardisation and defence etc. being among more recent absences. For some of these the best proponent might be the Commonwealth. However, submissions from that Government have been limited. If the Commonwealth considers Infrastructure Australia to be independent from its Government there should be no reluctance in making submissions.

Among the recent events has been disclosures and controversy about the East West Link. It has been claimed that the original business case was not provided to Infrastructure Australia because it might “*be used as a justification for not supporting the project*”. The issue here is not this particular project, but the potential for some (inconvenient) facts to be withheld. [[32]](#endnote-32)

The general absence of published ex-post reviews, the view that roads need some government support and the lack of an economic regulator for roads may make this risk higher for those projects.

The pipeline envisaged by the Government might differ to that already established by Infrastructure Australia. The Government has asked for at least one time element; the next 15 years.

In comparison, Infrastructure Australia’s existing pipeline is based on merit; the steps needed for a project to deserve the go ahead. Time is not the factor.

A 15 year pipeline which set out the timing of construction etc. would be a boon for infrastructure builders, advisers and possibly investors. It may improve public policy. Yet Governments, including the Commonwealth, already have such pipelines albeit with shorter horizons.[[33]](#endnote-33)

State government infrastructure agencies keep these pipelines current and get involved in project delivery. Not all such agencies have Infrastructure Australia’s functions of assessing proposals and showing the results. Are the 2014 changes to Infrastructure Australia relevant here?[[34]](#endnote-34)

Whatever the case, in my view to lose the essence of Infrastructure Australia’s existing approach of recommending only those proposals which demonstrate national significance, economic merit and feasibility, would be a grave mistake. All seven steps of its assessment process should be satisfactorily addressed before a pipeline indicates the timing for construction etc. of any project.

Subject to earlier reservations, the audit has essayed the first two steps of this process. Five remain.

## Lessons

A national infrastructure audit is desirable and should be undertaken by an organisation such as Infrastructure Australia; not by advocacy groups or Commonwealth or State departments.

One lesson of the 2015 audit is the extraordinary difficultly of a de novo start. Infrastructure Australia, in seeing the audit as part of a process, has an opportunity to recover ground.

The reaction to the audit in the press and elsewhere has been cheering that the message means a call for more infrastructure and spending.

Some phrasing in the report, ‘capital investment’ preceding ‘reform’ in a portfolio of reforms and initiatives, tends to this. Care is needed in understanding Infrastructure Australia’s independent advisory role and rigour.

There is a problem of expectations. For example, it is unlikely that every road problem can be addressed, or addressed in an economic way. With no particular case in mind: it is not worth spending $5 billion to fix a $4 billion problem. Yet saying there is a $4 billion problem, which is the style of the audit’s road tables, may raise expectations it will be fixed because it is a big problem.

Hence the next, necessary, five steps will be hard. The message that not all expectations should be met, even if they could be (by taxpayer funding or even by ‘user charging’), is likely to be much less popular and more difficult to convey than the message ‘received’ to date.

The strategic questions previously raised by Infrastructure Australia also are relevant. For example, in transport: what travel enhancing projects should be put on a pipeline prior to adequate nationwide planning for ports, airports and major freight systems? [[35]](#endnote-35)

The questions become even harder when it is realised that the roads fiscal deficit means additional government road funding is in opposition to future road reform.[[36]](#endnote-36)

There already are infrastructure advocacy groups who, understandably, do not pursue these questions. Neither they, nor the 2015 audit, have yet made the case for projects beyond the existing priority list. Let alone more infrastructure supported by taxes, government funding, self-evident though that may seem. That case, if it is to be made, needs to come from submissions.

In that process the real independence of Infrastructure Australia will come to the fore. Independence from the executive Government and departments may be important; certainly Parliament thought so. But it will show that more important is a message independent from industry, cheerleaders, and pet shop galahs.

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Disclosure: the author was an employee of the Commonwealth seconded to the Office of National Infrastructure Coordinator between 2008 until retirement in 2014. He has no paid or employment interest in the activities of the infrastructure industry, project proponents, governments or Infrastructure Australia.

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1. From Ho: transport policy; author’s seminar at the Institute of Transport and Logistics Studies, University of Sydney, March 2013. See: <http://sydney.edu.au/business/itls/research/seminars/past_seminars/2014>. [↑](#endnote-ref-1)
2. The first media reports on the content of the 2015 national audit preceded its release. Most recited some of Infrastructure Australia’s findings, often focussing on congestion.

   There was very little difference among reports apart from identification of local issues. See for example: <http://www.smh.com.au/nsw/53-billion-congestion-crunch-looms-warns-infrastructure-australia-20150521-gh6rzy.html>. (and explore in depth for 87 articles).

   There were a few exceptions, although almost all took the view that more infrastructure is needed for example; <http://www.theguardian.com/business/grogonomics/2015/may/25/after-the-death-of-the-east-west-link-infrastructure-pm-tony-abbott-is-more-talk-than-walk>. [↑](#endnote-ref-2)
3. Infrastructure Australia undertook a national infrastructure audit in 2008-09. The audit found a number of general and location specific infrastructure challenges, and identified themes to help meet these challenges. It also listed a number of projects for further analysis.

   Prior to this, in 1996 the then national commission of audit reviewed the adequacy of Australia’s infrastructure and found*:*

   *‘A proper assessment of the adequacy and condition of existing infrastructure can only be made on a case-by-case basis, with new investment determined using rate of return analysis of all the resource costs and benefits involved (including ‘externalities’). There is no evidence of overall infrastructure inadequacy. There is no evidence that net pressures on Commonwealth finances will emerge because of Commonwealth infrastructure responsibilities’*

   See: <http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22legislation%2Fbillsdgs%2FATTP6%22>

   This source, the Bill Minute for the 2008 Infrastructure Australia legislation, also noted:

   *‘Based on the Australian Infrastructure Report Card, the then Australian Council for Infrastructure Development (AusCID) estimated that $24 billion was needed to bring infrastructure to the ‘A’ level. The breakdown of this amount was: • electricity—distribution, transmission and generation: $1.15 billion • gas—transmission and distribution: $2.6 billion • water, sewerage and drainage: $3 billion • roads: $10 billion, and • rail—freight and urban passenger: $8.06 billion. AusCID did not say how it derived these estimates*.’

   In 2013 Infrastructure Australia published a national infrastructure plan. See: <http://infrastructureaustralia.gov.au/policy-publications/publications/files/2013_IA_COAG_Report_National_Infrastructure_Plan_LR.pdf> [↑](#endnote-ref-3)
4. This and the history of the first national infrastructure audit is included in the Australian National Audit Office review: <http://www.anao.gov.au/uploads/documents/2010-11_Audit_Report_02.pdf>.

   The Audit Office concluded that the methodology for the audit and for the priority list of projects was sound, however, there were questions about the method used to develop the pipeline of projects.

   Later the pipeline of projects became those which Infrastructure Australia assessed as having the potential of being put on the infrastructure priority list as ‘ready to proceed’. Projects with this potential were classed as either ‘early stage’, ‘real potential’ or threshold’. Hence the pipeline referred to the proven readiness of the project to meet the criteria of: national significance; economic merit; feasibility.

   In 2011 a different suggestion for a pipeline was raised in the National Land Freight Strategy update paper; listing of project ideas which are thought may become reasonably necessary under certain conditions such as levels of population or production. Thereafter continuous review of those conditions to allow a better understanding of the timing of when projects may become viable. [↑](#endnote-ref-4)
5. The idea of an organisation other than a Government department, eg. a land transport commission, advising the Commonwealth and other governments on transport infrastructure priorities had been raised a number of times in the 1990s and 2000s.

   It was further raised by the House of Representatives Standing Committee on Communication, Transport and the Arts in a report ‘Back on Track’. See: [www.aphref.aph.gov.au-house-committee-cita-backontrack\_railreform-report-front.pdf](http://www.aphref.aph.gov.au-house-committee-cita-backontrack_railreform-report-front.pdf)

   However, it was rejected by the Commonwealth with the view that Auslink would perform its function see: <https://books.google.com.au/books?id=CRT45DlRXCQC&pg=PA99&lpg=PA99&dq=national+land+transport+commission+1990s&source=bl&ots=iCtrF38A_7&sig=VIaqYOtsIhUyTRL-E3eDvqP-360&hl=en&sa=X&ei=cxeNVaf8Gs3x8gX2iaDIDA&ved=0CB0Q6AEwAA#v=onepage&q=national%20land%20transport%20commission%201990s&f=false>.

   Affleck and Aplin’s review of the National Road Transport Commission (2003) recommended a similar body, a national transport advisory council. However the Commonwealth again argued that its Auslink program would obviate the need for such a body.

   The 2009 review of the National Transport Commission observed the absence of a national transport plan:

   *‘It has proven difficult to achieve a national transport plan...* *In early 2008, the Chair of the ATC asked the NTC to commence a national planning process. There are mixed views on the success of this initiative to date*….*. In our opinion, governments, perhaps led by the Commonwealth Government, are best placed to drive improved planning. Organisations like the NTC and Infrastructure Australia can inform this process….’*

   See: <https://www.infrastructure.gov.au/transport/australia/ntc/files/NTC_Review_Report.pdf>

   The recent capability review of the Department of Infrastructure and Transport stated:

   *‘External stakeholders are unable to understand, for example, why the development of the freight and port strategies was allocated to Infrastructure Australia rather than to the department. To many stakeholders, these appear to be close to the core business of the department.’*

   The Department responded:

   *‘We acknowledge that clarification of our role, and that of Infrastructure Australia, would enable the private sector to identify more easily the appropriate approach points’…*..

   See: <http://www.apsc.gov.au/publications-and-media/current-publications/doit>.

   The latter two comments could be interpreted as indicating departmental disappointment that transport policy matters had been referred to other parties such as the National Transport Commission or Infrastructure Australia. [↑](#endnote-ref-5)
6. There is little on the public record regarding the reasons for the structure of Infrastructure Australia either at its origins in 2008 or in 2014.

   However, ‘distance’ from industry was clearly a consideration in 2008; the then Bill specified conflict of interest requirements for members and that the Chair could only take other employment with the agreement of the Minister. The 2014 legislation sought greater distance from the Government. This will be considered in a forthcoming article on public sector governance. [↑](#endnote-ref-6)
7. These tests were captured in a seven step process: goal definition; problem identification; problem assessment; problem analysis; option generation; solution assessment; solution prioritisation. See: <http://infrastructureaustralia.gov.au/search.aspx?query=template>. [↑](#endnote-ref-7)
8. Submissions can be seen at: <http://www.infrastructureaustralia.gov.au/policy-publications/submissions/published/received_2008_2009_A_C.aspx>.

   The report from the first audit is titled: *A report to the Council of Australian Governments* available at: <http://infrastructureaustralia.gov.au/policy-publications/publications/Report-to-COAG-2008.aspx>. [↑](#endnote-ref-8)
9. The timing of the report was brought forward in response to a Government request related to the then Global Financial Crisis.

   The Global Financial Crisis was expected to have three implications for infrastructure.

   First was an urgency for governments to increase expenditure to mitigate an economic downturn; an economic stimulus such as delivered by the Rudd Labor Government. In this, one question was whether infrastructure spending would provide such a stimulus; infrastructure spending as a tool of macroeconomic policy. Potential difficulties are the capital intensity of infrastructure construction, the long duration of construction and the lack of ‘shovel ready’ projects. Nonetheless, the idea of infrastructure as macroeconomic balancer remains alive, several commentators arguing for increased spending to offset the effects of diminishing investment in mining. See for example: <http://www.rossgittins.com/2015/03/more-infrastructure-spending-would.html>.

   Second was reduced availability of private finance, including for infrastructure. This gave rise to calls for governments to partly step into the shoes of capital markets, and reviews into infrastructure financing for example: <http://infrastructureaustralia.gov.au/policy-publications/publications/files/IFWG_Report_FINAL.pdf>. A leading example of this is the concept of ‘availability’ payments to ‘derisk’ toll roads. However, ‘derisking’ continues to attract support well after the global financial crisis has ended. Arguments to continue with derisking include: it may offset the reputational effects of previous major road projects which have financially failed. It is said to be important for superannuation fund support of infrastructure, but the relevance of this is unclear viz; why would money from superannuation funds be better than money from other sources? Perhaps it is a modern version of the ‘infant industries’ argument.

   Third was a lower than previously expected revenue stream for governments. This has been a significant contributor to the ‘debt and deficit disaster’, and also impacted the States. The lower revenue stream, and admonitions about public sector debt, reduced the ability of governments to fund infrastructure. The Building Australia Funds would be much smaller than initially expected. Overall the circumstances surrounding Commonwealth infrastructure spending changed from ‘how to spend a surplus’ to ‘how to avoid deficits’.

   [↑](#endnote-ref-9)
10. In response Infrastructure Australia offered guidance and even ‘templates’ for writing submissions, see: note (viii) above.

    Of interest is the practice of claiming ‘it’s a good project but a bad submission’ reappearing under the new terminology of revising business cases. Recently it has been claimed that several projects were improved after revisions to their business cases. The only substantial improvements would come from project changes, rather than more elegant exposition of project merits. [↑](#endnote-ref-10)
11. Assessment, examining what is proposed, does not easily lead to improved proposals. It may lead to strategic game responses; of proposers seeking to change assessments or undermine or avoid assessors.

    At various times there have been claims of an enormous Australia infrastructure deficit.

    Infrastructure Partnerships Australia suggestion of a $700bn deficit has often been repeated.

    That figure was first put in 2007 see: Infrastructure Partnerships Australia, *Financing Infrastructure in the Global Financial Crisis*, March 2009.

    A previous report did not define ‘deficit’, or provide that figure see: Infrastructure Partnerships Australia, *Australia’s Infrastructure Priorities, Securing Our Prosperity,* July 2007.

    Infrastructure Partnerships Australia suggested that the $700bn related to ‘critical’ projects such as a Sydney metro. Some of those projects are no longer being pursued.

    It also argued that the deficit was ‘emerging’. In the normal sense a deficit cannot be emerging; a deficit relates to a stock not a flow.

    The claimed deficit appears to have remained constant to at least 2013 see: <http://www.afr.com/business/construction/infrastructure-builds-business-20131021-jgvlv>.

    This might be compared with note (iii) above.

    Had Australia run up a deficit of $700bn in a little over a decade which was stabilised when Labor was in power? Such a facile question demonstrates the problems of reciting numbers instead of analysis to support a ‘burning platform’ for more infrastructure.

    There are a number of alternative approaches to estimating an infrastructure ‘deficit’ for example:

    a list of projects that might be desirable

    the cost of restoring infrastructure to its design capacity etc.

    the ‘loss’ incurred by the absence of infrastructure services

    the gross cost of infrastructure to avoid (c)

    the net cost of infrastructure to avoid (c)

    the net cost of infrastructure to avoid (c) under optimised conditions.

    Infrastructure Partnerships Australia claim of the $700bn figure seems to use (a).

    Congestion figures for individual roads in the 2015 audit appear to draw on (c).

    As explained later in the text, Infrastructure Australia has preferred (e) or (f) for its priority list. Implicit is that the scale of any deficit depends on whether it is worth fixing, and the minimum financial cost of rectification. If a gap cannot be bridged in a cost effective manner, it is not a real gap. If only for this reason, the estimated congestion cost of $53billion is open to question. [↑](#endnote-ref-11)
12. In 2007-08 Australia’s transport and infrastructure ministers unanimously agreed to pursue a policy framework set out by the National Transport Commission; *A New Beginning*. The ‘result’ was recorded in Infrastructure Australia’s submission to the review of the National Transport Commission:

    *‘In early 2008 the Australian Transport Council agreed on a national approach to transport policy with an ambitious agenda to deal with then emerging issues. While attention was to be given to ten policy aspects, over time the Council’s agenda progressively narrowed to focus only on operational regulatory reforms and the national regulators.*

    *Some initiatives under the national transport policy framework stalled when implemented ‘in house’. An example was the ‘incremental pricing trials’ for road use by heavy vehicles. While the need for such trials was seen as important to the road reform plan, two separate reports demonstrate a failure to undertake any meaningful trials over several years.*

    *Reporting on progress with the national transport policy framework was limited. The Office of the National Infrastructure Coordinator found it difficult at times to identify progress with the national framework and the thread of argument for policy propositions.’*

    See: <http://www.infrastructureaustralia.gov.au/policy-publications/publications/files/NTC_Review.pdf>. [↑](#endnote-ref-12)
13. Between 2009 and 2013 Infrastructure Australia published four transport ‘strategy’ documents for consideration by governments.

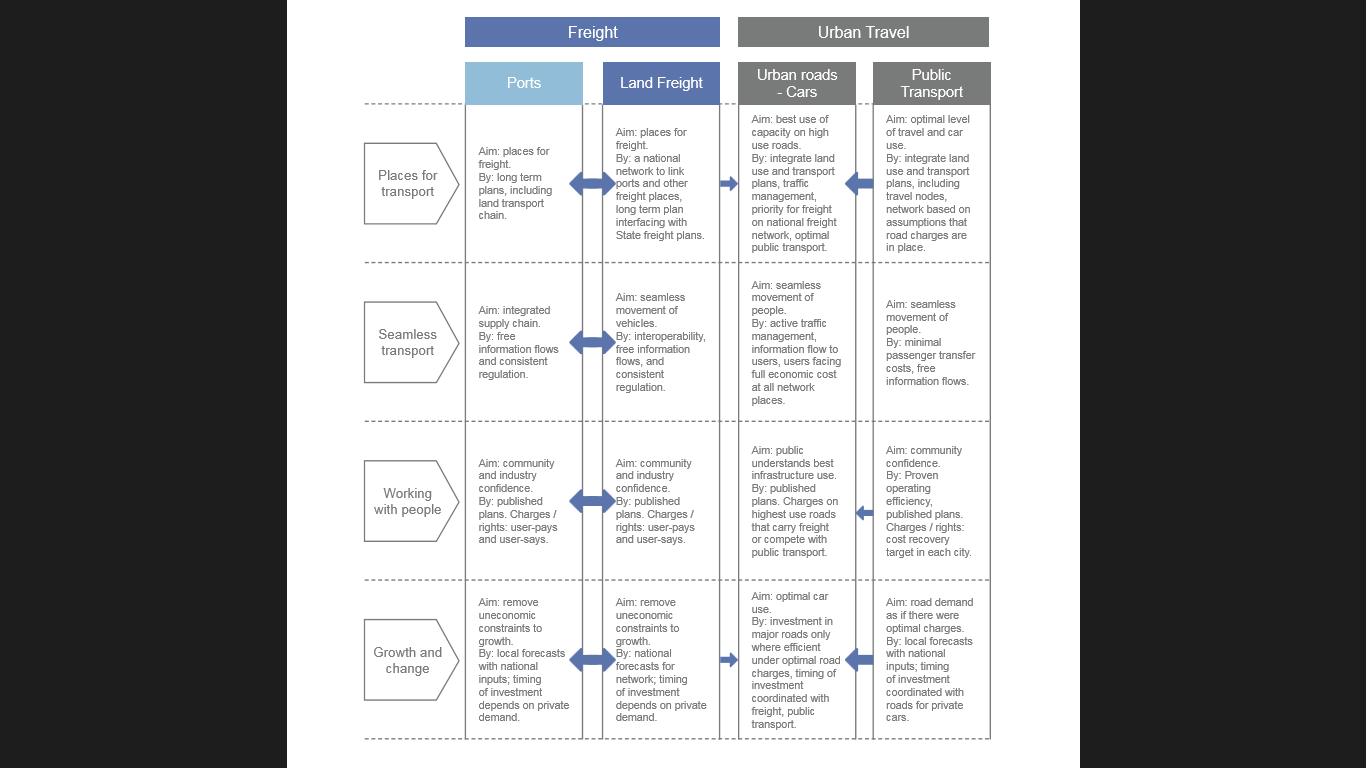
    The first, at the request of the Prime Minister, and in conjunction with the National Transport Commission, was the National Ports Strategy. This identified ports, and airports, as the fulcrum of transport systems and also as vital to national functions such as defence.

    The ports strategy recommended that Infrastructure Australia and the National Transport Commission develop a national freight strategy.

    Infrastructure Australia published a Land Freight Strategy Discussion paper in 2011 and an Update in 2012.

    These papers argued that the physical location of freight activities, including terminals and routes for large trucks and trains, is a critical issue for transport and infrastructure policies. They identified a network for freight that differed from the Commonwealth’s land transport network in including all major ports and terminals. They argued that there should be aims for network capacity and interoperability through matters such as rail gauge standardisation, high productivity vehicle access and siting of intermodal terminals in eg. western Melbourne and northern Brisbane. They also argued for mechanisms to ensure the ability of industry to influence these locations through ‘paying their way’. Finally they considered national policy to be more than a compilation of State approaches.

    In 2013 Infrastructure Australia published a National Urban Transport Strategy. It argued that urban transport infrastructure needs should be identified and assessed ‘as if’ there was road pricing, even if road pricing was not in place. It included an outline of what a national transport infrastructure policy might entail (table below), partly in response to requests to demonstrate how the recommended approaches for ports, freight and urban transport align.

    The documents are available at: <http://www.infrastructureaustralia.gov.au/policy-publications/publications/index.aspx?query>

    The order of these documents is significant. The order suggests that it is necessary to ‘solve’ infrastructure issues in sequence; ports (and airports), land freight, personal travel.

    The reason relates to the reversibility of decisions regarding the issues, degree of mobility and ease of society adaptation to infrastructure facilities. It is much harder to move a port or an international airport than to ‘create’ a new suburb. The location of a capital city port determines strategic options for residential development and therefore personal travel.

    One implication is that the greatest surety needs to be about the capacity of ports, airports and desired freight and truck corridors. Freight dedicated or priority corridors were seen as worthy of exploration for two reasons. First the size of freight vehicles implies that at some scale of task, traffic separation of freight from passengers will be economically efficient for both road and rail. This reason is akin to the separation of large jet from light aircraft. Second, people do not like freight vehicles, in particular big trucks. Externalities are optimised by minimising the freight footprint, implying creation of industrial precincts, buffer zones around ports and airports and preferred freight vehicle corridors instead of ‘lots of freight’ and ‘monster trucks’ going everywhere. In this respect, attempts to cater for the ‘last mile’ at times can reflect defective public policies.

    Of course there needs to be great surety about defence locations and related routes.

    Another implication is that proposals for urban travel, such as motorways or urban railways, in fact do make assumptions about the location of ports, freight facilities etc. The issue is that assumptions critically important to identification of options for urban travel may be unknown, mutually inconsistent, contradictory, untested or wrong.

    See note (v) above for observations about the inability of departments to formulate a national transport plan. The following comments reinforce the need for an organisation independent from executive Government to conduct an infrastructure audit and develop a pipeline; even though some of this work may not be welcomed at the time by departments.

    Between 2009 and 2013 Infrastructure Australia engaged with State and Commonwealth departments, including some Commonwealth agencies outside of the infrastructure and transport portfolio, to develop the four transport ‘strategy’ documents in (xii) above.

    Responses by agencies to the documents included the following:

    **National Ports Strategy**

    The Prime Minister released a version in 2009. However, Council of Australian Government processes delayed finalisation and a simpler, shorter and less committal document was produced in 2010.

    **National land freight**

    Infrastructure Australia’s documents were referred to by the Minister as the national land freight strategy see: <http://www.abc.net.au/site-archive/rural/news/content/201102/s3145767.htm> and <http://anthonyalbanese.com.au/keynote-address-to-the-ipa-partnerships-2012-infrastructure-investment-conference-building-the-infrastructure-agenda-the-national-land-freight-strategy>.

    In 2013 the Department of Infrastructure published, on behalf of the Transport and Infrastructure Council, a quite different document bearing essentially the same title as the Infrastructure Australia documents. It essentially compiles existing State policies, and provides an indication of Commonwealth funding. See: <http://www.transportinfrastructurecouncil.gov.au/publications/files/National_Land_Freight_Strategy_Compressed.pdf>.

    The consultation draft of the 2015 Labor national platform indicates that Infrastructure Australia’s land freight strategy will be the starting point for renewed work. See: <https://d3n8a8pro7vhmx.cloudfront.net/australianlaborparty/pages/2403/attachments/original/1430796114/2015_Consultation_Draft_Labor_National_Platform_1_.pdf>. at p55.

    **National urban transport strategy**

    These has been no acknowledgement of this document. As discussed in the text, aspects of this document appear to have been overlooked by the 2015 audit.

    **Consultation**

    Submissions from government departments are of interest.

    For example, the Victoria submission in response to the freight discussion paper called for: reference to previous work; a statement of principles underpinning the proposals; discussion as to whether project proposals must conform to the strategy to be included on the infrastructure priority list. See: <http://infrastructureaustralia.gov.au/policy-publications/submissions/nlfs/files/VIC_Submission_to_NLFS_FINAL.pdf>.

    While these matters were addressed in the update paper, none are included in the later document published by the Standing Council on Transport and Infrastructure, even though State officials participated in its drafting. Similarly issues raised by NSW, included in the update paper, were omitted from the paper published by the Standing Council; see: <http://infrastructureaustralia.gov.au/policy-publications/submissions/nlfs/files/NSW_DOT_Les_Wielinga_Response_to_Discussion_Paper.pdf>.

    In 2013, the National Infrastructure Coordinator summarised responses to the ports strategy as:

    ‘*some bureaucracies resisted. Nearly two years were lost in delays*’.

    For freight:

    ‘*The Prime Minister, Premiers and Ministers received our proposal enthusiastically.*

    *But the bureaucracy said no.*

    *The bureaucracy has devised its own vehicle for handing out money for roads and rail.*

    *Strategies are written about where the bureaucrats think the money should go, some people play with it at the margins, bringing in a political overlay, and the money goes out.*

    *In their wisdom, the bureaucrats’ vehicle omits Port Kembla in New South Wales, the Tullamarine Freeway in Victoria, several major ports in Western Australia and, perhaps most conspicuously, the world’s largest coal port in Newcastle.*

    *These are glaring omissions and no so-called designated network could survive without them.’*

    And for freight and ports there were:

    *‘bureaucratic charades and displays of truculence’.*

    See: <http://infrastructureaustralia.gov.au/news-media/speeches-presentations/Speech-CEDA-State-of-the-Nation-Conference-Jun-2013.aspx>*.* [↑](#endnote-ref-13)
14. Questions about the platform include the consistency of statements that Infrastructure Australia would assess all large projects against the commitment to fund major road projects. See: <http://www.theaustralian.com.au/business/opinion/abbott-governments-infrastructure-promise-just-hollow-words/story-e6frg9if-1227393657243>. [↑](#endnote-ref-14)
15. Some care is needed in understanding the ‘evidence base’ provided by the audit, and especially its limitations.

    The term ‘evidence’ is generally accepted as: things that may be used to support an assertion. At issue here is that the audit is not undertaken to support an explicit assertion, rather it is fact finding from which hypotheses may be developed.

    The collection and presentation of facts prior to a hypothesis will influence the hypothesis to be formed.

    While this may be reasonable for broad hypotheses such as ‘cities have challenges’ it is less optimal for more specific hypothesis such as ‘road expansion is needed’.

    The report does provide data, and forecasts, along the lines of: ‘the road is congested’. But this is an inadequate evidence base for road expansion.

    To complete the evidence base for ‘the road is congested’ it is necessary to establish the cause of congestion, what may mitigate congestion, and the costs of options. This is discussed later in the paper. [↑](#endnote-ref-15)
16. Unless theoretical and practical questions can be satisfactorily answered about the $53billion (pa?) congestion figure, it could be considered an overestimate.

    Among the theoretical questions are:

    comparator; an estimate of congestion needs to be compared with ‘non-congested’ conditions. For this purpose, non-congested conditions should have more traffic than ‘free flow’ or signposted speeds;

    level; projections of traffic should describe ‘market clearing’ or equilibrium conditions, beyond which congestion will not worsen;

    network effects; an estimate should indicate whether it covers all network roads, ideally all network transport, or only selected routes;

    causation; questions here relate to the implications for equilibrium conditions of altering alternatives such as rail timetables and traffic calming on parallel routes;

    costing; among the questions here are the appropriateness of aggregating small amounts of travel time savings into a large value that individually is unnoticeable and does not affect behaviour.

    The practical question arises from the fact that since 2011 Infrastructure Australia had questioned forecasts of traffic growth made for the previous projected cost of congestion; a $20billion figure. For example in the land freight discussion paper at p17, and the update paper at p2. In 2014 it noted that traffic growth had been substantially less than forecast; national urban transport strategy at p12. See note (xii) above.

    This continues to be the case; the earlier projection has proven, so far, to be greatly exaggerated.

    In late 2014 the Bureau of Infrastructure Transport and Regional Economics published a sheet on ‘saturation’ of road use for personal travel. This acknowledges a saturation effect, as has occurred in many countries, but suggests there will be renewed growth in Australian traffic up to 2020 in line with population growth.

    The term ‘renewed’ is used presumably because travel per person has declined, fallen, in recent years. Travel has fallen below the earlier estimate of saturation. See: <https://bitre.gov.au/publications/2014/files/is_061.pdf>.

    The chart below demonstrates the differences between the Bureau’s 2007 projection and experience to date.

    Sources: Bureau of Transport and Regional Economics,*Estimating urban traffic and congestion cost trends for Australian cities* Working Paper No 71 [www.bitre.gov.au/publications/2007/wp\_071.aspx](http://www.bitre.gov.au/publications/2007/wp_071.aspx);

    Bureau of Infrastructure, Transport and Regional Economics, *Australian infrastructure statistics yearbook 2014*, December 2014 [www.bitre.gov.au/publications/2014/files/BITRE\_YEARBOOK\_2014\_Full\_Report.pdf](http://www.bitre.gov.au/publications/2014/files/BITRE_YEARBOOK_2014_Full_Report.pdf)

    See: [www.bitre.gov.au/publications/2014/files/BITRE\_YEARBOOK\_2014\_Full\_Report.pdf](http://www.bitre.gov.au/publications/2014/files/BITRE_YEARBOOK_2014_Full_Report.pdf) [↑](#endnote-ref-16)
17. Newcastle, Wollongong and Geelong are substantially larger than Darwin and Hobart. They face challenges in common with the capitals; such as congestion at the end of the Hunter Expressway in Newcastle.

    They also face different challenges such as the transition from reliance on traditional industries such as mass production manufacturing or mining, and the need for economic and employment diversification.

    Also these cities may provide great opportunity to delay or defray problems in the major cities via, for example: alternative or supplementary container and general cargo port capacity; residential development possibly serviced by medium speed rail to State capitals; gateway centres for provision of services such as education, health, law for rest-of-state so that rural residents need not travel to the centres of capital cities. The Gold and Sunshine Coasts, and places such as Townsville, and Pilbara towns may also have some such opportunities.

    Similarly, Sydney and Melbourne face some challenges that are very different to Newcastle and Geelong; for example passenger loads on trains. [↑](#endnote-ref-17)
18. <http://infrastructureaustralia.gov.au/policy-publications/publications/files/Background-paper-on-demographic-projections.pdf>. At p15. At the long term historical rate, population would increase by 38.2 percent in twenty years, compared with the 36.5 percent of the preferred projection. [↑](#endnote-ref-18)
19. The audit background studies indicate the use of shadow tolls in modelling. Among the questions is whether shadow tolls imply excess demand due to no actual toll. <http://infrastructureaustralia.gov.au/policy-publications/publications/files/Urban-Transport-Infrastructure.pdf>.

    The report includes figures to $10,000 units in 2031; table 14. It does not present standard errors or confidence intervals for its figures. In this it shares a practice now common in public policy. However, it is not a good practice and can create a false sense of accuracy. It is known that forecasts for out years are expected to be less accurate than those in the near term, and forecasts for units of a large system are less accurate than forecasts for the system as a whole, but it is unclear to what extent this is recognised by the presented results. [↑](#endnote-ref-19)
20. For example, a timetable slowed by 1 minute in Sydney equates with over 5million passenger hours lost on that system, and probably significant losses in freight transit – even if all trains run to timetable. Infrastructure Australia previously had pointed to research suggesting the effects may be amplified by a slowing in road traffic in some cases. See: national land freight strategy discussion paper at p12; urban transport paper at p9. note (xii) above. [↑](#endnote-ref-20)
21. Agglomeration previously has been highlighted by Infrastructure Australia, for example in the national urban transport report note (xii) above. Infrastructure Australia’s assessment processes include review of cost benefit analyses without claimed agglomeration benefits. [↑](#endnote-ref-21)
22. As identified in the national urban transport report. See note (xii) above. [↑](#endnote-ref-22)
23. Identified in the land freight update report. See note (xii) above. [↑](#endnote-ref-23)
24. Identified in Infrastructure Australia’s State of Play report, note (xii) above, and Audit at p.114 [↑](#endnote-ref-24)
25. See: *Tar baby* available at thejadebeagle.com, and Michael Keating, Luke Fraser*. Infrastructure: Improvement or Impoverishment?* At <http://johnmenadue.com/blog/?p=3834>. The implications of the road fiscal deficit for road reform are set out in the author’s submission to Infrastructure Australia on the audit.

    There may be an awareness of the deficit, but it is not highlighted.

    For example, NRMA’s 2015-16 budget submission to the Australian Government asked for a ‘return’ of the Commonwealth excise to roads noting that the excise was significantly higher than road spending by that Government. NRMA’s corresponding submission for the NSW budget made no such claim for the return of that government’s road related charges. As subnational spending on roads greatly exceeds revenues, consistency with the submission to the Australian Government would see NRMA argue that the States should increase road charges and / or cut spending.

    The NRMA submission for the NSW budget cites claims of an enormous backlog of road maintenance in the State; some $30 billion growing by at least $0.6billion per annum in NSW alone. While it uses those figures as an argument for more funding, the figures, if true, indicate that the extent of undercharging for road use is much greater than indicated by the fiscal deficit. See: <http://www.mynrma.com.au/about/reports-and-submissions.htm> [↑](#endnote-ref-25)
26. As outlined in the land freight discussion paper note (xii) above. The paper also noted scalability to be an important aim for nationally significant freight infrastructure.

    Gauge standardisation is not mentioned in the land freight strategy paper drafted by officials. Interoperability is mentioned in passing but without explanation. See note (xiii) above.

    That paper, and subsequent maps, are concerned with current freight routes.

    This concern differs from the focus of Infrastructure Australia’s freight documents which was: future locations and routes for freight preferred by the community, industry and governments.

    One consequence of the difference is that the officials’ paper incorrectly purports there to be a national rail network that extends into north Queensland etc.

    In contrast Infrastructure Australia’s papers suggested long term aims of rail standardisation on main freight routes into Queensland eg. discussion paper at pp54-55. This has critical implications for the definition of national significance and therefore for the identification of nationally significant infrastructure projects. [↑](#endnote-ref-26)
27. <http://infrastructureaustralia.gov.au/policy-publications/publications/files/Nationally-Significant-Infrastructure.pdf>. At p43.

    Among the concerns of limiting significance to size would be that the Commonwealth is not adequately or coherently pursuing its Constitutional roles for example for defence or the facilitation of interstate trade and commerce, a pursuit which may come at the expense of some States.

    A further concern would be that the Commonwealth is intruding in an ad hoc fashion into areas reserved to the States, conflicting with the principle of subsidiarity and weakening accountability.

    These types of issues are discussed in the author’s htfu paper available at: thejadebeagle.com. [↑](#endnote-ref-27)
28. Reform of federation has background papers for health, education and tax/fiscal arrangements but not for infrastructure. See: <https://federation.dpmc.gov.au/>. [↑](#endnote-ref-28)
29. Previously Infrastructure Australia made a distinction between funding and financing. In this ‘funding’ referred to the source of money; ‘finance’ referred to the channel through which money flows (to infrastructure). See: Infrastructure Finance Working Group report note (ix) above.

    One dichotomy, who pays? is between taxpayer or user funding. Another separate dichotomy, who delivers money to the infrastructure industry? is between government and private sector.

    The audit expresses it thus (roads funded first by taxpayers):

    At p. 8*: 29. Government funding alone is unlikely to be sufficient to provide the infrastructure that Australia requires.*

    At p.51 *Thirdly, without funding reform, there will be insufficient funds available to provide the infrastructure required to sustain Australians quality of life. The cost of new projects (both those already planned and those yet to be defined) and the cost of maintaining existing assets will almost certainly exceed the funds that governments will plausibly have available to spend on transport. Evidence of this can already be seen in the periodic debates between governments about their respective funding shares for new projects. Governments therefore need to investigate alternative funding mechanisms to meet infrastructure needs.*

    If it is assessing congestion costs in the absence of charges / pricing, the audit would be implicitly assuming taxpayer rather than user funding of roads.

    It is true that at present roads are largely funded through taxes, around twenty five percent of which come from general taxes rather than indirect taxes on road users i.e. road users pay very much below the financial, let alone economic, cost of their activities.

    However, it is a further and not necessarily logical step to argue that additional or new road infrastructure should be funded on the same presumption.

    Marginality conditions suggest that all new road infrastructure should, prima facie, have full economic costs met by users. That is, users rather than taxpayers should provide the basis of finance for growth in the sector. [↑](#endnote-ref-29)
30. Roads are the only infrastructure sector out of step with the Australian economic reforms that commenced in the 1990s.

    Those reforms essentially aimed to increase competitive pressures within the Australian economy, particularly for public sector enterprises or businesses that operate via public sector licence.

    Control over monopolies is an essential element of the reforms; such controls usually involve restrictions on pricing set by a regulator who is independent of industry and has an economic charter.

    At present neither publicly nor privately owned or operated roads are subject to such regulation; tolls are set by governments rather than by regulators.

    Pricing, and reform, likely implies some rebalancing of ‘investment’ away from major projects in capital city CBDs and towards other places. [↑](#endnote-ref-30)
31. For example, Audit report table 15 shows Cronulla-Miranda-Caringbah(?) and CBD having the highest passenger hours travelled in Sydney. Correct or not, this is not a particularly helpful statistic for infrastructure planning. In fact other lines in Sydney have higher loads and arguably more severe capacity constraints; the western and southern lines as examples. See: <http://www.sydneytrains.info/about/our_performance/train_loads.jsp> [↑](#endnote-ref-31)
32. See, for example: <http://www.abc.net.au/news/2014-12-15/east-west-link-victorian-goverment-business-case/5966938>. Some issues regarding the east west link and Infrastructure Australia were noted in ‘tar baby’. [↑](#endnote-ref-32)
33. National Infrastructure Construction Schedule at: https://infrastructure.gov.au/infrastructure/nics/index.aspx [↑](#endnote-ref-33)
34. Infrastructure Australia now has a part-corporate character. [↑](#endnote-ref-34)
35. See note (xii) above. [↑](#endnote-ref-35)
36. Outlined in the author’s submission to Infrastructure Australia’s audit. [↑](#endnote-ref-36)