A People's M4 EIS

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This website exists to help people take back some control over the planning process. It is independent of any other organisation and is entirely volunteer run and funded.

Our aim is to help people access information needed to understand how the NSW Baird government's 33 kilometre Westconnex tollway project would affect not just transport options but also the future environment and health of Sydney. The People's M4 EIS is part of a broader community attempt to open up public debate about the Westconnex and counter the lack of transparency in decision making surrounding it.

The Westconnex is a single project, to be delivered in five separate stages. This means that while supposed broad benefits of the whole project are constantly proclaimed by the NSW government and Sydney Motorway Corporation, the negative impacts of the whole project are never assessed.

The EIS for the Westconnex M4 East was published by the NSW Department of Planning as a large PDF document – over 1GB, and nearly 5000 thousands of pages – on September 9, 2015. The community was given only 45 days to submit responses, although this was extended by ten days to November 2 because of a failure by the Westconnex Delivery Authority to file all the required documents.

Before waiting for the results of the EIS and planning process, the Westconnex Delivery Authority has already awarded the contract to build the M4 East to a consortium led by CIMIC (previously Leightons) and Samsung.

The way that NSW Planning Department and the Westconnex Delivery Authority have designed and published the EIS does not make it accessible. We've made it a little easier to find the bits you want (http://m4eis.org/category/table-of-contents/) in the PDFs.

We have published several parts of the EIS in a format that is easier to read (http://m4eis.org/category/selected-sections/) and enables you to cut and paste text more easily to build your own submission.

We have solicited and shared some 'plain English' commentaries to help you to make your own informed assessment of the Westconnex M4 tunnel. One of the problems with the EIS is that it fails to engage with contemporary developments in transport planning and critiques of its approach. This is a serious problem when the decisions to be made will have a huge impact.

We will be publishing some sample submissions, so that you can see what other people do or don't like about the M4 East project.

You can comment on any page or reply to anyone else's comments. If you have made a submission you would like us to share, please let us know. If you have ideas for how we can develop the People's EIS, leave a comment on this page.

In this way we hope together to break through the daunting amount of data and help the community to build strong individual and group responses.

Your contributions will help build an independent source of information for the community about the project.

Here's how you make a submission to the official planning process :

http://m4eis.org/2015/09/11/how-to-object/ (http://m4eis.org/2015/09/11/how-to-object/)

Additional Note on November 2

Parts of the People's M4 EIS has been submitted to the NSW Department of Planning to be considered as part of the assessment process.

We will continue provide updates on the rest of the planning process.

People: Many people have contributed to this project including Ben Aveling, Wendy Bacon, Luke Bacon, Henare Degan, Nicole Gooch, Miska Mandic and others.

7 thoughts on "**A People's M4 EIS**"

1. **Kerry** says:
   27/09/2015 at 11:10 am Edit

   Fantastic! Thank you to those who have worked so hard to get this site up-and-running. It will assist us residents to share our concerns and share what we have learned in interactions with the WDA "team".

Reply (http://m4eis.org/?replytocom=45#respond)

2. **Kathryn Calman** says:
   27/09/2015 at 3:14 pm Edit

   This is an amazing piece of work that you have put together. Thank you!!!

   Reply (http://m4eis.org/?replytocom=46#respond)
3. **Anthony johns** says:
   30/09/2015 at 9:44 pm Edit

   I think the project would be more worthwhile if it were less obviously partisan. As it stands, it's hard to believe anything you solicit written in "plain English" won't just be polemic

   Reply (http://m4eis.org/?replytocom=47#respond)
   - **wendybaconblog** says:
     01/10/2015 at 3:34 pm Edit

     The EIS is written entirely from the perspective of the 'proponent' which is Westconnex. Aecom that managed and prepared much of the EIS has involvement in many aspects of this project – from concept design to 'traffic director'. So it is reasonable to warn people to treat official EIS data and its presentation with scepticism. Likewise claims of critics should also be tested. One of the ideas behind the project is to subject the empirical claims to scrutiny so if you see any factual claims by critics you think are false Anthony Johns please be sure to comment.

     Reply (http://m4eis.org/?replytocom=48#respond)
4. **Michael Luis** says:
   06/10/2015 at 8:30 pm Edit

   Keep up the good work.
   Big thanks to all the contributors.

   Reply (http://m4eis.org/?replytocom=76#respond)
5. **Janet Dandy-Ward** says:
   26/10/2015 at 10:22 pm Edit

   Thank you so much for putting this together, this is really great information!

   Reply (http://m4eis.org/?replytocom=233#respond)
6. **Phil Siefert** says:
   31/10/2015 at 5:43 pm Edit

   Given the steps that have been taken by the NSW Government to privatise Westconnex Delivery Authority and NSW Planning department in the name of "fast tracking": such as construction awards before planning approval, lack of independent review, and no obvious review of public transport options – I have never felt more sceptical and disillusioned by a government.

   Thank you for the clarity of your submission —

   Reply (http://m4eis.org/?replytocom=302#respond)

A People's M4 EIS

Does Westconnex meet its core objectives ?

17/10/201525/10/2015 wendybaconblog Commentaries & Objections Alexandria Landfill, Asbestos, Badgery's Creek, Global economic corridor, Haberfield, King Georges Interchange, Liverpool Rd, M4 Widening, Parramatta Rd., Traffic congestion, traffic modelling, Urban Growth, Victoria Rd, Westconnex M4 East objectives

Some contributors have drawn the attention of the People's EIS to the core objectives of the Westconnex M4 East project. They argue that we should assess the project against them rather than on a topic by topic basis. This is another approach which seems worthwhile.

The objectives are set out in the Executive Summary (http://m4eis.org/2015/09/18/executive-summary-westconnex-m4-east-environmental-impact-statement/) which we have already published.

We will focus on some of these in detail later but in the meantime, here's an overview with some residents' comments.

Do you have anything to add to this section? If so contribute a comment or supply your details for contact at the end of this post.

Objectives

Support Sydney's long-term economic growth through improved motorway access and connections linking Sydney's international gateways (Sydney Airport and Port Botany), Western Sydney and places of business across the city

Sydney traffic congestions costs the economy billions of dollars each year. The question is: How far will Westconnex go to solving that traffic congestion? One analysis has already raised serious questions about traffic modelling (http://m4eis.org/2015/10/17/major-flaws-in-westconnex-eis-traffic-report/).

Another says that that there will be more congestion along the Parramatta Rd corridor (http://m4eis.org/2015/10/15/eis-admits-deterioration-in-parramatta-road-traffic-after-m4-east/). If the Westconnex leads to more traffic congestion in the Inner West and routes into the CBD, it will not improve access to businesses. It may depend which businesses you are considering but thousands of small businesses in Haberfield, Newtown and St Peters have not been consulted and fear that their livelihoods will be damaged not enhanced.

Why doesn't this objective mention Badgery's Creek airport which would be another international gate way, improving connections for Western Sydney, especially if there is a railway to the airport? Some are even asking whether the Westconnex was not partly driven by a desire by private interests to embed Sydney Airport's commercial advantage as the key international gateway.

Relieve road congestion so as to improve the speed, reliability and safety of travel in the M4 corridor, including parallel arterial roads. Cater for the diverse travel demands along these corridors that are best met by road infrastructure

Contributions to the People's EIS analysis (http://m4eis.org/2015/10/15/eis-admits-deterioration-in-parramatta-road-traffic-after-m4-east/) appear to show that Westconnex will not solve congestion on arterial roads such as Parramatta Rd, Victoria Rd or Liverpool Rd. Many intersections will remain at the lowest Level of Service which is F. There is also concern about congestions building up in roads beyond the portals and this causing traffic to slow including in the tunnel.

The second sentence seems to assume rather than demonstrate that this objective is met by stating that diverse travel needs are 'best met by road infrastructure.'

Claims by Westconnex that the project will improve speed and reliability depend on the reliability of its approach to traffic modelling which experts argue are flawed (see bibliography in contribution on flaws in modelling (http://m4eis.org/2015/10/17/major-flaws-in-westconnex-eis-traffic-report/)).

Create opportunities for urban revitalisation, improved liveability, and public and active transport (walking and cycling) improvements along and around Parramatta Road

This is a reference to Urban Growth's plans for major redevelopment (http://www.urbangrowthnsw.com.au/work/urban-transformation-projects/parramatta-road-urban-transformation-program.aspx) including high rise buildings along Parramatta Rd. There is no doubt that some opportunities for cycling and walking will be retained or developed but many argue that the overall impact of the project will be to increase car dependency (http://m4eis.org/category/commentaries-

objections/page/2/) which will have negative health impacts. The project could improve liveability for some but serious downgrade liveability for many thousands of others. The question is: are there alternative ways of achieving liveability goals without the destructive impacts of this project?

Enhance the productivity of commercial and freight generating land uses strategically located near transport infrastructure

This is a reference to faster travel times that should enhance the productivity and attractiveness for businesses along the Westconnex route. It also relies on traffic modelling predictions being accurate. Modelling has failed for some past projects leading to business failure. It's also not clear exactly what this is referring to and in the absence of a transparent business case, it's not possible to evaluate the positive impact of land uses.

Enhance movements across the Parramatta Road corridor which are currently restricted

It's hard to see how this objective will be achieved when there will be more traffic on some sections of Parramatta Rd (http://m4eis.org/2015/10/15/eis-admits-deterioration-in-parramatta-road-traffic-after-m4-east/) than there is now. Some intersections across Parramatta Rd west of Homebush will also be slower according to the M4 Widening EIS. Traffic flow might flow more easily in the M4 tunnel but some argue that it will hit congested spots not long after it emerges from the tunnel. Past experience would suggest that this congestion could bank up in tunnels. Also by 2031, the tunnels will reach full capacity.

Fit within the financial capacity of the State and Federal Governments, in partnership with the private sector

It is simply not possible to assess this objective because there is no public business case. Billions of dollars of public money are being paid to private companies.The public not the private sector carry the risk on this project. Currently, banks are being recruited to offer loans that will be repaid over many years by the toll paying public. News that the Westconnex Delivery Authority functions have been transferred to a private (but publicly owned) corporation, the Sydney Motorway Corporation (http://www.smh.com.au/nsw/westconnex-shielded-from-scrutiny-after-control-handed-to-private-corporation-20151016-gkapzx.html) will only add to the lack of transparency around the project. The only business case that was ever produced was found by the NSW Auditor General to be inadequate (http://www.smh.com.au/nsw/damning-report-into-westconnex-motorway-released-by-nsw-auditorgeneral-20141218-129r7t.html). Currently we do know that the Westconnex will absorb billions of Federal and State funds that could be spent on alternative projects.

Optimise user-pays contributions to support funding in a way that is affordable and equitable

This is a reference to tolls. Some commuters who chose to use the Westconnex M4 to travel to and from the Sydney airport would spend hundreds of dollars a week on tolls (http://www.mehreenfaruqi.org.au/westconnextolls/). While some agree with a user pays approach to roads, other argue that tolls shouldn't be applied unless there is affordable public transport alternatives or alternative free viable routes.

Integrate with the preceding and proposed future stages of WestConnex, without creating significant impacts on the surrounding environment or duplicating any potential issues across the construction periods

This is very hard to accept given the 3 year long construction period for the M4 tunnel and the 24/7 construction plan. Even the EIS acknowledges there are significant impacts in relation to noise, loss of housing and destruction of heritage. Already on the M4 widening, there are issues with asbestos waste (https://newmatilda.com/2015/10/02/westconnexs-asbestos-problem/) while at Beverly Hills noise walls have been stripped away from the M5 and will stay down for about 4 more months than originally predicted.

Protect natural and cultural resources and enhance the environment.

At least 50 hectares of open space and potential open space and a huge amount of vegetation would be lost across the Westconnex routes. A large number of heritage buildings, including homes, would be demolished. Communities are being decimated. It is hard to see that overall, this objective to protect natural and cultural resources is being met.

How does the EIS say Westconnex will achieve these objectives?

(People's EIS comments are in italics.)

Once completed, the project would provide immediate operational benefits along the M4 and Parramatta Road, including a reduction in travel times and improvements in the level of road safety.

- Whether the predicted improved travel times of 6-8 minutes by 2021 (http://m4eis.org/2015/10/15/eis-admits-deterioration-in-parramatta-road-traffic-after-m4-east/) is worth the additional traffic congestion on Parramatta Rd from Parramatta Rd to Homebush and the Inner West is up to you. Traffic is predicted to flow more smoothly on Parramatta Road between Homebush and Haberfield but even that depends on traffic modelling that some argue could be flawed.*

The project is being developed as part of the first stage of WestConnex which also includes the M4 Widening project. Completion of both projects would provide a full motorway connection between the Blue Mountains in the west and Haberfield in the east. Future stages of WestConnex would link the project with Sydney's south-west, as well as integral freight centres at Sydney Airport and the Port Botany precinct.

As such, the project would support NSW's key economic generators and provide a strategic response to currently inadequate and highly congested transport routes. Critically, this includes providing the missing link in the motorway network which supports Sydney's global economic corridor.

This statement is a little confusing because what is known as Sydney's 'global economic corridor' runs from Ryde, Macquarie Park towards the CBD and Sydney airport. In any case, even if the chosen M4 route was the global economic corridor, this objective suggests that entrenching development towards Sydney's CBD, which is on its eastern edge, is a desirable goal. Some planners, including the Committee of Sydney's CEO Tim Williams, argue that a key driving principle of planning for Greater Sydney should be decentralisation with an emphasis on enhancing the centres of Liverpool and Parramatta which are nearer the geographic centre of the city.

Integrated land use and transport planning initiatives are key factors in developing a future in which Sydney's growing population can reliably access jobs and services. To fulfil this need, the integrated package of transport improvements delivered by WestConnex would include complementary enhancements to the existing road network, a redesign of bus services and facilities, improved access to rail stations, and upgrades to cyclist and pedestrian facilities.

The public needs to be wary of phrases like "complementary enhancements" as it is not clear who is responsible for these or if they will happen. Indeed, you cannot assume they are 'enhancements' at all, given that AECOM, the authors of EIS, have long been promoting the positives of the controversial Westconnex while at the same time being paid with public funds to investigate the environmental impacts of the project.

There is a reference to improved bus services but bus lanes promised on Parramatta Rd are only options being considered by Transport NSW. Some bus routes across Parramatta Rd running N and S are predicted in the M4 widening to take longer after the completion of works.

The project complements a number of other transport and freight-based infrastructure initiatives identified in the Transport Master Plan. Ultimately, it is the combination of these initiatives that will best address Sydney's needs.

If this is true, the question becomes what are these? are the initiatives being done in the right order and how will then mitigate the negative impacts including traffic congestions generated by the Westconnex.

To protect natural and cultural resources and enhance the environment, design, construction and operation of the project would be undertaken in accordance with environmental management commitments identified in this environmental impact statement (EIS), as well as any additional measures identified in conditions of approval for the project.

This promise covers many things. The EIS defers consideration of mitigation of many impacts off to the post approval 'conditions of approval' phase. It is not clear what access the public has to monitoring these. Residents would do well to take advice on this issue from residents dealing with noise impacts at Beverly Hills where Westconnex has begun the King Georges Interchange project and to Granville residents dealing with asbestos issues on the M4 widening project. At St Peters residents are having continual problems with safety breaches such as a contractor not washing wheels when carting contaminated waste from the Alexandria Landfill site. A resident at Haberfield has also written a strong submission about concerns about construction and operational impacts (http://m4eis.org/2015/10/06/a-response-to-westconnex-m4-east-proposal-an-objection-from-a-haberfield-resident/), concerns shared by the Mayor of Ashfield Lucille McKenna (http://m4eis.org/2015/10/07/ashfield-mayor-lucille-mckenna-m4e-proposal-totally-unacceptable/). There are also concerns about cracking by underground Northconnex tunnelling (http://www.dailytelegraph.com.au/newslocal/the-hills/vibrations-from-northconnex-works-like-an-earthquake/story-fngr8i1f-1227558401617).

Conclusion

There are a huge number of questions hanging over the Westconnex project. Evidence is mounting that Westconnex would not meet its objectives and so should not be approved. The biggest concern that many residents, business owners, workers, planners and commuters have is that there will be no independent scrutiny by the NSW Planning Department of Westconnex's claims. The People's EIS is one small way of opening up the process to scrutiny and providing alternative ideas for consideration. We welcome contributions. Make sure the Planning Department knows about your concerns in one or more submissions. Submissions online can be made on the Department of Planning website http://majorprojects.planning.nsw.gov.au (http://majorprojects.planning.nsw.gov.au) or sent to:
SSI 6307
NSW Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

A People's M4 EIS

Major flaws in Westconnex EIS Traffic report

17/10/201525/10/2015 wendybaconblog Commentaries & Objections "Black Box" model, AECOM, City of Sydney, Cross City Tunnel, Induced traffic, Lane Cove Tunnel, Peak car, public transport, SGS consulting Westconnex report, traffic modelling

(Ed: These comments about Westconnex Traffic Modelling are relevant to the Westconnex M4 EIS traffic chapter that is already published on the People's EIS (http://m4eis.org/2015/09/27/traffic-and-transport-westconnex-m4-east-environmental-impact-statement/).Traffic modelling can be daunting but we hope that this contribution, along with other contributions on traffic, can help you prepare your own submission.)

By Anthony McCosker*

Traffic Modelling Flaws

Chapter 8 Traffic and transport (http://m4eis.org/2015/09/27/traffic-and-transport-westconnex-m4-east-environmental-impact-statement/) and the associated appendix (Appendix G (http://m4eis.org/category/table-of-contents/traffic-transport/)) are based on traffic modelling based on a three-stage system (see Appendix G, pp. 4-2 to 4-15):

(1) traffic demand management;

(2) rebase future year traffic demand; and

(3) operational traffic modelling.

This summary examines the limitations of relying solely on traffic modelling findings, before assessing the assumptions made by WestConnex traffic modelling, examining a parallel report completed by SGS and concluding with a brief case of other traffic modelling for similar projects.

Limitations of traffic modelling

Traffic Modelling has many limitations and therefore it is dangerous to rely solely on its findings.

In attempting to model the future, traffic modelling makes a number of assumptions to produce what can sometimes seem like absolute and certain figures. In contrast, the number of assumptions, simplifications and estimations used in the modelling means that the figures produced are just one possible outcome of many.

So to rely solely on these findings can lead to misguided conclusions or outcomes, adding unnecessary risk to a project (Evans, Burke, & Dodson, 2007). This can be seen in recent Australian examples such as AECOM facing litigation over the traffic modelling of the CLEM7 tunnel in Brisbane, litigation over the traffic modelling for the Lane Cove Tunnel, and the Cross City Tunnel struggling to reach 20,000 cars per day after modelling suggested that 90,000 cars a day would use it (see http://www.smh.com.au/federal-politics/political-opinion/the-forecast-was-not-good–or-even-accurate-20120929-26rzb.html (http://www.smh.com.au/federal-politics/political-opinion/the-forecast-was-not-good–or-even-accurate-20120929-26rzb.html)).

Indeed a reliance on traffic modelling as a justification for projects (as commonly happens in Australia) has seen '…investments in Melbourne's urban road network [result] in **more time being used by Melbourne's motorists rather than less time'** (Odgers, n.d., pp. 14-15), finding that from 2000-1 to 2006-7 overall speeds per hour on Melbourne freeways stayed generally the same, at around 78km/hour. Thus it is important to consider that 'Transport models are useful planning tools, but travel demand forecasting is not a precise science, and there are numerous outside factors which are difficult to predict or quantify' SGS (2015). Professor Michiel Bliemer and Dr Matthew Beck (both from the University of Sydney's Institute of Transport and Logistics) (Bliemer & Beck, 2015) state that models do not factor in future trends, preferences or behaviour (even trends that are known to be happening, such as 'millennials' driving less).

Some limitations of traffic modelling

Traffic modelling overlooks future trends

Because 'a linear relationship is assumed between population, concentrations of land use and long-term transport demand' (Evans et al., 2007, p. 6), traffic modelling fails to consider future trends including (but not limited to):

- Changes in fuel prices and shortage (or perceived shortage) of fuel ('Most technical

assessments of transport systems are naïve to the issue of petroleum risk' (Evans et al., 2007)):

- Changes in government policy (including transport and planning policy)
- The effect that emerging transport trends including decentralised and disruptive transport provision (such as Uber), car share (eg GoGet) and autonomous vehicles will have on car use
- Changes in generational travel preferences (such as 'Millennials' preferring technological connections over private vehicle connections; 'Boomers' driving less as this cohort ages)
- Changes in sociocultural trends (such as preference for particular destination types or avoidance of areas due to issues such as crime)

Traffic modelling inadequately address effects of 'induced traffic'

Traffic models also struggle to accurately address induced traffic, which 'weakens their capacity to inform policy makers about the broader economic value and environmental impact of major transport projects' (Evans et al., 2007, p. 6). Induced traffic can include:

- Mode change (such as switching from public transport to car use due to reduced travel time upon immediate opening of the road, known as the Downs-Thompson Paradox—see for example http://io9.com/how-the-downs-thomson-paradox-will-ruin-your-commute-1152573927 (http://io9.com/how-the-downs-thomson-paradox-will-ruin-your-commute-1152573927))
- New trip
- Change of route
- Shift of times at which people travel
- As travel times are initially shortened by increased road capacity, people have more time in their travel budget (generally around one hour—see the Marchetti Constant for more on this) so may choose to make longer trips
- Changes in land use due to changes in accessibility to transport modes
- Reduced public transport services further increasing automobility of a city

'The biggest force still driving the Auto City to build large freeways and accommodate the automobile rather than providing other options is the standard "black box" transportation/land use model…These are based on how a new or widened road will save time, reduce fuel, and lower emissions and road accidents…these benefits are illusory due primarily to "induced traffic."' (Newman & Kenworthy, 1999)

Traffic modelling oversimplifies trip types

Travel is ‘grossly simplified’ with minimal trip types considered (Evans et al., 2007, p. 4), for instance ‘trip-chaining’ (combining a number of destinations in one journey, such as dropping children at school before going to work, then picking the child up and going shopping) is ignored in modelling due to its complexity

Traffic modelling oversimplifies or limits considerations that lead people to choose trip or mode types

Residential density, land use mix and non-motorised accessibility all influence travel behaviour but are rarely accounted for (list adapted from Evans et al., 2007):

- ‘Australian metropolitan strategies…generally seek to reduce land use separation and distance, to promote walking, cycling, and public transport, and to reduce the use of the private motor vehicles. The use of models is unable to assess land use/transport interactions in order to determine and prioritise transport project investments within these strategies is therefore questionable.
- Trip zones considered are generally large, limiting consideration of walking or cycling
- Modal assignment is limited and overlooks many qualitative considerations of public transport services (such as youth preference to engage technology while travelling)
- Limited consideration of non-motorised trips and other travel options (such as carpooling)
- There is a focus on interchange and waiting times over quality of nodes or destinations (which affects the modes of transport people will take)

Traffic modelling focusses predominantly on travel times at the expense of other considerations

Models give limited consideration to effects such as pollution, noise or carbon emissions, while route/traffic assignment (Evans et al., 2007) assigns traffic flows to an equilibrium where no traveller can switch routes and reduce their costs which is not how the ‘real world’ works; capacities are generally over-simplified (for example heavy vehicle movements and highway geometry are often overlooked).

Traffic modelling is generally ‘expert’-led and ‘technocentric’, with little community input or justification of assumptions and inputs

Due to their technical nature,'knowledge of how the models work and their capacities, and in turn their biases and inadequacies, is often restricted to a small number of professional experts' (Evans et al., 2007, p. 2). **This can give traffic modelling reports the impression of 'objectivity' and 'universality', whereas the policy context and the political surroundings certainly play a role in the assumptions and inputs into such models, and when this is added to 'the inherent inadequacies of transport modelling, this technical complexity may be seen to create a form of institutional risk for transport planning assessment'** (Evans et al., 2007, p. 2).

Traffic modelling generally favours one mode—the car (Evans et al., 2007)

M4 East traffic modelling—what are the assumptions?

'Do nothing' baseline is assumed

A 'Do nothing' approach is used as the baseline for any time-saving benefits of the M4 East and wider WestConnex project, however a more viable comparison might have been an incremental improvement of multiple modes of transport infrastructure (including for cars, buses, trains, light rail, walking and cycling) using the funding amounts for the M4 East and wides WestConnex project ($15.4 billion). This could present an opportunity for increased viability of the traffic modelling, as previous suggestions by independent experts (see http://www.reportageonline.com/2014/06/westconnex-motorway-not-actually-going-to-help-sydneys-traffic-congestion/ (http://www.reportageonline.com/2014/06/westconnex-motorway-not-actually-going-to-help-sydneys-traffic-congestion/)) for sustainable public transport as an alternative have been 'overruled by WestConnex', and the speed of a city's roads are directly related to the speed of its public transport (known as the 'Mogridge Conjecture').

An auto-dependent study area is assumed

The study area—defined as the Local Government Areas in the project—is assumed in the report to be auto-dependent and reliant predominantly on cars for transport. However Newman and Kenworthy (2015) outline the fact that a suitable aspirational target for total trips taken by car might be 75% in an 'automobile fabric' area. Table 5.7 (Appendix G, p. 5-8) however shows that the average weekday travel for all local government areas within the project area is 57%, far lower than both the Greater Metropolitan Area of Sydney (67%) and the threshold for Newman and Kenworthy's 'automobile fabric'. It is a figure that is closer to a 'transit fabric' of 50% overall car use (see also Figure 5.4 from Appendix G, below). Along with

the fact that 90% of western Sydney commuters to the CBD travel every day by public transport (SGS, 2015), this brings into question the modelling assumptions that cars are the preferred form of transport and that they will remain so to the modelling horizon (2031).

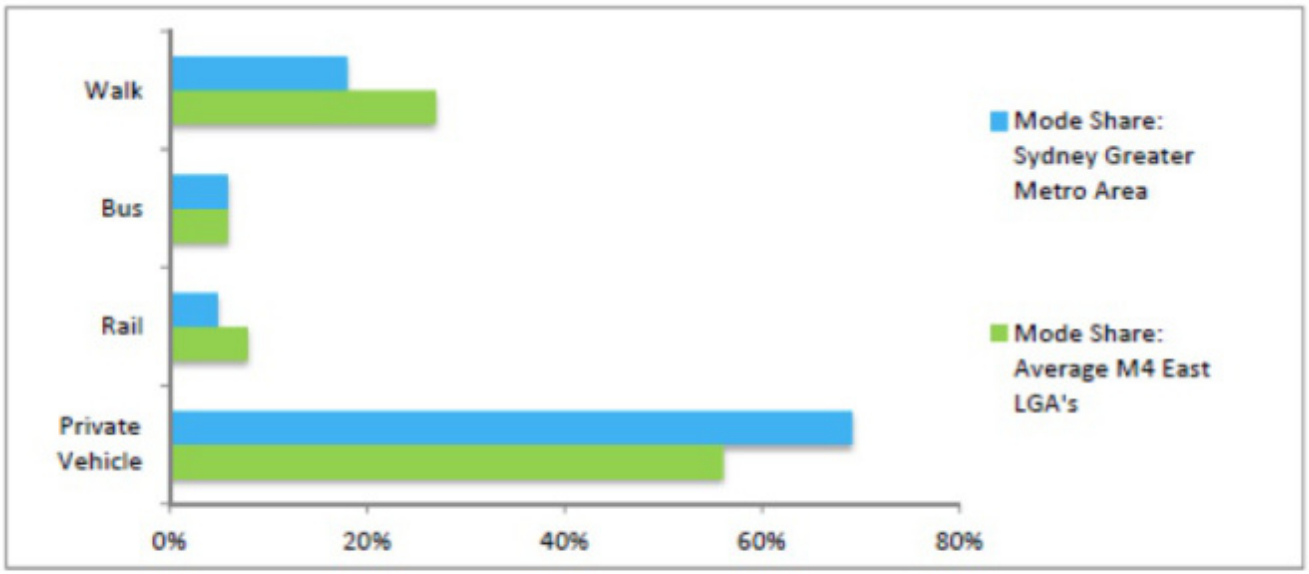

Figure 5.4 **Travel mode share comparison between study area average and Sydney GMA (Source: NSW Bureau of Transport Statistics, Household Travel Survey Report: Sydney 2012/13, November 2014 release)**

(https://m4eis.files.wordpress.com/2015/10/pt-tiff.jpg)

(Appendix G (p. 5-8) itself states: 'Findings from the HTS [household travel surveys] shows that on average, 57 per cent of trips on a typical weekday in the project area are car based compared to 69 per cent in the Sydney GMA. The lower proportion of residents who are dependent on car travel can be partly attributed to good public transport options in the project area and also to the proximity of activities with a high proportion of travel utilising the walk mode share in comparison to LGAs with a more dispersed land use.')

Current trends such as 'peak car' are ignored; outdated status quo is assumed

As outlined above, traffic models struggle to deal with future trends and patterns. However even current trends such as peak car (Newman & Kenworthy, 2015), which began in 2004 and is the decrease in the growth in overall car use, are ignored in the modelling. Ignoring trends towards peak car and shifts away from automobile dependence, as well as societal changes (such as an ageing population in Sydney and reduced reliance on cars by younger generations) and potential future technological developments (such as car share systems and autonomous vehicles), adds risk to the modelling assumptions and significantly reduces their reliability.

A certain level (2-7%) of induced traffic is assumed

'At the extremes of the project a slight increase in volumes is shown on Parramatta Road, Concord Road and City West Link. This is indicative of the induced traffic demand attracted to the corridor as a result of the project…To the west, Concord Road and Parramatta Road continue to show an increase in expected daily volumes reflecting the induced demand resulting from the attraction to drivers of the WestConnex scheme.' (Appendix G, p. 8-2)

'Induced travel demand increases 2031 future year traffic volumes using WestConnex between two per cent and seven per cent, with the specific value varying across different sections of the project.' (Appendix G, p. 4-6)

Yet the uncertainty regarding the actual amount of induced traffic and its effects on project aims (such as 'Relieve road congestion' and 'Create opportunities for urban revitalisation… along Parramatta Road'), its impact on the local study area and its implications in the context of Greater Metropolitan Sydney area are not addressed.

The effect of induced traffic demand on public transport usage is not acknowledged

Despite claims that improved public transport (such as bus) travel times will improve patronage (Chapter 8, p. 32), the effects of induced traffic (such as switches away from public transport to cars) on alternative modes are ignored. Concerns regarding increasing the demand for automobile use when the majority of developed cities around the world and most strategic directions and plans for Sydney point towards reducing automobile demand are also overlooked.

SGS traffic modelling report is ignored

A traffic modelling report conducted by SGS Economics and Planning (SGS, 2015) relating to the entire WestConnex project produces numerous counterpoints to the modelling conducted for the M4 East project and given in the EIS. This report is ignored throughout the M4 East report, despite the opportunity to strengthen both models by comparing and contrasting outcomes, and identifying differences in assumptions that led to any disparities (some select findings from the report are outlined below).

Brief findings from the SGS traffic modelling report

As a counterpoint to the modelling used for the EIS, this section will briefly outline the main points made by the SGS report that was conducted into the wider WestConnex project (available at http://www.sydney.org.au/sgs-economics-and-planning-westconnex-transport-modelling-summary-report/ (http://www.sydney.org.au/sgs-economics-and-planning-westconnex-transport-modelling-summary-report/)).

At best the disparity in the two projections proves the difficulty in accurately predicting future transport movements across a complex network in a city such as Sydney and confirms the above points warning against sole reliance on traffic modelling for project justification. At worst they present a bleak view of the effectiveness the WestConnex project will have, and bring the validity of the modelling used and thus the justification for the entire project into question. Briefly, the SGS report found that:

'Sydney traffic congestion will worsen with or without WestConnex, with the project only making a minor difference to Sydney's overall traffic in the future…The net effect [of the entire WestConnex project] is similar to the status quo.' (SGS, 2015, p. 1) (see below)

A map showing which areas stand to win (green circles) and lose (red) according to the City of Sydney.

(https://m4eis.files.wordpress.com/2015/10/sgs-graphic.jpg)

(see http://www.smh.com.au/nsw/parramatta-road-traffic-will-increase-under-westconnex-study-shows-20150427-1mueqm.html (http://www.smh.com.au/nsw/parramatta-road-traffic-will-increase-under-westconnex-study-shows-20150427-1mueqm.html))

'The [SGS] modelling confirms that WestConnex will not improve access to the Sydney CBD… the CBD is already congested and has little available parking.' (SGS, 2015, p. 4)
'Traffic flows on Parramatta Road will increase by up to 22 per cent (between Homebush Bay Drive and Concord Road) as vehicles avoid paying the toll on the M4 and M4 eastern extension. This finding is consistent with the WestConnex Delivery Authority's own assessment presented in the M4 Widening Environmental Impact Statement and with the traffic flow impacts observed when the M4 toll was removed in 2010. As a result of WestConnex, Parramatta Road will take more traffic in the future, not less.' (SGS, 2015, p. 15)

'Traffic growth on Parramatta Road will clearly jeopardise the government's planned urban renewal and population growth along this corridor.' (SGS, 2015, p. 4)

Issues with modelling of other comparable projects

In recent years, traffic modelling of other similar projects has been called into question on a number of occasions, and serves as a warning against relying solely on traffic modelling as justification for road projects into the future. For instance:

- The Cross City Tunnel (Sydney) became insolvent in 2006 as a result of significant traffic modelling discrepancies—90,000 cars/day were predicted through the model, though just over 20,000 cars/day actually used the tunnel (see http://www.smh.com.au/federal-politics/political-opinion/the-forecast-was-not-good–or-even-accurate-20120929-26rzb.html (http://www.smh.com.au/federal-politics/political-opinion/the-forecast-was-not-good–or-even-accurate-20120929-26rzb.html))

- The two companies responsible for the Lane Cove Tunnel (Sydney) traffic modelling were subject to litigation after the tunnel became bankrupt directly following its 2009 completion due to actual use less than half that projected in the modelling (see http://www.smh.com.au/nsw/trial-to-start-on-144-million-lane-cove-tunnel-debacle-20140809-102c6d.html (http://www.smh.com.au/nsw/trial-to-start-on-144-million-lane-cove-tunnel-debacle-20140809-102c6d.html))

- AECOM (who conducted the M4-East traffic modelling) faced litigation over the modelling of the Clem7 tolled tunnel in Brisbane. Central to the claim was the fact that AECOM provided traffic models showing 100,000+ cars/day usage by 2011, despite having 18 months earlier estimated usage would be 57,000 cars/day. Actual traffic usage numbers in 2011 were under 24,000 cars/day (see http://www.smh.com.au/business/backers-sue-on-tollroad-forecast-use-20110414-1dfxd.html (http://www.smh.com.au/business/backers-sue-on-tollroad-forecast-use-20110414-1dfxd.html)).

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SGS. (2015). WestConnex transport modelling: Summary report. Sydney: Commissioned by City of Sydney.

- Anthony McCosker is doing his doctorate at the Curtin University Sustainability Policy (CUSP) Institute

2 thoughts on "**Major flaws in Westconnex EIS Traffic report**"

1. **emendia** says:
   19/10/2015 at 11:23 am Edit

   Great summary of the issues with a transport modelling framework designed to justify increasing road capacity.
   Though my understanding of the Downs-Thompson Paradox is that the mode shift from public transport to cars results in reduced public transport patronage and therefore frequency, which in turn encourages further mode shift.

   Reply (http://m4eis.org/2015/10/17/major-flaws-in-westconnex-eis-traffic-report/?replytocom=152#respond)
2. **emendia** says:
   19/10/2015 at 11:32 am Edit

   The other component of induced demand overlooked in transport models is changes in residential/work location choice. New/expanded freeways encourage people to move further from work, knowing that they can do so and still keep their daily commute time withing their travel budget.

   The resulting sprawl has huge economic, environmental and social costs which are not included in a business case or EIS.
   The cumulative impact of urban-motorway induced sprawl over the last half century is that Australian cities now spend 13% of GDP on transport, compared to only 8% in European cities.

   Reply (http://m4eis.org/2015/10/17/major-flaws-in-westconnex-eis-traffic-report/?replytocom=153#respond)

A People's M4 EIS

Chris Standen's Submission to Westconnex M4 East EIS : 49 issues with Traffic and Transport assessment

01/11/201502/11/2015 wendybaconblog Commentaries & Objections Chris Standen, Downs-Thomson Paradox, Freight, Parramatta Rd., tolls, Traffic and Transport Assessment, Travel Times Savings, VKT, Walking Cycling

(Ed: This submission is by transport planner Chris Standen, who is currently completing a doctorate in transport economics at the University of Sydney. For more on Chris, see below. Readers will note that Chris has many questions for the M4 East Traffic Modellers. The People's EIS are keen to hear the answers. We note that Chris Standen's submission to EIS may have been slightly updated before it was finally submitted and we will publish the final version later)

1.Summary

1) I strongly object to the M4 East project, and to the broader WestConnex scheme.

2) The EIS has failed to model the impacts of implementing the proposed project (M4 East) relative to not implementing the proposed project (the 'future do minimum' scenario). The 'future do something' scenarios, on which the traffic, air quality, health and greenhouse modelling is based, include the M4 East project plus another uncommitted project to convert kerbside general traffic lanes on Parramatta Road to bus priority. With these additional bus lanes, the capacity of Parramatta Road would be significantly reduced and traffic volumes would fall accordingly, with drivers opting to use the M4 East tunnel instead. As such, the traffic volumes for the M4 East tunnel have been dramatically overestimated, and the traffic volumes for Parramatta Road have been dramatically underestimated in the 'future do something' scenarios.
The impacts of the project as proposed by the proponent (and as defined in Section 5 of the EIS), that is, **the M4 East Tunnel with no new priority bus lanes on Parramatta Road, has not been presented in the EIS, as required by the SEARs.**

(3) The stated objectives for the project were contrived to fit the project after it had already been announced. In a democratic strategic planning process, objectives are set first based on the needs and desires of the community, and then alternative projects/policies are appraised against their ability to meet those objectives.

(4) The EIS has not modelled alternative policy scenarios that could meet the transport/accessibility needs of NSW's growing population, e.g.
a) Greater investment in public transport;
b) Road pricing reform;
c) Land use planning that places more homes closer to employment and services.

(5) It is no secret that the real purpose of the WestConnex scheme is to increase the road freight accessibility of Port Botany and Sydney Airport, and that private passenger vehicles have been included as a means of paying for it (through tolls). However, there are various policy alternatives for dealing with the growing freight task that do not appear to have been considered, e.g.:

a) Increase the capacity and reliability of rail freight
b) Increase rail freight subsidies to match/surpass those of road freight.
c) Divert container operations to other ports outside the city centre. Very few cities concentrate container operations in the city centre where road access is costly and has significant impacts on highly populated areas.

(6) The M4 East will be used by less than 1% of the NSW population each day. The costs will be borne by the whole population. It can hardly be argued that it is providing for the "greater good".

(7) The Traffic and Transport Assessment does not stand up to scrutiny. There is not enough information about the methodology, input data or assumptions for the forecasts to be independently verified.

(8) There is no sensitivity analysis in the Traffic and Transport Assessment. The effects of varying key assumptions (e.g., willingness to pay the M4 East toll) have not been disclosed.

(9) The Traffic and Transport Assessment has not modelled the travel time and accessibility impacts for non-motorised modes (walk and bicycle).

(10) The issue of induced demand has not been fully addressed in the Traffic and Transport Assessment.

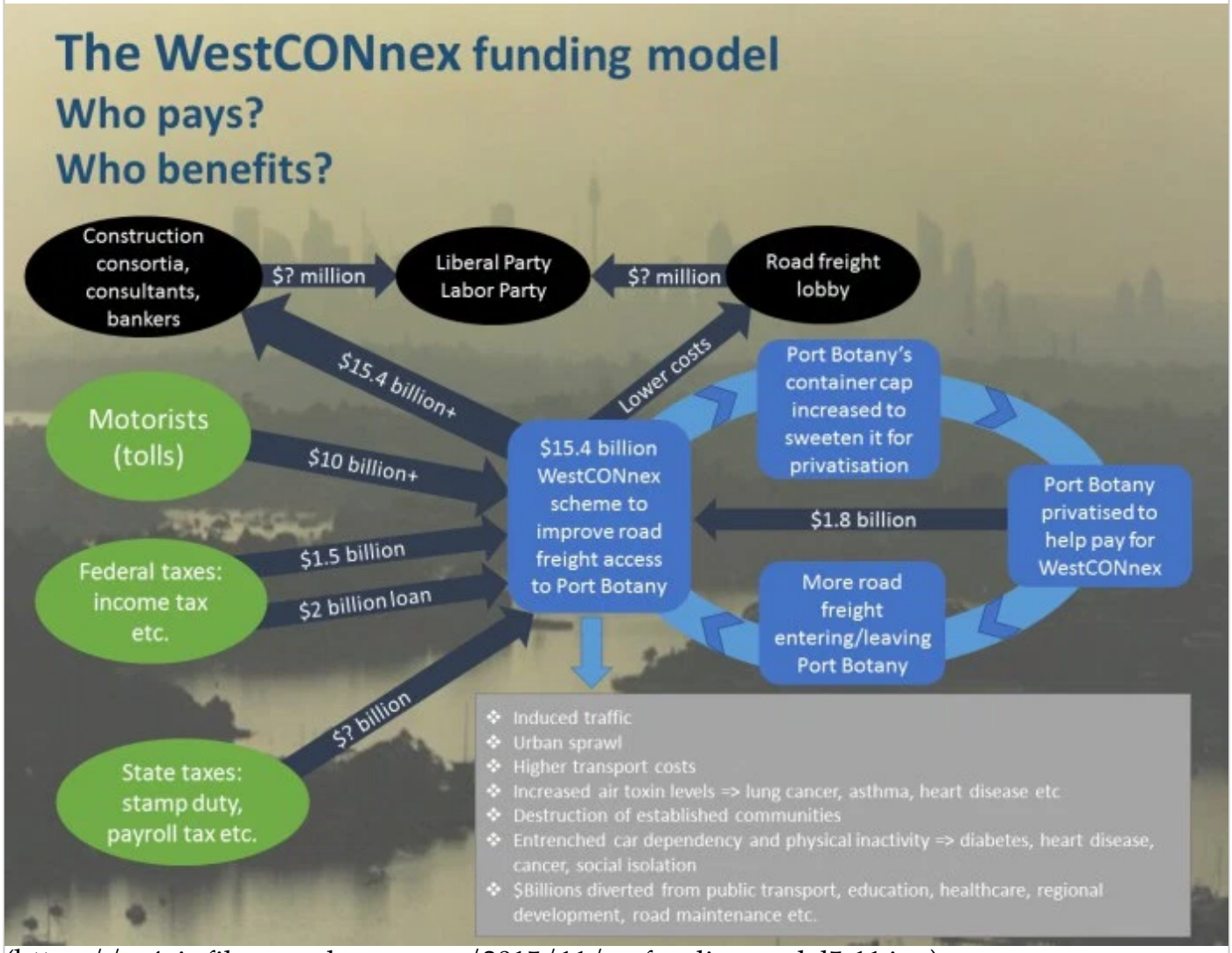
(11) Given the seriously flawed Traffic and Transport Assessment, there can be no confidence in the accuracy of the other impact analyses in the EIS that are dependent on the traffic forecasts, in particular:

a) Air quality,
b) Noise and vibration,
c) Human health,
d) Greenhouse gas emissions.

(12) The role of motorways in a multimodal urban transport network is to allow traffic to circulate around the edge of a city connecting low density suburbs, where the traffic does not directly impact highly populated areas. For radial transport into and out of employment/activity centres, mass transit (e.g., rail) is more quick/efficient, requires less space, and has fewer impacts on highly populated inner-urban areas.

(13) The EIS does not consider the cumulative costs of adding more urban motorways to those previously built through the heart of Sydney since the 1950s. Although the economic, social and environmental costs of each individual motorway (as reported in an EIS) may be considered by some stakeholders to be acceptable, the cumulative costs are considerable:
(a) Following decades of road expansion and consequential sprawl, Sydney now spends about 13% of its GDP on transport, while the average European or Asian city spends only between 5% and 8%.1 (1)
(b) Serious human health impacts due to petrochemical vehicle emissions/smog, including:
i) Lung cancer,
ii) Asthma,
iii) Heart disease,
iv) Impaired lung development in children living near motorways/exhaust stacks.

(c) Waterways contaminated with road runoff (heavy metals and carcinogens in brake and clutch dust, exhaust particulates etc.).
(d) High traffic crash costs (of deaths/traumatic injuries and material damage).
(e) Urban sprawl and increasing commuting distances.
(f) Social isolation for non-drivers living in car-dependent suburbs.
(g) Noise pollution from traffic and its impacts on sleep.
(h) Impacts on visual amenity (pollution stacks, concrete interchanges, concrete flyovers).
(i) Extreme summer temperatures (urban heat island effect).
(j) Community destruction and severance.
(k) Destruction of heritage.
(l) Less incidental physical activity from walking and cycling (including to/from public transport), resulting in higher rates of obesity, diabetes, cancer and heart disease.
(m) Increased chauffeuring burdens for parents and carers.n)
(n) Less independence for children.
(o) High per-capita greenhouse gas emissions.



(https://m4eis.files.wordpress.com/2015/11/wcfundingmodel5-11.jpg)

Designed by Chris Standen

2 Issues with the Traffic and Transport Assessment (Appendix G)

2.1 General Comments

(14) The Traffic and Transport Assessment does not stand up to scrutiny. There is not enough information about the methodology, input data or assumptions for the forecasts to be independently verified.

(15) There is no sensitivity analysis in the Traffic and Transport Assessment. The effects of varying key assumptions (e.g., willingness to pay the M4 East toll) have not been disclosed.

**(16) Travel time and accessibility impacts for non-motorised modes (walk and bicycle) have not been modelled.

(17) Impacts of disruptive technology on future driving demand have not been not considered (e.g.automated vehicles).

(18) Inter-generational changes in vehicle ownership, driver licensing and transport preferences have not been considered.

(19) Changes in aggregate transport measures have not been provided for the various scenarios.For example:

(a) Overall increase in VKT (Vehicle Kilometres Traveeled.)
(b) Change in average trip distance.

2.2 Comments on Specific Sections

2.2.1

(20 One of the stated purposes of the report is to "complete a holistic traffic and transport assessment including crash analysis, travel speeds and travel time analysis and opportunities to enhance public and active transport networks within the project area". However, the report does not provide any travel time forecasts for active transport.

(21) Another purpose is to "Recommend a suite of measures to mitigate and manage traffic and transport impacts of the project for construction and operational scenarios". The general consensus among transport experts is that the most effective way to manage traffic demand is through demand management, e.g., road pricing reform. However, the report does not recommend any demand measurement measures.

2.2.2 Section 3 – Strategic Context

(22) The stated justification for the project is based on the discredited 'predict and provide' approach to transport planning, whereby it is assumed that transport demand will continue to grow, and that capacity must be increased to accommodate it. In practice, transport demand in cities is limited by capacity: as capacity increases, so does demand (induced demand). It is geometrically impossible to provide enough roadway capacity to accommodate all the latent demand for driving (i.e., where everyone can live and work where they want, and make all the driving trips they want, when they want, to wherever they want in free-flow traffic) in a city of Sydney's population.

(23) Furthermore, the most efficient way to accommodate the transport and accessibility needs of a growing population is through mass transit and better land use-transport integration. Urban motorways are a very inefficient way of moving people around. A single traffic lane can transport a maximum of only 2000 people per hour (in ideal conditions); a single railway line can transport 20,000 people per hour.

(24) The statement "It is acknowledged that any investment in motorway infrastructure has to be aligned with supporting public and active transport initiatives to achieve an increase in capacity, while aiming to reduce the reliance and demand of private vehicles on the future road network" is contradictory: increasing motorway capacity will only serve to increase private vehicle demand.

2.2.3 Section 4:Assessment Methodology

(25) There is not enough information about the modelling methodology for it to be replicated and the outputs independently verified.

(26) The transport model (WRTM) has not been made available for independent verification.

(27) The model input data and assumptions have not been made available for independent verification.
What toll prices have been assumed?

(28) The model coverage area is too small to capture all the transport impacts of the project. The project will affect transport demand and behaviour across the whole metropolitan area.

(29) More detail on the Value of Travel Time Saving (VTTS)/Willingness to Pay (WTP) model is needed.
(a) The form and parameters of the model have not been given.
(b) If it was based on stated preference surveys, then how has the issue of hypothetical bias been addressed?
(c) Has the model been validated? Previous toll choice models in Australia have overestimated WTP for toll roads.
(d) Does it include the negative utility of the tunnel environment (monotony, no natural light, poor air quality)?

(30) The weekend period has not been modelled, despite current weekend traffic volumes being higher than weekday traffic volumes on many corridors.

(31) Insufficient information about the travel zone structure in the WRTM:
(a) What are the travel zones based on? How big are they?
(b) How are intra-zonal trips modelled?
(c) How are trips to/from external zones modelled?

(32) Induced demand has not been fully addressed:

a) The model ignores the impact of the project on the long-term transport decisions of individuals and firms, including:
(1) Residential location choice – the project will encourage more people to move further from work (sprawl), thereby increasing average travel distances/demand.
(2) Work location choice – the project will encourage more people to work further from home, thereby increasing average travel distances/demand.
(3) Car ownership choice – the project will encourage more car ownership.

(4) Firm location choice – the project will encourage firms to locate in locations further away from their labour supply/customers/suppliers than they otherwise would, thereby increasing travel distances/demand.

(b) To my knowledge, there has been no long-term evaluation/verification of the methodology used to forecast induced demand (New Zealand Transport Agency Economic Evaluation Manual (EEM)). Induced demand by its nature materialises over several years, as people gradually move home/work location etc. Without a long-term evaluation/verification of the methodology, there can be no confidence in the induced demand forecast produced.

(33) Insufficient detail on origin-destination demand matrix generation:
(a) What are the form and parameters of the generalised cost function?
(b) How were shortest paths calculated?

(34) Insufficient detail on trip generation:
(a) What are the form and parameters of the trip production function, and how was it estimated?
(b) What are the form and parameters of the trip attraction function, and how was it estimated?
(c) Were trips were balanced towards attractions, or towards productions?

(35) Insufficient detail on trip distribution/modal split:

(a) What are the form and parameters of the gravity model used?
(b) What are the form and parameters of the deterrence function used?
(c) How has modal split been estimated?

36 Insufficient detail on road traffic assignment:

(a) Is assignment stochastic or deterministic?
(b) What link loading/flow function was used?
(c) Were intersection delays included?

(37) Insufficient detail on public transport assignment:

(a) How were access and egress points determined?
(b) How were route strategies determined?

(38) Non-motorised trips have not been included in the WRTM or LinSig modelling.
(39) Impacts on accessibility have not been modelled. Most transport is not an end in itself – it is a means to access work, education, services etc. How does the project affect population accessibility?

(40) Equity and equality impacts not described.

(a) How many people are better off with the project?
(b) How many people are worse off with the project?
(c) Do benefits/impacts accrue to any population groups more than others, e.g., people with a disability or on low incomes?

(41) Downs-Thomson Paradox not considered.

The project will attract passengers away from public transport to road. As such, public transport patronage will be lower than it would be without the project. This could result in public transport service levels being cut, which will encourage further mode shift from public transport to road.

(42) No sensitivity analysis.

Given the numerous assumptions and approximations in the model, there needs to be some sensitivity analysis, e.g.: How will traffic volumes be affected if (when) the WTP for the toll turns out to be higher than the point estimate used?

2.2.4 Section 7 Assessment of construction impacts

(43) Impacts on walking/bicycle demand and travel times have not been modelled.
(44) Does the LinSig intersection modelling take into account the impact that changes in intersection LOS will have on travel demand?

2.2.5 Section 8 Future year traffic volumes and patterns

(45) Impacts on walking/bicycle demand and travel times have not been modelled.
(46) Does the LinSig intersection modelling take into account the impact that changes in intersection LOS will have on travel demand?

2.2.6 Section 8 Future conditions without the project

(47) Impacts on walking and bicycle demand and travel times have not been modelled.
(48) Does the LinSig intersection modelling take into account the impact that changes in intersection LOS will have on travel demand?

2.2.7 Section 9 Assessment of operational impacts

**(49) Impacts on walking and bicycle demand and travel times have not been provided.

3 References

1. Newman P, Kenworthy J. Costs of automobile dependence: global survey of cities. Transp. Res. Rec. J. Transp. Res. Board 1999;1670(1):17-26. doi:10.3141/1670-04.

(From The Conversation website (https://theconversation.com/profiles/chris-standen-106596): Chris is currently researching for a PhD in transport economics at the University of Sydney. He holds a BSc in Physics from Brunel University, where his honours research was on subatomic particle measurement at the Stanford Linear Accelerator, and a Master of Environmental Management from UNSW. He has previously worked as a transport planner in local government, as a policy advisor in the NSW Parliament, and as a systems architect designing telecommunications networks for operators in Europe and Asia.)

A People's M4 EIS

Transport economist explains poor project selection behind Westconnex : Kennedy Submission, Part One

29/10/201530/10/2015 wendybaconblog Commentaries & Objections business case, Gateway Review, Gratten Institute, Lyall Kennedy, Major Projects Assurance Framework, NSW Auditor's General's Performance Audit of Westconnex, Submission to Select Committee into the Abbott Government's Budget Cuts

(Ed: Transport economist Lyall Kennedy's submission will be published in several parts. It has already been sent to the NSW Department of Planning. This first part includes a focus on the NSW Auditor General's 2014 report on Westconnex that has never been properly responded to by the Baird government. As some referencing as been lost in this publication, full PDF will be published later on this site)

Introduction

My name is Lyall Kennedy. I am a Transport Economist with over 38 years experience in transport delivery and planning. I have held senior executive roles in the State Government and the private sector.

I am currently Director of Kennedy Consulting Pty Limited providing transport management and planning advice to the private and public sectors.

I also spent four years on Ashfield Council including as Mayor in 2011 and 2012.

I am very concerned that the WestConnex project has been ill conceived and the weaknesses of the proposal have been amplified through poor governance.

My submission largely focuses on transport issues. Whilst I don't cover other aspects of the EIS, I am concerned about other aspects particularly the impact on air quality and the loss of houses within the Haberfield Conservation Area.

A People's M4 EIS

Narrow interests plus public transport failure behind Westconnex M4 East – Lyall Kennedy Submission Part 2

29/10/201530/10/2015 wendybaconblog Commentaries & Objections 2031, Infrastructure NSW, M4 East, Max Moore-Wilton, Parramatta Rd., Sydney Airport, Time saving spin

(Ed: This is Part 2 of Transport Economist Lyall Kennedy's submission to the EIS. Kennedy is a transport economist and ex Mayor of Ashfield Council. Part One is here (http://m4eis.org/2015/10/29/transport-economist-explains-poor-project-selection-behind-westconnex-part-1-lyall-kennedy/))

What came first – WestConnex or the Strategic Plans

There is a requirement for the EIS that the proponent's proposal is consistent with all Sydney's strategic planning instruments. Requiring this project to be consistent with all strategic planning instruments sounds reasonable until you realise that **all the plans were rewritten in 2012/2013 to place WestConnex at the centre of their transport strategies**.

Up until 2012, metro strategy development in NSW was based on developing the broad strategy planning objectives and then discussing options to meet these strategic objectives before proposing individual projects/actions. Linking the M4 with the M5, as proposed by WestConnex, was never included as a project to realise previous Metropolitan Strategies.

Once WestConnex became the number one infrastructure project proposed by Infrastructure NSW, all strategic planning documents were rewritten to include WestConnex. In fact, it became the centrepiece of the transport strategy. This was after extensive community consultation was undertaken in February 2012 for the Long Term Transport Master Plan which did not include Westconnex.

At the time, Les Walinga, the then Director General of Transport, was on the Board of Infrastructure NSW and at the same time was developing the Long Term Transport Master Plan. When Infrastructure NSW proposed WestConnex as the major infrastructure project of its plan, **Les Walinga resigned from the Board citing conflict of interest as he was proposing public transport solutions in the Long Term Master Plan and was not supporting WestConnex**. Even within Infrastructure NSW there was doubt about the appropriateness of WestConnex.

Even allowing for the bastardisation of the planning process, this submission identifies areas where the **M4 East extension is inconsistent with the Metro Strategy**. These include:

- Does nothing to alleviate Western Sydney congestion
- Is an unsustainable solution as it will reach capacity by 2031
- Does not relieve traffic congestion on most downstream intersections

Who Benefits from the WestConnex Motorway?

Given that **WestConnex provides a direct link to Sydney Airport** but not to the city or Port Botany (which is eight kilometres from WestConnex) who is the big winner out of this project?

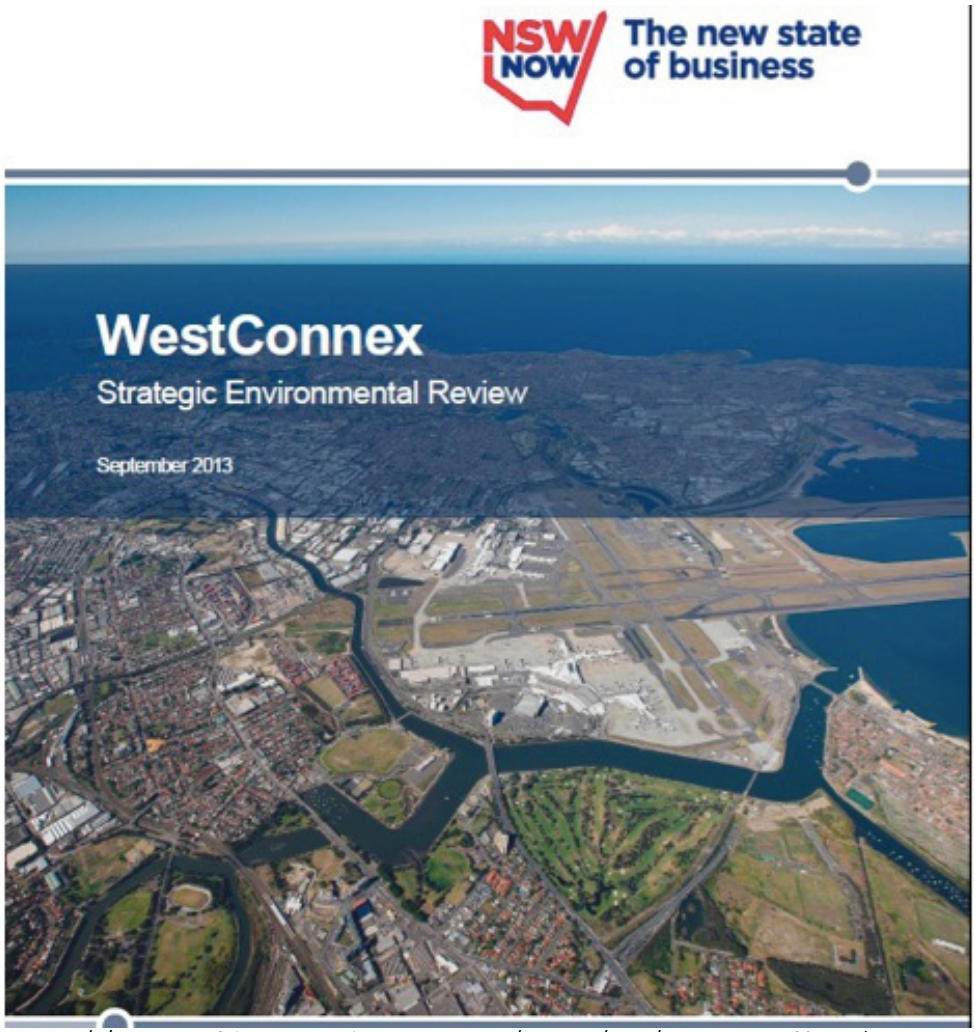
I would suggest that MAp Airports Limited the then owner of Sydney Airport (https://en.wikipedia.org/wiki/Sydney_Airport_Holdings) appears to be a major beneficiary. Since at least 2004, Sydney Airports has pushed in each of its Master Plans for improved links to the M4.

In 2011 the debate on a second Sydney airport was well advanced with the Federal Government considering a further proposal. If billions of taxpayers' money could be spent on improving road connections to the airport, this would cement Sydney Airport as the primary airport for Sydney for decades to come.

But how could an individual company influence the deliberations of Infrastructure NSW? One way may be to have the Chairman of Sydney Airport Holdings Max Moore-Wilton (http://www.infrastructure.nsw.gov.au/about-insw/our-board/max-moore-wilton-ac.aspx) as a Board member.

The only major attractor that is served by WestConnex is Sydney Airport. According to the WDA spin, among the benefits that WestConnex delivered included reducing the travel time from Parramatta to the airport by 40 minutes and bypassing up to 52 sets of traffic lights. They failed to say that you can now avoid the 52 traffic lights now in 2015 by catching the train which takes 45 minutes from Parramatta to the airport. According to google maps it takes between 39 and 54 minutes to drive between Parramatta and the airport. The claim of a 40 minute saving seems heroic.

The cover of the Strategic Environmental Review released by WDA in 2013 was a picture of the airport.



(https://m4eis.files.wordpress.com/2015/10/airporttiff.jpg)

Sydney has underinvested in public transport over the past 30 years

In 1998 the NSW government released Action for Transport 2010 an integrated transport plan for Sydney. The plan proposed to:

> "redress the [then] current imbalance in the road and public transport system."

(Action for Transport 2010 an integrated transport plan for Sydney, 1998, NSW Government p.2)

The plan included a 10 Point Action Plan for Sydney:

1. Getting the best out of the Sydney system
2. Improving Sydney's air quality
3. Reducing car dependency
4. Meeting the needs of our growing suburbs
5. Getting more people on public transport

6. Safeguarding our environment
7. Making space for cyclists and walkers
8. Preventing accidents and saving lives
9. Making freight more competitive
10. Giving the community value for money

(p. 3)

The plan listed (at page 5) 21 projects to be completed or started by 2010 these were:

Rapid Bus Only Transitways

1. Liverpool to Parramatta (2003)
2. Parramatta to Strathfield (2002)
3. St Marys to Penrith (Stage 1 2003) (Stage 2 2008)
4. Parramatta to Blacktown (2004)
5. Blacktown to Castle Hill (2009)
6. Blacktown to Wetherill Park (2006)
7. Parramatta to Mungerie Park (2010)

Heavy Rail

1. Airport Line (2000)
2. Bondi Beach Railway (2002)
3. Parramatta Rail Link to Epping and Chatswood (2006)
4. Hornsby to Newcastle High Speed Rail (Stage 1 to Warnervale 2007) (Stage 2 to Newcastle work to start by 2010)

North West Rail Link Epping to Castle Hill (2010)

1. North West Rail Link Epping to Castle Hill (2010)
2. Sutherland to Wollongong High Speed Rail (2010)
3. Hurstville to Strathfield Railway (To start by 2010 and be completed by 2014)
4. Liverpool Y Link (Work to start by 2010

Light Rail
16. To Lilyfield (2001)

Road Improvements
17. Eastern Distributor (2000)
18. M5 East (2002)
19. Cross City Tunnel (2004)
20. M2 to Gore Hill (2004)
21. Western Sydney Orbital (2007)

All the projects in bold were built. It can be seen from the list that every road project was delivered. Of the 16 public transport projects only four were completed.

The inability for successive governments to deliver public transport projects has made Sydney (particularly western Sydney) more car dependent. Building more roads has not had any lasting impact on road congestion. The traffic projections in the current M4 East EIS show the

tunnel at capacity by 2031.

> "2031 AM peak and PM peak operational performances (in comparison to the 'do minimum' results) are detailed in Table 10.7 and Table 10.8 respectively.
> High traffic densities are now recorded in the project's mainline tunnel east of Concord Road, particularly westbound during the AM peak and eastbound in the PM peak where capacity is reached."

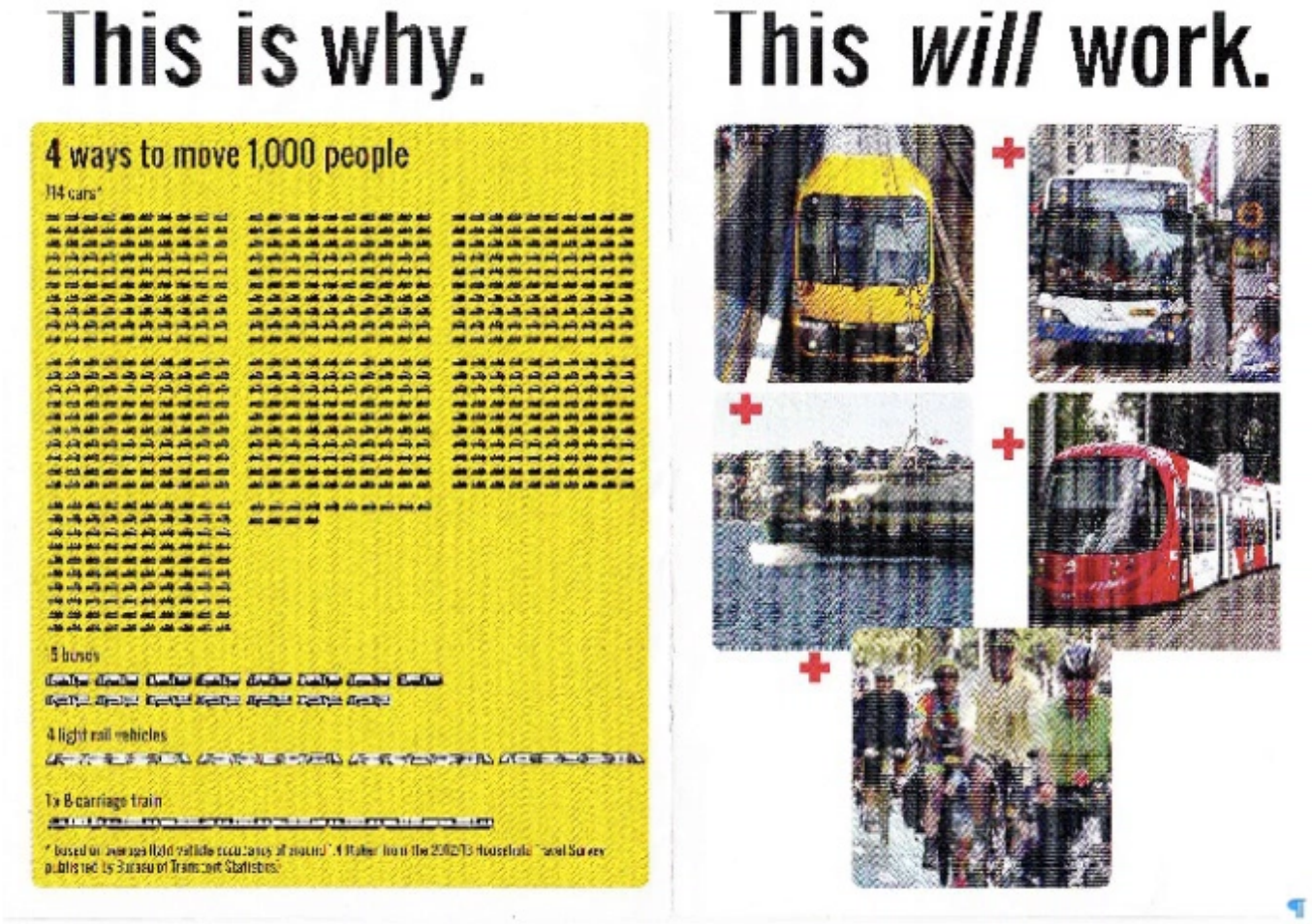
(M4 EIS M4 East EIS Volume 2A Appendix A-G, page 10-6)

What is the plan post 2031? Building more roads will not solve traffic congestion in Sydney.

WestConnex clearly fails to:

- Reduce car dependency
- Meet the needs of our growing suburbs
- Get more people on public transport

The Benefit-Cost analysis of WestConnex is evaluated over a 40 year period. Relieving traffic congestion on the corridor appears to be a major objective of the project. The project reaches capacity in the M4 East tunnel within eight years after project completion. This does not seem to be an effective means of relieving congestion. The Cost-Benefit analysis should include costs of additional measures required over the remaining 32 years of the project life to maintain the claimed congestion and travel time savings. If included, it is likely that the project costs will significantly outweigh any benefits.



(https://m4eis.files.wordpress.com/2015/10/this-is-why-this-will-work-tiff.jpg)

M4 East Past and Present

The M4 East was previously proposed in 2003/2004. The Sydney Motorways Project Office prepared a strategic environmental review of the WestConnex project in 2013. Chapter 4 of the review outlined the WestConnex scheme development and alternatives.

It is worth noting that this section covering alternatives to the then $10.5 billion project was only four pages long out of a 127page document. The review gave a brief history of the M4 East proposal.

> "The M4 Motorway between Emu Plains and Concord has been progressively developed over a 40 year period. The section between Parramatta and Concord was opened in 1992. An eastern extension of the M4 Motorway to the Sydney CBD was subsequently planned and a scheme was publicly exhibited in 2003 to 2004 which proposed extending the motorway to the City West Link and widening the existing motorway. This scheme did not proceed due to concerns over economic viability and environmental impacts." (p.25)

In the current M4 East EIS the following explanation is given:

> "Between 2003 and 2004 a preferred option for an eastern extension of the M4 to the Sydney central business district (CBD) was developed and publicly exhibited. This option, referred to as the M4 East, proposed extending the M4 to the City West Link and Parramatta Road at Ashfield as well as widening the existing motorway between Homebush Bay Drive and Concord Road. This scheme was put on hold indefinitely by the then NSW Government. The 2003 preferred option formed the basis of the concept design for the M4 East project, which forms part of WestConnex."
> WestConnex M4 East Environmental Impact Statement, Volume 1A, WestConnex Delivery Authority, September 2015, Page 4-1

The two reports appear to contradict each other. It is quite a different proposition to a project being abandoned "due to concerns over economic viability and environmental impacts" and simply putting the project "on hold". There is no analysis in the current EIS as to the reasons why the original proposal did not proceed. The comments in the Strategic Environmental Review should have been addressed in the EIS. What has changed since 2004 that now makes the M4 East economically viable with positive environmental impacts? The failure to release the business case further exacerbates the situation.

The project should not be approved without a full appraisal of the economic and environmental impacts of the proposal with particular reference to how the current proposal overcomes the previous concerns raised in 2004 that led to its abandonment.

The two reports appear to contradict each other. It is quite a different proposition to a project being abandoned "due to concerns over economic viability and environmental impacts" and simply putting the project "on hold". There is no analysis in the current EIS as to the reasons why the original proposal did not proceed. The comments in the Strategic Environmental Review should have been addressed in the EIS. What has changed since 2004 that now makes the M4 East economically viable with positive environmental impacts? The failure to release the business case further exacerbates the situation.
The project should not be approved without a full appraisal of the economic and environmental impacts of the proposal with particular reference to how the current proposal overcomes the previous concerns raised in 2004 that led to its abandonment.

Reasons given for Westconnex M4 East don't stack up

> "Parramatta Road is now one of the six most congested transport corridors in Sydney, with high travel demand and average travel speeds of private vehicles during the morning peak of about 30 kilometers an hour."
> WestConnex M4 East EIS, Vol 1A, Page ii

The EIS does not say where Parramatta Road sits in the top six most congested roads in Sydney. Is it the worst or is it the sixth worst? If it is the sixth worst why is $15.5 billion being spent on this corridor while the other five more congested corridors are not being given

priority? There is no discussion in the EIS on the comparative advantages of spending the money on WestConnex as opposed to the other congested corridors.

> "The Parramatta Road corridor is also one of Sydney's busiest corridors for public transport. It has one of the highest number of bus passengers during the morning peak of any major bus route in Metropolitan Sydney." M4 EIS vol 1A p.ii

Buses from the inner west carry around 10,000 passengers in the busiest hour into the city (as measured at Broadway). This includes the routes along Parramatta Road and King Street Newtown. However, in the study area, in particular Parramatta Road between Concord Road and Burwood Road there are no existing bus services. Between Burwood Road and Wattle Street, there is only one bus route the 461. This route has a peak frequency of 4 buses per hour. This gives a capacity of less than 250 passengers per hour. It is not a strong bus route due in part to its proximity to the main western rail line which accounts for most of the peak public transport demand on the corridor.

The EIS paints a false picture of public transport in the corridor. It suggests that there is already high public transport service and use on the corridor and that WestConnex will free up lanes on Parramatta Road for more and faster bus services. The implementation of bus lanes is stated to be the main public transport initiative of WestConnex. However, the project does not deliver bus lanes along the length of the Parramatta Road until after 2031.

WestConnex will have a net negative impact on public transport use. Refer to Part 3 on Congestion pricing for more information on why expansion of urban motorways has a negative impact on public transport.

Part One of Kennedy Submission can be found here (http://m4eis.org/2015/10/29/transport-economist-explains-poor-project-selection-behind-westconnex-part-1-lyall-kennedy/)

Submissions to the Westconnex EIS process close on November 2, 2015. Here's how you can make a submission: http://m4eis.org/2015/09/11/how-to-object/ (http://m4eis.org/2015/09/11/how-to-object/)

3 thoughts on "**Narrow interests plus public transport failure behind Westconnex M4 East – Lyall Kennedy Submission Part 2**"

1. **Kathryn** says:
   29/10/2015 at 11:15 pm Edit

   2 WestConnex fails the objectives of the NSW Transport Master Plan
   WestConnex is an anomaly to the NSW Transport Master Plan 2012
   The WestConnex EIS claims that it was a legitimate part of the long term transport planning for NSW for which it is very obvious that it was retrofitted after the event.

The NSW Master Transport Plan December 2012 was written from the perspective of improving the mobility for residents and visitors to Sydney through the modernising and connectivity of Public Transport.
The focus mentioned frequently throughout the document was to reduce car dependency and thus congestion by investing further in the various modes public transport. The main initiatives were to address the lack of rail connectivity, by enhancing the current radial mode to be a more networked and connected system. It also included complementary improvements with other modes, such as increase dedicated bus lanes plus BRT, increased cycle-ways and encouraging walkability. The livability of communities and protection of the environment was a key outcome of the Plan.
"Most of Sydney's rail network was built more than 100 years ago and is primarily centred on servicing the CBD. There has been little recent expansion of the network, with 39 kilometres of the total CityRail system of 1,050 kilometres built in the past 33 years (as at 2012).. As Sydney has grown and evolved to a multi-centred city, its needs have changed and our rail system needs to evolve to keep up with these changes."
"Businesses often cite the lack of public transport connectivity as an inhibitor to establishing a presence in the three regional cities of Parramatta, Penrith and Liverpool, as well as precincts like Macquarie Park, Sydney Olympic Park and Port Botany".

"By enabling industries to set up in the regions, in transport terms, this would reduce the impacts of dispersed employment in Greater Sydney, alleviate car dependency and long commutes, and promote more liveable communities".

The below comments – lifted from the Master Plan – succinctly encapsulate the rationale of this Plan:
"Regular physical activity is important to our health and wellbeing. Recent research shows that many people get an additional eight to 10 minutes of exercise each day when they use public transport. Importantly, being active for part of our journey to work or school incorporates exercise into our daily routines. The NSW Centre for Population Health has observed that public transport use, walking and cycling are associated with a number of health benefits, including a reduced incidence of obesity, higher levels of exercise and improved mental health.
Building social and community goals into our transport planning will strengthen communities, reduce disadvantage and open up opportunities. To meet our objective of reducing social disadvantage, we will require new ways of thinking about how to distribute transport services more evenly across the State. We will need to give people healthier travel options, such as making it easier and safer to cycle to work or walk to the nearest train station. We will also need to integrate our transport system more closely with land use planning, creating well-designed cities and suburban centres that reduce our reliance on cars, encourage us to be more active and produce safe, attractive and well-used urban spaces".

The inclusion of the WestConnex project at various points throughout the document is an anomaly to the key rationale of the original document.

NSW Master Transport Plan Vision
"The city will become more liveable by improving the design of buildings and public areas, developing mixed-use spaces where people work and live, and creating more opportunities for people to walk and cycle to work and major service centres. Protecting our natural

environment, improving access to green spaces and improving air quality will be critical. The Metropolitan Strategy for Sydney underpins this land use and planning vision for Metropolitan Sydney to 2031.
Central to these outcomes will be an integrated and efficient transport system that is closely aligned with land use planning. Sydney's transport infrastructure and services will cater to the customer, providing diverse transport options and reduced travel times, while being readily accessible across all parts of the city. Improved public transport networks will increase productivity and global competitiveness."
"Improve sustainability – by maintaining and optimising the use of the transport network, easing congestion, growing the proportion of travel by sustainable modes such as public transport, walking and cycling, and becoming more energy efficient"
"For public transport – If Under a 'do nothing' scenario, most travel in Sydney would continue to be by motor vehicle, with roughly the same percentage of trips still made by car in 2031.
"Transport has an important role in supporting Sydney as a global city. Strong connectivity across the city, quality public transport networks and opportunities for walking and cycling can all contribute to maintaining Sydney's role as a centre of economic and social activity".
"The city will become more liveable by improving the design of buildings and public areas, developing mixed-use spaces where people work and live, and creating more opportunities for people to walk and cycle to work and major service centres. Protecting our natural environment, improving access to green spaces and improving air quality will be critical.
"Central to these outcomes will be an integrated and efficient transport system that is closely aligned with land use planning. Sydney's transport infrastructure and services will cater to the customer, providing diverse transport options and reduced travel times, while being readily accessible across all parts of the city. Improved public transport networks will increase productivity and global competitiveness"
The Master Plan also goes on with the rationale "Currently, around 14 percent of greenhouse gas (GHG) emissions produced in NSW come from the transport sector, making it the State's second highest source of emissions. In the context of population growth and increasing travel demand, mitigating GHG emissions is a major challenge for the future".
"Providing people with opportunities to use public transport instead of private vehicles will help to reduce the environmental impact of transport in NSW. Increased walking and cycling, particularly for short, local trips, will also contribute to improved environmental outcomes."
" The cost and availability of oil and the rising cost of electricity will also have a direct influence on the choices we make in procuring the most environmentally sustainable and energy efficient technologies to power our transport fleets".
"The growing travel task is also a challenge for preserving the amenity of many of our communities. The movement of freight is rarely silent and the generation of noise on a shared network in proximity to residential areas is a recognised issue".
The WestConnex project and its horrible impact on communities, vulnerable species and the environment is a complete juxtaposition to the vision for Sydney's mobility by Gladys Berejiklian (previous Minister for Transport)
I strongly object to the WestConnex project, as it fails to match any of the required core outcomes of the NSW Travel Master Plan.
I strongly object to the WestConnex project as it represents a lost opportunity to "Get Sydney moving". The funds required to fully implement the exciting public transport

projects that will significantly improve connectivity of rail, bus, cycle and walking opportunities as proposed by Ms Berejilian will not be available. Instead, funds are redirected to a road project that is a space hungry, low volume mode of transport. It eschews Ms Berejiklian's rational plan for Sydney, instead resulting in the perpetuation of car dependency, more pollution, more traffic noise, more congestion, and more GHG emissions. It reduces the livability and amenity of our suburbs. It removes important greenspace and vegetation that is critical for the survival of vulnerable species and for the health and wellbeing of residents.
I strongly object to the misrepresentation contained in the EIS that WestConnex was part of the NSW Transport Master Plan 2012. It is reasonable to conclude that WestConnex was retrofitted later, rather than being a legitimate part of the long term plan scope.

Reply (http://m4eis.org/2015/10/29/narrow-interests-plus-public-transport-failure-behind-westconnex-m4-east-lyall-kennedy-submission-part-2/?replytocom=272#respond)

2. **Transport economist explains poor project selection behind Westconnex : Kennedy Submission, Part One | A People's M4 EIS** says:
30/10/2015 at 4:18 pm Edit

   […] Part 2 of Lyall Kennedy's submission can be found here […]

   Reply (http://m4eis.org/2015/10/29/narrow-interests-plus-public-transport-failure-behind-westconnex-m4-east-lyall-kennedy-submission-part-2/?replytocom=282#respond)

3. **Peter Galvin** says:
31/10/2015 at 9:01 pm Edit

   Good work Lyall

   Reply (http://m4eis.org/2015/10/29/narrow-interests-plus-public-transport-failure-behind-westconnex-m4-east-lyall-kennedy-submission-part-2/?replytocom=310#respond)

I strongly urge the Department of Planning & Environment to reject the M4 East EIS. Some of the reasons I call for this are elaborated below.

I would welcome the opportunity to expand on my concerns at any public hearings that may be held as part of your deliberations.*(This is an important point. The Westconnex project desperately needs open and transparent inquiry including hearings but the NSW government has no plans for these.)*

Lack of Transparency and Proper Process in Project Selection

The Federal and NSW governments have called WestConnex the largest road infrastructure project in Australia's history. For such a major piece of infrastructure it has had a relatively short period of review. It appears to have been 'fast-tracked' bypassing important evaluation steps aimed at providing assurance to government and the taxpayers that the project is the best solution.

The Productivity Commission in its recent inquiry into public infrastructure found, "an urgent need to comprehensively overhaul processes for assessing and developing public infrastructure projects."

It pointed to "numerous examples of poor value for money arising from inadequate project selection, potentially costing Australia billions of dollars". It argued that further spending under the status quo will simply increase the cost to users, taxpayers and the community, and lead to more wasteful infrastructure.(1)

At the request of the Senate Select Committee into the Abbott Government's Budget Cuts, the Grattan Institute recently prepared a paper on infrastructure financing and expenditure with a focus on transport infrastructure.(2)

To get a better return from infrastructure spending, governments should focus on selecting the right projects, and on making the business cases and their underlying assumptions more transparent. Governments can also get a better return through use of new technologies to get more value out of existing infrastructure; through minor augmentation and relief of pinch points; and through more systematic maintenance.

"The capacity to waste money is a serious risk for infrastructure, given the very large amounts of money involved." (p.1)

Infrastructure investment over the past five years has been about one per cent of GDP higher than a decade earlier. Such a significant increase would have been expected to have some visible effect on GDP growth. There is no evidence it has done so, with GDP growth still well below three per cent per annum and below historic growth rates.

"The wrong projects can destroy value and divert funds from projects that would be more valuable to the economy and community." (p.4-5)

"Australia could get better value from public infrastructure by making better project selections. Unreliable or non-existent cost-benefit analyses have been an obstacle to optimal project selection. Recent large infrastructure projects in Australia have typically suffered from cost overruns of about 15 per cent, while patronage has been 15 per cent lower than projected, on average. As a result, real cost-benefit multiples are expected to be about 25 per cent lower than projected on average. All other things being equal, this consistent overestimation of benefit-cost ratios is making uneconomic projects look viable at the approval stage." (p.5)

Unfortunately, the WestConnex project does not appears to be an example of industry best practice in project selection and transparency (see NSW Auditor General's comments below). Calls for the release of the business case have been opposed by both the Federal and NSW governments. If there is such a compelling business case, then why isn't it being shared with the Australian taxpayers who are bearing the risks associated with this project.

The NSW Auditor General's Performance Audit of WestConnex (http://www.audit.nsw.gov.au/news/westconnex-assurance-to-the-government) conducted in 2014 highlighted the importance of proper evaluation and identified some serious deficiencies in the development of the WestConnex project.

The Executive Summary of the Auditor General's audit concluded:

"In the period covered by this audit, the processes applied to WestConnex to provide independent assurance to Government did not meet best practice standards…

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

"The post-business case governance arrangements did not clearly separate board-level responsibilities for commissioning from responsibilities for delivering the WestConnex project. After not separating the roles, they also failed to provide mechanisms to effectively manage the conflict between these roles.

"The WestConnex project offers several lessons. While good internal controls are critical, they are not a substitute for externally managed Gateway reviews. Steering committees and boards cannot be responsible for both project delivery and independent assurance and reporting to the Government. Responsibility for commissioning should be clearly differentiated from the responsibility for project delivery. Challenging deadlines heighten the need for good assurance but, paradoxically, also the risk of departure from best practice." (p.3-4)

"The Government approved a new Major Projects Assurance Framework in December 2011…
"The objective of the Framework is to increase the Government's confidence and assurance in planning and implementation of major projects through their entire lifecycle, specifically:

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

"A key component of the Major Projects Assurance Framework is the Gateway review system. The Gateway system is a series of structured reviews at key decision points (gates) in a project's lifecycle.

Gateway gives the Government a level of independent assurance on:
• whether an investment in a project is warranted
• the strategic options considered
• the agency's capacity to manage and deliver the project on time, on budget and achieve desired project outcomes
• whether a project is on track and ready to move to the next phase."(p.10-11)

WestConnex Concept

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

"The Major Projects Assurance Framework introduced a Gate Zero to provide assurance that projects are well justified after considering a wide range of options. A Gateway review or similar should therefore be conducted early in a project's life cycle to provide assurance around whether:
• the need for a project is properly defined
• there is justification for addressing that need
• the best value means of servicing that need are being proposed after considering a broad range of alternatives and their associated costs and benefits.

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

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

"We saw no evidence that:
• the Government specifically exempted WestConnex from the Major Projects Assurance Framework Gate Zero
• provided an explanation or justification for the variation from the Major Projects Assurance Framework
• the alternative approach adopted was assessed as being equivalent to, or better than, the Major Projects Assurance Framework.

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

"Infrastructure NSW's roles at this stage of the WestConnex project were in conflict. It was responsible for developing the WestConnex concept and at the same time it was the key agency responsible for providing assurance to Government over major capital projects including WestConnex. A fundamental principle is separation between those providing independent assurance and those developing and delivering a project." (p. 16-17)

Developing the business case

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

"In line with the Transport for NSW Investment and Gating System we also expected to see the following Gateway reviews (or equivalent arm's length, independent expert reviews)
- *a strategic business case review (Gate One)*
- *a preliminary business case review (Gate Two)*
- *a final business case review (Gate Three).*

"We expected there would be acquittals of each of these reviews, and that the review reports and acquittals would be provided formally to Infrastructure NSW and followed up in each subsequent Gateway review or equivalent. We also expected regular progress reports to, and monitoring by, Infrastructure NSW." (p.21)

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

"The agencies concerned advised us that significant analysis and review of traffic numbers was undertaken by the specialist work streams established within the Project Office. However, we have seen no evidence of an independent, arm's length review of the traffic analysis used for the final business case, by someone technically qualified to do so, before the business case was presented to the Government. "We did not find peer review outputs for land use, urban planning or transport planning."(p.26)

Gateway review of preliminary business case

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

"In its report to the Sydney Motorways Project Office (dated 14 June 2013), the Gateway Review Panel concluded that:

"due to lack of key information presented for the review, the Gateway Review Panel was not able to form a view on whether the project is a worthwhile and prudent investment (both economically and financially viable) for the NSW Government".

"Further, the Gateway Review Panel stated that:
"A number of key documents were delivered later than anticipated and the Review Panel had very limited time to review the Silver business case.

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

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

"The Review Panel noted that not all key benefits nor all key risks were adequately documented, and that the business case would benefit from these and other inclusions". (p.28)

"The Gateway Review Panel also found the preliminary business case should have been more advanced than it was and would have benefited from previous iterations and review processes which had not occurred.

"The Gateway Review Panel's 'traffic light' risk ratings against the Gateway criteria were all red and yellow, with no greens." (p.29)

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

Yellow: Important and urgent – project should go forward with action on recommendations. Source: WestConnex preliminary business case Gateway review 2013.

Matters a Gateway review may have identified

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

"These deficiencies related to the way the business case dealt with risks around traffic projections, project cost, economic benefits, financial analysis, governance arrangements and the procurement strategy." (p.31)

Purpose of the business case

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

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

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

"Roads and Maritime Services' arguments do not justify the lower level of independent assurance provided on WestConnex than that offered by the Major Projects Assurance Framework. The objective was to "produce a business case that demonstrates the overall technical and financial viability of the WestConnex scheme, consistent with the State's Fiscal Strategy." Approval of the business case was the key decision point so far for this project, and arguably the stage at which independent assurance was most critical."(p.31)

(Ed:This is end of quotes from NSW Auditor General's report)

Conclusion to Part one of Kennedy Submission

Failure to abide by the Major Projects Assurance Framework and employ best practice governance from project inception has greatly reduced community confidence. The Community is being asked to comment on an EIS that is deficient in analysis of project justification.

A condition of consent for the M4 East should include adherence to the NSW Government's Major Projects Assurance Framework. Vital gateway reviews which should have been undertaken before the preparation of the EIS (and certainly before awarding construction contracts) should be commissioned, completed and made publicly available before any further approvals are issued.

Footnotes

1. Inquiry into Public Infrastructure, Productivity Commission (2014)
2. Submission to Select Committee into the Abbott Government's Budget Cuts, Marion Terrill, Transport Program Director, Grattan Institute (August 2015)

Part 2 of Lyall Kennedy's submission can be found here (http://m4eis.org/2015/10/29/narrow-interests-plus-public-transport-failure-behind-westconnex-m4-east-lyall-kennedy-submission-part-2/)

You have only three more days to lodge a submission to the M4 East EIS .. here's how you can do it
http://m4eis.org/2015/09/11/how-to-object/ (http://m4eis.org/2015/09/11/how-to-object/)

(https://m4eis.files.wordpress.com/2015/10/img_3611.jpg)

EIS submission Pub Night – Newtown Social Club October 28, 2015

A People's M4 EIS

Tackling Congestion with congestion pricing; Important questions but no answers from Westconnex – Lyall Kennedy Submission Part 3

30/10/201531/10/2015 wendybaconblog Commentaries & Objections City West Link, Congestion Pricing, Freight, Gratten Institute, Ian McCarthy, Queuing, tolls, transport infrastructure spending

Given that congestion levels are only likely to be reduced for a maximum ten years, at which point we would be back to where we are in 2015, there needs to be consideration of alternative ways to manage and reduce congestion.

Infrastructure NSW commissioned a discussion paper on congestion pricing. The paper *Pricing Congestion in Sydney* was published by ICIL Tasman in April 2012. The paper reviews alternative ways to manage congestion:

Almost everywhere, not just in New South Wales, governments have persisted in excluding congestion pricing from their changing mixes of anti-congestion measures, despite increasing urging from economists over the past 60 years to apply this policy instrument. These changing policy mixes have typically failed to stop congestion from worsening in medium-sized and large cities around the world. So, failed anti-congestion strategies are the norm.

Until the late-1970s, governments typically saw road building as the solution to congestion. However, high costs and assumed futility because of traffic attraction by new capacity ("induced traffic" or "induced demand") led to changes to anti-congestion strategies. Governments increasingly switched resources from roads to public transport, cycling and walking facilities, and operating subsidies for public transport. In some cases, governments re-allocated some pre-existing road lanes from general purpose use to access by buses and other multi-passenger vehicles, which effectively added to public transport subsidies. Many governments buttressed these policy changes with measures such as higher on-street and off-street parking charges, information programs regarding public transport services, and promotion of car-pooling arrangements.

All of these policy instruments were meant to reduce demand for road space and increase demand for alternatives to road-use by single occupancy vehicles. Transport planners typically described some or all of these policy instruments as 'demand management measures'.They considered them to be substitutes for congestion pricing.

These "demand management measures" failed to stop the inexorable worsening of congestion, even though the major measure, subsidised public transport, involved 100 per cent capital subsidies and operating subsidies in excess of 75 per cent of operating costs. Indeed, costs of all of these "demand management measures" have been found to be high relative to numbers of passengers attracted from single-occupancy vehicles. An important oversight by proponents of these measures is that they are just as likely as increases in road capacity to be undermined by "induced traffic". Another neglected problem is that public transport subsidies have facilitated inefficient operating arrangements.
"Public transport, cycling and walking have often been described as "sustainable transport", because use of these modes by commuters reduces congestion and emissions caused by cars. However, the fiscal unsustainability of an ineffective strategy of trying to reduce congestion to acceptable levels through heavy subsidies has been overlooked.

Many governments also took steps to change urban land regulation policies to try to increase urban densities, at least in and around major activity centres and major public transport hubs and routes. They hoped that this would encourage greater use of transport modes other than cars, and improve the viability of public transport. However, these actions have not reduced congestion and may have increased it. They have overridden consumer preferences and distorted relative prices of land and capital, inducing substitution of capital for land. The result has been resource misallocation.

Because massive public transport subsidies, other "demand management" policies, and regulated increases in urban density have made little impact on congestion, some governments, notably those in New South Wales, Victoria and Queensland re-considered their policies of restraint on provision of general purpose arterial road capacity, particularly in the case of by-pass or orbital roads. Toll roads (typically involving public private partnerships) were often preferred to provision of free-access arterials, because of the high costs of urban arterial road provision in the context of fiscal stress associated with high costs of maintaining public transport subsidies.

While governments have claimed that toll roads would help alleviate congestion, these roads typically have been priced simply to recover full costs (including a reasonable rate of return on capital). Such pricing is incompatible with congestion-alleviation, because full cost recovery is possible only if tolls are set to toll-off sufficient potential users to ensure a wide difference in quality of service between tolled and free-access facilities. Pricing of new roads to alleviate congestion would require low and possibly negative prices.
(Pages.vii -viii)

The paper then goes on to argue the benefits of congestion pricing:

Current anti-congestion policy-mixes for Sydney, as for most other major metropolitan areas, are ineffective and economically inefficient. Economically sensible reform would substitute congestion pricing for heavy public transport subsidies, parking levies/supply restraints, and tolling of new roads.

Ideally, prices under a congestion pricing regime would reflect marginal external costs of congestion — the difference between congestion costs caused and borne by each road-user. Prices would vary over time, across the network, and between vehicle-types. Prices would be highest in the busiest periods and locations, and for the largest vehicles. Zero prices would apply in free-flow conditions.

This "internalisation" of marginal external costs of congestion would induce changes to travel modes, routes and times, reducing traffic at peak times and locations. Delays, stress, fuel and emissions would be cut and transport facilities would be better utilised.

Congestion pricing would ensure "induced traffic" effects did not undermine benefits of new road, public transport, cycling and walking facilities, and information programs on urban transport options. Therefore, it would increase benefits from these initiatives. Meanwhile, these infrastructure and "demand management measures" would help pricing to induce changes in peak-period travel behaviour.

Congestion pricing is primarily a policy instrument for alleviation of congestion in an efficient way. It is very different concept to applying tolls to new roads to recover their full costs or to existing roads to raise money for further investments in urban transport infrastructure or some other purpose. "Unlike cost-recovery tolling of new road segments in dispersed locations, or tolling of existing roads to raise money, congestion pricing would improve efficiency of use of metropolitan road and public transport networks.

Of course, congestion pricing yields revenue as a by-product of its primary function. Moreover, there is reasonable evidence to suggest that under plausible assumptions, a well-designed congestion and road damage pricing system could provide enough revenue to cover full costs of providing and maintaining a metropolitan urban arterial road network.

Parking levies and supply restrictions have sometimes been proposed as a simplified form of congestion pricing. However, these measures would not address the contribution to congestion of through-traffic, commercial vehicles, and the length, route and timing of trips. In contrast, a well- designed congestion pricing system would do so.

Pricing of crowded roads would improve bus fuel economy, trip times, and service reliability. It would increase demand for bus and rail services, allowing higher service-frequency and route-density, which would attract still more passengers. Induced increases in residential and commercial densities around public transport corridors and destinations would reinforce these trends. A cycle of increasing demand for services and declining unit social costs of public transport-use would occur.

Congestion pricing should be accompanied by a restructuring of public transport fares. Congestion pricing raises effective prices of using single-occupancy vehicles in peak times and locations relative to effective prices of travel at other times and routes, and by other transport modes, including public transport. Therefore, continuation of subsidies to public transport to change relative prices of car and public transport-use would be redundant. Moreover, the reduced cost structure of public transport would have to be factored into fares. They should also be adjusted to manage passenger congestion and allow for broader, flatter peak periods. The various effects of congestion pricing should improve public transport's viability, reducing subsidy requirements.

It is extremely important to note that congestion pricing is an essential element of an economically efficient anti-congestion package for Sydney, but it is not sufficient. It must be complemented by increases in road capacity – particularly debottlenecking and by-pass investments – and increases in public transport capacity, but not public transport subsidies. Capacity increases are required for efficient congestion alleviation beyond the short-term future.(Pages viiii-ix)

This conclusion is consistent with the findings of the Grattan Institute report on the return from transport infrastructure spending discussed in Part One (http://m4eis.org/2015/10/29/transport-economist-explains-poor-project-selection-behind-

westconnex-part-1-lyall-kennedy/) of this submission.


(https://m4eis.files.wordpress.com/2015/10/img_2988-2.jpg)

Questions asked at Canada Bay Information Session October 6. 2015

I attended an information session hosted by WDA on 6 October. I raised a number of questions with the WDA Traffic representative, Ian McCarthy. A summary of my questions and the answers provided are outlined below.

Question:
EIS Claims that it will reduce the numbers of long distance vehicles on Parramatta Rd. Where are the stats on travel distances along the corridor?
Answer:
Not included in the EIS. Estimate is that 40-45% of trips are <5km long.

Question:
What are the major origins and destinations for trips along the corridor?
Answer
Not yet done. O/d data to come later.

Question:
Where is the analysis of freight movements on Parramatta Rd?
Answer
Not included in EIS. Updated Business Case (due to be released in next 2 months) will include freight analysis.

Question
Where are the traffic counts of trucks on the corridor?
Answer
Not included in EIS.

Question
What volume of freight by type uses Parramatta Rd?
Answer
Not included in EIS. Possibly in the Air Quality section. Ian agreed to seek figures for me.

Questions
What proportion of freight could be transferred to rail?
Answer
Bureau of Transport Statistics (BTS) report on freight has been provided to WDA but not released. Ian agreed to ask for a copy.

Questions
How much freight (truck movements/tonnage) would be on the corridor if the Enfield and Moorebank intermodal terminals were operating?
Answer
Intermodel terminals have been taken into account in the modelling. (not sure how this has been done. I think it might be from BTS)

Questions
Why is the peak direction to the west in the morning and east in the pm?
Answer
Didn't have a defininative explaination. However, suggested that it may have been because of existing congestion which limits the flow in the peak direction.

Questions
Where is the analysis of LoS for North/South movement at intersections?
Answer

LoS for north/south movements has been done but not included in EIS. LoS at intersections includes all arms.

Questions
What is the likely impact on travel times if tunnel operating at capacity as predicted for 2031?
Answer
Does have impact on travel times, however, not significant. WDA will provide info on how travel times have been calculated.

Questions
Do the traffic figures include or take account of urban growth projections for future residential and employment along the corridor?
Answer
Forecast projections are included – using BTS projections. Urban growth projections have not been included as they were not available. In any case they are over a 30 year period.

Questions
How were the strategic routes for time saving analysis selected? Why was Penrith to Surry Hills identified as one of the routes?
Answer
Not sure why selected.

Questions
Potential queuing in tunnel from congestion on Wattle street?
Answer
Believe there is enough capacity on exit ramps to cater for queuing. There is about 1km from Timbrell Drive intersection and the exit ramp. The exit slip lane starts as one lane and becomes 2 lanes before exiting (I didn't get the actual length of the one and 2 lane sections). Queuing is based on 95 percentile. Challenge is to get the Timbrell Drive intersection below capacity. Think it is currently at about 1.2 [need to check EIS]. It is critical that this intersection is below capacity, due to its impact on traffic exiting the tunnel. Likely to be a condition of approval. Some options being actively considered are making the Mortley Ave to Timbrell drive movement restricted to buses only. Cutting away the "redundant" footpath on adjacent to the new pedestrian footbridge to provide 2 right turn lanes from Timbrell Drive. Extending the slip lane in Wattle street for the left turn into Timbrell Drive.

Ian McCarthy committed to providing me with more detailed responses by Friday 9 October via email. I forwarded the above table to Mr McCarthy on 7 October under the following email:

Hi Ian

It was good chatting with you on Tuesday. I ran into Matt at the Strathfield meeting last night. He told me that you were working on responses to my questions. Attached is what I took out from the discussion. Happy for you to add another column with any additional thoughts/clarifications.

I have also attached a paper prepared for Infrastructure NSW on Congestion Pricing which gives a good explanation of the past strategies to deal with congestion over the decades. Although it is marked "Confidential" I downloaded it from the website. I think you and Matt might be interested in this (if you haven't already read it).

Matt asked to be included in the email in case I have entered your email address incorrectly.

Kind Regards
Lyall Kennedy
Director
Kennedy Consulting Pty Limited
(Phone supplied)

Freight benefits are an integral part of the justification for WestConnex. It should be noted that when WestConnex was first reviewed by Infrastructure Australia it was classified as a freight project. However, there is no analysis of the current freight movements in the corridor or any discussion of alternative options for freight. This is a major weakness of the EIS. WestConnex should not be approved until the community has had an opportunity to see and review all the freight claims and impacts.

Managing Traffic to Stop Queuing in the M4 East Tunnel

Possibly the most concerning aspect of the M4 East proposal from a traffic perspective is the possible congestion on the city west link heading east going back into the M4 tunnel at Wattle Street.

The City West Link was deliberately designed with six sets of traffic lights between Haberfield and the city. This platoons traffic heading towards the Harbour Bridge and reduces congestion on the approach to the bridge.

I'm not an expert on queuing theory, however, my understanding is that every additional vehicle that joins a queue has an exponential impact on delay times.

When you look at what is happening on the north side of the Harbour Bridge, much, if not all, of the travel time savings gained through the Lane Cove tunnel are negated by the extended queue time to get to the bridge.

According to the EIS, by 2031, the M4 East tunnel is at capacity. The intersection at Timbrell Drive is also at capacity. This will result in periods when the queue on Wattle Street will extend into the tunnel. The EIS talks in vague terms about how this might be managed including ramp metering and variable speed limits in the tunnel.

Ramp metering will increase delays in the tunnel as it will restrict the flow of vehicles out of the tunnel onto Wattle Street. Variable speed limits in the tunnel will have a negligible impact on reducing congestion in the tunnel and will also increase the time vehicles spend in the tunnel.

How to lodge a submission http://m4eis.org/2015/09/11/how-to-object/ (http://m4eis.org/2015/09/11/how-to-object/)

A People's M4 EIS

Why Westconnex is not an integrated transport solution

02/11/201502/11/2015 wendybaconblog News & Updates

By Cameron White

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This submission addresses the issue of whether the Westconnex project meets the goal of sustainability. It begins by setting out what the project and the EIS purports to do and then critiques those claims. It finds that Westconnex despite its claims is NOT an integrated transport solution.

The Environmental Impact Statement (EIS) for Westconnex East highlights the unsustainability of current transport infrastructure systems in western and inner-western Sydney. This issue of sustainability is defined in terms of congestion, amenity, health, safety and climate change. The 'Application Report' for the Westconnex East EIS shows **'transport emissions produced from the use of fuels are currently the third fastest growing component of NSW-generated greenhouse gases'.** Transport trends in Sydney and Australia are consistent with these issues. Per capita levels of car use have been in decline since 2004 and demand for public transport and active forms of transport are rapidly increasing (SGS, 2015).

Potentially, the Westconnex East EIS presents a nuanced response to these issues. Rather than a one size fits all, stand alone road project, it argues that the project seeks to target only essential forms of road-use related to freight, commercial and services tasks. Secondly, it describes the project as part of a broader integrated transport solution that includes numerous public transport initiatives designed to service commuters who might otherwise opt for road-transport.

Targeting essential forms of road-use?

- Firstly the EIS illustrates that the Westconnex East project seeks to target essential forms of road-use related to freight, commercial and services tasks. Sydney's freight, commercial and services tasks require distribution of goods and services across the Sydney basin, which relies on more diverse and dispersed point-to-point transport connections that can only be provided by the road network (4.2.3).
- The key customer markets identified for the project include highly dispersed and long distance passenger movements, as well as heavy and light freight and commercial services and businesses whose travel patterns are also greatly dispersed and diverse in nature (4.7)

An integrated transport solution?

Secondly, the Westconnex M4 East EIS highlights the need to view the project as part of a broader integrated transport solution, that includes numerous public transport initiatives. The Westconnex East EIS states:

- The project (as part of WestConnex) is considered to be a key driver for the introduction of a rapid transport solution (i.e. buses or light rail). The introduction of a rapid transit solution would result in more frequent and reliable public transport which would encourage higher patronage of public transport along the M4 and Parramatta Road corridor' (section 3.2).
- As part of a broader integrated transport solution, the project supports a coordinated approach to the management of… all modes of transport including road, rail, bus, ferries, light rail, cycling and walking (4.2.3).
- Demand management measures are [also] seen as complementary initiatives… to the project (4.2.4)

The EIS statement illustrates how Westconnex East relates to several key New South Wales Transport planning documents. These include:

- *Sydney's Rail Future: Modernising Sydney's Trains*(Transport for NSW 2012b) regarding the need to 'improve the Western Rail Line, which runs parallel to the project'.
- *Sydney's Bus Future: Simpler, faster, better bus services* (Transport for NSW 2013a). As the EIS describes it, this document states that investment in the bus network would occur in parallel with WestConnex. WestConnex would assist in introducing a bus rapid transit route along Parramatta Road in the long term, by providing an alternative route for longer distance trips (the project) along the M4 and Parramatta Road corridor. The project would be used generally by people who currently use Parramatta Road for through trips or longer distance trips. The project would include provision for a future bus rapid transit route in the design of the Parramatta Road interchange. Once in place, this bus rapid transit route could be upgraded to light rail, to respond to the increased transport demand associated with population growth along Parramatta Road (Transport for NSW 2013a).

- *Sydney's Light Rail Future: Expanding public transport, revitalising our city* (Transport for NSW 2012c). As the Westconnex East EIS describes it, *Sydney's Light Rail Future* states that in the longer term WestConnex may allow road space to be reallocated on City Road or Parramatta Road to allocate space to public transport in the University of Sydney corridor, the area that services the Universities to the west of Sydney CBD. At present, four light rail routes linking to Parramatta CBD are under investigation. One of these would connect the CBD to Sydney Olympic Park, running parallel to the existing M4 and the project to Burwood/Strathfield.

- *Sydney's Cycling Future* (Transport for NSW 2013b). Westconnex East will 'maintain and, where feasible, improving network connectivity'.

- *Sydney's Walking Future* (Transport for NSW 2013c) Westconnex East would 'improve urban amenity and road safety, contributing to an improved pedestrian environment'.

These two sets of initiatives related to, firstly, the targeting of essential forms of road-use and secondly the development of numerous integrated public transport opportunities, are both integral to the project's capacity to reduce environmental impact. As the EIS for Westconnex M4 East argues, the project will reduce greenhouse gas emissions generated by road users by around 56,800 tonnes of carbon dioxide equivalent in 2021 and around 45,400 tonnes of carbon dioxide equivalent in 2031. These reductions in greenhouse gas emissions are projected to take place in spite of the projected growth of Sydney's population. Western Sydney alone is expecting an increase in population of up to 900,000 people by 2031. An increase in transport demand from and to Western Sydney will continue to rise in parallel (Vol. 1a, p. ii).

Problems with the EIS

The problem with the Westconnex East EIS, and the reason that the project should be rejected at this time, is its inadequate capacity to explain and account for the impact of these initiatives related to, firstly, the targeting of essential forms of road-use and, secondly, the numerous public transport initiatives that form part of the broader, integrated character of the project. The inadequate capacity of the project to explain and account for the impact of these initiatives is especially apparent in relation to the public transport initiatives discussed. **These public transport initiatives are discussed only as future possibilities rather than as fundamental to the project.**

Thus, for example, while the EIS describes the project as a 'key driver' for the introduction of a rapid transport solution' and argues that it 'supports a coordinated approach to the management of freight and passenger movements, as well as all modes of transport including road, rail, bus, ferries, light rail, cycling and walking', **there is no attempt to explain what qualifiers such as 'key driver' and 'support' actually mean.**

Other attempts to explain the project as a 'broader integrated transport solution' rather than a stand-alone road project are similarly inadequate. The EIS argues that investment in the bus network would occur 'in parallel' with WestConnex; that 'once in place, this bus rapid transit

route could be upgraded to light rail'; WestConnex 'may' allow road space to be reallocated on City Road or Parramatta Road to allocate space to public transport in the University of Sydney corridor; four light rail routes linking to Parramatta CBD are 'under investigation', and so on.

Stand-alone Roads project not integrated solution

Rather than seeking to mitigate environmental impact, the Westconnex East project will proceed as a stand-alone roads project that will maximise environmental impact. Public transport alternatives will remain under-funded and under-developed and slower and less convenient than road transport. This in turn will lead to increased levels of car-traffic that will congest Westconnex east more rapidly than would otherwise be the case, increase emissions, reduce amenity create poor health outcomes and so on. These broader phenomena can be encapsulated using the term 'induced traffic'.

Likely overestimation of demand for road transport services

Secondly, the inadequate capacity of the Westconnex East EIS to explain and account for the impact of these initiatives means that the project will over-estimate demand for its road transport services. This is an important consideration. In Australia and globally, numerous recent large-scale road construction projects have been plagued by exaggerated expectations about demand. As a result, funding and resources have been allocated to unviable road construction projects. Both Sydney's Cross City Tunnel and Lane Cove Tunnel drove their initial operators into receivership. The developers of Brisbane's Clem Jones Tunnel Faired no better. The issue is not just limited to Australia. Of the 15.89 million journeys expected be taken between London and Paris during the Channel Tunnel's first year of operation, a mere 18% of those actually occurred.

(https://m4eis.files.wordpress.com/2015/11/img_3108-1.jpg)

Trucks on the existing M5

Problems with Australia's record in large-scale road construction

The credibility of Australia's ongoing investment in large-scale road construction projects has been challenged in recent years at the highest levels.
Recent Australian Productivity Commission and Treasury Inquiries suggest: 'Decisions are often based on inadequate and non-transparent information and assessment of the costs and

benefits of road projects'; 'Roads are the least reformed of all infrastructure sectors, with institutional arrangements around funding and provision remaining much the same as they were 20 years ago' (Harper et al 2015; Productivity Commission 2014).

An 'Australian Infrastructure Audit' by the independent federal advisory body Infrastructure Australia highlighted the inconsistent 'use and transparent reporting of cost benefit analyses'. It argued that, while 'market reforms have significantly improved the efficiency and competitiveness of the energy sector and more recently the telecommunications sector… [there is] a pressing need to commence the task of moving towards alternative institutional and governance arrangements in the roads sector' (Infrastructure Australia 2015).

Conclusion

The evidence provided by the EIS for Westconnex East regarding Environmental Impact management and minimisation is vague, and unsubstantiated. These inadequacies render the project vulnerable to issues related to induced traffic on the one hand and the exaggeration of demand on the other hand. These inadequacies reflect well-documented, widely recognised trends in the Australian roads sector over recent years. For these reasons the Westconnex East project needs to be fundamentally reconsidered with a view to explaining how and why the project functions as an integrated urban transport solution.

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A People's M4 EIS

EIS admits deterioration in Parramatta Road traffic after M4 East

15/10/201525/10/2015 wendybaconblog Commentaries & Objections Canterbury Rd, Ecotransit Sydney, Failed motorways, Level of Service F, Liverpool Rd, Parramatta Rd., Westconnex 2021, Westconnex 2031

Nearly all other claims in the EIS depend for their validity of the traffic analysis. For this reason, the analysis of the traffic section is crucial. This article by the public transport advocacy group Ecotransit Sydney (http://ecotransit-votes.info/?page_id=13) is republished with their permission.

Twenty years of failed promises

Twenty years ago the Greiner and Fahey Governments claimed construction of the M4 missing link and the M5 would significantly cut travel times and reduce congestion. Opponents said the motorways would only generate more traffic, eroding any short term improvements while pulling people off public transport and starving the rail and other pubic transport networks of funds for further development.

Today, Sydney's road traffic is worse than ever and in some inner urban areas where the motorways converge, motorists are beginning to experience **'super-jams'** — delays where people can get caught in traffic for hours.

M4 Widening

The EISs for the M4 widening and M4 East don't hide the fact that a similar future is waiting for everyone if these projects go ahead. A close look at the numbers shows that **congestion is anticipated to get worse in many areas and traffic volumes on some sections of Parramatta Road are anticipated to be higher than if WestConnex was not built**.

The spin used by the WestConnex Delivery Authority to justify the projects is that while the motorways won't generate any significant improvements, the next motorway that connects the M4 and M5, will. The predictions are that travel times will improve on most routes from around 6 to 8 minutes in the morning peak by 2021 to an earth shattering 10 to 12 by 2031 if the full $15.4 billion WestConnex scheme is built.

With about eight different motorway projects under discussion in Sydney and an embarrassing recent history of legal proceedings over traffic predictions for tollways, coupled with little in the way of public transport for western Sydney, the community can be easily forgiven for feeling this situation is getting ridiculous and out of control.

Let's start with the M4 Widening. The EIS states that by 2021 with minimal network changes at a point near Duck Creek, Parramatta Road will be carrying 43,990 vehicles on average per day, per year. With the M4 Widening it will carry 59,370 — that's 35 per cent more — because with a toll in place, some traffic will divert to using non-tolled roads. Victoria Road to the north is estimated to carry a daily average of 70,250 per day, per year with the M4 Widening instead of 60,440 — that's 16 per cent more — also because of toll diversion. By 2031 with the full WestConnex scheme in place, volumes will rise to 62,490 for Parramatta Road and 75,770 for Victoria Road. If WestConnex isn't built, the 2031 estimates are 52,030 for Parramatta Road and 68,250 for Victoria Road.

M4East

Moving on to the M4 East, at points along Parramatta, Liverpool, Punchbowl and Canterbury roads, the story is much the same. Traffic volumes on local roads are higher with the M4 East motorway and full WestConnex motorway scheme in place than they would be without them. By 2021, average weekday traffic on Parramatta Road would be just over 29,000 in the 'do minimum' case but 42,000 in the 'do something' case. For Liverpool, Punchbowl and Canterbury Roads, volumes stay pretty much where they are with no real improvements. For 2031, the estimated traffic volumes, are all higher or much the same , with the full WestConnex scheme in place with the exception of Liverpool Road which would see just 2,000 less vehicles on average on a weekday.

These results don't sit well with the claims from politicians that more motorway building will take traffic off local roads. One of the reasons why traffic volumes will remain high on many sections of Parramatta Road and other local arterial roads is because the motorway will unleash another round of induced traffic growth and significant sections of the network are needed to act as feeder routes to the M4. When taken as a whole — traffic on the motorways and local arterial roads — the volumes are always higher with the motorways in place. Results from the intersection analyses in the EISs aren't much better. Using a traffic engineering standard that measures congestion on a scale from A to F, where F represents a breakdown in the flow of traffic so that queuing and extensive delays result, of the 29 intersections covered in the EIS for the M4 Widening (Church Street, Granville to Shaftesbury Road, Burwood), 15 will be operating at Level of Service F or experience a drop in service levels during the morning

peak, 7 will be much the same, while Level of Service is estimated to improve on only 7. With the full WestConnex in place 16 intersections will be at Level of Service F or worse, 4 will be the same and 9 are anticipated to improve. The results are similar for the evening peak period.

Closer to the city, an inspection of the numbers in the EIS for the M4 East for 2021 tells a similar story. Of the 39 intersections analysed (Homebush Bay Drive to Crystal Street), 14 are anticipated to be operating at Level of Service F or experience worse congestion, 11 will be much the same, while 14 are estimated to improve during the morning peak period. Results for the evening peak are similar. **With the full WestConnex scheme in place by 2031, 16 are anticipated to be operating at Level of Service F or experience worse congestion**, 10 will be much the same and 15 are estimated to improve. Results are similar for the evening peak.

25 Parramatta Road intersections would continue with extremely poor level of service

Frighteningly, of the total 68 intersections investigated along the stretch of Parramatta Road, **25 are anticipated to be operating at Level of Service F**. Add the 40,000 additional apartments that Urban Growth wants to build in the Parramatta Road corridor that have not been included in the traffic model and this number will increase so that conditions become even worse than the forlorn outcomes reported in the EISs. Keep in mind these documents are meant to be sales-pitches for the motorway. If these underwhelming results are the best the WestConnex Delivery Authority has been able to produce amongst its general obfuscation of the truth, the reality is likely to be far worse and certainly not worth spending $15.4 billion on. This is undoubtedly why the government will not release the business case for the motorways.