Formal submission to M4 East WestConnex Project, SSI 6307

This submission is by Mr Chris O'Rourke, of Bathurst NSW

I strongly object to the proposed M4 East, and to the WestConnex project in its present state.

I object to claims made in the EIS and in other documents associated with the Westconnex project that traffic congestion will be reduced.

I object to claims made in the EIS that the M4 East / WestConnex will result in less pollution due to free-flowing traffic.

I object to the impact the M4 East / WestConnex will have on our environment and biodiversity.

I object to the impact the M4 East / WestConnex will have on people and communities.

I object to the large-scale destruction of key Sydney heritage sites for the M4 East / Westconnex.

I object to the very large amount of public funds that will be wasted if this project goes ahead.

I strongly object to the processes involved in this project: the government's attempts to keep secret documents associated with the Westconnex project[1] and to the general lack of transparency associated with the M4 East project, not the least of which is the lack of time made available for replies to the EIS!

Contents

[1] http://www.smh.com.au/nsw/government-bid-to-keep-westconnex-documents-secret-20140724-zwf70.html

General Observations on the EIS

One of the major faults of this proposal is that alternatives were not considered. This is revealed in the section called Alternatives (part 1A, p. iv) which indicates that improvements in road and public transport / rail freight were not canvassed.

Further on *p.iv,* the EIS notes that "the public transport and rail freight improvements and demand management alternatives alone would not address the diverse and dispersed point-to-point transport connections that can only be provided by the road network".

However no evidence is presented to support this conclusion.

Alternatives are dismissed out of hand.

This response to the EIS cites extensive evidence to the contrary: that improvements in public transport, and road demand management combined with improved rail (passenger and freight) will be a much more cost effective solution to congestion than the M4 East (and the WestConnex as a whole) in its current proposed form.

The EIS does not provide any detailed evidence to support the contention that "daily two-way traffic volumes on Parramatta Road are predicted to decrease by about 53 per cent" (p. vii).

The EIS states that "Modelling outputs suggest that the project would create average travel time savings of between six and eight minutes in 2021" (p. vii)

This is a minimal time saving given the proposed total cost of the whole M4 East / Westconnex project, which has been estimated at $15billion.

The EIS also states that "a number of intersections that are already congested would continue to experience delays" (page vii). This does not achieve the objective to

> "Relieve road congestion so as to improve the speed, reliability and safety of travel in the M4 corridor, including parallel arterial roads"

Traffic will increase on Parramatta Rd at Homebush, along Lyons Rd, Dobroyd Parade, Parramatta Rd and New Canterbury Rd.

The proposed tunnel linking the M4 and M5 in Stage 3 of the project will result in very high traffic densities on local roads.

Lack of a Business Case and Lack of Transparency

The project does not have a published business case. The level of fiscal risk is too high to justify its going ahead. Other similar urban motorways contructed in Australia in recent times have been financial failures: Cross City Tunnel, Lane Cove Tunnel and Clem 7! It is essential that a business case, to justify the expenditure of billions of dollars worth of taxpayers' funds, is published.

This lack of a business case is indicative of the lack of transparency surrounding the whole M4 East / WestConnex project.

In 2014 the NSW Auditor-General noted that there were 'shortcomings in the level of independent assurance provided to the Government'. According to the Government's framework, an additional 4 'Gateway' reviews should have been conducted.[2]

The NSW Auditor-General noted fundamental conflicts of interests in that the WestConnex steering committees and boards also provided assurances to Government.

The Sydney Motorway Corporation (SMC) is a public/private company which has oversight of WestConnex. Information about SMC cannot be gain through GIPA (Freedom of Information) requests, this hiding it from public scrutiny.

Effects on suburbs like Haberfield

The proposal is "not be sympathetic to the existing built environment or landscape character of the consevation area"

Based on the preferred design, full and partial acquisition of 182 properties and 10 road reserves would be required. (p.ix). This will result in significant dispuption to the residents of the area. Around 400 homes and businesses are subject to compulsory acquisition by WestConnex for the M4 East (and proposed extension of the M5) even before the projects are approved and a business case released.

The design of the interchanges at Concord Road and Frederick / Wattle Street have a very large footprint (Interchanges for the Eastern Distributor have a much smaller footprint). This has resulted in the unnecessary demolition of homes.

The project will have a detrimental impact on feeder roads, and surrounding housing despite what the report says: "would result in a reduction of traffic along Parramatta Road" (page 3-5).

The M4 East EIS notes that 53 properties within the Haberfield Conservation Area will be demolished, "permanently (removing) a substantial portion of the built heritage items fronting Wattle Street." 29 of these are assessed as 'contributory to the values of the Conservation Area'.

The constant daily movement of large transport trucks severely degrades the urban environment, including those with heritage significance.
The construction of urban motorways like the M4 (East) / Westconnex is likely to have a large impact on one of the few areas of Sydney which are accessible and liveable, that is, the Inner West.

[2] New South Wales Auditor-General's Report Performance Audit, Auditor General December 2014, p. 3

The M4 East / Westconnex will not fulfill most of its 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

This objective may be achieved in part.

Relieve road congestion so as to improve the speed, reliability and safety of travel in the M4 corridor, including parallel arterial roads

This objective will only be achieved in the short term. Within a short time congestion will return to the M4 corridor. This has been the case in most other projects of this type.
This is the main objection of this submission.

Cater for the diverse travel demands along these corridors that are best met by road infrastructure

This objective will only be achieved in part and in the short term. For example by tradespeople, businesses making deliveries where multiple trips and locations need to be made and accessed on a daily basis. It will not cater for the needs of point to point commuters. Any gains made tradespeople and the like will be in the short term as within a short time congestion will return to the M4 corridor.

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

This objective will not be achieved except for some minor urban revitalisation. Liveability will deteriorate through increased noise and particle pollution as a result of increased traffic on surface parts of the corridor and on feeder roads.
This project makes no provision whatever for public transport.
This project makes no provision whatever for active transport.

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

This objective may be achieved in part. This response does not address this issue due to lack of time allowed for responses.

Enhance movements across the Parramatta Road corridor which are currently restricted

This objective may be achieved in part. This response does not address this issue due to lack of time allowed for responses.

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

This objective may be achieved in part. This response does not address this issue

due to lack of time allowed for responses.

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

This objective may be achieved in part. This response does not address this issue due to lack of time allowed for responses.

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 objective is presented as a fait accompli. It assumes that the M4 East / Westconnex project will go ahead as proposed. The achievement of this objective will have a negative impact on the surrounding environment as noted above.

Protect natural and cultural resources and enhance the environment.

There is little evidence in the EIS to support the view that this objective will be achieved. Large parts of Haberfield and open spaces will be lost if this project goes ahead.

Evidence that the M4 East / Westconnex will facilitate sustained decongestion

There is no evidence, in the public domain, which supports the contention that the M4 East / Westconnex, as proposed, will result in a sustained reduction in congestion. Experience both in Australia and overseas shows that there is a short term alleviation of congestion but that congestion soon increases, requiring more expensive road construction.

Evidence that the M4 East / Westconnex will NOT facilitate sustained decongestion.

There is a considerable body of evidence to support the contention that the M4 East / Westconnex, as proposed, will not facilitate sustained decongestion. An economic study has found that investing in rail is the most cost effective transport solution in cities. Rail solutions are up to 60% cheaper than road in reducing congestion in urban environments.[3]

The Downs-Thompson Paradox is evidence that urban roads do not reduce congestion (see further detail in appendix)[4]

---

[3] "Rail up to 60% cheaper than road in reducing congestion" http://www.tandlnews.com.au/2014/01/30/article/rail-60-cheaper-road-reducing-congestion-ara/

[4] http://sydney.edu.au/business/__data/assets/pdf_file/0020/130583/laurentb-presentation.pdf

Induced Demand

There is a considerable body of evidence to support the contention that the WestConnex will lead to an increase in traffic in the Parramatta Road corridor: induced demand.

The phenomenon of induced traffic has been researched for more than 60 years and is now accepted among transport researchers that induced demand has a significant effect on road capacity. Neither the M4 East EIS nor the documents associated with Westconnex offer any modelling. This is significant omission in regard to the environmental impacts and the economic viability of this project. This lack of modelling may have exaggerated claims as to lower travel time savings, and to the extent of environmental impacts. Real traffic measures on the M4 West when it was opened corroborate this view.[5]

It is widely documented that large urban motorway projects like the M4 East / Westconnex project do **not** achieve the congestion problems that they were designed to solve. It generates more traffic: "Generated traffic has three implications for transport planning. First, it **reduces the congestion reduction benefits** of road capacity expansion. Second, it **increases many external costs**. Third, it provides relatively **small user benefits** because it consists of vehicle travel that consumers are most willing to forego when their costs increase."[6]

The detail of how a relatively high lower benefit-cost ratio has not been included and induced traffic has been ignored. This has resulted in what appears to be an exaggerated level of economic benefit and has underestimated its negative effects. The omission of the impact of induced traffic has not been included and as a result there will be an over allocation of public money on road construction and correspondingly less focus on other ways of dealing with congestion and environmental problems in urban areas.

There is evidence that removing urban motorways like Westconnex can actually reverse has actually reduce demand and reduce congestion. The Embarcadero Freeway was one such example

> "The San Francisco Freeways were a disaster in planning, engineering and design. The plans were disastrous because they intended to solve one problem without considering what new problems they might create. The only costs recognized in the projects were that of demolishing houses and pouring concrete.
>
> The Embarcadero Freeway was supposed to move cars from the City either east across the Bay Bridge or south along 101. Instead, it simply funneled traffic into bottlenecks in a way that degraded traffic, while at the same time inducing more people to drive when other options were available. Traffic actually improved after it was demolished."[7]

---

and http://www.econ.ucsb.edu/~tedb/Courses/Ec1F07/traffic.pdf

[5] Before and after opening of the M4 Motorway (West), Zeibots, M. UTS 2007, p.14.

[6] "Generated Traffic and Induced Travel Implications for Transport Planning" 2010 Todd Litman, Victoria Transport Policy Institute.

[7] http://www.roughlydrafted.com/RD/Urban/5A3D5EE6-1954-4106-B32F-D73B523643C7.html

Other examples include the Cheonggyecheon River Urban Design in Seoul which replaced another congested urban motorway.

Reduction in Driving

It is not appropriate to be investing in large urban motorways when car use in large metropolitan areas like Sydney has shown a sustained decrease over many years:

> "The phenomenon of peak car use appears to have set in to the cities of the developed world. It seems to be due to a combination of: growth in transit and ready urbanisation which combined to cause exponentially time to come I use; the reduction of car are used by older people in cities in cities and amongst younger people due to the emerging culture of urbanism; and the growth in the price of fuel which underlies all of the above factors. The implications for Traffic engineeres, planners, financiers and economists is a paradigm shift in their professional understanding of what makes a good city in the twenty first century. It does however point to the demise of automobile dependence."[8]

Demand Management

Section 4.2.4 of the EIS dismisses demand management as a tool for reducing congestion without supporting evidence. Existing research indicates the opposite, that the pricing of travel is effective in reducing congestion:

> "price-related travel demand management interventions, in particular fuel pricing and parking policy were most effective in reducing car and increasing public transport use compared to landuse change or infrastructure investment"[9]

> "Where applied, demand management measures such as 'access control', 'parking control' and 'road or congestion pricing' have generally proven to be quite effective. Well known examples include the schemes developed for London, Stockholm, Rome and Singapore". [10]

Unless supported by demand management and new capacity in public transport, building new urban motorways induces more car and truck journeys.

A recent publication by the road user advocacy group the NRMA reminded its membership that a small reduction in road use can, can have a significant influence on congestion:

---

[8] 'Peak Car Use': Understanding the Demise of Automobile Dependence, Newman and Kenworthy, Curtin University Sustainability Policy Institute

[9] "Public Transport or Private Vehicle: Factors That Impact on Mode Choice"
Grace Corpuz, 30th Australasian Transport Research Forum.

[10] http://www.transportstrategygroup.com/page/traffic_congestion.html (accessed 15 September 2015).

"School holidays are an obvious example of how traffic can suddenly start flowing in the AM and PM peaks, due to a reduction of between 5 and 10% (depending on the holiday) in the volume of traffic."[11]

Public Transport

The role to be played by public transport was dismissed out of hand in the EIS.

"Investing in public transport and freight rail improvements in isolation, without any improvement to the road network"

The EIS does not consider how private road transport and public transport can work together to reduce congestion and improve productivity.

Road and rail solutions, public and private solutionss should be considered in tandem. The M4 (East) / Westconnex ONLY considers road.

The role of active transport has also not been considered. Transport planners should be asking why people don't walk in Australian cities – a properly planned network of roads, buses, light / heavy rail should be planned so that people can walk (or drive if necessary) to the mode of transport that best suits their needs and the needs of the community. This will require a rethinking of how we live and a realisation that need to reinvent suburbia!

The EIS does not allow choice. It assumes that cars will be the answer. It is based on the assumption that Sydney has been designed and will continue to be designed only for the car and truck.

Car Dependeny

The M4 (East) / Westconnex is designed for those who have cars and it will encorage urban sprawl. This, combined with the extremely high cost of housing in Sydney, will force people to live in the outer suburbs. The is likely to lead to deteorating health outcomes: increased obesity, diabetes, and heart disease due in part to a transport system slanted towards people sitting in cars for extended periods.

Greater reliance on road transport and further urban sprawl will increase the incidence of mental health problems. There will be reduced opportunities for regular exercise, an important anti-depressant, reduced quality of life for families, reduced opportunities for interpersonal contact which will exacerbate social isolation. This will result from the increasingly isolated nature of suburban homes which is accentuated when there is a dependancy on car transportation. Social capital has also been adversely affected: the break down of social networks, and the loss of the sense of community.

This project is locking Sydney in to further dependency on roads. This is unenconomic as "Cities which are car dependent have seen 12 and 13 per cent of their wealth going

[11] "DECONGESTION 10 ways to relieve Sydney's traffic headache" NRMA Motoring & Services, May 2011, p.25

on transport. The cities which have good public transport systems have about 8 per cent and wealthy Asian cities about 5 per cent."[12]

Costs, Benefits and Overruns

The M4 East / WestConnex project demonstrates all of the problems that have been associated with many large infrastructure projects in recent years, namely that the benefits are overstated and the costs are understated:

> "Major infrastructure projects generally have the following characteristics.
>
> - Such projects are inherently risky owing to long planning horizons and complex inter- faces. Technology and design are often non-standard. Decision-making, planning, and management are typically multi-actor processes with conflicting interests.
>
> - Often there is 'lock in' or 'capture' of a certain project concept at an early stage, leaving analysis of alternatives weak or absent. The project scope or ambition level will typically change significantly over time. Statistical evidence shows that such unplanned events are often unaccounted for, leaving budget and time contingencies sorely inadequate.
>
> - As a consequence, misinformation about costs, benefits, and risks is the norm through-out project development and decision-making, including in the business case. The result is cost overruns and/or benefit shortfalls during project implementation."[13]

There is no evidence in the EIS that the fiscal consequences have been acknowledged. There has been no examination of what other cities are doing or have done to alleviate congestion. These cities have sought integrated transport solutions:Denver Dublin, London (specifically the Crossrail project), Madrid, Portland (Oregon), Vancouver and Zurich.

Not one of them is cited in the EIS.

---

[12] Why we're reaching our limits as a one-hour city. Peter Newman, Sydney Morning Herald. April 26, 2004

[13] "Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it", Bent Flyvbjerg, Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367

Appendix A - References to Induced Demand

Generated Traffic and Induced Travel: Implications for Transport Planning Todd Litman, 2010 Victoria Transport Policy Institute http://www.low.ph/transit/sdeis/Appendix%20P%20%20Generated%20Traffic.pdf

Research indicates that generated traffic often fills a significant portion of capacity added to congested urban road. Generated traffic has three implications for transport planning. First, it reduces the congestion reduction benefits of road capacity expansion. Second, it increases many external costs. Third, it provides relatively small user benefits because it consists of vehicle travel that consumers are most willing to forego when their costs increase.

Literature review of induced travel by Graham Currie and Alexa Delbosc Institute of Transport Studies Department of Civil Engineering Monash University August 2010 http://sydney.edu.au/business/__data/assets/pdf_file/0004/75181/itls-wp-10-16.pdf

The scope of research on induced travel is no longer concerned with whether increasing capacity increases travel, but how much increasing capacity increases travel (Cervero 2003). p.4

A common argument is that increasing road capacity is justified for the sake of economic development. But research suggests that new transport projects do not have a major impact on economic growth where cities already have well-developed infrastructure (Boarnet 1996; UK Standing Advisory Committee for Trunk Road Investment 1997; Center for Neighborhood Technology 1999). p.4

Two impacts that have received some attention are the impact of road improvements on development patterns (particularly urban sprawl) and reduction in public transport use. p. 8

Some of the evidence suggests the impacts of induced travel could remove all benefits of new road capacity in the long term. While evidence of this type is not the norm it has been demonstrated in 3 of the 13 long term studies identified. p.11

Demand for Public Transport in Germany and the USA: An Analysis of Rider Characteristics by RALPH BUEHLER and JOHN PUCHER Transport Reviews, Vol. 32, No. 5, 541–567, September 2012

The success of German public transport is due to a coordinated package of mutually supportive policies that include the following: (1) more and better service, (2) attractive fares and convenient ticketing, (3) full multimodal and regional integration, (4) high taxes and restrictions on car use, and (5) land-use policies that promote compact, mixed-use developments.

Auditor hits $2b road project http://www.theage.com.au/victoria/auditor-hits-2b-road-project-20110601-1fgpe.html "A SCATHING critique of one of Victoria's most expensive road projects, the Frankston bypass, has questioned whether it should be

being built at all. The promised economic benefits of the multibillion-dollar freeway may have been overstated and its potential negative impacts ignored, according to a report by the state Auditor-General, Des Pearson".

Literature review of induced travel by Graham Currie and Alexa Delbosc Institute of Transport Studies Department of Civil Engineering Monash University August 2010, INSTITUTE of TRANSPORT and LOGISTICS STUDIES http://sydney.edu.au/business/__data/assets/pdf_file/0004/75181/itls-wp-10-16.pdf

"Induced travel research suggests that the benefits of clearways may not be as simple or as large as they may immediately appear. Increased road capacity from clearways is likely to improve traffic and public transport travel times in the short term; however road capacity benefits may not last into the long term."

Space, time, economics and asphalt An investigation of induced traffic growth caused by urban motorway expansion and the implications it has for the sustainability of cities PH.D Thesis by Michelle E Zeibots 2007
http://epress.lib.uts.edu.au/dspace/handle/2100/609

"While it is not within the scope of this thesis to make specific recommendations as to what should be done in relation to transport decision-making systems, it is appropriate to state that unless the system is able to sincerely embrace sustainability as a goal, then decisions are unlikely to realise sustainable outcomes. ...

Where outcomes like induced traffic growth are not discussed, or remain unexamined, because their implications may not be in the best interests of special interest groups within society, the long-term sustainability of urban transport systems is jeopardised."

Appendix B - References to decreasing car use.

Data gathered by Bureau of Infrastructure,Transport and Regional Economics "Traffic Growth in Australia Report 127"- confirms the trend to decreasing car use. It shows that saturation level has been reached and that while aggregate usage will increase slightly this will be due to a natural increase in population.
"The main results of the study are models of vkt per capita as a function of this saturating effect over time, of petrol prices, and of fluctuations in the economy. Each state/territory and capital city is different, but the patterns of the models are amazingly similar.The models explain the common finding around the world of falling growth rates in aggregate traffic levels over the past four decades – a falling growth rate in population has been being reinforced by a declining rate of growth in traffic per person. Lately, there has been a significant effect from the global financial crisis in lowering traffic levels per capita." (p.71)

See also "Why are young people driving less? Trends in licence-holding and travel behaviour" -
" ... our transport modelling and transport planning needs to begin to adjust to this new paradigm of lower levels of licence-holding by young people. The increasing importance of public transport access to jobs, services, and local shopping opportunities are clear, and are already reflected in the NSW State Plan priority of improving public transport access to key major centres in the metropolitan region. There is also an opportunity for cycling and walking to play a much larger role in the transport task for this age group."

See also "America's love affair with the motor car is running on empty".-
"Transportation policy has been slow to respond to this change in the way we prefer to travel and, at times, actively resists the shift in customer demand for cheaper, cleaner, on-demand travel choices. Forecasters continue to predict 1.6% annual increases in vehicular travel demand as far as the eye can see – and are designing road and highway expansions to match."

See also "The road less travelled: Car use is peaking in the rich world. Governments should take advantage of that" -

See also "Young People Are Driving Less—And Not Just Because They're Broke" -

Zipcar consistently finds a strong Millennial desire to avoid driving. The National Association of Realtors found that six in ten of surveyed Americans preferred walkable neighborhoods to big houses, with young people leading the way. In 2011, the American Public Transportation Association found that ridership continued to climb, despite draconian budget cuts forcing riders to spend more for less.

See also "Car-share cuts need for street parking"-
Car share schemes in the City of Sydney save residents and the community more than $20 million a year, according to a study commissioned by the council.
The study anticipates rapid growth for the schemes in Sydney. On past trends, as soon as parking bays have been assigned to car-share schemes more drivers have signed up to use them.

Appendix C – Rail and Public Transport

"Public Transport Investment , The Value of Action versus the Cost of Inaction"

Synergies Economic Consulting Pty Ltd, sponsored by ARA, January 2014

Key findings

- The most effective way to address this problem is to invest in public transport.
- investment in passenger rail – both light and heavy rail – offers the best value for money solution … rail requires 57% and 38% less in investment than road (respectively) to achieve the same reduction in congestion.
- improving social inclusion for all people within the community,
- improving safety… Deloitte Access Economics found that the costs of road crashes is about 965% more than the crash costs from rail
- reducing emissions
- stimulating growth and development along the rail corridor and rejuvenating local communities.
- Rail offers significant advantages over roads in terms of value for money from urban investments.
- To meet the current and future challenges, investment in public transport - especially rail - is the most effective way of reducing congestion to efficient levels.
- In addition, apart from alleviating congestion rail offers a number of other important advantages over road investment, with our analysis showing that rail investment would take around 127,000 cars off the road in Brisbane and 163,000 cars in Perth in each hour of the peak. These other advantages include:
    - improving social inclusion for all people within the community, including people with disabilities, those who cannot afford a car and those who would prefer not to own a car (noting the recent trend away from car ownership amongst the younger population);
    - improving safety. For example, a study by Deloitte Access Economics found that the costs of road crashes is about 965% more than the crash costs from rail
- Alleviating congestion also gives people more time. Currently, commuters in Brisbane and Perth forgo up to 11 million and 14 million hours per year of time respectively being delayed in traffic, which could be applied to work (increasing productivity) or leisure (increasing personal well-being, reducing stress and improving family cohesion). The average commuter in both cities gains around 73 hours per year – or nearly an additional two weeks annual leave each year.

Most effective ways to manage traffic congestion

This leaves congestion pricing as the main candidate tool to curb traffic congestion.

The Fundamental Law of Road Congestion: Evidence from US cities
Gilles Duranton and Matthew A. Turner *University of Toronto*, 2010