

**Submission
No 126**

**INQUIRY INTO IMPACT OF THE WESTERN HARBOUR
TUNNEL AND BEACHES LINK**

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Please see attached submission. In conclusion

In the longer term, the Western Harbour Tunnel will do little to ease road congestion in Sydney. Regional New South Wales has a large infrastructure deficit and this will require significant funding to remedy. At present, Sydney with its motorways, metro and light rail is getting more than its fair share of New South Wales Infrastructure funding.

It is recommended that projects such as the Western Harbour Tunnel are put on hold until long overdue regional rail and road projects are delivered, and road pricing in Sydney is given a fair trial.

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Inquiry into the impact of the Western Harbour Tunnel and Beaches Link

Submission to the Public Works Committee of the Legislative Council

from Philip Laird, University of Wollongong, June 2021

The submission shall draw on ongoing research conducted at the University of Wollongong. However, the submission does not necessarily reflect the views the University.

This submission updates and expands on one made in early 2020 to the NSW Department of Planning. A summary of this 2020 submission and other issues is given in the attached article from the June 2020 issue of *Railway Digest* ***Sydney and NSW needs more investment in rail than yet another motorway***. This article noted the proposal received a large number of objections when the EIS was placed on exhibition in early 2020, along with the objections of the City of Sydney, Inner West Council and Willoughby City Council.

The proposed project includes a new crossing of Sydney Harbour involving twin motorway tunnels connecting the M4-M5 Link at Rozelle and the Warringah Freeway at North Sydney (the Western Harbour Tunnel).

This submission shall mainly address the following terms of reference:

- (a) the adequacy of the business case for the project, including the cost benefits ratio,
- (b) the adequacy of the consideration of alternative options,
- (h) whether the NSW Government should publish the base-case financial model and benefit cost ratio for the for the project and its component parts,
- (i) whether the project is subject to the appropriate levels of transparency and accountability that would be expected of a project delivered by a public sector body,
- (j) the impact on the environment, including marine ecosystems, ... and
- (m) any other related matter.

1. Infrastructure Australia 2021 finding

In 2021, Infrastructure Australia added the New South Wales Government's proposal for a second Sydney Harbour tunnel as a **Priority Project** on the [Infrastructure Priority List](#).

Infrastructure Australia noted that the proposal for a **Western Harbour**

Tunnel and Warringah Freeway Upgrade aims to ease congestion on one of the Sydney’s busiest growth corridors. Our evaluation confirmed that delivering this proposal is a national priority.

The proposal involves constructing a 6.5 km twin three-lane motorway from the Rozelle Interchange to the Warringah Freeway near North Sydney. It also includes an upgrade of the Warringah Freeway between the northern end of the Sydney Harbour Bridge and Willoughby Road.

The Sydney Harbour Bridge and Sydney Harbour Tunnel are critical transport links – carrying more than 250,000 vehicles each weekday as people travel into the CBD and through to other parts of the city. By 2031, this is expected to increase to 300,000 as Sydney’s population grows.

Without an additional harbour crossing, we expect additional traffic and delays around the Sydney CBD, impacting community access to schools, work and essential services.

Our 2019 [Australian Infrastructure Audit](#) found that congestion on this part of the road network could cost the NSW economy more than \$780,000 per day by 2031.

2. There are other material factors to consider

Firstly, where is the business case for the proposal ?

Secondly, inadequate consideration has been given to alternative options. These include the provision of better public transport, and road pricing reform.

In regards to public transport, the attention given to strategic alternatives to this proposal (in Chapter 4 of the EIS) is considered as totally inadequate. By way of example, page 4.3 notes, inter alia, “The origins of the Western Harbour Tunnel and Beaches Link program of works extend back to the 1930s when the need for additional cross–Sydney Harbour transport capacity was identified as part of the development of the Warringah Transport Corridor.”

However, nowhere in this Chapter of the EIS is reference made to the Bradfield proposal for further rail development to the northern beaches.

3. Road pricing reform

It is here that the EIS is most deficient. This question has been raised

many times before, and deserves a better response than given in Chapter 4 of the EIS with the doubtful statement that “To have a major impact on road traffic, travel demand management measures would require considerable changes in social attitudes, travel behaviour and government policy and can take many years to achieve.”

Tell that to the planners who introduced congestion charging in London and Singapore, and other cities. Or who are considering it for Auckland.

It is respectfully suggested that much more attention is needed to true ‘user pays’ and ‘polluter pays’ pricing for roads. The issues re transport pricing were addressed in 2003 in an official report on Sustainable Transport. However, the recommendations on fares and road pricing in this report by Mr Tom Parry were rejected by the government of the day. The present government would do well to revisit the 2003 Parry report.

Instead, the apparently easier option of building more roads is being pursued. It is wishful thinking that road congestion in Sydney can be reduced by building more roads. The overseas experience is that a more balanced strategy, including rail, is needed to reduce road congestion. Here, as noted by Ross Gittins in the Sydney Morning Herald (SMH) for 14 August 2013: *"The Coalition doesn't seem to have learnt what I thought everyone realised by now: building more expressways solves congestion only for long as it takes more people to switch to driving their cars."*

In this regards, the comments of the 2020 NSW Review of Federal Financial Relations Final Report, as follows, are relevant and commended to the Committee for its consideration.

Congestion: when building more roads fails

When considering how the road network is priced, it is just as important to consider how to make more efficient choices about transport methods, time of departure, or destination of travel. These choices have a direct impact on the level of congestion on the road network and in turn the liveability of cities.

Many transport users, not just drivers, suffer the consequences of highway delays, overcrowded trains or buses, wasted time looking for parking, vehicle wear and tear, and other inconveniences associated with congestion. The economic costs, such as lower productivity with more time spent commuting to places of work and higher transport costs are well known and quantified. Sydney is the 23rd most congested city in the

world, with Sydneysiders losing the equivalent of nearly five days (119 hours) of their lives due to traffic in 2019.

Building more transport infrastructure has only provided temporary relief. While additional roads improve travel times initially, more people then choose to drive to take advantage of the better speeds, rapidly eroding any benefits of the new infrastructure and congestion returns.

A continued infrastructure build without simultaneously managing demand is financially unsustainable and fiscally irresponsible, as it means all taxpayers are paying to alleviate the congestion problems affecting some. Construction through well-established suburbs is expensive, disruptive and depletes Australia's open green spaces and amenities. Supporting this significant construction and maintenance bill will require higher taxes, tolls or less expenditure on essential services.

The effects of congestion are location and time specific. Most roads are never congested at any time. But some roads are consistently congested at certain times. Because of this, travel times on all roads become more uncertain. This means that the costs of congestion include not just the time spent in traffic, but the time associated with leaving early, and the losses from the trips that are never made because of congestion. Individual drivers often consider only the time costs of congestion borne by themselves. They ignore the additional time delay and congestion costs that their trip imposes on other users of the congested road.

This problem highlights the growing inefficiency of our road funding system: road users are not appropriately charged for their use. Once registration and licence fees are paid (same amount regardless of the time of day and location of their trip), people are incentivised to drive. This means there are no financial incentives for people to change their travel habits to be more efficient; shop locally, choose to telework, drive after peak hour, switch to public transport, or travel by bike or on foot. This is another example of the failure to provide price signals.

Evidence has demonstrated the most effective way to reduce congestion is to put a price on the use of roads, which incentivises citizens to make a considered choice about transport alternatives. Where road pricing is implemented, modelling shows up to 20 per cent faster average travel speeds can be achieved.

There are several different ways congestion charging can be

implemented, drawing on successful international examples of cordon (a charge to enter a restricted area) and corridor (a charge to drive along specified section of road) style pricing ...

The recommendations of the Draft 30-year Infrastructure Strategy Infrastructure Victoria that was on public exhibition earlier in 2021 are also relevant.

50. Increase and extend the Melbourne Congestion Levy on parking

In the next two years, review the Melbourne Congestion Levy on parking to increase its value, expand the properties it applies to, and cover a wider area including Richmond, South Yarra, Windsor and Prahran. Consider applying a similar levy to other highly congested parts of Melbourne which have good public transport alternatives.

51. Incorporate congestion pricing for all new metropolitan freeways

Apply congestion reducing tolls to all new metropolitan freeways, including the North East Link.

52. Trial full-scale congestion pricing in inner Melbourne. In the next five years, trial full-scale congestion pricing in inner Melbourne.

53. Trial demand-responsive pricing on parking in inner Melbourne Trial demand-responsive pricing on street and council-controlled parking in inner Melbourne in the next five years.

54. Price parking at major public transport hubs, all train stations and park-and-rides

In the next five years, introduce pricing of parking at major public transport hubs, followed by all train stations and park-and rides, to help encourage using public and active transport for access. *[note added – Perth has done this over a several years now with some success]*

55. Phase out fixed road user charges and introduce user pays charging

In the next 10 years, replace fixed road user charges with variable distance-based and congestion charges. Ensure user pays charging reflects the relative costs of providing roads, and encourages drivers to change their behaviour.

3. Alternative projects

It is suggested that other transport projects within New South Wales should have a much higher priority than the Western Harbour Tunnel.

These other projects include a construction of a long proposed Mount Ousley interchange along with speeding up Sydney Newcastle, Sydney Wollongong and Sydney Canberra and Sydney Orange trains along with increasing capacity for freight and passenger trains on each of these lines.

It is one thing for the 20 year vision for Regional NSW (recently refreshed at) to noting in part that it is Australia's largest and most diverse regional economy and is home to a third of the state's population with a commitment to *"Make regional travel faster, easier and safer between and within regional centres, and to metropolitan areas."*

It is another thing to ensure that there is an equitable balance in funding public works between Sydney with about two thirds of the states population, and regional NSW with about one third of the states population.

At present, Sydney with its motorways, metro and light rail is getting much more than two thirds of the states \$107 billion infrastructure pipeline. It is suggested that projects such as the Western Harbour Tunnel are put on hold until long overdue regional rail and road projects are delivered, and road pricing in Sydney is given a fair trial.

3. 1 Completion of the Mount Ousley interchange

For some years, concept planning has been underway for a proposed Mount Ousley interchange. In 2017, a Review of Environmental Factors for the project was put on public exhibition by Roads and Maritime Services (RMS) and 130 submissions were received. RMS prepared a Submissions Report which was released in 2018, and some money was allocated in the 2018-19 NSW budget for geotechnical and other studies.

Some \$21 million was allocated over three years just after the 2020 NSW budget for planning for this project and in the 2021 federal budget, federal funding was allocated. However, a completion date for this long overdue project is yet to be announced.

The relevant factors are as follows.

1. The growing traffic on the Mt Ousley Road;
2. The need to provide a new northern entrance to the University of Wollongong; and,
3. The release, in February 2019, by Wollongong City Council of the draft Keiraville-Gwynneville Access and Movement Study.

The official website <http://www.rms.nsw.gov.au/about/corporate-publications/statistics/traffic-volumes> gives access to traffic counts on the Mt Ousley road that show in 2019, the annual average daily traffic (AADT) count on this road is 55113, and of this, 15 % are trucks. Accordingly, there are now an average of 8116 truck movements a day on this road.

The draft Keiraville-Gwynneville Access and Movement Study on page 33 (Table 3-8 Congestion intersections in the study area) notes, inter alia, for the Mount Ousley Road /Princes Motorway intersection

“ AM The ratio between the speed level of service and the posted speed is less than 30% at a 200 metres approaching distance of the intersection. On Mount Ousley Road the maximum queue length is around 15 vehicles between in the AM peak.

There would appear to be a case for completing the grade separation of the Mt Ousley Road (the scene of at least one fatal road crash last decade) with over 55,000 vehicles per day before completing the Western Harbour tunnel.

3.2 A better South Coast rail service

The 2012 State Infrastructure Strategy noted in part:

Newcastle and Wollongong *"As Newcastle and Wollongong grow in size and importance to the NSW economy, they need faster and more efficient links to Sydney"*

This report "assesses how faster rail journeys from the Illawarra and Central Coast to Sydney would help enable this integration and support these regions." ... also, this 2012 report on page 107, notes "An incremental program to accelerate the intercity routes is proposed, with a target of one hour journey times to Sydney from both Gosford and Wollongong, and a two hour journey time from Newcastle. The focus of the program will be operational improvements supported by targeted capital works to reduce journey times."

The current average speed of about 55 km per hour for the fastest Wollongong - Central trains is too slow. Perth Mandurah and Geelong Melbourne trains average 85 km per hour.

As noted in a May 2017 federal government document "The National

Rail Program: Investing in rail networks for our cities and regions” ...
 "Demand for rail is rising - and more investment is needed to match."

This new investment is not just ordering new intercity trains, but also selected track upgrades.

In addition, the constraints on the existing roads and railways and the ongoing expansion of Port Kembla mean that the case for completing the 35 km Maldon - Dombarton link is now stronger than it was in 1988 when worked on it was suspended.

In August 2017, the Illawarra Business Chamber released a detailed report noting that in recent years, the efficiency of the existing South Coast Line has been impacted by increased congestion with passenger and freight trains competing for scarce slots. The main recommendation of the report is for the completion of the Maldon - Dombarton Line with duplication of track outside of the Avon Tunnel and Nepean Viaduct, together with electrification of the new line and the 7 km Dombarton - Unanderra section a to form a South West Illawarra Rail Link (SWIRL). This study was updated in 2020 for the Illawarra Business Chamber. It is clear that completion of the rail link will bring benefits, not only to Wollongong but also Sydney and other parts of New South Wales.

Expressions of interest for the private sector to complete this line closed earlier in 2015, were reviewed, and then not taken up. It is likely that some government funding will be required to facilitate this rail link. The question is that would government money be better spent on this project and other regional rail projects rather than a reported minimum of \$16 billion on the Western Harbour Tunnel.

The 2018 report "Regional development and a global Sydney" of the Legislative Council Standing Committee on State Development, has recommendations including (no17) *That the NSW Government explore options to bring forward construction of the Maldon to Dombarton railway line, and Blayney to Demondrille railway line, including seeking funding through the National Rail Program to develop a detailed business case for the construction of the links.*

3.3 A better Newcastle rail service

Newcastle and the Central coast are getting new intercity electric trains. However, as likely identified in a report by Professor Andrew McNaughton and also a consultants study that was in part funded by the

Federal Government, selected track upgrades are also needed.

Indeed, as noted in the 2018 Greater Newcastle Future Transport Plan (<https://future.transport.nsw.gov.au/plans/greater-newcastle-future-transport-plan>) that in part outlined track work to speed up trains “... such as reducing track curvature, deviations and realignments, removal of level crossings, junction rearrangement and better segregation of passenger and freight services.”

One option is restoration of the original steeply graded but shorter alignments (eg Fassifern to Teralba) which would be amplified if curves on the restored alignments were to be flattened at the same time.

3.4 A better Sydney to Goulburn to Canberra/Albury rail service

New Regional trains are on order by the NSW Government However, selected track upgrades are also needed on the Main South line and the branch line(s) to Canberra.

It is of note improving the Sydney to Canberra rail link was listed as a national priority in the 2020 Infrastructure Priority List of Infrastructure Australia.

3.5 A better Sydney to Orange to Parkes/Dubbo

New Regional trains are on order by the NSW Government However, selected track upgrades are also needed on this line.

In October 2018, some months prior to the 2019 election, the NSW Deputy Premier John Barilaro MP stated that straightening the track would lead to a 25 per cent cut in travel times between Dubbo and Sydney.

It is a good question as if the costly Western Harbour Tunnel project proceeds, what would be the impact on the timing of this track straightening project/

3.6 Other regional lines

The NSW Government should have another look at reopening not only the Cowra lines (Demondrille to Blayney) but also the economics of at least re-opening the Queanbeyan to Cooma/Bombala line. This was part of the proposal made before the 2019 NSW election by the NSW Deputy Premier to consider a new railway to Eden.

4. Conflict with stated policy

It is hard to reconcile the proposed Western Harbour Tunnel project with the statement in the NSW FUTURE TRANSPORT STRATEGY 2056 Transport's role in environmental sustainability, as follows.

The transport sector, particularly private cars, contributes significantly to greenhouse gas (GHG) emissions and it is important that we work with industry to achieve reductions in emissions.

Transport has a significant role in contributing to a more environmentally sustainable community by providing travel that is more efficient, productive, quieter and cleaner compared to private car use – public and active transport.

The Future Transport Strategy aims to increase the mode share of public transport services and reduce the use of single occupant vehicles. Apart from reducing emissions through more efficient shared vehicles, this will also have positive benefits for congestion.

The Strategy also aims to work with industry to encourage the take up of Electric and Hybrid vehicles and other more fuel efficient vehicles.

We are also considering how active transport can play more of a role in our everyday journeys through providing better facilities and a more extensive network of bicycle paths and safer networks for cyclists and pedestrians where they share road space with vehicles.

5. Conclusions

In the longer term, the Western Harbour Tunnel will do little to ease road congestion in Sydney. Regional New South Wales has a large infrastructure deficit and this will require significant funding to remedy. At present, Sydney with its motorways, metro and light rail is getting more than its fair share of New South Wales Infrastructure funding.

It is recommended that projects such as the Western Harbour Tunnel are put on hold until long overdue regional rail and road projects are delivered, and road pricing in Sydney is given a fair trial.

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11 June 2021

Sydney and NSW needs more investment in rail than yet another motorway

Philip Laird

Since its election in 2011, the NSW Coalition government has embarked in a sustained delivery of more motorways and rail projects for Sydney along with main roads in regional NSW. Plans are now advanced for yet another motorway, this time the Western Harbour Tunnel (WHT) "Beaches link".

The latest proposal, that follows three stages of Westconnex and a F6 Extension south of Sydney, has attracted some support along with much opposition. A very large Environmental Impact Assessment (EIS) for the WHT, but incredibly no business case for a major project costing in excess of \$14 billion, was put on public exhibition with comments closing at the end of March. Some 1452 submissions were received from public agencies, individuals and organisations. The vast majority of submissions were by way of objection.

In the planning process, thousands of objections did not stop the NSW Government proceeding with each stage of Westconnex. As construction proceeded, objections including on health and property resumption grounds, continued to mount. This led to an inquiry in 2018 by the NSW Legislative Council Public Accountability Committee. The central finding of the committee was that "the WestConnex project is, notwithstanding issues of implementation raised in this report, a vital and long-overdue addition to the road infrastructure of New South Wales."

However, the Committee also found that "the NSW Government failed to adequately consider alternative options at the commencement of the WestConnex project and that "the transparency arrangements pertaining to the WestConnex business case have been unsatisfactory."

These two salient findings also apply to the WHT proposal.

In the run up to the 2019 NSW election, the NSW Government promoted the WHT and placed on public exhibition an EIS for a proposed F6 extension between Arncliffe and Kogarah. Both proposals were met with opposition, not only from the Greens, but the ALP, with the ALP promising to scrap both the \$2.6 billion F6 and the \$14 billion WHT and prioritize rail and public transport upgrades instead. There were also suggestions that improved road pricing was a much better option for Sydney than building more motorways.

Local Government objections

Four Councils made detailed objections to the WHT proposal. The City of Sydney noted "that it has been a long-time critic of WestConnex" as this costly motorway will fail in its primary objective of easing congestion. Urban motorways do not solve congestion; they induce demand for motor vehicle trips and any additional capacity created is quickly filled. This phenomenon applies equally to ...(the WHT) Project, a component of the WestConnex expansion."

Instead of the WHT, the City of Sydney recommended that the NSW Government provides alternative public transport options.

The Inner West Council, whose suburb of Rozelle will be adversely impacted by the WHT also has a long-standing position of opposing inner-urban motorways, and prefers "traffic-reduction solutions to addressing congestion, including public and active transport, travel demand management and transit-oriented development, with some modest/targeted road improvement."

North Sydney Council noted significant concerns with the WHT EIS including; "inadequate justification and need, loss of open space, construction and operational road network impacts, air quality and human health concerns, environmental, visual, social, amenity and heritage impacts as well as numerous strategic projects having the potential to be compromised."

Willoughby City Council noted time constraints on consideration of a very large EIS, made worse by COVID 19, and that a public transport alternative was not assessed. "Known alternative solutions with lower climate impacts need to be considered to be consistent with action on climate change and improved resilience."

Although Mosman Council did not oppose the project in principle, it did raise concerns about air quality.

Other concerns and objections

In 2017, it was revealed that the NSW Government was instructing transport officials to ignore public transport alternatives to motorway projects such as the F6 extension and the WHT; and, significantly improving Wollongong Sydney train services could be done at a saving of some \$10 billion.

This was at a time when Sydney train ridership has been increasing both faster than the distance driven by Sydney motorists – with BITRE data showing rail having a 39 per cent growth over ten years to 2018-19 and road just 12 per cent during a decade of rapid population growth.

Further attention is now needed to many aspects of the WHT proposal.

Of concern to the NSW Ports Authority is the amount of highly contaminated sludge that will be dredged up from Sydney Harbour and the close proximity of this dredging to residential areas has been raised by NSW Shadow Minister for Roads John Graham MLC.

The long standing Action for Public Transport (NSW) group in its objection questions the influence of the Transurban company on Sydney's road and transport planning, at a time the NSW Government in its long term transport integrated transport and land use plans is intending to move to net zero emissions by 2050.

It concludes that the approval for the project should be refused and the funding (of at least \$15 billion) for the project "should be reallocated to more worthwhile projects such as filling in missing links in urban public transport systems, disentangling the passenger rail network from the rail freight network, and providing faster rail links to regional centres."

Other options

NSW has a current overall shortage of 'fit for purpose' rail infrastructure to serve a growing population. This includes the Sydney Metro West (with an EIS now on exhibition) and ensuring that the new Western Sydney Airport is connected by rail.

There is also a need for more funding for upgrading the existing rail system and to cover a \$4.3 billion cost blowout of the Sydney City and Southwest Metro.

The NSW Government has also acknowledged a need for better rail services to the South Coast and Newcastle as well as Canberra and Orange. Here, the release of an independent report completed earlier this year by Professor McNaughton is now awaited.

The question is now should the WHT be abandoned, at the very least deferred, until other major rail projects for Sydney and improving its tracks to regional NSW have been completed.

Philip Laird of the University of Wollongong has written often for Railway Digest, and is a member of Action for Public Transport. This article is based on one that appeared in The Conversation.

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