

Submission
No 421

INQUIRY INTO IMPACT OF THE WESTERN HARBOUR TUNNEL AND BEACHES LINK

Name: Mr Francis Breen

Date Received: 17 June 2021

Mr Daniel Mookhey MLC
Chair
Inquiry into the impact of the Western Harbour Tunnel and Beaches Link
Parliament House
Sydney NSW 2000

Dear Mr Mookhey,

Please accept this submission in respect of terms of reference (a), (b), (h), (i), (j) and (m) for the Inquiry. I am a resident of Birchgrove and I hold a BA (Econ) Macquarie University and Graduate Diploma (Environmental Studies) Macquarie University. For many years I have been doing Bushcare in my local area and I have been active in local conservation groups.

I urge the Committee to find that the Western Harbour Tunnel should not proceed because of environmental, social and economic reasons and that a full range of alternative options should be adopted to address travel in the Sydney metropolitan area. These include better urban design, travel demand management, technological improvements to existing road networks and improvements to alternative transport modes.

My submission makes reference to the Environmental Impact Statement for the Western Harbour Tunnel and Warringah Freeway Upgrade Project January 2020. I note the Submission Report September 2020 and I consider that the Submission Report does not satisfactorily address the matters that I discuss below.

(a) the adequacy of the business case for the project, including the cost benefits ratio,

Critical matters in relation to the strategic context and project need for the Western Harbour Tunnel and Warringah Freeway Upgrade Project (WHT) are discussed in chapter 3 of the Environmental Impact Statement (EIS).

There is no information concerning the cost/benefit analysis for the project. The project need and strategic context for the project are provided in Sections 2 and 6 of Chapter 3. Nowhere in section 2 is there any information provided that demonstrates, in terms of the project need, that the benefits exceed the costs of the project.

Certain benefits are discussed in this section such as reduced congestion, improved resilience of the network and urban amenity improvements but these are not quantified in monetary terms. Similarly there is inadequate information provided concerning the costs of the project. It is not possible from the information provided to ascertain the costs and benefits of the project sufficient to conduct a cost/benefit analysis.

This is a major failing. Proceeding with the project without being able to verify that the expected benefits exceed the expected costs is irresponsible. It would be a gross misappropriation of resources should the cost/benefit be unfavourable compared to other Government projects.

Section 6 provides a description of certain State policies. It is stated (p3.22) that,

The project has been developed to align with the objectives of a number of strategic plans for transport, freight, and city planning that have been prepared at a national and State level.

This does not include the most relevant of all, i.e. that there is a net benefit to the community of the project and that the benefit is favourable when compared to the net benefits of other projects. A verified cost/benefit analysis is essential for this purpose.

A cost/benefit analysis is an essential component of determining the strategic need for the project with regard to its State significance and cost/benefit analysis in respect of major projects is relevant State Government Policy.

The project should not proceed without a published cost/benefit analysis that provides sufficient information to enable independent community evaluation of the costs and benefits of the project.

(b) the adequacy of the consideration of alternative options,

The consideration of alternative options was discussed in section 4.3 of the EIS. For the following reasons I submit that the consideration of the alternatives was inadequate and it has not provided a basis for selecting the project as the preferred alternative.

Section 4.3 of the EIS states,

‘Considering the identified requirements of the NSW Long Term Transport Master Plan and the Future Transport Strategy 2056, a number of strategic alternatives were considered for delivering the required road capacity, as follows:

- *Do nothing*
- *Travel demand management*
- *Improvements to the existing harbour crossing capacities and road network*
- *A new motorway crossing of Sydney Harbour (the project)*
- *Improvements to alternative transport modes.*

4.3.1 Do nothing

This was dismissed as an alternative on the basis that,

‘The Sydney Harbour Bridge and Warringah Freeway has been identified as one of Australia’s 30 most congested road corridors, generating a congestion cost of \$65,000 per day in 2016 (Infrastructure Australia, 2019). If no action is taken, this is forecast to rise to \$98,000 per day by 2031’.

and,

‘future traffic modelling (refer to Chapter 9 (Operational traffic and transport)) indicates that without the project, this alternative would be unable to accommodate forecast growth during the peak periods without unacceptable delays across the Sydney road network’.

The congestion cost of \$65,000 rising to \$98,000 per day by 2031 does not seem to be a relevant consideration taking into account the number of vehicles per day. The Sydney Harbour Bridge has over 165,000 vehicles per day and the Warringah Freeway has over 240,000 vehicles per day (section 3.2 of the EIS). Expressed in cost per vehicle per day the congestion cost for the Sydney Harbour Bridge is \$0.40 rising to \$0.60.

The future traffic modelling in Chapter 9 is also a matter for questioning. The traffic modelling discussed in Chapter 9 is set out in Appendix F of the EIS. Page 25 (dot point 4) of appendix F states

'The demands for 2037 (assumed year of opening plus 10 years) were determined by extrapolating the demands from the standard census forecast years of 2031 and 2036 demand matrices. This produced vehicle demands by time period for an average school day at each year and vehicle class for toll assessment'.

This modelling is controversial as it relies on historical trends continuing and no other relevant factors emerging which may impact this extrapolation. For example page 49 of Appendix F states the following in respect of the Rozelle area.

'When compared to the Sydney average, the public transport mode share is relatively high and the private vehicle mode share is relatively low. This can be attributed to the locations where the majority of residents work, which are Sydney Inner City and Leichhardt. These locations are highly accessible by public transport from the Rozelle and surrounds study area, and parking is discouraged in the Sydney CBD through pricing mechanisms'.

This demonstrates that other factors may impact on historical trends. In this example the location of residents and their places of employment and pricing changes for parking are relevant factors. It is reasonable to argue that relevant factors may change and can be changed during the time horizon for the project.

It is evident that congestion in itself would result in changes to historical trends. This is acknowledged on page 34 of Appendix F which states,

'In reality, when the demand for travel exceeds the capacity of the road network, drivers would change their behaviour, often travelling at a different time, by a different route or mode, or not making their trip at all'.

There is no analysis of the benefits of congestion. As suggested in the italics above congestion can prevent further congestion by drivers changing their behaviour. The analysis of *any feasible alternatives to the project* in respect of 'Do nothing' should include more in-depth examination of a range of scenarios where all reasonable and relevant factors are considered.

The analysis is shallow and dismissive and cannot claim to seriously provide a basis for selecting the project as the preferred alternative.

4.3.2 Travel demand management

Section 4.3.2 of the EIS states.

'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. Further, Sydney's population is forecast to grow from six million to eight million people over the next 40 years. An expanded road network would be required to accommodate this population growth, even with significantly reduced per-capita travel demand through demand management. Travel demand management changes alone are therefore not a viable strategic alternative to the project'.

This analysis is again shallow and dismissive. The EIS should include a range of scenarios where changes to social attitudes, travel behaviour, government policy and other relevant and reasonable factors are considered. There is no discussion of how these factors would need to change to achieve effective travel demand management.

As discussed above under 'Do nothing' the EIS has acknowledged that congestion and the location where residents live and work and pricing mechanisms are examples of relevant factors that influence travel demands.

More recently the work at home requirements introduced under the COVID-19 regulations resulted in a very significant change in traffic patterns. Before Covid -19 only five percent of workers worked at home and this changed to as much as 50% under the COVID-19 regulations. Working at home can become a permanent feature with appropriate incentives and support and these may be far less costly than the cost of building underground expressways.

I note that expressways are primarily justified on the basis of the benefit of travel time savings. The benefits of having no travel time by working at home can equally be calculated on the same basis and such benefits need to be quantified and taken into account. There is no discussion in the EIS about the benefits of no travel time or the benefits of reduced travel time flowing from other *changes in social attitudes, travel behaviour and government policy*.

It is noted that the Sydney Harbour Tunnel was opened to traffic on 31 August 1992. Building the tunnel has been only an interim solution to managing vehicle traffic. Serious and far reaching efforts to change social attitudes, travel behaviour and government policy in the years prior to the decision to build the Sydney Harbour Tunnel would have resulted in better outcomes for traffic management.

The analysis cannot seriously claim to have provided a basis for dismissing the travel demand management alternative or selecting the project as the preferred alternative.

4.3.3 Improvements to the existing harbour crossing capacities and road network

Page 4.8 of the EIS states,

'Increasing capacity of the existing crossings would also have limited benefit due to the constraints imposed by existing roads on the southern side of the harbour, including the Western Distributor and ANZAC Bridge.

This again demonstrates the inadequacy of increasing road capacity as a vehicle traffic management solution. The Western Distributor and the ANZAC bridge were major expansions of road capacity.

Similar to the Sydney Harbour Tunnel the Western Distributor and ANZAC Bridge have been only an interim solution to managing vehicle traffic. Serious and far reaching efforts to change social attitudes, travel behaviour and government policy in the years prior to the decision to build these would have resulted in better outcomes for vehicle traffic management.

It is unacceptable to justify the further expansion of road capacity on the basis that previous expansions were not enough to meet demand.

This does not provide the basis for selecting the project as the preferred alternative. It emphasises that further vehicle traffic management will be required after the WHT is operational and that the WHT project will be only an interim solution.

4.3.4 A new motorway crossing of Sydney Harbour (the project)

Page 4.8 of the EIS states,

'A new tunnelled motorway west of the CBD would address the project need of providing additional transport capacity across Sydney Harbour to relieve congestion and improve reliability on existing crossings'.

This is premised on the claim that additional transport capacity across Sydney Harbour is needed. Additional capacity may not be needed where alternative vehicle traffic management approaches are taken.

The WHT project would be an interim measure only as evidenced by the Sydney Harbour Tunnel, the Western Distributor and ANZAC Bridge examples

The paragraph quoted is self-serving and does not provide the basis for selecting the project as the preferred alternative.

4.3.5 Improvements to alternative transport modes.

This section describes the initiatives that are currently underway or planned for bus, rail and ferry networks and for active transport and states (p4.12) that none of the proposed initiatives negate the need to provide additional cross-harbour motorway capacity.

Page 4.13 of the EIS states,

'The array of journey patterns and trip purposes within Sydney, and the dispersed nature of origin and destination points for an individual journey mean that roads remain a critical element in the integrated transport network, servicing bus, freight, commercial and many other journey needs'.

This is the cornerstone for dismissing public transport as a preferred alternative to manage vehicle traffic. The *dispersed nature of origin and destination points'* basis for preferring the project ignores the Rozelle example discussed above in relation to section 4.3.1. That example demonstrates that the historical outcome for urban design has resulted in the vehicle mode share being relatively small. Contemporary urban design could be capable of the same outcome.

The analysis also does not contemplate what improvements to the public transport network would be needed in addition to the existing projects and plans to improve vehicle traffic management.

Figure 4.4 of the EIS shows the daily volume of passengers for trains, buses and cars on the Sydney Harbour Bridge and the daily volume of passengers for buses and cars on the Warringah Expressway and the ANZAC Bridge.

Page 4.11 of the EIS states

'... without measures to improve journey times by increasing the road efficiency or capacity, the addition of more buses to the network can contribute to congestion, making bus services less effective at meeting customer needs.'

This analysis proceeds on the basis that increased bus services will increase congestion and does not acknowledge that the number of travellers in cars can be reduced by increased bus capacity. The analysis does not include any discussion about this scenario

The analysis cannot seriously claim that it has provided a basis for dismissing improvements to alternative transport modes or selecting the project as a preferred alternative.

Summary of section 4.3 Strategic Alternatives

The strategic alternatives to the project have not been seriously analysed

There is no analysis of a range of scenarios where changes to social attitudes, travel behaviour, government policy and other relevant and reasonable factors are considered.

The costs of congestion provided in the analysis do not seem to be relevant taking into account the cost per vehicle per day and there is no analysis of the benefits of congestion.

The traffic modelling is controversial as it relies on historical trends continuing and no other relevant factors emerging which may impact on the model.

There is no serious analysis of scenarios for travel demand management.

The analysis ignores the interim nature of expanding road capacity as evidenced by the Sydney Harbour Tunnel, the Western Distributor and the ANZAC Bridge outcomes. It is not acceptable to select the project as the preferred alternative on the basis of the inadequacy of previous road capacity expansion.

The analysis does not contemplate what improvements to the public transport network would be needed to improve vehicle traffic management.

There is no serious analysis of the combined impact of all possible alternative strategies.

The analysis of strategic alternatives cannot seriously claim that it has provided a basis for selecting the project as the preferred alternative.

(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,

The NSW Government should publish the base-case financial model and benefit cost ratio for the project and its component parts. Critical elements in calculating the benefit cost ratio for expressways such as the WHT are travel time savings, the value attributed to these savings, the discount rate (time value of money) used to ascertain present value for the relevant benefits and costs and sensitivity analysis. These have not been published and it is not possible to evaluate these critical factors.

Chapter 3 of the EIS justifies a \$15 billion project in only 24 pages. This chapter is deficient in three major aspects.

The traffic modelling is not fully explained, nor is there any evidence put forward that the figures were peer reviewed. On page 3-17 we are told that in 2037 it will be possible to drive from Parramatta to North Sydney 12 minutes faster with the WHT than without the WHT. This means the public will be spending \$15 billion so vehicles can arrive 12 minutes earlier.

As discussed above (4.3.1 Do nothing) the modelling is controversial as it relies on historical trends continuing and no other relevant factors emerging which may impact these trends. I have discussed the Rozelle example of the impact of urban design on travel demand and the impact of the COVID-19 regulations concerning work at home.

Other factors may emerge which result in the travel time savings such as the Parramatta to North Sydney 12 minutes saving not being achievable.

All relevant factors which may impact on travel demand should be included in the scenario planning and sensitivity analysis applied to ascertain the relative impact of the factors considered. This information should be published to permit scrutiny of the factors considered and the assumptions made.

The chapter devotes just two paragraphs on page 3-5 to discussing the current and projected congestion cost to the economy and how the project will get rid of this congestion. The figures used are not explained and the public is asked to accept the figures at face value. There is also no evidence provided that these figures have been independently reviewed.

As discussed above (4.3.1 Do nothing) the congestion cost of \$65,000 rising to \$98,000 per day by 2031 does not seem to be a relevant consideration. Expressed in cost per vehicle per day the congestion cost for the Sydney Harbour Bridge is \$0.40 rising to \$0.60. The increase of \$0.20 would not seem to justify the cost of building the WHT and there is no information about the continuing congestion cost after the WHT is operational.

In section 4.3.5 of the EIS it is stated (page 4.11) that the addition of more buses to the network will contribute to congestion making bus services less effective. This does not recognise that the number of travellers in cars can be reduced by such increased bus capacity thereby mitigating congestion.

There is no analysis in the chapter examining potential benefits the economy if the money was spent on other worthy projects. For example, the spending of \$15 billion on education or health would seem to

far outweigh the benefits to the economy than the projected costs of traffic congestion and saving 12 minutes on the drive from Parramatta to North Sydney.

This emphasises the critical importance of the cost benefit analysis. Public funds are limited and it is unacceptable where other projects, particularly health projects, education projects and others which address major shortcomings such as social housing matters and environmental matters are not funded because the WHT is given priority based on the unpublished cost benefit analysis.

(i) the impact on the environment, including marine ecosystems

I note that Dr Bill Ryall has made submissions in respect of the adequacy of the EIS in respect of the impact on the environment including marine ecosystems. I support Dr Ryall's submission in which he states,

'With respect to the on-shore stage of the Western Harbour Tunnel, the EIS should have been rejected by the EPA because no environmental investigations had been undertaken on on-shore areas of identified environmental concern, resulting in the environmental impacts being unquantified and thereby not permitting the impacts to the environment and human health being assessed by the EIS.

With respect to the Immersed Tube Tunnel (ITT), the EIS should have been rejected by the EPA because the impacts to the health of users of Iron Cove, Yurulbin Point, Snails Bay, Berry's Bay and White Bay and impacts to the marine environment arising from sediments "lost" into the waters of Sydney Harbour during dredging was not assessed in the EIS nor in the subsequent Submissions Report

Dr Ryall's analysis of the EIS, the subsequent Submissions report and Dr Ryall's comments in respect of the significant requirements that the EPA must address add weight to the case for not proceeding with the WHT project and for fully exploring and evaluating the alternatives to the project.

(l) the impact of the project on nearby public sites, including Yurulbin Point and Dawn Fraser Baths

The impact of the project on Yurulbin Point is discussed in the Executive summary (Chapter 0) and Chapter 14 of the EIS concerning non-aboriginal heritage.

Chapter 0 Executive summary page E-22 states,

'This strategy requires the establishment of intermediate tunnelling sites close to the proposed alignment with direct access to Sydney Harbour for barging spoil, materials and major equipment. The temporary use of an area at Yurulbin Park in Birchgrove as a construction support site (WHT3) for the project would enable efficient delivery whilst minimising private property acquisition and haulage through local streets. Yurulbin Park has local heritage significance and it has been identified that the proposed works within Yurulbin Park would be of medium-large scale and moderate intensity. As such, the level of impact on the heritage item overall would be major'.

Chapter 14 pages 14-11 states,

'The design of the project works at Yurulbin Park have been developed in consultation with Bruce Mackenzie AM, the original designer of the park. This has resulted in a design that minimises impacts to significant features and changes to the permanent landform at Yurulbin Park. Some mature trees within

the park would be directly impacted, but areas of exclusion have been identified and replacement plantings would be provided on completion of construction as part of the redesign. Opportunities to temporarily remove, store and reinstate certain elements such as stone flagging, stone walls and steps would be investigated and implemented if these elements need to be temporarily removed. While permanent impacts would occur to areas of archaeological potential during site establishment, specialist investigations would provide an opportunity to obtain information about the archaeology and history of the site not available from other sources. Reinstatement works following the completion of construction would be designed in consultation with Bruce Mackenzie. The new design would seek to retain and enhance the existing character and the original design intent as much as possible. These works would also improve the quality and long-term viability of landscaping and useability of the park.

The implementation of the management measures described in Section 14.5 and Chapter 20 (Land use and property) will ensure that direct impacts are minimised and that disturbed areas would be reinstated following the completion of construction in a manner that is consistent with the heritage values of the item’.

These paragraphs demonstrate that the genuine non-aboriginal heritage of Yurulbin Park is of little consequence and can be demolished and reconstructed after the project works on that site are no longer needed.

This would be an unfortunate loss that is unnecessary if strategic alternatives to the project were adopted and provides a relevant and substantial reason for adopting strategic alternatives. It is a loss that cannot be reconstructed, only replaced.

Yurulbin Point is further discussed in the EIS Executive summary and in Chapter 19 Biodiversity (terrestrial and marine) impacts.

Chapter 0 Executive summary page E-22 states,

‘Most of the project footprint is considered to be in a poor ecological condition, with little ecological value and unlikely to have any native resilience or recovery potential. Construction of the project would require removal of about 7.29 hectares of vegetation which comprises native plantings, planted medians, non-native species or weeds. The project would not have a significant impact on any threatened flora species, or vegetation consistent with any plant community types or threatened ecological communities’.

Focussing on threatened flora species or vegetation consistent with any plant community types or threatened ecological communities dismisses the value of efforts made over many years, particularly by community volunteers, to protect or restore native vegetation. Often such efforts are only partially successful owing to factors such as a lack of resources or competing priorities for the vegetated areas.

Chapter 19 (p51) item B4 states

‘Vegetation will be re-established, where feasible and reasonable, in accordance with Guide 3: Re-establishment of native vegetation of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects (RTA 2011c)’.

What is feasible and reasonable is not stated in the EIS and Guide 3 referenced above does not specify what is feasible and reasonable. This is inadequate and a deficiency of the EIS.

The proposed removal of this vegetation is again an unfortunate loss that would be unnecessary if strategic alternatives to the project were adopted. It is a demoralising outcome for all the effort expended to date in protecting and restoring native vegetation.

The deficiency in the EIS and this unfortunate loss provide relevant reasons why the project should not have been approved and for adopting strategic alternatives.

(m) any other related matter

The WHT will become part of a private monopoly. The WHT is part of the Westconnex project which currently is partly privatised and will ultimately be fully privatised.

Urban expressways are effectively a monopoly as it is not practical for other expressways to be constructed that could compete on service and price. Travellers may have the option of taking alternative routes or means of transport but the construction of the expressway is predicated on the basis that these other routes and modes of transport will not impact substantially on the traffic flows for the expressway.

The M2 expressway provides an example. Alternatives to the M2 include Epping Road, Victoria Road and the bus service along the expressway. It is evident that the increasing cost to drivers of using the M2 has not resulted in a flight of traffic to Epping Road and Victoria Road or an increase in bus services sufficient to dent traffic levels. Revenue from tolls on the M2 is effectively guaranteed and this is a characteristic of monopolies.

The monopolistic nature of the WHT is reflected in the tolling regime. The Sydney Morning Herald reported the following on 26 March 2021,

'WestConnex is allowed to raise tolls by at least 4 per cent each year for the next two decades, and then by the rate of inflation for the 20 years beyond that.'

Combined with the lack of effective competition as evidenced by the M2 example, this guaranteed increase in tolls confirms the monopolistic nature of the WHT. Such a monopoly may be justified where the WHT is publicly owned by an agency of the NSW Government but cannot be justified as the Westconnex project is currently partly privatised and will be ultimately fully privatised.

Some may argue that privatising the project results in the NSW Government obtaining, at that time, the proceeds that it would have otherwise received over the 40 year period. This does not take into account that private investors are unlikely to acquire an asset where the net present value of the future income flows does not exceed the cost of acquisition by a margin large enough to provide an appropriate return on the funds invested.

This means that the project will ultimately cost the motoring public more than it would where the project remains in public ownership. The project has all the economic and social disbenefits of a monopoly and the monopolistic profits accrue to the private owners of the project. The project is morally reprehensible and the WHT should not add to the already questionable situation with the Westconnex project so far. The WHT project should not proceed.

Another unsatisfactory outcome of private expressways is the welfare impact. Tolls take up a higher proportion of the income of drivers in the lower socio-economic categories. In addition it is these drivers that usually live in the outer residential areas and need to travel further. This is recognised by the NSW Government which has introduced a rebate on vehicle registration to offset some of the toll costs.

These drivers have been facing the higher cost of travel associated with living in outer residential areas before Westconnex and there was no rebate on vehicle registration fees to offset some of the cost. The rebate should have been considered when new outer residential areas were established. Introducing the rebates after Westconnex has opened can be interpreted as a subsidy to the private Westconnex owners to ensure that the expressway is used and toll revenue is generated.

Conclusion

The contracts have not been signed for the construction of the WHT. The project should be cancelled and a full range of alternative options adopted to address travel in the Sydney metropolitan area. These include better urban design, travel demand management, technological improvements to existing road networks and improvements to alternative transport modes.

There needs to be a change of direction. The Sydney Harbour Tunnel, Western Distributor and Anzac Bridge all provide examples of the ultimate failure of new expressways to address travel in the Sydney Metropolitan area.

Birchgrove 2041 NSW