

Public Works Committee

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

Hearing 13 September 2021

Supplementary questions

Questions for Stop the Tunnels

1. You said in your opening statement that 20,000 children will be impacted by the project. Can you summarise the construction and operational impacts?

From a high level; construction impacts from 5-10 years of construction work, pollution from the stacks, heavy vehicles on local roads, noise and dust impacts, potential disturbance of hazardous substances, potential for air pollution to enter classrooms via open windows (esp. under Covid return to school mandates), the failure of the local road systems particularly in the North Sydney area which is the largest schools district in Australia. However we refer you to the individual submissions from 8 individual schools and 1 sporting organisation and the Asthma Australia and Lung Foundation Australia who all put in individual submissions into this inquiry alone. We reference the schools who have submitted below. We have also attached a confidential report on the impact for children from silica dust. These issues are discussed extensively in our submission. We have attached the full list of schools in the North Sydney area brochure published by North Sydney council.

References:

- Submission from Stop the Tunnels to this inquiry
- Submission from Northern Beaches Secondary College Balgowlah Boys Campus Parents & Citizens Association
- Submission from Seaforth Public School
- Submission from Rozelle Public School
- Submission from Cammeraygal High School
- Submission from Cammeray Public School
- Submission from Anzac Park Public School
- Submission from St Cecilia's Catholic School
- Submission from Balgowlah North Public School
- Submission from Asthma Australia and Lung Foundation Australia
- Submission from Northern Suburbs Netball Association
- Stop the Tunnels Submission Appendix E: Silica Dust Risks to Children
- Schools in North Sydney brochure

2. You mentioned in your opening statement that there is evidence that high rise residential buildings will be impacted by greater pollution levels. Can you explain that in more detail please?

This is discussed extensively in the Stop the Tunnels supplementary submission to the inquiry and in Appendix A; *Air Quality Paper; an assessment of the air quality and health implications of the Western Harbour and Beaches Link Tunnels* and Appendix C - *Air Quality*

Implications Associated with High Rise Buildings in the Vicinity of Stacks and Page 92 (<https://www.parliament.nsw.gov.au/lcdocs/submissions/76393/0575a%20Stop%20the%20Tunnels.pdf>). Appendix C contains a document obtained via a GIPA request produced for council at the completion of the NorthConnex build which demonstrates that the air quality of high rise dwellings is at risk due to stack pollution dispersion. A large number of high rise developments are planned in the area and it is clear that under worst case (or even anything other than best case scenario conditions) air quality is likely to be poorly affected at height. This has widespread implications across the area and has not been adequately assessed in terms of health outcomes particularly with regard to more children living in high rise developments who are more susceptible to air pollution.

3. You mentioned that Military Rd does not receive a benefit in terms of traffic once the tunnels are built. Can you explain why, and where you have sourced this information?

Transport for NSW claims that Military Road will enjoy a 10% reduction in traffic by 2037 if both tunnels are built compared to **future predicted traffic growth**. When comparing the traffic appendices data to **baseline traffic levels** however - **traffic on Military Rd will not be reduced** i.e. traffic will remain at roughly the same level as today pre-COVID. Given that peak hour traffic is already at ceiling level traffic growth claims are hard to justify as are therefore the 10% reduction claims. That said the community have been led to believe, based on the way the claims are presented, that there will be some relief beyond today's level of traffic which is a much needed outcome from any project expenditure - and historically what a key outcome of the project was supposed to achieve. The impacts for Military Road are discussed in detail in the Stop the Tunnels submission and we have also referenced a report prepared for North Sydney Council which discusses the issues of traffic and the fact that expert traffic planners at the council have modelled that congestion on Military Rd will increase due to the rat runs created by the configuration and limitation of access to the freeway. There is a distinct disparity between the claims made by TfNSW, Traffic modelling data and the modelling that councils have completed.

4. Have you had any consultation in relation to a dedicated bus lane being included in the tunnel?

Transport for NSW on several occasions have stated that there will be no dedicated bus lane in the tunnels - this was confirmed via government testimony on Day 3 of the Inquiry.. A project cannot be considered to be a public transport solution to congestion unless the priority is given to a mass transit and mode shift is created. Buses being stuck inside a tunnel going at the same speed as traffic will not create mode shift and therefore this is not a public transport solution.

It should be noted that the NSW Long Term Master Plan 2012 for the tunnel (one of the earliest modern references in planning documents outside the 1960's DMR plan) states that a Rapid Bus Tunnel was being investigated. There was no mention of a toll road tunnel within this planning document.

NSW Long Term Master Plan 2012

The plan identifies that a corridor assessment was underway

"Transport for NSW has been identifying and testing potential options for both corridors. The north-south and east-west corridors are shown in Figure 4.55. These options range from short term investments such as better bus priority on the corridors, to long term options such as separated lanes **and a bus tunnel under Sydney Harbour**. Options include various combinations of dedicated bus lanes (in the kerb lane or on the median lane), peak tidal flow arrangements and supporting infrastructure investments including options that replace existing bridges (at the Spit and Narrabeen)

with wider bridges (including possible 'clip-on' options) and **a tunnel to bypass Military Road**. All options focus on the existing road corridors complemented by a redesign of the bus network aimed at making the network easier to understand and use. We will consult with stakeholders and the community as we progress analysis of shortlisted options." Page 154, <https://www.transport.nsw.gov.au/sites/default/files/media/documents/2017/nsw-transport-masterplan-final.pdf>

One of the narrowed down options was quoted to be a "Kerbside BRT on Pittwater Road and **bus tunnel under Military Road**".

It is not clear at what point the 1960's original road plan and the bus tunnel concepts morphed into a toll road plan. Information has been gleaned from newspaper reports and events as to the evolution of the project from an express bus solution to a toll road. Perhaps less clear is that the Western Harbour Tunnel appears to have been added well after scoping began for the Beaches Link. The progress of the project seems to indicate that a proposal was put forward to join a Military Rd Tunnel to the Warringah Freeway and then the Western Harbour Tunnel was added to join up to the Beaches Link on the Freeway. There appears to have been little assessment as to whether joining the tunnels into the Warringah Freeway was the best option and no real consideration of the local traffic, amenity and health impacts of doing so in early scoping.. The only indication as to why the Warringah Freeway may have been considered to be a good option is that INSW mentions that the WHT was likely to attract considerable toll revenue. The claims that it relieves Anzac Bridge have been proven wrong by the EIS data - the Anzac Bridge will increase considerably in traffic if the WHT is built. This indicates that the motivation for the WHT or at least it's alignment may be orientated toward creating a link to enable the Beaches Link whilst monetising congestion rather than solving it. The ability to capture toll revenue should not be the key driver for a project particularly if claimed benefits are not achieved. The WHT may provide an alternative route but it also grows our vehicle reliance and creates more congestion where we can least afford it both around the Lower North Shore and across the Inner West. If these areas are already at capacity during the peak, adding more cars and more roads will simply create new choke points - reducing car reliance around our urban centres should be the priority if we want to address congestion. During the recent Transurban AGM the Chairman stated that the Western Harbour and Beaches Link would have little effect on the operation or feasibility of WestConnex so "feeding" the WestConnex Toll Road system does not appear to be a driver as has been previously claimed during the WestConnex Inquiry. On the balance of evidence available the driving force for both projects and the change from a bus tunnel to a toll road under the Harbour seems to be the historic promises made around the Beaches Link project and the need to justify a project where "toll revenues are unlikely to offset costs".

26 Jan 2009 toll road discussions were reported in the SMH - at this stage a toll road tunnel only under Military Rd was proposed: "Macquarie Bank, its toll road arm, Macquarie Infrastructure, and the community group Sensible Transport Action Group have been discussing the proposal with Roads and Traffic Authority officials for several months, the Herald has learnt. The RTA officials will soon advise the Roads Minister, Michael Daley, on the project." <https://www.smh.com.au/national/1b-plan-for-tunnel-and-new-spit-bridge-20090126-gdtb6e.html>

2014 INSW State Infrastructure Strategy Update

Recommendations to the NSW Government November 2014

“Western Harbour Tunnel

A third road crossing of Sydney Harbour, the Western Harbour Tunnel, is under investigation as part of the Government’s strategic motorway planning program. As with the existing harbour crossings, the Western Harbour Tunnel is expected to be a **tolled motorway**. The Western Harbour Tunnel would provide a tunnel from WestConnex across Sydney Harbour to North Sydney, creating another bypass of Sydney’s CBD and easing demands on the Sydney Harbour Bridge, Eastern Distributor and other approaches to the city. The southern portal at Rozelle would connect with the WestConnex Northern Extension and its northern portal would be in the corridor between the Gore Hill and Warringah Freeways. The pre-feasibility assessment of the Western Harbour Tunnel highlights that by 2031 travel demand on the existing harbour crossings and Anzac Bridge will significantly exceed capacity in peak periods. Traffic modelling indicates that around 13 per cent of demand – or almost 2,000 vehicles per hour – would divert to the new tunnel during the morning peak, easing congestion on the Harbour Bridge and the existing Tunnel. **The Western Harbour Tunnel’s indicative cost is estimated at up to \$4.5 billion. Initial assessment suggests that the project would be expected to raise significant toll revenues from motorists.”**

Beaches Link investigation

“A potential Beaches Link **toll road** (currently being assessed) would provide a direct connection from Seaforth to the Warringah Freeway corridor, improving journeys from the Northern Beaches to the major employment centres of Sydney’s Global Economic Corridor. Beaches Link would likely use a tunnel connection for its full length, although the option of a combined tunnel and bridge over Middle Harbour is also under consideration. The project is estimated to significantly alleviate congestion on one of the slowest corridors of Sydney’s road network – potentially reducing morning peak traffic movements from the Spit Bridge by around 30 per cent and improving the local amenity of Military and Spit Roads. Beaches Link could also improve public transport journeys from the Northern Beaches by offering a ‘Mosman Bypass’ for express bus services to the CBD and other centres. Beaches Link is likely to be connected to the Western Harbour Tunnel, noting that both projects serve related travel demands for access to and from the CBD, gateways and western Sydney from the north of the city. Beaches Link is best viewed as a longer term complement to the Western Harbour Tunnel, given the heavy congestion currently experienced on the Warringah Freeway and harbour crossings during peak periods. **Pre-feasibility work undertaken to date suggests that Beaches Link would cost between \$2.4 billion and \$3.1 billion (\$2014). Projected toll revenues are unlikely to fully offset the cost.”**

https://www.infrastructure.nsw.gov.au/media/1090/inf_j14_871_sis_report_book_web_new.pdf

2014-2015 Budget Paper included a “Northern Beaches Tunnel” Feasibility Assessment of \$5 Million

https://www.treasury.nsw.gov.au/sites/default/files/pdf/2014-2015_Budget_Papers_BP4_Infrastructure_Statement.pdf

Feb 2016 Tunnels appear on the Infrastructure Australia Priority List as a Priority Initiative with a 10-15 year timeframe as WestConnex Stage 4a and 4b

https://www.infrastructureaustralia.gov.au/sites/default/files/2019-06/australian_infrastruc_ture_plan-infrastructure_priority_list.pdf

17 Feb 2017 New Premier commits to Northern Beaches and a Beaches Link Tunnel

“The Manly Daily uncovered a pre-feasibility assessment of the B-Line, then called BRT, from 2012, when Ms Berejiklian was transport minister. It argued that benefits would not be worth the expenditure of the what was then estimated as a \$336 million plan. It said significant infrastructure upgrades, like a bus tunnel or widening of the Spit Bridge, would be needed. The plan now known as the Beaches Link tunnel was also ruled out as too expensive in the report. When asked about the report, Ms Berejiklian said: “There’s no doubt (it) will be a very effective piece of infrastructure, but you are right, it will be better if there is other things with it. That is what we are doing — we are looking at an integrated response and we have always said that.”

3rd March, 2017 announcement by the then Premier that a road based solution was intended prior to by-elections:

<https://www.smh.com.au/national/nsw/gladys-berejiklian-builds-expectation-for-spit-bridge-tunnel-announcement-20170303-guq390.html>

6 April, 2017 News Article: the Premier Signed Lobby Group Poster The Sensible Traffic Action Group reactivated its campaign for a tunnel on the back of the by-election. STAG has been quiet for seven years. STAG co-founders ... **were summoned to Parliament House** on Tuesday to meet the Premier for a photo opportunity. She signed a giant hand-drawn sign with a message the Beaches Link tunnel is guaranteed to start by 2019.

<https://www.dailytelegraph.com.au/newslocal/mosman-daily/premier-gladys-berejiklian-signs-tunnel-agreement-ahead-of-north-shore-by-election/news-story/4e34bd6bed79a3e8f518bc67b7e2d423>

4 July 2018 - The Premier renewed pledge promising the Toll Road Tunnel to lobby group

involved in the 2009 toll road proposal: *“The latest development on the tunnel has seen \$556 million being set aside for tunnel pre-construction and planning over the next four years. But Peter Papas, co-founder of the pro-tunnel organisation Sensible Traffic Action Group (STAG), would have liked more progress on the multi-billion project.”*

<https://www.dailytelegraph.com.au/newslocal/mosman-daily/gladys-berejiklians-pledge-to-build-the-tunnel-falls-short/news-story/bc0b90965c813b214ee0024647d01196>

July 18 2017 - Tolls on Bridge are needed to cross subsidies both tunnels

The documents show the new tolls on the Harbour Bridge and Harbour Tunnel will help cross-subsidise the third harbour crossing and the Beaches Link, **whose tolls will be insufficient to cover the full cost of building, maintaining and operating them.** Cabinet documents seen by Fairfax Media and the ABC have put the cost of the new tunnels at \$14 billion, which compares with \$16.8 billion for the 33km WestConnex motorway. Transport authorities believe tolls are necessary to **avoid free northbound trips on the Harbour Bridge and Harbour Tunnel undermining the case for a third crossing.** A free alternative would discourage motorists from using a tolled Western Harbour Tunnel.

<https://www.smh.com.au/national/nsw/revealed-8-tolls-each-way-planned-for-new-roadway-tunnels-to-sydney-north-20170718-gxdawm.html>

29 Oct 2019 Community petition raised asking for stop and alternatives assessment

<https://www.dailytelegraph.com.au/newslocal/mosman-daily/antitunnel-campaigners-gather-10000-signature-petition-against-beaches-link-tunnel/news-story/bc869efb84afe7dbc08577ebaa4033c9>

July 30th, 2020 Petition presented to Parliament 11,000 signatures majority Willoughby

<https://www.parliament.nsw.gov.au/la/petitions/Pages/abled-paper-details.aspx?pk=77604>

August 6, 2020. Leader of Upper House Censured for not handing over Western Harbour and Beaches Link Business Case/ Travel Time Justifications

<https://www.thinklocal.com.au/article/local/urban-development/minister-censured-over-western-harbour-tunnel-and-beaches-link-documents>

December 24, 2020. Beaches Link EIS released to community during "Covid Christmas"

<http://www.goodformanly.com.au/news>

January 22, 2021 Western Harbour Tunnel Approved - with no costings made public or funding model...and no alternatives assessment

<https://thewest.com.au/news/transport/sydneys-west-harbour-tunnel-gets-approval-ng-s-2046388>

January 22, 2021 Western Harbour and Warringah Freeway Approved without addressing community concerns

<https://www.abc.net.au/news/2021-01-22/sydneys-western-harbour-tunnel-approved-for-construction/13081236>

The Beaches Link is Pending Approval/ Funding Decision.

Note: Community members submitted a GIPA which demonstrated that known assessments of alternatives such as that provided in Appendix B: Metro Assessment were not considered in the alternatives assessment for the project. The very early assessments appear to have only assessed the bus options but it is not clear in the project documents if even these were fully compared to the toll road option. A bus only tunnel under the Harbour mentioned in early documents certainly has not been compared to a toll road.

5. Can you explain what the local traffic impacts will be from the reconfiguration of the Warringah Freeway?

This is discussed extensively in the Stop the Tunnels submission into the inquiry which is attached for your reference and includes a diagram explaining the extensive changes to the freeway. The EIS demonstrates that many intersection delays across the North Shore will either increase or fail as a result of building the two tunnels into the Warringah Freeway corridor. The planned changes affect its East/ West distribution function and limit local choice creating the need to run locally up and down the full length of the Freeway which generates more congestion.

6. In terms of air pollution what evidence do you have showing that sensitive receivers will receive a higher level of pollution as a result of the project?

This is discussed extensively in the Stop the Tunnels submissions and appendices to the inquiry. The EIS demonstrates that Community Receptor points at locations which represent a large number of school students will receive higher levels of pollution as a result of the project. We reject the notion that the results can be averaged out across a wide area (including points well away from the project footprint) when schools full of children are very clearly negatively impacted. The EIS demonstrates that background pollution levels will already be at criteria and WHO have recently advised that criteria levels should be lowered to improve health outcomes. The concerns about pollution around school children have now been compounded by the fact that schools are required to keep windows open. The dust (potentially contaminated) and diesel issues around schools is a high priority concern and no guidance has been given to schools as to what to do in the event of an event that would normally require windows to be closed. There is also no monitoring available which schools have requested via numerous submissions both at school locations and at local sports fields. We request that the inquiry recommend that work not be undertaken during school hours and/ or that monitoring and HEPA filtration be made available to all schools immediately that are within 500 metres or along the transport route of these projects.

7. Based on your research of the corridor and the changes required, will the transition to electric vehicles necessarily solve the air pollution problems?

This is extensively covered in Appendix A to our supplementary submission. With only a 30% transition to EV's by 2027 predicted within the new car market (which is only a small percentage of the overall car market) and growing diesel reliance it is clear that the current projected transition to EV's will not address the air pollution issues within ten years of these tunnels opening, particularly given urban pollution in the area is already reaching criteria level and the tunnels will create a significant uplift in freight through the corridor. A mix of solutions which include EV transition and a mode shift to sustainable transport and planning is needed to slow the rate of increase in terms of urban pollution.

8. You mentioned contamination concerns at local construction sites. Can you explain why you are concerned and what consultation has occurred to date around this?

This is discussed extensively in the Stop the Tunnels submissions to the inquiry. Ongoing contamination concerns are noted at the chosen primary construction dive sites at Cammeray Park and Flat Rock Gully. In the case of Cammeray Park/ Golf Course land owners have failed to report the site under the Contaminated Lands Act and as such the site is not being treated as a contaminated site by the EPA. The community have been advised by the EPA that they cannot do anything unless the land owner reports meanwhile large trenches and extensive work is underway within meters of children's playing fields. There is a known history of contamination and a risk assessment that states the site is a moderate to high risk which should require a full DSI and mitigation procedures to be put into place prior to construction. The DSI's that have been completed have identified some contaminants but testing is incomplete and has been averaged across the site. DPIE compliance are currently undertaking an investigation however it is our understanding that North Sydney Council/ Crown Lands do not report the site as contaminated under the Contaminated Lands Act the community is concerned that there is little the DPIE can do to assure community safety. We would ask the inquiry to recommend that the landowners report the site to the EPA and that the precautionary principal is employed regarding dust and migration of contaminants to the nearby fields.

Willoughby Council are now undertaking Bore Hole Testing (as a result of community feedback and subsequent reporting to the EPA) of the Flat Rock Gully landfill/ dive site. There are concerns however that not all contaminants ie) PFAS and Dioxins will be tested for. The site was not only a legacy industrial landfill but housed a refrigerant factory - it is clearly documented that refrigerant waste was dumped in the tip area. Contaminants such as Chromium and PFAS are likely to be present as a result. Additionally, there is documented evidence that the landfill was frequently burned and therefore Dioxins may also be present. There are community questions as to why full testing of these sites was not completed prior to the EIS being released and why Willoughby Council has been required to cover the cost? Mitigation and remediation needs cannot be costed accurately at these sites until rigorous testing is complete and if not for the tunnel project Willoughby Council would not be digging up the land.

Given both sites are within the catchments of waterways which run out to Middle Harbour there is significant concern regarding the wisdom of selecting these sites and the environmental damage and potential for harm to residents and users of the parks and waterways in the area. Alternatives have been suggested for both sites ie) Undergrounding sites next to the Freeway at Cammeray and a slight realignment around the landfill at Flat Rock with staging to ensure spoil is removed underground via the Warringah Freeway and Gore Hill Expressway. The community's suggestions in this regard have been dismissed with the reason being that time would be added to the project. We would argue that delays like that being experienced by West Gate Tunnel can be far greater where contamination is concerned and that preventative action taken in advance could avoid some of these issues arising with a lesser increase in time being needed.

It should be noted that North Sydney Council has discussed the possibility of a land swap with a Berry's Bay in recent council meetings. The community are extremely concerned about what is already a net loss in green space - and both the returned Golf Course and Berry's Bay had been promised to the community. The Golf Course is Crown Land and should be returned in good order to the community after use.

9. Can you expand further in your concerns about consultation during the planning process?

The consultation processes are covered in the Stop the Tunnels Supplementary Submission - particular concerns are raised around the consultation occurring during COVID-19 lockdowns/ restrictions, the complexity of the 20,000 pages of documents, lack of community access to the EIS, the planning system being inaccessible due to scheduled maintenance on the weekend submissions were due, suburbs such as those not directly impacted but affected ie Northern Beaches not being consulted, no change occurring as a result of detailed community feedback and a lack of responsiveness from the local members around well researched community concerns and suggestions.

10. In your submission you talk about concerns regarding the claims made around the project and a conflict of interest. Can you expand on this further?

This is detailed in our Supplementary Submission - the concerns relate to the fact that Jacobs prepared the EIS (ie risk assessment), have been awarded the Early Works as part of the Sydney Program Alliance Contract and are now responsible for the detailed site assessments. We believe this constitutes a conflict of interest and lacks scientific objectivity. Testing and reporting of contamination should be conducted independently to the contract and additional controls applied where contamination is confirmed.

11. What are your concerns about the BCR?

The BCR for the Western Harbour Tunnel/ Warringah Freeway Upgrade is stated as only 1.2. Our concerns are covered in the Supplementary Submission. Our key concerns are that there is evidently serious and a large proportion of under assessed risk which may further erode a marginal BCR or result in corners being cut. Items claimed as benefits do not appear to be reasonable or validated. The cost to the environment, health and local amenity associated with the project is not sufficiently accounted for. The impact of COVID-19 has also clearly not been addressed as part of the Business Case review. INSW claims that changing trends will not impact the project in the longer term are contradicted by Infrastructure Australia's conclusion that these changes will have considerable impacts on major infrastructure and all project should be re-assessed. The BCR of these projects are particularly susceptible due to the fact that they are serving an inner suburbs commuter corridor - changes in work habits, attitudes to public and active transport and a move to the regions will impact this. Whilst freight will not be as sensitive to these changes - freight alone cannot account for the toll revenue required. . The other factor is toll saturation - Sydney is already showing signs of this. Truck drivers along this route are likely to have to use multiple toll roads to deliver their goods in both directions. The strong possibility of further toll avoidance has not been adequately considered.

12. Do you think mitigation of the various risks and impacts you have highlighted from this project is possible, or should alternatives to the project be considered?

No, we do not believe that effective mitigation of all of the stated risks to the project are possible and certainly not within the allowances made. For example, on the testimony of the Marine Scientists silt curtains to the seafloor would be needed to mitigate the risks of contamination however experts have advised that full length silt curtains are not possible in the location due to strong currents and tidal flows. Alternatives to the project and if not the methods and alignment chosen should be considered. The Southwest Metro Business Case Summary demonstrates that an immersed tube was considered to create an unreasonable risk to the environment and a bored tunnel was selected instead. Whilst we do not believe that this project will achieve the benefits nor will it address congestion should the government go ahead we believe that substantive changes to the project are needed to make the project both viable and safe. Changes such as the elimination of immersed tube tunnel methods, a realignment away from the Freeway, re-alignment out of Flat Rock Gully and pollution treatment would substantially reduce risk. Ultimately however we do not think that a toll road tunnel along this corridor meets the needs of the community or achieves the project goals. A mix of sustainable transport and planning options are needed. These are covered in more detail in our submission and include creating substantive mode shift via metro/ light rail, cycleways and on demand transport, optimising what is available via Smart Motorways and freight solutions but also reconsidering the way we work with support for work from home, local work centres and a better mix of residential and commercial zoning to allow people to affordably live closer to work. We should also address the continual sprawl and congestion of Sydney by providing more options to move to the regions and funding high speed rail. Rather than investing in growing our car reliance we should be looking at ways to reduce it and live and work more sustainably as our population grows.

13. In your submission you mentioned concerns about the climate, biodiversity and sustainability profile of these projects. Can you expand on those concerns?

This is discussed extensively in the Stop the Tunnels supplementary submission to the inquiry (please see the Biodiversity, Climate and Sustainability Scorecard in our supplementary submission, page 63 and 64) and in many other expert group submissions into the inquiry as follows.

**Western Harbour Tunnel and Beaches Link Toll Road
Climate, Biodiversity and Sustainability Scorecard**

Item	Western Harbour/ Warringah Freeway	Beaches Link and Gore Hill Extension	Cumulative Impact* * and Comparison
Total Construction Emissions	784 000 tonnes CO2e* WHT EIS Appendix X Table 3-16 *164 000 Tonnes CO2e Diesel* WHT EIS Chapter 26 Table 26-5	809 000 tonnes CO2e* BL EIS Appendix X Table E-1 *138 000 Tonnes CO2e Diesel BL EIS Chapter 26 Table 26-5	1 477 000 tonnes CO2e BL EIS Appendix X Table E-1 Comparison: The Southwest Metro, Chatswood to Sydenham ¹¹² will produce total construction emissions of only 579,280 t CO2-e over approx. the same distance ie 15.5km twin tunnels
Total Operational emissions per year with the project 2037***	72 100 tonnes CO2e tonnes per year WHT EIS Ch 26 Table 26-26	52 526 tonnes CO2e tonnes per year BL EIS App X Table 3-28	139 363 tonnes CO2e tonnes per year by 2037 BL EIS App X Table 3-28 Southwest Metro produces only 65,835 t CO2-e per year
Emissions increase due to the project	31 651 tonnes CO2e additional per year** WHT EIS Appendix X Table 3-26	19 484 tonnes CO2e additional per year BL EIS Appendix X Table 3-16:	67 950 tonnes of additional CO2e per year BL EIS Table 3-16 Metro = reduction in vehicle emissions
Increase in Vehicle Kilometres Travelled (VKT) per Day by 2037 due to the project	410 406 additional VKT per day WHT EIS Appendix X Table 3-15 14 004 279 VKT (do something) - 13 633 873 VKT (BL do minimum) = 58,443	311 963 additional VKT per day BL EIS Appendix X Table 3-15 based on 13 945 836 BL 13 945 836 (Do something ie BL) - 13 633 873 (Do Min)	950 393 additional VKT per day BL EIS Appendix X Table 3-15 based on 14 584 266 Do something cumulative - do minimum Metro = reduction in overall VKT's
Total Waste Generated Spoil, crushed rock, site etc	6 + Million tonnes EIS Appendix X Table 3-9	6+ Million tonnes EIS Appendix X Table 3-9	12+ Million Tonnes in Total Addition

Amount "suitable" for offshore disposal	1 219 200 tonnes EIS Appendix X Table 3-9	241 000 tonnes BL EIS Appendix X Table 3-9	1 450 000 tonnes total
Water Usage: per day	1 327 000 Litres per day* *Includes 837 000 L per day potable water WHT EIS Chapter 6-90	2 645 000 Litres per day* *Includes 1 442 000 Litres Potable water BL EIS Chapter 24 -6	3 972 000 Litres of water will be used per day to build the tunnels
Volume of sediment to be Dredged from Harbour	904 500 m3 Sydney Harbour WHT EIS Chapter 19	163 000m3 Middle Harbour Note: Dry out & disposal location unknown BL EIS Chapter 24 Table 24-7	1 067 500m3 Total dredged sediment Metro = zero dredged as bored not immersed tube tunnel used
Contamination Risks Identified in Project Footprint	20 moderate to high risk sites Areas along Warringah Freeway, St Leonard's Park, Cammeray Golf Course, Waverton Park, Birchgrove Pt, Sydney Harbour. Contamination risks noted: PFAS, Heavy metals, hydrocarbons (mainly PAH), asbestos pesticides, PCB, nutrients, cyanide, VOC, asbestos WHT EIS Appendix M	24 moderate to high risk sites Areas along Warringah Freeway, Artarmon Industrial Area, Flat Rock Gully Reserve Tip Site, Willoughby Leisure Centre, Middle Harbour, Spit, Balgowlah Golf Course, Wakehurst Parkway Seaforth. Risks noted incl: Heavy metals, hydrocarbons, pesticides, PCB, nutrients, cyanide, VOC, asbestos, landfill gas BL EIS Appendix M	44 sites in and around the selected alignment are rated as having a moderate to high risk of contamination Early testing has confirmed contaminants at several sites but more testing is needed to determine mitigation feasibility and cost
No. of significant Aboriginal Sites identified in the project footprint	9 8 are moderate to highly significant	11 5 are highly significant. Several are underassessed or yet to be inspected. Additional 3 PAD's identified BL EIS App L	20 Unidentified finds are likely in areas of high significance to the Cammeraygal. Cultural significance of areas is under assessed.
No. of threatened or vulnerable species in the project footprint	7 Fauna, 11 Marine, 4 Flora Species Offset Credits = 2 WHT EIS Chapter 19	24 Fauna, 11 Marine, 2 Flora Species Offset Credits = 1099 BL EIS Chapter 19	63 Threatened or Vulnerable Species put at higher risk
Amount of Green Space Lost	7.29 ha EIS Chapter 19, Table 19-12	15.44 ha BL EIS Ch 19 Table 19-13	22.73 ha Lost
Min no. of Trees to be destroyed/ impacted	506 Trees Appendix W -17	3009 Trees BL EIS Table 3.3 Arborist Assessment	3515 Trees Removed Note: 100's more are earmarked as "potential impact"

Additional References:

- Submission by Larissa Penn, John Berry and Kristina Dodds
- Submission by Inner West Council
- Submission by Metropolitan Local Aboriginal Council
- Submission by Save Flat Rock Gully and Middle Harbour
- Submission by WEPA 1
- Submission by WEPA 1a
- Submission by Friends of Manly Penguins
- Submission by Flat Rock Gully Residents Action Group
- Submission by Ku-ring-gai Bat Conservation Society Inc.
- Submission by Willoughby City Council
- Submission by Parramatta River Catchment Group
- Submission by Save Manly Dam Catchment Group
- Submission by Baringa Bush Resident Group
- Submission by Australian Marine Sciences Association Inc
- Submission by North Sydney Community Independent Councillors

- Submission by Royal Zoological Society of New South Wales
- Submission by Underwater Research Group of NSW
- Submission by Northern Beaches Council

In summary the sustainability and climate profile of these projects are poor when compared to a mass transit alternative. The documents clearly demonstrate that VKT's congestion and emissions will increase considerably and already endangered species will be placed at further and unnecessary risk. Many Aboriginal Heritage sites stand to be damaged and the projects result in a considerable net loss of green space and the removal of 3500+ trees. Where there are viable alternatives available these should be taken rather than creating widespread destruction of sensitive Sydney Harbour environs for little tangible benefit. Removing trees whilst increasing pollution in and around children is unacceptable. A project which so clearly increases emissions and car reliance should not be supported in light of both government's commitment to net zero. It is important to note that each council impacted has declared a climate emergency.

14. Can you expand on your concerns around the business case for the projects?

This is discussed extensively in the Stop the Tunnels supplementary submission into the inquiry - the business case does not align with the data presented in the EIS with regard to surface level traffic, congestion benefits and costs. The travel time savings claimed do not align to lived experience nor do they make sense in terms of the predicted traffic growth based on available information. The costs to the community in terms of health and congestion are also underassessed as are the impacts to the sensitive Marine Environment of Sydney Harbour. Substantive alternatives have not been assessed via an apples to apples comparison - essentially the only assessment has been that of a toll road tunnel. Given that government documents do exist that demonstrate the feasibility of the Metro option and other alternatives we do not believe that the business case is valid. The requirement to demonstrate the highest public good and intergenerational equity has also not been met due to the lack of comparison and the fact that future generations will suffer higher levels of pollution (clearly demonstrated in the appendices), worse local traffic (as demonstrated via widespread local intersection delays), higher road use costs (ie two way tolling on all harbour crossings in addition to new roads) and future generations will be responsible for high levels of debt and guarantees. There is no evidence to support the assumption that future generations want toll road tunnels, however plenty of evidence to demonstrate that future generations want a clean, healthy environment where emissions are lower than today and where reliance on individual car ownership is reduced in urban areas and the cost of living is affordable.

15. Why do you think the travel time savings quoted are overestimated and why they should be validated?

Please refer to the Stop the Tunnels submission and the claimed travel time savings and extracts from google maps driving time estimates in the 8AM peak. The fact that the travel time savings are overestimated are quite self evident.

Travel time savings

Beaches Link will provide a safer, faster and more reliable trip as you bypass:

- 19 sets of traffic lights through The Spit, Mosman and Neutral Bay
- 20 sets of traffic lights from Frenchs Forest to Macquarie Park

By 2037 you will:

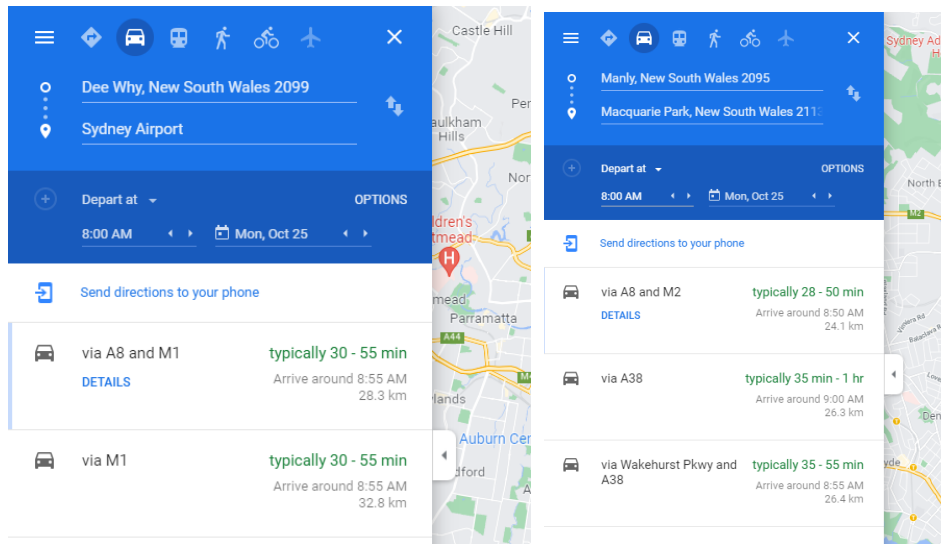
- 🕒 **Save up to 38 minutes**
Balgowlah to Sydney CBD
- 🕒 **Save up to 56 minutes**
Dee Why to Sydney Airport
- 🕒 **Save up to 54 minutes**
Frenchs Forest to Rozelle
- 🕒 **Save up to 32 minutes**
Manly to Macquarie Park

Navigation interface showing a route from Balgowlah, New South Wales 2093 to Sydney CBD, New South Wales. The departure time is 8:00 AM on Monday, Oct 25. Three route options are listed:

via A8 and M1	typically 20 - 35 min	Arrive around 8:35 AM 13.8 km
via A8	typically 18 - 40 min	Arrive around 8:40 AM 13.0 km
via A8 and Cahill Expy	typically 18 - 35 min	Arrive around 8:35 AM 13.5 km

Navigation interface showing a route from Frenchs Forest, New South Wales 2086 to Rozelle, New South Wales 2039. The departure time is 8:00 AM on Monday, Oct 25. Three route options are listed:

via A38	typically 24 - 40 min	Arrive around 8:40 AM 22.3 km
via A38 and Victoria Rd/A40	typically 24 - 50 min	Arrive around 8:50 AM 20.6 km



16. Can you provide more information regarding the air quality implications of this specific project?

There is significant detail on this in the Stop the Tunnels submission into the inquiry - Please see Appendix A of the Supplementary Submission for more detail. There are significant implications ie) this project increases VKT's daily by almost 1M km's and therefore pollution/ emissions overall, schools are particularly affected due to the whole of project air pollution impacts which includes increases in surface level traffic and high rise developments/ dwellings may be adversely impacted (See Appendix C

<https://www.parliament.nsw.gov.au/lcdocs/submissions/76393/0575a%20Stop%20the%20Tunnels.pdf>)

17. What do you think two way tolling on all Harbour Crossings will mean for the areas on both sides of the Harbour?

This is discussed in the Stop the Tunnels supplementary submission into the inquiry. Two way tolling not only taxes the Northern Beaches and North Shore commuters but adds more cost to tradies and transport operators moving goods across the region. Given that additional two way tolling is earmarked for all Harbour Crossings it is evident that those moving across the Harbour front the West will further seek to avoid WestConnex in order to afford the two way tolling across the Harbour. Trip destination data demonstrates that the movement South to North to access the job centres of North Sydney, Chatswood etc is very considerable and the impact of two way tolling should be thoroughly assessed as part of the Business Case for this project with any disbenefits accounted for.

18. Do you think the consultation in planning the project was adequate and effective?

No, The communities that were most consulted were the least impacted by these projects and the communities most impacted were often only consulted when pushed for by the community. The impact of COVID on the consultation process was significant. Given very few changes have been made despite extensive and detailed feedback we do not consider that consultation has been effective in leading to better outcomes for the community or project. The vast majority of feedback has been left unactioned.

Transition to School

For information and help regarding transition to school:
<https://education.nsw.gov.au/public-schools/going-to-a-public-school/primary-schools/starting-school>

Before and After School Care

Most primary schools offer before and after school care (BASC), however places are limited, so it is important to apply early. Further details can be found in the North Sydney Childrens Services Guide at www.northsydney.nsw.gov.au/children. NSW BASC finder website: <https://bascfinder.service.nsw.gov.au>

School Holiday Care and Activities

North Sydney Vacation Care

Admin: Level 5, 99 Walker St, North Sydney

Up to two centres operate during school holidays, according to demand: North Sydney Community Centre, behind Stanton Library; and Grandstand Kindergarten, next to North Sydney Oval.

02 8571 9700

info@gowriensw.com.au

www.gowriensw.com.au/vacation-care/north-sydney-community

Council Webpage: www.northsydney.nsw.gov.au/vacationcare

Note: *North Sydney Vacation Care is operated by Gowrie NSW with the support of North Sydney Council.*

Planet X Youth Centre

Music Shell, St Leonards Park,
cnr Miller & Falcon Sts,
North Sydney NSW 2060
02 9959 5537

contact@planetx.org.au
www.planetx.org.au

Planet X is managed and run by North Sydney Council staff to provide supervision and a safe place for youth who are secondary school age.

Note: *Although Planet X operates during the school holidays, it is not a registered vacation care service.*

For further information about options for the school holidays, go to:
www.northsydney.nsw.gov.au/schoolholidays

Further Information

Association of Independent Schools of NSW

02 9299 2845
www.aisnsw.edu.au

Catholic Education Office Sydney

02 9569 6111
www.ceosyd.catholic.edu.au

Disability Learning and Support

The NSW Government supports an inclusive learning program.
<https://education.nsw.gov.au/teaching-and-learning/disability-learning-and-support>
Email: disability.support@det.nsw.edu.au

NSW Department of Education

<https://education.nsw.gov.au/public-schools>

Public Schools and Catchment Areas

<https://education.nsw.gov.au/school-finder>
www.schoolcatchment.com.au

Public Selective High Schools and Opportunity Classes

1300 880 367
<https://education.nsw.gov.au/public-schools/selective-high-schools-and-opportunity-classes>
Applications and entry exams are held in the preceding year.

Translating and Interpreting Service (TIS) 13 14 50.
Ask for an interpreter in your language to contact North Sydney Council on 02 9936 8100.
This is a free Service for Council related enquiries.

Further information on the schools listed in this brochure can be found in the online Community Directory:
www.northsydney.nsw.gov.au/communitydirectory

Updated May 2021. If you detect an error or have any comments email: communityinformation@northsydney.nsw.gov.au or phone 02 9936 8100 and ask for the Community Information Officer.

For an electronic version of this brochure go to:
www.northsydney.nsw.gov.au/schools

Schools in North Sydney



www.northsydney.nsw.gov.au/schools



North Sydney Council
Website: www.northsydney.nsw.gov.au
Email: council@northsydney.nsw.gov.au
Telephone: 02 9936 8100
PO Box 12, North Sydney NSW 2059
200 Miller St, North Sydney

Primary Schools (aged 5-12)

ANZAC Park Public School 2 ANZAC Ave, Cammeray 02 9922 3288 www.anzacpark-p.schools.nsw.edu.au	Public Co-ed Catchment
Cameragal Montessori Primary School 12 Miller St, North Sydney 02 9954 0344 www.cameragal.nsw.edu.au/primary	Non-demominational Independent Co-ed
Cammeray Public School Palmer St, Cammeray 02 9955 7200 www.cammeray-p.schools.nsw.edu.au	Public Co-ed Catchment
Loreto Kirribilli Junior School 85 Carabella St, Kirribilli 02 9954 0374 www.loreto.nsw.edu.au	Catholic Independent Girls
Neutral Bay Public School Ben Boyd Rd, Neutral Bay 02 9953 1798 www.neutralbay-p.schools.nsw.edu.au	Public Co-ed Catchment
North Sydney Public School (or North Sydney Demonstation School) cnr Bay Rd & Pacific Hwy, North Sydney 02 9955 2822 www.nthsyddem-p.schools.nsw.edu.au	Public Co-ed Catchment
Redlands Grammar School See Secondary Schools for details	Anglican Independent Co-ed includes Preschool
St Aloysius Junior College 29 Burton St, Milsons Point 02 9955 9200 www.stalloysius.nsw.edu.au	Catholic Independent Boys from Year 3
Marist Catholic College North Shore 40 Ridge St, North Sydney 02 9922 4418 www.maristcollege.com	Catholic Independent Co-ed (Formerly St Mary's Primary School)
Shore Grammar School See Secondary Schools for details	Anglican Independent Boys Girls Year 3 -8
Wenona School See Secondary Schools for details	Non-demominational Independent Girls

Secondary Schools (aged 12-18)

Cammeraygal High School 192 Pacific Hwy, Crows Nest (yrs 10-12) 149 West St, Crows Nest (yrs 7-9) 02 9954 7100 www.cammeraygal-h.schools.nsw.edu.au	Public Co-ed Catchment
Loreto Kirribilli Senior School 85 Carabella St, Kirribilli 02 9957 4722 www.loreto.nsw.edu.au	Catholic Independent Girls
Marist Catholic College North Shore 270 Miller St, North Sydney 02 9957 5000 www.maristcollege.com	Catholic Independent Co-ed
Monte Sant' Angelo Mercy College 128 Miller St, North Sydney 02 9409 6200 www.monte.nsw.edu.au	Catholic Independent Girls
North Sydney Boys High cnr Falcon and Miller Sts, Crows Nest 02 9955 4748 https://northsydbo-h.schools.nsw.gov.au	Selective Public Boys
North Sydney Girls High 365 Pacific Hwy, Crows Nest 9922 6666 www.northsydgi-h.schools.nsw.edu.au	Selective Public Girls
Redlands Grammar School 272 Military Rd, Cremorne 02 9909 3133 www.redlands.nsw.edu.au	Anglican Independent Co-ed includes Preschool
St Aloysius Senior College 47 Upper Pitt St, Kirribilli 02 9922 1177 www.stalloysius.nsw.edu.au	Catholic Independent Boys
Shore Grammar School Blue St, North Sydney 02 9923 2277 www.shore.nsw.edu.au	Anglican Independent Boys
Wenona School 176 Walker St, North Sydney 02 9955 3000 www.wenona.nsw.edu.au	Non- demominational Independent Girls

TAFE NSW

St Leonards Campus 213 Pacific Hwy, St Leonards 2065 131 674 www.nsi.tafensw.edu.au	Year 11-12 Specialising in Creative TAFE training and offering HSC
Bradfield Senior College St Leonards Campus (please see above) https://bradfield.nsw.edu.au	

School Open Days

School websites have details of school open days, giving parents a chance to view the school facilities and meet students, teachers and staff. Some schools also conduct tours by appointment.

Glossary of Terms

School Catchment Area Designated area surrounding the school where resident students applying must be accepted.
Co-ed Accepts both boys and girls, also known as comprehensive.
Independent School The school is <u>not</u> government owned or operated, also known as a private school.
Non-denominational Not affiliated with any one religion or religious belief.
Opportunity Class Some public schools offer this class for high achieving, academically gifted Year 5 and Year 6 students. See "Further Information".
Public School The school is government owned and operated with no fees for permanent Australian residents.
Selective School Students need to take a selective exam for entrance to the school or selective class in a public school. See "Further Information".
TAFE Technical and Further Education, specialising in technical and vocational subjects. Go to www.tafensw.edu.au for a full list of courses offered.