Transport for NSW

Responses to post-hearing questions

Public Works Committee

Inquiry into Impact of the Western Harbour Tunnel and Beaches Link

Hearing Date – Monday, 27 September 2021

SUPPLEMENTARY QUESTIONS

QUESTION:

1. Could you please clarify with data how, when and where there will be a decrease and/or increase in traffic from the construction of the Beaches Link and Western Harbour Tunnel projects?

ANSWER:

The two project specific Environmental Impact Statements (EIS) provide details of changes to traffic volumes and patterns as a result of the construction and operation of the respective projects, as well as the cumulative effects of the Western Harbour Tunnel and Beaches Link Program. Relevant traffic data and forecasts are included in Chapter 8, Chapter 9 and Appendix F of each EIS.

QUESTION:

2. You claim that there are start/stop efficiencies - has the net effect been considered given there are greater stop/start issues created on local roads according to the EIS?

a. What is the Warringah Freeway change in relation to local roads?

ANSWER:

Each EIS considers and assesses the net effect of the projects on traffic and transport conditions on motorways and surrounding roads.

These projects are expected to improve travel speeds and reduce the number of stops caused by congestion on both motorways and lower order roads, including local roads.

The Western Harbour Tunnel and Warringah Freeway Upgrade EIS indicates that the proposed projects would substantially improve travel conditions on the Warringah Freeway while maintaining performance on surrounding roads in surrounding areas.

QUESTION:

3. Can you confirm that the EIS Screenline assessment demonstrates that the Northern Beaches will see an increase in vehicles of 18% with the tunnels by 2037?

a. Is this due to housing development and the expectation that more vehicle reliant city commuters will move in?

ANSWER:

The forecast change in traffic demand as a consequence of the projects is explained in Appendix F of the EIS.

Importantly, the Beaches Link project increases the capacity of the transport network connecting to the Northern Beaches, by adding three lanes in each direction, meaning that pressure will be reduced on the Spit Road and Warringah Road corridors, leading to travel time savings and reliability improvements for public transport, freight and private vehicle trips, regardless of which route is used.

QUESTION:

4. Can you name an equivalent overseas tunnel as long as these without air treatment and where there are 20,000 children in close proximity?

ANSWER:

In November 2018, the Advisory Committee on Tunnel Air Quality published a review that found emissions from well-designed ventilation outlets have little, if any, impact on surrounding communities and, as such, there is little health benefit in installing filtration and air treatment systems.

No in-tunnel filtration system is proposed for the projects because the air quality assessment in Appendix H to the EIS demonstrates that the ventilation system would be effective in ensuring compliance with both in-tunnel and ambient air quality criteria. The inclusion of tunnel filtration was evaluated and found not to provide any material benefit to air quality or community health.

QUESTION:

5. Where will locals be able to access the tunnel other than North Sydney?

a. Do you acknowledge that the limited access points will create rat running?

b. Has rat running been modelled?

ANSWER:

The Western Harbour Tunnel has entry and exit portals on the Warringah Freeway, north of Ernest Street, and an underground connection to the M4, M8 and M5 corridors via the Rozelle Interchange. Vehicles can also access the Western Harbour Tunnel from the City West Link in Rozelle. There is also an entry portal adjacent to the Warringah Freeway at North Sydney, accessed via Berry Street in North Sydney, and an exit portal to Falcon Street at Crows Nest.

The Beaches Link and the Western Harbour Tunnel will be connected via an underground tunnel at Cammeray.

The entry and exit portals for the Beaches Link are located on the Burnt Bridge Creek Deviation in Balgowlah, Wakehurst Parkway in Killarney Heights, Warringah Freeway in Cammeray and Gore Hill Freeway in Artarmon.

The potential for 'rat running' is considered through traffic assignment at strategic traffic forecasting and detailed microsimulation traffic modelling levels.

'Rat running' can generally be characterised as traffic using lower-order or local roads to avoid congestion on arterial roads. Given that access to the proposed tunnels are direct adaptations of existing motorway access points, and that the performance of the motorway network and lower order roads is expected to be maintained or improved as result of the projects, the project is not expected to create 'rat running' issues.

QUESTION:

6. Why does the EIS show that there are greater intersection delays across many surface intersections around the project if there is less surface level traffic as you claim in your submission?

ANSWER:

Each EIS noted that intersection delays (a single-point assessment criterion), cannot holistically represent traffic and transport effects/performance in complex and constrained urban areas. Intersection performance is dependent not just on the absolute volume of traffic, but also strategic traffic patterns and the performance of adjacent network elements.

It is for these reasons that an extensive, network-wide traffic forecasting and traffic modelling methodology has been adopted, with primary metrics including average network speeds and travel times. When considering the net effects across the

projects' areas of influence during a forecast typical day, the projects are expected to improve travel speeds and reduce congestion on both motorways and lower order roads, including local roads.

QUESTION:

7. Can you confirm that the EIS demonstrates that the Anzac Bridge will see an increase in traffic if the Western Harbour Tunnel is built? According to Appendix F Table 9-4 the increase is 17% by 2037 when compared to the baseline from 2016.

ANSWER:

The premise of the question is misleading. The 17 per cent increase compares traffic in 2016 to traffic in 2037 when the Western Harbour Tunnel is operational. This does not take into account that, in the absence of the Western Harbour Tunnel project, daily traffic demand on the Anzac Bridge is forecast to increase by around 34 per cent by 2037. With the construction of the Western Harbour Tunnel and Beaches Link, traffic data indicates a reduction of traffic on the Anzac Bridge by 11 per cent in 2037, when compared to 2037 conditions without the program.

QUESTION:

8. Can you confirm that the EIS demonstrates that the Gladesville Bridge will see an increase in traffic if the Western Harbour Tunnel is built? According to Appendix F Table 9-4 the increase is 20% by 2037 when compared to the baseline from 2016.

ANSWER:

The premise of the question is misleading. In the absence of the Western Harbour Tunnel project, daily traffic demand on the Gladesville Bridge is forecast to increase by around 27 per cent by 2037. The Western Harbour Tunnel and Beaches Link Program is not expected to materially change traffic conditions on the Gladesville Bridge.

QUESTION:

9. Can you confirm that the community have been told that the 10% claimed decrease in traffic on Military Rd is based on future projected traffic growth on this corridor, as opposed to traffic changing substantially from current levels as a result of the project?

ANSWER:

The Western Harbour Tunnel and Beaches Link Program is expected to decrease future daily traffic on Military Road on a typical weekday by around 13 per cent in 2037, when compared to 2037 conditions without the program.

In addition, the Beaches Link is expected to reduce demand on parallel routes through the Mosman-North Sydney area, including Ourimbah Road/Belgrave Street and Kurraba Road corridors, by reducing through traffic travelling to and from the Northern Beaches. By returning traffic to the Spit Road/Military Road corridor, the project is expected to reduce 'rat-running' on parallel routes.

QUESTION:

10. Where will this future traffic growth be accommodated given that submissions state that Military Rd is already at capacity at peak hour?

ANSWER:

Forecast 2037 conditions, reflective of the anticipated effects of the Western Harbour Tunnel and Beaches Link Program, indicate a potential small reduction in daily traffic demand on Military Road when compared to existing conditions. In this scenario, demands are within the demonstrated existing capacity of the network.

QUESTION:

11. You stated that substratum acquisition will be required and will not be compensated. Given the highly residential route of both tunnels, will the substratum acquisition be in the hundreds, thousands or tens of thousands?

ANSWER:

TfNSW only acquires the exact substratum it requires for projects. The final number of substratum acquisitions cannot be confirmed until the Western Harbour Tunnel and the Beaches Link projects are procured and detailed final designs are available.

The number of substratum acquisitions is dependent on the final tunnel alignment, width of the tunnel, and includes partial acquisitions where the tunnel passes under part of a property or under a single property in more than one location.

QUESTION:

12. Will house deeds be amended to include the substratum acquisition process?

ANSWER:

Yes.

QUESTION:

13. How long does it generally take to process a deed? Are there any foreseeable delays?

ANSWER:

TfNSW prepares and lodges the relevant dealing with NSW Land Registry Services within one week. Processing and registration of deeds or land title dealings can vary and is the responsibility of NSW Land Registry Services.

QUESTION:

14. Why haven't TfNSW reported the Cammeray Golf Course site to the EPA under the Contaminated Lands Act given the previous knowledge of contamination and proximity to children's facilities, where dust migration is a known risk?

ANSWER:

Sydney Program Alliance, the Warringah Freeway Upgrade early works contractor, completed a Detailed Site Investigation (DSI) on areas of the Cammeray Golf Course that are to be affected by the Warringah Freeway Upgrade early works program. Further DSIs are being planned for other areas of the Cammeray Golf Course that will be affected by future programs of work. These will be completed by a suitably qualified consultant, to be engaged by the Warringah Freeway Upgrade Main Works contractor. As part of the project's planning approval, each DSI is provided to DPIE.

Should the results of these DSIs identify the presence of contamination, consideration is made as to whether the contamination meets the requirements for notification as

set out in the NSW Environmental Protection Authority (EPA) *Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997*. If remediation is required, the site would be remediated and certified by an EPA Site Auditor in accordance with the Conditions of Approval.

QUESTION:

15. Does the early work on the project include relocation of communications related utilities?

a. Who is conducting this work?

ANSWER:

Yes. Sydney Program Alliance is delivering this work, including activities to remove and relocate a range of critical underground and above-ground services and utilities before main construction starts. Some of the relocation work is non-contestable in nature, meaning the work will be undertaken by the utility owner.

QUESTION:

16. Have you had any COVID-19 delays on other tunnel projects when reliant on overseas contractors?

ANSWER:

Infrastructure projects across the world have been impacted by the COVID-19 pandemic.

QUESTION:

17. Do you envisage any risk of delay due to overseas contracts or supply?

ANSWER:

There is always some risk associated with relying on overseas supply chains, whether due to geopolitical matters, global economic performance or, more recently, a pandemic.

For motorway projects, this risk is typically managed by the construction contractors, as they will source, install, test and commission the relevant elements on behalf of TfNSW.

QUESTION:

18. Given overseas contractors have been awarded some of the work - what percentage of jobs will be awarded to overseas workers? What percentage of skilled vs non-skilled jobs?

ANSWER:

The Warringah Freeway Upgrade early works activities are being carried out by the Sydney Program Alliance. The Alliance has demonstrated a strong commitment to engage local services, providers and businesses, wherever possible.

The main Warringah Freeway Upgrade design and construction contract, awarded to CPB Contractors and Downer EDI Works, encourages and incentivises diversity in the workforce as well as the use of local business and people.

TfNSW is not aware of any overseas workers required or planned to be used for these works.

Engagement of local people and services is facilitated through various plans and programs, including the NSW Government's Ten Point Commitment to the Construction Sector. The same targets will be adopted for Western Harbour Tunnel and Beaches Link.

QUESTION:

19. Do you acknowledge that the projects increase Vehicle Kilometres Travelled per day by 950 393 kms (Appendix X Tables 3-15 WHT +BL) and vehicle emissions by 67 950 CO2 per year (Appendix X Table 3-26 WHT + Table 3-16 BL)?

a. Do you acknowledge that total construction emissions will be 1 477 000 tonnes CO2 and operational emissions are 139 363 tonnes CO2 per year by 2037?

b. Do you acknowledge that 12 million tonnes of waste will be generated (EIS Appendix X Table 3-9 WHT+BL), 1 450 000 has been deemed suitable for offshore disposal (EIS Appendix X Table 3-9) and 3 972 000 Litres of Water per day will be used to build the tunnels (WHT Chpt 6-90 + BL Chpt 24-6)?

ANSWER:

Both figures account for the difference between the 2037 scenario of constructing the Western Harbour Tunnel Beaches Link and certain other planned transport projects ('Do something cumulative' scenario, as described in the EIS) and the 2037 scenario of the baseline road network ('Do minimum' scenario, as described in the EIS).

While road traffic emissions and volumes are forecast to slightly grow, the improvements in road layout and widening will improve the efficiency of vehicles using the road network in the study area. This, as well as analysis of the benefits of future fuel efficiency and technology changes, suggests that efforts to support the free flow

of traffic, reduce congestion and increase average speed along the project would likely result in less emissions than presented in the EIS.

Chapter 24 of both EISs present and assess estimated volumes of resource use and waste generated by the projects, in both the construction and operational phases, including measures to manage and minimise these impacts.