## **Objection to Beaches Link Tunnel**

I write to strongly object to your proposed construction of the Beaches Link Tunnel ("BLT"), for the following six reasons.

First, placing unfiltered smoke-stacks taking exhaust fumes from the proposed BLT within a residential area close to a number of childcare centres, primary schools and high schools demonstrates an absolute lack of care about the health of citizens and in particular, young children. Air pollution has been shown to have a materially negative impact on the health of humans, including shortening lifespan, impairing brain development in children and an increased occurrence of life-threatening conditions such as asthma, stroke, heart disease, cancer and dementia. Worse still, the proposed development will not filter or otherwise mitigate the exhaust fumes that will be pumped into the air above our schools and suburbs, presumably in an effort to reduce cost. The New England Journal of Medicine recently concluded that "our data show independent associations between short-term exposure to PM10 and PM2.5 and daily all-cause, cardiovascular, and respiratory mortality in more than 600 cities across the globe" (see References). This is before we consider the impact on global warming of encouraging more cars and hence more carbon dioxide. If TfNSW is to progress with the proposed BLT, the bare minimum safeguards should be legally required filters, move the smoke-stacks as far away from schools as possible (additional cost will be saved in reduced healthcare costs), carbon capture and storage, banning all polluting vehicles such as petrol and diesel from the BLT or better yet, legislate bicycle lanes and electric bus lanes only.

Second, the construction of the BLT is a considerable project given the length of the proposed tunnel and the requirement to bore through sandstone and tougher material. It's clear from the EIS that the noise from this construction will be disruptive for children at school and local businesses for 6 to 10 years (since nearly all projects over-run in time) and potentially afterwards from additional traffic in the area entering the tunnel. Prolonged exposure to noise pollution has been shown to have a significantly negative impact on human health, including stress, anxiety, poor concentration, high blood pressure, cardiovascular disease, hearing impairment/tinnitus, speech impairment, cognitive impairment, headaches/migraine, insomnia, increased adrenaline release leading to long-term fatigue and gastro-intestinal problems. In a major study of the impact of noise pollution on human health, the WHO concluded "there is overwhelming evidence that exposure to environmental noise has adverse effects on the health of the population" (see References).

Third, the environmental impact on this area of such rare natural beauty including unique flora and fauna, critical creeks, historic indigenous sites and dredging of the Harbour will undoubtedly cause the proposed construction of the BLT to be viewed both now and well into the future as an unforgiveable and foolish act of environmental vandalism, perhaps taught in schools as evidence of man's inability to curb his/her selfish, avaricious and exploitative instincts. Beyond the actual destruction of historic sites and death of rare animals and trees, the dredging of the Harbour to lay the tunnel is highly likely to release toxic sludge, despite promises of likely ineffective curtains, making the Harbour and

downstream beaches such as Clontarf unswimmable for years. Given Australia's relative strength globally in science, NSW, Sydney and the Northern Beaches should be leading in protecting our environment, not sacrificing it to more roads.

Fourth, building a tunnel under the Harbour in order to provide more roads to facilitate more cars travelling to the CBD and Airport does not make the Northern Beaches or Sydney more liveable, in fact quite the reverse. As has been seen in Sydney and other cities, building more roads leads to more cars, more air pollution, more noise pollution and only a few years of improvements in travel time – beyond the short term, the roads fill and travel times revert to those seen prior to the new construction meant to improve travel times. What would make Sydney more liveable is better air quality, more green space especially for children, more bicycle lanes, more bus lanes, a move to less noisy transport (such as electric vehicles) and faster internet to match that of comparable developed countries such as Singapore and South Korea.

Fifth, there are a number of far more cost-effective alternatives that were suggested by Councils or others that should have been given more consideration, such as a train from Dee Why to the Northern Beaches Hospital and then to Chatswood, a tunnel between North Head at Manly and South Head or introducing new ferries from Seaforth or the Spit. Also, given the considerable success of the new B-lines, a very cost-effective and sensible alternative is to expand the B-lines project and have a dedicated bus lane from Brookvale to the CBD with no exceptions (get rid of the T3/transit lane). Also, given the great success of the working from home experiment forced upon us by COVID, more consideration should have been given to creating working hubs in suburbs as opposed to persisting with oldfashioned attitudes of conveying all workers to a single city location. Given the very high cost of the proposed BLT, due consideration should have been given to all of the above as well as others and residents should have been consulted on all viable alternatives.

Finally, the release of the 10,000 page EIS just before Christmas providing two months to respond when people are busy with holiday duties and then busy again returning to work, smacks of opportunism and a blatant attempt to bury bad news while residents are distracted. Only those with considerable time and energy will read the entire report and those most affected, such as children and working age people, will not be able to engage. From what I've read, the revised plans appear not to have taken into account residents' previous objections to the smoke-stacks (moving one a hundred metres up the Wakehurst Parkway will likely make no difference) and the impact on existing traffic for the next 6 to 10 years from heavy trucks carrying spoil away from the construction sites.

In conclusion, the proposed tunnel will negatively impact the health of current and future residents, damage the local environment and historic sites, make the city less liveable, not achieve its travel time objectives over the medium or long term, ignores more cost-effective alternatives, is being forced through without addressing residents' valid concerns and, in my opinion, constitutes a gross act of environmental vandalism in an area of extreme natural beauty. I strongly object to the construction of the Beaches Link Tunnel and suggest a minimum one-year delay to allow proper consideration of the impacts of the proposed project and viable transport alternatives.

## References

"Ambient Particulate Air Pollution and Daily Mortality in 652 Cities" https://www.nejm.org/doi/full/10.1056/NEJMoa1817364

"Burden of disease from environmental noise - Quantification of healthy life years lost in Europe"

https://www.who.int/quantifying\_ehimpacts/publications/e94888/en/