I made a submission concerning the EIS noting my concerns with the impact on cycling. Having now had a chance to look at other impacts, I make a further submission.

I object to the The Beaches Link and Gore Hill Freeway Connection EIS (Beaches Link) and recommend refusal on the following grounds:

General objection

I object both to entrenching private travel at the expense of public and active transport and to the scale and design of the Beaches Link and Gore Hill Freeway Connection which will severely degrade and impact the lower North Shore communities, to no benefit, both during construction and after completion. This EIS does not provide a full detailed business case to support this proposal over alternative public transport modals.

By building this freeway NSW is proving itself to be more than 60 years behind most of the Western World. The Braess Paradox was first postulated in 1968 when it was shown that adding a road to a particular congested road traffic network would increase overall journey time because of increased congestion. The paradox is that removing roads or lanes actually increases traffic flow. The President of the US, Joe Biden, plans to allocate many millions of dollars to remove roads across the States in order to reduce congestion. Boston showed as far back as 1990 that removing a highway and replacing it with biking / bus / and walking lanes reduced congestion by 62%. Cities across Europe are also managing congestion by removing roads and creating more choice in how people move. Other countries have moved their policies to improving public transport and active transport infrastructure.

According to Newman & Kenworthy, (1999) automobile dependence is when a city or an area of a city assumes automobile use as the dominant imperative in its decisions on transportation, infrastructure and land use. Other modes thus become increasingly peripheral, marginal or non-existent until there are no real options for passenger travel other than the car. The opposite of automobile dependency is a balanced transportation system with more mixed travel patterns.

[Newman, P. & Kenworthy, J. (1999) Sustainability and Cities: Overcoming Automobile Dependence, Island Press, Washington, p.334.6]

The Beaches Link is not a balanced transportation route. It encourages the use of cars at the expense of active and public transport options. In fact, active transport will be detrimentally affected by this work, particularly in Artarmn. It will result in more, not less, congestion, more pollution, more reliance on fossil fuels and ultimately a very poor outcome for our personal and global environment.

The concept of Induced demand appears to have been overlooked completely in your discussion. It is generally accepted that "Increased vehicle ownership ... in quest for travel convenience and time saving, results in automobile oriented transport planning to reduced travel options down to stigmatization of alternative modes of mobility, suburbanization and degraded cities. In view to remedy the situation, this leads to automobile oriented land use planning, and generous parking supply resulting in dispersed development patterns and invariably back to increased car ownership. These causes continue to flow in a sequential manner reinforcing each other and adding to the problem". Building this link will exacerbate, not reduce, the traffic issues the Northern Beaches suffer at present.

Building this road simply creates an increasing cycle of road building that can never satisfy the demands of the motor vehicle. This is the point at which this cycle needs to stop.

It is only by reducing our dependence on cars that we will be able to successfully accommodate all elements of the sustainability agenda. If flexible commuters are given more choice in how they travel by providing a good public transport system and active transport infrastructure, they will use those methods of travel in preference to their car. This has been shown over and over again in advanced countries.

The Beaches link aims to provide a faster, less congested way for Beaches residents to access the City. However, in the short term, it will also provide a way for people from all over Sydney to access the Northern Beaches. This will result in crowding of beaches, need for more parking, and consequent negative impacts on the amenity of the Northern Beaches.

Objection based on Cycling impacts

I object to the approval of this proposal before there is consultation with the key cycling stakeholders Bike North and Bicycle New South Wales. There has been a failure on the part of the project developers to consult with these key stakeholders which is evident by the incomplete and inadequate response to cycling impacts documented in this EIS. No approval should be made for this project until stakeholder consultation has been conducted with Bike North, Bicycle New South Wales and other local cycling advocates to identify and address all the cycling issues, including those raised in this submission. I further requests that if approved, conditions be placed on the project to ensure detailed on-going consultation with the cycling stakeholders during all following phases of the project.

The Beaches Link as documented in the EIS on public exhibition offers nothing for cycling on the Lower North Shore and will result in severe impacts on the existing cycleways and local amenity both during construction and possibly in operation. The project needs to provide a safe, appropriate cycling infrastructure. It is imperative that this be constructed prior to any work on the The Beaches Link and Gore Hill Freeway Connection so that cycling commuters are not severely impacted.

I object to the failure to include the planning and delivery of an active transport corridor along the length of this project, evidenced by the failure to include delivery of the North Shore Cycleway as part of the project. Sydney's Cycling Future (NSW Government, Dec 2013) requires that the 'needs of people on bike be included throughout the planning of new and upgraded road projects', and that 'bicycle facilities be identified and delivered parallel to major transport corridors'. I would like to see, that prior to any future approval, conditions be placed on this project to deliver the North Shore Cycleway as part of this project, with delivery at the same time as the rest of the project. These conditions should be developed in consultation with local government authorities and cycling stakeholders Bike North and Bicycle New South Wales.

I object to the number of bicycle routes that will be severely impacted during construction by this proposal and the poor attention to provision of detour routes. I request that prior to any proposal approval, conditions be placed on this project to ensure any temporary or permanent removal of cycling facilities be minimised in impact. Such conditions should ensure that an equally safe, short, minimal time delay detour is provided for each cycling facility. I also object to the failure to reinstate all existing cycling infrastructure once construction is complete. Conditions should be placed to enforce the continuation of all existing cycling infrastructure or an alternative provided to the same level of safety, continuity and directness. I object to the failure to identify all existing cycle access links in this EIS, in particular those links that are in popular use along between Naremburn / Cammeray and North Sydney. Conditions should require the project to identify and address all breaks in cycle access. These should be developed in consultation with cycling stakeholders Bike North and Bicycle New South Wales and local government authorities. I also objects to the failure to take the opportunity to increase safety for pedestrians and bike riders.

In addition, I object to completion of the community engagement and consideration of this proposal at this time, in the midst of a pandemic, and when most of the community are on summer leave. This is not the time that the community can fully engage with the issues arising out of the proposed project. This project will have devastating impacts on the lower North Shore community and at a minimum needs major changes to avoid destroying a community that will already be hugely traumatised from the impacts of this pandemic.

I also note that Willoughby City Council will not have the opportunity to hold a meeting to discuss this EIS before the closing date for submissions. The EIS was put out for consultation just before the Summer season break in meetings. Willoughby City will bear the brunt of the negative impacts from this project and at the very least all effort should be made to allow input from this Local Authority **Artarmon**

A large cycle flyover is the only solution I can see that would provide a safe route over the construction area from Reserve Road then East over the railway line to join the Flat Rock Creek joint use path South of Artarmon Reserve. This path is used by commuters to the city, North Sydney and the local area and everything should be done to ensure the safety and comfort of people who prefer to walk and ride rather than use resource guzzling, climate wrecking vehicles.

Any detour route during construction of the Artarmon site must at the very least:

- 1. Provide separation from vehicles, protection from heavy vehicles and be constructed to Austroads standards.
- 2. Be included as part of the overall site design, rather than fitting around a pre-determined site design
- 3. Be based on a final designed path as much as practical
- 4. At all stages be developed in consultation with the Willoughby Council, Bike North and the Artarmon Progress Association with timely notifications of all changes
- 5. Provide an underpass of the railway line connecting to Punch Street so as to avoid steep hills and merging with vehicles on and around railway overpass roads
- 6. Provide an underpass of Herbert Street if possible

7. Connect directly back to the existing path from Waltham Street to avoid Reserve Road

Cammeray

The major area of concern for bike riders in Cammeray is for bicycle paths and bicycle routes through and alongside the Cammeray Golf Course which is a construction support site and also a site for motorway facilities under operation. There is concern regarding the existing bicycle route along the Warringah Freeway from the Cammeray on ramp to North Sydney, access to and use of the Cammeray Golf Course shared path and any impacts of the separated cycleway along Ernest Street.

Also of consideration are impacts and opportunities on East -West connections over the Warringah Freeway, previously covered in the Warringah Freeway Upgrade EIS consisting of Falcon Street shared path bridge, Ridge Street shared path bridge.

Another point of contention is the failure to include within the project scope a safe pedestrian and cycling connection from the existing regional cycleway in Naremburn to West Street Cammeray.

Objection based on increased Traffic through Artarmon Village

Artarmon Village is already impacted severely by through traffic. The Beaches Link as planned will exacerbate this issue unless alternative routes are provided for cars to access the Freeway. As identified in the EIS, Artarmon will experience an increase in traffic through both its residential and industrial areas as traffic heads both to and from Reserve Rd.

I consider it is of utmost importance to consider the intersection at Mowbray Rd and the Pacific Highway. Traffic travelling East from Mowbray Rd. West cannot turn right into the Pacific Hwy. Hence drivers turn right at Hampden Rd. and drive through the village to join major roads. If The Beaches Link is constructed, the traffic impact will be huge unless the intersection at Mowbray Rd and the Pacific Highway is upgraded to allow a right turn from Mowbray Rd West into the Pacific Hwy. Cars will then be able to access the Beaches Link further down via Dickson Ave./Reserve Rd.

I find your interactive map nauseating. You show less congestion, less traffic and less rat-running in some areas, but do not show the vastly increased amount of traffic that this project will produce in Artarmon.

Because the Reserve Road ramps are already often congested, an extra north-bound lane is proposed for traffic to turn onto the Gore Hill Freeway eastbound and onto the Beaches Link. As a result, more traffic will use Reserve Road and, in many cases, travel through Artarmon Village to do so. This problem is further compounded by the lack of a right turn from Mowbray Road West onto Pacific Highway southbound.

Objection based on the use of local roads as arterial routes

An exit is proposed from the Beaches Link at Dickson Avenue to join Reserve Road and the Pacific Highway where traffic lights will be installed. This is quite incongruous with the local traffic in the Artarmon industrial area and it is not clear how it will work at points such the 'four stop-sign' intersection with Clarendon Street.

Barton Road West, Dickson Avenue and Punch Street, all in Artarmon, are planned to be worksites. This will inevitably result in a huge increase in traffic on local roads that are already busy. There is nothing in the EIS that adequately covers the impacts on the shared use paths that are used by both locals and commuters from further North and West to get to work places in St. Leonards, North Sydney and the city centre. The popular tier 1 cycleway alongside Gore Hill Freeway, which extends as far as Eastwood, will be closed for four years between Station Street Naremburn and Reserve Road Artarmon. The proposed detour is inherently unsafe, particularly with the huge increase in heavy vehicles using and crossing this proposed path.

The connection of existing and planned local cycle paths to this route is a key community concern and high on Willoughby City Council's list of matters for discussion with Transport for NSW.

Objection based on increased Traffic on Flat Rock Drive

If this project goes ahead, Flat Rock Gully Reserve will be a central tunnelling site. There will be high levels of traffic congestion, noise, and vibrations during the five-year construction period. Traffic on Flat Rock Drive will have to cope with 60 B-double truck movements per hour leaving and entering the site.

Traffic congestion will also increase following construction. A <u>recent SMH article</u> has highlighted the post-construction trouble other Sydney suburbs have had with 'rat-running' across local streets to avoid tunnel and motorway tolls.

Many residents enjoy walking or cycling on the shared pathways through the Reserve bushland, which is part of a wildlife corridor through the north shore. Concerns about the environmental impact of the construction site include contamination of the soil and Flat Rock Creek and the impact on fauna and flora.

Objection based on destruction of Bushland

Destruction of much-loved bushland and biodiversity to the east of Flat Rock Drive with threats of further impacts on flora and fauna in nearby Tunks Park. These areas are one of the last refuges for a variety of small native birds in our region.

Objection based on disturbance of Contaminated fill

There will be disturbance of contaminated fill underlying Bicentennial Reserve and the netball courts, the nature of which previously led to Tunks Park being managed under the *Contaminated Land Management Act 1997*. The proposed dig site sits at the top of the Flat Rock Gully/Tunks Park wildlife area.

Objection based on decreased Air Quality

The plan includes installing unfiltered stacks pumping out pollution over pre-schools, primary and high schools across North Sydney.

Objection based on Marine Pollution

Damage to the marine environment of Middle Harbour due to the disturbance of layers of historic underwater contaminants.

There is an alternative

It is particularly disturbing that this massive project has been proposed without the business case being released and with scant consideration in the EIS as to whether the project is necessary given the likely congestion-busting impact of the planned express bus service from Dee Why/Brookvale to Chatswood to integrate with the new Metro link to the city.

Chapter 4 states that Sydney's population is forecast to grow from five million to eight million people over the next 40 years. This project is designed to convey traffic from the Northern Beaches. Where are the figures that show the expected population growth for this area. It is certainly not 3 million. You also state "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." If you look at what is happening in other parts of the world, you would see that these changes have already occurred where there is a political will. It has been shown over and over again through many many research papers that building more roads encourages more traffic and hence more congestion.

When you consider rail alternatives in this chapter, you admit that the Northern beaches region has a low population density and population growth rate.

You state "Supplemented by a rapid bus service between Dee Why and Chatswood that is currently being planned, ... more people are likely to travel by rail, helping to reduce the number of buses travelling into the Sydney CBD from locations north of Sydney Harbour. This would also provide increased capacity for buses and cars travelling from the Northern Beaches to the Sydney CBD." Before embarking on this incredibly expensive, pollution-generating, congestion-generating, toxic Beaches Link, as much as possible should be thrown at the rapid bus service. Eg. Parking stations at Dee Why, bus only lanes, etc.

If this huge amount of money had been spent in providing improved public and active transport for this area, Sydney would vastly improve its rating as a livable city. This project will only diminish our reputation as a city mired in traffic congestion, shrouded in air pollution, and with increasingly poor alternatives for active transport

Questions

Where in the EIS is the evidence that shows that a \$14 billion car tunnel is more cost-effective and environmentally sustainable than a public transport link and provision of active transport options?
Why has the EIS not considered the census data which shows that the planned bus service, in conjunction with the new metro, will service the areas where Northern Beaches residents work?

•Why hasn't the EIS considered the impact of the increased incidence of working from home as a result of Covid-19?

- •How will proposed offsets protect the diminishing bushland in Willoughby City?
- •Where in the EIS have you examined alternatives?

•Where in the EIS is there a discussion of worldwide trends in traffic infrastructure and the reasons you have ignored them?

•Why hasn't the State Government announced a timetable for the deregistration of vehicles powered by internal combustion engines? You have used the uptake of electric vehicles as one of the drivers for less Greenhouse gas emissions, but have not given any timeline for this uptake.