

4 September 2014

Director - Infrastructure Projects
 Department of Planning and Environment
 Number: SSI 13_6136
 Major Projects Assessment
 GPO Box 39
 SYDNEY NSW 2001

NorthConnex Application Number: SSI 13_6136

Please find below my submission in response to the exhibition of the EIS for NorthConnex.

Firstly I would like to state I object to the project as described in the EIS.

I have a high level of concern regarding the following issues and request that these be considered by NorthConnex and the Department of Planning. In regards to the NorthConnex tunnel, I am concerned about:

1. Placement of the northern ventilation stack in the centre of a densely populated residential area in Wahroonga, where 9,300 school children will be exposed, as well as multiple aged care facilities, hospitals, businesses and homes.
2. The placement of the northern ventilation stack in a valley in Wahroonga where there are often low wind speeds, which will result in poor dispersion and exposure to community to high levels of tunnel emission.
3. I am highly concerned about the multiple large scale research studies that suggest the impacts of air pollutants on health are serious. These include increased death from heart disease, increased risks of lung cancer, stroke, poor lung growth in children, increased asthma, and recent research suggesting low birth weight for pregnant women, increased autism, and congenital heart defects. These studies confirm air pollutants have prothrombotic and inflammatory effects on humans which cause the above health problems.
4. I am concerned about the project including future provisions for portal emissions in densely populated areas, which will result in emissions remaining at ground level, and hence exposing the local population to pollutants. I am also concerned that NorthConnex's claim that there will no portal emissions from current proposal cannot be verified.
5. I am concerned about the large amount of diesel emissions which will be emitted from the NorthConnex tunnel, as it is being designed for heavy freight to bypass Pennant Hills Rd. Diesel emissions have been classified as carcinogenic by the World Health Organisation, and also contain a larger number of fine particles which penetrate deep into lung tissue and remain there causing inflammation.
6. I am concerned about the air quality within the tunnel which is shown in the EIS to have exceedences above standards for pollutants such as NO₂, and haze from particulate matter at the ends of the tunnel.

NorthConnex EIS Submission

7. I am concerned about the multiple flaws in the air quality modelling of the northern stack in the EIS. These include:
 - a) extrapolation of meteorological data from other weather stations which do not reflect the local meteorology, local topography, and the valley location.
 - b) The use of a coarse topographical model
 - c) The failure to consider polluted intake air from the Pennant Hills/M2 interchange as part of the project contribution to air quality at Wahroonga
 - d) the background air quality being based on air quality at Lindfield and Prospect and the lack of any actual data on PM_{2.5}
8. I am concerned that a full and transparent options assessment process was not undertaken to assess alternative designs for the project. Unlike other tunnel projects in Sydney there are alternatives for locating the stack and portals in non-residential areas.
9. I am concerned that the justification for not providing filtration for the stacks is cursory and unconvincing.
10. I am concerned that even though general motor vehicle emissions are dispersed easily on normal roads, tunnels concentrate these emissions and they are being dispersed in one location at each end and close to residential areas. The outlets should be moved – especially the northern outlet, as it is close to homes, schools and hospitals.

To address my concerns I request that the following actions are undertaken:

1. The air quality and human health impact assessment need to be revised to address the issues raised above.
2. An independent options assessment process should be undertaken to assess alternative locations for the ventilation stack and portals.
3. To undertake a Life Cycle Analysis and assessment for the provision of filtration.
4. A long term health study on children and residents in areas impacted by stack discharges be included as part of the conditions of approval.
5. A comprehensive air quality monitoring program is developed and implemented.
6. An independent review of the ventilation system is undertaken to ensure that NorthConnex's claim of no portal emissions is justified.
7. Portal emissions from NorthConnex in the future are banned.

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8. The Submissions Report/Preferred Project be exhibited to allow the community to respond to the revised information contained in the report.
9. The Department does not approve the project in its current form as it clearly does not meet the principles of Ecologically Sustainable Development as required by the Environmental Planning and Assessment Act.
10. Consideration to adopt the possible solution outlined in the attached Equilbria Proposal.

[REDACTED]
[REDACTED]
[REDACTED]

EQUILIBRIA PROPOSAL



PROPOSED M1-M2 TUNNEL EXTENSION - WAHROONGA NSW

June 2014

<https://www.facebook.com/EquilibriaProposal>

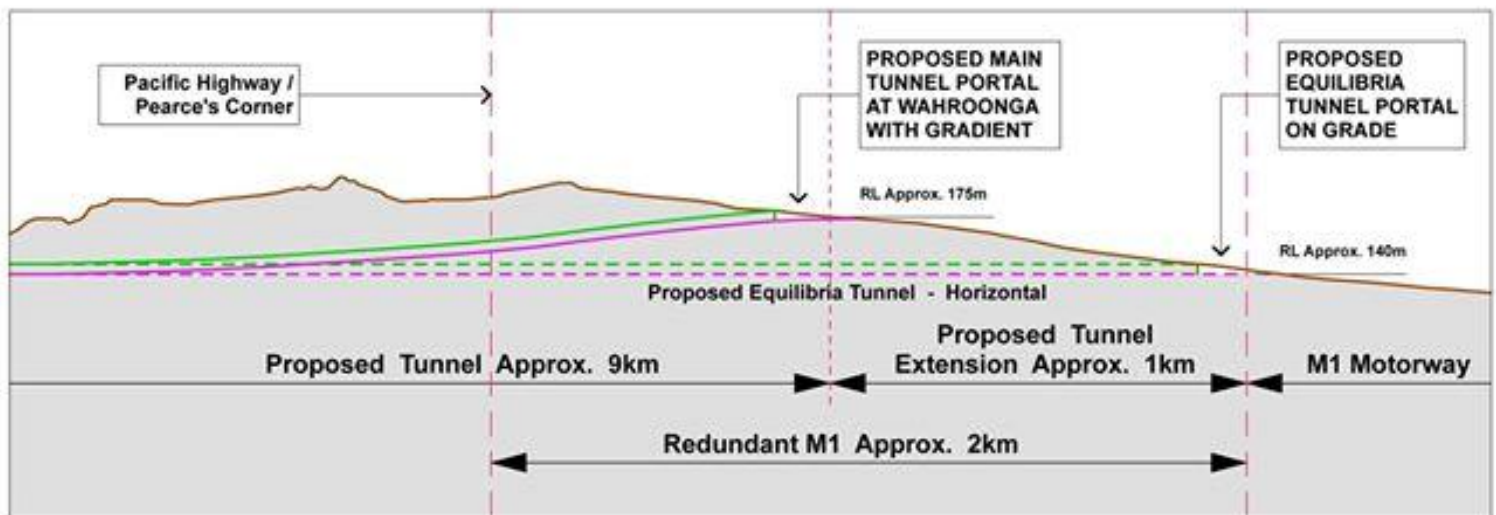
March 2012: Transurban submitted an Unsolicited Proposal to the NSW State Government to build a tunnel linking the M1 and M2 motorways in Sydney.

October 2013: Equilibria developed a proposal to extend the tunnel to approximately 2km north of Pacific Highway - approximately 1km longer than the current Transurban/Lend Lease Bouygues Joint Venture Proposal.

Approximately 2km of redundant M1 would be rezoned to create a unique opportunity for a sustainable urban development.

The suburb of Wahroonga would be reunited (currently cut in two by the M1) and approximately 2000 dwellings would be built over ten separate land precincts totalling approx. 100,000m².

The main tunnel would then be built **horizontal** with **minimal vehicular emissions**. Pollution stack near Hornsby industrial area.



Longitudinal Section: Proposed M1-M2 Tunnel + Extension

Benefits

Equilibria's Proposal would enhance Transurban's Proposal, benefit project partners, and provide economic stimulus to the Federal and NSW State Governments and the local community.

- More vehicles likely to use tunnel due to less pollution in tunnel and faster traffic flows - less risk
- Greater community acceptance of the M1-M2 Tunnel due to less pollution and noise in local residential area
- The extension to the tunnel would be cost effective due to economies of scale from existing construction setup
- A likely improved EIS / more efficient planning approval
- NSW Government receives capital return on sale of redundant M1 land
- The pollution stack would be located adjacent to Hornsby industrial area, not immediate to Wahroonga residents
- The Spring Gully Creek riparian zone, currently adjacent to the M1 would be protected, not destroyed
- No Wahroonga resident would be forced out of their home
- Provision of an additional 2000 dwellings for Sydney with close proximity to Wahroonga train station
- Substantial financial benefits for the Federal Government, the State Government, Transurban and Lend Lease Bouygues

Feasibility Summary

- Total area of all land precincts = approx. 100,000m²
- Residential development subsidy for 1km tunnel extension = \$350M
- Payment to NSW Government for redundant M1 land = \$100M
- Total number of dwellings = 2000
- Total development sales = \$1.833B
- Total stamp duty from development sales = \$74M
- Total development profit = approx. \$400M



Masterplan: Proposed Development Precincts