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Director - Infrastructure Projects
Department of Planning and Environment
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Major Projects Assessment
GPO Box 39 Sydney NSW 2001

Submission on NorthConnex EIS

I have three main concerns with the EIS and the delivery process for the Northconnex project:

1. Project Need and Objectives

There is a lack of strategic planning for this project. Yes, improved traffic flow and capacity between the M1 and M7 is required.

The traffic forecasts and impacts in the EIS are forecast for 2019 and 2029, but not beyond. (The modelling by Transurban models is another cause for concern!) Yet this infrastructure has a design life beyond 50 years. So how does this infrastructrure fit in with the longer term strategic traffic plans for north-west Sydney and more broadly, a Sydney western M1 bypass? Is this project designed to support urban growth or provide a Sydney bypass or both? To what extent for either requirement and over what time-frame? These questions are not addressed in the EIS, which only compares the current and 2029 traffic loads.

At a cost of $3B and high tolls, there is a high risk that the project is over-capitalising on capacity to meet short-to-medium term needs and compromising the effectiveness and implementation of a western Sydney bypass (route corridor Type C) in the longer term. Such a bypass will be required to allow inter-region and inter-state traffic to bypass Sydney and provide capacity relief and as an alternative for the M1 from Sydney to and beyond the Central Coast. Population growth on the Central Coast alone is planned to increase by some 100,000 over the next 20-30 years.

2. Project Alternatives

Alternatives and options to the project have relied extensively on past reports, up to 10 years old, and assessments, data and consultations more than 10 years old. An above-ground route along Pennant Hills Rd has not even been considered. The Type A corridor alignment options in the *F3 to Sydney Orbital Link Study* (SKM, 2004) relied on in the EIS "**assumed** that all four options would be **in tunnel** for the majority of their length" (EIS 4.1.2, p44). The 2004 report was a strategic planning document, not an options report into delivery options subject to cost-benefit analysis.

Other lower cost tunnel alternatives also exist, such as a single bi-directioanl two-lane tunnel designed to cater for peak traffic flows in either direction. A second tunnel can be drilled in future if necessary. Or a single 3-lane tunnel with one bi-directional lane to suit traffic conditions.

Most overseas multi-lane roadways are upgraded by elevated roadways due to significant cost benefits over tunnel options. Tunnels only become economic when other significant factors are involved eg. crossing water bodies or through high mountain ranges. Elevated roadways are constructed rapidly with most components precast off-site and assempled on-site like Lego blocks. Access to the work site is along the assembled roadway as it progresses.

There are many benefits of an above-ground option along Pennant Hills Rd to increase traffic capacity as shown in Table 1 below.

Table 1 Comparison of Impacts Tunnel vs Above-Ground Options

EIS Ref	Item	Proposed Tunnel Option	Above-ground Option (2 x 2 lane)
NA	Capital cost	$3B	Likely < $1.5B. Typical tunnelling costs are 3 to 5 times surface construction costs
NA	Construction period	4 ½ years (Table 6-6)	2 years. No tunnelling
NA	Operations cost	High due to confined space	Low. No confined space
3	Strategic Need	Significant poulation growth South-West / North-West Sydney and Central Coast (100,000) over next 20-30 years, necessitating Type C corridor route for Sydney bypass.	
		Short-medium term solution. Compromises Type C implementation by over-capitalising on capacity in short-term. See also 71.	Short-medium term solution. See also 7.1.
4	Project Development and Alternatives	Alternatives to tunnel not contemplated.	
	Improved valuation and pricing of environmental resources (p65)	Lower cost alternatives not considered at all	Significant cost benefits likely. Significantly reduced use of resources and waste – see 8.3.
7.1	Traffic	Capacity increase 2 lanes each-way.	Capacity increase 1 lane each-way; 2 lane increase for through traffic. Opportunity to provide connections at Commenarra Pky, Boundary Rd, Castel Hill Rd
		Significant spoil disposal volumes; remote disposal sites.	Disruption along route during construction (as for most road upgrade projects).
7.2	Noise and vibration	Impacts from extensive tunnelling for 2 ½ years	Increased but temporary construction noise along route. . No vibration impacts from tunnelling.
7.3	Air quality	Concentrated emissions from stacks during construction and operation	No concentrated emissions
7.4	Health	Concentrated emissions from stacks during construction and operation	Improved. No concentrated emissions.
7.5	Visual amenity		Increased visual impact,but limited to road route and immediate surrounds. This is, however, a major traffic corridor already.

EIS Ref	Item	Proposed Tunnel Option	Above-ground Option (2 x 2 lane)
7.7	Social and economic	Inadequately addressed. Permanent toll impacts not covered; possible compulsory toll for trucks.	Reduced impacts due to significantly reduced capital and operating costs.
7.8	Hydrogeology and soils	Groundwater impacts from tunnel	No groundwater impacts
7.9	Surface water	Impacts from tunnel portals and integration with existing roads	Minimal impacs
8.1	Land use and property	Some impacts on private property	Minimal impact on private property
8.2	Hazards and risks	Relatively high due to tunnel operations	Low. No tunnel operations
8.3	Resources and waste	Significant: Surplus spoil: 2.6M m^3 Shotcrete: 221,000 m^3 Water: 2.25 GL potable Power: 80M kWhrs	Significantly lower / minimal surplus spoil, water, power requirements. No shotcrete
8.4	Greenhouse gas emissions	Relatively high	Relatively low

As is clearly evident, there are compelling benefits from an above-ground route option for the M1 – M7 'missing link'. Serious consideration of an above-ground option is required.

The 2 x 2 tunnel "assumption" for 'Critical Infrastructure' costing $3B with significant tolls is quite irresponsible in my opinion. Taxpayers and the broad community are entitled to be aware of and compare all options (single and multi-tunnel, above-ground) and the associated cost-benefits and trade-offs as part of decision-making. This is completely absent in the EIS and decision-making.

3. Project Delivery

The Unsolicited Proposal process is of significant concern for this $3B Critical Infrastructure project. Some issues:

i) No comparative estimates from other sources, eg competitive tenders, for both capital costs, operating costs and tolls. A negotiated price for such major public infrastructure is completely inappropriate. There can be no public confidence in such process.

ii) Risk management is compromised. If Transurban carries all construction and operations risks (including traffic volumes), risks are priced into its unsolicited offer and paid for, even if some risks do not eventuate. Taxpayers and customers pay more than they should. Transurban carries little or no risk.

What are the public and road-user benefits of the Unsolicited Proposal in this case? I do not believe unsolicited proposals are compatible with public infrastrucutre and should not be given any consideration without compelling reasons. As far as I can see, there are no compelling reasons for an Unsolicited Proposal delivery process in this case.

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