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Have we forgotten something?

The climate change arguments against Sydney's WestConnex

A submission on the M4 East EIS to the NSW Planning Department

Sunday, November 1, 2015

Executive Summary

We have called this submission *Have we forgotten something?* because the whole WestConnex project has been devised as if the NSW and Australian Governments have forgotten that the world is facing a climate catastrophe unless carbon emissions are reduced dramatically, and fast. So we assert that if the NSW Government accepts the science of climate change and therefore that Australia needs to significantly cut its carbon emissions, it must stop all further work on WestConnex.

The NSW Government should not support a road project that will create more traffic and more carbon pollution. The money should instead be spent on other measures that would cut emissions and offer bigger economic, social and environmental benefits. If the NSW Government seeks to leave Sydney a better place for future generations, if it truly wants to build a better Sydney, where people waste less time and money travelling, where the air is cleaner, and where there's less traffic noise, it cannot support WestConnex.

Climate Change Balmain-Rozelle is a community organisation that campaigns for Australia to do more to cut carbon emissions, and as an 800-supporter community group wants Sydney to show the rest of the world how an advanced major city can cut carbon emissions sensibly. That's why we oppose WestConnex. A six-lane toll road is not the answer to Sydney's congestion.

WestConnex is an idea that is 50 years past its time, a period before we realised that new roads would simply fill up with more cars, petrol was cheap, and when we didn't fully understand the extent of the damage caused by burning fossil fuels. This project flourished recently under a Federal Government that refused to provide funding for public transport, and regarded climate change as, at best, 'crap', and at worst, a United Nations conspiracy. Those times are past, and it is now time to put WestConnex into a proper perspective. We believe that WestConnex has come this far only because a Federal government with an ideological aversion to seriously address climate change was prepared to support road building rather than public transport.

As climate campaigners, our submission naturally focuses on WestConnex's greenhouse gas emissions. We challenge the central claim of Appendix U of the EIS, that WestConnex will reduce greenhouse gas emissions because free-flowing traffic produces less emissions than congested traffic. This claim has been discredited by reputable transport experts worldwide. We challenge the claim in the EIS that WestConnex will, by 2031, reduce greenhouse gas emissions by 12% despite an increase in car and all other light vehicle traffic of41% and truck traffic by 106%, compared to a scenario for that year where it is not built. It is an unwarranted claim for the WestConnex Delivery Authority and their consultants Aecom to make.

We call on the NSW Government to halt all further work on WestConnex and instead invest in public transport, rail-based freight solutions and other low-carbon planning policies.

1. New roads create more traffic

Building more roads doesn't solve traffic problems. It creates more traffic[1]. It's called the induced traffic effect. Put simply, if commuting travelling time can be cut by building a new road, more drivers will be prepared to drive further than previously. This new traffic creates new carbon emissions. As residents in Sydney's Inner West campaigning for a world with lower carbon emissions, we obviously can't support any project that increases carbon emissions.

There is no question from the EIS that WestConnex will increase traffic flows across the Inner West. Table 8.2 "WRTM screenline analysis - AWT (2031)" in Appendix G makes this clear. It shows the volume of traffic travelling east-west across four groups of major arterial roads in the Inner West increasing by 36%, 43%, 103% and 62%. For example, to pick the last of these, the group of roads made up by Lyons Rd, Frederick St, Parramatta Rd and New Canterbury Rd, traffic will rise from 172,900 to 279,000 a day. Where will this traffic go?

2. Government has ignored climate change effects of WestConnex

For three years to 2015, the NSW Government had nothing to say about the climate damaging effects of a tollway of this size. Remember, the first Intergovernmental Panel on Climate Change report came out in 1990, warning of the consequences of uncontrolled carbon emissions. Yet, remarkably, 22 years later, the phrase "climate change" received no mention in the *WestConnex business case executive summary* of September 2012, nor in the *M4 Widening environmental review* of August 2014. The 162-page W*estConnex Strategic Environmental Review* of 2013 did have two pages on climate change, but only on the risks WestConnex might suffer later this century from extreme weather from climate change. This document did include brief concern about possible damage to WestConnex from climate change but nothing on the damage to the climate by WestConnex.

CCBR notes that the WestConnex Delivery Authority addresses the issue in the Environmental Impact Statement for the M4 East project, released in September. It has a section, Appendix U, on the greenhouse implications of WestConnex, both from its construction and in operation.

3. Greenhouse emissions from construction are highly significant

Just to build this section of WestConnex is estimated to need 11.6 million litres of diesel for construction plant and equipment, another 20 million litres to transport materials and waste to and from the sites, and 1.2 million litres for project vehicles and employee travel.

[1] For a terrific summary of the facts on this see *New freeways cure congestion: time to put the myth to bed* by Dr Leigh Glover, May 8, 2013 at http://theconversation.com/new-freeways-cure-congestion-time-to-put-the-myth-to-bed-13896. Also see *Technologies for Climate Change Mitigation – Transport Sector* by Salter, R; Dhar, S and Newman P; United Nations Environment Program, March 2011.

As well the project will need 974,000 tonnes of concrete, 32,000 tonnes of steel and 40,000 tonnes of asphalt. In total, construction greenhouse emissions are said to add up to 382,000 tonnes of carbon dioxide equivalent. That's comparable to the annual household greenhouse emissions of a city of around 63,500 people – a city about the size of Coffs Harbour.[2]

4. Greenhouse emissions from ongoing use are underestimated

Construction emissions are, of course, only created once. But once WestConnex is built there will be huge emissions from the vehicles using the road, as well as emissions from the energy used to run the lights, ventilation systems and control centre of the tollway. For this submission, we will just review traffic greenhouse gas emissions.

There are no figures on the total emissions from all sections of WestConnex, but the M4 East Environmental Impact Statement forecasts the emissions from all vehicles by 2031. CCBR challenges the figures produced by WestConnex and its consultants Aecom. These suggest that even though by 2031 car use across the Inner West will increase by 41%, and truck use by 106% petrol use will decrease by 11% and diesel use by 13% (compared with the scenario had WestConnex not been built)[3]. The EIS explains that this is because:

> As improvements to traffic flow and congestion are achieved through increased speeds, reduced travel distances and reduced frequency of stopping, fuel efficiency is improved and subsequently GHG emissions associated with road use are reduced. As such, it is anticipated that the project would result in GHG emissions savings when compared to the base case scenario.[4]

We acknowledge that one car in smoother-flowing traffic uses fuel more efficiently than if that car were sitting in traffic, which is why less fuel is used according ot the highway cycle in vehicle fuel use labelling. But such gains cannot offset the huge predicted increases in vehicle use across the whole transport system due to WestConnex. Furthermore, WestConnex's own analysis speaks of high traffic densities, and capacity being reached by 2031: stop-start traffic just as it is now. The claim that freeways reduce greenhouse gas emissions because they ease traffic congestion is discredited by independent transport experts. For example, Professor Peter Newman, Director of the Curtin University Sustainability Policy Institute, told us:

> We have studied claims like this over the past 30 years and the evidence to support them is not there. The freeway will increase car use and hence increase GHG. Only if the freeway can reduce overall car use by enabling public transport to take more trips and reduce car use will it be possible to make this claim.[5]

[2] How was this calculated? The Australian Government's *Global Warming. Cool it!* booklet estimated average household greenhouse emissions from energy use, transport and the decay of household waste at 15 tonnes a year. While that was published in 2003, the numbers remain sound so we used it for this comparison. So we divided WestConnex's annual emissions by 15 to calculate the equivalent household emissions, then multiplied that by 2.5 as the average household size to give us a figure for city size.

[3] See Table U-11, Appendix U on VKT and Table U-18 on Fuel use

[4] Opening text of section U-5, Appendix U

[5] Personal communication by email October 22, 2015

Put another way, we ask the NSW Government this simple question: has any credible government, environmental agency, or research agency anywhere in the world suggested building new freeways as a carbon mitigation strategy?

Even if one accepts the figures in the EIS for the M4 East, they represent a wholly unsatisfactory reduction in greenhouse gas emissions, given the national target currently is for a 26-28% reduction by 2030. While we do not accept these figures, we note that they claim a reduction of 12% in emissions due to WestConnex . However, the total figures are still huge: on just this section of the tollroad, the annual greenhouse gas emissions are estimated as 346,780 tonnes a year; equivalent to the household emissions from a city of almost 58,000 people, about the size of Wagga Wagga.

5. Spending on climate-friendly traffic solutions is needed urgently

Sydney traffic is congested. But WestConnex will make it worse. Like Melbourne, we need to reject new tollways as the solution to traffic in the 21st Century. We need a metropolitan-wide planning strategy that reduces the need to travel and so in turn reduces carbon pollution, local air pollution, and noise. This won't happen in just two or three years, but by spending WestConnex's $15.4 billion budget, we could make a massive start. Sydney's CBD South East Light Rail will cost $2.1billion. So we could build four light rail systems each at $1.5 billion - perhaps one each for Parramatta, the Northern Beaches, Newcastle and Wollongong - buy hundreds of new buses, build a high speed rail link to Gosford and Newcastle, reopen rail services on the Far North Coast… and still have money left over. And we'd cut carbon emissions, not increase them.

Every major investment decision we all now make - governments, businesses and households - should consider how the result will limit climate change. That's what science, economics and common sense tells us.

We call on the NSW and Australian Government to stop all further work on WestConnex, investing instead in innovative public transport. This project was conceived at a time when both the Australian Government and NSW Government seemed to have forgotten about climate change as a major long-term issue. Climate Change Balmain-Rozelle calls on both governments to acknowledge this public policy requirement. WestConnex is a project incompatible with the needs of a low-carbon society.