

My response to the project overall is that it will not resolve the traffic congestion in this part of Sydney as it purports to do, and it has not been subjected to an appropriate cost-benefit analysis to take into account the real costs of road-building in this part of Sydney, particularly the health costs.

Traffic data from roads near the M5 East and the Lane Cove tunnels show that the main roads nearby are just as congested as they were before those tunnels opened. In the absence of other public transport options, new roads attract more traffic to an area. There is no reason to assert that this will not be the same pattern with the WestConnex proposal. This is especially the case if one takes into account the associated NSW government's urban renewal proposal that envisages 50,000 new dwellings along the Parramatta Road corridor. Australian Bureau of Statistics data indicates that in 2013, the rate of passenger car ownership across Australia was 568 vehicles per 1,000 people (Australian Bureau of Statistics, Cat No 4102.0 - Australian Social Trends, July 2013). Thus the government's urban renewal proposal could potentially add 56,800 vehicle drivers (if one assumes 2 persons per new dwelling) along this corridor, in the absence of other improved public transport options nearby.

This EIS study contains very modest forecast traffic increases which do not take into account the potential impacts of the urban renewal proposal, and thus underestimates the traffic flows to 2027 along the corridor. This factor alone throws into question the conclusion from its modelling that this part of the WestConnex proposal will not adversely affect overall air quality.

The corridor from Parramatta to the Sydney CBD has many suburbs with some of the highest density populations in NSW. More road building in this corridor will attract more traffic over time, both on Parramatta Road and the M4, with consequent addition to the local air pollution that already exists.

The nearest air quality monitoring stations are at Prospect, Chullora and Rozelle, each of them more than six kilometres away. The only one of these monitoring PM2.5 is Chullora. The data from these monitoring stations is being used as a benchmark for gauging the effects of additional traffic on air quality, in the absence of publically-available real data for the several "hot spots" that already exist along this corridor.

The question needs to be asked, when does the EPA plan to provide monitoring stations nearer the proposed WestConnex project, so that more meaningful data, especially of PM2.5 (and finer) can be collected.

This EIS report acknowledges that "toll resistance" will lead to more traffic on parts of Parramatta Road in the Church Street to Homebush Bay section. The subsequent negative impact on the air quality in those sections will compound the deleterious effect on the people who live and work in the 0-300 metres zone along those parts of Parramatta Road.

The government and residents need to question the use of advisory standards that only refer to the average or general exposure of a population to air pollution, rather than long-term exposure to "hot spots". Numerous international studies indicate that both distance from a major road as well as the quality of the ambient air are important in the health impacts of exposure.

A true "whole-of-government approach" to this EIS would have required the authors to include studies of local health data (heart disease, lung cancer, asthma, emphysema) of populations along

the current M4 and Parramatta Road routes, to establish a true benchmark for gauging air quality impacts, rather than the weak model used in this report.

It is astonishing that in 2014, with the availability of powerful computer programs and the potential to monitor and map individual health data that indicates air pollution effects "hot spots", the health department is not doing so. There is obviously no political will to do it, despite the increasing number of road and tunnel projects proposed for the Sydney region.

The trend in the maximum 24-hour average PM10 readings at Rozelle and Chullora are upward in the three years to 2012 (2013 data compromised by the bushfire effect, so difficult to discern), which implies this part of Sydney's particulate matter component of air quality has deteriorated. The lack of an EPA monitoring station near the WestConnex proposed route means it is impossible for this EIS study to judge whether this upward trend in PM10 is also apparent near WestConnex.

The general conclusion from the modelling of the air quality impacts is that there will be improvements in quality overall, except for sections of Parramatta Road, but the report doesn't explain how this is possible, when traffic is forecast to increase.

The modelling does not use data actually collected at the receptor stations along the route, but uses data based on the 2008 fleet average (modified for local topography, etc). So one of the major flaws of this EIS is that it uses base exhaust emission factors on 2008 data for freeway/motor typical fleet (see Table 5-2). This data is six years old and would underestimate the actual fleet composition in 2014.

A study of the Australian diesel fleet indicated that by 2015 the total number of diesel fuel vehicles on the roads would increase from 904,529 (in 1995) to 2,226,480. This report projected the number of diesel vehicles in all categories would grow at a faster rate than other (non-diesel) vehicles (National Environment Protection Council, November 1999, The Australian Diesel Fleet). Australian Bureau of Statistics data indicates that diesel fuel vehicles account for 18.5% of the total vehicle fleet, but in the 5 year period from 2009 - 2014, the number of passenger and light commercial vehicles registered with diesel fuel increased by 103% and 65% respectively (Australian Bureau of Statistics, Cat No 9309.0, Motor Vehicle Census, Australia 31 January 2014).

Thus this EIS study's modelling of impacts on air quality underestimate both the 2014 composition of the vehicle fleet and the future composition to 2027. This is particularly so for PM2.5 and finer, which is a recognised product of diesel fuel. In 2012 the World Health Organisation listed diesel fumes as a Level-1 Human Carcinogen i.e. proven evidence of carcinogenicity in humans (ref http://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213_E.pdf)

Related to this main flaw of the study is that the report provides detailed data of PM10, NO2 and CO2 from each of the three EPA monitoring stations, yet does not provide any readings from the sensitive receptor locations (S1 to S7) along the proposed widened M4. The conclusions of the study relating to the route itself cannot therefore be easily judged by the reader.