

**Submission
No 364**

INQUIRY INTO IMPACT OF THE WESTCONNEX PROJECT

Organisation: Parents and Citizens Association of Sydney Secondary College,
Balmain Campus

Date Received: 29 August 2018

Submission to Parliamentary Enquiry about the WestConnex Project.....including the Western Harbour Tunnel

Sydney Secondary College: Balmain Campus: Parents and Citizens Association

Who are we?

This submission is from the Parents and Citizens (P&C) Association of Sydney Secondary College, Balmain Campus.

Summary of main points

1. Our P&C association (Balmain Campus only) represent some 1,248 students and probably around 868 families who will be directly impacted over the period of construction of the WestConnex and Western Harbour tunnel. And all of these families will have to live with the long term operational issues such as congestion and pollution.
2. The school is located less than 400 metres from construction sites and a ventilation shaft yet has not been designated as a sensitive receptor. This should be fixed.
3. The cost benefit analysis hasn't taken **indirect costs** into account and our school will be affected by these.
4. The cost benefit analysis has not considered the **opportunity cost** of the project.
5. The sporting fields in the Rozelle Goods Yards may be a future benefit but the impact of three unfiltered ventilator shafts on the site is problematic.
6. The objective of reducing traffic congestion will not be met as far as our school is concerned. (All major routes into our area will be more congested).
7. During the construction phase we are concerned about the impact on:
 - a. Children's travel to and from school
 - b. Dust and noise
 - c. Access to King George Park and Terry Street
 - d. Access to Birchgrove Park
 - e. Truck movements and increased danger to children
 - f. Dredging and impact on water quality and stench
8. During the operational phase we are concerned about:
 - a. Increased traffic congestion affecting travel between campuses
 - b. Increased pollution from 4 unfiltered ventilator shafts and its impact on children and staff
9. We have made a number of suggestions for ameliorating the impact of all of the above points of concern.

About the school

Sydney Secondary College is a multi-campus, co-educational, high school and an important community organisation. We have three separate campuses; at Balmain, Leichhardt and Blackwattle Bay with a total of over 2500 students and there is significant interaction (involving movement of students and teachers between the campuses) on a daily basis. This submission relates specifically to

the Balmain campus. A separate submission is being lodged by the P&C of the Leichhardt Campus.

The Balmain campus takes students from year 7 to year 10 and currently we have 780 students enrolled. We also have a special education stream which includes students with autism and physical/intellectual disabilities. Some 20 plus students from the special education needs group have special transport needs...including wheelchairs.

They come from a multiplicity of national and religious backgrounds and 42 percent are from non-English speaking backgrounds. The school draws on a wide catchment area extending from Drummoyne to Darlinghurst with some of the selective students travelling from farther afield. Students transfer from the Balmain and Leichhardt campuses to the Blackwattle Bay campus for Years 11 – 12.

So around 80% of the students live in suburbs that will be directly involved with WestConnex and all of the students and staff of the three campuses will be affected by the project. Those who live in suburbs in proximity to WestConnex works (approximately 2,000 students) will have families (approximately 1,400) who are also impacted. Because the project will run for at least 6 years, the numbers of students and families directly impacted by construction will be about double these numbers.....4,000 and 2,800 respectively.

Our own Balmain campus numbers represent about 31% of these figures or 1,248 and 868 respectively. So the P&C has a very real interest in WestConnex and its impact on the school and community.

1. General issues about the WestConnex project

The Balmain campus is located on the borderline between Rozelle and Balmain and the students and staff will be impacted, in various ways, by:

- The tunnel between the Rozelle Goods Yard and Iron Cove Bridge and the associated ventilation stacks.
- The construction of the Western Harbour Tunnel. (Whilst, perhaps not formally under WestConnex, the stub tunnels have, to date, been featured as part of the Rozelle interchange project).
- The construction of the M4-M5 link and the associated construction in the Rozelle Goods Yards.
- And the ongoing **operation** of all these separate pieces of infrastructure

2. Re para (a) of the terms of reference concerning cost benefit ratio of the projects.

The WestConnex Updated Strategic Business Case (Sydney Motorway Corporation 2015) appraised the economic benefits of WestConnex by considering the following parameters:

- Direct costs to the community

- Direct benefits to the community
- Indirect benefits to the community

However, there is a glaringly obvious omission from this list and that is the **indirect COSTS** to the community. In the case of Balmain school some of these indirect costs include:

- Increased travel times for students to get to and from school and to travel between campuses and to sporting events. (Especially during the construction phase but also, afterwards with the increased congestion in Drummoyne, Anzac Bridge and Johnson Street).
- Dust and noise from construction. This may continue from 2018 to 2030 if the Western Harbour Tunnel is constructed after the Rozelle interchange and the Iron Cove tunnel. That is 12 years of disruption.....and that is no longer “**temporary**”. It extends over the whole school life of a generation of students.
- Increased danger to students from large double-B trucks utilizing streets around Rozelle and Balmain and surrounding suburbs where the students live. The Sydney Morning Herald of 17th August quotes government documents as predicting an additional 4,200 heavy vehicle movements per day and an additional 3,200 light vehicle movements per day....resulting in congestion spreading across the network.
- The loss of students and families from the community following the compulsory acquisition of their homes and their inability to buy back into the same community because of inadequate compensation.
- The potential loss of sporting facilities in King George Park over a long period.
- The impact of increased pollution from the four ventilation shafts which will concentrate the pollution from about 15km plus of tunnels into the suburb of Rozelle and the plume from which will extend into surrounding suburbs.
- Restrictions on the use of Terry Street during the construction phase which will impact on buses utilized by the school. Plus there will be an impact on parents and staff trying to access the school and students utilising bus routes along Victoria Road.

The other missing element from the cost benefit analysis is the **opportunity cost**. That is, what else might have been done with the \$20 billion plus. One obvious alternative would have been investment in public transport such as railespecially to the north.....which carries more people, reduces road traffic and hence pollution and reduces congestion. Some of our students might have been able to utilise a rail link in commuting to and from school. Apparently consideration of alternatives was ruled out from the cost benefit analysis. This would appear to be *unusual*. Of course the \$20 Billion could also have been spent on education or health or other infrastructure where returns might have been greater. But such alternatives were not considered.

We recognise that, under the current plans for Rozelle Goods Yards to be returned to the community as sporting facilities, that the school could **benefit** from these. This might be considered as an indirect benefit to the community.

The downside is that, at best, we will not have access until 2023 and, because of the subsequent construction of the Western Harbour Tunnel, access to the sporting facilities will probably be delayed until 2030. That is, two entire generations of students will pass through years 7-12 at the school before we gain access to these sporting facilities. So this can hardly be considered a benefit in terms of the cost/benefit to the community. At best the *benefit* needs to be heavily discounted.

And, related to the sporting fields in Rozelle Goods Yards, is their co-location with three huge ventilator shafts pumping nitrous oxide, sulphur dioxide, carbon monoxide, benzene, xylene, toluene, and other organic compounds, and small particles into air above the playing fields. All of these can contribute to respiratory problems and some to cardiovascular problems and some are known carcinogens. The school needs some reassurance that students and staff will not be adversely affected by these levels of pollution whilst utilising the playing fields. There is no safe lower level for exposure to small particles (PM_{2.5}) which are a known carcinogen or for the even smaller microparticles which can enter the bloodstream via the lungs.

These ventilator shafts are not going to **improve** air quality. They are concentrating pollution and pumping it from elsewhere, into Rozelle. They can only make air quality worse. Perhaps much worse. This is fairly obviously an **indirect cost** from the WestConnex project.

Suggestions

At a bare minimum the **absolute** levels of pollutants in the playing fields needs to be monitored on an on-going basis ...over a period of several years..... to account for different wind, temperature and weather patterns to provide data which can be used to make decisions about the risk factors involved in using the sporting facilities. This does not mean calculations based on mathematical models but actual measurements. It is doubtful if, anywhere in the world, there are three co-located ventilation stacks exhausting pollutants from 15km of tunnels so data and mathematical models from elsewhere are irrelevant.

We recognise that, if the traffic models prove accurate...and they have not proved accurate with:

- The Cross City tunnel
- The Lane Cove tunnel
- The M5 motorway
- The Clem Jones Tunnel in Brisbane

then, through-traffic along Victoria Road will be reduced considerably from otherwise predicted levels. This may be considered an **indirect benefit** to the school. (Lower levels of exhaust emissions and reduced traffic risk to students). However, this benefit needs to be heavily discounted because of previous massive errors in predicting traffic flows and the uncertain impact of toll-avoiding drivers who will use alternate routes. And, offsetting any reduction in exhaust pollution from lower traffic will be the increased pollution from the four exhaust stacks in Rozelle....one of which is only about 300 metres from the

school. (And even closer to our feeder School; Rozelle Primary School). These ventilator shafts will almost certainly result in increased exposure to health-impairing levels of pollution to our students, teachers and visitors to the school.

3. Re para (f) of the Terms of Reference, relating to meeting the original objectives of the project.

As our students are concentrated around the inner west ... especially, Balmain, Rozelle, Birchgrove, Lilyfield, Annandale, Drummoyne, Pyrmont, Ultimo, Glebe, Forest Lodge, though many travel from farther afieldvery few are likely to utilise **any** of the tunnels associated with the WestConnex Project. They will continue to walk, ride bikes or catch public buses to attend school. So they will **not** benefit directly from this massive project, though they may be disadvantaged by it.

A major goal of the project was to reduce congestion on the roads. It is therefore disappointing to note from the *M5-M5 Link Environmental Impact Statement* (Page xii) that congestion on; Anzac Bridge, On Johnson Street in Annandale, on the Western Distributor and in Drummoyne will actually be worse on completion of the project than it would have been without any of the WestConnex infrastructure. These are all routes that are utilized by our students in getting to and from School and in transporting students and teachers between campuses or to sporting venues.

Furthermore, as mentioned above, during the construction phase there are likely to be 4,200 extra movements per day of heavy vehicles and 3,200 movements per day of light vehiclesresulting in traffic congestion spreading across the network

So, from our perspective, the objective of reducing congestion will not be met. It will actually make life more difficult for our students and staff.....and parents visiting the schools or transporting their children. This will apply both during construction and after completion of the projects.

- **Suggestions:**

Remove spoil by barge from White Bay instead of by truck through already congested roads.

Utilise the sandstone spoil for raising the level of the White Bay port area (thus anticipating future issues from rising sea levels. The same could be done in the Rozelle Goods Yards. This would reduce truck movements.

Complete the stub tunnel for the Western Harbour tunnel from Rozelle Goods Yards as an initial priority. Then use this tunnel to bring in equipment and remove spoil via Rozelle Goods Yards instead of creating a dive site at the old Tigers Club location. At one stroke, this removes huge numbers of truck movements from suburban streets and Victoria Road in Rozelle. Plus eliminating the source of congestion, dust and noise associated with the dive

site. Plus, there would be significant energy savings from not having to lift millions of cubic metres of sandstone the 58 meters to the surface.

4. Re para (j) of the Terms of Reference, relating to any other related matter.

4.1 During the construction phase (which might take up to 12 years)

The P&C is concerned about all of the following and we have added some suggestions for ameliorating the negative impacts:

Designation as a sensitive receiver

- We note from the *M4-M5 WestConnex Environmental Impact Statement* Volume 1B chapters 9 to 15, page 9-21 that “Community receptors such as schools, childcare centres and hospitals were defined as being within a specified zone around 500–600 metres either side of the project footprint“. But the Balmain campus of Sydney Secondary College...the border of which is less than 400 metres from the Iron Cove ventilation shaftis not listed in table 9.8 (The full list of community receptors). Nor is it listed in Table 11-2 (Community receptors included in human health risk). This would appear to be errors or oversight...both of which should be corrected. The school **IS** listed in Table 14-5 as being an educational facility within 400 metres of construction ancillary facility sites.
- **Suggestions**
The Balmain campus should be added to the “full list of Community Receptors” and “Sensitive Receivers” and given the special attention that this group warrants.

Children’s travel to and from school

- Access to the schools by students (bus, walking, bike, car).
- Travelling between campuses....especially for the instrumental music program and sport.
- Loss of pedestrian and bike overpasses at intersection of Victoria Road and the Western Distributor.
- We also note that in the NSW Government *Western Harbour Tunnel-project update* of July 2018, page 27, that it shows a massive reduction in the size of the pedestrian/bike link between The Rozelle Goods Yards and Annandale. This link will be used on a daily basis by students travelling from the Balmain Rozelle, Lilyfield areas to the Blackwattle campus. And returning home. We trust that this is not a formal change but just an error in the drawing.
- **Suggestions:**

Contractors must be obliged to organise day to day activity in such a way that the needs of the school are taken into account and access routes are maintained for students, staff and school buses. This includes bike and pedestrian access across the Western Distributor) to Annandale. We suggest that some formal consultation mechanism be established between contractors and Sydney Secondary College (and possibly Rozelle Primary) to minimise problems.

Dust and Noise

- Dust and noise especially that associated with the construction activity on Victoria Road and with the Tigers Club dive site.
- **Suggestions:**
Dust and noise suppression measures to be enforced and levels of dust and noise monitored by an independent 3rd party to ensure that they are kept to reasonable levels for children. To ensure transparency these measurements should be available to all interested parties online.

The use of the Tiger's club as a dive site should be revisited. The Western Harbour Tunnel at this point will be very deep (58m) and it may be much more economical and sensible to simply drive trucks and equipment along the already prepared stub-tunnels from the Rozelle Goods Yards ...than raising millions of cubic metres of rock a height of 58 metres. This would eliminate a source of noise, dust, obstruction and 120 truck movements per day on Victoria Road, and, in the heart of Rozelle.

The stub tunnels from Rozelle Goods Yards to Balmain are already part of the approval process for WestConnex so they do not have to wait for the approval processes involved with the rest of the Western Harbour Tunnel. They could be constructed now and be ready to utilise the moment approval is given to proceed with the full Western Harbour Tunnel project. Any complications from having several contractors operating simultaneously in the Rozelle goods yards could be managed.

Access to King George Park and Terry Street

- The school is a major user of the sporting facilities in King George Park and we are concerned that their use may be compromised and access made difficult because of the construction associated with the Iron Cove tunnel.
- Likewise, construction near Terry Street will impact on children travelling, and on school bus movements. Terry Street is a major access route for the school.
- **Suggestions:**
Contractors must be obliged to maintain access to Terry Street at all times and, perhaps, ensure that any closures coincide with school holidays. (See also the formal consultation mechanism between schools and contractors, proposed above).

Access to Birchgrove Park

- We welcome the commitment in the NSW Government *Western Harbour Tunnel- project update* of July 2018, page 6, that there are no plans to utilise Birchgrove Park as a construction site.
- **Suggestions:**
This needs to be firmed-up as a commitment that it will NOT be used rather than that there are no *proposals* to utilise it.

Truck movements

- Increased movement of trucks and traffic (danger for kids) throughout the region
- Movement of heavy trucks into Balmain Peninsula associated with the Western Harbour Tunnel.....traffic hazard, noise, dust, interference with traffic flows ..especially buses. We appreciate the commitment in the NSW Government *Western Harbour Tunnel- project update* of July 2018, page 6, that there will be no transport of spoil through Balmain or Birchgrove local streets. This must be enforced. However, we anticipate that there will still be heavy truck movements to and from the Yurulbin construction site.
- We are concerned that with the Tigers Club site being used as a dive site, that large trucks accessing and departing the facility may wish to reverse direction. For example they may wish to travel along Victoria Road towards Anzac Bridge. Or they may wish to enter the dive site but be travelling from Drummoyne. There will be a great temptation to enter the Rozelle Balmain peninsula in order to effect a change of direction. This will create significant problems for the community because of the noise, dust, congestion and narrow roads.
- Also, see above comments above about the issues from an additional 4,200 heavy truck movements and 3,200 light vehicle movement per day during the construction phase.
- **Suggestions:**
Contractors must be obliged to use the access points to Rozelle Goods Yards in White Bay and on the Western Distributor and to avoid local roads. Drivers must undergo training to ensure they understand the permitted and prohibited routes. (Large trucks regularly get stuck in the narrow roads in Balmain and Rozelle).
As proposed in the *Western Harbour Tunnel- project update* of July 2018, p38, the coffer dams should be totally supported by water transport. But, in addition, all the other construction at Yurulbin point should be supported by water borne transport....not by trucks.
- The simplest solution to having trucks entering Balmain peninsular to change direction, is to **ban** trucking contractors from entering the Balmain peninsula, north/east of Victoria Road. And, as above, they must undergo training to ensure this is understood.
- A better solution is that outlined above (under the heading *dust and noise*) to avoid using the Tiger's Club site as a dive site and access the Western Harbour Tunnel via the (already approved) stub tunnels. This would totally eliminate the truck movements in the heart of Rozelle and probably be more cost effective.

Dredging

- Dredging for the Western Harbour Tunnel will create pollution because of stirred up sediments which are known to contain deadly dioxins..among other things. The water will be contaminated and there will be a stench associated with the sediments. This will be an issue for the school children involved in water sports; rowing, kayaking, swimming in Dawn Fraser pool etc..
- **Suggestions:**
- Sediments should be pumped wet (not dried-out locally with the consequent stench from methane and sulphur Dioxide etc.) onto barges and taken to sea and dumped at an approved location. They must not be trucked through the Balmain peninsula. We appreciate the recent commitment not to truck spoil through the peninsula. Pollution levels in the water, and atmospheric stench must be continuously monitored by a third party and the data made available online to all interested parties. When guidelines are exceeded, work must cease until remedial action is taken.

Dredging in White Bay for construction of harbour tunnel segments

- It is currently proposed to construct the concrete tunnel sections for the Western Harbour Tunnel in White Bay. This will involve excavating some 500,000 cubic meters of contaminated sediment with similar issues of water pollution and stench as those described above.
- **Suggestions:** There is a simple solution to this issue and that is to construct the concrete sections in Port Kembla in the same location as the Eastern Western Harbour Tunnel sections were cast. Then bring these sections to Sydney by barge. The process is proven and Port Kembla would welcome the construction activity.

4.2 Issues in the operating phase

The P&C is concerned about all of the following and we have added some suggestions for ameliorating the negative impacts:

Increased congestion

- Increased congestion in all the major connecting roads from Rozelle (This is predicted by the environmental impact statement and we have mentioned this above under para (a) of the Terms of Reference).
- **Suggestions:** The most obvious suggestion, is not to continue with the WestConnex project . The whole concept of running radial freeways into the centre of the city is flawed as was shown by the Kirby study in 1972. It could be replaced with alternative public transport such as rail or trams.

- The other alternative is to do what the freeway proponents have always done and that is to build more freeways to cope with the generated congestion. So a tunnel under Drummoyne could be built to deal with congestion there....but this simply moves it further west to Gladesville. In fact, it seems that the Western Harbour Tunnel and the Iron Cove tunnel have been developed in response to the predictions about increased congestion on Anzac Bridge from the M4_M5 link.
- A third alternative is to use tolls as way of managing and reducing traffic volumes, to a level where congestion is tolerable.

Pollution from four unfiltered ventilator shafts

- The P&C is especially concerned about the increased pollution from the 4 unfiltered ventilator shafts in the area. These will be pumping the exhaust products from over 15 km of tunnels and over 100,000 vehicles per day into the atmosphere near our school. One stack is about 300 m from the school the other three are about 1km away....certainly close enough for our students to be breathing in the pollutants. All of them have negative health impacts. Small particles, PM_{2.5}, are known carcinogens.
- The Iron Cove ventilator shaft's outlet will be lower than the level of Darling Street and dispersion characteristics are really unknown in these circumstances.
- **Suggestions:**
There is a need for a pollution monitoring station to be maintained on the school grounds so that **actual** levels of pollution can be determined over a two year period. Using mathematical models is just not good enough with the health of 900 students and staff at stake. (Plus a similar number at Rozelle Public school). Actual sampling and analysis is required. The data from this station should be made public and available on a real-time basis online.

There is a need for monitoring respiratory problems (as a minimum) with students ...maybe before and after WestConnex (as they live in the area and will be subject to the increased pollution 24/7). Teachers should probably also be included. The cost of this should be borne by the WestConnex project.

One obvious improvement would be to filter the four stacks on a continuing basis and add the cost (which is a real cost to the community and therefore to the ongoing costs of operation of the tunnels) into the tolls.

Possible benefits from WestConnex

- Reduced traffic through Victoria Road Rozelle (will be welcomed but not if Victoria Road becomes a "rat-run" and this is possible).
- Increased playing fields in Rozelle goods yards will be welcomed but not if the levels of pollution...especially small particlesare elevated.