



Mission Statement

- Support the building of the NorthConnex tunnel and its benefits
- Relocating the northern tunnel exit and ventilation stack to a location that minimises the health risks to all communities
- Acknowledge viable alternative locations for the northern portals and ventilation stack that provide a safe alternative to the community

Mission Statement

- Inform and engage with the community about the health risks
- Represent the community
- Lobby and work with politicians, NSW Government agencies, NorthConnex and other relevant groups
- Support a rigorous and inclusive planning assessment and approval process

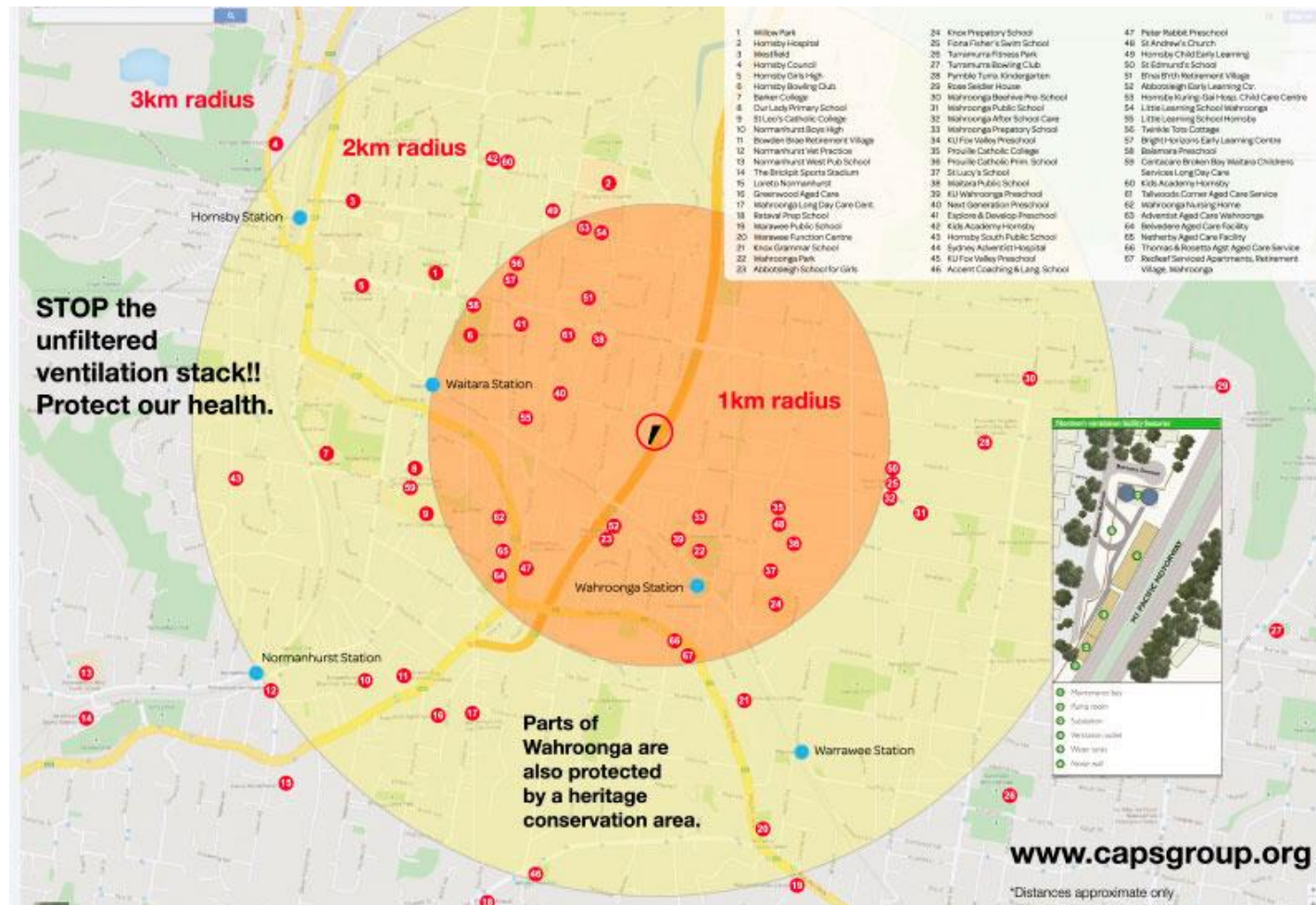
Facts about NorthConnex

- Largest road tunnel in Australia and in top 10 largest in the world
- Three times the size of Lane Cove Tunnel
- No filtration
- Only tunnel in Sydney with vent stack in residential/schools area
- Portal emissions planned in the future
- In top 3 largest point source of PM_{2.5} in Sydney

Facts about NorthConnex

- Unsolicited bid– many details are “commercial in confidence”
- Alternative designs and selection criteria are secret
- Approx \$1 billion of taxpayer funds
- Significant change in portal and vent stack location from previous reports
- Longitudinal ventilation system – same as M5 East and poorly suited to portal emissions

Area of impact



What & where



Health impacts

- Ultra-fine particles – Asbestos of 21st Century
- Exposure to vehicle emissions:
 - Cardio-vascular diseases
 - Respiratory problems – asthma, lung development, lung cancer
 - Autistic spectrum disorder

Tunnel health studies

- M5 East 2006 – NO_x exposure only - “This study was not designed to assess long-term health impacts of emissions.”
- Lane Cove Tunnel – Similar type of study focusing on respiratory symptoms including symptoms such as eye, nose & throat irritation and cough, wheeze and shortness of breath.

Air quality assessment

- Does not consider ultrafine particles $< 1\mu\text{m}$ as recommended by NHMRC (2008)
- Modern vehicles emit significant quantities
- Limited range of pollutants assessed
- Does not consider long term chronic impacts from exposure to low concentrations of multiple pollutants
- Averaged over time scales that hide peaks
- If air discharges meet criteria will result in a doubling of the concentrations of PM levels
- Background monitoring does not include the vent stack location and <1 years of data

Facts about the planning process

- Quickest progression from preferred option to EIS in NSW planning history
- Timing of the project - 2015 State Election
- Critical infrastructure – no legal appeals
- Insufficient time for proper community review of the EIS
- EIS exhibition planned for June/July 2014
- EIS 3000+ pages – 65 pages a day

Facts about consultation

- Substandard for project this size
- Many residents don't know about the project let alone stack location
- Schools, businesses and other stakeholders only just being consulted
- Much of the information on the web-site is misleading or incorrect

Responses from NorthConnex

- Potential environmental/human health impacts not a selection criteria
- “It is expected that the project will not result in significant human health impacts”
- Filtration “does not provide value for money”
- The ventilation system will be designed for the number of vehicles at opening and portal emission will occur in the future

Filtration – the facts

- M5 East Trial
 - Retro-fit of existing tunnel
 - Required new ventilation tunnels & fans – 80% of \$60 million cost
 - Filtration equipment under-capacity (AMOG 2012)
 - Still removed 65% of PM10 and lower
 - 5% of PM removed as only 50% of westbound and only operational 4-6 hours per day

Filtration – the facts

- CETU Report 2010 – review of filtration
- Most tunnels don't have – mountainous areas
- Many filtration systems are to manage in tunnel air quality – often turned off
- Efficiency of PM₁₀> removal is 80-90%
- Most Japanese tunnels have filtration and in urban areas operate 24hr/7 days
- Increasing number of European tunnels in urban areas have filtration

What are we doing?

- Lobbying the NSW Government including local MPs and Ministers
- Engaging with Government agencies such as Planning, EPA, Chief Scientist, NorthConnex
- Raising awareness in the community about the project and potential impacts including schools, businesses, residents
- Obtaining media coverage about the project

What are we doing?

- Seeking an extension to the EIS exhibition period
- Engaging experts to review the EIS

What are the alternatives?

- 24 hour a day filtration and no portal emissions
- Moving the one or both portals 2 km north and vent stack to bushland
- Moving the vent stack Hornsby industrial area

How can they be funded

- NorthConnex - \$420 m to move portals north
- Longer tolling concession for Transurban
- Tolling heavy vehicles on Pennant Hills Rd
- Making additional land available for urban development – existing M1 corridor, Hornsby Quarry