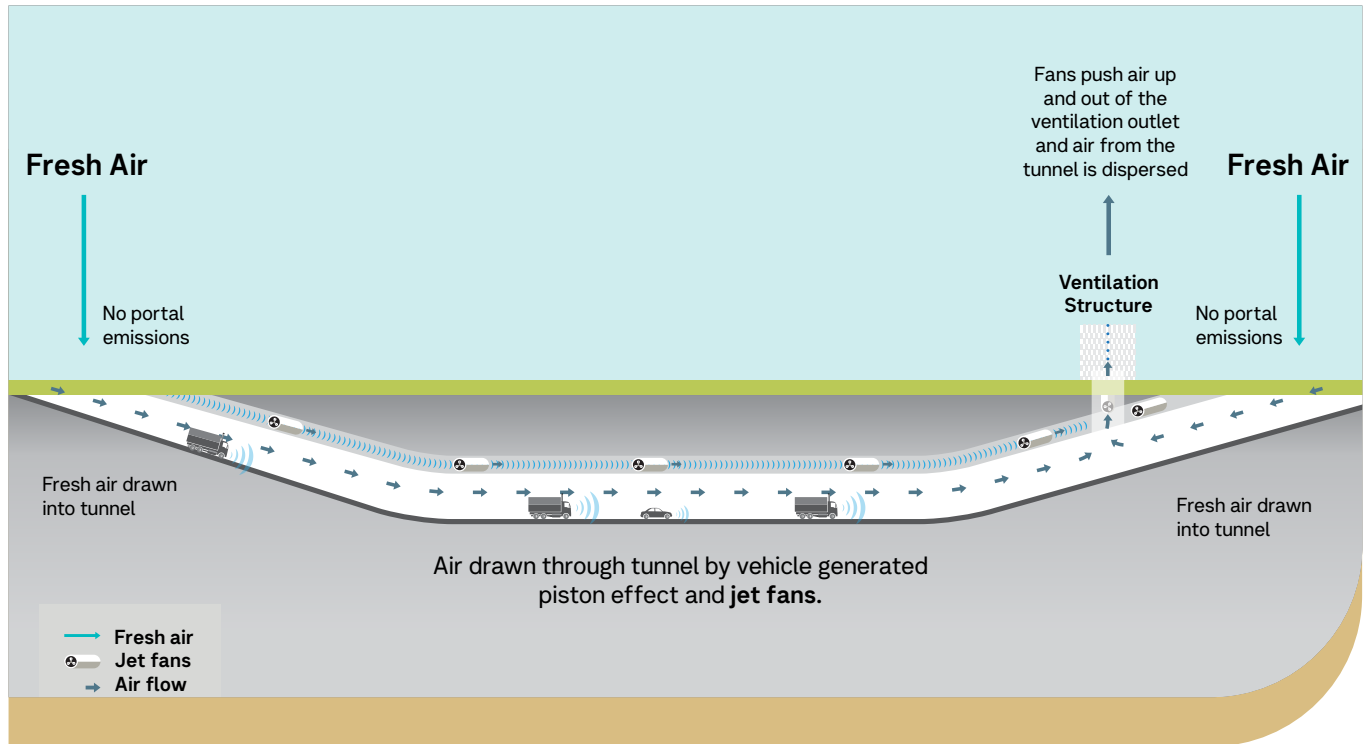


# Tunnel ventilation and air quality

FACTSHEET  
JULY 2022



The West Gate Tunnel Project's tunnel ventilation system has been designed according to stringent air quality standards to protect the health of communities and drivers using the tunnels.

Road tunnels can help reduce air pollution by moving traffic off roads where people live and work, putting vehicles underground. In a tunnel, vehicle emissions can be controlled and dispersed more effectively and are monitored to ensure standards are met.

With thousands of tunnels in the world, there are well-established and effective ways to design tunnels and ventilation systems so that there are no negative effects on local or regional air quality.

The project's tunnel ventilation system has been designed to meet Victoria's stringent air quality requirements which are among the highest standards in the world.

## How tunnel ventilation works

Tunnel ventilation systems are designed to maintain safe air quality both inside and outside the tunnel to meet stringent air quality standards.

Ventilation systems work by drawing in fresh air from the tunnel entry, which is then pushed through the tunnel by the movement of vehicles and jet fans.

Before the tunnel exit, air is pushed up and out of the tunnel through a ventilation structure and into the atmosphere where it mixes with fresh air. There are no emissions from the tunnel portals where vehicles enter and exit.

Research from around the world clearly shows emissions from well-designed tunnel ventilation systems have no measurable effect on local or regional air quality.

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## Monitoring

Six air quality monitoring stations have been set up mainly near roads in the project area to understand current local conditions.

Air quality will be monitored during construction and for up to 5 years after the West Gate Tunnel Project opens or for a lesser period if agreed with EPA Victoria. There will also be in-tunnel monitoring to ensure the tunnel ventilation is operating as it should.

All of the West Gate Tunnel Project air quality monitoring station locations were established in consultation with Victoria's Environment Protection Authority (EPA) and are set out in the Project's Environmental Performance Requirements.

Results from the air quality monitoring stations are published on the project website: [westgatetunnelproject.vic.gov.au/air-quality](http://westgatetunnelproject.vic.gov.au/air-quality)

Air monitoring station



## Inner West Air Quality Community Reference Group

The West Gate Tunnel Project air quality monitoring program and data is also available to the Inner West Air Quality Community Reference Group being led by the Department of Environment, Land, Water and Planning (DELWP). The Inner West Air Quality Community Reference Group is investigating air quality across the inner west and exploring sources of pollution, to find the best solutions for managing air quality and emissions in the inner west.



### Did you know?

**Air quality monitoring for the project is designed to develop a 'baseline' of data from which we will measure any changes once the tunnel opens.**

**The project set up a sixth air quality monitoring station on Millers Road in direct response to community feedback.**

**The completed West Gate Tunnel Project will have no emissions from the tunnel portals.**

**The ventilation system will include two ventilation structures – one above the northern tunnel portal and the other above the southern tunnel portal.**

## Want more information?

- For more information about air quality and to access air quality reports visit: [westgatetunnelproject.vic.gov.au/air-quality](http://westgatetunnelproject.vic.gov.au/air-quality)
- To learn more about air quality monitoring and how the West Gate Tunnel Project works with EPA Victoria visit: [epa.vic.gov.au](http://epa.vic.gov.au)

