



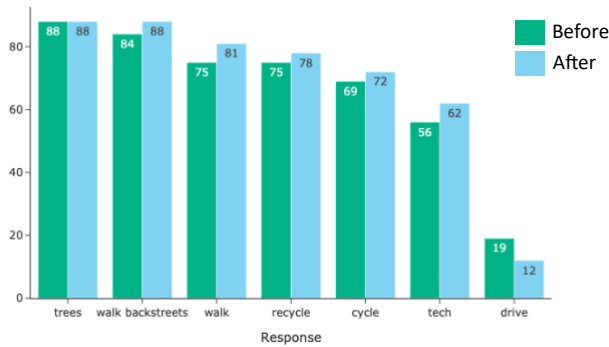
Breathe Melbourne at Kingsville Primary School



Between 28th Nov – 2nd Dec 2022, classes 6EH and 6LA took part in the Breathe Melbourne Citizen Science Project. They became air quality scientists and measured the air pollution on their school commute using a special backpack with an air quality monitor.

Before and after taking part, students completed a survey – here are some results from your school.

Strategies to reduce air pollution



After the study, more children understood the correct strategies to reduce air pollution exposure.

I can improve the quality of air I breathe if I:
“Research and learn more about the problem, tell others, use cars less”



I can improve the quality of air I breathe if I:
“Taking cleaner routes to school e.g. walking through park instead of some main road”

I can improve the quality of air I breathe if I:
“Electric vehicles teaching about air pollution and stopping the use of factories that pollute”

Something I liked about the project was:
“I felt like I was helping something important, see how different routes can impact your life differently”

I can improve the quality of air I breathe if I:
“Use the car less, walk or ride to places that are near me”

Something I liked about the project was:
“I felt like I was a scientist”

What did the students measure?

Particulate Matter (PM_{2.5})

Often comes from:

Wood heaters Motor vehicles



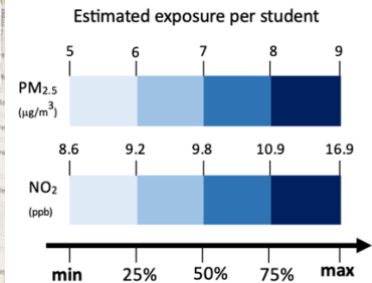
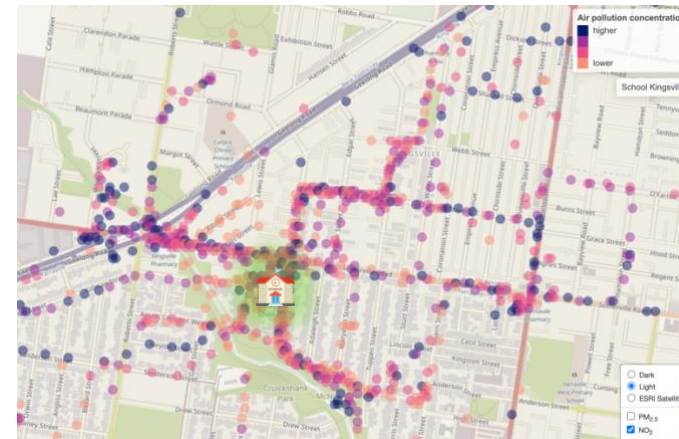
Nitrogen Dioxide (NO₂)

Often comes from:

Energy generation Motor vehicles



We already know Melbourne’s Inner West has [higher levels of air pollution](#) compared to other areas in Melbourne. The purpose of this study was to look at hotspots on the school commute. The map below shows the NO₂ data the students collected on their commutes. Lighter colours show where air pollution was lower, and darker where air pollution was higher.



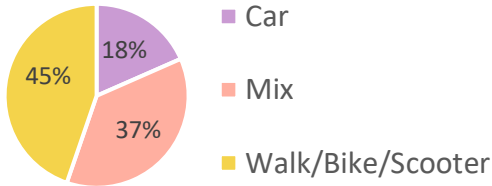
*These air pollution concentrations were collected every second. They are not comparable to standard hourly or yearly thresholds.

On average these levels are lower than those seen in our sister study, [Breathe London](#). But there is no ‘safe’ or ‘ideal’ level of air pollution, so our focus is always on how we can improve the air quality as much as possible. Turn to the next page to find out what you can do and what we’re doing.

What did the data tell us about the school commute?

- We didn't see a notable difference in air quality between different modes of transport.
- But other studies show us that active transport usually has better air quality than driving.
- Plus, active transport reduces cars around the school - reducing air pollution 😊.

How did students get to and from school?



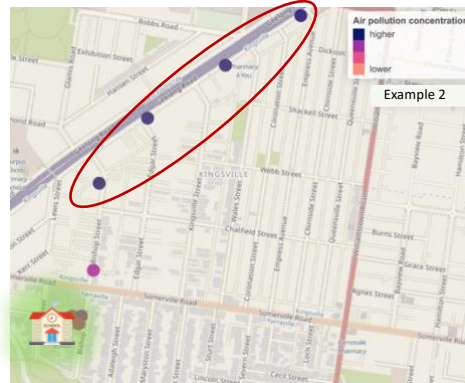
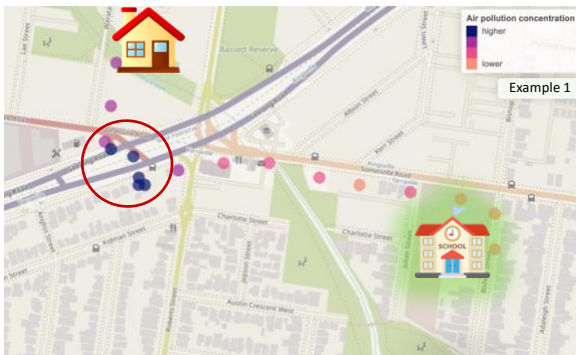
TIP 1: Where possible walk/scoot/bike the whole journey to school.

TIP 2: Some of us have to drive to school, which is ok. We can reduce the amount of pollution that gets into our car from other traffic by turning on the air recirculation button.

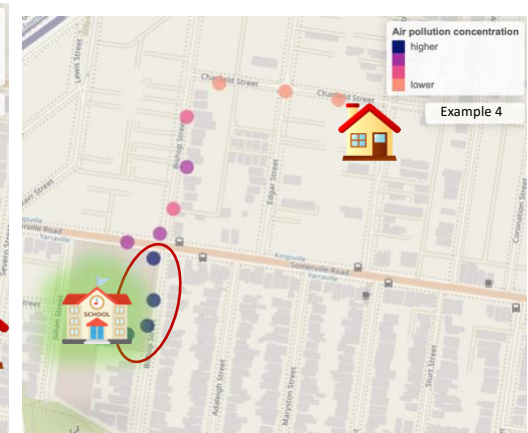
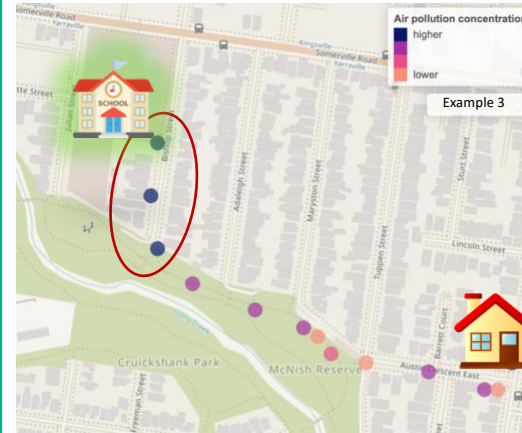
TIP 3: Using air purifiers is a great way to improve air quality inside the classroom.

Air pollution hotspots on the school commute

- Children commuted on minor roads 61% of the time.
- Only 30% of air pollution hotspots on the school commute happened on a major road.



- 40% of hotspots happened on minor roads next to the school – it is likely that heavier car traffic during school pick-up and drop-off times is increasing air pollution.



TIP 4: Air quality around the school could be improved by **idling off**. You can do this by turning your car engine off when at standstill, instead of keeping it running. This has been proven to reduce pollution and improve health of children in other countries.

TIP 5: If possible, try to park further away from school and travel the last part of the commute on foot.

What is next for Breathe Melbourne?

- Thank you to our wonderful citizen scientists for collecting this data and raising awareness about air pollution in the school community!
- We have given you 5 tips on how you can improve air quality around the school.
- BUT we also need bigger changes to improve air quality across Melbourne's inner west. Other cities around the world show us what is possible:
 - Introducing Low Emission Zones (LEZs) – read more about the success in London [here](#), and Europe and Japan [here](#).
 - Making greener and cleaner transport easier - read more [here](#).
- Next, we will continue the analysis of data from all schools and share more results publicly next year. We will use the opportunity to advocate for policy changes to improve air quality in Melbourne's inner west.
- Wishing you a safe and happy summer. Thank you for making Breathe Melbourne possible.



The Idle Off Program at Kingsville Primary School



Car idling is when your car is running but it is not moving.

As part of the Breathe Melbourne Project, class 6LA took part in the Idle Off program in 2023. This program involved students learning about the connection between idling cars, air pollution and health.

Students created their very own air pollution catchers to measure the amount of air pollution around the school. They also learnt how to advocate to help reduce the amount of air pollution from car idling around the school. You may have seen some of their terrific posters on the school fence.



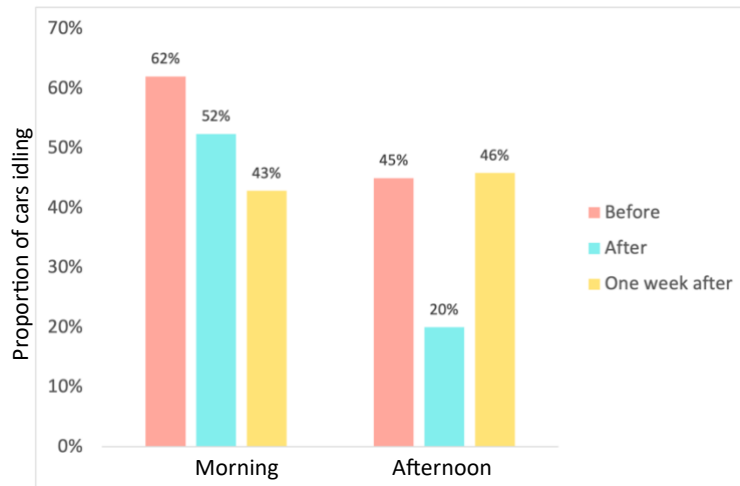
The advocacy that class 6LA undertook to reduce idling around the school worked!

The graphs below show that there was a decrease in both the number of cars idling, as well as the duration of car idling after the project. There was a small increase one week after the Idle Off project, probably because some people had forgotten, which is not unusual, we often need to keep advocacy going overtime to see a long-lasting change.

Thank you to 6LA for their fantastic advocacy.

On average, just ten seconds of car idling wastes more fuel than turning the engine on and off again.

Proportion of cars idling in the morning and afternoon throughout the Idle Off Program



Duration of car idling in the morning and afternoon throughout the Idle Off Program

