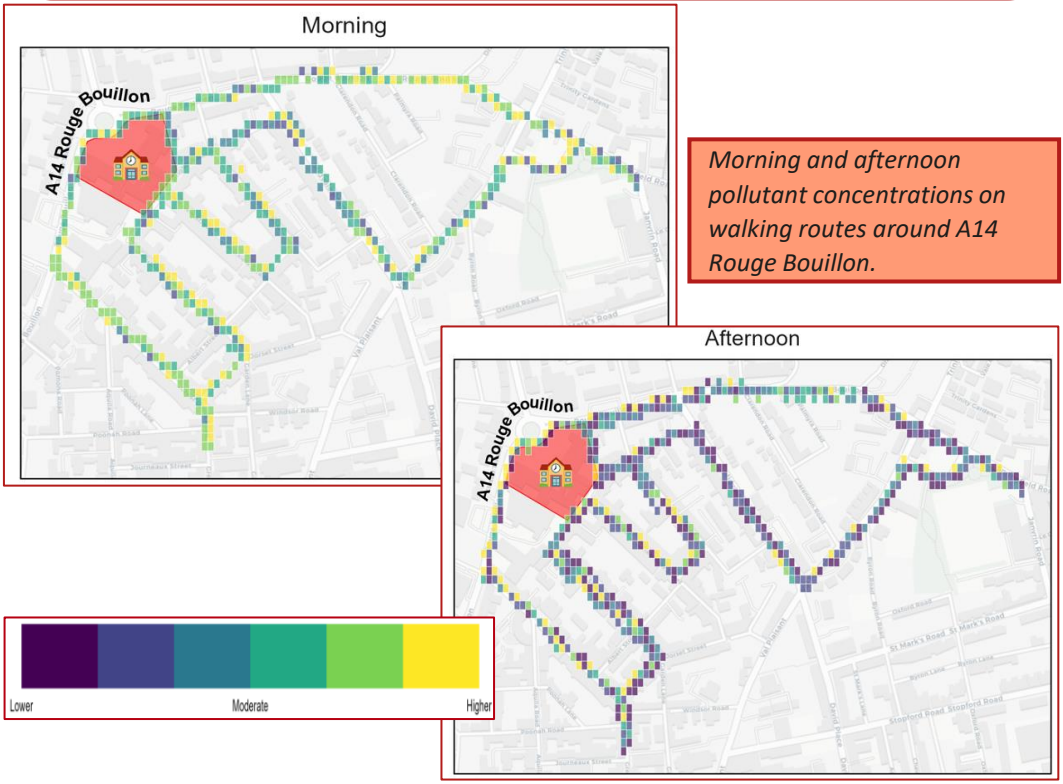
Jersey Schools Air Quality Study

Aim of study

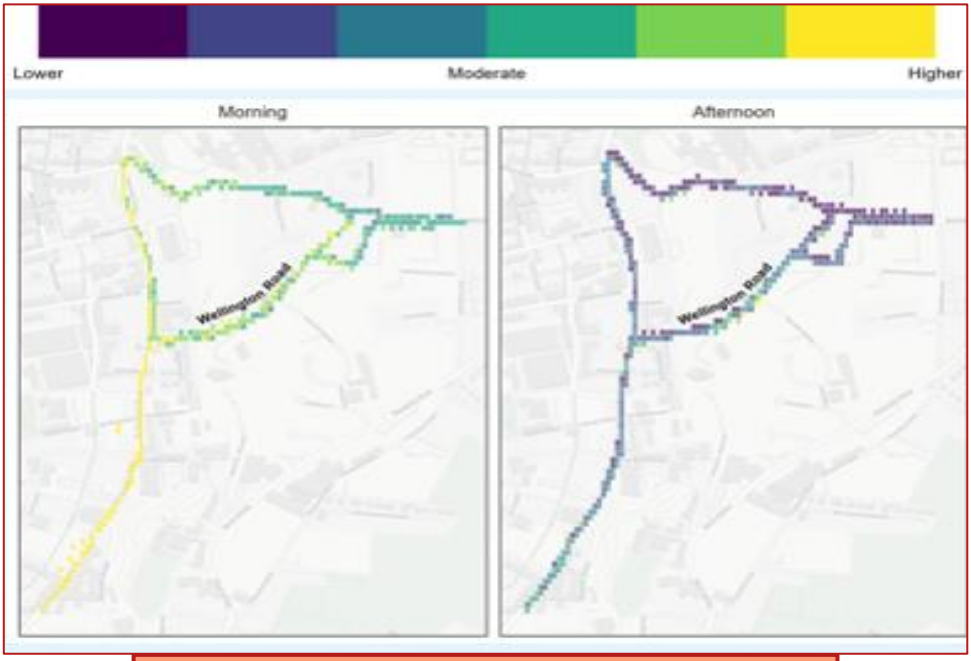
Studies indicate that school run traffic exposes children to elevated pollutant concentrations at school entrances.
To address air pollution around schools, the Government of Jersey, with the help of air quality experts Ricardo, conducted an air quality monitoring study to assess pollutant exposure along popular main road and backstreet walking routes to and from two schools in Jersey.

Local monitoring

Common pollutant (NO_2, PM_{10} and $PM_{2.5}$) concentrations were measured at two monitoring locations along A14 Rouge Bouillon and Wellington road.
Using air quality sensors, Ricardo walked two main road routes and two backstreet routes to each school to measure pollutant concentrations at morning drop-off and afternoon pick-up times.



Morning and afternoon pollutant concentrations on walking routes around A14 Rouge Bouillon.



Morning and afternoon pollutant concentrations on walking routes around Wellington Road.

Results

NO_2 concentrations were shown to be significantly higher when walking along main road routes to each school location at drop off and pick up times.

Pollutant concentrations were shown to be higher at morning drop off times compared to afternoon pick up times.

A pollution hotspot was identified close to each monitoring location, especially at pick up times. This was likely caused by the high traffic volume and idling vehicles waiting to collect pupils from each school.

What you can do:

- **Take backstreet routes to and from school instead of main road routes to reduce exposure to elevated pollutant concentrations.**
- **Walk to school where possible to reduce motorised vehicle traffic.**
- **Turn off engines when stationary on roads surrounding schools to reduce emissions from engine idling.**