

Pollution Exposure in Île-de-France Educational Institutions

Introduction

Graphs and analysis

Conclusion

Objective:

Study air pollution (NO_2 , PM_{10} , $\text{PM}_{2.5}$) in Paris schools (2012–2017) by type and location.

Why:

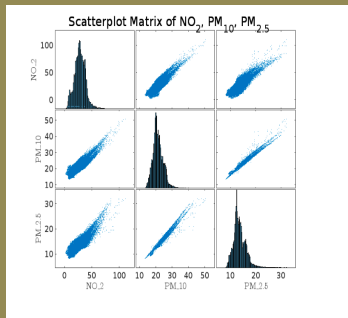
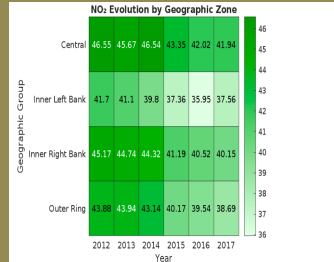
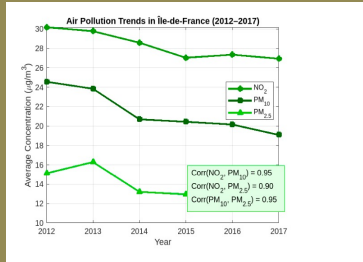
To understand risks to children and guide safer school placement.

Goals:

- Compare pollution by school and area
- Track trends over time
- Map safe vs. risky zones
- Find pollutant correlations

Method:

Analyzed school pollution data using charts and maps.

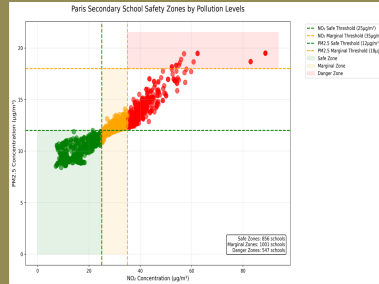
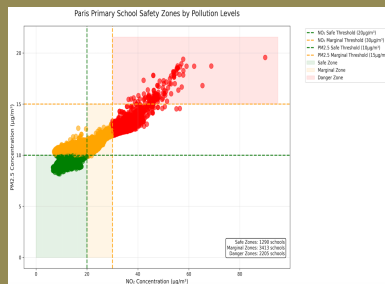


NO_2 and PM_{10} declined steadily, while $\text{PM}_{2.5}$ fluctuated before stabilizing. Strong correlations (0.90–0.95) point to traffic as a major source. Reducing NO_2 could improve overall air quality. Central Paris showed the highest, but decreasing pollution

Air pollution in Paris schools has improved (NO_2 , PM_{10}), but $\text{PM}_{2.5}$ remains inconsistent. Some areas still pose health risks.

Implications:

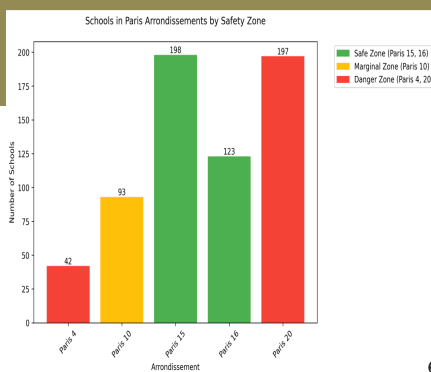
Clean air is crucial for school safety and city planning.



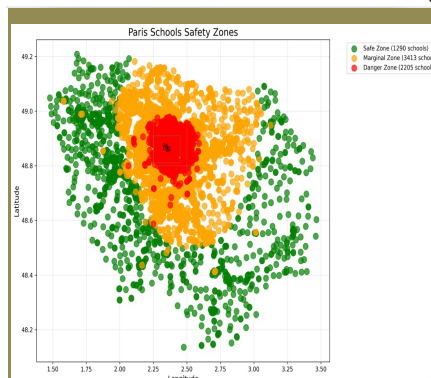
Recommendations:

- Build in low-pollution zones
- Add filtration to high-risk schools
- Link building permits to air quality data

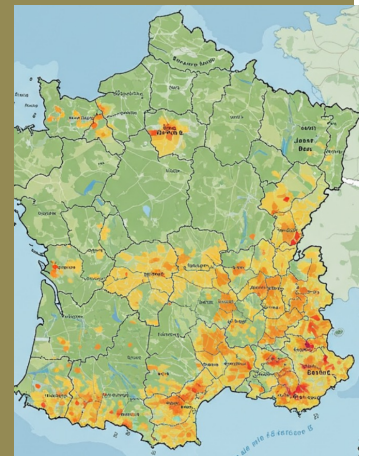
This map shows 2017 $\text{PM}_{2.5}$ and NO_2 levels, with 75015 and 75016 safest for schools, and 75004 and 75020 exceeding health limits.



2017 pollution data shows 75015 and 75016 as safest for schools; 75004 and 75020 exceed health limits, guiding safer planning.



This chart ranks five Paris districts for school sites: 75015 and 75016 lead; 75004 and 75020 lag; 75010 shows potential.



Data source :
data.gouv.fr



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