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Traffic congestion around public schools harms community resilience

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Over 4.4 million students in the U.S. attend schools within 500 feet of a major highway, truck route, or other significant traffic. This heightened exposure to air pollution has been found to directly impact student health and academic performance, posing a threat to community resilience. While recent studies have pointed to this danger, schools across the country are still being built with traffic and air pollution as an afterthought. During the school year in 2014-2015, nearly 20 percent of new U.S. schools were built near a busy road. Further government incentives and attention to this planning issue are needed to build resilience for the nearly 8,000 public schools across the country that are affected by traffic and pollution.



Traffic in Southern California (source Wikimedia)

A recent study at the University of Michigan found that schools located in areas with high levels of pollution experience lower attendance rates and lower proportions of students meeting state-wide testing standards. A similar study done by the National Bureau of Economic Research found that students at schools in areas of increased traffic pollution experience more behavioral incidents, lower test scores, and more absences. While air pollution has a visible effect on a student's cognitive performance, it also has hidden health detriments. Traffic pollution can lead to asthma attacks,

increased cancer risk, and heart disease, which negatively impact students' health and ability to learn.

The negative effects of air pollution are not equally felt among students across the country; minority students are disproportionately impacted by pollution and traffic near their schools. Research has found that 81.5 percent of all African American students attend schools in the most highly polluted

zones. Part of the reason behind this are historic policies that increased racial divide. Redlining, the Federal Housing Administration policy that existed through the 1960s, prevented minority residents from receiving mortgages in neighborhoods of higher opportunity. Later, highways were built through what became predominantly minority neighborhoods. Today, minority students are more likely to attend public schools in big cities, which are located near more high traffic and polluted roads.

While federal agencies have made recommendations for how to address the issue of air pollution plaguing nearby schools, there is currently little obligation for districts to follow any sort of standard. Some states, like California, have taken the lead on identifying air quality issues and how to mitigate them. The South Coast Air Quality Management District uses funds earned through settlements with polluting companies to pay for air filtration in schools near freeways, and The U.S. Environmental Protection Agency has acknowledged that such filtration systems make a notable positive impact in school air quality. While these measures have been proven to work, states must be further incentivized to take preventative action. Researchers of the issue have suggested a required environmental-quality analysis when planning for new school construction. These further steps can help mitigate the effects of traffic congestion and air pollution near public schools across the country.

Sources and Further Reading

[The Invisible Hazard Afflicting Thousands of Schools – The Center for Public Integrity](#)

[How Car Pollution Hurts Kids' Performance in School – City Lab](#)

[Air pollution near Michigan schools linked to poorer student health, academic performance – Institute for Social Research, University of Michigan](#)