



**CLEAN AIR FOR THE LONG HAUL COHORT FOCUS GROUPS:
Black and Latino/x Sentiment on the Impacts of the Environmental Protection Agency
Proposed Rulemaking to Reduce Pollution from Heavy-Duty Vehicles**

WE ACT for Environmental Justice (WE ACT), convener of the Clean Air for the Long Haul Cohort, conducted qualitative research to capture the experiences and perspectives from people of color that live and work near major highways and experience adverse impacts from heavy-duty truck pollution. This research also gathered feedback on the Environmental Protection Agency (EPA) and the proposed standards the Agency released in March 2022 to reduce smog-forming nitrogen oxides and greenhouse gasses from heavy-duty engines and vehicles starting in model year 2027.¹

On September 7 and 12, 2022, we held two 90 minute focus groups with respondents from Detroit and New York City, respectively. We specifically recruited residents who lived or worked near major highways (at least within 2 miles), such I-75 (Detroit) and I-95, I-87, I-278, I-295, US 1 (New York). In total, 11 respondents participated in this research, consisting of African Americans, Latino/x and Native American/Eskimo.

Transportation is the largest contributor of climate change causing greenhouse gas emissions.² Specifically, the medium- and heavy-duty sector is the greatest source of harmful smog and soot-forming nitrogen oxides in the U.S.³ As a consequence of a legacy of discriminatory policies like redlining, communities of color live in close proximity and the repositories of transportation infrastructure disproportionately exposing these communities to higher than average levels of pollution.⁴

Our research provides insights into the lived realities, concerns and preferences of people of color, and how crucial it is for EPA to finalize the strongest standards to minimize pollution from the heavy-duty truck sector and safeguard public health, especially for communities of color across the nation that are located to near diesel truck intensive facilities and infrastructure, such as major roadways.

¹ US EPA, Proposed Rule and Related Materials for Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards (March 2022), <https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-and-related-materials-control-air-1>

² US EPA, Sources of Greenhouse Gas Emissions, <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation>

³ US EPA, Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards - Overview Briefing of the Proposal (April 2022), <https://www.epa.gov/system/files/documents/2022-04/hd-2027-stds-nprm-overview-2022-04.pdf>

⁴ Haley Lane et al, "Historical Redlining Is Associated with Present-Day Air Pollution Disparities in U.S. Cities, Environ. Sci. Technol. Lett. 2022, 9, 4, 345–350, <https://doi.org/10.1021/acs.estlett.1c01012>

Key Takeaways

Air pollution is a pressing issue for Detroit and New York and truck pollution from highways is a major culprit

“The Bronx has one of the lowest air qualities within the five boroughs. It’s so congested.” – New York respondent

“In the southwest, there is literally a middle school and an elementary school that’s right next to the freeway. I used to go to that school. As soon as you drive into Detroit, you can smell the difference of the air that’s here. Whenever we would go outside, it was always so hard to breathe.” - Detroit respondent

Respondents from both cities conveyed concerns over poor air quality in their communities and those who lived in proximity to highways were aware of the increase in pollution due to truck and car exhaust. The participants stated that air pollution exposure directly resulted in respiratory conditions such as asthma, bronchitis, sinus problems, as well as skin conditions eczema, and acne.

Studies have routinely demonstrated that proximity to major roadways and vehicular pollution has detrimental health effects ranging from asthma and impaired lung function to heart disease and premature death.^{5, 6} An analysis of EPA data revealed that by 2023, diesel emissions can cause nearly 9,000 premature deaths, 3,800 heart attacks, 173,067 cases of respiratory symptoms, and more than 2,963 asthma-related visits to the emergency room.⁷ Air pollution, particularly diesel particulate matter, has been shown to degrade skin cell health.⁸

They were aware that children, the elderly, and those with compromised respiratory systems are at heightened levels of risk from air pollution and that children had developed asthma at increased rates in recent years. A 2019 study conducted at Harvard Medical School found that childhood asthma severity was directly related to the distance a child’s school was from major roadways.⁹ In Detroit, 16.2% of adults and 14.6% of children have asthma. These rates are both

⁵ US EPA, “Research on Health Effects Exposure, & Risk from Mobile Source Pollution”, (February, 2021), <https://www.epa.gov/mobile-source-pollution/research-health-effects-exposure-risk-mobile-source-pollution#:~:text=Motor%20vehicle%20emissions%20contribute%20to,and%2For%20immune%20system%20damage>.

⁶ American Lung Association, “Living Near Highways and Air Pollution,” (January 2021), <https://www.lung.org/clean-air/outdoors/who-is-at-risk/highways>

⁷ Clean Air Task Force, “Deaths by Dirty Diesel: Mapping the health impacts of diesel nationwide,” (<https://www.caf.us/deathsbydiesel/>)

⁸ Shin, Kyong-Oh, Yoshikazu Uchida, and Kyungho Park. “Diesel Particulate Extract Accelerates Premature Skin Aging in Human Fibroblasts via Ceramide-1-Phosphate-Mediated Signaling Pathway.” *International Journal of Molecular Sciences* 23, no. 5 (February 28, 2022): 2691. <https://doi.org/10.3390/ijms23052691>.

⁹Marissa Hauptman et al., “Proximity to Major Roadways and Asthma Symptoms in the School Inner-City Asthma Study,” *The Journal of Allergy and Clinical Immunology* 145, no. 1 (January 2020): 119-126.e4, <https://doi.org/10.1016/j.jaci.2019.08.038>.

substantially higher than the Michigan-wide asthma rates of 11.1% for adults and 8.4% for children.¹⁰

In New York, respondents directly attributed these health problems to a decrease in air quality due to higher levels of highway traffic and construction debris. In fact, analysis carried out in the South Bronx confirms that schoolchildren with asthma are exposed to higher levels of diesel emissions and particulate matter (PM) at closer proximity to high traffic areas.¹¹ Areas of the South Bronx and Northern Manhattan have one of the highest death and disease rates from asthma in the country. Childhood asthma in these communities is responsible for a large number of emergency room visits, hospitalizations, and deaths.¹²

In addition to air pollution, Detroit respondents also readily identified poor water quality as the most pressing health and environmental issues in their communities. No one can forget the water crisis in Flint, Michigan and in Detroit, access to clean water is not always guaranteed, especially for low-income communities of color. The 2014 decision to switch Flint's water supply to the Flint River was an important factor in multiple outbreaks of Legionnaire's disease¹³ and, more importantly, a monumental water crisis where Flint residents, including 9,000 children, were exposed to dangerous lead levels in their drinking water for 18 months¹⁴. At the same time, thousands of Detroit residents lost access to running water as the local water utility shut down consumer access for nonpayment.¹⁵ This amplifies the fact that environmental justice communities have to live with cumulative burdens from multiple sources of toxic environmental pollution that threaten their lives.

Truck pollution disproportionately affects lower income residents and people of color

"My feeling is that most vulnerable in society are the pens that are most affected...the poorest people, the people with the health concerns, those were the ones that were the greatest affected, and right now, the same thing is happening. You're going to have trucks go through the more vulnerable communities." - Detroit

¹⁰ Kuyangna, Prudence, and Beth Anderson. "Detroit: The Current Status of Asthma Burden." Michigan Department of Health & Human Services, 2021. https://www.michigan.gov/mdhhs/-/media/Project/Websites/mdhhs/Folder50/Folder3/Detroit-AsthmaBurden-2021_Update.pdf?rev=187419566778478fa169dfb8bb7791b1&hash=7D7A2C74C96925EFF078CD29CEE02B69.

¹¹ Ariel Spira-Cohen et al., "Personal Exposures to Traffic-Related Particle Pollution among Children with Asthma in the South Bronx, NY," *Journal of Exposure Science & Environmental Epidemiology* 20, no. 5 (July 2010): 446–56, <https://doi.org/10.1038/jes.2009.34>.

¹² Columbia Center for Children's Environmental Health, "Asthma" (June 7, 2022), <https://www.publichealth.columbia.edu/research/columbia-center-childrens-environmental-health/asthma#:~:text=The%20areas%20of%20the%20South,visits%2C%20hospitalizations%2C%20and%20deaths>.

¹³ David Otto Schwake et al., "Legionella DNA Markers in Tap Water Coincident with a Spike in Legionnaires' Disease in Flint, MI," *Environmental Science & Technology Letters* 3, no. 9 (September 13, 2016): 311–15, <https://doi.org/10.1021/acs.estlett.6b00192>.

¹⁴ Melissa Denchak, "Flint Water Crisis: Everything You Need to Know," NRDC, accessed November 2, 2022, <https://www.nrdc.org/stories/flint-water-crisis-everything-you-need-know>.

¹⁵ "Nurses, Activists, Cite Public Health Emergency In Detroit Water Shutoffs," National Nurses United, July 17, 2014, <https://www.nationalnursesunited.org/press/nurses-activists-cite-public-health-emergency-detroit-water-shutoffs>.

“I think it’s most relevant in the sense that if we do have these health issues, a lot of the time, lower income people who don’t have healthcare or the right kind of resources that they need to take care of things.” - New York

Communities of color are disproportionately at risk for exposure to traffic related air pollution. According to the EPA, of the 72 million people who live within 200 meters of major trucking routes, a high proportion reside in cities and with higher percentages of people of color. Specifically, New York City neighborhoods with the higher traffic density have greater levels of PM 2.5 air pollution, which is significantly worse in low-income and communities of color – in city districts with predominantly Black and Latino residents, adult asthma rates are 11 and 40% higher, respectively compared to the city average.¹⁶ While a study on disease and health inequalities attributed to air pollutants in predominantly communities of color in Detroit showed that 46% of air-pollution related asthma hospitalizations are due to NO₂ exposures largely from trucks.¹⁷

The participants expressed an understanding of the connection between lower income, race, and undergoing higher levels of exposure to pollution. Furthermore, they pointed out that people who fall in lower income brackets have lower levels of access to healthcare or resources to address the negative effects of environmental pollution. Respondents expressed views aligned with environmental justice concepts of government responsibility to ensure equal access to clean air regardless of race or economic status. They spoke about accountability for government agencies responsible for keeping pollution at safe levels and keeping their communities clean.

The EPA can do better to build awareness and set stronger standards to protect the most vulnerable communities

“I’d like to see the EPA have a little bit more air quality studies around the city of Detroit; especially around the highways. We don’t get an air quality report, ever. I think the EPA could do a bit better” - Detroit

*“They’re supposed to be an agency dedicated to making policies that improve our environment.”
– New York*

Participants viewed the EPA as being a watchdog, responsible for making and enforcing policies that protect the environment and for punishing those who broke environmental laws. However, residents we spoke with had a neutral to negative opinion of the EPA. Reasons for this included difficulty in finding information with regards to air quality within their communities.

¹⁶ Transportation Alternatives and the Civic Data Design Lab, “Spatial Equity NYC: 2022 Report Card,” November 16, 2022, <https://www.transalt.org/spatial-equity-2022-report-card#executive>

¹⁷ Sheena Martenies et al, “Disease and Health Inequalities Attributable to Air Pollutant Exposure in Detroit, Michigan. Int J Environ Res Public Health. 2017 Oct 19;14(10):1243. doi: 10.3390/ijerph14101243. PMID: 29048385; PMCID: PMC5664744.

There are opportunities for the EPA to expand awareness among the communities our respondents represent. For example, respondents displayed a lack of awareness of nitrogen oxide (NOx) while very few understood NOx as a pollutant or a key component in the formation of smog or that medium to heavy-duty trucks sector is the largest source of NOx emissions (and the second largest source of greenhouse gas emissions). Regardless, many expressed a desire for more information on the issue in order to have informed discussions with friends and family and to understand how truck pollution affects them.

When presented with the two regulatory options the EPA is considering to control nitrogen-oxide emissions from heavy-duty trucks and engines;¹⁸ responses varied between Detroit and New York participants:

"I prefer option 2 because I want to start right now. I'm afraid if we go with Option 1, people might drag their feet by the time 2031 comes around, and things could change politically." - Detroit

"...So, whatever option they choose, it's only going to be for the better forever." - Detroit

"I would say Option 1 because ultimately, it's going to give you 75% right after 2027, and then additional percentage at 2031. Option two is going to just give us 75%, and then that's it. That's it, they're done. It's over." – New York

"It's kind of too little, too late. It should have been done a long time ago. That right there shows negligence." – New York"

Detroit residents believed that pollution reduction measures should be implemented sooner rather than later. The group showed preference for option 1, expressing uncertainty about the political environment to enforce stricter standard 2031. New York respondents echoed the sentiment that action needed to be undertaken immediately. However, option 1 was preferred as it was viewed as stricter and achieving greater NOx emissions reductions comparative to option 1. Additionally, New York residents expressed disappointment at the lack of EPA action over the past two decades and in fact described the lack of action as "negligence".

In addition to tighter emission standards on heavy-duty trucks, respondents expressed a desire to move towards electric trucks. Though both groups acknowledged drawbacks to electrifying trucks, such as mileage on a single charge and the ability for the power grid to support these

¹⁸ EPA's proposed Option 1 would implement stronger NOx standards in two steps: the first increase in stringency would be in model year 2027 and the second in model 2031. The 2031 NOx standards would be 90% lower than today's standards. Option 2 would be fully implemented in 2027, achieving 75% less NOx emissions reductions relative to today's standards.

US EPA, Proposed Rule and Related Materials for Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards (March 2022),

<https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-and-related-materials-control-air-1>.

zero-emission vehicles, most saw the benefits to the transition, including improving air quality, job creation, and cost savings on fuel.

The viewpoints emerging from the focus groups are a subset of realities faced by people of color across the country who live in cities and experience the worst exposure to air pollution and health impacts from trucks. This research shows how critical it is for the EPA to honor its commitment to protect the environment and people, especially the most overburdened communities. It highlights the desire of residents from affected communities and the need for the Agency to finalize the most stringent, health protective emissions reductions standards and set us on a pathway to zero tailpipe polluting, electric heavy-duty trucks.

For more information on the qualitative study, please read the final report.¹⁹

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WE ACT for Environmental Justice is a Northern Manhattan membership-based organization whose mission is to build healthy communities by ensuring that people of color and/or low-income residents participate meaningfully in the creation of sound and fair environmental health and protection policies and practices. WE ACT has offices in New York and Washington, D.C. Visit us at weact.org and follow us on [Facebook](#), [Twitter](#), and [Instagram](#).

The **Clean Air For The Long Haul** cohort is composed of environmental justice groups from across the country who are working together to move forward campaigns centering overburdened communities in federal rulemaking in the power and transportation sectors. Through its campaigns, the cohort work to catalyze the environmental justice movement to lead in fueling political will for ambitious, durable rulemaking and explore opportunities to pursue emission reductions for all criteria air pollution from power plants, cars and trucks.

¹⁹ WE ACT Qualitative Research Final Report, October 7, 2022, <https://drive.google.com/file/d/1FCtkCVDThKBqIDRV1v8hDCrER739cvkm/view?usp=sharing>