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FIQWS 10108

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1 December 2025

Saving the South Bronx from Air Pollution

In New York City, air pollution is an urgent public health problem in the South Bronx, especially around the Hunts Point and Mott Haven neighborhoods, where heavy diesel truck traffic is concentrated. Studies and local health data show that traffic related diesel exhaust is strongly linked to higher rates of childhood asthma and emergency room visits in these ZIP codes (nyc.gov)(southbronxunite.org). Instead of only slow, broad policies, a focused approach targeting the oldest diesel trucks will improve air quality much faster. This strategy can deliver quick health benefits for children and families while protecting small local truck owners from unfair financial problems.

My *"Saving the South Bronx"* program focuses on replacing and upgrading the oldest diesel trucks that serve Hunts Point and Mott Haven. Research has found that only a small fraction of trucks, those manufactured before 2007 produce a huge amount of emissions (theicct.org). Thus, targeting those oldest trucks will clean the air much faster than standard rules. By concentrating resources on the worst polluters and providing financial help for replacements or upgrades, the city can achieve major public health gains without wasting money.

This approach works because emissions are highly concentrated in the oldest vehicles. For example, According to the International Council On Clean Transportation, pre-2007 trucks make up just 6-10% of New York City's fleet but generate about two-thirds of its diesel PM2.5 pollution. Replacing or upgrading those few old trucks produces dramatically larger benefits,

swapping a pre-2010 truck for a modern one can cut its health impact by 81-96% (theicct.org). In simple terms, every dollar spent targeting the worst polluting trucks reduces far more harmful emissions than spreading funds evenly across all vehicles. Providing targeted vouchers, grants to upgrade older trucks, or trade in incentives keeps the strategy cost effective while supporting small operators.

The impact is much worse in the South Bronx than most of New York City. In 2016, the asthma-related emergency department visit rate for children in Hunts Point and Mott Haven was about 503 per 10,000, compared with roughly 172 per 10,000 citywide (nyc.gov). This problem means far more missed school days for kids and missed work for parents in the South Bronx. Ongoing exposure to diesel pollution can also affect children's lung development and lead to lifelong respiratory diseases (theguardian.com). Indeed, the South Bronx has some of the highest childhood asthma rates in the country, with studies finding over 30% of asthma cases in these neighborhoods due to traffic emissions (southbronxunite.org). The high health problem in Hunts Point and Mott Haven demonstrates the urgency of targeting diesel pollution there.

City leaders must act immediately because this pollution problem is unfair, especially for South Bronx children. Researchers show that cleaning up diesel emissions, such as replacing older trucks with electric models, rapidly improves local air quality (theicct.org). At the same time, investing in green infrastructure like parks, street trees, etc helps block pollution and gives immediate relief to children with asthma. For example, children living near parks have far fewer asthma symptoms than those with no green space nearby (ersnet.org). In short, combining targeted truck rules with new green spaces would result in quick health benefits for Hunts Point and Mott Haven.

The proposed program, *"Saving the South Bronx,"* would pay to replace, upgrade, or retire the oldest diesel trucks serving Hunts Point and Mott Haven. The city would provide financial assistance to truck owners, for example, grants to remove or replace pre-2007 trucks, vouchers for installing cleaner engines or filters, and low interest loans or discounts targeted to small, local groups. We would also increase spot inspections and strict enforcement of idling and emissions regulations in sensitive areas like, near schools and homes. Targeting the oldest trucks is essential because a small number of vehicles produce most of the local diesel pollution (theicct.org). By fixing or retiring those few dirty trucks first, the neighborhood will see immediate improvements in air quality, providing rapid health relief while the city slowly switches to zero emission trucks.

The program could be implemented through existing city and state resources. State climate and clean air funds such as NYSERDA would finance grants and low interest loans. New York City agencies, DOT and the Mayor's Office of Climate and Environmental Justice would manage the truck refund and inspection rules. Programs like the NYC Clean Trucks Program and the New York Voucher Incentive Program already do outreach and assist owner operators. Indeed, the original Hunts Point Clean Trucks (2012-2020) replaced 711 high emitting trucks, cutting their particulate emissions by approximately 97% and nitrogen oxides by approximately 89% (nycctp.com). That success provides a proven plan, we would use similar outreach and verification methods to reach even more business and make sure they follow the rules.

A grant committee should fund this proposal because evidence shows it will improve public health. Numerous studies of Bronx children show that higher diesel truck pollution causes more coughing, wheezing, and asthma attacks. As demonstrated, local health data show Hunts Point and Mott Haven have far higher childhood asthma ER visit rates than almost any other

NYC neighborhood (nyc.gov). The TRUE Initiative/ICCT research further confirms that the oldest trucks produce most of the pollution, so getting rid of those trucks produces the biggest health gains per dollar invested (theicct.org). We would measure success by tracking the number of trucks replaced or upgraded, reductions in local air pollution levels, and fewer asthma related ER visits and school absence rates in these ZIP codes. We will also track economic outcomes, such as whether small businesses survive, loans are repaid, and local jobs are created.

Some people argue that replacing old diesel trucks is not the best solution, because it is too expensive and unfair for small truck owners who depend on those vehicles to make a living. Buying new or electric heavy duty trucks requires large investments that many owners cannot afford even with subsidies. In addition, electric heavy duty vehicles and the necessary charging infrastructure are not yet widely available or practical for every route or business, so immediate replacement may be unrealistic for many operators.

I concede that the financial difficulty and short-term infrastructure limits are real and important concerns, but Saving the South Bronx is intentionally designed to solve them. The most valid audience reason, that costs could hurt small operators, is handled by offering vouchers, loans, and cleaner truck upgrades so small owners get support instead of being forced out of business. Offering upgrades or the option to join shared electric groups of trucks gives practical alternatives while charging stations and infrastructure are still being built. Starting the program with a small test program that focuses on the trucks causing the most pollution per dollar helps improve health quickly and allows time for infrastructure to grow. Finally, including workforce training and hiring local businesses ensures the program also benefits the neighborhood's economy.

Success will be measured by the number of trucks replaced or upgraded, changes in local air quality results, and public health signs such as fewer asthma related ER visits and missed school days in the targeted neighborhoods. The program's economic impact will be tracked by small business survival, loan repayment, and local job creation.

In conclusion, city and state leaders should fund and launch the Saving the South Bronx program now, using state and city climate funds and building on existing programs for outreach. With community oversight and fair financial support, the program can quickly reduce harmful diesel emissions, improve children's health, and create local green jobs. Once the program expands, the South Bronx can expect cleaner air, fewer asthma attacks and ER visits, better school attendance, and a stronger local economy ready for cleaner trucks in the future.

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