

Office of the Assistant Secretary for Health Washington, D.C. 20201

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Rick Marquis FHWA NY Division Administrator Federal Highway Administration Leo O'Brien Building 11A Clinton Ave, #719 Albany, NY 12207

Janno Lieber Chair and CEO Metropolitan Transit Authority 2 Broadway, C4.64 New York, NY 10004

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William Carry Assistant Commissioner for Policy NYC Department of Transportation 55 Water Street, 9<sup>th</sup> Floor New York, NY 10041

Dear Administrator Marquis, Chair Lieber, Dr. C. de Cerreño, Assistant Commissioner Choubah, and Assistant Commissioner Carry:

I am writing to provide comments on the Draft Environmental Assessment for the Central Business District Tolling Program (Program). The Program would toll vehicles that enter or remain in the Manhattan Central Business District in order to reduce traffic congestion and generate revenue to improve subway, bus, and commuter rail systems in Metropolitan Transportation Authority's 2020–2024 Capital Plan.

The U.S. Department of Health and Human Services (HHS) recently established an Office of Environmental Justice in response to President Biden's Executive Order *Tackling the Climate Crisis at Home and Abroad*. The Office's mission is to protect the health of disadvantaged communities and vulnerable populations on the frontlines of pollution, and other environmental hazards that affect health.

In pursuit of environmental justice, we respectfully submit these comments recommending additional health protective mitigation measures for the neighborhoods surrounding the Cross Bronx Expressway.

According to the Centers for Disease Control and Prevention and Agency for Toxic Substances Disease Registry's Environmental Justice Index (EJI or Index), census tracts along the Cross Bronx Expressway score in the 98<sup>th</sup> to 100<sup>th</sup> percentile for exposure to diesel particulate matter (diesel PM). Unfortunately, these communities likely breathe more diesel PM than 98 percent of communities nationwide. See Figure 1.

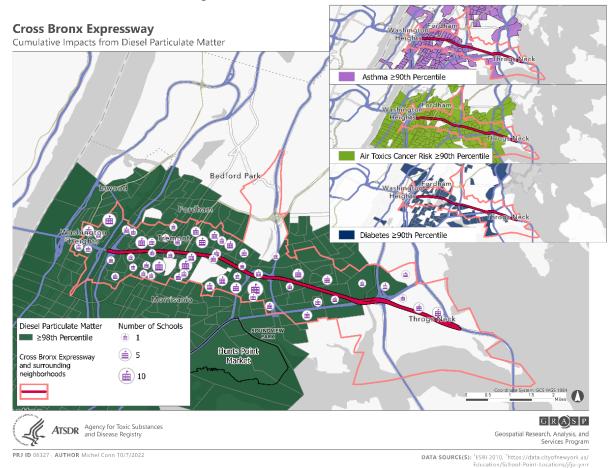


Figure 1. Cumulative Impacts from Diesel Particulate Matter

Diesel PM is a particle emission from a diesel motor made of an elemental carbon core and various adsorbed organics compounds and other chemical components.<sup>1</sup> Evidence indicates that diesel PM exposure may cause respiratory symptoms via inflammation and oxidative stress.<sup>2</sup> Acute exposure to diesel PM has been associated with acute coronary syndrome and other cardiovascular issues.<sup>3</sup> Diesel PM also contains carcinogens such as benzene and formaldehyde that may lead to the development of certain kinds of cancer.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Wichmann, H.-E. (2007). Diesel Exhaust Particles. Inhalation Toxicology, 19(sup1), 241–244. https://doi.org/10.1080/08958370701498075.

<sup>&</sup>lt;sup>2</sup> Ristovski, Z. D., Miljevic, B., Surawski, N. C., Morawska, L., Fong, K. M., Goh, F., & Yang, I. A. (2012). Respiratory health effects of diesel particulate matter. Respirology, 17(2), 201–212. <a href="https://doi.org/10.1111/j.1440-1843.2011.02109.x.">https://doi.org/10.1111/j.1440-1843.2011.02109.x.</a>

<sup>&</sup>lt;sup>3</sup> Peters, A., Dockery, D. W., Muller, J. E., & Mittleman, M. A. (2001). Increased Particulate Air Pollution and the Triggering of Myocardial Infarction. Circulation, 103(23), 2810–2815. <a href="https://doi.org/10.1161/01.CIR.103.23.2810">https://doi.org/10.1161/01.CIR.103.23.2810</a>.

<sup>&</sup>lt;sup>4</sup> Krivoshto, I. N., Richards, J. R., Albertson, T. E., & Derlet, R. W. (2008). The Toxicity of Diesel Exhaust: Implications for Primary Care. The Journal of the American Board of Family Medicine, 21(1), 55–62. <a href="https://doi.org/10.3122/jabfm.2008.01.070139">https://doi.org/10.3122/jabfm.2008.01.070139</a>.

In addition to the diesel PM emissions, the cumulative impacts currently borne by these residents are not much better. The EJI scores these areas in the 90<sup>th</sup> and above percentiles for air toxics cancer risk, poverty, no high school diploma, unemployment, housing cost burden, limited English-speaking proficiency, and racial/ethnic minority status. The Index also shows that residents already suffer from high prevalence of chronic health conditions, such as asthma and diabetes, that can worsen the impacts of air pollution on health. These social and environmental factors interact and compound with the existing health disparities in the area to worsen the overall burden of disease in these communities. The cumulative burden of social, environmental, and underlying health factors in these neighborhoods range from the 90<sup>th</sup> to 99<sup>th</sup> percentile nationwide, according to the EJI. See Figure 2.

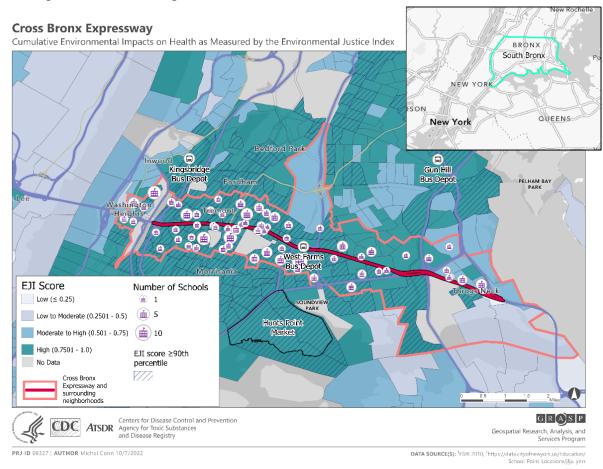


Figure 2. Cumulative Environmental Impacts on Health as Measured by the Environmental Justice Index

All tolling scenarios in the Draft Environmental Assessment for the Central Business Tolling District Program will increase heavy-duty truck trips in neighborhoods along the Cross Bronx Expressway, worsening emissions and associated harms to health. Focused health protective mitigation measures along the Cross Bronx Expressway could include: (1) the funding and installation of air filtration systems in public schools, prioritizing schools within 500 feet of the

<sup>&</sup>lt;sup>5</sup> See Central Business District Tolling Program Environmental Assessment. Table 10-14. Summary of Effects of the CBD Tolling Alternative on Air Quality; Table 10-11. Mobile Source Air Toxics Emission Burden Percentage Changes by County, CBD Tolling Alternative (Tolling Scenario A, Analysis Year 2023). <a href="https://new.mta.info/document/92846">https://new.mta.info/document/92846</a>.

expressway; (2) a prioritized deployment of zero-emission buses at the Gun Hill Depot *and* the West Farms Depot; and (3) a prioritized deployment of electric-diesel hybrid locomotives for use on NYC Transit work trains. I respectfully encourage the Federal Highway Administration and sponsoring agencies to incorporate these and other health protective measures to reduce the excessive environmental and health burdens these neighborhoods are already experiencing.

<< Signed >>
Rachel L. Levine, M.D.
Assistant Secretary for Health

## **Map Text Descriptions**

## **Cumulative Impacts from Diesel Particulate Matter**

This map and its three inset maps depict various factors contributing to overall cumulative impacts on health, as measured by the Environmental Justice Index, in communities within a half-mile of the Cross Bronx Expressway in South Bronx, New York (expressway represented by a dark red line and nearby communities are outlined in a lighter red color). The Environmental Justice Index ranks communities nationwide for 36 environmental, social, and health factors which contribute to cumulative impacts. Of the 111 communities within half-mile of the Cross Bronx Expressway, 92 score in the top 98<sup>th</sup> percentile nationwide for diesel particulate matter (represented in dark green). Among communities surrounding the expressway, 100 score in the top 90<sup>th</sup> percentile nationwide for air toxics cancer risk (represented in light green), 65 score in the top 90<sup>th</sup> percentile for asthma prevalence (represented in light purple), and 44 score in the top 90<sup>th</sup> percentile for diabetes (represented in dark blue).

There are a total of 110 public schools in the communities surrounding the Cross Bronx Expressway, representing potential cumulative impacts experienced by children attending those schools. These schools are symbolized on the map using purple school buildings surrounded by a dark gray circle. Larger school symbols mean there are more schools in that community.

For assistance, please email eji coordinator@cdc.gov.

## Cumulative Environmental Impacts on Health as Measured by the Environmental Justice Index

This map depicts cumulative environmental impacts on health, as measured by the Environmental Justice Index, for communities within a half-mile of the Cross Bronx Expressway in South Bronx, New York (expressway represented by a dark red line and nearby communities are outlined in a lighter red color). The Environmental Justice Index ranks communities nationwide on a continuous scale of 0-1, with 0 representing low cumulative impacts (represented in light blue) and 1 representing high cumulative impacts (represented in dark blue-green). Of the 111 communities within half-mile of the Cross Bronx Expressway, 95 communities have a score of 0.75 or higher when compared to communities nationwide and 70 of these communities have a score of 0.90 or higher (represented with hashes on the map).

There are a total of 110 public schools in the communities surrounding the Cross Bronx Expressway, representing potential cumulative impacts experienced by children attending those schools. These schools are symbolized on the map using purple school buildings surrounded by a dark gray circle. Larger school symbols mean there are more schools in that community.

Potential additional sources of diesel pollution are also highlighted on the map using black text and symbology, including the Kingsbridge, Gun Hill, and the West Farms bus depots (symbolized with black bus icons in a white circle), as well as the Hunts Point Market (outlined in black).

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