



Press Alert

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**Bronx Council for Environmental Quality Completes Research Project on  
THE ROAD TO ENVIRONMENTAL JUSTICE IN THE BRONX:  
ISSUES OF HEALTH, WEALTH & EDUCATION**

*Preview: Wednesday, September 8, 2021 at 7:30 pm on Zoom*

(Bronx, September 7, 2021) Bronx Council for Environmental Quality (BCEQ) announces the completion of a research project on Environmental Determinants of Health, Wealth, and Education in the Bronx, conducted in partnership with Columbia University and with Lehman College, a Hispanic-serving institution in the Bronx.

A team of Columbia and Lehman undergraduate students used sophisticated data visualization techniques to explore correlations among statistical measures of public school dropout rates, income, and health disparities with environmental factors.

The research was supported by a grant from New America's Public Interest Technology University Network (PIT-UN). Earlier this year, BCEQ submitted a proposal for the Columbia-Lehman Public Interest Technology Data Science Corps (PIT-DSC), facilitated by, Town+GownNYC, a city-wide university-community partnership program, resident at NYC Department of Design and Construction, that brings academics and practitioners together to create actionable knowledge. The BCEQ project was selected to participate in PIT-DSC's inaugural summer undergraduate research experience program. Over the summer, undergraduate students applied their data science skills in projects that focused on improving the lives of New York City residents in underserved communities. Graduate students from the Columbia Department of Statistics served as mentors during the summer program.

*"One of the key reasons for supporting this project was the opportunity to support data driven research with policy; build and strengthen partnerships among PIT-UN member institutions and community organizations; and create opportunities for students to directly connect their classroom learning and skills with real world applications." said Andreen Soley, Interim Co-Director, Public Interest Technology, New America, "It's gratifying to see that this project has resulted in all three but most importantly to see that BCEQ will have the information they need to advance their advocacy goals for Bronx residents."*

The completed report, [Environmental Determinants of Health, Wealth, and Education in the Bronx](#), is a call to action to save Bronxites from the impacts of bad environmental policy through budgeting and planning. To complete the research, BCEQ Board Members met weekly with a research team of Kayla Bernard (Lehman, BA Sociology), Gabriel Agustin Fernandez (Columbia, Math/CS), Ashe Lewis (Barnard), and Eusebia Vazquez (Lehman), and led by Zi Fang (Columbia,



Masters in Statistics). Students utilized ESRI datasets, ArcGIS, QGIS, Census figures, New Yorkers for Parks Report, as well as city and state agency databases. Findings include:

- Those who live farther from parks have more health problems. While this improves slightly as parks are greener, parks remain unused if they are found to be unclean.
- The dropout rate among students is exponentially higher in areas located along federal highway corridors, many of which carry diesel trucks servicing the entire metropolitan area.

*“Columbia is working to improve the public good by expanding and diversifying the Public Interest Technology data science workforce,”* said Columbia Professor Tian Zheng, Principal Investigator for the PIT-DSC program. *“Our partnership with Lehman and BCEQ advances our mission to create data science solutions that have a societal impact.”*

*“We are thrilled to be partnering with BCEQ and Columbia on a project that uses our students’ expertise to understand environmental conditions in the Bronx,”* said Lehman Assistant Professor Jennifer Laird, Co-Principal Investigator for the PIT-DSC program. *“This project provides invaluable data science training for our students, most of whom are from the Bronx, and it provides stakeholders with the evidence they need to make informed policy decisions.”*

*“The Town+Gown:NYC program has been working with the PIT-DSC program to develop data science projects with City agencies and community-based organizations such as BCEQ and is delighted that the BCEQ project was a success for BECQ and the students,”* said Terri Matthews, Director, Town+Gown:NYC. *“As the City’s primary capital construction project manager, DDC has been a leader in built environment policy and workforce development, and the Town+Gown:NYC program continues DDC’s role as a research resource.”*

An all-volunteer organization celebrating 50 years of environmental advocacy, BCEQ partners with academic institutions, city agencies, and other professionals to research and implement sustainable environmental policies and planning in the Bronx. Dr. Robert Fanuzzi, BCEQ President, praised the contribution of the Public Interest Technology University Network (PIT-UN) and its student researchers to environmental justice. *“This project puts clear illustrations of Bronx disparities in the hands of advocates, policy-makers, and decision makers. Environmental quality matters. The series of maps produced by this research have direct policy implications for the maintenance and operations of parks, schools, and highway corridors.”*

Student researchers will be presenting the BCEQ Research Project on the Environmental Determinants of Health, Wealth, and Education in the Bronx on Wednesday September 8, 2021 via Zoom.

The public is invited to attend, and urged to register by sending their name, affiliation to [karen@bceq.org](mailto:karen@bceq.org) by September 7, 2021 we will send you a zoom link.