



For Immediate Release

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DRAFT

**Bronx Council for Environmental Quality Completes Research Project on
ENVIRONMENTAL JUSTICE ISSUES OF
HEALTH, WEALTH & EDUCATION**

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

(Bronx, September 2, 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 + Gown program, a university-community partnership program 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.

Suggested New America quote (pending approval): "Our investments reflect our commitment to making public interest technology a driver of societal change," said XXX. "Understanding the correlates of environmental injustices and the groups who are most impacted moves the fields of public policy and technology toward a more just future."

Town+Gown quote:

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.”*

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 by September 7, 2021.

This is on BCEQ web page but it is not published yet.