



## Equity Impact Statement: Assessing and Improving Indoor Air Quality and Ventilation

**Title:** Assessing and Improving Indoor Air Quality and Ventilation

**Date:** November 3, 2021

Was the [Racial Equity Planning Tool](#) used?  Yes  No

If yes, insert date(s) of REPT meetings and link to completed REPT here: \_\_\_\_\_

Did a member of the Division of Equity, Strategy and Opportunity Gaps review this statement?  Yes  No

BPS Racial Equity Planning Tool Sections	Summary/Rationale
<p><b>1. Proposal/Presentation &amp; Impact</b>  <i>What are the proposal's/effort's desired outcomes, including in eliminating disparities? Who led this work/planning, and do they reflect BPS students' and families' group identities (key groups include individuals who are Black, Latinx, Asian, indigenous, immigrant, multilingual, and have Special Education experience)?</i></p>	<p>Excellent indoor air quality (IAQ) is essential to Boston Public Schools students' and employees' health, and ability to learn and work effectively. The current assessment and improvement project aims to ensure that every school in the district receives indoor air quality sensors for all classrooms, the main office, and the nurse's office, and an outdoor sensor for the rooftop as a baseline.</p> <p>Collecting indoor and outdoor IAQ data at each school will ensure response actions for improving IAQ are tailored to each school's specific needs. Mitigation steps will be planned with an equity lens, ensuring that schools in neighborhoods with the highest asthma rates are served first.</p> <p>BPS follows the U.S. Environmental Protection Agency's "IAQ Tools for Schools" guidance, and implements a layered risk reduction approach to its IAQ management program. The IAQ Tools for Schools definition of good indoor air quality management includes:</p> <ul style="list-style-type: none"> <li>● Control of airborne pollutants;</li> <li>● Introduction and distribution of adequate outdoor air; and</li> <li>● Maintenance of acceptable temperature and relative humidity.</li> </ul> <p>Installing IAQ sensors will help BPS:</p> <ul style="list-style-type: none"> <li>● Collect, monitor, measure, and evaluate IAQ carbon dioxide data in order to take appropriate action to improve schools' mechanical and natural ventilation.</li> <li>● Communicate with and educate BPS students, families, and staff about IAQ measures.</li> </ul> <p>Develop agency, collaboration, and trust around the topic of BPS healthy school environments.</p> <p>This initiative is led and supported by staff from Operations, Facilities Management, and Instructional and Information Technology, whose identities are collectively reflective of BPS students, and include staff with Special Education expertise.</p>
<p><b>2. Alignment with the Strategic Plan</b>  <i>How does the proposal/effort align with the district's strategic plan?</i></p>	<p>This initiative aligns with Strategic Plan Priority 2.7, "Creating safe and supportive learning spaces."</p>
<p><b>3. Analysis of Data</b>  <i>What data was analyzed? Was it disaggregated by race and other key groups? What did it show regarding disparities?</i></p>	<p>The implementation team reviewed City of Boston Air Quality Index data, information on BPS student asthma rates, data regarding school HVAC systems, and the district's Opportunity Index. While all schools have now received IAQ sensors, the installation schedule was developed using this data to apply an equity lens, prioritizing neighborhoods with the lowest air quality and highest asthma rates. For example, the installation</p>

	schedule began with all East Boston schools.
<p><b>4. Stakeholder Engagement</b>  <i>Who was engaged (quantity, key groups, and roles) and how, and what did that yield? What did students/families most impacted by this proposal/effort say?</i></p>	<p>During the pandemic, BPS families and employees, particularly union members, along with external air quality, ventilation, public health, and education experts, were engaged on issues of indoor air quality, ventilation, and healthy school environments. The IAQ sensors initiative was developed and proposed by the BPS Sustainability and Environmental Resources Division as one strategy to improve indoor air quality and ventilation across all schools.</p>
<p><b>5. Racial Equity Strategies</b>  <i>How does this proposal/effort mitigate disparities and increase racial and other equity? What are possible unintended consequences? What complementary strategies will further advance equity?</i></p>	<p>Nationwide, nearly 1 in 13 school-age children has asthma, the leading cause of school absenteeism due to chronic illness.<sup>1</sup> According to the BPS District Wellness Council, 20% of BPS students have been diagnosed with asthma. Differentiated by race, this represents 22% of multiracial students, 21% of Black students, 20% of Asian students, 20% of Latinx students, 15% of Native American/Pacific Islander students, and 14% of White students.<sup>2</sup></p> <p>Globally, air pollution and asthma disproportionately affect people of color and historically marginalized communities, and the same is true in Boston and in BPS. Improving IAQ in our schools is a matter of public health, education, racial equity, and environmental justice, and the first step is collecting, measuring, and monitoring key IAQ information by installing sensors.</p>
<p><b>6. Budget &amp; Implementation</b>  <i>What are the budget impacts? How will implementation ensure all objectives, particularly equity-related objectives, are met? What are the group identities of the implementation team, and will they bring an equity lens?</i></p>	<p>The IAQ Sensor Initiative is being financed by ESSER funds. The contract, which includes all equipment, software, labor, and service costs, will total \$6.7 million.</p>
<p><b>7. Accountability &amp; Communication</b>  <i>How will impacts be assessed, documented and communicated to stakeholders? Who will be responsible?</i></p>	<p>IAQ data will be shared and communicated through an informational web page and public dashboard on the BPS website. This site is expected to go live by the end of November. BPS Facilities Management will work with Communications to continually update the site. The launch of the site will be announced to BPS students, staff, and families through districtwide communications and the press.. BPS Facilities Management will provide an update on this initiative to the School Committee in spring 2022.</p>

<sup>1</sup> [U.S. Environmental Protection Agency.](https://www.epa.gov/asthma)

<sup>2</sup> Courtesy of the BPS District Wellness Council; asthma data from health screenings in Grades 1, 4, 7 & 10 (Health Services).