

# The Opportunity Index

February 2018



## Purpose

Closing opportunity and achievement gaps is the Boston Public Schools' driving priority. It is the catalyst for the hard work we are doing to replace the structures, practices, and mindsets that perpetuate inequities. Every student, in every classroom, in every school of the BPS system should have the same unconstrained opportunity to achieve the greatness within him or her. We know that students come to school with differing experiences, opportunities, and needs, but as a district, we historically have lacked a nuanced way to account for these differences and mitigate inequities that are out of schools' immediate control. The Opportunity Index is an innovative tool created to help quantify these differences so we can make decisions and allocate resources more equitably, helping to close gaps in opportunity.

## Definition

The Opportunity Index is a composite index that incorporates a range of data representing factors that are outside of the schools' control, yet are predictive of students' academic outcomes. The data include "place-based" measures related to students' home neighborhoods – as defined by Boston's 177 U.S. Census tracts – as well as measures specific to individual students and their families. By rolling multiple measures into a single, more accessible metric, BPS will be better equipped to direct resources and supports to the schools and students who need them most.

## Methodology

The Opportunity Index is designed to identify schools with higher concentrations of students in need of additional resources and supports to overcome opportunity gaps. To develop the Index, BPS partnered with researchers from Northeastern University and Harvard University through the Boston Area Research Initiative (BARI).

The team worked with representatives of various BPS offices to devise an initial Opportunity Index that measures ten "place-based" indicators across five categories. For each student in a school, the Index examines statistics associated with the student's home neighborhood (Census tract) rather than the location of the school itself. The indicators vary somewhat by student educational level, but include:

<b>Academic attainment:</b>	Percentage of adults living in the Census tract who have earned a Bachelor's degree or higher.
<b>Neighborhood safety:</b>	Statistics related to gun use, domestic violence, and other crimes committed in the immediate geographic area.
<b>Socioeconomic status:</b>	Rates of family poverty, median household income, public assistance, and unemployment.
<b>Custodianship:</b>	Frequency of residents' use of 311 to report issues in the area, an indication that residents have a sense of agency regarding their neighborhood and securing city services.
<b>Physical disorder:</b>	Deterioration and denigration of neighborhood structures and spaces – both private and public – determined through 311 reports.

The Index also calculates factors specific to an individual student and his or her family, specifically:

<b>Economic disadvantage:</b>	Participation in one or more of the following state-administered programs: Supplemental Nutrition Assistance Program (SNAP); Transitional Assistance for Families with Dependent Children (TAFDC); Department of Children and Families' (DCF) foster care program; and MassHealth (Medicaid).
<b>Chronic absenteeism:</b>	Attendance rate of 90% or lower.
<b>Course failures:</b>	Percentage of English Language Arts and Mathematics courses failed.
<b>MCAS failures:</b>	Percentage of MCAS exam failures in English Language Arts and Mathematics.
<b>Suspensions:</b>	One or more suspensions from school.

With the exception of socioeconomic status, each of the student-specific indicators is calculated using the student's previous educational level. That is, for high school students, the Index uses measures from the middle grades, and for middle school students, the Index uses measures from the elementary grades. For elementary school students, the only individual indicator included is the economic disadvantage factor.

Using statistical analyses, the BARI researchers recommended a "weight" for each of the indicators above, based on the indicator's ability to predict students' future academic outcomes, as defined by MCAS performance. A composite score is calculated for each student in the school. Each school's Opportunity Index score is then determined based on the concentration of students at greater academic risk, relative to their peers at the same educational level (elementary, middle, or high). Opportunity Index scores range from 0.01 to 0.99, with higher numbers indicating a higher average level of student need.

The Opportunity Index will be calculated once for each school year. The initial methodology and calculations will be used for decision-making in school year 2018-2019 (fiscal year 2019). Every year, the district will recalculate the Index, using essentially the same model but incorporating any newly-available student and neighborhood data, and any changes to the indicators or their relative "weight" in the formula.

## Application

For the 2018-2019 school year (fiscal year 2019), BPS will pilot the use of the Opportunity Index for the allocation of two central sources of funding:

- **The Partnership Fund:** \$6 million awarded centrally for schools to partner with community nonprofit organizations. Schools with an Opportunity Index score greater than or equal to 0.57 (60 schools) will receive an allocation based on student enrollment and level of need. Each school will have autonomy to select partner organizations to provide services for its students.
- **School Support Funds:** \$3 million in unrestricted funding awarded centrally to support schools' academic priorities. Schools with an Opportunity Index score greater than or equal to 0.35 (102 schools) will receive an allocation, based on student enrollment and level of need.

These allocations are included in the Superintendent's proposed FY19 budget, which is subject to the approval of the Boston School Committee and the Boston City Council.

*Updated February 10, 2018*