

2013

GREENING BOSTON PUBLIC SCHOOLS

REPORT



Superintendent Welcome

Dear Friends,

I am excited to share with you the first-ever green schools report for Boston Public Schools (BPS). While BPS has been engaged in sustainability efforts for many years under the leadership of Superintendent Johnson, this is the first time that our stories, data and best practices for operating a green school district have been showcased in one place.

The City of Boston is a nationally recognized environmental leader thanks to the vision and initiatives spearheaded by Mayor Thomas M. Menino over the past twenty years, most recently through his sustainability initiative, Greenovate Boston. Greenovate is a collective movement to ensure a greener, healthier and more prosperous future for Boston by helping reduce its greenhouse gas emissions (GHG) by 25 percent by 2020 and 80 percent by 2050. Here at BPS, we are committed to supporting Greenovate Boston by advancing whole school sustainability efforts each year in the areas of resource conservation, transportation efficiency, health and wellness and environmental education.

It will take every member of the district to achieve the goal of responsible environmental stewardship, social well-being and economic efficiency in the operations of our schools and the education of our youth. From upgrades of our buildings and school buses, to outdoor classrooms and gardening, our students, staff and partners are engaged on many levels to make our schools more equitable, healthy and efficient. The stories highlighted in this report offer a glimpse of the amazing “greenovation” happening across BPS and include examples such as:

- Teachers who utilize outdoor classrooms for hands-on learning
- Facilities Management staff working behind the scene to reduce energy consumption
- Farm to School and healthy living initiatives to improve student and staff wellness

We know that healthier buildings create a more equitable environment for learning across the district; and by improving the quality of the school environment, we can improve the learning potential of our students. As an educational institution, we are also responsible for preparing students for 21st century careers and connecting them with real world opportunities that foster a respect for their future. We strive to create this sustainable educational environment—and we work to improve on it every day at BPS!

Sincerely,



John P. McDonough
Interim Superintendent,
Boston Public Schools



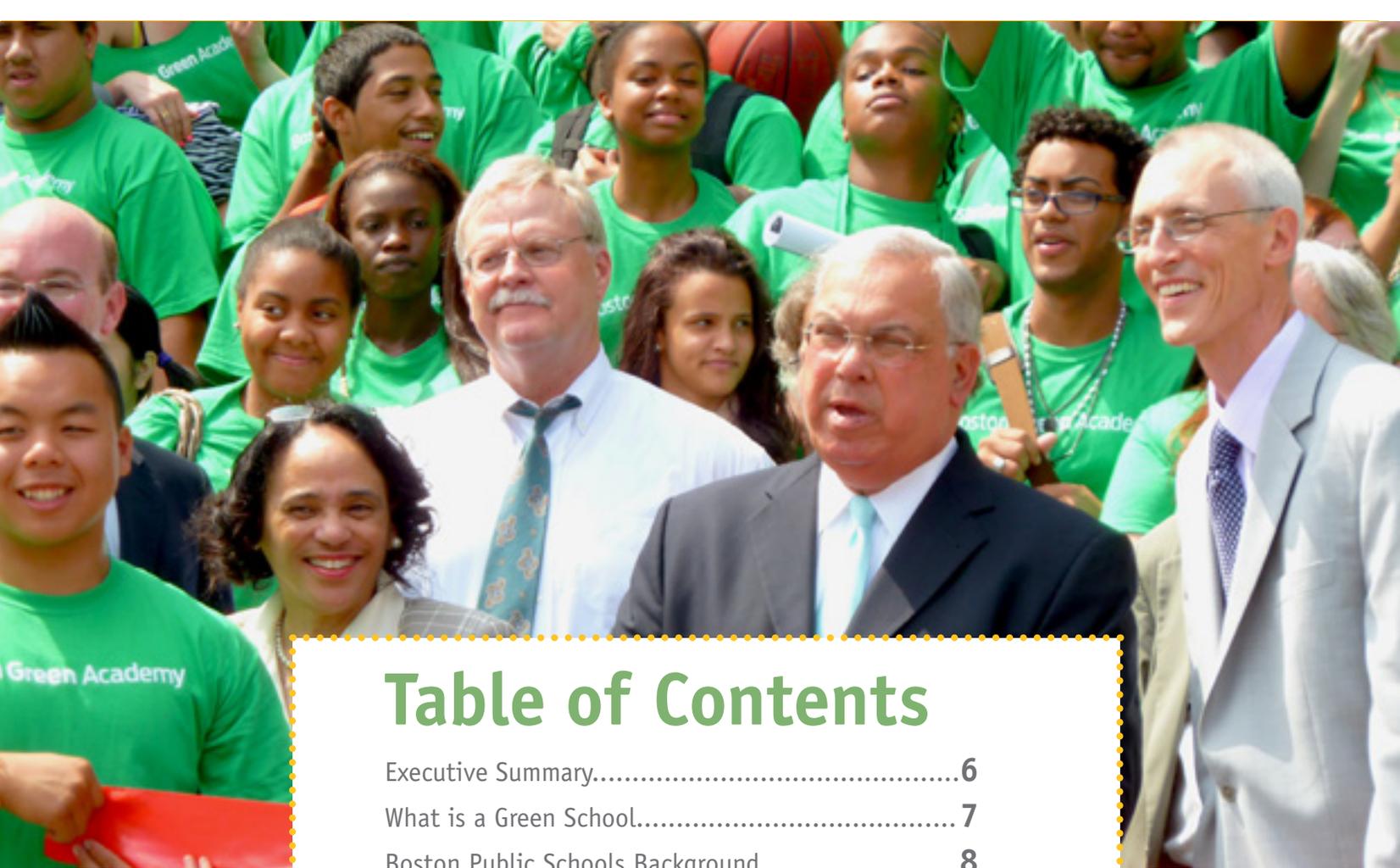


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CITY OF BOSTON
Thomas M. Menino, Mayor

BOSTON SCHOOL COMMITTEE
Michael O'Neill, Chairperson • Claudio Martinez, Vice-Chairperson
Meg Campbell • Rev. Gregory Groover • Mary Tamer

BOSTON PUBLIC SCHOOLS
John P. McDonough, Interim Superintendent

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Executive Summary

BPS believes that every child deserves access to a great education, and every day we work to design, build and operate our school sites as high-performance spaces where every child can succeed. With a focus on whole school sustainability, this first ever *Greening Boston Public Schools* report is an exciting showcase of district-wide initiatives that are helping to save resources, promote health and wellness and connect students to environmental, STEM and community learning opportunities.

RESOURCE MANAGEMENT

Since 2005, BPS has reduced its greenhouse gas emissions from buildings by 12 percent.

Students can now recycle at school just like they do at home. By June 2013, 80 out of 128 schools were participating in a single stream recycling program.

TRANSPORTATION

BPS maintains a high-performance fleet of buses and when making new purchases, always chooses the buses with the highest efficiency and lowest environmental emissions on the market.

The Transportation Department reduced NOX emissions by 50 percent in their buses through special exhaust cleaning equipment, one of the many efforts taken to help improve air quality.

HEALTHY SCHOOLS & HEALTHY STUDENTS

As a result of 18 years of work, the Boston Schoolyard Initiative has transformed 88 asphalt parking lots into beautiful schoolyards and 32 outdoor classrooms with vegetable gardens and hands-on nature elements for learning and safe, healthy play.

A comprehensive Wellness Policy was passed in spring 2013, bringing the work of seven different departments together under one policy.

In SY 2012-2013, 27 schools received fresh fruits and vegetables to serve as snacks as part of an initiative to promote lifelong healthy eating habits.

EDUCATION FOR SUSTAINABILITY

On September 29, 2012, fifteen BPS schools participated in the inaugural Center for Green Schools' Green Apple Day of Service.

A new Horace Mann Charter School, Boston Green Academy, opened its doors to students in fall 2011.

Thousands of students received climate change, energy and environmental education from community organizations including Alliance for Climate Education, Boston Latin School YouthCAN and more.

AWARDS & RECOGNITION

BPS was one of two districts in the U.S. to be chosen to host a Center for Green Schools UTC Fellow from the U.S. Green Building Council.

What is a Green School?

*U.S. Department of Education Green Ribbon Schools demonstrate compelling examples of the ways schools can help children build **real-world skillsets**, **cut school costs**, and **provide healthy learning environments**.*

–Arne Duncan, U.S. Secretary of Education

While there are many definitions of a green or sustainable school, Arne Duncan, the U.S. Secretary of Education at the Department of Education (US DOE), defined it for the country when he launched the Green Ribbon Schools recognition program. This award program is designed to bring awareness to schools that demonstrate excellence in green school initiatives. Through Green Ribbon, US DOE now takes a comprehensive look at schools operations, curriculum offerings and institutional culture around sustainability. Schools that rise to the top and are awarded the Green Ribbon each year have demonstrated excellence across their school in three categories. The Center for Green Schools developed this simple way of illustrating the Green Ribbon Schools criteria: lower environmental footprint, positive impact on health and an increased number of environmentally literate graduates:



1) Reduced Environmental Footprint (waste, H2O, energy, CO2)



2) Improved Health



3) Environmentally Literate Graduates



green school /grEn skül/ a school that creates a healthy environment that is conducive to learning while saving energy, resources and money

Boston Public Schools

DISTRICT BACKGROUND

Our Mission—The Boston Public Schools is committed to transforming the lives of all children through exemplary teaching in a world-class system of innovative, welcoming schools. We partner with the community, families and students to develop in every learner the knowledge, skill and character to excel in college, career and life.

Boston, Massachusetts is the birthplace of public education in the United States; the city was home to the first public school as well as the first public elementary and first public high school. The district has come a long way since Boston Latin School opened in 1635 and is constantly innovating and implementing new ways to provide the best education and services to its diverse constituents - representing 58,000 students and more than 8,000 staff, across 128 schools.

GREENOVATE BOSTON

On May 14, 2013, Mayor Menino announced the official launch of Boston's new sustainability brand and initiative, Greenovate Boston, with ambitious new community engagement goals, a new website, and a citywide advertising campaign.

Greenovate Boston focuses on engaging and educating all sectors of Boston to take steps to reduce Boston's GHG emissions by 25 percent by 2020. In a city propelled by innovation and drive, Greenovate Boston will encourage continued sustainable growth and make this city the greenest on the planet.



REPORT BACKGROUND

BPS is grateful to the many teachers, school leaders, district staff and community partners who contributed to the *Greening Boston Public Schools* report. The development and publishing of this report was made possible thanks to the USGBC and the content was compiled by the Center for Green Schools UTC Fellow at the Boston Public Schools, a three-year Fellowship position supported by United Technologies Corporation through the USGBC.

The impactful stories, compelling data and best practices featured in this report are organized under five categories: 1) Resource Conservation, 2) Transportation, 3) Healthy Schools and Healthy Students, 4) Education for Sustainability and 5) Awards and Recognition. The report concludes by highlighting several of the district's goals for furthering sustainability initiatives and policies into 2014 and beyond.

Resource Management

The energy used to operate BPS' buildings and transportation fleet accounts for 40 percent of the city's total municipal greenhouse gas emissions (GHG). Because of these emissions, BPS has a large role in helping reach Boston's GHG reduction goals of 25 percent by 2020, as outlined in his 2011 Climate Action Plan. Through forward-thinking conservation and efficiency projects led by BPS Facilities Management, BPS has made significant progress towards reducing its impact on the environment and realizing savings for the district.





BPS is making strides to save energy and reduce its greenhouse gas emissions in line with the Mayor's climate goals:

GREENING SCHOOLS

Contractors **broke ground on the new Dudley Square Municipal Office Facility**, future home of BPS Administration. The project is designed to be a LEED Silver building and 20 percent more efficient than a typical office building.

The \$27 million dollar energy improvement and accessibility project at **Charlestown High School and Community Center**, to be completed in 2014, will result in **20 percent more efficient lighting and mechanical systems**.

The **Barr Foundation** awarded BPS \$200,000 to develop standardized contracts for solar PV and streamlined processes for conducting energy audits, an initiative that will result in operational savings for BPS.

ENERGY SAVINGS

West Roxbury Education Complex is expected to use 22% less energy and save \$69,122 annually, as a result of a lighting retrofit that replaced exterior and pool lights with LEDs and installed occupancy sensors throughout the building.

In 2012, **steam traps were replaced at the Irving Middle School**, which will result in an estimated **annual savings of \$65,800**.

PowerSave software installed on desktop computers across the district powered down thousands of units from January 2012 - June 2013, **saving BPS over 12 million kWh and \$376,677 in avoided costs**.

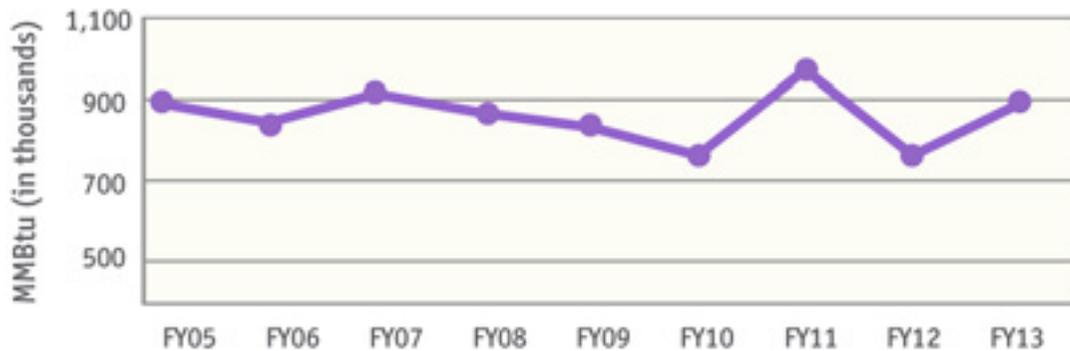
HISTORICAL GREEN BUILDING AND ENERGY CONSERVATION PROGRAMS

- 1984** The energy conservation program started with leadership from Facilities Management
- 1990** The first Energy Management System was installed in schools to proactively monitor and manage energy usage
- 2000** BPS installed 27 energy efficient cogeneration mechanical systems in 19 schools
- 2004** The last school converted from #2 and #4 heating oil to natural gas
- 2007** Mayor Menino signed an executive order setting goals for reducing GHG emissions
- 2008** BPS completed its first LEED certified project at the Roosevelt School in Hyde Park
- 2010** Grants funded six solar Photo Voltaic (PV) installations at Madison Park, Murphy, Boston Latin School, Boston Latin Academy and Roosevelt Schools
- 2011** BPS was selected to host a Center for Green Schools UTC Fellow for three years

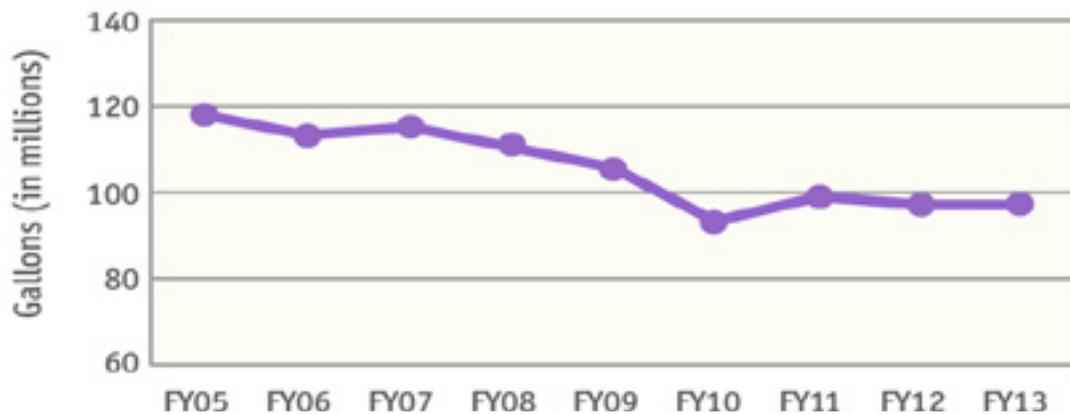


Since the 2005 baseline year, BPS has stabilized energy use and decreased water usage even while it increased the use of buildings and expanded classroom technology. In 2011, BPS operated all cogeneration mechanical systems, which use gas to generate electricity at a lower cost than the market purchase price. A decrease in energy usage was realized in FY 12 when BPS closed ten buildings. Six of those buildings reopened in FY 13. The increase in energy usage between 2012 and 2013 can also be explained by the 13 percent increase in the hours that schools were open. Water usage has remained steady over the past two years; but since 2005, BPS has achieved an 18 percent reduction.

BPS BUILDING ENERGY USAGE



BPS BUILDING WATER USAGE





FEATURE STORY: ENERGY EFFICIENCY

In September 2013, the American Council for an Energy Efficient Economy (ACEEE) ranked Boston top among large U.S. cities for energy efficiency programs and policies. Not surprisingly, Massachusetts has received this same ACEEE number one ranking at the state level for the last two years running. Taking advantage of the energy incentives available in Massachusetts during the 2012-2013 school year, BPS implemented several lighting retrofit and steam trap replacement projects in partnership with the local utilities. The three projects outlined below totalled \$190,363, with NSTAR and NGRID rebating 47% of the project costs. The district will realize annual savings of \$138,156 as a result of these energy upgrades.

ENERGY EFFICIENCY AND UTILITY INCENTIVE PROJECTS

Facility/Project	Project Cost	Utility Incentive	Annual Savings	Payback
West Roxbury Education Complex Lighting Retrofit	\$163,060	\$76,803	\$69,122	1.25 years
East Boston High School Lighting Retrofit	\$10,101	\$5,402	\$3,198	1.5 years
Irving Middle School Steam Trap Replacement	\$17,202	\$8,601	\$65,836	3 months
Total	\$190,363	\$90,806	\$138,156	- - -



The district is working to achieve a recycling rate of 20 percent:

WASTE MANAGEMENT

Students can now recycle at school, just like at home - in one single stream container. Since launching the program, the volume of school recycling has more than doubled.

BPS recycled approximately **30 tons of paper from administrative buildings, 15.5 tons of polystyrene trays from the cafeteria, 244 tons of cardboard and 8,200 electronics.**

A new version of the invoicing software, PeopleSoft, was rolled out to **streamline operations and reduce paper usage.**

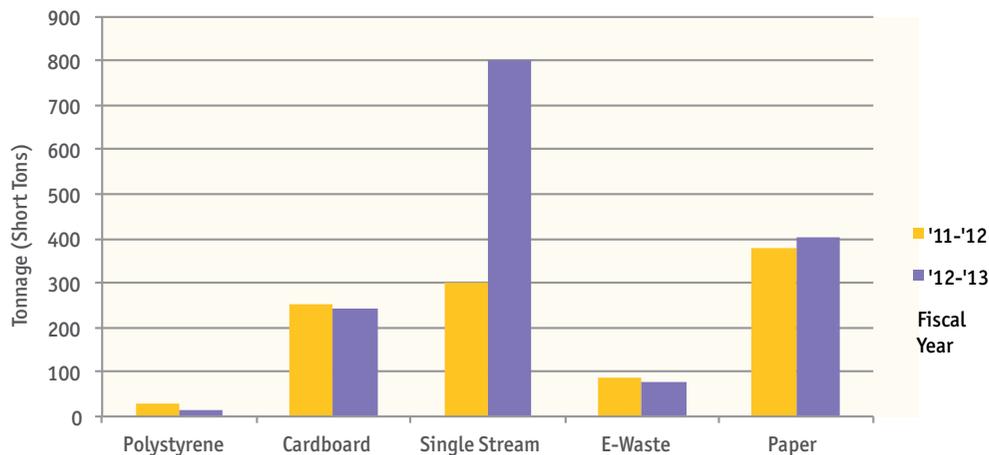
Many BPS schools have moved over the last several years, and **extra furniture and equipment is re-used** and distributed to other schools.

Thanks to Boston Children's Hospital, BPS Health Services implemented **electronic medical records for school nurses, saving paper and improving BPS' ability to provide better care.**

In an effort to reduce waste and improve health, BPS Food and Nutrition Services phased out the use of polystyrene and began serving meals on paper trays.

RECYCLING AT BPS	
Late 1980s	Paper recycling program begins
1999	Hired full time recycling staff
2000	BPS recycling center opened with polystyrene & cardboard recycling equipment
2007	BPS schools participated in RecycleMania, a district wide recycling competition
2009	BPS Recycling Committee officially formed
May 2012	Single stream recycling contract in place
Spring 2012	80 out of 128 schools recycling single stream

BOSTON PUBLIC SCHOOLS' RECYCLING RATES



FEATURE STORY: RECYCLING & COMPOSTING

Generation Citizen, a local non-profit, partners with college students and classroom teachers to teach an action civics course in which **teens are empowered to solve problems** they are facing in their own communities and become engaged as effective citizens. In 2012, Generation Citizen worked with students at Community Academy of Science and Health (CASH) and Boston Arts Academy (BAA) to raise awareness about recycling and bring better resources to their school. As a result, **both schools are actively recycling single stream**, and BAA now has a green team that will be participating in a composting pilot in 2014. Students begin Generation Citizen believing they have little control in their world and end the program having made a real difference within their school.



“ My students love being in charge of the single stream recycling program at the Kilmer Upper School. Each week we collect the recycling from classrooms, which not only gives us valuable pre-vocational experience but also allows our class to work on social skills. It’s great to see that in just a few months the other students in the building have a greater awareness of recycling as well as the diversity of the student body in their school.

Aimee Smith-Munnely, Kilmer Upper School



Transportation

Getting students to and from schools safely and efficiently is a primary focus for the district, but busing is energy intensive and costly. Fortunately, the BPS Transportation Department purchases the most efficient buses on the market and implements initiatives to reduce miles traveled - showcasing their commitment to reducing negative environmental and health impacts from their diesel fleet. Schools and community partners are also helping curb emissions and improve the health of youth by encouraging students to walk and bike to school.





The BPS bus fleet is becoming more efficient every day, and more students are active in biking, walking and riding to school:

ALTERNATIVE TRANSPORTATION

Students participated in **Safe Routes to School, bike safety training and Walk/Ride days.**

Ten schools participated in a walk to school promotional program made possible by a **Green Streets Initiative grant.**

The **Boston Bikes program served 3,848 students in cycling activities** at 17 different BPS schools, in 13 different neighborhoods.

ROUTING EFFICIENCIES

Veolia, the district's new bus fleet contractor, is working to **improve efficiency of routing** by trip chaining and **integrating buses with GPS** to help maximize efficiency of bus miles driven.

Bus idling time, wait time for students and traffic congestion have been reduced as a result of faster bus loading schedules and a partnership with the city to retime street lights.

VEHICLE EFFICIENCIES AND MAINTENANCE

BPS purchases the newest and most fuel efficient buses on the market; and emissions enhancements are prioritized over cost. BPS was the first fleet customer in New England to meet the federal 2007 emission requirements and emphasizes that compliance must be reached by the engine itself, not as a result of credits or trading.

BPS measured a 50% decrease in NOX emissions by cleaning the bus exhaust system during a pilot program. The initiative has now been expanded to service the entire fleet.

Environmental measures such as using #2 diesel, J3 low ash oil, and synthetic lubricant that lasts five times longer than typical lubricant, are taken to **improve emissions and engine efficiency.**

Antifreeze from buses is reconditioned and reused, tires are re-capped before being recycled and the **parts from retired buses are reused or recycled.**

MASON STUDENTS, TEACHERS & PARENTS FILLED WITH GREEN PRIDE

The school grounds at the Mason School in Roxbury were abuzz with **Walk/Ride Day** excitement. Michelle Wilkins, Walk/Ride Day coordinator at the Mason School, delicately balanced recording students commute and stamping their hands with the signature Green Streets logo. Over 40 students participated by either walking, biking or taking a popular commuting option, the scooter. On Walk/Ride day, everyone is encouraged to wear green and the entire school was adorned with Walk/Ride Day signs and banners. Michelle presented each participating student with a certificate and raffled off three prizes to a few lucky students.

Healthy Schools & Healthy Students

BPS aims to actively promote the health and wellness of all students to advance both their healthy development and readiness to learn. The district has leveraged resources and made extensive efforts through local and national partnerships to achieve the goals set out in *Healthy Connections: Strengthening Coordination and Capacity in the Boston Public Schools to Advance Student Health and Wellness*, the strategic plan for health and wellness.





As a result of great partnerships, BPS is improving the health, wellness and nutrition services for all students and staff:

HEALTH & WELLNESS OUTREACH

In spring 2013, a new **BPS Wellness Policy** was adopted - **one of the most comprehensive in the country**. The policy was developed by a District Wellness Council that involved students, parents, community partners and staff.

Health & Wellness hosted its 6th annual Wellness Summit, a wildly successful event that brought together a wide array of stakeholders and **awarded 13 schools** for their outstanding coordinated school health initiatives.

Harvard School of Public Health and Boston Public Health Commission **completed a water access study** in 2013, which will **result in dozens of schools going back online to using tap water instead of bottled water**.

SCHOOL FOOD & NUTRITION

Healthy Snack and Beverage policy guidelines were revised to meet and in some cases **exceed state and city policies** – **removing sweetened drinks and trans fats from schools**, and increasing access to foods lower in sugar and fat and high in nutrients.

At the King K-8 and Edison K-8, **family nights in 2013 included healthy cooking demonstrations** and a healthy heritage potluck in celebration of Black History Month and African Heritage and Health Week.

Every day last year, **students in 27 different schools enjoyed fresh fruits and vegetables as a snack** - a program that is helping to create lifelong healthy eating habits in Boston youth.

HEALTHY FOOD PROGRAMS

Universal Free Breakfast Program	All schools 57,000 students
Food Research and Action Center Breakfast in the Classroom	7 schools 600 students
2011-2012 Farm to School Local Lunch Thursdays	46 schools 35,000 lbs of local produce
Fresh Fruit & Vegetable Snack Program	27 schools, 13,086 students



HEALTHY SCHOOL ENVIRONMENTS

In summer 2012, a **comprehensive chemical inventory took place in 31 schools** as a result of a partnership with Facilities Management, the Science Department and the Environmental Protection Agency. The project **resulted in a 33.5 percent reduction of chemicals in labs.**

BPS and the Boston Public Health Commission performed **annual environmental facility inspections in every school** to identify health and safety issues and conduct a visual inspection of all occupied areas for possible asthma triggers (leaks, molds, dust, clutter, pests).

Custodians stripped the wax lobby floors at the Curley School and Brighton High School and **polished them with pads that only use water and don't require the use of chemicals.**

BPS has several policies in place to help ensure **good indoor environmental quality**, including green cleaning and integrated pest management.

HEALTH EDUCATION

The comprehensive **Tobacco-Free Environment Policy** was passed in January 2012, which **establishes school grounds as tobacco-free zones for students, staff and visitors.**

The **Let's Move in the Common Core** seeks to **integrate physical activity into K-5 classroom instruction.** Through the lesson, Macarena Math, students learn to count while dancing - a fun initiative made possible by a generous donation from Partners Healthcare.

FEATURE STORY: HEALTH & WELLNESS POLICY

Understanding that **physical and mental health, emotional well-being, and positive development are inextricably linked with academic success**, BPS has worked to transform the district's capacity to meet the health needs of all Boston children. To bring more focus to this issue, in spring 2013, BPS became a leader when the Boston School Committee voted unanimously to adopt a **new district Wellness Policy - one of the most comprehensive models of coordinated student health in the country**. The policy requires every school to form or maintain a Wellness Council to guide best practices. For the first time, health services, food and nutrition services, facilities, equity, health and wellness, physical education and physical activity departments are working together to make the healthy choice the easy choice for all schools.



Education for Sustainability

The school building and its surrounding site are often referred to as the “third teacher.” Educators have exciting opportunities to use the building, outdoor classrooms, field experiences and surrounding communities to teach students about sustainability and prepare them to be stewards of our environment. Boston schools are well-supported in these efforts through academic opportunities and STEM education and also through community partners who engage with youth, staff and parents.





Sustainability education initiatives provide BPS students hands-on learning opportunities, both in and out of the classroom:

LEARNING & ACTION

Close to **2,000 BPS high school and middle school students** learned about the science of **climate change** and what they can do to help the environment during The Alliance for Climate Education's award-winning assembly.

Project STRIVE, a school-to-work transition program, provides special needs students with experience in the recycling, green cleaning and electronic filing industries. **BPS students help recycle over 100 tons of mixed recycling at Wentworth University every year** and tons of paper from city administrative buildings.

Fifty students from Madison Park Technical Vocational High School's Electric and Automotive program visited the local International Brotherhood of Electrical Workers (IBEW) training facility to **learn about the future of electric vehicles**. IBEW's electric vehicle charging station is powered by its wind turbine, which is visible from I-93.

Boston Green Academy, in partnership with the Nature Conservancy, **hosted students in six paid summer internships at the Conservancy preserves through the national Leaders in Environmental Action for the Future (LEAF) program**.

Over the past three summers, **29 BPS high school students from ten different schools were trained as Energy Auditors as part of a Green Summer Jobs program**. These students conducted energy investigations of their schools and served as school leaders in energy efficiency.

Each year, **BPS teachers learn how to incorporate outdoor projects into their curriculum through the Science in the Schoolyard and Outdoor Writers Workshop** curriculum support and professional development programs.

Dearborn Middle School hosted the first BPS Food Corps Service Member in 2011, and the program expanded to Orchard Gardens in 2012. **Food Corps Members run hands-on gardening activity blocks twice a week, which is a favorite with the students**.

Fenway High School received a "How Green Is My Library" grant from the Library Services and Technology Act, enabling **students to explore how chemistry relates to their everyday lives** and better understand the impact that the urban environment has on their health.



COMMUNITY SUSTAINABILITY

The **6th annual Summit on Global Climate Change for Youth and Educators**, hosted by Boston Latin School YouthCAN, brought together hundreds of students around the state to learn about climate change, water access issues and green jobs.

MassArt partnered with the newly established UP Academy Charter School of Dorchester to **transform the asphalt front entrance into a vibrant and beautiful new pavilion that signifies the transformation taking place with the establishment of UP Academy.**

The third grade classrooms at the **Otis School participated in MassPort's Go Green Contest and won the \$2,500 top prize** for collecting the most recyclable plastic bottle caps. Local artists used the bottle caps for an art display, visible to thousands at Logan Airport.

NEW GREEN SCHOOL INITIATIVES

Boston Green Academy, a new Horace Mann Charter School, **opened to students in 2011.** The school focuses on creating a culture of sustainability and civic engagement by integrating sustainability throughout all subject areas and into special projects.

Josiah Quincy Elementary School installed a "living wall" which offers a bit of a nature sanctuary in the busy city and also serves as a hands-on learning project for students to explore concepts of water conservation, ecology and botany.

Schools all across BPS took part in the inaugural **Green Apple Day of Service to bring recognition to the fact that "where we learn matters."** Projects included full schoolyard cleanups, recycling signage, energy audits and more.

Since 1995, The Boston Schoolyard Initiative, a public/private partnership among the City of Boston, BPS and the Boston Schoolyard Funders Collaborative, has had profound impacts on our schools and our community:

- **88** schoolyards renovated
- **32** outdoor classrooms constructed
- **30,000** school children reached annually
- **850** teachers engaged in professional development
- **130** acres reclaimed for learning and playing
- **25** acres of asphalt greened
- **100** garden beds created
- **200** trees planted
- **75** play structures installed

FEATURE STORY: OUTDOOR EDUCATION

At the Russell Elementary School in Dorchester, physical education instructor Elizabeth Reynolds Lupo and science teacher Holly Rosa instruct classes together, creatively melding science concepts with physical education activities. The success of these co-teaching classes is being able to **take their students to the outdoor classroom**—a collaboration, they say, that has allowed them to **enhance the learning experience** for their students.

On the day of our visit, Reynolds Lupo and Rosa are outside with their kindergarten special education and ESL class. Today's topic is shapes, and the students begin by using their bodies to make squares, triangles and ovals. The teachers then bring their students into the outdoor classroom to collect and identify objects by their shape, reinforcing the same concept in a different way. The students are excited and engaged. By twisting into shapes and moving around the outdoor classroom, **students get meaningful physical activity while also engaging in academics.**

BEFORE



AFTER



Awards & Recognition

BPS is home to one of the first Center for Green Schools Fellows— a sustainability coordinator who works across the school district for three years, bringing together faculty, administration, facilities staff, teachers and students to advance whole-district sustainability initiatives.

Kim Szeto, Boston Farm to School Coordinator, won the 2011 Blue Ribbon Award from the Massachusetts Farm to School Project. Kim is involved with several projects, including Local Lunch Thursdays, expanding gardens at schools and educating students about healthy, local food options.

Thirteen BPS schools demonstrated that by creating connections with community partners and working across departments in their school, **it's easy to make the *healthy choice the easy choice*.** At the 6th annual BPS Wellness Summit, these schools received an “Excellence in School Wellness” award and cash prize.

Cate Arnold, a teacher at Boston Latin School and the Youth Climate Action Network advisor, was recognized as the “**Coolest Teacher in the World**” and spent two weeks with explorer Robert Swan, O.B.E. and his organization, 2041, in Antarctica learning about climate change.

In recognition of their efforts to go green, the **Nathan Hale, Gardner Pilot Academy, Boston Latin Academy, Boston Green Academy (BGA) and Haley** schools all **received environmental awards** from the Massachusetts Executive Office of Energy & Environment. BGA also won a 2013 Greenovate Boston Award from Mayor Menino for its environmental initiatives.

Past Superintendent Carol Johnson **acknowledged the McCormack Middle School** for being eligible and applying for **national recognition from the Alliance for a Healthier Generation**. Fourteen Boston schools have earned this distinction in previous years.

Lee Burke, science specialist at the Samuel W. Mason Pilot School, received **Mass Audubon's Conservation Teacher of the Year award** for her work to extend science education outside the classrooms walls and into the community.

Thanks to Youth Ventures, **Boston Arts Academy and Boston Latin School students won \$1,000** to develop signage for their Two School Composting Pilot; **Latin School won an additional \$1,000 grant** for their “**Random Acts of Green**” program.

At the 6th annual Wellness Summit, **Boston Schoolyard Initiative was awarded the “Excellence in School Wellness Lifetime Achievement Award”** for nearly two decades of service and ongoing contributions toward creating healthy school environments for Boston Public Schools students.

Boston Latin School was selected as one of four **state finalists for the Green Ribbon Award**, a recognition program launched in 2012 by the U.S. Department of Education to recognize excellence in green school operations and curriculum integration.

Looking Forward

As evidenced in this report, BPS is a dedicated leader in building outdoor learning spaces, operating high efficiency buses, supporting schools to implement health and wellness programs, and saving resources through energy conservation, and recycling. It is only through continuous improvement, innovation and focused leadership, however, that we will maintain this leading role. In the next year, the district will convene a Green Team to establish specific departmental goals around greening our operations and curriculum. This work will be tracked and reported in the 2014 green schools report. Cross-departmental and community collaborations like this Green Team will set BPS apart and ensure it remains a sustainability leader.

RESOURCE MANAGEMENT

BPS received a \$30,000 grant from the Mass. Department of Environmental Protection to support the hire of a part-time recycling coordinator who will expand recycling and reuse opportunities for all schools.

An energy competition will kick off in October 2013 with the goal of reducing energy and water usage district-wide by 5 percent.

A capital planning study is underway to assess programmatic needs and the condition of our facilities. For the first time, this study will consider long term impacts of climate change.

TRANSPORTATION

The Transportation Department will work with BPS' new fleet operator, Veolia, to become more resource efficient by aligning bell schedules to reduce miles driven, moving to electronic files, and purchasing high efficiency buses.

Consistent with Boston requirements, BPS will purchase approximately 72,000 to 75,000 gallons of bio-diesel fuel, at least 5 percent of the total fuel purchased annually.

HEALTHY SCHOOLS & HEALTHY STUDENTS

BPS Food and Nutrition Services will expand nutrition education and program offerings such as Farm to School, Fresh Fruit and Vegetable Snack program, and Breakfast in the Classroom.

The Health & Wellness and Facilities Management departments will install fountains in schools to improve access to tap water. Water bottle filling stations will be installed in some high schools.

The District Wellness Council will work to implement the Wellness Policy, adopted in spring 2013.

EDUCATION FOR SUSTAINABILITY

After 18 years, the Boston Schoolyard Initiative organization will be closing and transitioning its programming to BPS. The district will continue to maintain our schoolyards and outdoor classrooms as well as connect students and the community to these assets through STEM, civics courses and community leadership opportunities.

In April 2012, thirty students were recruited as the first Greenovate Boston Youth Recycling Ambassadors – a role that involved students in hands-on outreach and educational recycling service throughout Boston. BPS will be expanding this program in 2013-2014 to spread the word about the importance of recycling.



The design and printing of this report has been made possible by the Center for Green Schools at the U.S. Green Building Council and its founding sponsor, United Technologies Corp.

ABOUT THE CENTER FOR GREEN SCHOOLS AT USGBC

The Center for Green Schools at the U.S. Green Building Council is making sure every student has the opportunity to attend a green school within this generation. From kindergarten to college and beyond, the Center works directly with staff, teachers, facility, students, ambassadors, elected officials and communities to drive the transformation of all schools into sustainable places to live and learn, work and play. For more information, visit centerforgreenschools.org, follow us on Twitter at @mygreenschools, and like us on Facebook at facebook.com/centerforgreenschools.

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