

District Nominee Presentation Form

CERTIFICATIONS

District's Certifications

The signatures of the district superintendent on the next page certify that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

1. The district has been evaluated and selected from among districts within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The district is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
3. OCR has not issued a violation letter of findings to the school district concluding that the nominated school district has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
4. The U.S. Department of Justice does not have a pending suit alleging that the school district has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
5. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school district in question; or if there are such findings, the state or school district has corrected, or agreed to correct, the findings.
6. The district meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools District 2015-2018

Name of Superintendent: **Kathleen Bodie, Ed. D.**

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

District Name: **Arlington Public School District**


(As it should appear on an award)

Address: **869 Massachusetts Avenue, Arlington, MA 02476**

Telephone: **781-316-3501** Fax: **781-316-3509**

Website/URL: **<http://www.arlington.k12.ma.us/home/default.asp>** E-mail: **aps_superintendent@arlington.k12.ma.us**

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.



(Superintendent's Signature)

Date: **March 28, 2018**

Pillar 1: Reducing Environmental Impact

Improvements to K-12 school facilities save schools money, strengthen the nation's energy security, and conserve natural resources. Please describe your school's recent initiative(s) related to reducing environmental impact. Applicants are **strongly** encouraged to address improvements in each of the following areas:

1. reducing or eliminating greenhouse gas
2. improving water quality, efficiency, and conservation
3. reducing waste production
4. using alternative transportation

The Arlington Public Schools (APS) in Arlington, Massachusetts consist of seven elementary schools, one middle school, and one high school serving over 5,000 students. Part of the APS mission includes "preparing students for responsible participation in an ever-changing world" and reducing its environmental impact, improving health, and providing environmental education are integral to this mission.

The town of Arlington was designated a Green Community by the Massachusetts Department of Energy Resources in 2010. Among other things, we earned this designation by committing to reducing municipal energy use by 20% within five years, a goal we met in 2014. The Massachusetts Department of Energy Resources published this case study about Arlington's reduction of municipal energy consumption:

<https://www.mass.gov/files/documents/2017/10/19/green-communities-case-study-arlington.pdf>

The APS district works to reduce greenhouse gases through a variety of initiatives, including a) Composting lunchroom food waste: currently at six of the nine schools, with plans for district wide participation over the next two years. This food waste (representing 122,000 lbs per school year) is now being processed and delivered to local farms rather than being transported thirty miles to an incinerator to be burned. The schools with food waste collection also replaced their foam trays with compostable ones; b) Solar panels on six of the nine school buildings, with display screens in each of the participating schools to educate the school community about how much clean energy each school is producing. Data about the solar panels from the six participating schools is also posted on the town website: <https://www.arlingtonma.gov/i-want-to-/green-arlington/solar-pv-program>; c) Installation of new, efficient natural gas boilers in place of outdated oil boilers; d) LED exterior lighting; e) variable speed exhaust hood and automated refrigeration controls in walk-in freezers; f) replacing failed steam traps to avoid wasting steam in schools; g) Installation of energy management systems (EMS) to provide centralized control, scheduling and monitoring of HVAC systems; h) recent school rebuilds (Thompson Elementary, Stratton Elementary) were designed with light shelves, which reflect daylight into the rooms, daylight dimming sensors, occupancy sensors, and efficient plumbing fixtures. Thompson was designated as a Verified Leader through the Collaborative for High Performance Schools, which requires a school "must be balanced in providing benefits to the environment, student health and student performance." The upcoming high school rebuild project is pursuing a net-zero energy design.

In terms of water quality, in 2016, local community public water systems and the Massachusetts Water Resources Authority (MWRA) conducted lead and copper sampling of the drinking water at the Arlington Public Schools. Results indicated that all but the high school were "below action

level" (<http://www.mass.gov/eea/docs/dep/water/drinking/lcca-schools-list.pdf>). School custodial staff monitor school sinks and fountains regularly and ensure that any leaks are repaired quickly.

Drinking water in the Arlington public school district is tested and managed by the Board of Health. Arlington does not apply any fertilizer to school lawns, which keeps both surface runoff and groundwater cleaner. For water conservation, the water fountains in some schools include bottle fillers to help minimize use of bottled water. Thompson and Stratton elementary schools have new, highly efficient Flushometer-valve toilets. Stratton also has sensed faucets. Arlington does not water any school lawns except at the High School, and there only in the morning.

Reducing waste production is a top priority in the APS district. In addition to the aforementioned lunchroom food waste collection, all schools recycle in the lunchrooms, classrooms, and hallways. Green Team students are actively involved in recycling collection and education at several of the elementary schools and at the high school. Four of the elementary schools conducted classroom recycling audits and eight of the nine schools have conducted lunchroom waste audits. These waste audits assess the contents and weights of all categories of waste (recyclables, liquids, compostables, trash) and have educated the school community with their results through bulletin board displays, classroom presentations, and assemblies.

The school district launched a textile recycling campaign in the 2016-2017 school year, culminating in a competition with prizes for the school that collected the most textiles. A total of over 7,000 pounds of textiles was collected in just three weeks. As of January 2018, six of the nine schools have textile recycling bins on the school grounds through the Bay State Textiles School Box Program, already recycling over 5,000 pounds of textiles and raising funds for the schools.

Green Teams at several of the elementary schools have organized additional waste reduction initiatives, including a fall 2017 Pumpkin recycling event just after Halloween, successfully composting 3,000 lbs of pumpkins and thus rescuing them from going to the incinerator, and collecting unwanted school supplies in good condition at the end of the school year to then be re-distributed the following school year.

All seven elementary schools in the APS district participate in Walk or Bike to School days multiple times during the school year, encouraging families to see the environmental and personal health benefits of alternative ways to get to school. These days are well-publicized and have high rates of participation. The majority of middle and high school students in Arlington walk or take the local bus to school.

Pillar 2: Improving Health

High standards for safety, nutrition, and fitness improve student and staff health, attendance, and achievement. Please indicate your school's recent initiative(s) related to improving health. These standards can be met by developing an integrated school environmental health program that addresses integrated pest management, contaminant controls and ventilation, nutrition, fitness, outdoor time, and more. Applicants are **strongly** encouraged to address improvements in each of the following areas

1. purchasing/procurement for environmental health

2. the nutrition, fitness, mindfulness, and overall health of your students and staff

The modern HVAC systems installed in many of the APS schools provide better air filtration than older systems.

In 2012, the Arlington School Committee adopted a policy on Green Cleaning (<http://www.arlington.k12.ma.us/asc/policies/ecd.pdf>), stating: "The Arlington Public Schools will use green cleaning products and practices to support the goal of maintaining a healthy, safe and clean environment for students, faculty and staff."

In the 2017-2018, the Brackett Elementary School Green Team launched a classroom green cleaning campaign and succeeded in replacing disinfectant wipes used by students in all the classrooms with safer natural green cleaners, made by the Green Team students.

There are many programs in the APS district that address the nutrition, fitness, mindfulness, and overall health of students and staff, including a) Arlington Eats program, which provides daily healthy snacks (e.g., fruit, cheese sticks, yogurt) to students, especially those at the Title I schools in the district. This program, through a collaboration with the Arlington Food Pantry, also provides meals to families during school vacations, the summer, and a community dinner once a month; b) Fit Girls for elementary school students, led by teachers and school social workers and based on the Girls on the Run national model; c) Heart Rate Monitors for high school 9th grade physical education students to help them learn more directly about heart rates, training zones, and cardiovascular fitness; d) Mindfulness-based programs for students and staff (facilitated by school nurse, social worker, occupational therapist, and teachers) at Hardy and Thompson Elementary Schools and at the Ottoson Middle School; e) A diabetic care coordinator who oversees the health related issues for the district's growing population of students with type 1 diabetes and runs a related parent group; f) The Open Circle program at all the elementary schools that provides evidence-based social and emotional learning (<https://www.open-circle.org>).

Pillar 3: Providing Effective Environmental Education

Environmental education (EE) prepares students to be good citizens and enhances achievement and engagement in all subjects, especially in science, technology, engineering and mathematics. An effective EE program enhances the curriculum and instruction of multiple subjects, providing meaningful, authentic, and applied learning experiences inside and outside the classroom and school day. These experiences readily align with the 2016 Massachusetts Science and Technology/Engineering Curriculum Frameworks as they are relevant to the real world, encourage a deeper understanding and application of content, reveal the interconnected nature of science, and more. Please describe your school's recent initiative(s) related to providing effective environmental education. Applicants are **strongly** encouraged to address improvements in each of the following areas:

1. Coursework offerings
2. Extracurricular or internship offerings by applicant and/or partner organizations

In the elementary and middle schools in the APS district, many of the science classes address environmental topics, aligning with the Massachusetts Science and Technology/Engineering Curriculum Framework. Examples include a unit in Earth and Space Sciences in kindergarten that explores how plants and animals (including humans) can change the environment, a 6th grade

Technology/Engineering unit that gives students a design challenge and asks them to consider potential impacts on people and the natural environment.

Arlington High School offers a standard and AP Environmental Science class, as well as Biology, Astronomy, and Oceanography. In a class called Current Issues, climate change, the Paris Climate Agreement, and environmental protection topics are included. In the Introduction to Public Policy class, which is a college level class that is part of Syracuse University's Project Advance program, many students choose environmental topics for their final project. Past final project topics have included "The Redistribution of Food in the Cafeteria to Reduce Food Waste" and "A Policy to Reduce the Amount of Plastic Water Bottles Used at AHS."

Arlington High School also offers Backpacking and Winter Survival courses as part of the physical education curriculum. These courses culminate in a 3-4 day overnight trip and include "leave no trace" principles (caring for your surroundings), and learning about the natural history of the area. Half of the class meeting time is spent outside (at Arlington's Menotomy Rocks Park) during the quarter prior to the trip.

This spring a high school senior approached the Arlington School Sustainability Coordinator about doing an internship. The high school intern (a current senior with an interest in environmental science) researches and writes a monthly eco-newsletter shared through the School Sustainability page on our town website:
<https://www.arlingtonma.gov/departments/public-works-/recycling-trash-composting/school-programs>.

School gardens provide the ideal site for applied environmental education at many of the schools. Bishop Elementary School received grants to fund a garden educator and to develop a curriculum, which connects classroom science and social studies curriculum to garden activities (e.g., 3rd graders planting a Three Sisters garden—corn, squash, and beans—as part of their Wampanoag unit). The "Envirogarden" at the high school gives students the opportunity to experiment with green technologies such as solar voltaic, wind, and aquaculture as well as to explore organic gardening and pond studies. High school students in a woodtech class also recently used their Maker Space to build raised garden beds for Menotomy Preschool students (the preschool is housed in the high school). Woodtech and science teachers are also collaborating this spring at the high school to engage students in a greenhouse project.

As aforementioned, there are Green Teams at all the Arlington Public Schools that engage parents, teachers, and/or students in environmental learning and action. Most teams meet before or after school throughout the school year and participate in town-wide events like Town Day in September, Ecofest in March, Earth Day programs and the Patriots' Day Parade in April. All teams are registered with the Massachusetts Department of Environmental Protection's Green Team program and the Arlington Public Schools were featured in the Mass DEP's Green Team newsletter last month (February 2018).

In the fall of 2016, the town of Arlington hired a School Sustainability Coordinator (this award applicant), funded in part by the Massachusetts Department of Environmental Protection's School Recycling Assistance Grant. The School Sustainability Coordinator created an online resource library of Green Team projects, guest speakers, and grant/fundraising opportunities,

and facilitates bimonthly meetings for the Green Team parent/teacher/student leaders to share ideas and support.

Make your final pitch! Tell us why your school or district should be recognized as the 2018 Massachusetts and United States Department of Education Green Ribbon School

The Arlington Public School district should be recognized as the 2018 Massachusetts and United States Department of Education Green Ribbon School district for its strong dedication to reducing its environmental impact, improving the health and well-being of its students and staff, and providing curricular and extra curricular opportunities for environmental learning and action.

The need and ongoing support for the Arlington School Sustainability Coordinator position reflects the value the town places on sustainability initiatives in the schools. This past school year, there has been increased interest in expanding waste reduction and environmental education programs such as lunchroom composting (a junior recently proposed a composting pilot for the high school), textile recycling (the APS superintendent proposed partnering with the Bay State Textiles program), and school gardening (the Arlington Garden Club will offer an annual stipend to support school gardens, beginning this spring).

The Arlington Public School district serves as a model for surrounding communities in its environmental sustainability efforts as evidenced by the frequent calls, emails, and school visits the School Sustainability Coordinator has received over the last two years from teachers, parents, and Recycling Coordinators from Belmont, Cambridge, Lexington, Melrose, and Winchester.

If the Thompson Elementary School Green Team students in Arlington were asked why we should be recognized as a Green Ribbon School district, they would likely respond with the song they wrote and performed (with ukulele and singing) upon learning last year that their efforts led to replacing their lunchroom foam trays with compostable ones: "We are awesome, we are powerful, we can change the world!"