



District Sustainability Award 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 Sustainability Award 2019-2021

Name of Superintendent: Denise Juneau

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

District Name: Seattle Public Schools

(As it should appear on an award)

Address: 2445 3rd Avenue S., Seattle, WA 98134

Telephone: 206.252.0167 Fax:

Web site/URL: www.seattleschools.org E-mail: superintendent@seattleschools.org

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



Denise June

Date: 2/12/2020

(Superintendent's Signature)

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies 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 Authority's knowledge.

1. The district is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
2. The district meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Washington Office of Superintendent of Public Instruction

Name of Nominating Authority: Dr. Ellen Ebert
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Ellen Ebert, Ph.D.

Date: 2/12/2020

(Nominating Authority's Signature)

SUBMISSION

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: March 31, 2021

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data



needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

U.S. Department of Education Green Ribbon Schools District Application

Seattle Public Schools
2445 3rd Ave. S., Seattle, WA 98124

Summary Narrative

Seattle Public Schools (SPS) serves over 51,000 students across 104 schools. More than 30% of students qualify for Free and Reduced Lunch, and over 5,000 students will experience homelessness during the 2019/20 academic year.

SPS prioritizes the advancement of student wellness and safety in order to pursue positive student outcomes and accomplishes Green goals through a comprehensive effort across interdisciplinary teams that have unique skill sets. The Green goals and mission of SPS are accomplished by district staff, students, parents, and volunteers, and through numerous partnerships with community organizations.

Student health and wellness is supported by a wide range of teams including targeted programs to meet the needs of the SPS students, in addition to conventional programs in Nutritional Services, Safety and Security, Counseling, and Nursing.

The Nutritional Services team serves over 14,000 lunches and nearly 6,000 breakfasts every day. Students' needs are met through a variety of targeted programs for students at dozens of locations. SPS Nutritional Services has made a concerted effort to increase healthy ingredients and options as part of their services and strives to focus on availability of fruits and vegetables, more whole-grain rich items, and reduced sodium content.

SPS offers additional programs for schools with vulnerable populations, including a Fresh Fruit and Vegetable Program at seven targeted elementary schools, with a coming expansion to an additional eighteen schools. A Community Eligibility Provision Program offers breakfast at no cost to all students at five schools. A total of forty schools meet the 40% Free and Reduced Lunch threshold.

SPS Facilities Management manages over eight million square feet. The buildings range from one to one hundred and eight years old, creating a unique set of challenges and opportunities. To manage these facilities at the highest standard, SPS has several Resolutions and Policies that

support student wellness and provide guidance for Green Standards and decision-making to achieve optimal environmental performance.

Between 2008, when baseline measures were set, and the 2016-17 school year, the district saved approximately \$1.4M in waste, water, and energy costs. Annual performance goals are set at Less than or equal to 3700 British Thermal Unit per square foot per month (Btu/ft²/month) for energy, less than or equal to 75 gallons/student/month for water, and less than or equal to 4 cubic feet/student/month for waste, recycling and compost. In the 2018/19 school year, 89 schools achieved at least one goal across water, energy, or waste reduction metrics. All facilities are benchmarked with Energy Star Portfolio Manager and seventy five percent of schools are Energy Star Qualified. SPS is eagerly pursuing renewable energy sources. Six schools recently added 100KW+ photovoltaic systems with a state Department of Commerce grant, bringing the number of solar schools to ten.

SPS grounds and maintenance staff are critically important for ensuring water conservation through tightly controlled irrigation practices at community playfields. The work of SPS Custodial Engineers cannot be understated. They are invaluable in supporting all waste and recycling efforts, as well as being the first to identify problems with leaking water infrastructure or deficiencies in HVAC, mechanical, lighting, or building envelope systems. SPS also employs a team of four Recommissioning Coordinators, who fine-tune all school HVAC systems, regardless of age, for optimum performance.

SPS Capital Planning has made significant advances in recent years to support student health and wellness while promoting positive student outcomes. To better serve the needs of an economically diverse population, Capital Planning addresses equity through school design to better provide safe places for student learning. This includes materials selection through design, as well as providing facilities for community partners to offer services, such as Teen Life Centers in partnership with Seattle Parks and Recreation. Capital Planning also supports work in environmental advocacy through stringent standards in Energy Use Intensity indexes (EUI). The six newest schools opened through capital levies boast EUIs that far exceed the national average for K-12 schools, ranging from 15-25 kBtu/ft².

SPS has three Resource Conservation Specialists tasked with managing a wide range of utility accounts on behalf of SPS, including electricity, natural gas, water, solid waste, recycling, and compost. This team works alongside school leaders, champions monitoring, and reviews critical work and initiatives focused on the reduction of environmental impacts and costs across district operations. They also look for and support projects and programs that help reduce energy and water consumption, waste, and promote the reduction of carbon output and Greenhouse Gas (GHG) emissions.

All schools at SPS are encouraged to create Green Teams and be certified with Washington Green Schools. Funding is available through a dedicated Shared Savings account, which is established by meeting goals in energy and water conservation, as well as through waste diversion metrics.

Underpinning all the above work are the Resource Conversation Policies and guidelines. These are written to be aspirational, as well as provide specific guidance in shaping resource conservation at SPS.

Student curriculum at SPS aligns science curriculum at K-12 to the 2013 Washington State Science and Learning Standards (also known as the Next Generation Science Standards). The department completed a K-12 curriculum adoption in May 2019 to align core science instructional materials at all schools and grade bands with these science standards and include environmental and sustainability literacy topics.

At the Elementary Level the foundations of climate science are taught beginning with solar energy, weather patterns, and severe weather. Middle School students begin their study in grade 6 with units covering Thermal Energy; Ocean, Atmosphere, and Climate; and Weather Patterns to develop an understanding of scientific principles necessary to answer scientific questions and address design solutions related to climate change in the culminating units, Earth's Changing Climate and Earth's Changing Climate Engineering Internship. In High School, Semester 1 Biology's final unit is Human Energy Systems. The four preceding units build evidence that students apply to the Human Energy Systems phenomenon of global climate change.

Seattle Public Schools (SPS) is committed to eliminating opportunity gaps to ensure access and provide excellence in education for every student. Through the policies, initiatives and work outlined above, SPS strives to create safe learning and social environments where everyone is part of creating sustainable, environmentally responsible/responsive people, spaces and places.

Crosscutting Questions

Awards and Programs

Does your district participate in a local, state, or national green schools' program?

Seattle Public Schools has partnered with Washington Green Schools and has certified 5 schools per year on average for the last 10 years. Currently, 64 schools are certified (25 bronze, 9 silver, 4 gold, 1 platinum) in the categories of Energy, Healthy School Buildings, School Grounds and Gardens, Transportation, Waste and Recycling and Water.

In the past five years, has your district received any awards relevant to the Green Ribbon School/District recognition?

AWARD	AWARDED TO	AWARDED BY	YEAR RECEIVED
School District Sustainability Scholarship	Rina Fa'amoe-Cross	US Green Building Council, Center for Green Schools	2019
Sustainability Leadership Awards Finalist	Seattle Public Schools	Sustainable Seattle	2018
Middle School PE Teacher of the Year	Jennifer Herickson	SHAPE (Society of Health and Physical Educators) WA	2018
Presidential Innovation Award for Environmental Educators	Laura Tyler (South Shore K-8)	Environmental Protection Agency (EPA)	2016
Channing Mann Outstanding PE Administrator of the Year	Lori Dunn	SHAPE	2016
Patsy Collins Award for Excellence in Education, Environment and Community	Mary-Elizabeth Ezenwaka(Roxhill ES)	Seattle Foundation and Islandwood	2016
Patsy Collins Award for Excellence in Education, Environment and Community	Jessica Levine (Eckstein MS)	Seattle Foundation and Islandwood	2016

School Nurse of the Year	Terri Hem-Remund (West Seattle ES)	School Nurse Organization of WA	2015/16
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Communication Strategies

How do you communicate your Pillar I required policies and best practice recommendations to school principals, faculty, staff, parents, and other stakeholders in your district?

Seattle Public Schools holds a weeklong Leadership Summit in August of every year for all Principals and Vice Principals. The Resource Conservation Management team (RCM) has a presence at this annual event. This includes briefing about the relevant SPS Resource Conservation policies, and addressing the role and services provided by the RCM team, which encompasses analysis and support for all managed utilities. Additionally, the RCM team volunteers at these lunches to help with waste sorting, which provides a good opportunity for face-to-face interactions between the team and school leadership, while demonstrating proper waste handling procedures to school leaders. The RCM team also attends a yearly one-day summit for all facility Custodial Engineers. The RCM team provides a more technical presentation at this assembly to engage custodial staff on topics including waste management, hazardous waste, energy and water management, while going a little deeper to address logistical and technical challenges that may be encountered during the year.

The City of Seattle is experiencing unprecedented growth, which has a ripple effect in the schools. As such, SPS is going through an ambitious Capital Levy (Building Excellence V) to address the needs of a growing city. This involves modernization of existing buildings and new schools, including three new schools for the 2019/20 school year, as well as one addition at Ingraham High School (HS). Part of the commissioning process of the new facilities includes training for teachers and staff, facilitated by the building architects and engineers. This provides an opportunity for staff to better understand how their buildings operate, how modern energy design is incorporated into the classroom, and how to be better stewards of SPS facilities.

Parents and staff can find additional information on resource conservation and policies via the Resource Conservation page of the SPS website. Questions are often funneled through this channel, as well as through school Green Teams. To improve lines of communication and increase awareness of green programming at SPS, the RCM team is currently revamping its communication strategy with the help of the SPS Public Affairs and Communications staff.

Equity

Please describe how your students and broader community members are being included in, honored for, and engaged in this work.

The topic of Equity has been a key priority under the current guidance of SPS Superintendent Denise Juneau. Under the SPS five-year plan, the vision of educational excellence through racial equity in every school is the district's top priority. School based Racial Equity Teams are part of a comprehensive and coherent plan to institutionalize education racial equity into our schools as mandated by SPS Ensuring Educational and Racial Equity Policy 0030.

The mission of the Department of Racial Equity and Advancement (DREA) is to maximize culturally responsive instruction and leadership to transform educational opportunities, access and outcomes for every student, in every classroom, every day. DREA offers services in professional development, coaching, technical assistance, and racial equity analysis. Any work performed throughout the district in Facilities Management, Curriculum, Resource Conservation, Nutritional Services, Transportation, Behavioral Health Services, Counseling and Guidance, or any other department is performed through the lens of racial equity for all students and the vision and mission put forth by DREA.

SPS has a strong partnership with the YMCA Earth Service Corps and supports clubs in all high schools. At Ballard HS, the Youth Climate Action team has gone to the state capital to learn more about the legislative process, testify about climate action and bring those lessons back to students and staff. In 2019, the Earth Service Corps club at Ingraham HS won the Washington State Envirothon and competed against 52 other schools at the National Envirothon competition held in North Carolina. Throughout the week-long competition, students demonstrated their knowledge on soils and land use, aquatic ecology, forestry and wildlife management through written tests and interactive stations featuring North Carolina's natural resources. The team also prepared oral presentations on the topic of "Agriculture and the Environment: Knowledge and Technology to Feed the World." Since 2011, Chief Sealth HS has hosted the International World Water Week Conference, promoting understanding of the relationship between members of the local community with water in the region and around the world, emphasizing conservation and local action addressing equal access for all global citizens. Several high school clubs have hosted student clothing swaps and donated leftover items. Fundraising to support victims of the recent wildfires in Australia is a common interest at all schools.

Pillar I: Reduce environmental impact and costs

Element 1A: Energy conservation strategies

Describe how your district programs, policies, and actions have reduced the amount of energy used in your building(s). Please cite data and/or give specific details in your answer.

The Seattle Public School's Board of Directors has approved and implemented four specific policies regarding the conservation of natural resources and energy to create and/or sustain healthy environments. These policies are intended to complement one another and provide

guidance for decision making across all divisions of operation, including capital planning, operations, and in schools.

Natural Resources Conservation Policy 6810 requires SPS to wisely manage the use of natural resources and maintain programs that support the conservation of energy and other natural resources. The policy identifies a resource conservation management plan. The policy requires SPS to reduce energy and water consumption, reduce waste production, increase recycling measures and educate staff and students to lessen their environmental impact through targeted trainings and collaborative partnerships with local government and NGO partnerships.

Superintendent's Procedure SP6810 strives to create a healthy learning and work environment for students, staff, and community. The focus is long term sustainable measures that reduce natural resource consumption by providing specific actions and standards concerning heating, cooling, ventilation and mechanical equipment, lighting, composting, recycling, waste reduction, new construction and modernization, operations and maintenance, and procurement. In addition, 6810SP provides specific guidance for HVAC and Mechanical Equipment operation, Lighting, Waste Management, Ongoing Maintenance, Operations, and Procurement. This document is intended to provide guidance for best practices and allows the previously described work to be executed through a lens of sustainable operations.

Resolution 2006/2007-18 commits SPS to a long-range plan to reduce greenhouse gas emissions and authorizes SPS to join the Seattle Climate Action Plan (formerly the Seattle Climate Partnership). This policy requires each department to develop an action plan.

Resolution 2012/13/12 is the SPS Green Resolution encourages the use of passive design and establishes ambitious environmental standards for construction and renovation of buildings and campuses. Eco-charettes with architects, teachers and the community are used to identify and develop a range of sustainable building strategies in concert with SPS building criteria. All new construction builds upon the Washington State Sustainable Schools Protocol.

A baseline for energy, water, and waste was established in 2008. In that time, SPS has successfully demonstrated improvements across all categories. 2016-17 data shows a 17.5% reduction in energy, 7.5% in water, and 19.6% improvement in recycling, helping the district establish an avoided savings of approximately \$1.4M.

Energy, water, and waste are tracked using School Dude software module Energy Manager. All facilities are benchmarked with Energy Star Portfolio Manager and seventy five percent of schools are Energy Star Qualified. SPS employs a team of four retro-commissioning agents to tune-up buildings in accordance with Seattle's Building Tune-Up Ordinance. The ordinance requires only 10-15% of system components be tested, but the retro-commissioning team tests 100% of all components to ensure the majority of issues are recorded and resolved.

SPS is eagerly pursuing renewable energy sources. Six schools recently added 100KW+ photovoltaic systems with a state Department of Commerce grant, bringing the number of solar

schools to ten. Twelve schools use ground source heat pumps for heating and cooling, using the constant ground temperature as a heat sink in the summer and a heat source in the winter. The average energy use index (EUI) for the heat pump schools is just over 21 kBtu/square foot, among the best performing in the district.

Element 1B: Water quality, efficiency, and conservation

Describe how your district implemented and is maintaining your water conservation program. Please cite data and/or give specific details in your answer.

SPS has developed robust standards for water conservation and water quality. With health and safety of students and staff at the forefront of priorities, all drinking water sources pass the rigorous testing standards adhered to by SPS, exceeding national standards.

From a drinking water perspective, drinking fountains/bubblers are provided at every school within the district. All water fountains, bubblers and sources of drinking water are tested every three years with results shared on the district website. In 2016, a state-funded grant paid for installation of water bottle filling stations in 85 schools. Many Green Teams sell school-branded reusable water bottles to promote drinking more water and reducing plastic water bottle waste. The District Water Report is available online, at:
https://www.seattleschools.org/departments/finance/risk_management/environmental_health_sues_and_water_quality/drinking_water_quality_program.

For stormwater, SPS has set a high standard for flow control and water quality. Working in partnership with Seattle Public Utilities, SPS incorporates a wide variety of stormwater features to comply with and exceed code. Stormwater features that go beyond code include bioswales, detention ponds, rain gardens, vaults and other best management practices. SPS is currently examining its practices in surface porosity and identifying opportunities to reduce impervious surfaces where applicable.

In the case of landscaping and irrigation, SPS policy requires using drought tolerant and native shrubs, trees, and grasses in plant selection. In new landscaping, SPS employs two years of irrigation to promote establishment for juvenile plants. After two years, irrigation is shut off for landscaping. The only on-going irrigation in SPS operation is for grass turf at athletic complexes, offered as community assets which can be rented and used for a variety of activities, rather than just SPS athletic programs. Many sports fields have been renovated from grass to synthetic turf, which has resulted in reduced water consumption. Many of these fields have also incorporated appropriate flow control measures with the development of turf.

Water conservation occurs in school facilities through both capital planning as well as facilities management. New schools and those undergoing modernization implement low flow fixtures including 1.28 gallons/flush toilets and low flow urinals and aerators in bathrooms. Bathroom

sinks are manually adjustable to be set to a maximum of 10 seconds. Fourteen schools have received rebates from Seattle Public Utilities for installing low flow fixtures since 2013, with at least 2 expected to have bathroom renovations implemented in 2020. Water conservation is tracked and benchmarked and is included in the Shared Savings Program, giving money back to schools that have met the water goal of less than 75 gallons/student/month.

Element 1C: Waste management and product procurement

Describe your solid waste management plan and practices. Please cite data and/or give specific details in your answer.

Beyond compliance with strict composting and recycling ordinances, SPS works with partners to exceed city requirements. The District waste contract specifically mirrors that of the City so that residentially acceptable recycling materials will be the same at home as at school. Outreach and education are a component of waste contracts, offering all-school assemblies on What Goes Where, waste audits, tours of the local transfer station and recycling sorting facility. The compost hauler offers training for lunch monitors to help students properly sort lunch waste. The YMCA Earth Service Corps has clubs in all high schools. The Resource Conservation team coordinates outreach efforts of these stakeholders to maximize benefit to the schools that need assistance in meeting District conservation goals.

Ahead of the January 2015 mandatory composting deadline, SPS conducted a Waste Reduction Pilot in 2012 to determine how to improve recycling rates without adversely impacting custodial hours. After two 5-month trials, containers, custodial equipment and container locations were standardized. Over the summer months in 2013 and 2014, garbage and recycling containers in most schools and all new schools were updated to follow the new container standard. The District warehouse keeps standard waste containers in stock for quick delivery. Support from Seattle Public Utilities includes recycling posters available in 18 different languages and desk-top compost containers for classrooms. In the 2018-2019 school year, over 75% of the schools either met the waste reduction goal of 4 cubic feet/student/month or improved from the previous year.

Waste reduction attains greater environmental benefits than recycling alone, so preventing waste is a priority. Nutrition Services staff is trained on best practices to reduce food waste at the back of the house (ordering, prep, serving, storage). Most schools have food share tables located in cafeterias, sharing whole and packaged food with fellow students and after school programs. Currently 4 schools have pilot programs for food recovery with local food banks. In the 2018-2019 school year over 8,000 pounds of food were diverted from the landfill and shared with the local community, feeding our at-risk population.

The Risk Management Department handles and disposes of hazardous, dangerous and universal waste in accordance with federal and state regulations. Safety Partners are assigned to work with school-based safety committees to address hazards and provide access to safety training

resources. The Risk Management team serves as a resource for other areas of environmental health and safety, including indoor air quality, drinking water quality, lead, asbestos, and hazardous chemicals.

Element 1D: Alternative transportation

Describe alternative transportation options to driving in a single occupancy vehicle to and from schools. Please cite data and/or give specific details in your answer.

SPS offers yellow bus service via a contract with First Student. As of October 2019, 12,000 students were participating. SPS standard is to provide yellow bus service within in two miles (WA standard is one mile), encouraging more students to walk and use alternative transportation to get to school. In general, all high school students receive regional metro bus cards, as well as middle school students living 1.5 – 2 miles from a school. For those students that don't meet the eligibility requirement, the City of Seattle has a City Youth ORCA Program where they can apply for a pass based on family income eligibility.

SPS Transportation utilizes alternative carriers, Zum, Hop Skip Drive and ALC. Drivers for these services are trained in student transportation and offer flexibility to provide the right service for each student. This program allows new students to be accommodated until they can be placed on a yellow bus route.

SPS Transportation uses technology to improve the service of transporting students. In Spring 2020, buses will be equipped with tablets for route management, reducing the need for paper and improving accuracy and accommodating changes in schedules. First Student has an app called First View, which allow parents, students and schools to see bus locations in real time. This information will reduce pressure on the dispatch team and provide parents with up-to-the-minute information on the location of their child.

Risk Management participates in the City of Seattle's School Traffic Safety Committee, publishing recommended walk route maps for elementary schools. They review plans for new schools to ensure safe access for non-motorized transport. The team handles pedestrian, bicycle, and vehicle safety concerns, including the Safe Routes to School Program. The District has gotten funding for an Active Transportation Coordinator who will help organize Walking School Buses and Bike Trains. In 2019 there were at least 11 schools with teams participating in Bike Month and Bike to School Day

District policy and procedures prohibit idling to reduce fuel use and air pollution. All bus drivers receive recurring training on the anti-idling policy. Signs are posted at the central office and many schools have conducted Anti-Idling campaigns to educate parents.

The John Stanford Center (central office) has an active Commute Trip Reduction Program that promotes and encourages employees to find alternative transportation to get to work. There are 52 designated carpool stalls with a waiting list for annual permits. The regional transit card can

be loaded monthly with pre-tax dollars and can be used on five regional bus systems, trains, light rail and ferries. The central office has a robust Bike Month Program with 60 people participating in the month of May.

Pillar 2: Improve the health and wellness of schools, students, and staff

Element 2A: An integrated school environmental health program

Describe how your district implements and measures the success of your integrated environmental health programs and practices to ensure the health and safety of the district community. Please cite data and/or give specific details in your answer.

SPS employs a Risk Management team which includes a Risk Management Manager, a Manager of Environmental Health and Safety, and a Health and Safety Coordinator. The team also includes a Certified Playground Safety Inspector. Although required by Washington State Labor and Industries, the SPS Accident Prevention Program also contains elements such as chemical management.

An example of proactively providing schools with improved indoor air quality would be the standards set forth under new capital development, where all new schools are provided operable windows to each classroom and HVAC equipment that is shifting towards the use of outdoor air economizing. The team of Retro-Commissioners and Mechanical Coordinators also focus on improving classroom comfort through the Building Tune-up program. In many cases, building tune-ups at SPS have included measures to optimize air handlers and other HVAC equipment. Identifying and repairing deficiencies in air handlers may not always result in energy reduction but does contribute to improved air quality in classrooms. Through the building automation system employed by SPS, the Mechanical Coordinator team schedules building start-ups to provide fresh air as needed to schools. These teams also collaborate with the Risk Management team to respond to any reported hot/cold calls or other indoor air quality issues within 24 hours.

SPS has taken several measures to reduce exposure to harmful chemicals or bacteria within chemical management and mitigation programs. In the early 2000s, the Risk Management team underwent a complete overhaul of CCA-impregnated wood from all playground or learning garden equipment. In 2015, SPS partnered with PTA members at Adams Elementary to secure a grant from the Washington State Department of Ecology that focused on providing Best Practices for Cleaning Health in the Classroom for teachers. The benefits of this material included reduced absenteeism, increased productivity, improved indoor air quality, and reduction in asthma and allergy triggers. This document was adopted by the Washington State

Department of Health in January 2016 as guidance for Classroom Cleaning Tips for Teachers. School nurses provide reminders about non-bleach cleaners and unscented cleaning products.

SPS provides a robust water quality program, with extensive water quality testing performed on a three-year cycle for all fixtures that provide drinking water.

Element 2B. High standards of nutrition, fitness, and quality outdoor time for both students and staff

Describe how your district implements high standards of nutrition, fitness, and quality outdoor time for both students and staff. Please cite data and/or give specific details in your answer.

Nutrition Services participated in the USDA's Healthier Schools Challenge when it was active and has permanently implemented many of the core principles. Forty schools in the district meet the Community Eligibility Provision for free breakfast and lunch. SPS is working with City of Seattle and local community groups to bring fresh, local food into schools and create culturally appropriate options.

A newly implemented Soup Bar pilot in six secondary schools allow students to choose their vegetables and then add a broth: pho, tortilla, coconut curry or chicken. Salad bars have been added to all schools, allowing students to choose their favorite vegetables or try something new. The partnership with the City of Seattle has allowed the threshold for participation to soon expand our Fresh Fruit and Vegetable Program from seven schools to an additional eighteen schools, totaling 25 schools. The after-school snack program allows student clubs to sign up and receive fresh fruits, vegetables and a grain for participating students.

Nutrition staff is conducting Nutritional Focus Groups with principal-selected students at 13 targeted schools to provide guidance on how to improve the menu, making it more appealing to students. Breakfast After the Bell, Grab & Go and Second Chance Breakfast programs are offered in over a dozen schools. Nutrition Educators are placed in four elementary schools.

All Elementary Schools and K-8 schools have a playground with age-appropriate play equipment and game courts. Eighty percent of schools have one or more forms of on-site school yard learning gardens, or regularly-visited off-site environmental learning opportunities to support the school's curriculum. The school gardens include edible, permaculture, native plants, ornamentals, rain-water-management, wetlands, and forests. Laurelhurst Elementary has a Peace Garden named for a teacher that taught at the school for 25 years.

Off-site opportunities adjacent or near a school yard include community gardens, urban farms, and forests. Learning is organized in a variety of models; teacher-led and/or managed by a volunteer or paid garden-coordinator. Depending on the school, students may participate in hands-on "work" on a weekly basis, monthly, and/or during after school clubs. SPS manages a

School Learning Garden Network for the community to support the learning gardens in providing routine information, meeting bi-annually and offering an all-day winter workshop every year.

For outdoor time, younger students have recess, physical education (PE) classes, and gardens, and some have neighborhood walking field trips. The District has strong partnerships with community stakeholders. Cascade Bicycle Club provides bike and pedestrian safety for EVERY student in grade 3,4 and 5, expanding to middle schools in 2020. The District works with local rowing clubs on skill and water safety education. Erg Ed brings equipment (indoor rowing machines), technology, curriculum and water safety training to middle and high school PE students, staff and community. SPS Physical Education programs have long been a leader with strong motor-skills based activities and lifelong educational programs. SPS has added the innovative "Five for Life" curriculum, where students receive developmentally appropriate instruction on topics such as: the five components of health-related fitness, goal setting, nutrition, the skeletal system, the muscular system, and training principles. Along with class time SPS supports all students, staff and community, through Comprehensive School Physical Activity Programming (CSPAP) which offers family fitness nights and nutrition activities for the home.

What proportion of the schools in your district have a school nurse and/or school-based health center?

78/104

Describe your district's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.).

Seattle Public Schools has a total of 78 certificated nurses for a total of 67.6 FTE and 10 classified nurses for a total of 9.25 FTE. Classified nurses have LPN/or 2-year RN degree and are primarily assigned to work at schools with large, medically complex student populations. All 104 sites have access to certificated nurse (Baccalaureate degree) which varies in time for 1.0 FTE to 0.1 FTE per building according to the student population. SPS has a total of 28 school-based health centers thanks to SPS-Community partnerships with seven different health care organizations. These SBHC are in all comprehensive high schools, and many middle and some elementary schools. All enrolled SPS students can have access to health services at the 28 sites. All school nurses complete suicide assessment training. Many high schools (nurses, counselors and admin) are involved with the Forefront suicide prevention program that is sponsored by the UW school of Social Work. Genesee Hill and Thurgood Marshall Elementary Schools both have Buddy Benches to ensure that their school is welcoming, kind, and inclusive.

There are five Positive Behavioral Intervention Support (PBIS) trained coaches on the Behavioral Health Team. In January, the School Board voted to accept the Department of Education School Climate Transformation Grant to support the Safe and Welcoming Schools goal of the District's strategic plan. SPS has moved to a Multi-Tiered System of Support (MTSS), to encompass both the academic and social-emotional-behavioral demands of learning. MTSS is a key element of

the strategic plan to support all learners and ensure equitable access to a robust, high quality education.

Pillar 3: Provide effective environmental and sustainability education which incorporates STEM, civic skills, and green career pathways

Element 3A: Interdisciplinary learning about the key relationships between environmental, energy, and human systems.

Describe how your district integrates and measures students' environmental and sustainability literacy at each grade level, including curriculum, courses, outdoor learning, and assessments. Please cite data and/or give specific details in your answer.

The SPS Science department's objective is to align science curriculum at K-12 to the 2013 Washington State Science and Learning Standards. The department completed a K-12 curriculum adoption in May 2019 to align core science instructional materials at all schools and grade levels with these science standards. The adopted units at all three grade bands include the following environmental and sustainability literacy topics:

- Global Climate Change is deeply embedded in the WA State Science and Learning Standards. Specific units of study within the core curriculum ensure all students receive instruction on global climate change. These units are as follows.
- At the Elementary Level the foundations of climate science are taught beginning with solar energy, weather patterns, and severe weather. The adopted units that specifically focus on the topic of Global Climate Change are Energy Conversions at grade 4, and Ecosystems Restoration and The Earth Systems at grade 5.
- Middle School students begin their study in grade 6 with the following units, Thermal Energy; Ocean, Atmosphere, and Climate; and Weather Patterns to develop an understanding of scientific principles necessary to answer scientific questions and design solutions related to climate change in the culminating units, Earth's Changing Climate and Earth's Changing Climate Engineering Internship.
- High School Semester 1 final unit of Biology is Human Energy Systems. The four units preceding that unit build evidence that students apply to the Human Energy Systems phenomenon of global climate change.

Other Topics:

- Learning in Places Grant (in partnership with the UW Institute for Science & Math Education): The objectives of the project, which is being implemented in nine classrooms at elementary schools, explores the question: What is our impact on the places we see every day? As

students use their observations to create testable questions, they also create "Should We" questions to further study how their impact alters their surroundings.

- Based on estimates provided by IslandWood staff, approximately 30 of the 74 SPS elementary school grade 5 classes participate in outdoor learning experience through the IslandWood program.
- Based on teacher self-reporting about participation from 2018-19 school year, approximately 18 elementary schools continue to participate in the Salmon in the Schools program funded by the city of Seattle.

Describe professional development opportunities available to your teachers in environmental and sustainability concepts, and the number and percentage of teachers who participated in these opportunities during the past two years. Please cite data and/or give specific details in your answer.

Any SPS teacher, at the direction of their building principal or independently, may opt to participate in learning opportunities in environmental and sustainability literacy through supplemental curriculum and outdoor learning experiences.

Nine elementary teachers in SPS have participated in the ongoing Learning in Places Grant (in partnership with the UW Institute for Science & Math Education), referenced above.

Professional development opportunities that have been anecdotally self-reported by teachers include training around Salmon in the Schools, Salish Sea Experience workshops, and the ClimeTime collaboration through the Puget Sound Educational Service District.

Teachers who adopt science units that include components of environmental and sustainability literacy (outlined above) receive professional development and training around these units. SPS completed a curriculum adoption in May 2019 at K-12 to align core science instructional materials at all schools and grade levels with these science standards.

The annual teacher training sponsored by Washington Green Schools has provided lessons on waste reduction strategies for 8-10 teachers in the past two years.

As part of a recently received US Green Building Council Sustainability Scholarship, up to ten teachers will be able to access the Green Classroom Professional Certificate Program. It provides K-12 educators and school staff with the knowledge to identify what supports or impedes healthy, resource-efficient and environmentally sustainable learning spaces.

Element 3B: Use of environment and sustainability concepts to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century.

Describe how environmental and sustainability education in your district supports the teaching of science and engineering practices and supports robust general science education that includes a deep understanding of life, physical, and Earth & space sciences.

SPS-adopted science curricular materials align with the 2013 Washington State Science and Learning Standards, which includes all Next Generation Science Standards (NGSS) Science and Engineering Practices and Disciplinary Core Ideas in all three domains of science across grades K-12. The teaching of NGSS science and engineering practices is integrated throughout the core science curriculum across all grade levels at K-12.

Describe how your district's curriculum connects classroom content to career options that focus on environmental and sustainability field studies and/or careers.

- In the Middle School curriculum Earth's Changing Climate, students take on the role of climatologists to investigate why the Earth's ice is melting and the Earth is changing.
- Climate Engineering Internship in which students act as civil engineering interns at a fictional engineering firm. They learn about The Design Cycle and apply their understanding of energy and climate science to create roof modification designs for a city in the desert. Students consider two roof types, white and solar, and design a proposal of roof modifications the city could implement to reduce the city's climate impact.
- Populations & Resources, in which students take on the role of ecologists at a research center near the fictional Glacier Sea. Students investigate what may have caused a puzzling increase in the size of the moon jelly population there, which serves as the anchor phenomenon for the unit. Ecosystems are complex systems; determining what might have caused a change in the size of a population is not a straightforward question but is an important one as population sizes are changing more than ever due to human activities.
- Advanced Placement Environmental Science is offered at seven high schools. Students from several SPS high schools participate in Project Feed 1010, Institute for Systems Biology, catalyzing a new agricultural economy. Cleveland HS has started an aquaponic system, combining fish farming with growing plants in water. Nathan Hale HS offers a Horticulture class with an active greenhouse and an annual plant sale in the spring.

Element 3C: Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community

Describe students' civic and/or community engagement experiences integrating environmental and sustainability concepts, field studies, and community service at every grade level. Please cite data and/or give specific details in your answer.

Elementary (K-5):

- K-Needs of Plants & Animals unit: Students investigate how children in Mariposa Grove attract monarch caterpillars to their neighborhood. Civic Engagement is embedded as students discover they need to provide space in the community garden for milkweed plants.
- Grade 2 - Plant and Animal Relationships unit: Students investigate what is happening to the chalta trees in the Bengal Tiger Reserve. Civic Engagement is embedded as students discover the fence is keeping out elephants that eat the chalta fruit & disperse the seeds.
- Learning in Places Grant (in partnership with the UW Institute for Science & Math Education) The objectives of the project which is being implemented in 9 classrooms at elementary schools in SPS explores the question: What is our impact on the places we see every day? As students use their observations to create testable questions, they also create "Should We" questions to further study how their impact alters their surroundings. These "Should We" questions often lead students to a call to action.
- Based on estimates provided by IslandWood staff, approximately 30 of the 74 SPS elementary school grade 5 classes participate in outdoor learning experience through the IslandWood program.
- Based on teacher self-reporting about participation from 2018-19 school year, approximately 18 elementary schools (grade levels vary) continue to participate in the Salmon in the Schools program funded by the city of Seattle.

Middle and High School students have project-based learning both in school and community based. The YMCA Earth Service Corps has clubs in all high schools. Chief Sealth High School has been a leader in hosting the annual International Water Week Conference, coordinating well-known speakers and inviting other schools, even in other school districts, to participate. Ingraham High School is impacting their community by hosting the Washington Global Issues Network Conference. The international student-led conference on global issues brings youth participants from around the world together for a weekend of learning and action. Middle and high school students collaborate to amplify youth voices to protect our air, water, health, education, communities and future.

END OF APPLICATION