

2013-2014 District Nominee Presentation Form

PART I - ELIGIBILITY CERTIFICATION

District's Certifications

The signatures of the district superintendent (or equivalent) on the next 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 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 as a whole 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 2013 – District Award

Name of Superintendent* Mr. Mark Evans

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name* Omaha Public Schools

Tel.(402) 557-2006

(As it should appear on an award)

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

is accurate.

(Assistant Superintendent's Signature)

Date: <u>January 22, 2014</u>

PART II – SUMMARY OF ACHIEVEMENTS

The Omaha Public Schools (OPS), Nebraska's largest school district, continues to grow serving over 51,000 students, 73.7 percent of which are underserved. OPS, over 150 years old, has been working to improve the health, wellness, and learning environment while implementing new, innovative initiatives in the areas of environmental and sustainability education.

In February 2010, OPS created an Energy Action Plan to reduce consumption of energy, water, and other resources. Soon thereafter, the Green Schools Initiative (GSI) was launched, to reduce the consumption of natural resources, and embed environmental responsibility in the culture. In 2013, a position was created to oversee GSI. Each of the 82 schools, 11 alternative programs, and administrative offices participate in the GSI effort. Students collect recycling, serve as energy managers, pick up litter, plant trees, and participate in related community events. After three years, OPS has seen a positive culture change, has dramatically reduced its environmental impact, and has shaved nearly \$3 million cumulatively in costs.

The financial impact of GSI clearly stands out. The estimated benefits conservatively exceed \$2.7 million dollars cumulatively. These include:

- \$1.8 million in cumulative energy savings since September 2010
- \$545,000 in lighting incentive rebates
- \$400,000 value in energy audit services through State of Nebraska and City of Omaha grant programs

The environmental benefits are exceptional as well. Energy conservation kept the equivalent of almost 14,300 metric tons of carbon dioxide (CO₂) out of the atmosphere annually. The average ENERGY STAR rating for OPS's 82 schools made an impressive jump from a three-year low of 46.4 in September 2010, to 60.5 in July 2013.

When comparing the last seven calendar years, 2012 boasts the lowest volume of trash sent to the landfill; a significant accomplishment. Recycling volumes are also at a five-year high.

Beyond focusing on building energy, water and waste, OPS integrated many other changes to practices to positively benefit the environment. OPS evaluates bus routes for fuel efficiency and operates over 400 buses on propane autogas. All pest management professionals employed by OPS are instructed to use IPM

methods, and OPS personnel were among the founding members of the Nebraska IPM Coalition, actively implementing IPM practices for more than ten years. OPS purchases materials containing post-consumer content, has a medication disposal policy to protect local water quality, and uses smart irrigation and native landscaping.

OPS also made great strides improving the health, wellness and safety of our students and staff. Healthy air is a priority and OPS uses the Environmental Protection Agency's (EPA) IAQ Tools for Schools program to monitor indoor air quality (IAQ). OPS was recognized for its program by EPA, receiving a National Excellence Award for IAQ (2006) and a Model of Sustained Excellence Award for IAQ (2009).

OPS provides support for potential mold problems, asbestos management, lead testing of paint, soil, and water, mercury spills clean-up by use of a special vacuum and two direct read mercury vapor analyzers, chemical management for spills and proper storage, and proper disposal of potentially hazardous materials.

Healthy food options are a priority. OPS is a member of the School Food Focus (Food Options for Children in Urban Schools), to make meals healthier, regionally sourced, and sustainably produced. OPS is an active participant in the Midwest Regional Learning Lab.

OPS provides environmental and sustainability education of many kinds and in certain magnet schools provides opportunities for students to explore Science, Technology, Engineering and Math (STEM) in a depth available at few schools in the region. Energy, environmental science, research, engineering, biotechnology and STEM themed education programs are offered to students at elementary, middle, and high school levels. Some schools have also developed outdoor classrooms to provide outdoor learning experiences.

OPS has earned recognition for its efforts:

- The three Green Ribbon Award schools in Nebraska are all OPS schools.
- Omaha Public Power District's J.M. Harding Award (2011) for demonstrating efficient and innovative utilization of energy.
- Green Omaha Coalition Green School Award to Lothrop Science and Technology Magnet in 2010 and 2011, the first Omaha metro school to reach the gold leaf achievement level and the first to earn a repeat certification.
- Kristine Denton was recognized as a USGBC Trailblazing Teacher in 2013.
- Three staff earned USGBC Green Classroom Professional certificates in 2013.
- Three new buildings/additions have achieved LEED Silver Certification. Another has applied.

OPS students learn the connections between environmental science, sustainability, and urban agriculture at every grade level. Ninety-nine percent of the OPS schools are actively engaged in recycling, where students relate recycling to environmental quality for healthy lifestyles. Vegetable gardens, wildlife and native plant habitats, amphitheaters/courtyards, playgrounds, and greenhouses provide hands-on learning opportunities, and allow students to practice multi-disciplinary skills. Teachers also learn to lead their students through multiple grades using proven developmental teaching practices, as well as, modeling wellness strategies.

PART III - DOCUMENTATION OF STATE EVALUATION OF DISTRICT NOMINEE

Instructions to Nominating Authority

The Nominating Authority must document the district's high achievement in each of the three ED-GRS Pillars

and nine Elements. Please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

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 and sustainability 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	Nebraska Department of Ed	lucation	
Name of Nominating Authority ——	Mr. James A. Blake		
Tuthority —	(Specify: Ms., Miss, Mrs., I	Dr., Mr., Other)	
I have reviewed the informeets the provisions above	± ±	ertify to the best of my knowledge	e that the district
(Nominating Author	rity's Signature)	Date1/27/2014	
The nomination package	including the signed certification	ons and documentation of evaluat	ion in the three Pill

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to <u>green.ribbon.schools@ed.gov</u> according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: February 28, 2015

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.



2014 NEBRASKA DISTRICT

Number of schools at each Level (63) Elementary (PK - 5 or 6) (0) K - 8 (12) Middle (5/6/7 - 8) (7) High (9 or 10 - 12)	Other data you wish to collect: 11 alternative programs How would your district Urban Suburbat Rural		u describe	Is your district among the largest 50 districts in the country? ☐ Yes ☑ No Total Enrolled: 51,314
Does your district serve 40% or more students from disadvantaged households? Yes No	% receiving FRPL 73.6% % limited English proficient 14.4% Other measures 3.8% refugees			n rate: 77.78% (4 year Cohort Grad Rate) e rate: 93.89%

Application Outline:

oplication Outline:	
ED-GRS Pillars and Elements	<u>Points</u>
Cross-Cutting Question: Participation in green district/school programs	5 Points
Pillar I: Reduce environmental impact and costs: 30%	
Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions	15 Points
Energy	
Buildings	
Element 1B: Improved water quality, efficiency, and conservation	5 Points
Water	
Grounds	
Element 1C: Reduced waste production	5 Points
Waste	
Hazardous waste	
Element 1D: Use of alternative transportation	5 Points
Pillar II: Improve the health and wellness of students and staff: 30%	
Element 2A: Integrated district environmental health program	15 Points
Integrated Pest Management Indoor air quality	
Contaminant controls and Ventilation Moisture control	
Asthma control Chemical management	
Element 2B: Nutrition and fitness	15 Points
Fitness and outdoor time	
Food and Nutrition	
Pillar III: Provide effective environmental and sustainability education, incorporating	
STEM, civic skills and green career pathways: 35%	
Element 3A: Interdisciplinary learning about the key relationships between dynamic	20 Points
environmental, energy and human systems	
Element 3B: Use of the environment and sustainability to develop STEM content,	5 Points
knowledge, and thinking skills	
Element 3C: Development and application of civic knowledge and skills	10 Points
Total	100 Points

1.	Is your district participating in a local, state or national district program which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes No Program(s) and level(s) achieved: OPS Green Schools Initiative, Benchmarking Energy, Waster & Recycling, Paper Use, Water and Green Teams
2.	Has your district, staff or student body received any awards for facilities, health or environment? Yes No Award(s) and year(s) OPS received the EPA's National Excellence Award for Indoor Air Quality in 2006 and EPA's Model of Sustained Excellence Award for Indoor Air Quality in 2009. Two recent additions and a new building achieved LEED Silver certification. Another new building has applied for LEED Silver certification.
	r I: Reduced Environmental Impact and Costs
Energian 1.	Can your district demonstrate a reduction in Greenhouse Gas emissions? Yes No Percentage reduction: 13.2% over (m/yy - m/yy): August 2010 - July 2013 Initial GHG emissions rate (MT eCO2/person): 1.869 Final GHG emissions rate (MT eCO2/person): 1.599 Offsets: No How did you calculate the reduction? Energy Star Total GHG Emissions
2.	Has your district received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification? ☐ Yes ☐ No ☐ Year(s) and score(s) received: 2013: 5 schools; 2012: 12 schools; 2011: no testing occurred; 2010: 5 schools; 2009: 4 schools
3.	Has your district reduced its total non-transportation energy use from an initial baseline? Yes □ No Current energy usage (kBTU/student/year): 13,643.70 Current energy usage (kBTU/sq. ft./year): 76.0 Percentage reduction: 13.9% over (m/yy - mm/yy): August 2010 - July 2013 How did you document this reduction? Energy Star Site Energy Use
4.	What percentage of your district's energy is obtained from: On-site renewable energy generation: 3%
6.	Has your district constructed or renovated building(s) in the past ten years? Yes □ No For new building(s): Percentage building area that meets green building standards: 100% Certification and level: LEED Silver Total constructed area: 354,758 sq ft For renovated building(s): Percentage of the building area that meets green building standards: N/A Certification and level: N/A Total renovated area: N/A
	r and Grounds Can you demonstrate a reduction in your district's total water consumption from an initial baseline? Yes □ No Average Baseline water use (gallons per occupant): 3.089 Current water use (gallons per occupant): 2.890 Percentage reduction in domestic water use: 6.2% overall Percentage reduction in irrigation water use: included above Time period measured (mm/yyyy - mm/yyyy): August 2012 - September 2013 How did you document this reduction (i.e., ENERGY STAR Portfolio Manager, utility bills, district reports)? Utility Bills
8.	What percentage of your landscaping is considered water-efficient and/or regionally appropriate? 30% Types of plants used and location:

Some schools have 100% of their landscaping considered water –efficient and/or regionally appropriate. There are native grasses for hillsides and green spaces, as well as native plants in catch ponds. At these schools, native plants and grasses were used in all decorative landscaping near the building.

Other schools have made sure that all new plantings are drought-tolerant species, including Brome grass.

Still other schools have courtyards/gardens with daylilies, hostas, mums, aloe, red bud trees, native grasses, sunflowers, vegetables, basil and shrubs.

- 9. Describe alternate water sources used for irrigation. (50 words max)

 Rainwater is used to irrigate greenspaces and soccer fields, as well as the green roofs on some schools.
- 10. Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. (50 words max)

 Schools plant native/adapted species including Buffalo rye grass. Some have green roofs. Others use

 water retention cells to hold and absorb rain water. Another built an irrigation path made from recycled
 plastic bottles. Many have rain barrels. Another developed rain-gathering troughs, built by students and
 placed near down spouts.

11.	Ou	district's drinking water comes from: Municipal water source Well on district property
		Other:

- 12. Describe how the water source is protected from potential contaminants. (50 words max)

 The municipal water source, Omaha's Metropolitan Utilities District (MUD), provides water that meets or exceeds every federal and state requirement for safe drinking water. MUD uses chloramines in the water treatment process to kill bacteria.
- 13. Describe the program you have in place to control lead in drinking water. (50 words max)

 Water was tested by the District in all schools in 1989 when the EPA mandated testing water coolers for lead. Testing was done to the first draw of water after a weekend when lead concentrations would be highest. Two water coolers were removed from service in OPS after testing.
- 14. What percentage of the district grounds are devoted to ecologically beneficial uses? (50 word max) 15% (estimate) Many schools have gardens/courtyards/interactive classrooms. Other schools have catchponds and/or areas to use storm water runoff.

Waste

- 15. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? 21% Complete all the calculations below to receive points.
 - A Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 10,329 (assumed 100% full)
 - B Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): 2,813 (assumed 100% full)
 - C Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): $\underline{0}$

Recycling Rate = $((B + C) \div (A + B + C) \times 100)$: 21%

Monthly waste generated per person = (A/number of students and staff): 0.177

- 16. What percentage of your district's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free? 35%
- 17. List the types and amounts of hazardous waste generated at your district:

Flammable Liquids	Corrosive Liquids	Toxics	Mercury	Other:
N/A	N/A	N/A	N/A	N/A

How is this measured? <u>Using OPS Safety Protocols</u>

How is hazardous waste disposal tracked? Using OPS Safety Protocols

Describe other measures taken to reduce solid waste and eliminate hazardous waste. (100 word max)

OPS recycles waste as much as possible, employing methods like mercury reclamation (for industrial use). Whenever possible chemicals and chemical products are reused by another school, rather than disposed of; processes are in place to facilitate reuse. Unwanted chemicals become hazardous waste when there is no other option but to dispose of the material.

<u>Hazardous waste quantity/disposal is tracked by use of waste manifests, written documentation containing the identification of the contents, quantity, and final disposal location as well as the signature of all who took possession of that material.</u>

18. Which green cleaning custodial standard is used? <u>ISSA Cleaning Industry Management Standards</u> What percentage of all products is certified? <u>25%</u>

What specific third party certified green cleaning product standard does your district use? ISSA

Alternative Transportation

19. What percentage of your students walk, bike, bus, or carpool (2 + students in the car) to/from district? (Note if your district does not use district buses) 75%

How is this data calculated? (50 word max)

With over 51,000 students an exact percentage is not possible to determine. We know for certain that 18,000 students (35%) ride OPS buses. It is estimated, by staff observation, that another 40% either walk, ride the city bus, carpool, or ride bikes to school.

20	Has your	· district	transportati	on use im	plemented?
20.	Tius your	district	ti unsportun	on use m	picincinca.

] Designated	carpool	parking	stalls
--	--	--------------	---------	---------	--------

- A well-publicized no idling policy that applies to all vehicles (including district buses)
- Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors and windows
- Safe Pedestrian Routes to district or Safe Routes to District

Describe activities in your safe routes program: (50 word max)

OPS has well-documented School Bus Idling Procedures within the Handbook for Transportation. OPS transportation identifies hazardous streets, number of students assigned to routes, and implements a safe walk to school zone less than two blocks away from the school. All elementary schools participate in Safe Walk to School Day.

- 21. Describe how your district transportation use is efficient and has reduced its environmental impact. (50 word max) OPS bus idling procedures state buses should be turned off for loading, unloading or waiting for students, except in extreme weather. Buses don't start until all students have boarded. The bus fleet is fueled by propane autogas and is estimated to reduce 2.3 million pounds of CO₂ per year.
- 22. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100 word max)

Beginning at the start of the 2013-2014 school year, over 400 of the OPS buses used are fueled by propane autogas instead of diesel. OPS now has the largest school fleet of propane autogas buses in North America which has a tremendous impact on the OPS Green Schools Initiative. This change is estimated to reduce 2.3 million pounds of CO₂ per year.

A few schools now use the Boltage program - encouraging students and staff to walk or bike to school. Other schools have special parking for low-emitting and fuel-efficient vehicles.

Pillar II: Improve the health and wellness of students and staff

Environmental Health

1. Describe your district's Integrated Pest Management efforts, including IPM/green certifications earned, routine inspections, pest identification, monitoring, record-keeping, etc.:

OPS personnel are among the founding members of the Nebraska IPM Coalition and have been actively implementing IPM practices in the District for more than ten years. All pest management professionals employed by OPS are instructed to use IPM methods and must secure permission from the IPM program manager and the IPM program committee before any pesticide application is performed. The OPS IPM program does not include antibacterial or antifungal cleansers.

All OPS schools are practicing IPM methodologies. No routine application of pesticides is allowed in OPS schools. Pests must be captured, identified and a specific pest management strategy developed for the control of that pest population.

OPS school personnel are not allowed to purchase or use over-the-counter pesticides and are not allowed to bring pesticides from home for use in OPS buildings.

Insect pest populations are monitored by use of sticky traps some of which may have been impregnated with pheromones which are regularly monitored and the findings recorded by the PMP vendor.

- 2. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: 0 gal/student/year -- no pesticides at all are used.
- 3. Which of the following practices does your district employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice.
 - Our district prohibits smoking on campus and in public district buses. Smoking is prohibited on OPS property (including all buildings and grounds) and on any OPS student transportation vehicle.
 - Our district has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the district. Voluntary elimination of mercury policy since 1997
 - Our district uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO₂). The newer schools have the UDS system. These are all vented and there is an emergency shutoff valve to detect carbon monoxide and shut off if needed. Some schools have gas-fired steamers and ovens in the school kitchen. It is presumed that these schools have working CO₂ detectors. Some schools have emergency generators that have a combustion engine that uses natural gas. Schools with emergency generators have them loaded in a space that has direct outside air.
 - Our district does not have any fuel burning combustion appliances.
 - Our district has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L or our district was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.
 - All frequently occupied rooms are tested, with retesting after significant remodels or ventilation system changes.
 - Our district has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.
 - Any landscaping lumber suspected to contain chromate copper arsenate is protected by polyurethane.
- 4. Describe how your district controls and manages chemicals routinely used in the district to minimize student and staff exposure. (100 word max)
 - The District provides information, procedures and support to control and manage chemicals used. These tools include locked storage areas, safety manuals/presentations, laboratory waste stream directions, inventory spreadsheets, disposal information, spill procedures and educational videos, as well as pick up services to recycle science lab chemicals, cleaning chemicals, art/other paints, and other chemicals. In addition to this written support and pick up service, there are individuals at the district level to answer any questions on managing chemicals. The overarching goal is to always try to substitute less toxic chemicals and to reuse chemicals when possible to avoid disposal.

- 5. Describe actions your district takes to prevent exposure to asthma triggers in and around the district. (100 word max)
 OPS works to minimize or eliminate major asthma triggers such as secondhand smoke, pollen and mold spores, dust mites, cockroaches and animal dander. For example, smoking is prohibited; one-inch pleated filters are used in HVAC systems to reduce pollen and mold spore concentrations; mold remediation and prevention is a priority; indoor humidity is expected to be below 60% to minimize dust mites; an Integrated Pest Management Plan is in place, and other actions attempt to eliminate cockroaches, and any classroom pets are kept in cages with food in air tight containers.
- 6. Describe actions your district takes to control moisture from leaks, condensation and excess humidity and promptly cleanup mold or removes moldy materials when it is found. (100 word max)

 Annual baseline reading of temperature, relative humidity and carbon dioxide are taken at each school, and additional IAQ baselines can be collected if requested. If the presence of mold is suspected but cannot be found, mold spore sampling may be performed. The OPS Environmental Department has specialized training to assess mold issues. Building engineers and custodians are trained to look for water leaks and condensation and to work with the OPS Environmental Department to prevent mold growth in all schools. Any leak or condensation is reported immediately and repairs are completed promptly to prevent mold growth if possible.
- 7. Our district has installed local exhaust systems for major airborne contaminant sources.

 Yes No

 Exhaust fans exist in each restroom in the school buildings. Also, most science areas have exhaust hoods in their experiment areas.
- 8. Describe your district's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100 word max)

 Custodial staff is responsible for changing filters on air handling units on a quarterly basis or more frequently if needed. The District heating, ventilation and air-conditioning (HVAC) technicians provide crucial technical support to determine the proper operation of all ventilation systems as needed. The HVAC technicians have also upgraded filters with a 6% efficiency rating to pleated filters with a 30% efficiency rating.
- 9. Describe actions your district takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. (100 word max)

 As a new school is designed or old school remodeled, architects and mechanical engineers work with District staff to ensure close adherence to the ASHRAE Ventilation Standard. Issues considered by the design team include the placement of outdoor air intakes preferably away from loading docks, refuse containers, student drop off lanes, dedicated exhaust systems, interior relative humidity control and temperature control. The OPS HVAC technicians also recommend upgrades or retrofit systems to achieve ventilation rates and air quality in line with the current ASHRAE Ventilation Standard.
- 10. Describe other steps your district takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Districts and/or conducting other periodic, comprehensive inspections of the district facility to identify environmental health and safety issues and take corrective action. (200 word max)

 The District uses the EPA's IAQ Tools for Schools program to monitoring indoor air quality (IAQ), and has been recognized for its program by EPA National Excellence Award for IAQ (2006) and Model of Sustained Excellence Award for IAQ (2009). Annual IAQ baselines are collected at each school to monitor IAQ and are used to detect early issues in the building or in the ENERGY STAR awards program. The District works regularly with building personnel to educate them in the recognition of environmental health and safety issues and where they can receive assistance with any corrective actions needed.

The District provides support for potential mold problems, asbestos management, lead testing of paint, soil, and water, mercury spills clean-up by use of a special vacuum and two direct read mercury vapor analyzers, chemical management for spills and proper storage, and proper disposal of potentially hazardous materials.

Other safety issues are managed by the Risk/Safety Management Office by providing training and corrective actions related to safety; including fire safety, occupational safety, traffic safety, extreme weather, playground and other safety issues to all schools.

•	7		• .	•	7		7 • .
/\	/1	ıtı	*1 f 1	On	and	н	itness
Ľ	v	$u \iota \iota$	uu	on	unu	1	uuess

11.	Which practices does your district employ to promote nutrition, physical activity and overall district health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100 word max each)
	Our district participates in the USDA's Heathier US School Challenge. Level and year:
	Our district participates in a Farm to School program to use local, fresh food.
	Our district has an on-site food garden. <u>Several of our schools have gardens.</u>
	Our district garden supplies food for our students in the cafeteria, a cooking or garden class or to the community Many schools have gardens that supply cooking classes. Other schools share their produce with their families and
	community members. A few schools donate to various food banks and shelters throughout the city of Omaha. For
	schools with aquaponic gardens, these donations are made every four-six weeks.
	Our students spent at least 120 minutes per week over the past year in district supervised physical education. All OPS high school students are required to complete two years of Physical Education (205 minutes per week) or the equivalent via Marching Band, JROTC, or school-sponsored athletic teams. At the middle level, scheduling varies amongst the 12 schools. At some, students receive at least 45 minutes every day in physical education; at other schools, students receive 90 minutes of instruction every other day. In addition, athletic programming and practices are held year-round for all secondary students. Elementary schedules also vary throughout the 63 elementary buildings. Elementary students average 50 minutes of PE instruction per week.
	Food purchased by our district is certified as "environmentally preferable." Percentage:Type:
12.	Describe the type of outdoor education, exercise and recreation available. (100 word max)
	OPS has a wide variety of activities available.

- Interactive outdoor classrooms
- Gardening classes and clubs
- Outdoor, Science or Ecology clubs
- All elementary schools have playground systems that include basketball courts.
- Intramural athletic programs
- Sponsorships for environmental camps outside the state
- King Science and Technology Magnet has monthly Fitness Friday where for 40 minutes, the entire school engages in a physical activity ranging from yoga to heart rate monitoring.
- Walking clubs, fitness programs, swimming programs, aerobic classes, etc. before/after school or during lunch.
- Baseball, Cross Country, Football, Golf, Soccer, Softball, Tennis, Track/Field
- 13. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (100 word max)
 - OPS is a member of School Food Focus (Food Options for Children in Urban Schools), to make meals healthier, regionally sourced and sustainably produced. OPS participates in the Midwest Regional Learning Lab.

The Gretchen Swanson Center for Human Nutrition partners in actively promoting Farm to School Activities. Newsletter is mailed to all parents; Daily Nutrition Tips for Schools on website; monthly Taste It! Try It! Fruit/Veggie Day! - introduces new/different items, and "Cheese Nugget" features a locally produced cheese nugget. Project Fit America, Blue Cross/Shield and Omaha Schools Foundation provide indoor/outdoor activities to enhance the P.E. curriculum and fight obesity.

Coordinated School Health, Mental Health, School Climate, and Safety

14.	Does your district use a Coordinated School Health approach or other health-related initiatives to address overall
	district health issues? Xes No
	If yes, describe the health-related initiatives or approaches used by the district:

A "Healthy School Environment" is Policy 6.29 in the Omaha Public School district. The policy states that "The district recognizes that schools play a critical role in creating a healthy environment for the prevention of childhood obesity and combating problems associated with poor nutrition and lack of physical activity. Federal law requires that each school district have a wellness policy. The district's wellness policy encourages all members of the school and community to maintain an environment that enhances maximum student potential. Therefore, each school must create and maintain a wellness plan that meets the goals and guidelines in the district's wellness policy. Federal law also requires the district to measure the implementation of the wellness policy."

FOR STAFF: All OPS employees are eligible to participate in EHA Wellness events such as "Super Salads", "Power of Music", "Life Line Screenings", etc. Employees receive freebies and rewards for tracking participation. The EHA Wellness program also provides a physical and mental health survey to each employee each year. Newsletters are sent out by the Employee Assistance Program (EAP) each quarter and contain healthy recipes, tips for dealing with stress, and information about timely events. The EAP also offers three free mental health counseling visits for any staff member in need. Flu shots were made available for free (covered by OPS health insurance) to all staff and family members.

First Aid and CPR training are available to all interested staff and is strongly encouraged for all coaches and club sponsors.

FOR STUDENTS: OPS is a member of the School Food Focus (Food Options for Children in Urban Schools), to make school meals more healthful, regionally sourced and sustainably produced. OPS is an active participant in the Midwest Regional Learning Lab. The Gretchen Swanson Center for Human Nutrition is a partner in actively promoting Farm to School Activities. The newsletter, Nutrition Connection, is sent to all parents; Daily Nutrition Tips for Schools on our website; monthly Taste It! Try It! Fruit & Veggie Day! - introduces new and different items, and "Cheese Nugget" of the month which features a locally produced cheese nugget.

All schools have a Wellness plan for students as part of the school improvement (EXCELS) goals. This includes curriculum presented by the school nurse, health information presented in classes (Human Growth, Tech and Living, Science, PE), wellness information presented via daily announcements, and wellness information posted in the cafeteria. Wellness information is shared with families via the school newsletter and during Open House and Parent-Teacher Conferences.

Walk To School/Step Into Spring events are held in the majority of the 63 elementary schools. Walking School Bus programs are currently being investigated. A pilot program will begin the spring of 2014.

School nurses work closely with students, parents and pediatricians to educate them about the foods available and selecting a balanced meal at school. The school nurses and school counselors also work with families regarding medication interactions with food, etc.

15.	Does your district partner with any postsecondary institutions, businesses, nonprofit organizations, or community
	groups to support student health and/or safety? Xes No
	If yes, describe these partnerships:

Secondary schools have School Resource Officers provided by OPS and the local law enforcement group. The dedicated SROs are an integral part of the workings of the school on a day-to-day basis and is called in on all crisis situations as well as any Threat Assessments.

Each school also has multiple community partnerships. These partnerships provide support and services for students and will continue to do so on a yearly and as-needed basis.

Through a partnership with Methodist Hospital, OPS has Licensed Mental Health Practitioners and Licensed Alcohol and Drug counselors available to work with students in the secondary school 3 days a week at no charge to families. OPS refers to this partnership as the Community Counseling Program (CCP).

All students can visit the eight school-based health centers. A doctor from Children's Physicians oversees guidelines and collaborates with school nurses. While this program is not housed in every building, it is housed in each neighborhood so OPS students and families have access to their low- and no-cost programs.

- 16. Does your district have a school nurse and/or a school-based health center? ⊠ Yes ☐ No
- 17. Describe your district's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.):

The Methodist Foundation provides a community mental health specialist in the school 4 days per week. This program is called the Community Counseling Program.

Omaha Public Schools has a strict anti-bullying policy and procedure in place. Documents are available for students to report bullying behavior, and administration can assign consequences to students who participate in bullying behavior according to the Code of Conduct. Students who bully and students who are bullied are also able to receive followup counseling through the school counselor and the Community Counseling Program.

School counseling curriculum includes a personal/social component which is taught in classrooms to all students. Through Human Growth and Development coursework the concepts of families, peer relationships, puberty, and personal health care.

<u>High Schools are also staffed with a social worker who provides one-on-one counseling, group counseling, crisis intervention, and meditation/conflict resolution with students. He/She also refers students to the Community Counselor, Professional Partners (Reg 6), and other mental health providers/services.</u>

Guidance counselors are dedicated to assisting students with social issues and all counselors provide guidance lessons, promote wellness, and support a safe and secure school climate. In addition, the counselors provide individual and group sessions and collaborate with outside agencies. The Guidance Resource Center is a safe zone for all students. Groups and clubs, such as Student Council, Gay-Straight Alliance, and Real Advocates for Diversity promote acceptance of all.

Pillar III: Effective Environmental and Sustainability Education

- 1. Which practices does your district employ to help ensure effective environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.
 - Our district has an environmental or sustainability literacy requirement. (200 word max)

 The Nebraska State Standards for science include focuses on Life Science (including flow of energy and matter, impact on ecosystems, and biodiversity) and Earth and Space Science (including use of earth materials, fuel, building materials, sustaining plant life, and effects of energy changes on Earth). These standards, which are connected to sustainability and the environment, are core elements of what students are taught every day.
 - Environmental and sustainability concepts are integrated throughout the curriculum. (200 word max)

Within the climate and culture standards for Social Studies, students learn agricultural practices of various regions and how people in other cultures interact with their environment. They study the long lasting effects of pollution in their science courses and use math and graphing skills to document trends over time. Some of the non-fiction selections used by reading classes include literature relating to the environment and renewable energy.

Most of the schools also integrate STEM into many classes. Career Education has several labs that are directly related to green technologies. Topics that are part of that curriculum include; alternative energies, sustainable travel, wind turbine technology, solar cells, geothermal energy, fuel cell technology and solar hydrogen fuel.

In addition, Business and Marketing courses focus on the role of companies practicing environmentally sustainable practices throughout the product cycle. Media Technology students annually create video Public Service

Announcements that are entered into local and national contests. In Fall 2013, 118 students submitted 29 Omaha

Public Power District "Project Greenflick" entries to highlight energy saving practices. In Spring 2013, 42 students submitted ten entries to the National Association for Environmental Education, capturing first place in both the "long form" and "short form" Public Service Announcement categories.

Environmental and sustainability concepts are integrated into assessments. (200 word max)

Included on the OPS Acuity Diagnostic tests and on the Nebraska State assessments, questions pertaining to recycling, renewable energy and cultural practices are included.

Students evidence high levels of proficiency in these assessments. (100 word max)

46 % of the District met/exceeded the Nebraska State Accountability for Science during 2012-2013.

Professional development in environmental and sustainability education are provided to all teachers. (200 word max)

All staff have been trained on proper recycling techniques with professional development presentations and signage. Each light switch in OPS buildings includes a "please turn off" sticker.

Several of the OPS science teachers are certified as Nebraska Project Wild and Project Wet instructors. Many elementary teachers have taken part in the Nature Explore Educator Workshops.

2. For districts serving grades 9-12, provide:

Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: 0.30% (10 of 2,909) Percentage scoring a 3 or higher: 66.67%

3. How does your district use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200 word max)

Nebraska State Standards for science include Life Science (flow of energy and matter, impact on ecosystems, and biodiversity) and Earth and Space Science (use of earth materials, fuel, building materials, sustaining plant life, and effects of energy changes on Earth). These standards are core elements of what students are taught daily.

Nebraska State Standards for mathematics include "Comprehensive Data Analysis/Probability Standard" in which students communicate data analysis/probability concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

In Technology & Living, students apply information and research sustainability and environmental topics to complete experiments, analyze data and produce scaled replics of green energy machines and vehicles. Students apply information and research to their daily lives and incorporate changes in behavior to lessen their carbon footprints.

Engineering and science classes use sustainability in designing new and remodeled structures (Honors Engineering Design & Development, Honors Civil Engineering), the impact of energy and renewable energy sources (Physics and Honors Physical Science), and the interrelatedness of human endeavors with the natural environment (Biology 1-2, Biology 3-4, AP Biology and AP Environmental Science).

4. How does your district use sustainability and the environment as a context for learning green technologies and career pathways? (200 word max)

<u>Career Education uses the Nebraska Department of Labor career cluster model. Career pathways linked with sustainability and the environment include: Health Science, Communication and Information Systems, Agriculture, Food and Natural Resources, Skilled and Technical Sciences, and Human Sciences and Education.</u>

Green technologies are a key component in the Engineering career pathway courses. Team projects allow small groups of students to investigate sustainable practices. For example, a team of students integrated their knowledge

of robotics and programming to create a model solar panel that tracks the sun and adjusts the solar panels to the ideal angle each day.

In Business pathway classes, students learn how business owners show customers they are environmentally responsible and improve the environment by creating environmentally friendly products and processes. These case studies include topics like how companies can reduce the amount of a certain chemical in a process they use, resulting in cleaner waterways.

<u>In Physical Science</u>, lessons on renewable energy resources require students do hands on activities related to solar energy.

5. Describe students' civic/community engagement projects integrating environment and sustainability topics. (200 word max)

Students interact with community members to learn about the natural environment and plan for sustainable practices and structures. Engineering students work with mentors to design land use and building practices that aim to achieve LEED certification and technologies that supply alternative energy sources (solar, wind, water). Media Technology students interview environmentalists and create Public Service Announcement videos to promote sustainable practices. Marketing students create marketing plans to identify and address environmental concerns.

In some schools, homeroom classes participated in a poster contest about recycling to encourage all students in the building. We have students who have participated in community cleanup efforts through community organizations.

Students annually apply environment and sustainability to service learning projects. Recent projects include renovating the historic Dunn Deal Café and Habitat for Humanity homes and removing invasive species of plants around the Viking Ship Community Center and the Malcolm X Birthplace.

Media Technology students interviewed and created videos demonstrating "green" practices being used in district buildings.

Clothing & Textiles students cooperate with Goodwill Industries and University of Nebraska at Omaha (UNO)
Service Learning to redesign and reuse clothing, presenting the repurposed clothing at a Fashion Show hosted by
UNO Marketing students.

- 6. Describe students' meaningful outdoor learning experiences at every grade level. (200 word max)

 Math teachers utilize green roofs to teach various concepts including perimeter, volume and rate; science teachers teach biology concepts. Meaningful outdoor learning experiences occur as part of specific classes: Team Sports, Individual Sports, Biology, AP Environmental Science and AP Biology. Physical Education experiences outside range from running to participating in tennis, football, soccer, track, cross country, baseball and archery. Some students attend star parties to experience the night skies outside of city lights, participate in docent-led hikes at area nature centers. Others enjoy the natural highlights of Nebraska. Some elementary students participated in planting and maintaining a school flower garden project. There are property clean up days, school garden work, planting of trees and shrubs and field trips to Fontenelle Forest. Summer school students help create and maintain school gardens. During recess, students go to the gardens and pull weeds or look at the various flowers and grasses. Many schools plant native species and the students work to maintain them.
- 7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200 word max)

Three schools (Lothrop, King Science and Technology, North High), school board members, community members and first responders worked to improve an outdoor learning area and celebrate the community by mulching, planting natives, trimming, cleaning, etc. The outdoor classroom is lined with fruit trees and filled with plants so that when students use it, the inner-city isn't visible and the problems associated with it seem far away.

All teachers are able to spend time outdoors with their classes. For example, a reading class might take their books outside to read. Math teachers find ways to do labs and lessons outside so that students can participate in applied knowledge rather than abstract.

The school gardens are used to teach Science and Math Standards, along with utilizing the space for class reading and exercise such as Tai Chi Chih. Many of the vegetables are used to enhance the school nutrition classes, are taken home to enhance the meal experience, or are donated to local homeless shelters.

The Nature Explore interactive outdoor classrooms support whole-child development and learning across the curriculum including:

- Critical thinking and problem solving
- Science
- Language and literacy
- Math
- Visual-spatial learning
- Construction and engineering skills
- 8. Describe your partnerships to help your district and other districts achieve in the three Pillars. Include both the scope and impact of these partnerships. (Maximum 200 words)

<u>In February 2010, OPS, in partnership with Verdis Group, LLC (Verdis), created an Energy Action Plan, outlining</u> strategies to reduce consumption of energy, water, and other resources.

The Sherwood Foundation provided funding for Verdis and funded significant portions of a major lighting retrofit across OPS. The retrofit contributed to improving the simple average Energy Star rating for schools by more than 14 points.

In three years' time, nearly 3 million dollars have been saved.

All OPS employees are eligible to participate in Educators Health Alliance (EHA) wellness events. Employees receive freebies/rewards for tracking participation. The EHA wellness program provides a physical and mental health survey to each employee each year.

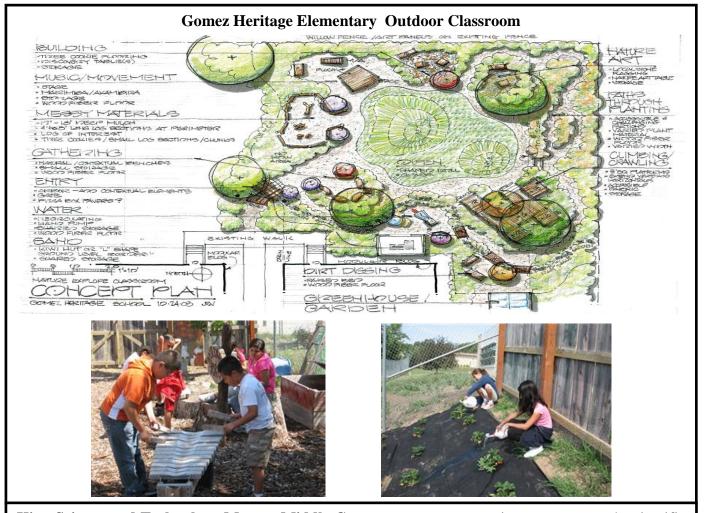
<u>Partnerships</u> between school levels enable students to see environmental and STEM education in action. The scope of these partnerships ranges from understanding prerequisites for courses, to being mentored by high school students.

Engineering mentors from the community help students to better understand the environmental impacts of land use (parking lot vs. green space) and building design (existing structures and local products vs. new construction and long-distance shipments). Partnerships with area colleges, as well as other schools, provide opportunities for students and alumni to interact to serve the Omaha community.

- 9. Describe any other ways that your district integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200 words)
 - Effective environmental and sustainability education is embedded into learning for all content areas. Whether it is using an article about environmentalism as a catalyst for a debate in Social Studies, learning about technical writing in English using a piece on sustainability, or learning about actual sustainability theory in Technology & Living, our students are focused on environmental education thoroughout their days. They are aware that it is their responsibility (and will someday be their job) to take care of their environment. They are up to the challenge.

OPS recognizes the need to integrate "green" topics throughout the curriculum. From our community partnerships with Engineering, Science, Media Technology, and Business-Marketing-Information Tech courses, many students of all ability levels have multiple opportunities to learn about and apply concepts of the environment and sustainability in authentic projects and service.

10. Submit up to 20 photos and/or up to 10 minutes of video content.



King Science and Technology Magnet Middle Center uses two aquaponic systems to teach scientific concepts while growing fresh produce for donation to the Open Door Mission. The technology utilizes fish waste to provide nutrients to a soilless grow bed. This organic method of farming enables harvests of fresh produce such as lettuce, beets, peas, tomatoes, and other fresh fruits and vegetables every 4-6 weeks. The systems were built and are maintained by 7th Grade Service Learning students.

Several OPS schools have aquaponic systems.





Davis Middle School opened the fall of 2013. It includes countertops made from recycled glass and features numerous windows, allowing natural light into almost every room. Providing ample amounts of light improves students' alertness and cognitive ability, thereby resulting in improved learning and performance. Each floor has access to an outdoor area -- from the first floor courtyard to the third floor green roof. Davis also has native landscaping, a catch pond (shown above), lighting motion sensors, low flow plumbing features, a rain garden, and a geothermal well field.



Pawnee Elementary School uses "student recycling coaches." They come to the cafeteria in 15 minute shifts on either side of their own lunch period and coach other students on what can be recycled and how to do it.

Anecdotally, employing student coaches has been really successful. Many students now sort their refuse at the table before coming over to throw things away.

Side benefit... more students finish their milk so they can recycle the plastic bottle!



Green Omaha Coalition Green School Award to **Lothrop Science and Technology Magnet** in 2010 and 2011, the first Omaha metro school to reach the gold leaf achievement level and the first to earn a repeat certification.



The Green Schools Initiative team at **Druid Hill Elementary** planted two sawtooth oak trees in front of their building to add decoration and in the future, shade. The team, which consists of the principal, head engineer, two teachers, and student council, teamed up with the Nebraska Statewide Arboretum and Loveland Garden Club to plant these trees on the property. A lesson was given by Loveland before planting took place. Students learned the value and importance of trees and how to properly take care and manage them as they grow. They also received a lesson on how to protect them against the elements and wildlife that could damage the tree while it is still young.

Saddlebrook Joint Facility opened its doors in the fall of 2009 in collaboration with the city of Omaha Recreation Department and Omaha Public Library. It is unlike any school in the State of Nebraska and one of only a few in the United States. Its unique arrangement of elementary school, community center and public library under a single roof benefits all students, their families and our community members while incorporating life-long learning and wellness for life.

The facility features a commons area, the circulatory center of the building, which functions as a welcoming place for meeting, gatherings, and grade level assemblies. **Saddlebrook Elementary** students reap the benefits of two gyms, a mac and pc lab, an indoor running track, a "green" roof (shown below), and state of the art technology classrooms.



Three Nebraska schools have earned the Green Ribbon Schools award. All three of those schools are in the Omaha Public Schools. The schools are **King Science and Technology Magnet**, **Lothrop Magnet**, and **Miller Park** (shown below).





Gateway Elementary boasts low impact and native landscaping (shown above), lighting motion sensors, low flow plumbing features, cistern to collect rainwater, geothermal well field and bike racks. The elementary students have access to teaching rain gardens where they learn about plants and irrigation. Gateway opened in the fall of 2013 and is certified LEED Silver.



Staff at **Belle Ryan Elementary School** created posters that feature current students to promote their recycling efforts.

OPS principals publicly committed to participating in the Green Schools Initiative (GSI) by signing the 'Principal's Go Green Pledge'. Pictures and/or pledges are posted to the GSI web site.



Students from **Wilson Focus School** demonstrate their recycling posters, garden and composter.





Northwest High Magnet School students can take up to two years of Science classes in the greenhouse. In the introductory course of Plants and Propagation, students learn about the plant kingdom with an emphasis on the structure and function of plants. In the advanced class, Horticulture, students study requirements for growth and production including soil and fertilizers, temperature, light, growth and retardants. stimulants water use applications. The Horticulture course also introduces propagation and growing problems as they relate to the production of vegetables, bedding plants, bulbs, nursery stock, potted plants and cut flowers.



Three schools (**Lothrop Elementary, King Science and Technology Middle,** and **North High**), community members, school board members, District administration and first responders worked to improve an outdoor learning area and celebrate the community by mulching, planting natives, trimming, cleaning, etc. as part of the Green Apple Day of Service. The outdoor classroom is lined with fruit trees and filled with plants so that when students use it, the inner-city isn't visible and the problems associated with it seem far away.







