



2014-2015 School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades Pre-K-12.
2. The school has been evaluated and selected from among schools 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 education.
3. Neither the nominated public school nor its public school district is refusing 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.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public 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.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. 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 public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school 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 2014-2015

Charter Title I Magnet Private Independent

Name of Principal: Mr. Paul Stellato

Official School Name: Princeton Day School

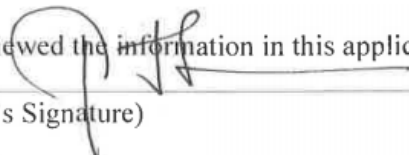
Official School Name Mailing Address: 650 The Great Rd., Princeton, NJ 08540

County: Mercer State School Code Number : 210727645 **Private School*

Telephone: 609-924-6700 Fax: 609-279-2711

Web site/URL: www.pds.org E-mail: lcutler@pds.org

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


(Principal's Signature)

Date: 1/28/15



Name of Superintendent: N/A

District Name: Princeton Day School

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

N/A Date: N/A

(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 school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes grades Pre-K-12.
2. The school 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.
3. The school 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: New Jersey Department of Education

Name of Nominating Authority: Mr. Bernard E. Piaia, Jr.

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

Date: January 29, 2015

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

SUBMISSION

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 green.ribbon.schools@ed.gov 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.

School Contact Information

School Name: Princeton Day School District N/A

Street Address: 650 Great Road

City: Princeton State: New Jersey Zip: 08540

Website: www.pds.org Facebook page: www.facebook.com/PDS

Principal Name: Paul J. Stellato

Principal Email Address: pstellato@pds.org Phone Number: 609-924-6700 Ex. 1100

Lead Applicant Name (if different): Liz Cutler

Lead Applicant Email: lcutler@pds.org Phone Number: 609-924-6700 Ex. 1751

Level [] Early Learning Center [x] Elementary (PK - 5 or 6) K - 8 [x] Middle (6 - 8 or 9) [x] High (9 or 10 - 12)	School Type () Public (x) Private/Independent () Charter	How would you describe your school? () Urban (x) Suburban () Rural	District Name _____ () Largest 50 Districts in the nation? Total Enrolled: <u>940</u>
Does your school serve 40% or more students from disadvantaged households? () Yes (x) No	% receiving FRPL _____ % limited English proficient _____ Other measures _____	Graduation rate: <u>100%</u> Attendance rate: <u>100%</u>	

SUMMARY NARRATIVE: Provide an 800 word maximum narrative describing your school’s efforts to reduce environmental impact and costs, improve student and staff health, and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships.

Princeton Day School has demonstrated both quantitatively and qualitatively its dedication to environmental sustainability and real change over the past decade. Our green team is composed of faculty, staff, administrators and students from all departments and all divisions.

The high school Environmental Action Club (EnAct, created conferences (Our Future, Our Challenge) in 2011 and in 2012 on environmental issues, inviting all high school students in New Jersey. Over 100 students from public and independent schools participated each time. EnAct partnered with the Princeton Environmental Film Festival to create the 2012 and 2013 Next Generation Fair with 18 NJ schools participating, for which the club won the Youth In Focus Award from the Festival. In 2004 and 2005 they organized the Walk for Open Space, raising over \$50,000 each year for local environmental organizations. At the end of each school year since 2009, they organize The Great Give Away to have a zero waste locker clean out event by working will all students to collect their gently used school supplies and donating 40 cartons of supplies each year to HomeFront. The theatre program and EnAct partnered to promote issues of sustainability surrounding the school play (Urinetown), earning the 2014 Paper Mill award for education. Since 2013 the theater program has committed to creating zero waste productions where sets are made from recycled materials. We have had several environmental community service days; for example, four times in the last decade 100 PDS sophomores spent the

day at Mountain Lakes nature preserve doing environmental service. For many years students have maintained the part of the local Princeton Green Trail that runs through the PDS campus. In 2009, the entire school worked together to win the national Green Schools Alliance Green Cup Challenge. The PK-4 classrooms all have a designated sustainability student leader and invented a green/red magnet to help custodial staff know which rooms have been cleaned so they don't have to use the lights on as their signal.

In October 2013 PDS offered a workshop in school garden design and curriculum reform for 40 NJ public and independent school teachers. The Sustainability Coordinator and Garden Coordinator present regularly at conferences and have worked with scores of other schools who have come to us for advice on becoming more sustainable. PDS runs environmental summer camps open to the public.

We have created a Green Panther Certification Award for classrooms and offices to self-monitor behavior based on environmental indicators and questions. Simultaneously, we are creating a Green Panther Home Award for families to apply this behavior in their own homes. We have a specific Parent Association support group to help bring the sustainability into student's homes.

We have installed CO2 sensors, passive solar harvesting lights, occupancy sensors, low flow toilets, water bottle refilling stations, high efficiency boilers, variable speed drives, double pain high-insulating windows, a building control system, and much more (see website list). We have composted over 80,000 lbs in the last four years.

At the last Middle States Evaluation one of the faculty's self-chosen goals was stewardship and its incorporation into the curriculum. To do this we created sustainability rubrics for curriculum, had faculty in-service days on sustainability, created an annual Barn Week where lower students learn animal stewardship, run an annual Harvest Dinner (now in its sixth year) where high school students prepare and teach about the importance of local and organic food to 250 families, integrated garden education into our health & wellness initiative in all grades. We have a physics course on energy, a history course on oil, an English class on food, sustainability and writing, a sustainability course for all 6th graders, and required outdoor garden classes for all preK – 4 students. There is an outdoor kitchen/classroom for all divisions and all departments.

Ecometrica performed a quantitative Green House Gas Assessment on the entire Princeton Day School campus that quantified our emissions and kick-started a line of facilities changes that allowed for a demonstrable decrease in environmental impact since the assessment was performed in 2011. We have a fully transparent bill system that allows for tracking of the consumption of all forms of energy on a monthly basis. The students performed a greenhouse gas assessment in 2013 and 2014 in partnership with students from Princeton University. We have sustainability guidelines for building and grounds passed by the Board of Trustees.

Finally, to promote health of both faculty and staff and sustainable dining, we have become Green Restaurant Certified at the three star level. The website has all the specifics of this certification; a few examples are: no disposables in our dining or catering, all food cooked from scratch, 19% local food, "Healthy Me, Healthy Planet" Tuesdays where we feature foods high in nutrition and low in carbon footprint. We have composted in windrows over 80,000 lbs.

SCHOOL PROFILE: GREEN SCHOOL PROGRAM AND AWARDS (Cross-Cutting Question)

1. Is your school participating in a local, state, or national program, which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes No ___ If yes, please explain what program(s) and what level you are currently at, and state the years you have been involved in these programs. (e.g. EPA Energy Star Portfolio Manager, Eco-Schools USA, PLT Green Schools, NJPALS, Green Schools Leadership Institute, NJ Learns, NJ Sustainable Schools Project, NJ Recycling).

PDS is Bronze Level River-Friendly School Certification by the Stony Brook Millstone Watershed Association and is a member of NJ Eco-Schools.

2. Has your school, staff or student body received any awards for facilities, health or environment?

Yes No ___ Award(s) and year(s) Grand Prize Kiwi Crusaders Award for Sustainable and Healthy Food 2009, national winner of Green Schools Alliance Green Cup Challenge 2009, Youth in Focus Award for Princeton Env. Film Festival 2012, Bronze Level River Friendly Certification given by the Stony Brook Millstone Watershed Association 2011, Charter Member of Green Schools Alliance. Both the EnAct Club faculty advisor in 2010 and 3 of the students in 2015 received Princeton Sustainable Leadership Awards

3. Has your school identified or created a place for teachers to go to share lessons on Sustainability?

Yes No ___ If yes, where? A brief report of environmental updates and best practices are often presented at faculty meetings and at the Green Team monthly meetings.

4. Has your School Board adopted a Green Strategic Plan? Yes No ___

5. Has your school created a Green Team? Yes No ___ If yes, list team members and their roles.

Liz Cutler, Sustainability Coordinator; Ron Tola, Director of Special Projects; Pam Flory, Garden Coordinator, Carrie Norin, Upper School Biology teacher; Sylvia Debenedetti Mid/Upper School Science Dept. Chair; Aaron Schomburg, Lower School Science Teacher; Emily Gallagher, 1st Grade Teacher; Daniel Cohen, 4th grade teacher; Ann Robideaux, Dance Teacher; Nicole Foster Hinds, Middle School Math Teacher, Matt Connolly, Director of Facilities; Dulany Gibson, Assistant School Head in charge of Finance and Operations; Becca Paggitt-Mungai, 5th & 6th grade Humanities Teacher; Brian Mayer, Upper School physics teacher.

6. Has your school seen a cost savings from green initiatives? Yes No ___ If yes, describe the **cost savings** or use the table below to fill in your **cost savings** data.

	Electric Energy Consumption (kwh)	Natural Gas or Fuel Oil Consumption (therms)	Electric Utility Costs (\$)	Natural Gas Utility Costs (\$)	Total Utility Costs (\$)	Annual Savings (\$)	% Reduction from FY'10-'11
FY '12-'13	64174	20994	\$6729	\$7957	\$364,692	\$14,686	4%
FY '13-'14	37800	43089	\$4536	\$16,332	\$345,184	\$20,868	6%

PILLAR I: REDUCED ENVIRONMENTAL IMPACT

Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions

Energy (Please convert energy data to Portfolio Manager format if possible)

7. Can your school demonstrate a reduction in **Greenhouse Gas emissions**? Please fill in table below first.

(X) Yes () No Percent reduction: 25% Over (m/yy - m/yy): 06/11-06/13

Initial GHG emissions rate (MT eCO2/person): 0.33 MT eCO2 per staff+ student

Final GHG emissions rate (MT eCO2/person): 0.25 MT eCO2 per staff+ student

Offsets: _____ How did you calculate the reduction? Using the change in energy consumption as measured each semester on the electric and natural gas consumption bill and converting the respective units of volume (cubic ft for natural gas and kWh for electrical) to units of Energy and then MT of eCO2 with help from the Ecometrica assessment performed in 2013 and the EPA star technology.

What do you use to benchmark your energy use? We have focused on reducing our own use as opposed to comparing to other schools or national averages.

Table is based on School data taken from Utility Bills Portfolio Manager, district utility bills, etc.), as reported by Vendor (Vendor or School/District Personnel).

	Electric Energy Consumption (kwh)	Natural Gas Consumption (therms)	Fuel Oil Consumption (gallons)	Carbon Dioxide from Electric 1.52 lbs/kwh	Carbon Dioxide from Natural 11.7 lbs /therms	Carbon Dioxide from Fuel Oil 26.033 lbs/gal	Total number of Staff & Students	MT eCO2 /person
FY '11-'12	198,684	9,444	-	302,000	110,500	-	1250	0.33
FY '12-'13	134,510	9,234	-	204,456	108,044	-	1250	0.25
FY '13-'14	96,710	8,803	-	147,000	103,000	-	1250	0.20

8. Has your school conducted an energy audit of its facilities? Yes No

Percent reduction: 6 %

Measurement unit used (kBTU/Square foot or kBTU/student): kBTU/student

Time period measured: from 2009 to 2011

9. Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification? (score of 75 or above)

Yes No Year(s) and score(s) received: _____

10. What percentage of your school's energy is obtained from:

On-site renewable energy generation: None Type _____

Purchased renewable energy: 25% Type 50% Wind, 45% Biomass, 5% Landfill Gas

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: No

11. Has your school reduced its total non-transportation energy use from an initial baseline? Yes No

Current energy usage (kBTU/student/year): Enter data in table below.

2,544 kBTU/student/ year

Current energy usage (kBTU/sq. ft./year): Enter data in table below.

9.35 kBTU/sq.ft/year

Percent reduction: 19% over (m/yy -- mm/yy):

09/2011 – 06/2013

How did you document this reduction? Through calculations using the energy bill discussed above and conversion from kwh of electricity used to kBTU consumed, not including transportation costs, and dividing by the sq. footage of the school or the student population. Aided by Energy Star technology.

	Electric Energy Consumption (kwh) 1kwh=3.412 kBTu	Natural Gas Consumption (therms) 1therm=100kBTu	Fuel Oil Consumption (gallons) 1 gal. = 139 kBTu	Number Occupants (Students & Staff)	kBTU/Occupants (Students & Staff)	kBTU/sq.ft.	% Reduction from FY'10-'11
FY'11-'12	198,684	9,444	-	1250	3,048	11.20	baseline
FY'12-'13	134,510	9,234	-	1250	2,722	10.00	12%
FY'13-'14	96,710	8,803	-	1250	2,544	9.35	7%

12. In what year was your school originally constructed? 1963 main building, lower school wing in 1993, and arts wing in 2007

What is the total building area (sq.ft) of your school? 340,000 sq. ft

13. Has your school constructed or renovated building(s) in the past ten years? Yes () No

For new building(s): Which green building standard was used? None
(LEED for Schools, CHPS Operations Report Card, Green Globes or other)

Percentage building area that meets green building standards: 0%

Certification and level: _____ Total constructed area: _____

For renovated building(s): Percentage of the building area that meets green building standards:

_____ Certification and level: _____ Total renovated area: _____

Which green building standard was used? LEED Certification is planned for upcoming Field House Construction at the Gold Level

(LEED Existing Buildings: Operation & Maintenance, CHPS Operations Report Card, Green Globes or other)

Element 1B: Improved water quality, efficiency, and conservation

Water and Grounds

14. Can you demonstrate a reduction in your school's total water consumption (measured in gal/square foot) from an initial baseline? Yes ___ No If yes, please complete the table below, then provide the following information:

We have not yet done these calculations.

How did you document this reduction (i.e. Energy Star Portfolio Manager, utility bills, school district report?)

We have installed 12 low flow toilets and urinals so far in 2014-15, reduced the amount of ice in the ice rink, and discontinued using hot water to melt the ice shavings from the Zamboni.

15. Describe any strategies you use to discourage single-use beverage containers on school property. Describe how you assure the recycling of those containers at athletic locations, or other outdoor events. We banned use of single-use beverage containers in our dining services and catering events. We've required all athletes to make a reusable water bottle part of their equipment for practices and games. Eight years ago we switched from bottled water to pitchers and classes for the daily lower school snack. We installed water bottle refilling stations throughout the school. We've worked with coaches to have 5 gal water containers at all games and practices and asked parents not to bring cases of drinks. The EnAct Club monitored, graphed, and displayed all the disposable bottles found in the recycling containers for 2 weeks, creating a "trash mountain" in the front hall surrounded by educational posters about disposables. We give out reusable water bottles at our hockey tournament rather than t-shirts and stopped buying 10-15 cases for that event each year. The theater dept. collected 4000 used disposable water bottles and made a huge curtain with them that hung as the backdrop to the musical, Urinetown, to discourage their use.

16. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? 50%

Types of plants used and locations. See below.

17. What plants are native to your geographic location and how have you incorporated them?

We have created a wildflower meadow to promote forest conservation and it includes planted local flora. As part of an agreement with the DEP we have also moved our school ropes course site so that the old area could be mitigated with 205 native shrubs and trees. The 205 include:

(15) Quercus alba #2 12-18"	(20) Carpinus caroliniana #2 3-4	(8) Betula Nigra 1.5-1.75"
(15) Quercus palustris #2 2-3'	(10) Dentatum viburnum #1 2-3'	(8) Cercis canadensis 1.5-1.75"
(15) Acer rubrum #2 12-18"	(10) Spirea tomentosa #1 12-18"	(8) Liriodendron tulipifera 1.75-2.0"
(15) Betula nigra #2 2-3'	(10) Winterberry holly #1 2-3'	(8) Quercus palustris 1.75-2.0"
(15) Quercus rubrum #2 18-24"	(20) Leucothoe	(8) Quercus rubra 1.75-2.0"
(15) Quercus phellos #2 2-3'		
(15) Fagus grandiflora #2 12-18"		

18. Describe alternate Non-potable water sources used for irrigation (e.g. roof run-off, parking lot runoff). (50-words max)

In the garden we have set up a rain barrel system to collect runoff from the outdoor classroom used to water the plants in the outdoor garden.

19. Describe any efforts to reduce stormwater runoff and/or reduce impervious pavement (e.g. rain gardens, bioswales, ponds). (50-words max)

We have a rain garden at PDS and a small local pond on our campus. We also have a bio retention basin that we turned into the wildflower meadow with native species.

20. Our school's drinking water comes from: Municipal water

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

Preventative filters have been set up at every water source station for drinking, with back flow preventers at every water source on campus.

22. Describe the program you have in place to control lead in drinking water. (50-words max)

We use municipal water with filters of our own.

23. Does your school have its own well? Yes___ No If yes, did your school comply with all monitoring requirements and did the drinking water meet all applicable standards? Yes___ No___

24. Describe how your school's site grading and irrigation system and schedule is appropriate for your climate, soil conditions, plant materials, with an emphasis on water conservation: (50-word max)

Andropogon Inc. performed a comprehensive landscape analysis and campus master-plan and determined that our school's site grading and irrigation systems are appropriate for local climate and soils.

25. What percentage of school grounds are devoted to ecologically beneficial uses? (50 word max)

71.5% of our school's 110 acres are open space.

Element 1C: Reduce waste production – Waste/Hazardous Waste

26. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? 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): 72

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): 30

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): 1 cu. yd. into our on-campus windrows

Recycling Rate = $((B + C) \div (A + B + C) \times 100)$: 30%

Monthly waste generated per person = $(A/\text{number of students and staff})$: .065

27. What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free? 50%

28. Do you include after-hour activities in your garbage reduction calculations? (adult sport leagues, adult education, scouting, other community events etc.?) Yes. We joined the Princeton Municipal compost program which picks up the industrially compostable containers the students recycle from the snack bar, open after school. The chip bags from the snack bar are sent to TerraCycle so they don't wind up in the waste stream.

29. Verify that your school is compliant with the New Jersey Department of Environmental Protection's (DEP) Air Quality Permit requirements. Equipment at schools that require air permits include boilers, emergency generators, space heaters and hot water heaters that have a maximum rated heat input of 1 million BTU/Hr or greater, to the burning chamber. Also, some schools might require an air permit for certain woodshop operations.

Our school has the required [New Jersey DEP Air Quality Permits](#). Yes No___

30. Describe how you have reduced your paper consumption, and how you measured that reduction (e.g. working and reviewing on student : 1 ipad program in place and look at our paper usage on a yearly basis.

We keep an excel spread sheet to track the reduction of paper usage each year.

All Xerox machines are set to a default double sided setting.

31. List the types and amounts of hazardous waste generated at your school:

Flammable liquids	Corrosive liquids	Toxics	Mercury	Other: CFL Fluorescent Light Bulbs, 20 per year
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How is this calculated? **By tracking the number of CFL light bulbs changed out each year**

How is hazardous waste disposal tracked? **Carefully, any hazardous sharps or waste is monitored by facilities and the science department**

32. Describe other measures taken to reduce solid waste and eliminate hazardous waste (on-site composting etc.). (100-word max)

33. Which green cleaning custodial standard is used? **Green Seal Certified**

What percentage of all products is certified? **85-90%**

What specific third party certified green cleaning product standard does your school use? **We use Hillyard Green Seal Certified products.**

Describe the measures your school has taken to use only green cleaning product. **We have been using Green Certified Cleaning products since 2007**

34. If your school has a nurse's office, how does the nurse track regulated medical waste? Describe the tools or mechanisms used to track this waste. **For sharps, we have a specific sharps container that gets sent to a medical disposal company and Epipens get packaged and given to the local hospital for disposal and other medical waste gets retrieved by an official medical disposal company.**

35. Is a Hazardous Waste Policy for storage, management and disposal of chemicals in laboratories and other areas with hazardous waste, in place and actively enforced? Yes **X** No ___

36. Are there any Underground Storage Tanks located at your School? ___Yes **X**No If yes, do you have the proper permits for using an underground tank? ___Yes ___No

Element 1D: Use of Alternative Transportation

37. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses) **Approx. 150 of our 930 students use the school bus system and an estimated additional 50 students carpool or ride their bike to school.**

How is this data calculated? **This data is calculated based on extrapolations from averages from a comprehensive survey polling the middle and upper school that received 400 responses on its mode of transportation to school and by following the number of families that utilize a school bus waiver each year.**

38. Has your school implemented?

- Designated carpool parking spaces **We are currently working on this.**
- XX** A well publicized no idling policy that applies to all vehicles (including school buses)
- A policy that encourages walking and/or bicycling to school
- XX** Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows
- XX** A Safe Routes to School program or a School Travel Plan
- XX** Walk and Bike to School Days **The EnAct Club has overseen a Low Impact Travel Week 3 times in the last 8 years. This is pretty hard to do at our school because we draw from such a large radius and are located so far out of town.**

XX Secure bicycle storage (such as bicycle lockers, racks, or rooms) is provided to encourage bicycling to school

Describe activities in your safe routes program if applicable: (50-word max) **There a bike/walking lane on the main road leading to the school from Princeton.**

39. If your school has only bus transportation, describe how your school transportation use is efficient and has reduced its environmental impact (e.g. more efficient bus routes, diesel retrofits for buses, use of biodiesel fuel, electric vehicles). (50-word max) **We have promoted carpooling through an online initiative that maps the geographic location of all PDS family homes in order to ease the efficiency and popularity of carpooling options. We have also appointed a carpooling parent ambassador to help parents connect with one another.**

Summary Question for Pillar 1

40. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100-word max)

PILLAR 2: IMPROVE THE HEALTH AND WELLNESS OF STUDENTS AND STAFF

Element 2A: Integrated School Environmental Health program

Environmental Health

1. Has your school conducted any "Occupant Survey" with teachers and students? If so, please state the date(s) and over results of the survey.(CHPS Occupant Survey) **No**
2. Do you have an Operations & Maintenance Policy for your building? **Yes**
3. Describe your school's Integrated Pest Management efforts, including IPM/green certifications earned, routine inspection, pest identification, monitoring, record-keeping, etc.

The PDS Grounds crew treats for turf & weed issues during the growing season following the NJDEP regulations for Pesticide Applications.

Posting for Chemicals is done 3 days prior with placards placed at all traffic entrances, paper notices on affected building doors, post on both All School Business & Announcements too ensure notification to all on campus.

Postings indicate the product to be used, possible side effects, symptoms, re-entry restrictions, IPM & Poison Control phone numbers. Also they list 3 dates for application. These signs & postings must remain for 72 hours after completion in described area.

All areas are flagged during application & flags must remain in place for 72 hours. Events & Athletics are consulted to reduce traffic & contact. ie-Field closures or move activity to another location. No-impact,green or safe applications are still given a 1 day notification, though not specifically required, just to keep the Community aware.

Bees are the only immediate response that we treat for when there is a threat to humans. Those in the area are notified, caution tape may surround the area, a flag is posted after application & All School Business & Announcements are notified with each occurrence. Detailed records are kept for each treatment, detailing area treated, amount of chemical, weather conditions, etc. Other pests, insects & rodents are treated after hours under the watch of Custodial Coordinator & an outside vendor.

4. What is the volume of your annual pesticide use (gal/student/year) total/year ? Describe efforts to reduce use: We use only Dupont Advion ant gel applied in dots and Bromadiolone/Contrac Blox mouse trap bait. We use no spray pesticides on campus.

5. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice.

XX Our school conducts both indoor (structural) and outdoor (turf and ornamental) IPM to reduce student exposure to chemical pesticides.

XX Our school prohibits smoking on campus and in public school buses
Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. No elemental mercury has ever been reported_

Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO)
We have carbon monoxide sensors in housing and on school property.

Our school does not have any fuel burning combustion appliances (e.g. boilers, emergency generators, hot water heaters, etc.)

NJ Recommends School Radon Testing:- Our school has tested all frequently occupied rooms in contact with the ground, and first floor rooms above basement spaces that are not frequently occupied for radon gas and has fixed and retested rooms with levels that tested at or above 4 pCi/L . XX Yes ___ No

Our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L. ___ Yes ___ No The school was built before radon resistant construction.

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. N/A

6. Describe how your school controls and manages chemicals routinely used in the school, as well as construction or cleaning activity that produces odors or dust, to minimize student and staff exposure. (100-word max) 85-90% of all chemical cleaning products used in science laboratory and schoolwide are green certified through Hillyard. The custodial staff entirely vacuums the school daily.

7. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100-word max) Princeton Day School participates in the Pediatric/Adult Coalition of NJ Asthma Awareness and is an active member.

8. Describe actions your school 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)

Leaks are addressed as soon as reported and are cleaned up and repaired as necessary. Condensation is controlled by pipe insulation as well as condensate pumps to remove any condensation discharge from air handling equipment. Humidity is controlled by the facility-wide a/c HVAC systems as well as the BAS. Any moldy material found is removed and disposed of. Cleanup consists of spraying/wiping down with EPA recommended solution.

9. Our school has installed local exhaust systems for major airborne contaminant sources. ___ Yes x No

10. Describe your school'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) The school BAS is checked and monitored on a daily basis to ensure proper operation. All equipment is visually inspected on a regular basis to confirm. Air filters are inspected regularly as well as fans and ductwork. Air filters are changed bi-annually or as needed.

11. Describe actions your school 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) **All air handling equipment has been set up and established and is monitored to make sure that all regulations have and continue to be met set by the EPA. Many areas are equipped with CO2 detectors that will let in more fresh air if the load in that location exceeds the recommended set point.**

12. Describe other steps your school takes to protect indoor environmental quality such as: (200-word max)

- XX** Implementing EPA IAQ Tools for Schools and/or
- XX** Conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action.
- XX** Participating in the Pediatric/Adult Coalition of NJ's Asthmas Friendly Awareness Program
We meet each of these criteria and additionally have followed up on several occasions with corrective actions yielded from our monitoring.

13. Which of the following green procurement practices does your school engage in?

- XX** Building & Construction
- XX** Carpets
- XX** Cleaning
- XX** Food Services
- XX** Landscaping
- XX** Office Supplies
- XX** Paper

14. What system do you use to determine if the above products and services are considered sustainable?

- XX** Other **We follow the sustainability guidelines set by our Board of Trustees for building and grounds**

15. Does your district have an Operations & Maintenance Policy for your buildings? **As an independent school we have no district, but we do have a sustainability policy for Buildings and Grounds approved by our Board of Trustees.**

Element 2B: Nutrition and Fitness

Food and Nutrition, Fitness and Outdoor time

16. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100-word max each)

- Our school participates in the USDA's Healthier US School Challenge. Level and year: _____
- XX** Our school participates in a Farm to School program to use local, fresh food. **YES**
- Our school has an on-site food garden that teaches nutrition and environmental education, describe. **YES**
We have a 50 ft. X 150 ft Organic Garden on campus completely integrated into the pre-K-4 curriculum and the health and wellness curriculum, and a fulltime garden coordinator/teacher on staff.
- XX** Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. **All food in the garden is eaten by students either in classes or in the cafeteria. We also have a teaching kitchen classroom built into the garden that students from all age groups use. We also have a food and garden club at each divisional level.**

XX Our students spent at least 120 minutes per week over the past year in school supervised physical education. **We have a required PE program for every grade and many JV and varsity sports.**

- XX** At least 50% of our students' annual physical education takes place outdoors. **All fall and spring sports (66%)**

- Our school participates in the NJ Safe Routes to School Resource Center. Level and year: _____
- Our school participates in International Walk to School Day in October and/or National Bike to School Day in May. Year(s): _____.
- XX** Our school has a School Wellness Policy that addresses both nutrition AND physical activity. **We have a brand new health and wellness initiative for all grades**
- XX** Our school has a School Wellness Committee that meets at least once a year. _____
- Health measures are integrated into assessments. _____
- At least 50% of our students have participated in the EPA's Sunwise (or equivalent program).
- XXA** certain percentage of the food purchased by our school food service is locally sourced from regional farms. Percentage: **17-20%** Type: **fruits, vegetables, eggs, bread.** **We purchase from a variety of local vendors including local farmers, Common Market in Philadelphia, and we follow the Monterey Bay Seafood protocols and recommendations.**

17. Does your school compost lunch waste on-site? If so, what percent? **100%** **All food other than dairy and meat is composted** How much is used in your outdoor classroom? **100%** **All of the compost goes back into our school garden**

18. What environmental technology is used at your school? (e.g. weather station, composting, rain garden) **Solar panels (with live online monitoring), composting, outdoor rain collection system and student made bicycle powered motor to pump rain water into the garden to demonstrate energy needs. Also have carbon dioxide sensors and passive solar lighting sensors, motion activated light switches, low flow toilets and urinals, occupancy sensors, water bottle refilling stations, solar monitoring on line, and variable speed drives on the HVAC system.**

19. Describe the type of outdoor education, exercise and recreation available. (100-word max) **We have a green trail and a campus-guiding map for students. The following sports at every level are always taught and played outside: soccer, field hockey, lacrosse, cross country, tennis, baseball, softball. We also have a huge ropes course and ropes course program outside. Middle School mini-week has several outdoor education options including a Farm Trip intensive and a Cape Cod Trip intensive. All recess is held outside. There are separate lower and middle school playgrounds. We have an open campus and Upper School students are allowed outside during any free time.**

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

20. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? **X** Yes ___ No

If yes, describe the health-related initiatives or approaches used by the school: **We have a student health team that includes 3 nurses, a school psychologist, 3 learning specialists covering all divisions, a very strong faculty/student advising system, a Dean of Students, a Dean for each grade 9-12, 4 security officers, and a certified Athletic Trainer**

21. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health, school garden education and/or safety? **XX** Yes ___ No

If yes, describe these partnerships: **Sports Physical Therapy, a local PT group, comes into the school twice/week to see students with injuries.**

22. Does your school have a school nurse and/or a school-based health center? **XX** Yes ___ No

23. Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.): **We have a peer to peer group counseling program in the high school; a 1:1 advising program in middle and upper school**

Summary Question for Pillar 2

24. Describe any other efforts to improve coordinate health and safety, nutrition and fitness, highlighting innovative or unique practices and partnerships. (100-word max) In our efforts to provide healthy snacks at the snack bar, we wanted to move away from processed foods. To do this, dining services created many snacks that are served in industrially compostable containers such as fresh cut fruit, hummous and pita bread, salsa and chips, tuna salad and pita, etc... They also make their own granola and serve it in compostable bags. They serve healthy breakfast options for students who did not have a chance to eat before school. We removed soda type drinks from the snack bar, all high-fructose corn syrup from the cafeteria drinks, make our own water flavored with fresh fruit or herbs.

PILLAR 3: EFFECTIVE ENVIRONMENTAL AND SUSTAINABILITY EDUCATION

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

1. Which practices does your school 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.

XX Our school has an environmental or sustainability literacy requirement. (200-word max) All Prek-4 students participate in garden education, all 6 graders take a sustainability course, and all high school students have the option to choose from a variety of electives such as Environmental Science, Nature and Literature, The History of Oil, a physics course on Energy, and an English course called Food, Culture and Writing.

XX Environmental and sustainability concepts are integrated throughout the curriculum. (200-word max) We have a Sustainability Curriculum Framework that is shared with all faculty and they are encouraged to use it in their class prep. In the 2012-2013 school year, we did a school wide education for sustainability audit that demonstrated sustainability measures and concepts are integrated throughout the curriculum in subjects ranging from hard science to language arts to social studies.

XX Environmental and sustainability concepts are integrated into assessments. (200-word max) The audit above showed that some courses in a range of interdisciplinary subjects have sustainability concepts integrated into assessments. One example is a high school biology based class that tested environmental impact on a final assessment.

XX Students evidence high levels of proficiency in these assessments. (100-word max) In the classes mentioned above, this is consistently the case.

XX Professional development in environmental and sustainability education are provided to all teachers. (200-words) We have had several in-service days devoted to sustainability and the sustainability coordinator works with teachers across divisions and disciplines. Prof. dev. is offered off-campus to all faculty paid for by the school.

Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills

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

Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: _____ Percentage scoring a 3 or higher: _____

Zero – this AP is not offered.

3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200-word max) PDS has a STEM task force that is currently creating this program. All biology science classes and the environmental science class in the high school, several of the middle school biology classes, and

all of the lower school science classes use the PDS campus and the outdoor garden and surrounding local flora as a laboratory and teaching tool. The solar panel monitoring device is also integrated into several science and math curricula. All sixth graders are required to take a course in sustainability.

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

Element 3C: Development and application of civic knowledge and skills

5. Describe students' civic/community engagement projects integrating environment, environmental justice ([as defined by EPA](#)) and sustainability topics. (200-word max)

EnAct, created eco-conferences in 2011 and 2012, inviting all NJ high schools. Over 100 students from public and independent schools participated each time. EnAct partnered with the Princeton Environmental Film Festival to create the 2012 and 2013 Next Generation Fair with 18 Central NJ schools participating, for which the club won the Youth In Focus Award from the Festival. In 2004 and 2005 they organized the Walk for Open Space, raising over \$50,000 each year for local environmental organizations. At the end of each year since 2009, they have organized The Great Give Away to have a zero waste locker clean out by working with all students to collect gently used school supplies and donating 40 cartons each year to HomeFront. The theatre program and EnAct partnered to promote sustainability through the school play (Urinetown), earning the 2014 Paper Mill Award for Education. We have had several environmental community service days; for example, four times in the last decade 100 PDS sophomores spent the day at Mountain Lakes nature preserve doing environmental service. For many years students have maintained the part of the local Princeton Green Trail that runs through the PDS campus.

6. 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)

The organic garden is completely integrated into the PreK - 4 curriculum, in language arts, social studies, math, science, and arts. That curriculum is also posted for public use on the PDS website. Many classes from all divisions and all departments use the outdoor classroom as a teaching/learning tool and the campus as a laboratory. The 5th and 6th grade humanities classes use the garden to enhance their teaching, as well as the high school biology and environmental science classes and some history and English. One example is an upper school English Class entitled "Food for Thought" that regularly works in the garden with PDS' on-site full time farmer. Another example is the third and fourth graders whose regular work with the beehives is a regular part of their science curriculum. We also have chickens and a chicken yard to encourage students to practice stewardship by interacting with the birds outside.

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

See above. Also, the 4th graders take care of the beehives. There is a Garden Apprentice Program for the high school.

These students take care of the chickens. We have a campus as laboratory initiative and many classes use the campus grounds, meadow, woods, and ponds as learning labs.

8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 200-words) We have offered workshops in school garden design and curriculum reform for teachers in other local schools. Our sustainability coordinator and garden coordinators regularly speak at statewide and national conferences. Princeton Day School is a founding member of OASIS, Organizing Action and Sustainability in Schools, a 23 school non-profit consortium of schools working toward sustainability. The PDS sustainability coordinator, Liz Cutler, is the Founding Director of that project. We host 10-15 school visits per year from other schools to learn about our sustainability measures and practices and publish all of our practices on our website for the benefit of other schools. Finally, in 2012 we founded a partnership with Princeton University students entitled GGAT, Green House Gas Assessment Team,

that analyzed GHG data from PDS and encouraged both university and high school students to learn further about environmental issues. In 2011, we ran a summer camp called Green Team for financially challenged students in the local Princeton area.

Summary Questions for Pillar 3

8. Describe any other ways that your school integrates core environment, sustainability, STEM, equity and environmental justice issues ([as defined by EPA](#)), green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200-words) Currently we are in the process of initiating a Green Panther Certification Award for different groups in the school to self-monitor their behavior based on environmental indicators and questions. Simultaneously, we are creating a Green Panther Home Award for students to apply this behavior in their own homes. We have a Parent Association Support Group that helps us to bring the work in sustainability and civic engagements that is happening within the school into student's homes. One of the faculty's self chosen goals for the last middle states assessment was stewardship. One of the many ways to accomplish this goal is both through our annual Barn Week, where lower students learn animal husbandry and also our Harvest Dinner, where upper school students prepare and teach about the importance of local and organic food. This is our sixth year of the Harvest Dinner, serving over 200 individuals at the dinner. We also have a highly active student high school club (ENACT) that does educational projects throughout the year from political action and letter writing to bringing speakers to showing films to trash audits, just as some examples.

9. How are your descriptions in number 8 supported or enhanced by your efforts in Pillar 1 to reduce environmental impact and costs for your school. (Maximum 100-words) Our Facilities Director has provided the opportunity for student tours of our HVAC and Energy systems to promote transparency and learning. We provide many campus facilities such as bee-hives, gardens, chickens, that promote environmental learning. Our facilities director and our school CFO are members of our Green Team. The GGA student team is planning to present its findings to the faculty and Board this spring.