January 16, 2023

Re: Funding to Address Air Pollution at Schools [60106]

Dear Administrator Regan:

Thank you for considering our comments on the Request For Information (RFI) #60106 concerning Funding to Address Air Pollution at Schools.

About Climate Parents of Prince George's
Climate Parents is a campaign to reduce climate change–causing pollution in our schools, increase the climate resilience of our school infrastructure and capacity, and benefit the children, educators, and staff who will be impacted by a changing climate. Our group is active in Prince George's County, Maryland. In particular, we worked directly with Prince George's County Public Schools (PGCPS) technical staff and other advocates to develop a Climate Change Action Plan (CCAP) for PGCPS as part of a Board of Education Focus Workgroup. This CCAP was one of the first comprehensive CCAPs for a Local Education Agency (LEA) and could also provide a useful look at some of the issues facing school systems in regards to this RFI.[1]

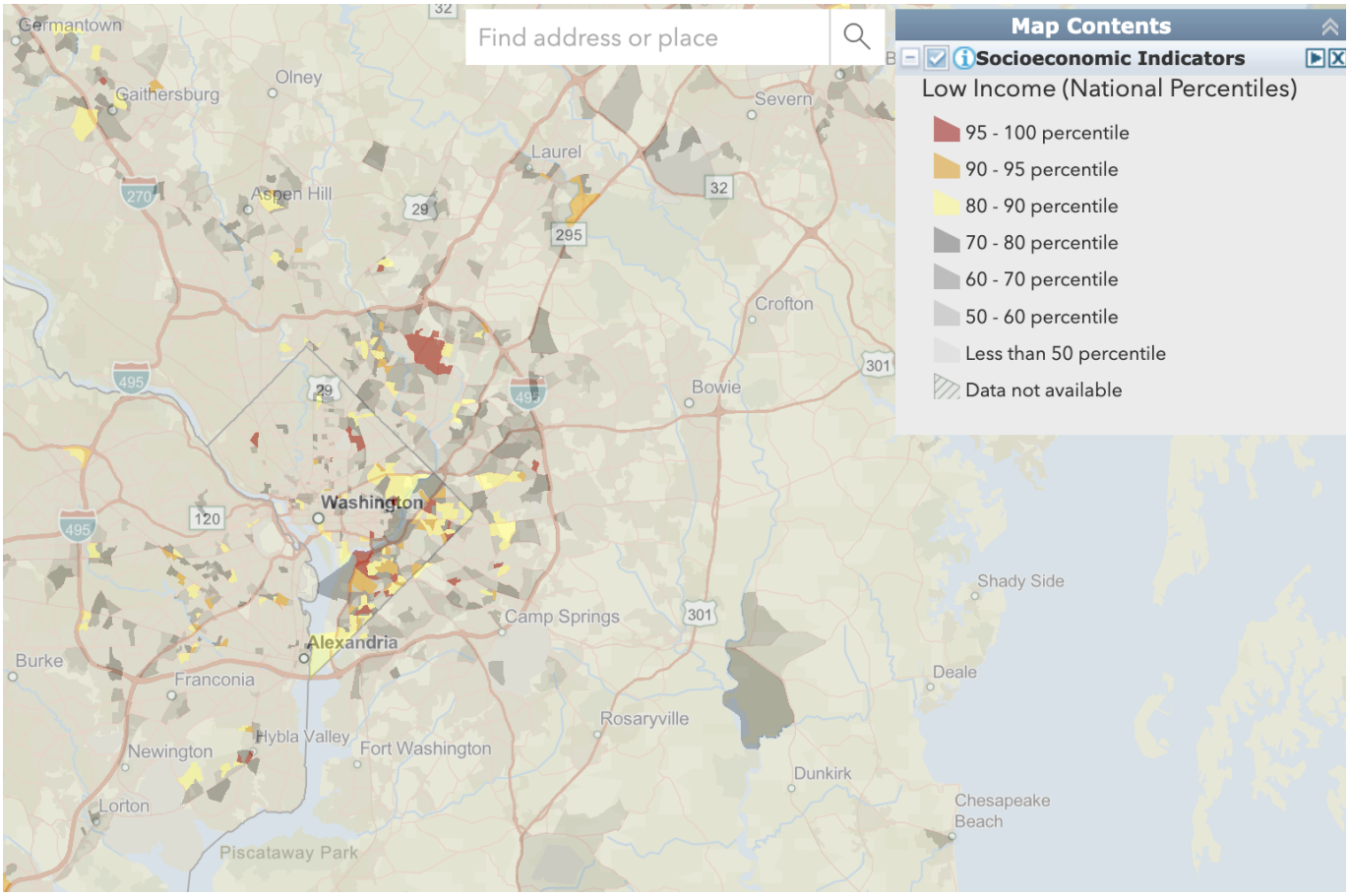
What barriers might eligible applicants face in applying for these grants?
It has been our experience that schools are under-resourced when it comes to applying for grant programs such as these. Applications should be limited to what is absolutely necessary. The application process that EPA put in place for the Clean School Bus program was an excellent model since it allowed numerous LEAs to apply for funds either independently or through a partner company. We encourage this fund to be set up similarly.

What specific approaches do you recommend to promote the successful award of these grants to low income and disadvantaged communities most in need of such support?
It is vital that EPA chooses a method that drills down more than what was used in the Clean School Bus program (namely looking at county aggregated statistics). For one, school buildings are less fungible than buses so it is much clearer what communities and student bodies will be directly benefited by emissions-free solutions. We would suggest examining the location at a census tract level rather than at the county level, as was done for the Clean School Bus program. This ensures that compact communities that face a disproportionate burden are not averaged away due to being in a county with pockets of wealth. For a data source, we suggest that EPA rely on their EJScreen tool as the basis for determining high priority locations since it is an easy to use tool designed to highlight disadvantaged communities.

Using our county as an example, Prince George's County, Maryland was not considered a "prioritized" county under the Clean School Bus Program. However, as you can see in the following map based on the EJScreen tool, many census tracts inside of the Washington, DC Beltway (I-495) have high percentiles in terms of low income as one indicator, but under a county-based metric, these disadvantaged communities wouldn't receive air quality benefits, given that many parts of the county do

[1] https://pgcps.org/climate and https://drive.google.com/file/d/1eS5YuvflbLyDsnw5QWwqITltKBeEjx28/view

not have the same experience. A more granular approach to determining high-priority applications is needed.



What energy efficiency/greenhouse gas emission reduction technologies or approaches do you think would be the most successful in school buildings?
Concerning HVAC systems, priority needs to be given to Ground Source Heat Pumps (GHSP) and secondarily to Air Source Heat Pumps (ASHP). PGCPS provides a unique example as to why GHSPs are the way of the future. PGCPS has entered into an innovative Public-Private Partnership to construct six new schools. One of the features of the contracts is that the company building the schools must retrofit the schools to meet the latest energy codes in 15 years. Due to this long-term thinking that is being placed into the budget constraints, GHSPs make the most economic sense for five of the six buildings (one had challenges for installation and is using an ASHP and efficient natural gas boilers). However, most school construction is financed solely looking at upfront costs and GHSPs don't pencil out in light of that. To help LEAs make better long-term financial decisions, benefit the health of the students, and reduce greenhouse gas emissions, GHSPs and AHSPs must get priority for HVAC systems.

Concerning cooking, induction cooking needs to be given high priority. Numerous commercial cooking operations are moving in this direction and schools must too. They are safer to operate and reduce pollution from indoor air pollutants, namely oxides of nitrogen, which are created from burning of natural gas, and benzene and methane, which come from leaks in natural gas pipes that supply conventional gas cooking equipment. Also this type of equipment should be open to both installation in specific schools and in commissary style operations.

Sensors that allow for more comprehensive monitoring of energy use in buildings that can distinguish between electricity use in different applications to allow for better troubleshooting of energy wasting systems would also be a beneficial technology to fund.

What technical assistance, guidance and other non-financial support is most needed to help schools in low-income and disadvantaged communities implement effective and sustainable IAQ and energy efficiency programs?
While working with PGCPS, we have learned that technical assistance is needed in terms of accessing energy data. Some utilities prefer to aggregate data across all of the buildings owned by a large organization such as an LEA and requirements that support utilities disaggregating that data so LEAs and other organizations that manage building energy usage can more properly evaluate use in individual buildings in portfolio manager.

Another point of assistance is to help with revised operational and capital cost budgeting. Switching to GSHPs in particular comes with major maintenance costs in the 15 year time horizon, whereas conventional fossil fuel boilers have a longer 30 or more year lifetime. Additionally, the higher upfront cost of installing such systems comes with a long-term operations costs benefit in terms of reduced fossil fuel expenditures. While in aggregate this is great, but the upfront costs are in capital budgets and the savings are in operational budgets leading to a mismatch in fund allocations. Guidance for LEAs to rely on for new budgeting approaches to use inlight of the changing technology will be quite useful.

Summary
We are very excited to see communities around the nation benefit from better air quality in education facilities and reduced greenhouse gas emissions from education for future generations. This grant program will be an excellent way for school systems to show leadership in tackling climate change and give future generations hope.

Sincerely,

Joseph Jakuta
Lead Volunteer
Climate Parents of Prince George's