



SCHOOL OF ENGINEERING

Civil and Environmental Engineering

March 29, 2024

Mr. Marc Draisen
Executive Director
Metropolitan Area Planning Council
60 Temple Place
Boston, MA 02111

Dear Mr. Draisen,

I write to express my strong support for the Climate Pollution Reduction Grant (CPRG) Implementation Grant application submitted by the Metropolitan Area Planning Council (MAPC) in partnership with the Boston, Chelsea, and Lowell Housing Authorities. The Greater Boston Affordable Housing Decarbonization Accelerator (AHDA) proposed by this coalition application supports key pathways for accelerating building decarbonization and serving environmental justice communities to meet the Commonwealth's 2050 climate goals.

Decarbonizing existing buildings is critical to achieving Massachusetts's greenhouse gas (GHG) reduction targets. While using net zero and Passive House standards is more common in new affordable multifamily construction projects, most residential buildings that will exist in 2050 are already constructed. This includes hundreds of thousands of units of affordable housing, which are among the most inefficient and carbon-emitting buildings in the Commonwealth and house populations least able to afford or make retrofits. Numerous studies conducted by the Commonwealth's agencies have identified needs for funding, resources, and technical assistance to help owners of affordable housing, particularly Public Housing Authorities, address these challenges and ensure that low-income and disadvantaged populations are not left behind in the clean energy transformation. Furthermore, decarbonization retrofits, in conjunction with removal of gas cooking equipment and improved ventilation, can improve indoor air quality and provide substantial health benefits to occupants.

Tufts University is excited to be a partner in implementing the AHDA. In the past 10 years we have successfully completed two HUD-funded and one NIH-funded study of indoor air quality in low-income and affordable housing in the Boston area. The buildings studied were all multi-family buildings ranging in age from very recently constructed (<2 years) to more than 70 years old. Most of these buildings were located near highways and major roadways where outdoor air quality was generally poor. Our goal was to better understand occupant behaviors that impacted indoor air quality, particularly indoor exposures to traffic-related air pollutants. For this work, we used both particulate- and gas-phase monitors in >100 units in 12 buildings, and we retrofitted the monitors to provide noise cancellation and to otherwise minimize impacts on residents. By running our monitors at 1-60-second time resolution, we were able to collect highly detailed and rich datasets. We then developed algorithms to efficiently process the data and generate

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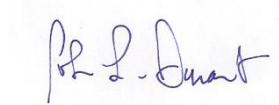
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quality assurance measures demonstrating accuracy, precision, comparability and completeness. Tufts is excited to bring the same determination and enthusiasm to the data collection effort proposed herein by MAPC.

As a Regional Planning Agency (RPA), MAPC is uniquely situated to lead many aspects of this proposal including overseeing the technical assistance program, development of collective and streamlined procurement pathways, and facilitation of the regional community of practice. The agency has partnered with these municipalities and their housing authorities in the past to accomplish programs such as installing affordable and reliable high-speed internet for residents in existing housing authority complexes. MAPC administers technical assistance and grant awards through its Technical Assistance Program and Accelerating Climate Resilience grant program and regularly facilitates regional dialogues around key climate issues. Further, the agency's collective procurement work has streamlined the competitive procurement process cities and towns need to undertake to purchase clean and energy efficient products and services.

The regionalized approach of the AHDA will support stakeholders in affordable housing across the Greater Boston region in developing and implementing plans for reducing GHG emissions and other harmful air pollutants in the buildings and populations where investment is most critically needed. In closing, we wish to express our support for and commitment to working with MAPC's Greater Boston Affordable Housing Decarbonization Accelerator and ask that the review committee give their application full and fair consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "John L. Durant".

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