

Dr. Steve Gallon III, Vice Chair

SUBJECT: HVAC SYSTEM UPDATE AND REPLACEMENT PLAN

COMMITTEE: FACILITIES & CONSTRUCTION

LINK TO STRATEGIC

PLAN: SAFE, HEALTHY, & SUPPORTIVE LEARNING ENVIRONMENT

The School Board of Miami-Dade County is responsible for the operation, control, and supervision of all public schools within Miami-Dade County, and is committed to the adoption and implementation of policies and practices, as well as provisions that ensure the safety of students, employees, and all stakeholders that enter its facilities. In fact, Florida Statute 1001.42 and School Board Policy 7410, *Maintenance*, address the Board's authority, duty, and responsibility to “*provide adequately for the proper maintenance and upkeep of school plants, so that students may attend school without sanitary or physical hazards...*” and to “*conduct a continuous program of inspection, maintenance, and rehabilitation for the preservation of all school buildings and equipment.*” These are statutory and policy driven duties and obligations of the School Board. The Superintendent is charged with its program development, implementation, and monitoring.

M-DCPS has demonstrated its commitment to new school construction and facility upgrades, as well as the enhancement of technology through its General Obligation Bond (GOB) and Capital Improvement Plans. However, over the past several years, mounting challenges with HVAC systems, especially in older school buildings and district facilities, have increased and continue to have an adverse impact on teaching and learning, and the overall working environment.

The onset of the COVID-19 pandemic has increased even more attention and focus on indoor air quality and its impact on the teaching and learning environment. The Centers for Disease Control and Prevention provided recommendations and indicated that improving ventilation is crucial to minimizing the spread of COVID-19 indoors. The focus on ventilation has come as scientists generally believe COVID-19 primarily spreads through the air, particularly indoors where stagnant air allows particles from an infected person's breath or sneezes to linger. In addition, a spate of recent research has linked air conditioning, air filters, and other building improvements to gains in student learning. Thus, the stakes of improving the air quality through HVAC systems in school buildings in M-DCPS and across the nation are higher than ever.

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Despite previous investments and the herculean efforts of district maintenance staff, M-DCPS continues to face tremendous challenges with HVAC systems in schools, offices, and buildings throughout the district. Such challenges are acute and exacerbated in older schools and buildings. Such conditions are even more pervasive throughout the year due to South Florida's year-round heat and humidity. Also, some systems may have greatly exceeded their lifespan and require frequent, costly repairs. Significant costs of repair and replacement of HVAC systems have often impeded the development of a specific, targeted plan for the procurement of HVAC systems in M-DCPS. The infusion of unprecedented federal dollars to address the safety, health, and welfare of students and employees in schools and includes provisions for such purchases, better positions M-DCPS to plan, implement, and deliver new systems in older schools and buildings.

The recent opening of schools has once again revealed the significant challenges the district faces with ensuring that HVAC systems in its schools, offices, and buildings are effectively operating. Several schools and classrooms throughout the district have reported breakdowns and lingering experiences with non-operating systems---requiring students and employees to deal with often uncomfortable, sometimes unbearable conditions. Again, with the threat of COVID-19 looming through the air and thriving in poorly ventilated environments, addressing the district's HVAC systems and challenges has not only become an issue of discomfort, but potentially an issue of health and safety-to-life.

Thus, this item seeks to direct the Superintendent to conduct an audit of all HVAC systems and related equipment (i.e., chillers) for all schools; collect, analyze, and provide DCRT and/or maintenance work order repair data for HVAC repair issues in schools and offices from July 1, 2019 to September 3, 2021; identify and provide a list of schools and offices HVAC systems and related equipment over 15 years old; provide the list of schools by School Board Member voting district and percent of students enrolled in said schools that are on Free and Reduced Lunch; develop and present a plan for the replacement and purchase of new HVAC systems and related equipment (i.e. chillers) that exceed 15 years and/or where there have been persistently identified problems; identify specific timeline and funding source for such replacement, where needed or recommended; and present findings, inclusive of plans for replacement, where required, needed, or recommended, at the Facilities and Construction Committee Meeting of November 10, 2021.

This item has been reviewed and approved by the School Board Attorney as to form and legal sufficiency.

**ACTION PROPOSED BY
DR. STEVE GALLON III:**

That The School Board of Miami-Dade County, Florida, direct the Superintendent to:

1. conduct an audit of all HVAC systems and related equipment (i.e., chillers) for all schools;
2. collect, analyze, and provide DCRT and/or maintenance work order repair data for HVAC repair issues in schools and offices from July 1, 2019 September 3, 2021;

3. identify and provide a list of schools and offices HVAC systems and related equipment over 15 years old;
4. provide the list of schools by School Board Member voting district and percent of students enrolled in said schools that are on Free and Reduced Lunch;
5. present a plan for the replacement and purchase of new HVAC systems and related equipment (i.e., chillers) that exceed 15 years and/or where there have been persistently identified problems;
6. identify specific timeline and funding source for such replacement, where needed or recommended; and
7. present findings, inclusive of plans for replacement, where required, needed, or recommended, at the Facilities and Construction Committee Meeting of November 10, 2021.