Office of School Board Members September 9, 2020
Board Meeting of September 9, 2020

Ms. Maria Teresa Rojas, Board Member

SUBJECT: **IMPACT OF RECENT CYBER SECURITY ATTACKS ON MIAMI-DADE COUNTY PUBLIC SCHOOLS (M-DCPS)**

COMMITTEE: **FISCAL ACCOUNTABILITY & GOVERNMENT RELATIONS**

LINK TO STRATEGIC BLUEPRINT: **SAFE, HEALTHY AND SUPPORTIVE LEARNING ENVIRONMENT**

School Board Members have previously addressed the issue of cyber security and have been quite concerned throughout the years. At the Board meeting of July 25, 2018, Board Member Maria Teresa Rojas proffered agenda item H-9, co-sponsored by Board Member Susie Castillo, titled CYBER SECURITY IN MIAMI-DADE COUNTY PUBLIC SCHOOLS. The staff follow-up provided some very interesting facts that now raise even more questions. For example, during the 2017-2018 school year:

- 48 major Distributed Denial of Service attacks (DDoS) were mitigated; these attacks are designed to disrupt the network environment.
- 18 million hostile attempts, including attacks targeting web applications and data, were blocked by the District's Intrusion Prevention System.

The staff follow-up further stated that "New measures and technical solutions are continuously explored and evaluated to significantly improve our security profile. The following are currently under consideration:

- Future isolation of networked systems to better prevent unauthorized access to data systems;
- Enhanced email monitoring to further control the flow of threat messages targeting District users;
- Additional strategic placement of Intrusion Prevention System devices (special hardware that detects network-related threats); and
- The use of multi-factor authentication to further control accessibility to sensitive resources."

This information was provided to the Board for 2017-2018, yet just recently a 16-year old student at one of our schools was allegedly able to successfully disrupt the network environment in Miami-Dade County Public Schools. What went wrong, what happened, why didn't the system pick this up as it had done before?

It also important to be pointed out that the issue of cyber-security has been discussed extensively at the Audit and Budget Advisory Committee (ABAC) on September 18, 2018, July 16, 2019, May 12, 2020 (virtual), and July 21, 2020 (virtual). Furthermore, the Network Security Testing Services project (PEN) was included in response to H-9 in the 2019-2020 Audit Plan and because of concerns raised by several ABAC members regarding emerging global cyber security issues that were brought to light during some of the meeting discussions. The firm RSM US LLP was selected to perform this test. However, the detailed report is exempt by Florida Statutes from public access or disclosure due to the confidentiality of the subject matter. As it was discussed at ABAC, the findings will be discussed with the School Board at an Executive Session once we are able to meet face-to-face.

Good Cause
H-17

The citizens of Miami-Dade County deserve the very best and transparent information that we as a School Board can present to them. People are skeptical about all the information that has been related about the cyber security attacks. Not only the local news media has expressed different points of view, but the national media has inquired about how a 16-year old high school junior was allegedly able to penetrate and disrupt the fourth largest school district in the nation. It was reported at the time that this young man apparently launched eight attempts to disrupt the system and it was reported that a total of 12 attacks to the system occurred. It was also stated that foreign actors may have been involved including Russia, China, Ukraine and Iraq. First it was CISCO, then COMCAST, then a cyber-attack. COMCAST provided a statement about the network disruptions; however, COMCAST's statement did not say a word about cyber security attacks.

Therefore, this agenda item seeks to direct the Superintendent of Schools to provide the Board with an updated review of current network security practices; a complete and accountable response about the recent cyber-attacks, including responsible vendors and actions taken or to be taken; review of current and future staffing needs in Information Technology Services (ITS), review and needs of appropriate equipment currently housed at ITS supporting network security systems; M-DCPS financial investment in ITS for the past five years; updated ITS recovery plan; and provide a report to the Board by October 21, 2020.

It should be noted that specific information regarding the District's security solutions are not to be made public. The nature of the sensitivity of these security topics should not be discussed in a public forum in order to maintain the integrity of the system and not weaken the District's defenses by exposing information that can be used to subsequently exploit our network environment.

Good cause exists to vary from the established agenda because the recent cyber security issues experienced in this school district arose after the School Board agenda was published, and these are matters of great importance to our students, parents, teachers, and the entire Miami-Dade County Public Schools community.

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

ACTION PROPOSED BY
MS. MARIA TERESA ROJAS:

That The School Board of Miami-Dade County, Florida, direct the Superintendent of Schools to provide the Board with an updated review of current network security practices; a complete and accountable response about the recent cyber-attacks, including responsible vendors and actions taken or to be taken; review of current and future staffing needs in Information Technology Services (ITS), review and needs of appropriate equipment currently housed at ITS supporting network security systems; M-DCPS financial investment in ITS for the past five years; updated ITS recovery plan; and provide a report to the Board by October 21, 2020.