TO: Board of Education

FROM: Jerry Crisci, Director of Technology

RE: Technology Infrastructure Upgrades

DATE: May 5, 2014

Responses to Questions

1. *Please provide a detailed description of the entire scope of the proposed project.*
   The project will upgrade the District's core technology infrastructure by replacing network switches and components in every building. We also need to install network cabling in the Middle School and High School to accommodate the next generation of wireless access points. These devices will be installed in every classroom and in common areas. (The actual purchase of the access points will be funded through the annual hardware lease/purchase plan.) Funds will also be used to upgrade our server backup power infrastructure and upgrade our fiber optic backbone within each building, which is necessary for compatibility with the new network switch infrastructure. As we have seen, backup systems are critical to the preservation of information and ongoing District operations in emergency situations where power is lost to the buildings.

2. *Why is the project needed in your building? Please include logistical, enrollment, infrastructure, curricular, security, and other current concerns that it will address.*
   We would like to continue a funding model that began years ago, when the community funded technology infrastructure needs through long term bonds and classroom technology through a four-year lease/purchase program. These infrastructure improvements are critical to the operation of our buildings.   For example, network switches are over twelve years old, and there will be increased need for additional bandwidth with the growing use of technology, particularly individual portable devices. The items that are proposed for inclusion in the bond are long-lived and not as susceptible to obsolescence as individual computers and other peripherals.

3. *What are the implications of the project for emerging instructional methods and 21st century learning? Please describe some specific instructional plans for the space.*
   The use of technology is now embedded in nearly everything we do, starting with the curriculum at all levels. Because technology increasingly provides the foundation of our instructional program, the District depends on this infrastructure to support the current and future learning experiences for students; infrastructure failure can mean the loss of instructional time.   Also, critical administrative functions that range from the maintenance of student records to building security depend on having a reliable and robust technology infrastructure.

4. *Please describe the features of the space that will provide flexibility as new instructional methods are introduced.*

N/A

5. *Does the project provide new opportunities for collaborative and interdisciplinary instruction? Please describe.*
   N/A

6. *How does the project contribute to the sense of community and connectedness in the building?*
   N/A

7. *Does the project scope address specialized instructional programs such as the arts, physical education, special education services, etc.   Please describe the specific instructional uses for the new space.*
   N/A

8. *Does the project incorporate the use of technology as an integrated feature of the space?*
   Infrastructure upgrades are required to maintain reliable technology access for students and staff. Approximately two years ago, we replaced our core switches, the main devices that route network traffic in each building. There are dozens of other switches that control traffic in each section of the building, and these components have reached their end of life and need to be replaced.

9. *Will the project reflect environmental and sustainability improvements? Connections to the outdoors?*
   "N/A

10. *If the project doesn't get the green light, how will the problems identified above be resolved?*
    Upgrading the switches for the District's technology infrastructure is not optional; it is crucial to the continued successful functioning of the District. If the project is not approved, additional funds will be needed in the annual budget in the next several years to replace infrastructure components over time. If the additional funds are not available, lease/purchase funds will have to be used, which will greatly limit our ability to continue to provide technology for the instructional program. In addition, we will experience unplanned technology service interruptions as equipment continues to age. Because technology increasingly provides the foundation of our instructional program, and because our administrative functions rely on technology infrastructure, these interruptions will disrupt key operations in our District.