NYS Smart Schools Bond Act

April 2019 Overview of Phase III Network Storage Project

History of New York Smart Schools Bond Act

◇ 2014 – Governor Cuomo called for $2 Billion technology investment in schools

◇ November 2014 – Public approval of the Smart Schools Bond Act

◇ 2015 – Development of Smart Schools Bond Act guidelines

◇ April 2016 – Smart Schools Review Board was assembled

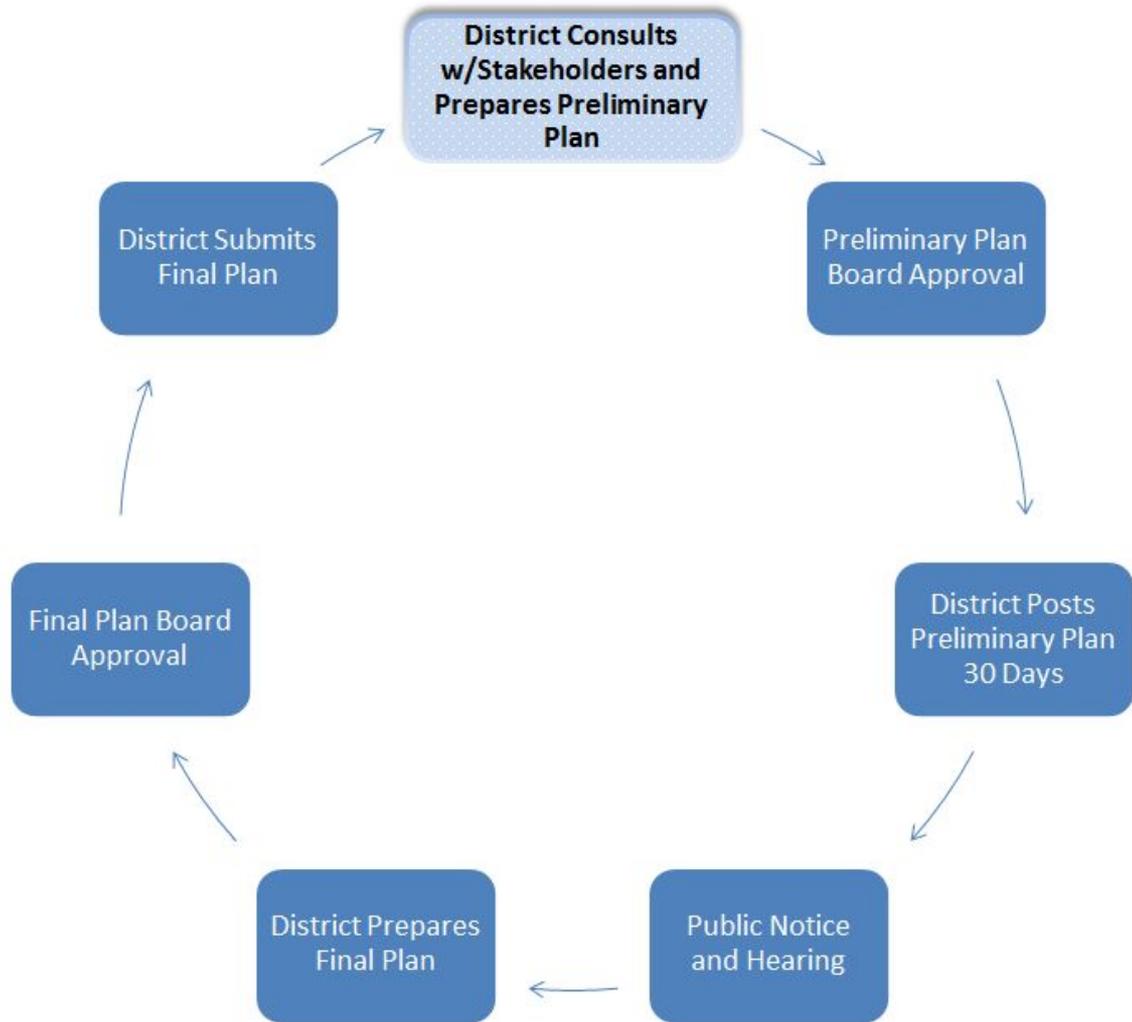◇ June 2016 – First group of Smart School Investment Plans were approved

Allowable Project Categories

Approved categories of expenditures include:

◇ School Connectivity
◇ Classroom Technology
◇ Pre-Kindergarten Classrooms
◇ High-Tech Security Features

District Consults w/Stakeholders and Prepares Preliminary Plan

Preliminary Plan Board Approval

District Posts Preliminary Plan 30 Days

Public Notice and Hearing

District Prepares Final Plan

Final Plan Board Approval

District Submits Final Plan

Smart School Investment Plan (SSIP) Timeline for Phase 3

✔ Submitted required technology survey

◇ November 2018 received NYSED approval

✔ Developed a draft SSIP for Network Storage Upgrade - April 2019

✔ Presented draft SSIP to BOE for discussion and comment - April 2019

✔ Advertised and held public hearing on the draft SSIP- April 2019

✔ Posted draft SSIP on the District website to provide the opportunity for community comment via the website & written correspondence - April and May 2019

Background Information

✔️ Used Federal eRate money and leveraged BOCES Aide to purchase a new Core Switch to be installed Summer 2019

✔️ OPCSD purchased 4 Dell PowerEdge R640 servers that will be used to to upgrade the district's VM Infrastructure - Summer 2019.

✔️ The new servers will:

- ❏ Update server environment to the newest version of VMWare
- ❏ Provide more memory and processing power to support the District's expanding virtual environment.

The VMware server cluster is currently supporting 40 virtual servers

Phase III Project Proposal

The proposed Phase III SSBA project supports the purchase of two Network Storage Arrays or Storage Area Networks (SAN)

◇ A storage area network (SAN) is a dedicated high-speed network that interconnects and presents shared pools of storage devices to multiple servers.

◇ A storage area network is a local area network (LAN) designed to handle large data transfers and bulk storage of digital information. A SAN typically supports data storage, retrieval and replication on business networks using high-end servers, multiple disk arrays and interconnect technology.

Rationale for Network Storage Project

✓ Update to a full SSD storage solution for better I/O performance which will increase server OS operation & database data transfer speeds

✓ Update usable capacity from 12TB to 30TB to allow for future growth

✓ Upgrades network to 10GB for better bandwidth performance

✓ Provide better integration with VMWare for a more simplistic management console

✓ Built-in controller redundancy for single point of failure prevention

✓ The original equipment will be repurposed to set up a DR site

Orchard Park Central Schools approved for $ 2,333,018

- Phase 1 - HS Chromebooks Rollout
  - Total Cost: $ 713,552
  - Complete
- Phase 2 - High Tech Security
  - Total Cost: $ 770,353
  - Awaiting approval from SSBA Committee
- Phase 3 - Network Storage Hardware
  - Total Cost: $121,000
  - Draft Proposal presented April 2019

TOTAL Remaining: $728,000

Questions?