Solvay Schools Technology Plan
and
Smart Schools Bond Act

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Uses for the SSBA

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Sub-Allocations</th>
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<tbody>
<tr>
<td>School Connectivity</td>
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<tr>
<td>Connectivity Projects for Communities</td>
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<tr>
<td>Classroom Technology</td>
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<tr>
<td>Pre-Kindergarten Classrooms</td>
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<tr>
<td>Replace Transportable Classrooms</td>
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<tr>
<td>High-Tech Security Features</td>
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<tr>
<td><strong>Totals</strong></td>
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## Current Network Configuration

<table>
<thead>
<tr>
<th>School</th>
<th>Wiring Closets</th>
<th>Switches</th>
<th>Wireless APs</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>SES</td>
<td>Three</td>
<td>5 (48-Port) 1GB, 10 Older Wireless APs, Cramped Space</td>
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<tr>
<td>SMS</td>
<td>Six</td>
<td>12 (24/48-Port) 1GB, 40 Wireless APs (Cloud Controlled)</td>
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<tr>
<td>SHS</td>
<td>Seven</td>
<td>14 48-Port 10GB, 8 (24/48-Port) 1GB, District’s Core, Phone &amp; Data Center, 27 Older Wireless APs</td>
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</table>
SMS Wireless Access Points
Current Asset Inventory

• 673 Windows Desktops
  • Classrooms, Offices, Labs

• 157 Laptops (Mac/PC)
  • Carts, Classrooms, Labs, Staff Assigned

• 638 Chromebooks
  • Carts, 6th Grade Classrooms, Staff Assigned

• 441 Apple iPads
  • Carts, Staff Assigned
6th Grade 1:1 Chromebook Pilot

- Robust Wi-Fi enables ease of access
- Having the Chromebooks right in the classroom saves time tracking down shared carts or getting a class to a computer lab etc.
- CNYRIC Bandwidth increased from 20Mbps -> 100Mbps
  - This has eliminated a lot of the buffering or slowdowns we have seen in previous years.
Infrastructure Upgrades Recommendations

- Would like to upgrade all remaining 1GB switches to 10GB switches across the network. This will future proof us for at least the next 5 years.

- Would need to upgrade the wireless at SES and SHS to match what the SMS currently runs. Meraki Wireless is a robust cloud-based controller-less solution that has been working great at the middle school for almost a year.

- Total cost to upgrade network switches and wireless ~ $200,000
1:1 Chromebook to Student Plan

- Phased in multiyear approach to bring students and staff up to speed.
- Leveraging Google Classroom
- Professional Development for staff
  - CNYRIC ITD and local trainers
- Prepare students for Computer Based Testing CBT (starting this Spring @ Elementary school)
International Society for Technology in Education (ISTE) Standards

1. Creativity and innovation
   • Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
     a. Apply existing knowledge to generate new ideas, products, or processes
     b. Create original works as a means of personal or group expression
     c. Use models and simulations to explore complex systems and issues
     d. Identify trends and forecast possibilities

2. Communication and collaboration
   Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
   a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
   b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
   c. Develop cultural understanding and global awareness by engaging with learners of other cultures
   d. Contribute to project teams to produce original works or solve problems
ISTE Standard For Students 3&4

3. Research and information fluency

• Students apply digital tools to gather, evaluate, and use information.
  a. Plan strategies to guide inquiry
  b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
  c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
  d. Process data and report results

4. Critical thinking, problem solving, and decision making

• Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
  a. Identify and define authentic problems and significant questions for investigation
  b. Plan and manage activities to develop a solution or complete a project
  c. Collect and analyze data to identify solutions and/or make informed decisions
  d. Use multiple processes and diverse perspectives to explore alternative solutions
5. Digital citizenship

- Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
  
  a. Advocate and practice safe, legal, and responsible use of information and technology
  
  b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
  
  c. Demonstrate personal responsibility for lifelong learning
  
  d. Exhibit leadership for digital citizenship

6. Technology operations and concepts

- Students demonstrate a sound understanding of technology concepts, systems, and operations.
  
  a. Understand and use technology systems
  
  b. Select and use applications effectively and productively
  
  c. Troubleshoot systems and applications
  
  d. Transfer current knowledge to learning of new technologies
## One-to-One Replacement Plan

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<th>School Year</th>
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<th>7</th>
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- **Purchase New**
- **Smart Schools Bond Money $1,132,000**
- **Local Funds**
Questions ??