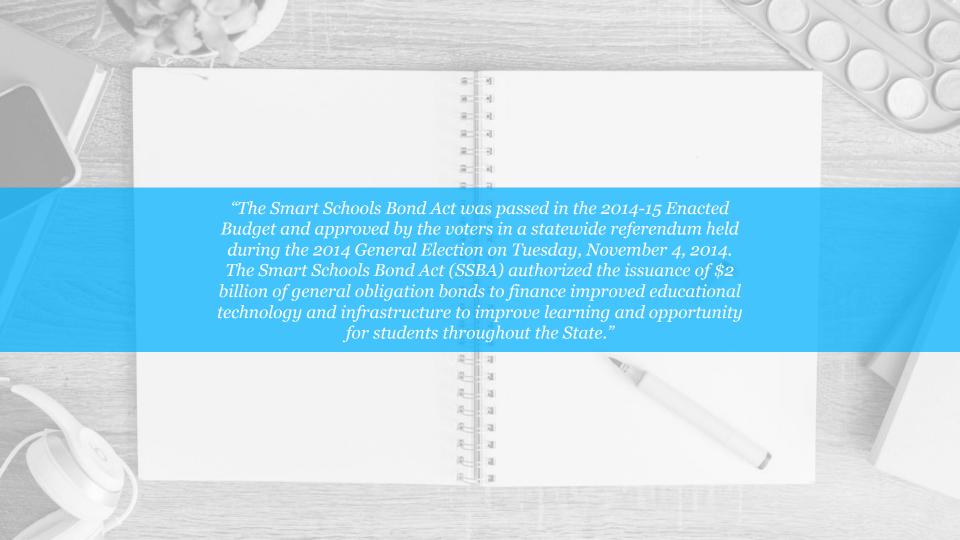


# Welcomel

#### **Scott Fisher**

Director of Technology Sag Harbor Schools









The purpose of the Smart Schools Bond Act is to improve learning and opportunity for public school students by funding capital projects to:

- Install high-speed broadband or wireless internet connectivity for schools and communities;
- → Acquire learning technology equipment or facilities, including but not limited to interactive whiteboards, computer servers, and desktop, laptop, and tablet computers;
- → Construct, enhance, and modernize educational facilities to accommodate pre-kindergarten programs and to provide instructional space to replace classroom trailers; and/or
- → Install high-tech security features in school buildings and on school campuses, including but not limited to video surveillance, emergency notification systems, and physical access controls.





## **Currently the district supports nearly 2000 WiFi Devices on our Network**

#### Instructional

Chromebooks

Laptops

Desktops

**Printers** 

**Tablets** 

Interactive Displays

SmartBoards

#### **Administrative**

Laptops

Desktops

**Tablets** 

**Mobile Phones** 

**Printers** 

Scanners

Copiers



#### **Speed & Coverage**

Current
Models:
Aruba 200 &
300 Series
Considered the
802.11AC standard



# **Upgraded Models:** Aruba AP-635

The 630 Series APs are designed to take advantage of the 6 GHz band, which translates into far greater speeds, wider channels for multi-gigabit traffic, and less interference.



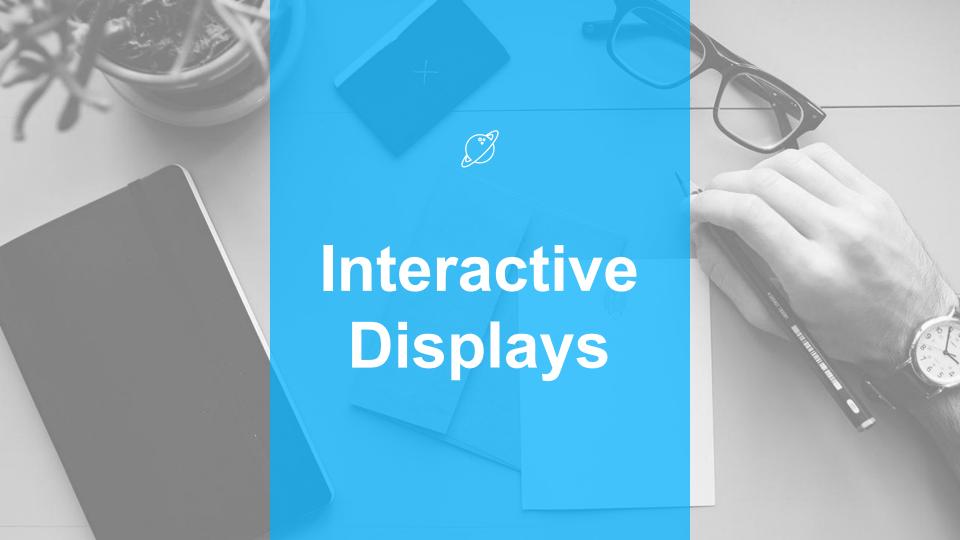


# Old Access Points Vs. New Access Points

The AP-635 is the new 802.11AX standard. These AP's have the new 6ghz radios on them so we will have some future proof as the new 6GHz clients become more available. The real improvement we will will see over our current clients will be better performance when a larger number of clients are connected to an AP. The current 200 series AP's will be good for 30-40 clients connected, while the 300 series will be good for 40-50 clients. The 600 series should be good for 60-80 clients with good performance based on the current 500 series analytics. The new AX standard improves the performance in the dense environments of schools over the older AC standard. In a school environment, we are not looking for max speeds but having enough bandwidth to support many clients at the same time.

#### **Old Access Points Vs. New Access Points**

		27774A) (1925/A) (19
	802.11ac	802.11ax
BANDS	5 GHz	2.4 GHz and 5 GHz
CHANNEL BANDWIDTH	20 MHz, 40 MHz, 80 MHz, 80+80 MHz & 160 MHz	20 MHz, 40 MHz, 80 MHz, 80+80 MHz & 160 MHz
FFT SIZES	64, 128, 256, 512	256, 512, 1024, 2048
SUBCARRIER SPACING	312.5 kHz	78.125 kHz
OFDM SYMBOL DURATION	3.2 us + 0.8/0.4 us CP	12.8 us + 0.8/1.6/3.2 us CP
HIGHEST MODULATION	256-QAM	1024-QAM
DATA RATES	433 Mbps (80 MHz, 1 SS)	600.4 Mbps (80 MHz, 1 SS)
	6933 Mbps (160 MHz, 8 SS)	9607.8 Mbps (160 MHz, 8 SS)











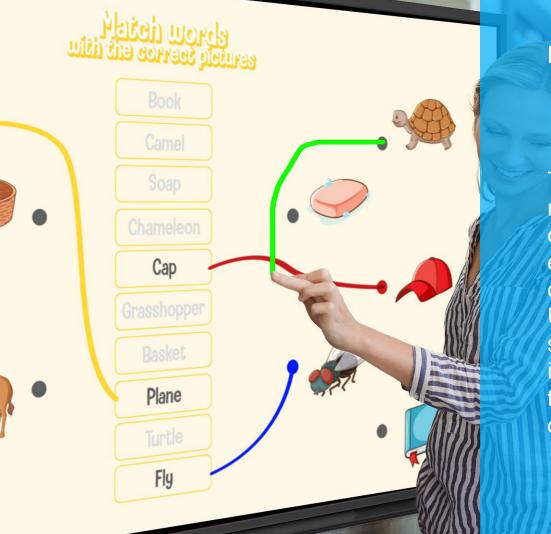
#### **Touch that Inspires & Protects**

Interactivity truly brings collaboration to life. The ability to combine analog writing with digital tools makes communication all the more effective. With interactivity at the core of these product's development, tools are integrated that do not only make touch a "nice to have" feature, but a "must have" feature for daily interactions...



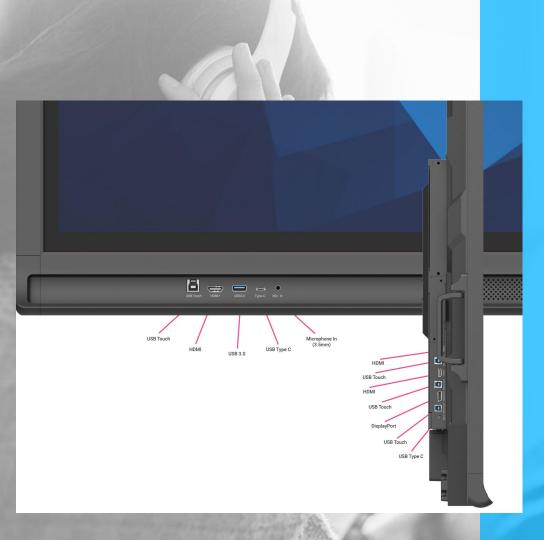
#### **Collaborative Software**

The latest innovation complements the strengths of the software. Better reach our students and collaborate with ease on software built for education. Content sharing, device management, and time saving is a priority.



#### Plug & Play USB-C

The mental checklist to grab the right cables, troubleshoot connectivity and hope everything else interacts well can be overwhelming. With plug & play USB-C, the entire setup process is streamlined to one cable and instant access. And it doesn't stop there! Audio, video, and 65 watts of power are transferred too.



#### **Superior Connection**

The diversity in connection ports provide great options for all types of devices, making the interactive display more accessible to all users. Ports located on the front and the back of the panel make it easy to use the panel in any mounting situation. For those devices that need wireless connection, a reliable Wi-Fi 6 module provides dedicated wireless connectivity.



#### **Estimated Project Costs**

ltem	# of Devices	Costs
R7J28A Aruba AP-635 Access Point, Related mounting materials,	102	\$86,398.544
Labor		
TRUTOUCH750 75" Ultra-HD LED \$2,799.00 \$27,990.00		
Multi-touch Display with 5	25	<b>604 450 00</b>
year warranty, Includes 1 Oktopus	25	\$84,450.00
software license.		
Standard flat wall mount		
is included for free.		

Total \$170,848.54

### Public Comment Period and Adoption of Final Smart Schools Bond Act Plan

- The Preliminary Plan was posted on the District's website for all stakeholders to view from October 18, 2022 to November 18, 2022. No public comments were received.
- After today's Public Hearing, the Board of Education may adopt the Final Plan and the Final Smart School Bond Act Plan will be posted on the District's website.
- The Plan will then be submitted to the Smart Schools Review Board. The Smart Schools Review Board shall review the plan to determine whether it meets the requirements of the Smart Schools Bond Act and demonstrates a sound plan to use the funds in a manner that advances the educational well-being of the district's students. Once the Smart Schools Review Board approves a plan, the district will be authorized to spend the funds. If the Board rejects a plan, the district shall have the opportunity to modify and resubmit the plan.



Any questions?

sfisher@sagharborschools.org



#### **CREDITS**

Special thanks to all the people who made and released these awesome resources for free:

→ Information from <a href="https://www.p12.nysed.gov/mgtserv/smart\_schools/">https://www.p12.nysed.gov/mgtserv/smart\_schools/</a>

https://newline-interactive.com/usa/products/qseries

https://www.arubanetworks.com/products/wireless/access-points/indoor-access-points/630-series/

- Presentation template by <u>SlidesCarnival</u>
- → Photographs by <u>Death to the Stock Photo</u> (<u>license</u>)