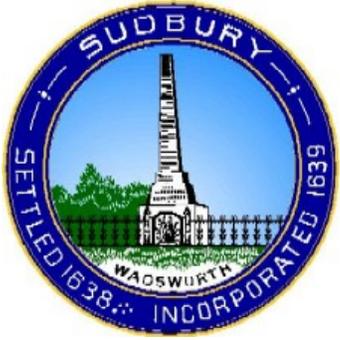


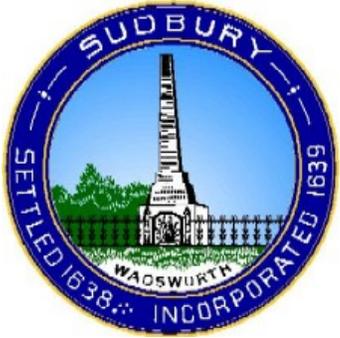
Project Overview

- FY 2015 Budget request - \$ 500K
- Category 1 justification presented by R. Gargeya 10/15/13
 - Bandwidth and connectivity that (finally) meet state standards for learning & administration
 - Scalable architecture for growth
- User requirements being gathered now for bidding
- Project includes replacing the existing infrastructure & adding wireless capabilities in all buildings to serve
 - 1700 students
 - 200 employees
 - 385,000 ft² of coverage
- Desired 'ready for test' date is 15 August 2014

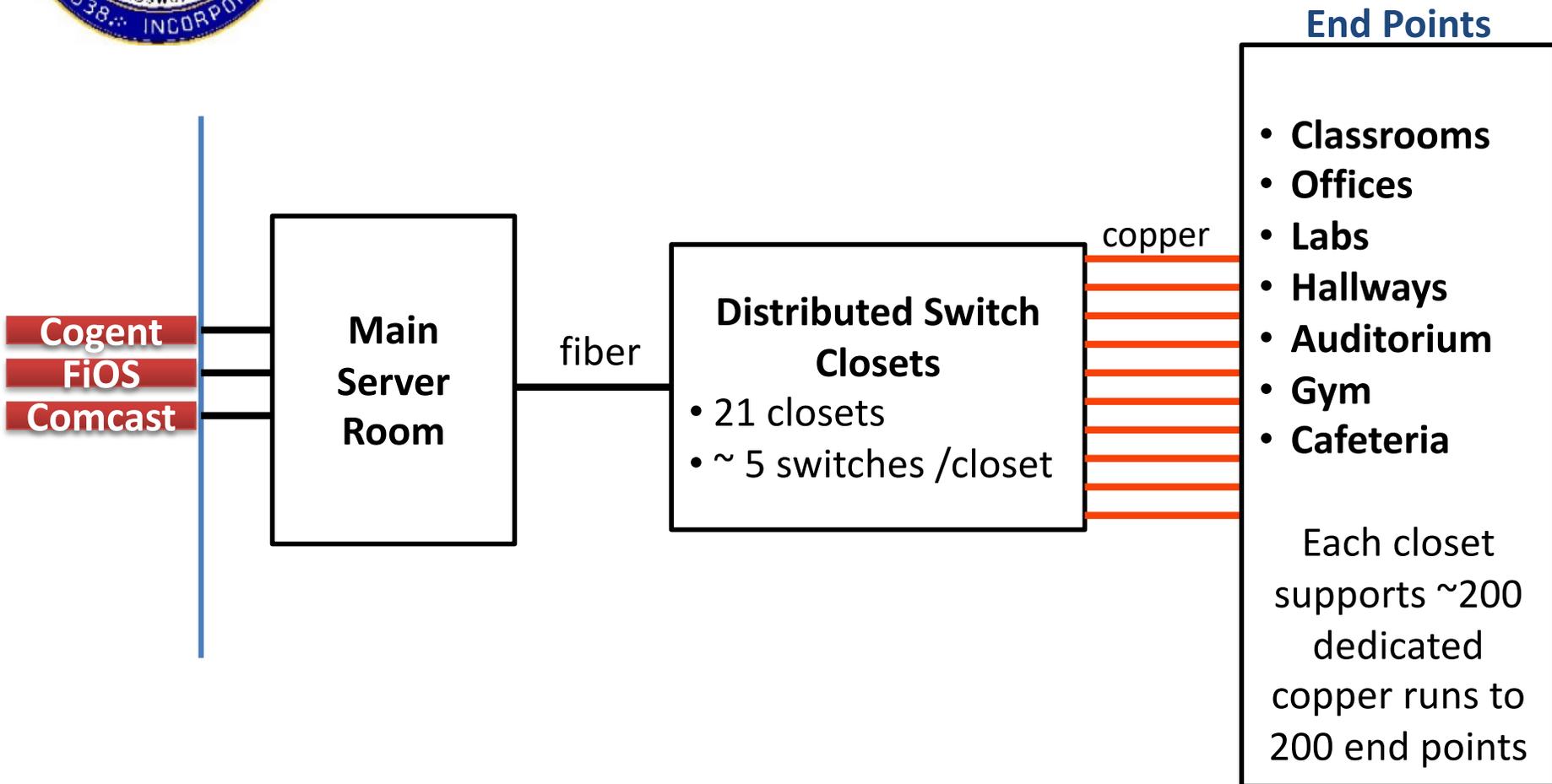


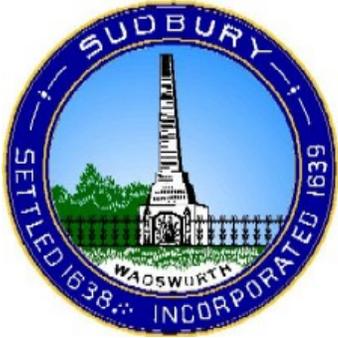
Importance of Digital Literacy

- Digital literacy is active in neighboring town schools, such as
 - Concord Carlisle
 - Burlington (MA model for digital literacy)
 - Acton Boxboro
 - Wayland
 - Maynard
- The age and capabilities of the LS infrastructure require a network renovation to be on par with other high schools

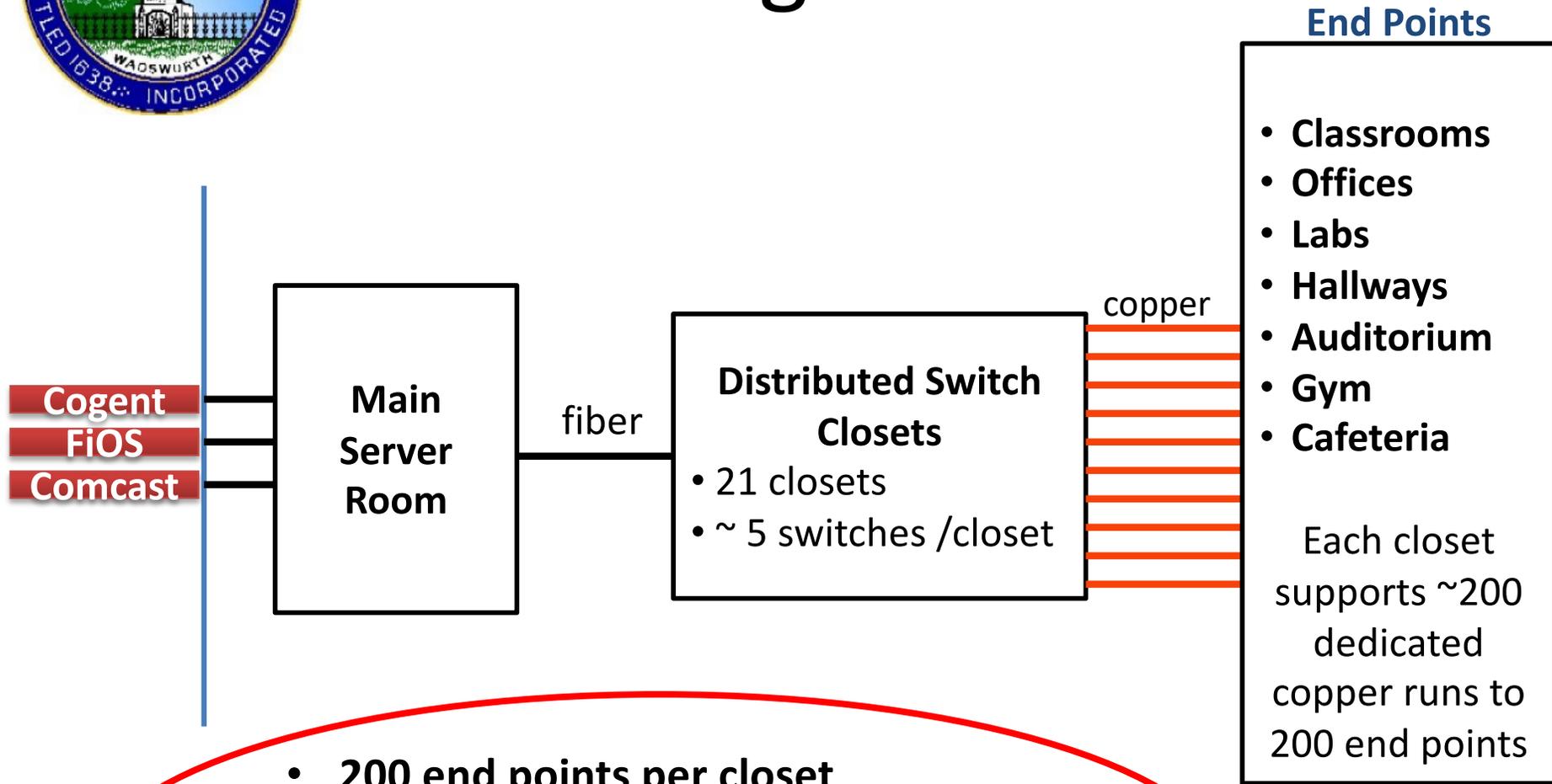


What Is The Infrastructure?

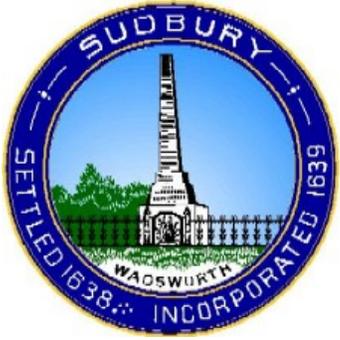




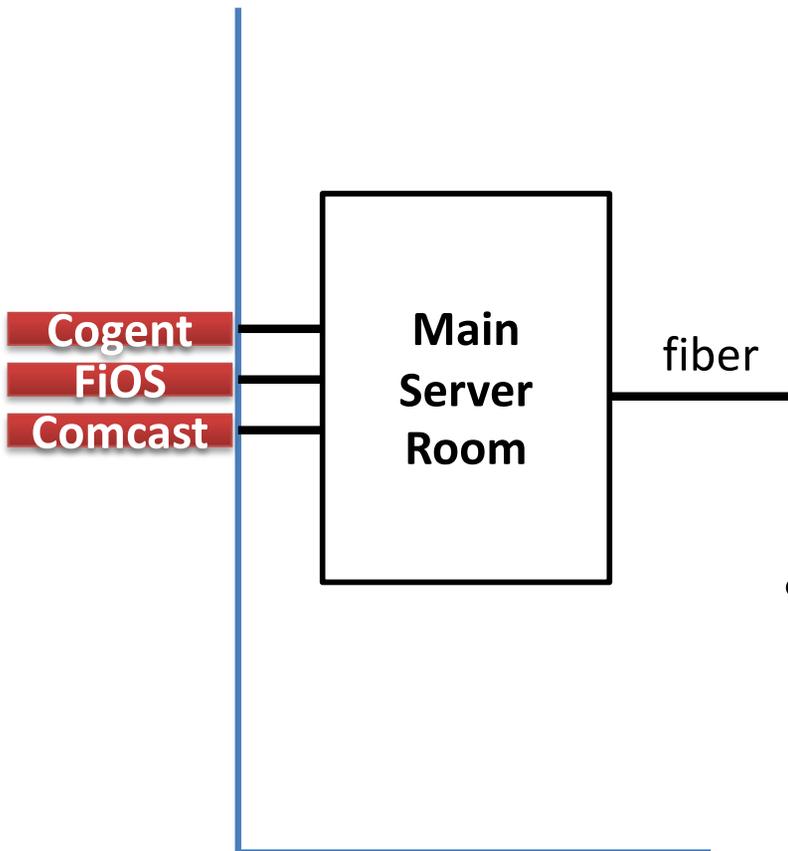
It's a Big Network!



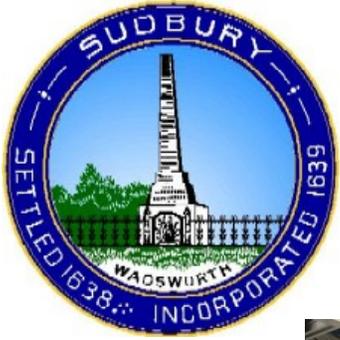
- 200 end points per closet
- 21 Closets
- **4,200 end points**
- > 150 switches, servers and routers



Main Server Room



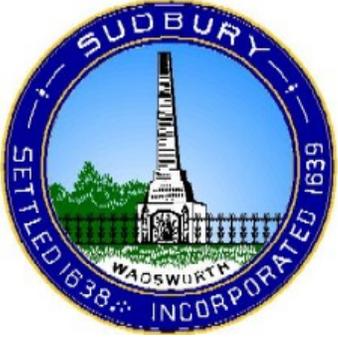
- Upgrades Required
 - Higher capacity switches
 - Higher capacity distribution fibers to support
 - More wireline users
 - More wireless users
 - More traffic per user
- What is reusable?
 - Closet & switch room space
 - Cable conduits



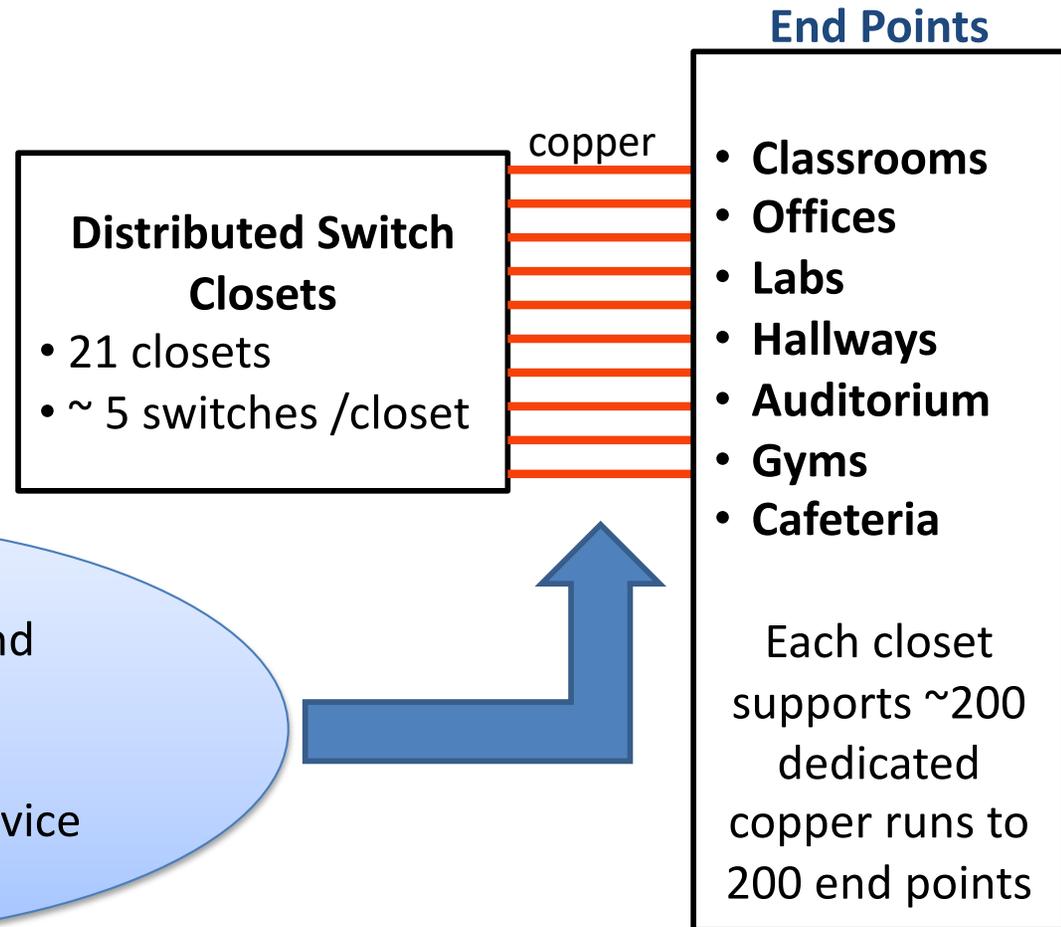
Switch Closets



- Switches in each closet manage end user network traffic
- Average # of switches per closet is 5
- Closets are connected to the main server room via fiber
- End user connections to the closet are a combination of wireline (Ethernet over Copper) and wireless
- Plenty of closet space for network component expansion



Distribution Network



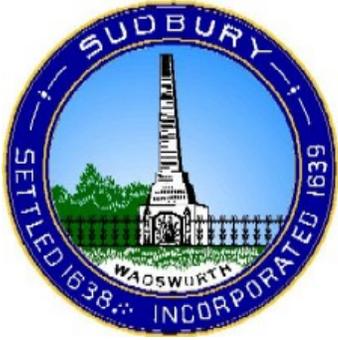
- Re-use copper runs to end points
- Add runs as required for wireline and wireless service



Project Milestones

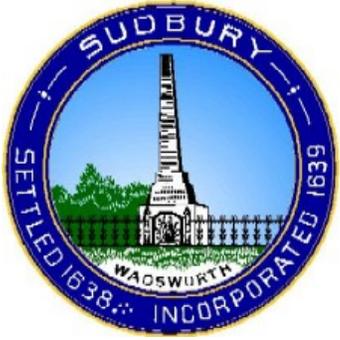
- *Glenn and Radha - can you help me with target dates...*

Activity	Completion Date
Municipal Funding Strategy in place	
Bid Documents Ready	
Town Meeting	
Proposals Received	
Award/Start	
Installation Complete	August 15, 2014
Acceptance Testing Complete (Simulated Traffic)	
Students Return (Live Traffic)	



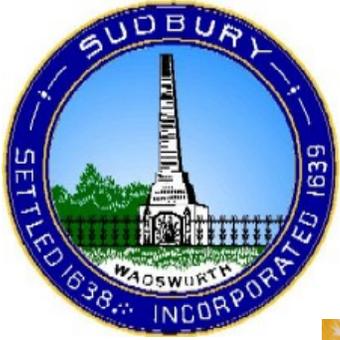
Project #2: Network Appliances

Project	Category	FY '15 Budget Request \$\$	Comment
LS Network Infrastructure	1	\$ 500K	Sudbury portions <ul style="list-style-type: none"> \$500K FY 15 \$20K/yr X 4 years (start 2016)
Servers, laptops, PC & desktop computers	2	\$120K	Network appliances to activate and manage the infrastructure
Fitness Center Equipment	3	\$ 50K	Total project \$ 130K to replace equipment over 5 years
Fine Arts - Music	4	\$20K	<ul style="list-style-type: none"> \$20K per year X 3 years Instrument mtce & replacement for orchestra, band and lessons
Fine Arts - Equipment	5	\$70K	Still and motion cameras, kilns and pottery wheels
AV Equipment	6	\$ 35K	Class room projectors, school-wide intercom
Lawn Mower	7	\$ 16.5K	ALREADY REPLACED



Overview

- An updated LS network can support a multitude of users, all doing different things on different types of devices
 - These “things” are require applications & services
 - Devices and users are staff and students, fixed and mobile
- To make the network support all this activity, it has to be told what to do (provisioned), watched and adjusted (managed)
- Funding is requested to purchase the network mgt tools, mobile computing carts and application servers to support the needs of the LS user community
- *Although listed as priority 2 project, it qualifies for priority 1 consideration*

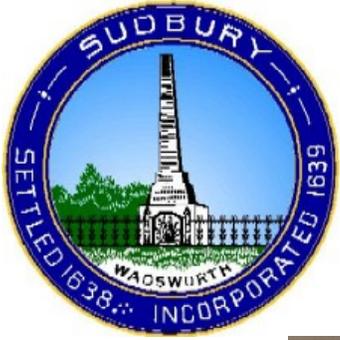


Computer Upgrades



Time to say good-bye.....

- 200 out of 625 still in service since 2002
- Hardware is manufacturer discontinued
- Software programs are limited
- Only way to offset hardware attrition is through replacements
- Part of the requested funding includes replacement computers for labs, classrooms and offices



Replacement Computers



- Computers purchased in 2013 **are X %** of the price of computers purchased in 2002
- Much higher level of supported programs for learning & administration
- Vendor agreements available for maintenance and support



Carts

