MINUTES CAPITAL OUTLAY COMMITTEE

November 15, 2018

The meeting of the Capital Outlay Committee was called to order in the Town Hearing Room at Sharon Community Center at 7:00 pm by Chair Paul Linehan.

<u>Members Present</u>		
Chair:	Paul Linehan	
Board of Selectmen:	William Heiti	in, Walter Roach, Jr.
Finance Committee:	Gordon Glads	stone, Anja Bernier
School Committee:	Katie Currul-	Dykeman, Mena Mesiha, Heather Zelevinsky (Alt.)
Planning Board:	Rob Maidman	n, David Blaszkowsky
Finance Director:	Krishan Gupt	a
<u>Members Absent</u>		
Finance Committee:	Ted Philips (A	Alt.)
Board of Selectmen:	Emily Smith-	Lee (Alt.)
Planning Board:	Kai Richard Y	Yu (Alt.)
Town Administrator:	Fred Turking	ton, Jr.
<u>Others Present</u>		
School Superintendent:		Dr. Victoria Greer
Assistant Superintendent fo	r Information	
Systems & Administration:		Dr. John Marcus
Director of Maintenance &	Operations:	Kenneth Wertz
Director of Business Operat	tions and	
Human Resources:		Nerlande Mintor

Administrative Items

Chair Linehan asked the Capital Outlay Committee members to introduce themselves.

School Department Requests

Dr. Greer, Dr. Marcus and Mr. Wertz

Dr. Greer explained that the School's Capital Outlay request has been submitted for the Board's review. She noted that they have included everything that they know that they need to do now. However, there one high-cost item included for which they are seeking guidance. They're flexible if it needs to be pushed back.

FY'19 Capital Review

Mr. Wertz provided an overview of the FY'19 projects and their status.

Acoustics

The plan was to retrofit one grade per year with acoustic sound fields. They were able to leverage better financing and could do more with less than requested last year so they are a little ahead of their five year cycle.

District Wide Furniture

Furniture continues to be purchased. It will be discussed later but schools are transitioning away from hard backed chairs as it is no longer appropriate for students in today's environment. Sensory input, mobility and flexibility for team teaching are now required. As furniture ages and is replaced, it will be upgraded with new style furniture.

Code Issues - Cottage Street and High School Doors

Cottage Street – Hallway doors on upper and lower level were not on magnetic hold opens which created backups for the students. The doors were able to be retrofit with the hold opens.

The doors are circa 1960 and not tied into the fire alarm system. They are also asbestos filled which makes retrofitting the doors very difficult. This is written up by the Building Inspector and Deputy Fire Chief each year as non-conforming. Replacement of three sets of doors was anticipated however, there was a solution worked out with Joe Kent, Building Inspector who was able to come up with a work around in order to get to a satisfactory solution without retrofitting. Mr. Wertz expects that \$20,000 will be turned back to the town from this project.

East Elementary Lighting

The design is roughly ³/₄ complete. An engineering firm was hired to help the department navigate the "Green Community" grant program. The lighting upgrade will take place in this fiscal year.

Heights Elementary Library A/C

The air conditioning has been installed and is up and running. Construction is booming in Boston which has made it difficult to get skilled, qualified contractors on-site to complete work.

Heights Parking Lot Design

The design bid will be out shortly. It was important to wait until school was back in session before meetings with the architect/civil engineer began.

Special Education Vans

Three vans were purchased in Fiscal Year 2019. There are another three vans in this capital request. Mr. Linehan asked about what happens with the old vehicles and how many vans are in the fleet. Mr. Wertz explained that there are 34 vans in the fleet and at the time they are replaced, they are barely serviceable so they are disposed of as surplus. Mr. Roach asked about how many of the vans are brought home and whether it was cost effective to keep them in town. Mr. Wertz explained that for those drivers with out-of-district routes, it's not always feasible for those drivers to come to Sharon to get their vehicles before heading out to pick up students but will investigate this question further. Ms. Bernier asked whether there were tracking devices in the vehicles which are taken home to verify that they aren't being used for personal use. Mr. Wertz stated that the busses have tracking capability but not the vans. This has been investigated not with GPS devices rather with cell phones but will be further investigated as well. Mr. Roach asked whether the State bid contracts are used to procure vehicles. Mr. Wertz noted that they are.

Mr. Maidman asked about items labeled "cycle maintenance" and whether it would make more sense to purchase more at a lower cost rather than continue to come back every year. Mr. Wertz explained that the price of furniture hasn't changed much in the past two or three years ago, but the type of furniture has changed significantly in the past five years.

Mr. Linnehan asked if there were any outstanding balances from earlier accounts. It was explained that there is \$1,900 remaining from FY16 which will be repurposed as recommended by the Finance Director. The funds received for FY17 were for track repairs which are being completed this week. The Department is still working off the funds from FY18 and 19 at this time.

FY'20 Capital Requests

Acoustics

• DW- Acoustics Phase II \$16,500

As explained earlier, originally it was planned to retrofit one grade per year with acoustic sound fields. They were able to leverage better financing and could do more with less than requested last year so they are a little ahead of their five year cycle. At the end of this cycle, all of the Elementary Schools will be equipped and all of the Middle School. It is hoped that all of the High School classrooms will be equipped as part of the improvement or construction project.

Impact Resistant Film

• DW- Impact Resistant Film - \$50,875

An assessment of the five buildings was recently completed with a window film contractor. Mr. Wertz pointed out that this is not "bulletproof" film, rather it is ballistic rated. A demonstration was presented where this product was put onto tempered glass and then shot at with multiple types of weapons and the bullets went through. The benefit of this film is that it buys time. With the film, the entire window works as a system and the glass won't shatter, allowing easy access to the building.

There was a request to do all all windows on the first floor of each building but this goes against the ALICE protocol. Staff is told in an emergency to throw a desk through the window to get the children out. The film works both ways in that a desk thrown against the window would bounce off. The film will be placed strategically.

Mr. Maidman asked about the life expectancy of the product. Mr. Wertz explained that the material doesn't degrade therefore its life expectancy becomes the same as that of the window it is installed upon. Mr. Wertz explained that there is very little insulation value to the product and that there are two or three manufacturers which procude a product which is appropriate for an application such as this.

Early Childhood Center

• Solar Shade - Canopy - \$20,000

Mr. Wertz showed photographs to illustrate that there is no shade on the playground which is an interior courtyard space. A photo was also provided showing a possible option for a cantilevered shade. It was explained that the children are outside as much as possible and a shade would help with sun exposure and overheating. A shade of this nature would have supports on the perimeter, thus reducing the risk of a child running into one.

Mr. Gladstone asked about wind and who would be responsible for either bringing in or retracting the shades in inclement weather. It would primarily be the custodial staff. The Department has also thought about this being an issue and has talked about some checks and balances and being as safe as possible.

There was a discussion about extreme weather and how that might affect safety. Ms. Kurrel-Dykeman mentioned that the intent for use of this canopy is during the summer as the spot gets too hot to have the children outside. Mr. Linehan asked whether the canopy material could be brought indoors for the winter. The group suggested that perhaps they could review more technical information from the manufacturer.

East Elementary School

• Kennedy Road Guard Rail - \$20,800

Mr. Wertz showed photographs which illustrated the vunlerability of the soccer fields due to the sharp curve in the road. This request is for installation of an esthetically pleasing guard rail similar to the one installed at the Middle School. The Middle School guard rail has held up well over time and is strong enough to provide safety from a vehicle.

Mr. Maidman asked whether there was any data requested of the Police Department. This area is a pinch point as there are cars parked here at pickup and dropoff while school is in session as well as during soccer season.

Dr. Greer metioned that there is no barrier or deterrent to keep staff or students safe should an individual intend to do harm at times when cars are not parked on the sides of the road.

Ms. Currel-Dykeman mentioned that this location is unique as there is no natural border around the fields at this location. She always wondered why there was no protection here, not necessarily from vehicles but rather to keep the children from getting into the street. Mr. Linehan thinks this is a good point and feels perhaps this should be considered.

Mr. Blazkowski asked about securing the perimeters of all school and perhaps a cost should be associated as such for all locations rather than to go about it piece-by-piece in an effort to provide cost savings. Mr. Linehan agrees that the overall goals should be reviewed. Mr. Blazkowski went on to say that if someone wants to do damage and they cannot do so at one location, they'll look for the most vulnerable and perhaps it behooves the group to consider whether this is a concern. Undertaking this from a collective standpoint should be evaluated.

Mr. Wertz stated that the premise has always been not to make a school look like a prison, thus the logic behind the type of fencing as opposed to perhaps jersey barriers or metal guard rails. This is not exclusively a cost-based decision but that being said, the wood material suggested is a cost-effective material compared to galvanized metal. Mr. Wertz will go back to the Administration to discuss.

Heights Elementary School

• Air Conditioning Installation

There are many special education classrooms at Heights Elementary. There are also many summer programs that are run at the location as well. Some special ed. students are at the school all summer long. There are some children with IEPs which require air conditioning. Mr. Wertz provided some description on the differences between VRF and VRV models. Overall, this type of air conditioning system is about 25% more efficient than most standard window units, they do not block natural light, they reduce noise in the classrooms and they are out of reach of the students. Many of the curious students in the classrooms with window units have pulled the plastic covers and grills off of the front of the air conditioners which usually results in replacement of the entire unit as the front covers are generally obsolete.

Mr. Linehan asked whether the condensers would be placed on the roof and would there be cooling zones. The Department will be looking into that. The downside to zones would be if one compressor fails, there could be multiple classrooms affected. Mr. Wertz also mentioned that it is extremely costly to have technicians out to complete work at the schools due to Prevailing Wage laws. Regardless of trade, it costs \$2,500 per day to have two technicians on site to do work of any kind, whether it be carpentry, electrical, plumbing or HVAC related. The Heights Elementary roof was recently redone so the contractor must be certified by the roofing installer, the supports are intricate which drives up the cost and there are also hurricane straps which are required.

• Generator - \$393,250

The FY18 request for this generator was presented in the amount of \$150,000. Per the recommendation of the Capital Outlay Committee, the request was bumped up to \$175,000. An architectural firm was hired who then hired an engineering firm to do a full assessment and full design. They were as cost conscious as possible. The cost rolled out was for a new generator, a dedicated gas main and meter, switch gear and timing, transfer switch, wiring to all panels, wiring the boiler room, and emergency power to the kitchen. This design does not provide heat to the building, it solely circulates the water to avoid freeze-ups. All of these items total the amount of \$393,250. This amount includes remaining capital funds from FY18 in the amount of \$140,250.

Mr. Linehan inquired about whether life safety and non-life safety emergency items were comingled with this design. Mr. Wertz explained that they are providing emergency lighting from the lighting panels and providing back up power to the kitchen. It was designed to be code conforming. There was also a question of whether natural gas qualifies as an acceptable emergency fuel source as it is not stored on site. Mr. Wertz stated that this is a grey area. The emergency generators at the other school facilities are powered with a natural gas generator. Mr. Wertz will inquire and provide further information.

Mr. Blazkowski asked what the fundamental drive would be for a \$350,000 emergency generator. Presumably there wouldn't be school for subsequent days in the event of a long duration power outage, so beyond keeping the pipes from freezing and food from spoiling, what need would there be for the generator? Given that the frequency of severe weather is on the rise, the need for the generator is partly to get students through the first day of an outage depending on the time of year. In winter, although the generator won't power the heat, it will circulate the forced hot water system to keeps the pipes from freezing. The generator will only power critical items in the building to protect the building such as providing for communication until the students are dismissed, keeping the emergency lights on for building checks and for public safety if needed.

Mr. Maidman asked whether there has been any thought given to adding another school building as an emergency shelter. Mr. Heitin replied that in the past, there has been no need as the available existing shelters are hardly used.

Mr. Gladstone mentioned that he recalled when the generator was originally recommended that the budget was bumped up to allow for engineering. He asked whether this system was designed by an independent engineer or a vendor. Mr. Wertz replied that CGKV Architects was hired whom consulted NB5 formerly RDK. This was done by a licensed engineer and licensed architectural firm.

Mr. Linehan mentioned that Heights is the oldest of all the school buildings; it was built in 1997. Dr. Greer mentioned that the upkeep for this building just hasn't happened like it has for other buildings.

Mr. Bernier asked whether the Department could provide a priorities list. The issue the committee faces is that the School Department request is the largest and would require additional borrowing that is not in the budget. Having this capital request ranked in order of priority would be helpful. Mr. Linehan mentioned that having all Department submit a prioritization list would also be helpful.

Mr. Wertz wants to be clear that the building is perfectly safe at present. There was an existing conditions study conducted at Heights simultaneously with the High School. The study for Heights did call out some key items that need to be addressed within the next ten years. The decision was made by the previous administration to parse the projects out as capital projects rather than do one large upgrade project. This building is just not meeting the current needs due to its age.

Ms. Bernier asked whether space will be an issue in five to ten years. Dr. Greer stated that they are looking at short and long term solutions for adequate space. They have seen consistent growth in Kindergarten classes since 2000. One of the discussions they've had with their working group is rethinking the configuration and having a Pre K/Kindergarten facility would alleviate some of the burden of adequate space. They are also looking at moving the administrative offices to make space at the Middle School.

• Parking Lot - \$1,182,500

Mr. Wertz has been working with Peter O'Cain as well as different engineering firms and installers in an effort to determine a value for replacement of the asphalt, granite curbing, sidewalks, new parking travel lanes and the site work that goes along with this type of construction. The projected cost is fluid as they're just beginning to think about design. The amount of curbing and type of curbing needed are being explored for cost savings as well as ease of maintenance. This is a heavily treated area for snow and ice. Due to snow and ice treatment and plowing, the concrete curbing is continually hammered which is causing deterioration and presents trip and fall hazards. This site is stretched thin for parking as well. Safety is the big concern. The parking lot is not at catastrophic failure yet.

Mr. Linehan has heard that the que system is a big issue. Mr. Wertz presented some of the design ideas that are being investigated to maximize the available space and may help alleviate some of the drop-off/pick-up issues. A traffic study will take South Main Street into account.

Mr. Heitin offered some suggestions if this is a high priority issue for the Department including partially funding over two years. Mr. Wertz suggested that this would increase costs due to contractor remobilization and escalation. An alternative of this nature has been done a couple of times in the past to help stabilize the capital budget, particularly with the High School.

Mr. Gladstone asked about the recurring costs being carried out for multiple years. It was explained that they built in escalation for a better picture of what the costs could look like if the project is put off for a few years.

There was a discussion regarding the traffic light at the Heights entrance. Mr. Wertz explained that the study and design will take into account the traffic and staged parking on South Main Street.

Middle School

• HVAC Controls - \$50,000

The Middle School HVAC controls are obsolote and parts are no longer supplied. The manufacturer has also begun phasing out software support. Much like a cell phone, these computerized systems become antiquated quickly. Control systems seem to be on a quicker cycle. This is a proprietary system. Additionally there are only a handful of service providers in Massachusetts that can work on it. Service contractors must install so many Automatrix systems annually in order maintain their certification. The firm that the School Department currently works with has been great. They're aggressive on their pricing and their philosphy is to get the system up an running, having personnell trained so they're not coming and going doing service work. The expected life span of a new control system is roughly five to ten years. It seems that historically the controls have needed upgrading after about seven years.

Furniture

• DW - Replacement classroom furniture \$85,000

Furniture is centered on the team-based learning concept. New options have sensory movement and are easy to rearrange. Some students learn better while standing so there is a standing height desk option. As Dr. Greer had mentioned earlier, the Middle School is experiencing a population bubble so some of this funding is to buy additional furniture.

School Vehicles

• Replacement vans - SPED Fleet (3) \$112,500

Three older vans need replacing, two standards special education vans and one handicapped accessible van. The handicapped accessible van is significantly more money, \$47,500. Last year's capital budget was \$90,000 for three vans. In response to the question of whether the vans would be front-wheel or all-wheel drive, Mr. Wertz explained that the Department had looked at that roughly ten years or so ago and they found that AWD vehicles were problematic as they were prone to mechanical breakdown. The manufacturers that supply the most suitable vans for the department in terms of size, do not offer a front wheel drive option.

District Technology

FY2019 Overview

Dr. Marcus first reviewed the renewal and advancement of the 1:1 program. Chromebooks were purchased for this cycle which were considerably less expensive than in the past. Three hundred Lenovo 11E were purchased and cost was about \$350 each; 225 of the same product were purchased for the 6th and 7th grades which brings the middle school closer to the 1:1 ratio.

The Department began the cycle of purchasing laptops for faculty about six years ago. Beginning last year, a small number of those which were failing were selected for replacement. There is a request this year for another cycle of faculty laptops.

Ms. Bernier asked how the determination was made for which Chromebook device was best. Dr. Marcus explained that there is a 1:1 implementation team which is made up of students, parents, teachers, and tech support staff. Dozens of different models were brought in to the seventh and eighth grades who worked with them and were then asked to give feedback.

Mr. Linehan asked whether any funds would be turned back. Dr. Marcus pointed out on the Review of FY19 slide that the wireless access points waiting for E-Rate funding which is federal funding or additional enhancements to technology funding. This funds primarily the ability to get onto the internet and use the internet. All other projects are either complete or in process.

FY2020 Requests

• Chromebooks 1:1 Access Expansion - \$120,000

This is the fifth year of the program. Grades 8-12 will finally be at the 1:1 ratio. Chromebooks will be purchased again this year as they have performed well over the past year.

• Infrastructure Upgrades – Servers \$85,000

Current primary servers were purchased in 2011. Yearly maintenance costs amount to around \$4,500. Replacement consists of two "hyper-converged" VM services which combine processing and storage. New wifi requires faster, more powerful switches. The benefits of replacement include energy savings, enables Powerschool to be brought back in-house, safer storage, and less expensive yearly maintenance.

There was a lengthy discussion about security, cloud storage, on-site digital storage and the benefits and drawbacks to both.

• Wireless access points, servers, etc. \$25,000

This year's request will add/replace 30 access points to the fleet. The Department is trying to move the district to one system, Aerohive. There is an important need for shift in tech from hardwired desktops to mobile devices. These access points support learning but also supports anyone's access to the internet.

• Projectors - replace old/broken devices across district \$25,000

The school has 250 projectors district wide and replaces roughly 10% annually. Replaceable projectors are InFocus, Sharp and Promethean 2005-2009. These projectors are an essential tool in every room. Some classrooms have switched to monitors.

• Update Room 603 2D/3D Lab

Middle School Technology Classrooms and labs are starting to age out and need updating. Instead of purchasing the larger Mac desktops; the Mac Mini is a smaller, less expensive option.

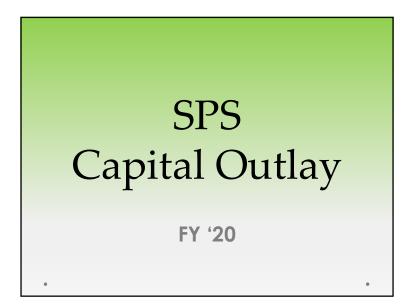
Mr. Linehan asked whether the goal was to shift purchase of the Chromebooks from the Capital Budget to the School Operating Budget. Dr. Greer advised there has been some discussion with Mr. Turkington but there has been no definitive answer. Mr. Linehan also asked whether the Chromebooks qualify as a five year capital item, and it was determined that they do.

Mr. Maidman expressed concern that there is a comingling of items that have a long life expectancy with items that perhaps may not. He would like to know the detailed life span of previously purchased 1:1 equipment. Dr. Marcus explained that there is a spreadsheet that he will forward to the committee or bring to a future meeting.

It was asked who insures the devices and whether there is a net positive for insurance. Dr. Marcus explained that the School Department insures them; they are self-insured. The first year, the insurance cost was \$75/student but found that the figure was too high. It has been adjusted each year since then. Mr. Heitin had nothing but praise for the 1:1 program based on his experience.

Adjournment

VOTED: Heitin - Bernier (11-0-0) To adjourn the meeting at 9:20 pm – unanimous.





Review of FY '19

DW Classroom furniture	rooms) Cycle maintenance	\$23,000
CSS- Doors in K hallway	Code issues	\$30,360
East- Lighting design	First part	\$12,500
East- Lighting upgrade	Energy efficiency	\$165,000
5HS- Cafeteria doors	Code issues	\$46,125
Heights- Library A/C	Program and health issues	\$68,150
Heights- Pkg lot design	Part of overall plan	\$70,500
Special Education Vans	Replace older vans	\$90,000

Overview of FY '20 Requests

Acoustics- Grade Two (Elementary Buildings)	Phase Two: Student/Staff Environment	\$16,500
Impact Resistant Film	Security	\$50,875
ECC Retractable Shade	Student/Staff Environment	\$20,000
Kennedy Road Guard Rail	Safety	\$20,800
Heights VRF(AC) install	Special Ed. Air conditioning	\$66,000
Height Generator	Safety	\$353,250
Heights Parking Lot	Replacement- obsolescence	\$1,182,500
MS HVAC Controls	Replacement - obsolescence	\$50,000
DW Classroom furniture	Cycle maintenance	\$85,000
Replacement Vans	Special Education	\$112,500

Acoustic	s–I	hase II	
LightSpeed (TopCat)	6	\$ 2,450	\$ 14,700
Contingency:	1	\$ 1,500	\$ 1,500
Acoustics (1 grade level) Gr. 2			\$ 16,200
Media Connector	•		۰

Impact Resistant Film

	Qnty.	Unit Price	Subtotal
East	1	8254	8,254
Cottage	1	9260	9,260
Heights	1	9456	9,456
SMŠ	1	9635	9,635
SHS	1	14270	14,270
Project Total:			\$ 50,875



ECC Pla	yg	rour	nd	
	Qnty.	Unit Price		Subtotal
Playground Retractable Cover	1	20000		20,000

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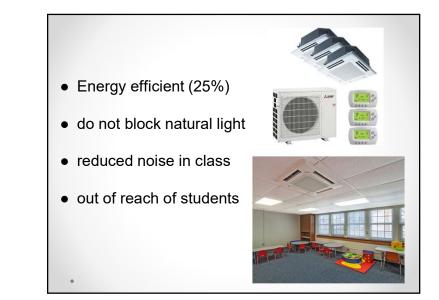
East Elem. Guard Rail (Kennedy Road)

	Qnty.	Unit Price		Subtota
Design/Install Wood Guard Rail	1	19800		19,800
Contingency 5%	1	1000		1,000
Project Total:			\$	20,800
Toject Total.			Ψ	20,000

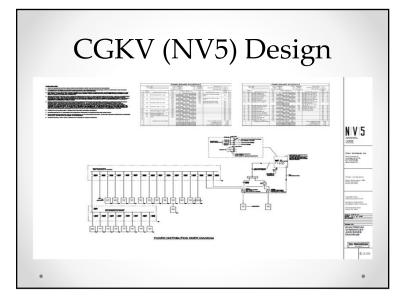


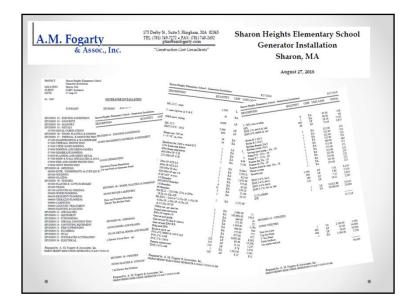


	Qnty.	Unit Price	S	ubtotal
ASD Rooms	3	10850		32550
TBL Rooms (2 are smaller)	3	9800		29400
Contingency (tariff concerns)	1	4050		4050
Project Total:			\$	66,000



Heights Ger	nera	ator	Install
0			
	Onty.	Unit Price	Subtotal
Remaining Capital Funds FY18	<u>Qitty.</u>	(140,250)	(140,250)
Cost Estimate Base Project	1	401,000	401,000
General Conditions	1	92,500	92,500
Project Contingency	1	40,000	40,000
Project Total:			\$ 393,250





Heights Parking Lot Replacement

Project Total:			\$ 1,182,500
contingency	1	107,500	107,500
Contingency	1	107,500	 107,500
drainage,fencing,signage)	1	75,000	75,000
New Parking/travel lanes Sitework (playground,	1	100,000	 100,000
Sidewalks Now Parking (travel lange	1200	100 000	120,000
Granite Curbing	1200	275	330,000
Project Direct Replace (DPW Price)	1	450,000	450,000
	Qnty.	Unit Price	Subtotal





MS HVAC Control

	Qnty.	Unit Price		Subtotal
Update current HVAC	1	50000		50,000
computer and controls				
(current system is no longer				
supported)				
	_		-	
Project Total:			\$	50,000

DW Furniture

	Qnty.	Unit Price	Subtota
Middle School	100	200	20,000
Cottage	100	200	20,000
East	100	200	20,000
Heights	100	200	20,000
High School	25	200	5,000
Project Total:			\$ 85,000



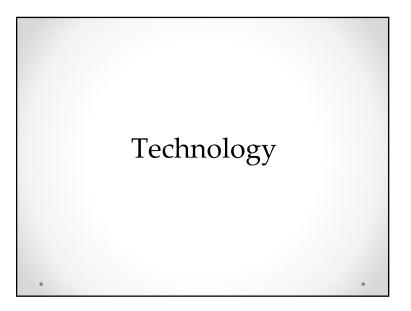
Transportation Vans

Special Education Vans2Handicapped Accessible Van1	32,500 47,500	65,000
Handicapped Accessible Van 1	47 500	05,000
	47,300	47,500
Project Total:		\$ 112,500

Special Education Vans

- Replacement of 3 older vans needed for safety, fuel efficiency, cycle maintenance, potential to expand fleet.
- (2) two standard student vans
- (1) one handicapped accessible van
- Vans are bid and procured w/ State Contract Suppliers

Renewal of 1:1 program. Chromebooks.	SMS/SHS	\$114,000	Complete. 300 Lenovo 11e.
Replacement Computers for SMS (6th & 7th) Carts (Yr 2 of cycle)	SMS	\$100,000	Complete. 225 Lenovo 11e.
Teacher Replacement - hold on large purchase. Smaller replacement cycle	DW	\$14,250	In process. Ordered.
Wireless Access Points, Servers etc. to improve wireless computing DW	DW	\$25,000	Wait for E-rate.
Projectors across district to replace old, broken devices (9 total)	DW	\$25,000	Installing this week



Overview of FY20 Requests

Chromebooks to allow for 1:1 access expansion.	300 students @ \$400	\$120,000
Replace VM servers (2)	Replaces older, more expensive equipment	\$85,000
Year 1 of Switch Replacement	SMS- approx 15 switches	\$60,000
Small Teacher Replacement	About 18 total	\$16,000
Wireless Access Points	30 APs	\$25,000
Projectors across district to replace old, broken devices	10% of fleet	\$25,200
Update Rm 603 2D/3D Lab, 3 SMS labs	SMS, SHS	\$87,500
Security Camera/System Upgrade DW	Provides very good service to all bldgs, connected to Police/Fire	\$88,440
		\$503,140

Infrastructure Upgrades

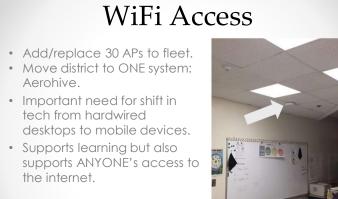
Servers- Current primary servers Dell VNC circa 2011. Run LDAP, DHCP, state assessment caching, systems backups (Powerschool, email, etc). SAN (storage) circa 2010. Switches- 2011. Yearly maintenance ~\$4,500.

Replacement- Two "hyper-converged" VM servers, combine processing and storage. New wifi requires faster, more powerful switches. Energy savings, bring Powerschool back in-house, better, safer storage, cheaper yearly maintenance.

Projectors

- \$25K replaces about 10 projectors around the district. Replaceable projectors are InFocus, Sharp and Promethean 2005-2009.
- 250 projectors across district- just under 10%
- Essential tool in every room.





1:1 advancement

- Moving into Year 5 based on successful rollout.
- Significant training still ongoing. Teachers adapting instruction to take advantage of new tools. Focus is very much on teaching and learning.
- Transition has been strengthened by size, style, stability, support and comfort with devices.
- Request will fund one entire grade at slightly higher cost. **

8

Goals

- Innovative curriculum design that advances learning in ways not otherwise possible.
- Increased student engagement.
- Active learning design promoting more individualized/differentiated instruction.
- Opportunities for broader, richer learning times outside the classroom.
- Increased resources for communication, collaboration and creativity.
- Allows for anytime learning
- Allows for a whole new ability to differentiate
- Allows for a whole new level of engagement
- Shifts instruction from sage on the stage to individualized learning
- Promotes communication, writing prowess, global understanding and engagement, collaboration, creativity
- Less crazy heavy backpacks. All materials in one place.
- Promotes OWNERSHIP which leads to more responsibility and pride
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Important for FY20

- 1:1 continues to be effective for teaching and learning.
- Costs are being defrayed by creative concepts (BYOD, Incentivized purchasing, MB Airs lower price, exploring device options.)
- Chrome pilot this year has gone very well, especially as the devices have improved dramatically.
- Team working on making final determination regarding Chrome model and to 8th or to 9th.

Security Cameras

- In conjunction with Town Hall project and Police/Fire departments.
- 8 new cameras and servers at each elementary school and the high school. (Most HS equipment can be re-purposed.)
- No added cameras but upgrade to existing infrastructure at SMS.
- Video to be available to police/fire 24/7.
- Important safety and security upgrade needed. A key next step in overall safety program and collaboration with public safety teams.

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