

**OFFICE OF THE SUPERINTENDENT OF SCHOOLS  
Peterborough, New Hampshire**

**CONTOOCOOK VALLEY SCHOOL DISTRICT**

**BUDGET & PROPERTY**

**May 9, 2017**

**SAU Office  
6:00 PM**

**Minutes**

**Committee Members:**

- Dick Dunning, Chair
- Rich Cahoon
- Jim Fredrickson
- Tom Kelly
- Stephan Morrissey

**Present:** Dick Dunning, Rich Cahoon (6:50), Jim Fredrickson, Tom Kelly, Stephan Morrissey, (6:06), Myron Steere, Kimberly Saunders, Tim Grossi, Brian Grattan, Carol Young

**1. Call to Order**

**Dick Dunning called the meeting to order at 6:00 p.m.**

**2. Approval of Minutes – April 11, 2017**

**Tom Kelly moved to accept the minutes of April 11, 2017. Jim Fredrickson second.  
Unanimous.**

**3. Food Service Update**

The financial update will take place at a later meeting. A proposed School Food Service Agreement was shared for committee review. Once the financial report comes forward, the agreement can move to the full Board. The proposed agreement reflects an anticipated near \$80K loss.

What would the loss reflect under our in-house food service less benefits? Kimberly Saunders agreed to research that figure.

**4. Renovations at ConVal High School**

Carol Young, CVHS Science Teacher, was present and shared information about Science Class Enrollment data. Historically, 20% of our students are enrolled in Earth Space Science, 15% are enrolled in Biology etc. (see attachments)

Discussion took place about the number of classrooms necessary to meet the number of sections required. Further discussion took place about Science teachers having designated classrooms without moving from one room to another during the course of a day.

Currently, there are eight science teachers; seven science teachers anticipated in the future. There has been an increase in the demand for science classes. The percentage of students enrolled in science classes has grown over the years. In order to meet the capacity for the electives, we will need the teachers. Three science credits are now required to graduate; up from two in the past.

Classroom requirements; which classrooms would require gas, water, electricity were discussed. The rationale to move forward in this way is to use funds that we currently possess to conduct this work without waiting for a bond to pass. A phased renovation might be sought. Cost breakdowns for each phase would be developed.

Hypothetically, what would it look like if we renovated rooms 101, 104, 110, and 108 and 211, 212 (see attached)?

The NSTA Guide to Planning School Science Facilities was referenced.

Further, a PowerPoint presentation that outlined what rooms will need was shared.

The rooms would be completely gutted; removal of furniture. New desks would be in question. Phased two-person tables have been being integrated into classrooms to replace desks.

The chemical storage area was displayed and discussed.

A proposal to join rooms 101 and 107 was made. Further discussion took place about the impact of the building and the proposed *Fill the Void* project.

Should Tim Grossi, Carol Young, Dick Dunning, and Hutter Construction meet to discuss cost potential? Confirmed.

Plumbing is a concern.

What is the drop dead date for allocating funds? The first of June. We won't know what the final financial picture is until mid to late June.

A vote was made with regard to the \$725,000 savings in health. Community outreach would be important to share with the taxpayers that the revised intent would be to use these funds for renovations. Towns would formulate their budget based on certain assumptions of which the return of these funds may have factored.

Tom Kelly suggested visiting Mascenic to view the science labs Hutter built there.

Quotes for the work would be needed to move forward. Six complete labs would be part of the estimate.

Removing Room 111 to allow for additional square footage was proposed.

ConVal fits the profile of requiring four science credits for graduation rather than the three currently required.

Discussion about attracting chemistry teachers and providing space that meets the needs is critical. Otherwise, because of the demand for these teachers, they'll go elsewhere.

Discussion took place about the number of labs required. Six science/lab classrooms are needed.

It would be helpful to breakout the classrooms into what type of classroom would be needed. i.e. a chemistry class/lab etc.

Cost to renovate and cost to expand is needed.

Cost information on furniture would also be important.

Next year, seven sections would require chemistry labs.

Tim Grossi will contact Hutter Construction to schedule a meeting.

## **5. Future Funding for CVHS Renovations**

Discussed in agenda #4 above.

## **6. Other**

Dick Dunning reported that on May 23<sup>rd</sup> at 1:00 pm – COP SYNC will be present to give a presentation to local Police Chiefs. Grant money is available through June. It has to do with having the ability to do the job. This is informational only.

Brian Grattan shared information about ERate, the ability to recoup funds for connectivity. First Light is an entity that can work across multiple providers. This would allow us to tackle E911 in Goal 4. We currently pay approximately \$3,300 per month for telephony and \$2,500 for internet totaling \$5,800 combined (see attached).

The advantages of moving in this direction would provide one campus. This is the only entity that can pull all of our campuses together for this purpose.

Brian Grattan reported that he has to file for ERate by midnight on Thursday. We cannot realize the reimbursement if we do not submit the paperwork with the intent to do so. It is okay if we don't do the work but we need to file in the event that we do.

Kimberly suggested that it be filed.

**Stephan Morrissey moved for the all campus scenario. Jim Fredrickson second. Unanimous.**

Dick Dunning spoke about billing received for the school election portion from various towns. Currently, Peterborough, Dublin, and Antrim have submitted billing. Francestown typically does.

In Peterborough, it is solely a school election because the town election occurs in May.

Dick wanted to make sure that the remaining towns know that there is the option to bill the district for voting.

Rich Cahoon suggested paying a specific cost per registered voter to the town.

Dick Dunning shared cost for informational purposes.

Tim Grossi shared information about Requests from Capital Reserve Accounts.

Athletics detailed \$18K for permanent bleachers for lower field, softball and baseball fields, \$9K for lower field hockey sound system, \$13,300 for handicap/elderly parking at the athletic building and lower field. Facilities included \$14,400 for an equipment barn for secondary containment and diesel tank storage.

**Stephan Morrissey moved to approve the \$18K for bleachers. Jim Fredrickson second.**

**Unanimous.**

**Stephan Morrissey moved to approve the \$9K for the lower field sound system. Jim Fredrickson second. Unanimous.**

**Stephan Morrissey moved to approve \$13,300 for elderly/handicap parking. Jim Fredrickson second. Unanimous.**

**Stephan Morrissey moved to approve \$14,400 for the equipment barn. Jim Fredrickson second.**

Rich Cahoon asked about building two barns in three years.

Tim Grossi said that everything is being stored in the athletic barn. An additional cub cadet has been added to support the CV booster organization and requires space. Tim reported that he has also lost space to the Fire Safety Science Program.

Should the barn be bigger? No, this will meet the needs.

**Unanimous.**

## **7. Non-Public Session: RSA 91-A:3,II (If Needed)**

None.

**Stephan Morrissey motioned to adjourn at 7:55 p.m. Tom Kelly second. Unanimous.**

Respectfully submitted,

Brenda Marschok

Course	Certification Required	2013-2014		2014-2015		2015-2016	
		min. # sections required	% of population required	min. # sections req.	% of population	min. # sections	% of population
Earth and Space Science	ESS	n/a	n/a	0%	n/a	0%	13
Physical Science	PS, Chem, or Physics	n/a	n/a	0%	n/a	0%	140
EPS	ESS, PS, Chem, Physics	71	3	8%	163	7	20%
Honors EPS	ESS, PS, Chem, Physics	62	3	7%	42	2	5%
Lab Investigations	PS, Chem, or Physics	67	3	8%	57	3	7%
Chemistry	Chemistry	90	4	10%	84	4	10%
Honors Chemistry	Chemistry	30	2	3%	52	3	6%
AP Chemistry	Chemistry	27	2	3%	n/a	n/a	0%
Physics	Physics	46	2	5%	16	1	2%
Honors Physics	Physics	23	1	3%	13	1	2%
Biology 123	Life Science	49	4	6%	32	2	4%
Biology 012	Life Science	97	5	11%	117	5	14%
Biology (123/012)	Life Science	n/a	n/a	0%	n/a	n/a	0%
Honors Biology	Life Science	91	4	11%	62	3	8%
ESP Science	Special Education	5	1	1%	n/a	n/a	0%
AP Biology	Life Science	n/a	n/a	0%	21	1	3%
Anatomy & Physiology 1	Life Science	52	3	6%	38	2	5%
Anatomy & Physiology 2	Life Science	34	2	4%	14	1	2%
Oceanography	Life Science or ESS	64	3	7%	65	3	8%
Environmental Science	Life Science or ESS	27	2	3%	29	2	4%
Sustainable Agriculture Fall	Life Science or ESS	n/a	n/a	0%	n/a	n/a	0%
Sustainable Agriculture Spring	Life Science or ESS	n/a	n/a	0%	n/a	n/a	0%
<b>Total Science Students/Minimum Sections</b>		<b>835</b>	<b>44</b>		<b>805</b>	<b>40</b>	<b>708</b>
<b>Total School enrollment</b>		<b>860</b>			<b>826</b>		<b>761</b>
<b>Percent of students 9-12 enrolled in science classes</b>		<b>97%</b>			<b>97%</b>		<b>93%</b>
Number of students in electives (courses not meeting graduation requirement)		204			167		162
Percent of CVHS students in science electives		24%			20%		21%
Percent of science students in science electives		24%			21%		23%

2016-2017		2017-2018		2018-2019		2019-2020	
% of population	# enrolled	min. # sections req	% of population	# registered	min. # sections req.	% of population	min. # sections req.
1 2%	46	2	6%	147	7	20%	143
2 18%	191	8	26%	177	8	24%	161
3 0%	n/a	n/a	0%	n/a	n/a	0%	---
4 0%	n/a	n/a	0%	n/a	n/a	0%	---
5 6%	30	2	4%	13	1	2%	14
6 12%	85	6	11%	35	2	5%	35
7 5%	67	3	9%	40	2	5%	35
8 5%	n/a	n/a	0%	28	2	4%	n/a
9%	21	1	3%	15	1	2%	3%
2%	15	1	2%	14	1	2%	2%
0%	n/a	n/a	0%	n/a	n/a	0%	---
0%	n/a	n/a	0%	n/a	n/a	0%	---
15%	107	5	14%	117	5	16%	108
9%	63	3	8%	57	3	8%	9%
0%	n/a	n/a	0%	n/a	n/a	0%	---
0%	13	1	2%	n/a	n/a	0%	15
5%	32	2	4%	37	2	5%	36
4%	14	1	2%	22	1	3%	20
5%	31	2	4%	28	1	4%	41
2%	n/a	n/a	0%	n/a	n/a	0%	---
0%	13	1	2%	14	1	2%	13
0%	10	1	1%	8	1	1%	9
738	39		752	38		726	35
744			730	*		709	*
99%			103%			102%	104%

\* based on 5.1.17 registered enrollment

\* based on 5.1.17 registered enrollment

\* based on 5.1.17 registered enrollment

**2020-2021**

# projected	min. # sections req.	req.
140	6	
158	7	
---	---	---
---	---	---
14	1	1
35	2	2
35	2	2
n/a	0	0
20	1	1
14	1	1
---	---	---
---	---	---
105	5	5
59	3	3
---	---	---
15	---	---
35	2	2
20	1	1
40	2	2
---	---	---
13	1	1
8	1	1
<b>710</b>	<b>35</b>	
<b>693</b>	*	
<b>102%</b>		
248		
36%		
35%		

\* based on 5.1.17 registered enrollment

**CVHS Science Lab Quick List**  
**April 2017**

Both the National Science Teachers Association (NSTA) and the State of New Hampshire have established the maximum laboratory science class size at 24 (NSTA Board of Directors, 2007; Ed 306.17, n.d.). The number of science laboratory/classrooms required to support various population sizes can be found on the NSTA website at the following link. Planning and investing in safe science facilities.

The CVHS Science Department recommends seven science laboratory/classrooms. This provides capacity for supporting the current science class schedule. CVHS requires students to complete three science credits for graduation (physical science, biology, and Earth space science), however over 65% of CVHS students elect to take chemistry, physics, anatomy, and other courses to better prepare themselves for college. Historical and projected numbers of students enrolled in each science course, from 2013-2021, can be found in the Google Sheet “Science Enrollment Numbers”, generated May 4, 2017.

The following link is the National Science Teachers Association reference for best practices in planning science facilities. Chapter 6 focuses specifically on high school science lab requirements and recommendations. The recommendations in this report are based on this resource. NSTA Guide to Planning School Science Facilities, 2nd ed.

Science Department members prioritize having all labs grouped on the same floor. Reasons include increased collaboration between teachers

- ease of sharing large or unwieldy equipment such as incubators, biotech tools (gel electrophoresis chambers, vortexes, etc), probeware (colorimeters, spectrophotometers, CO<sub>2</sub> sensors, etc.), outdoor gear (waders, nets, shovels, etc.)
- chemical safety -- eliminate need to transport chemicals up and down stairs

**Common features of the proposed seven science laboratory/classrooms are as follows:**

- Seating area separate from lab -- 12 student utility tables providing 24 seats<sup>1</sup>
- Perimeter counters on 3 walls with storage below
- Storage above perimeter counters on 2 walls -- Install magnetic white board or use white board paint on 3rd wall
- 4-5 sinks on perimeter with drying racks above
- One ADA compliant sink and lab station
- Fire blanket, eyewash, and emergency shower with drain
- Safetyoggle sanitizer
- Small group meeting area, glassed in, for students to work in quiet space under teacher's supervision
- Cubbies/hooks near entrance to the room for students to place backpacks
- Mobile teacher table -- not a fixed demo table at the front
- Smart board/projection system at front of room with lectern for teacher computer
- Sliding marker board with storage behind at front of room
- Access to electrical outlets throughout room

**Additional storage**

- With the exception of the chemistry rooms, each classroom would have its own individual storage closet with shelving and counters for lab preparation (Hutter did this well at Merrimack High School).
- For chemistry, there should be a large prep room between the two chemistry labs. This must have
  - At least one large sink
  - Counter top with electricity
  - Fume hood with ventilation to the outside
  - Counter space for water distiller and other equipment
  - Separate, limited access chemical storeroom with shelving and cabinets designed for proper chemical storage, ventilated to the outside.
- Biology needs a designated gear room to store outdoor gear such as waders, nets, shovels, loppers, etc. and a place for a full size refrigerator.

**Specific classroom needs**

The following table lists the needs unique to each science laboratory/classroom. While the primary subject is listed, it should be understood that often more than one subject will be taught in any given classroom. For example, a teacher who is dual certified may teach both chemistry and biology in the same semester in order to meet scheduling needs. Moving a teacher from room to room to

teach different subjects compromises student safety and teacher job satisfaction. NSTA recommends generic laboratories with a few exceptions for specific needs. This maximizes curricular flexibility (Motz, Biehle, and West, 2007, p. 70)

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7
Primary subject(s)	Chemistry	Chemistry	Physical Science	Physics	Biology	Biology	Earth Space Science
Located on an outside wall	High priority	High priority	Medium priority	Preferred but lower priority	Medium priority	Medium priority	Preferred but lower priority
Fume Hood	Yes	Yes	Yes	Preferred but lower priority	Yes	Yes	Preferred but lower priority
Gas on perimeter, near sink	Yes	Yes	No	No	No	No	No
Lab benches with access to electricity, no water	Fixed	Fixed	Moveable	Moveable	Fixed	Moveable	
Extra storage under lab bench (no open space for legroom)	Yes	Yes	Yes	No	No	No	

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7
Primary subject(s)	Chemistry	Chemistry	Physical Science	Physics	Biology	Biology	Earth Space Science
Microscope storage (24)	No	No	No	No	Moveable <sup>2</sup>	Moveable	No
Storage closet	Use chem prep room	Use chem prep room	Individual closet in room	Individual closet in room	Individual closet in room; access to outdoor gear room	Individual closet in room; access to outdoor gear room	Individual closet in room
Specific features	Spill control center	Spill control center		Suspension track for hanging heavy objects from the ceiling	Light station for growing plants	Autoclave	

#### Notes

1 = We will need all new student tables as the ones we currently have are in various states of disrepair. We have purchased 2-4 student tables each year since 20112 and currently have 12 in very good condition, enough to outfit one classroom.

2 = allows scopes to be transported to other classrooms when needed

## References

Motz, L.L., Biehle, J.T., West, S.S. (2007). *NSTA Guide to Planning School Science Facilities, 2nd edition*. Arlington, VA: NSTA Press.

NSTA Board of Directors. (2007). *NSTA Position Statement: Liability of Science Educators for Laboratory Safety*. Retrieved from <http://www.nsta.org/about/positions/liability.aspx>

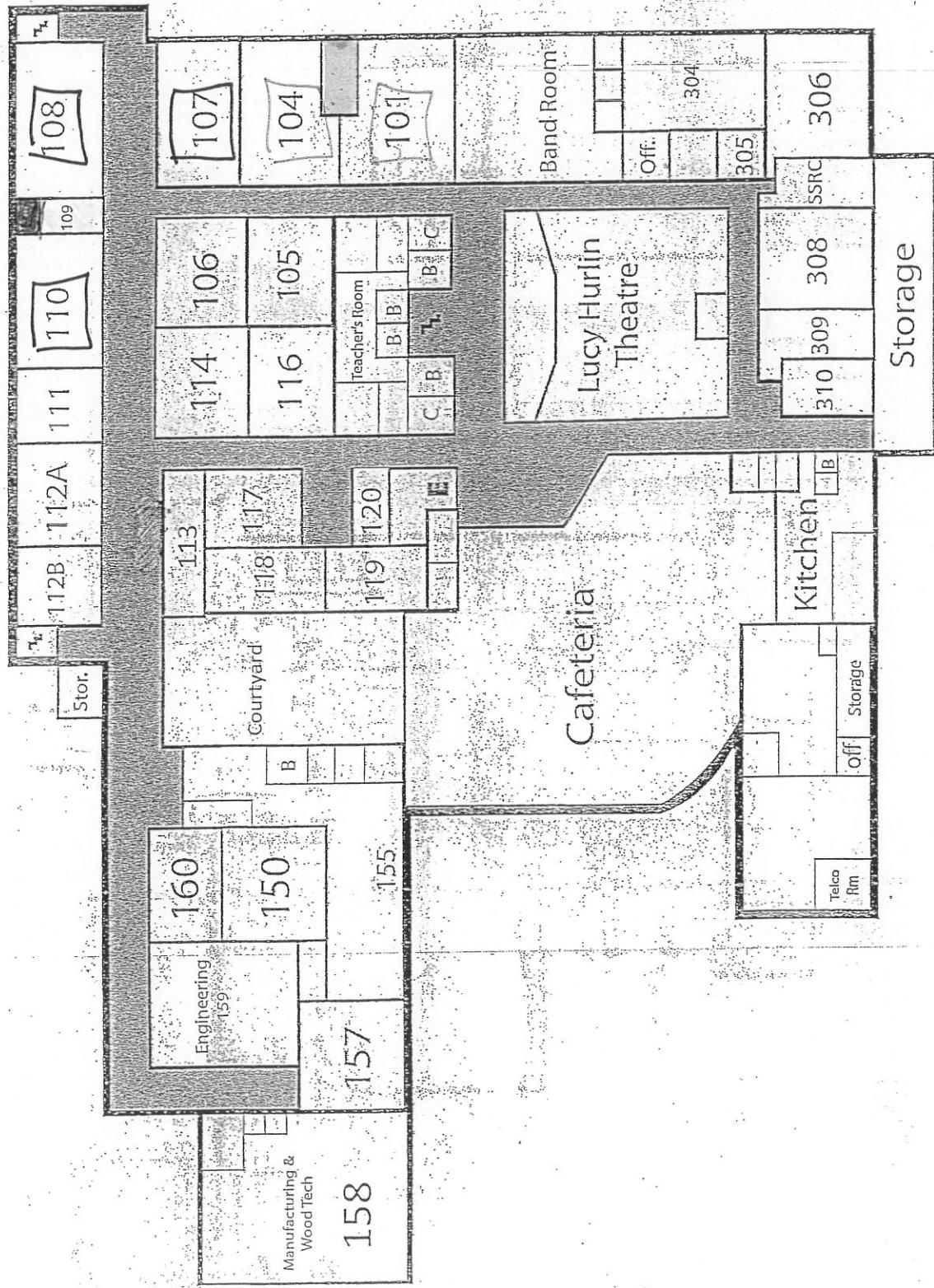
Ed 306.17. (n.d.). Class size in *Chapter Ed 300 Administration of Minimum Standards in Public Schools*. Retrieved from [http://www.gencourt.state.nh.us/rules/state\\_agencies/ed300.html](http://www.gencourt.state.nh.us/rules/state_agencies/ed300.html)

## Author's Note

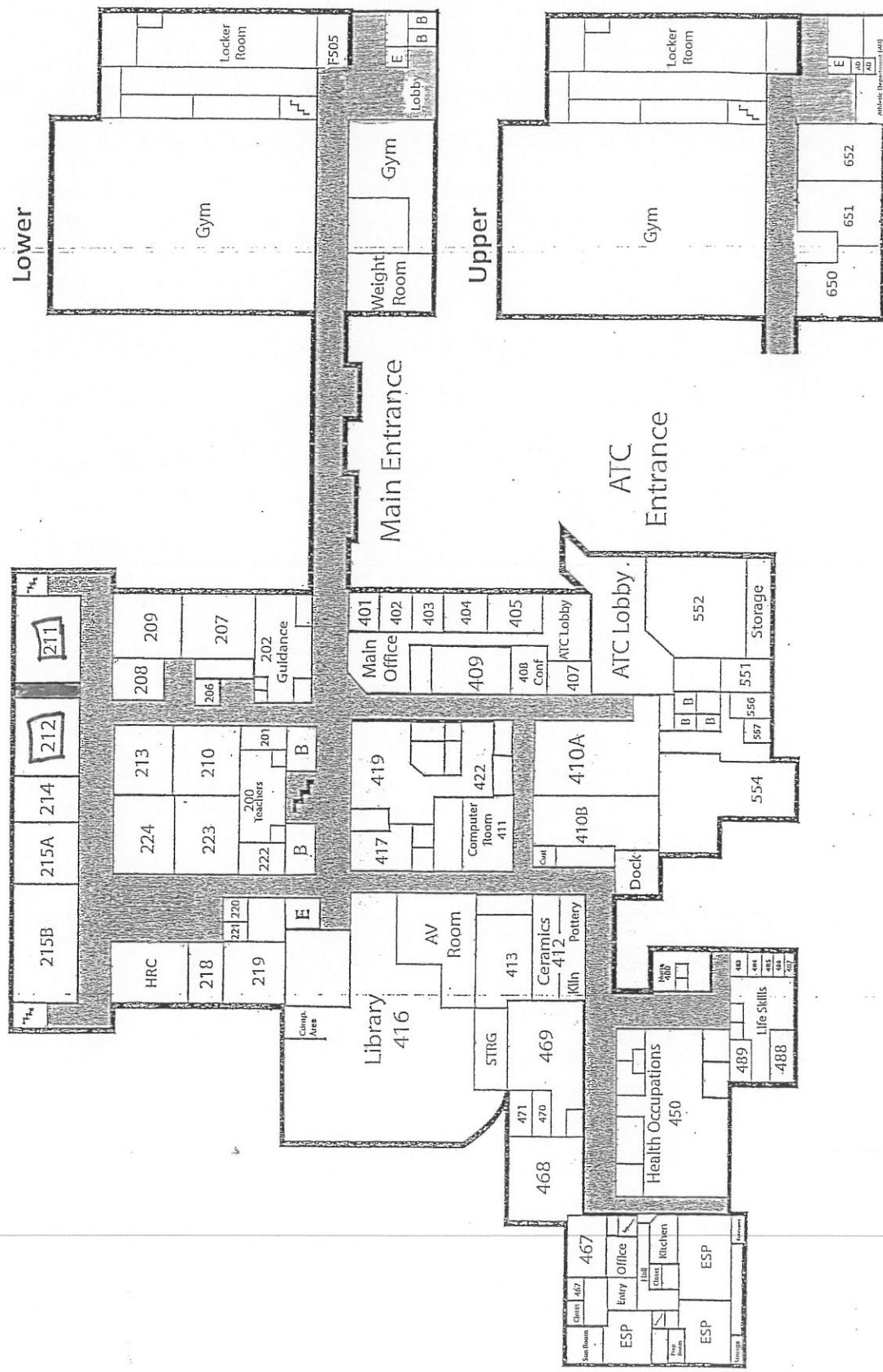
This list is intended as a starting point for prioritizing wants and needs for new science laboratories/classrooms. It is neither exhaustive nor unchangeable. While individual science teachers added their input to its creation and I did my best to represent their voices, further discussion is warranted.

Respectfully submitted,  
Carol Young  
April 28, 2017

ConVal High School Building Map  
Lower Level- 100s, 300s



ConVal High School Building Map  
Upper Level- 2005, 4005



## 4 Campus Totals

Location	Current Cost			Current Cost		
	Internet (ComCast/Fairpoint)			Telephony (Windstream/Fairpoint)		
AES/GBS	\$	412.55	CC	\$	823.50	WS
CVHS	\$	771.35	CC	\$	823.50	WS
SMS/SAU1	\$	455.60	CC	\$	823.50	WS
PES	\$	277.70	CC	\$	823.50	WS
DCS	\$	636.52	FP	\$	7.50	FP
		2,553.72		\$	3,301.50	
				Current Monthly Total	\$	5,855.22
				Proposed Total	\$	7,562.30
				E-Rate Windstream Reimbursement	\$	7,170.60
				Net Total Monthly Increase	\$	391.70
				New Monthly Total	\$	6,246.92

## 4 Campus Worksheet

CVHS/SAU/SMS		Erate @ 60%	
1G IP	\$ 1,900.00	\$ 1,140.00	
400M ELAN	\$ 816.00	\$ 489.60	
PRI	\$ 332.15		
<i>subtotal</i>	<u>\$ 3,048.15</u>		
<b>Antrim</b>			
200M ELAN	\$ 2,695.00	\$ 1,617.00	
PRI	\$ 332.15		
<i>subtotal</i>	<u>\$ 3,027.15</u>		
<b>Peterborough Elementary</b>			
100M ELAN	\$ 525.00	\$ 315.00	
PRI	\$ 332.15		
<i>subtotal</i>	<u>\$ 857.15</u>		
<b>Dublin Elementary</b>			
100M ELAN	\$ 525.00	\$ 315.00	
3 SIP Trunks	\$ 104.85		
<i>subtotal</i>	<u>\$ 629.85</u>		
E-Rate Reimbursement		\$ 3,876.60	
Monthly Windstream		\$ 3,294.00	
<b>Total</b>	<b>\$ 7,562.30</b>	<b>\$ 7,170.60</b>	<b>\$ 391.70</b>

## All Campus Totals

Location	Current Cost			Current Cost		
	Internet (ComCast/Fairpoint)			Telephony (ComCast/TDS/Windstream/Fairpoint)		
AES/GBS	\$	412.55	CC	\$	825.00	WS/TDS
CVHS	\$	771.35	CC	\$	823.50	WS
SMS/SAU1	\$	455.60	CC	\$	823.50	WS
PES	\$	277.70	CC	\$	823.50	WS
DCS	\$	636.52	FP	\$	7.50	FP
BES	\$	144.85	CC	\$	11.02	TDS
FES	\$	134.85	CC	\$	56.11	FP/CC
GES	\$	636.52	FP	\$	15.04	FP
HES	\$	114.85	CC	\$	66.31	FP/CC
TES	\$	117.85	CC	\$	54.63	FP/CC
		3,702.64		\$	3,506.11	

Current Monthly Total	\$	7,208.75
Proposed Total	\$	18,311.55
E-Rate Windstream Reimbursement	\$	14,532.60
Net Total Monthly Increase	\$	3,778.95
 New Monthly Total		
\$ 10,987.70		

## All Campus Worksheet

		Rate @ 60%
CVHS/SAU/SMS		
1G IP	\$ 1,900.00	\$ 1,140.00
400M ELAN	\$ 816.00	\$ 489.60
PRI	\$ 332.15	
<i>subtotal</i>	<u>\$ 3,048.15</u>	
AES/GBS		
200M ELAN	\$ 2,695.00	\$ 1,617.00
PRI	\$ 332.15	
<i>subtotal</i>	<u>\$ 3,027.15</u>	
PES		
100M ELAN	\$ 525.00	\$ 315.00
PRI	\$ 332.15	
<i>subtotal</i>	<u>\$ 857.15</u>	
DCS		
100M ELAN	\$ 525.00	\$ 315.00
3 SIP Trunks	\$ 104.85	
<i>subtotal</i>	<u>\$ 629.85</u>	
BES		
100M ELAN	\$ 2,045.00	\$ 1,227.00
3 SIP Trunks	\$ 104.85	
<i>subtotal</i>	<u>\$ 2,149.85</u>	
FES		
100M ELAN	\$ 2,045.00	\$ 1,227.00
3 SIP Trunks	\$ 104.85	
<i>subtotal</i>	<u>\$ 2,149.85</u>	
GES		
100M ELAN	\$ 2,045.00	\$ 1,227.00
3 SIP Trunks	\$ 104.85	
<i>subtotal</i>	<u>\$ 2,149.85</u>	
HES		
100M ELAN	\$ 2,045.00	\$ 1,227.00
3 SIP Trunks	\$ 104.85	
<i>subtotal</i>	<u>\$ 2,149.85</u>	
TES		
100M ELAN	\$ 2,045.00	\$ 1,227.00
3 SIP Trunks	\$ 104.85	
<i>subtotal</i>	<u>\$ 2,149.85</u>	
	E-Rate Reimbursement	\$ 11,238.60
	Monthly Windstream	\$ 3,294.00
<i>Total</i>	<b>\$ 18,311.55</b>	<b>\$ 14,532.60</b>
		<b>\$ 3,778.95</b>