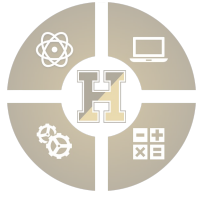

Career Technical Education

— Haverhill High School —



What is CTE?



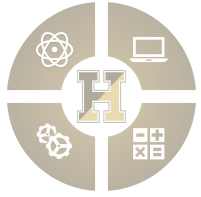
Cohort Structure

**Series of Rigorous Technical
Courses (Industry Credentials)**

Advisory Committees

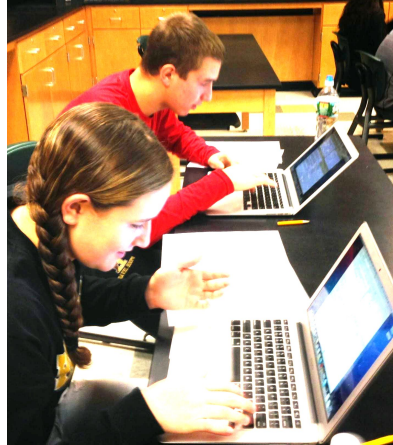
Work-based Learning Opportunities

HHS CTE Programs



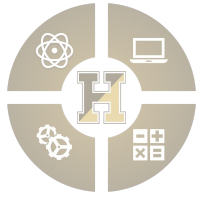
**Healthcare
Occupations**
Year 4

**Programming &
Web Development**
Year 3



**NAF Academy of
Information Technology**
Year 5

Why these CTE programs?



MA is only producing:

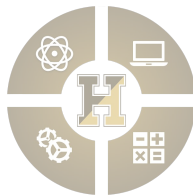
10% of the needed healthcare workers

25% of the needed technology workers

Labor Statistics

Source: *Meeting the Commonwealth's Workforce Needs: Occupational Projections and Vocational Education*, Northeastern University, Oct 2015

MA Northeast Labor Market Blueprint



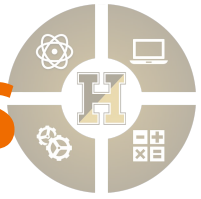
Top Industries Facing the Most Significant Employee Shortages:

- Health Care and Social Assistance
- Professional and Technical Services

Top Occupations Facing the Most Significant Employee Shortages:

- Registered Nurses
- Software Developers

<https://www.mass.gov/doc/northeast-regional-workforce-skills-planning-initiative-regional-blueprint/download>



Recommended Stackable Credentials

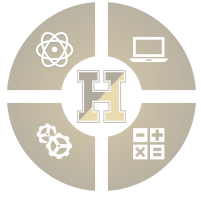
Certified Nurse Assistant (CNA) 31 - 1014

Cisco/CompTia- IT Fundamentals

Cisco/CompTia- Networking & Security

<https://www.mass.gov/doc/northeast-regional-workforce-skills-planning-initiative-regional-blueprint/download>

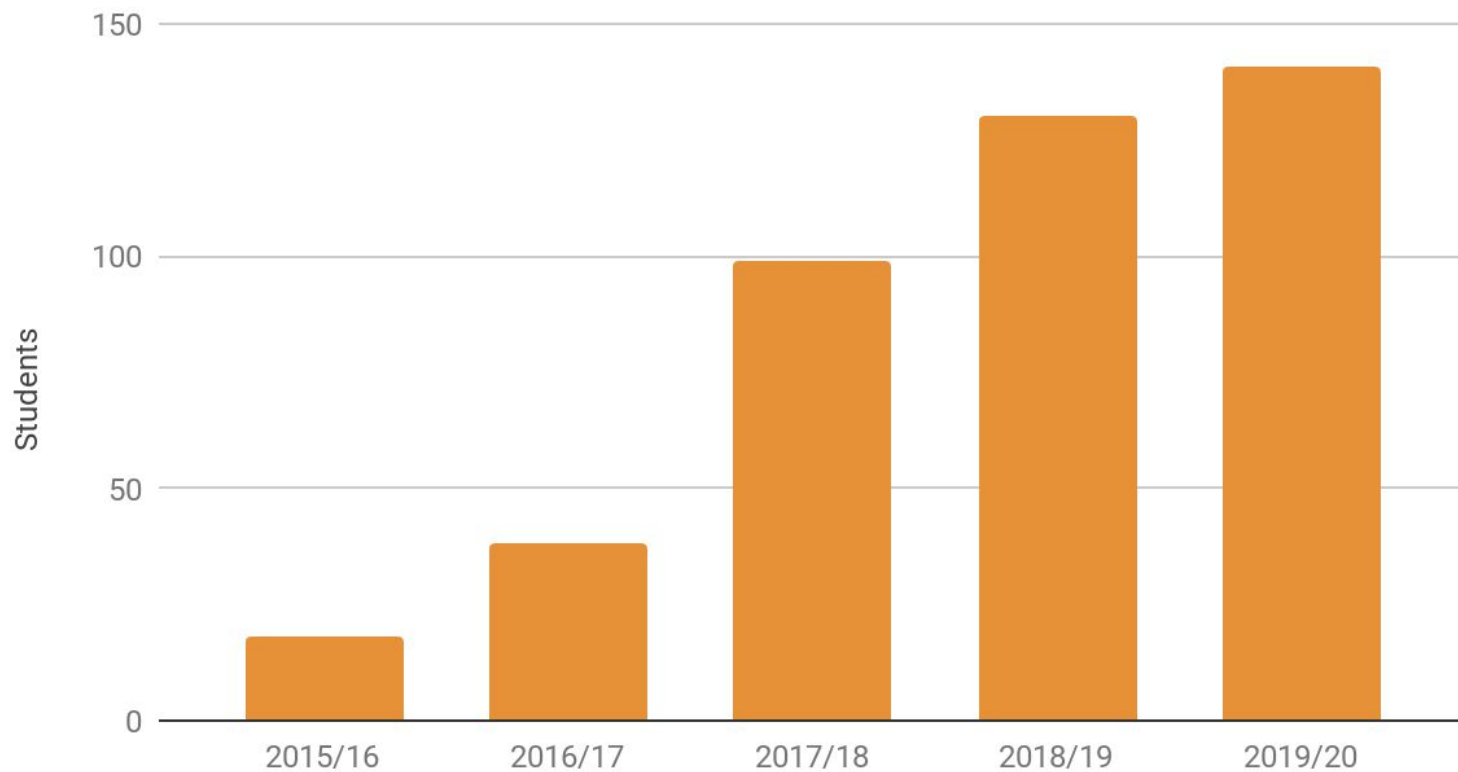
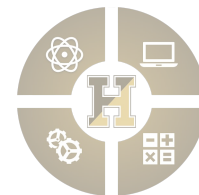
What does it take?



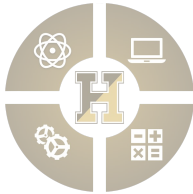
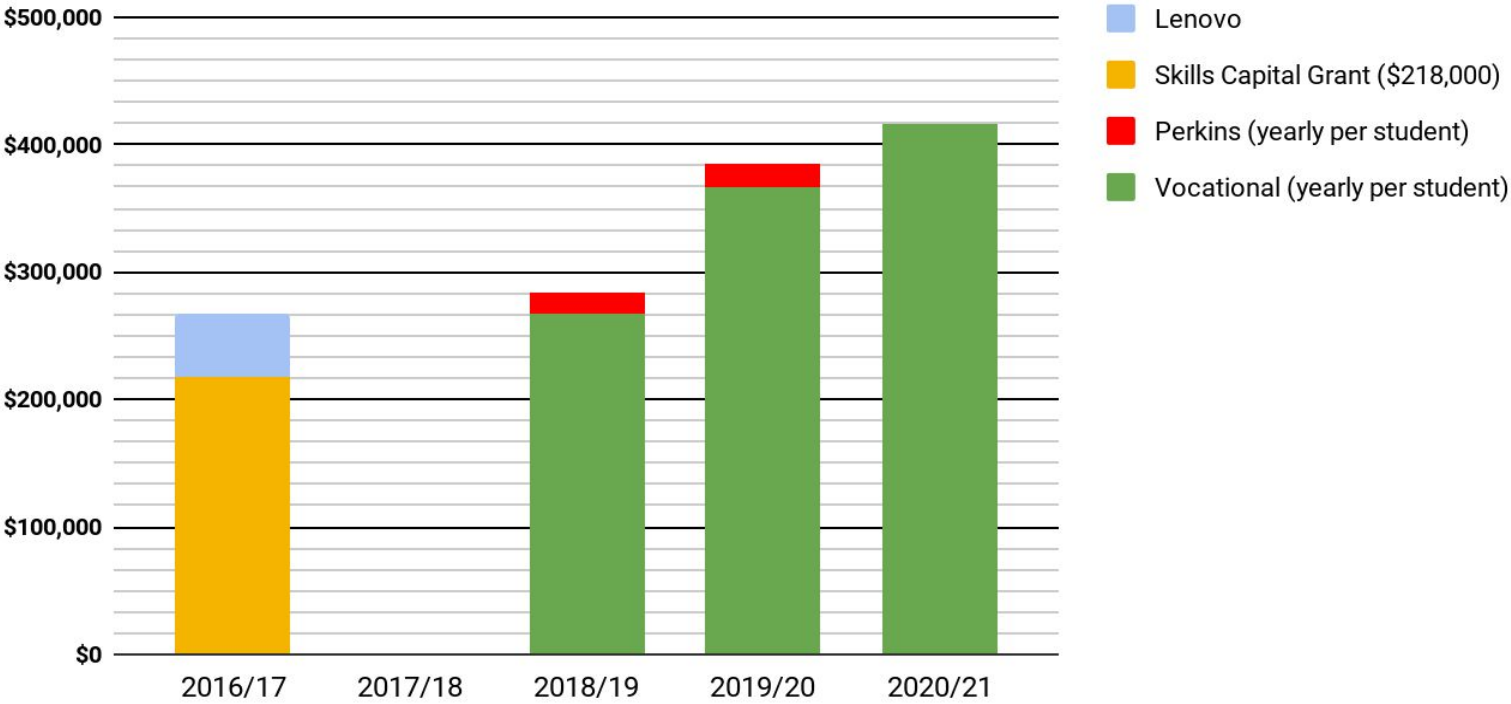
In order to provide quality, project-based courses, work-based learning opportunities and industry credentials students need:

- additional equipment and supplies
- additional staff to support program growth and success of all scholars

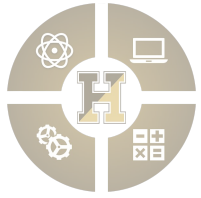
CTE Student Enrollment



CTE Funding



2020/21 Vocational Funding



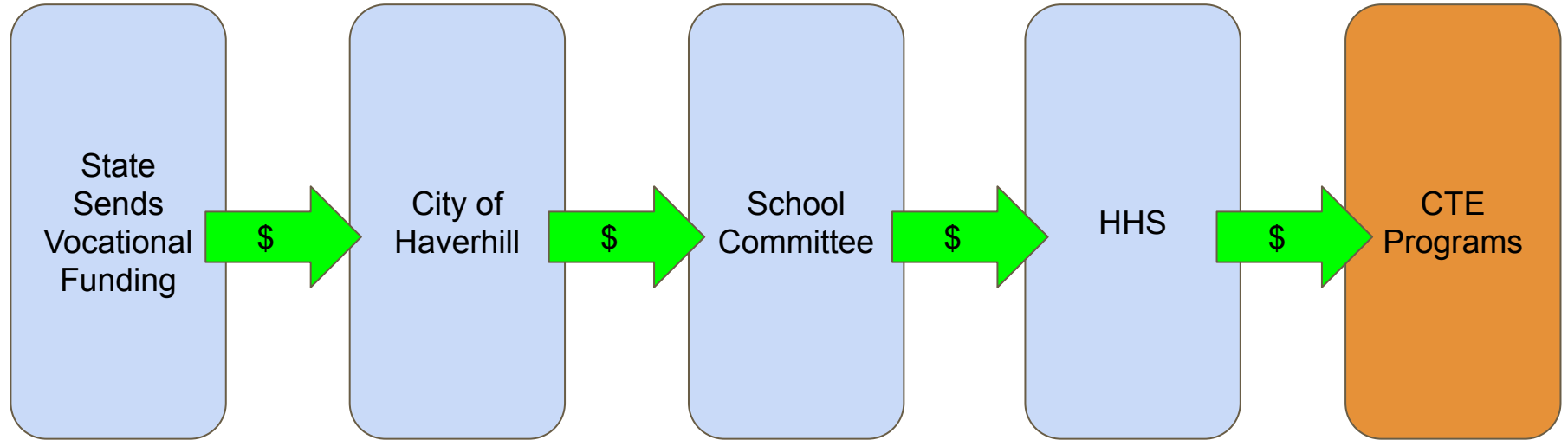
141 Vocational students difference in funding between a vocational high school student (\$14, 954.65) and a non-vocational high school student (\$9,785.25) for FY21 budget is \$5,169.40

\$5,169.40 X .5988=\$3095.44

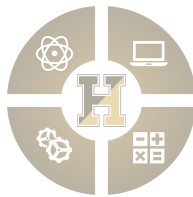
\$3,095.44 X 141= **\$436,457.04**

\$436,457.04 In Additional Funding for the City of Haverhill

Vocational Funding



Zyon Bessette 2018 Graduate NAF IT

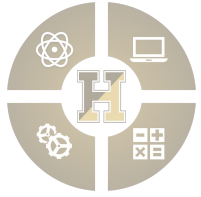


How NAF IT Helped Launch My Career

Paid Internship

Job That Helps Pay for College Classes

Mina Girgis 2019 Graduate NAF IT



Internship

Capstone

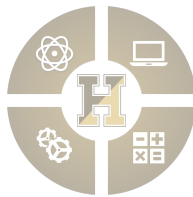
Merrimack College

Merrimack College Help Desk

Hackathon



Amber Welch Grade 10 Programming and Web Development

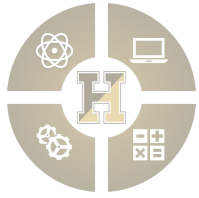


Hands on Project-based Courses

Python

Internship Working With a Team Building the CTE Website

Chelsea Daigle Grade 11 NAF IT



Completed: Cisco IT Essentials and A+ Course

Next Semester: Cisco Networking Course

Summer Internship: looking at Lawrence General Hospital
with the IT Department



Maddie Connolly Grade 12 Healthcare

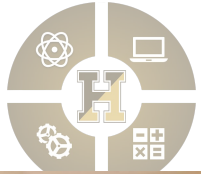
Internship: LGH Emergency Room

Working in Healthcare: Home Health Aid

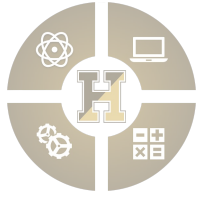
Clinical: Career choice

College Acceptance: stronger candidate

Student Govt: professionalism & leadership



Sara Levesque Grade 12 Healthcare



Benefits of the Program

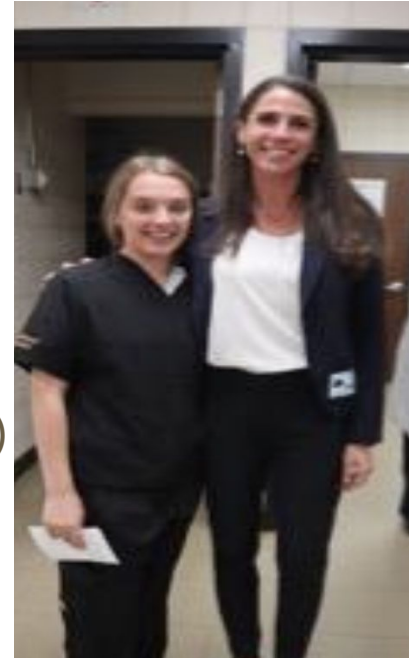
Support System: Students and Staff

Certifications: Qualify for jobs in Healthcare Industry

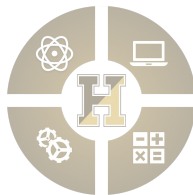
Clinical: Communication, Decisions About Future

Healthcare Management: Internship (Grant Writing & Budget)

Capstone: Community Outreach (Vaping or Concussions)



Benefits & Highlights



Addresses District and School Goals:

- Increase Graduation Rate
- Increase # of students attending college
- College and Career Ready (Future Ready)

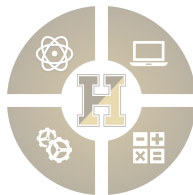
Community Benefits:

- Adds to the STEM Labor Force
- Supports Economic Growth

Provides Choice & Opportunity:

- Expanded Access to CTE programs
- Access to AP / Concurrent Enrollment
- Prep for Certifications (e.g. CNA, EMT)
- Post-secondary and Career Prep

Foundational Needs



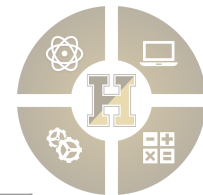
Clearly Earmarked Funds and Line Items

Priorities: Human Resources to Support the Growth of the Programs and Scholar Success

Contract: CTE Program Lead Teachers

Work-based Learning Staff

Growth



Year	Programs	# of FTE Staff	# of Students	IEP	ELL
2015-16	1	.2	18	1	0
2016-17	2	.6	30	4	0
2017-18	3	2.4	99	13	0
2018-19	3	3	130	22	4
2019-20	3	3.5	141	28	16

Massachusetts Department of Elementary and Secondary Education

Office of School Finance



FY21 Chapter 70 Foundation Budget

128 Haverhill

	Base Foundation Components							Incremental Costs Above the Base							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
		----- Kindergarten -----			Junior/ Middle	High School		Special Ed	Special Ed	English learners	English learners	English learners			
	Pre-school	Half-Day	Full-Day	Elementary			Vocational	In-District	Tuitioned-Out	PK-5	6-8	High School/Voc	Low income	TOTAL ENROLLMENT	
Foundation Enrollment	211	1	625	3,541	2,224	1,902	141	324	83	543	139	121	4,497	8,540	
1 Administration	42,173	200	249,831	1,415,444	889,000	760,286	56,362	893,854	245,103	50,738	13,640	10,065	291,855	4,918,551	
2 Instructional Leadership	76,165	361	451,219	2,556,425	1,605,617	1,373,149	101,795	0	0	88,791	23,868	17,614	1,382,783	7,677,786	
3 Classroom & Specialist Teachers	349,243	1,655	2,068,969	11,721,808	6,478,712	8,148,035	1,026,864	2,949,492	0	621,507	167,074	123,288	13,498,600	47,155,246	
4 Other Teaching Services	89,570	425	530,650	3,006,451	1,359,264	967,757	71,742	2,753,900	3,744	88,791	23,868	17,614	0	8,913,775	
5 Professional Development	13,812	65	81,863	463,871	315,830	261,905	32,099	142,281	0	25,364	6,819	5,031	654,853	2,003,794	
6 Instructional Materials, Equipment & Technology	50,547	240	299,456	1,696,599	1,065,585	1,458,092	189,159	124,189	0	63,417	17,048	12,579	100,418	5,077,330	
7 Guidance & Psychological Services	27,590	131	163,463	926,113	733,698	764,471	56,672	0	0	38,053	10,229	7,548	546,610	3,274,578	
8 Pupil Services	10,105	48	59,900	508,948	522,173	1,029,762	76,339	0	0	12,684	3,410	2,517	2,840,305	5,066,190	
9 Operations & Maintenance	96,982	460	574,525	3,255,029	2,216,372	1,837,865	254,990	998,477	0	152,203	40,916	30,193	0	9,458,011	
10 Employee Benefits/Fixed Charges	119,131	565	705,744	3,998,568	2,610,754	2,010,224	242,585	1,043,941	0	139,524	37,506	27,676	2,183,518	13,119,735	
11 Special Education Tuition	0	0	0	0	0	0	0	0	2,327,123	0	0	0	0	2,327,123	
12 Total	875,317	4,148	5,185,619	29,549,255	17,797,004	18,611,546	2,108,606	8,906,135	2,575,971	1,281,073	344,378	254,125	21,498,943	108,992,111	

13 Wage Adjustment Factor	100.0%
*The wage adjustment factor is applied to underlying rates in all functions except instructional equipment, benefits and special education tuition.	
14 Low income percentage	54.17%
15 Low income group range	54.00 - 69.99%
16 Low income group number	10

Foundation Budget per Pupil	12,763
-----------------------------	--------

English learner foundation budget as % total foundation budget	1.7%
Low-income foundation budget as % total foundation budget	19.7%

Low income enrollment determination	
Estimated low income enrollment based on FY16 Ch.70	4,242
FY21 low income enrollment from direct certification	4,497
greater number used for FY21 Chapter 70	4,497

Total foundation enrollment (column 14) does not include incremental costs above the base. The pupils are already counted in columns 1 to 7.

Total foundation enrollment assigns pupils in pre-kindergarten and half-time kindergarten an enrollment count of 5.

Special education in-district enrollment is an assumed percentage, representing 3.82 percent of K-12 non-vocational enrollment and 4.82 percent of vocational enrollment.

Special education tuitioned-out enrollment is also an assumed percentage, representing 1 percent of non-vocational K-12 enrollment.

As specified in the Student Opportunity Act of 2019, each district's FY21 low income enrollment is calculated by taking the greater of:

- (a) the number of low income students identified through direct certification up to 133% of the federal poverty standard, or
- (b) the estimated number of low income students determined by multiplying the district's FY16 low income % by its FY21 foundation enrollment

Direct certification includes the Supplemental Nutrition Assistance Program (SNAP);

the Transitional Assistance for Families with Dependent Children (TAFDC); MassHealth (Medicaid); and students in foster care.

Low income and English learner foundation budget increments are based on:

the number of students attending school in the district or district residents who attend charter schools.

The low income percentage is the ratio of the low-income enrollment to:

the total students attending school in the district and the total resident students attending charter schools.

FY21 Chapter 70 Summary

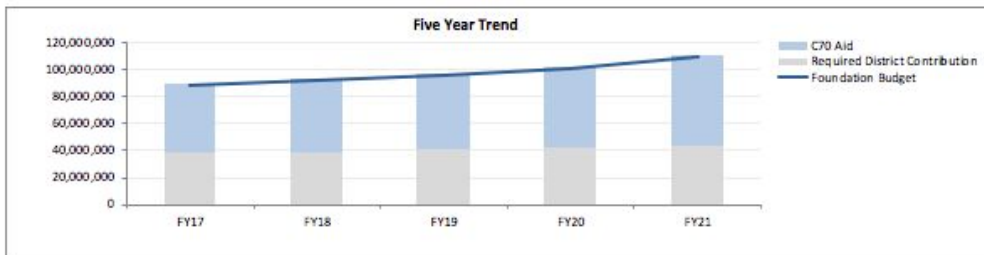
128 Haverhill

Aid Calculation FY21

Prior Year Aid	
1 Chapter 70 FY20	58,353,924
Foundation Aid	
2 Foundation budget FY21	108,992,119
3 Required district contribution FY21	43,726,032
4 Foundation aid (2 - 3)	65,266,087
5 Increase over FY20 (4 - 1)	6,912,163
Minimum Aid	
6 Minimum \$30 per pupil increase	256,200
7 Minimum aid amount (if line 6 - line 5 > 0, then line 6 - line 5, otherwise 0)	0
Subtotal	
8 Sum of 1,5,7	65,266,087
Minimum Aid Adjustment	
9 Minimum aid adjustment	64,016,125
10 Aid adjustment increment (if line 9 - line 8 > 0, then line 9 - line 8, otherwise 0)	0
Non-Operating District Reduction to Foundation	
11 Reduction to foundation	0
FY21 Chapter 70 Aid	
Sum of 1,5,7,10 minus 11	65,266,087

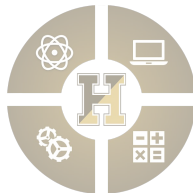
Comparison to FY20

	FY20	FY21	Change	Pct Chg
Enrollment	8,237	8,540	303	3.68%
Foundation budget	100,463,268	108,992,119	8,528,851	8.49%
Required district contribution	42,109,344	43,726,032	1,616,688	3.84%
Chapter 70 aid	58,353,924	65,266,087	6,912,163	11.85%
Required net school spending (NSS)	100,463,268	108,992,119	8,528,851	8.49%
Target aid share	56.84%	57.89%		
C70 % of foundation	58.08%	59.88%		
Required NSS % of foundation	100.00%	100.00%		



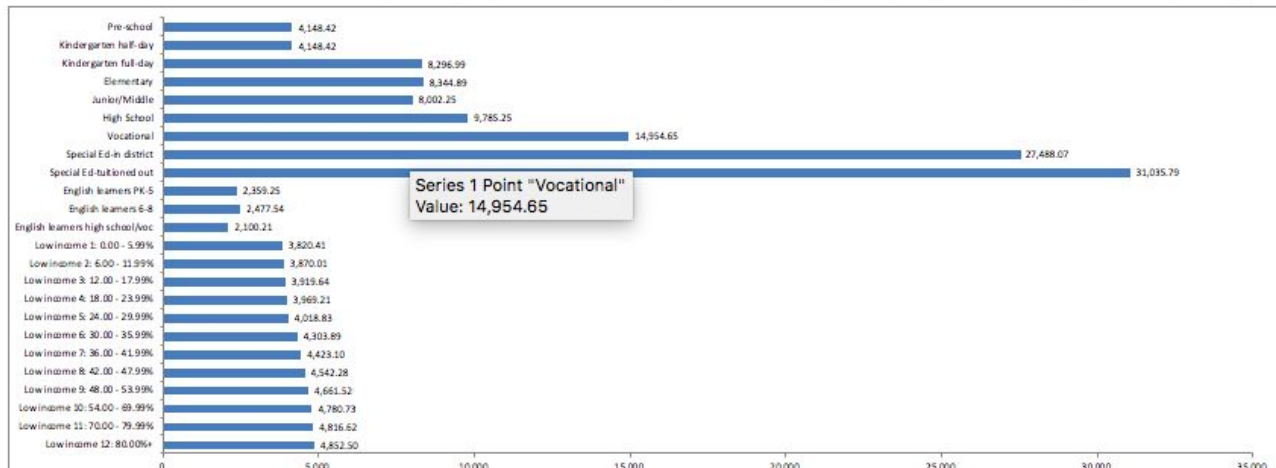
Note on Minimum Aid Adjustment on lines 9 and 10:

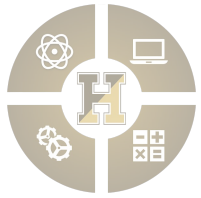
The minimum aid adjustment is the sum of (a) the greater of foundation aid or base aid determined based on the FY20 base and incremental rates, inflated to FY21, and (b) foundation enrollment multiplied by \$30. The aid adjustment increment (line 9) is the line 8 amount less the line 7 amount if the difference is positive. Otherwise, the increment is zero.



Foundation Budget Rates Per Pupil, FY21 Chapter 70

	Administration	Instructional Leadership	Classroom & Specialist Teachers	Other Teaching Services	Professional Development	Instructional Materials, Equipment & Technology	Guidance & Psychological Services	Pupil Services	Operations & Maintenance	Employee Benefits/Fixed Charges	Special Education Tuition	Total, All Categories
Pre-school	199.87	360.97	1,655.18	424.50	65.46	239.56	130.76	47.89	459.63	564.60	0.00	4,148.42
Kindergarten half-day	199.87	360.97	1,655.18	424.50	65.46	239.56	130.76	47.89	459.63	564.60	0.00	4,148.42
Kindergarten full-day	399.73	721.95	3,310.35	849.04	130.98	479.13	261.54	95.84	919.24	1,129.19	0.00	8,296.99
Elementary	399.73	721.95	3,310.35	849.04	131.00	479.13	261.54	143.73	919.24	1,129.22	0.00	8,344.89
Junior/Middle	399.73	721.95	2,913.09	611.18	142.01	479.13	329.90	234.79	996.57	1,173.90	0.00	8,602.25
High School	399.73	721.95	4,283.93	508.81	137.70	766.61	401.93	541.41	866.28	1,056.90	0.00	9,785.25
Vocational	399.73	721.95	7,282.72	508.81	227.65	1,341.55	401.93	541.41	1,808.44	1,720.46	0.00	14,954.65
Special Ed-in district	2,758.81	0.00	9,163.37	8,499.69	439.14	383.30	0.00	0.00	3,081.72	3,222.64	0.00	27,488.07
Special Ed-tuitioned out	2,953.05	0.00	0.00	45.11	0.00	0.00	0.00	0.00	0.00	0.00	28,037.63	31,035.79
English learners PK-5	93.44	163.52	1,144.58	163.52	46.71	116.79	70.08	23.36	280.30	256.95	0.00	2,359.25
English learners 6-8	98.13	171.71	1,201.97	171.71	49.06	122.65	73.59	24.53	294.36	269.83	0.00	2,477.54
English learners high school/voc	83.18	145.57	1,018.91	145.57	41.58	103.96	62.38	20.80	249.53	228.73	0.00	2,100.21
Low income 1: 0.00 - 5.99%	51.86	245.72	2,398.74	0.00	116.38	17.84	97.13	504.73	0.00	388.01	0.00	3,820.41
Low income 2: 6.00 - 11.99%	52.54	248.91	2,429.88	0.00	117.89	18.07	98.39	511.28	0.00	393.05	0.00	3,870.01
Low income 3: 12.00 - 17.99%	53.21	252.11	2,461.02	0.00	119.40	18.31	99.66	517.84	0.00	398.09	0.00	3,919.64
Low income 4: 18.00 - 23.99%	53.88	255.29	2,492.17	0.00	120.91	18.53	100.92	524.38	0.00	403.13	0.00	3,969.21
Low income 5: 24.00 - 29.99%	54.55	258.49	2,523.31	0.00	122.42	18.77	102.18	530.94	0.00	408.17	0.00	4,018.83
Low income 6: 30.00 - 35.99%	58.42	276.82	2,702.31	0.00	131.10	20.10	109.42	568.60	0.00	437.12	0.00	4,303.89
Low income 7: 36.00 - 41.99%	60.05	284.49	2,777.15	0.00	134.73	20.65	112.45	584.35	0.00	449.23	0.00	4,423.10
Low income 8: 42.00 - 47.99%	61.66	292.15	2,851.99	0.00	138.36	21.21	115.48	600.10	0.00	461.33	0.00	4,542.28
Low income 9: 48.00 - 53.99%	63.28	299.82	2,926.85	0.00	141.99	21.77	118.52	615.85	0.00	473.44	0.00	4,661.52
Low income 10: 54.00 - 59.99%	64.90	307.49	3,001.69	0.00	145.62	22.33	121.55	631.60	0.00	485.55	0.00	4,780.73
Low income 11: 70.00 - 79.99%	65.39	309.80	3,024.23	0.00	146.72	22.49	122.46	636.34	0.00	489.19	0.00	4,816.62
Low income 12: 80.00%+	65.87	312.11	3,046.76	0.00	147.81	22.66	123.37	641.08	0.00	492.84	0.00	4,852.50





Until 2018/19 there were no additional staff positions added to the High School to support CTE programs. (This was done through a reallocation of teaching responsibilities)

In 2018/19 we hired a .4 Healthcare teacher.

In 2019/20 we increased the Healthcare teacher from .4 to .6 time.