Hollis Brookline High School

STEM Center Public Forum



Goal Statement

- To provide a high quality education to all students that best prepares them for the future
  - To enhance our computer science & engineering offerings
  - To provide adequate space to meet the Board Policy-defined optimal class-size (7:30-2:30)
  - To provide an adequate space for extra-curricular activities such as Robotics (2:30-10:00)

Facts

- Over one-third of our courses exceeded School Board class size specs
- 1 physics lab is used for 9-10 sections of physics
- Not enough math & humanities classrooms available to meet the student requests
- Room utilization is at 93%
- HB1674 added computer science to “adequate education”

Facts

- Student enrollment exceeds projections
- Athletic trainer lacks private space to work with student athletes
- Current weight room facility has underutilized space overhead
- Robotics team is housed in an overcrowded, inadequate space in the middle school

Needs

- Classroom space to house CORE curricular offerings
- Reduction in class size to conform to School Board policy (additional teacher in FY 20 operating budget, additional teacher made available through course changes)
- Appropriate space to house computer science & engineering classes (7:30-2:30) as well as Robotics (2:30-10:00)

Space Needs—Why Now?

- Student enrollment is close to that of ten years ago…

  BUT…

- New specialized programs have been developed that take up space (~3-4 classrooms)
- FIEMUS, CHOICE, additional Life Skills classroom due to expanded population, Executive Functioning, etc.

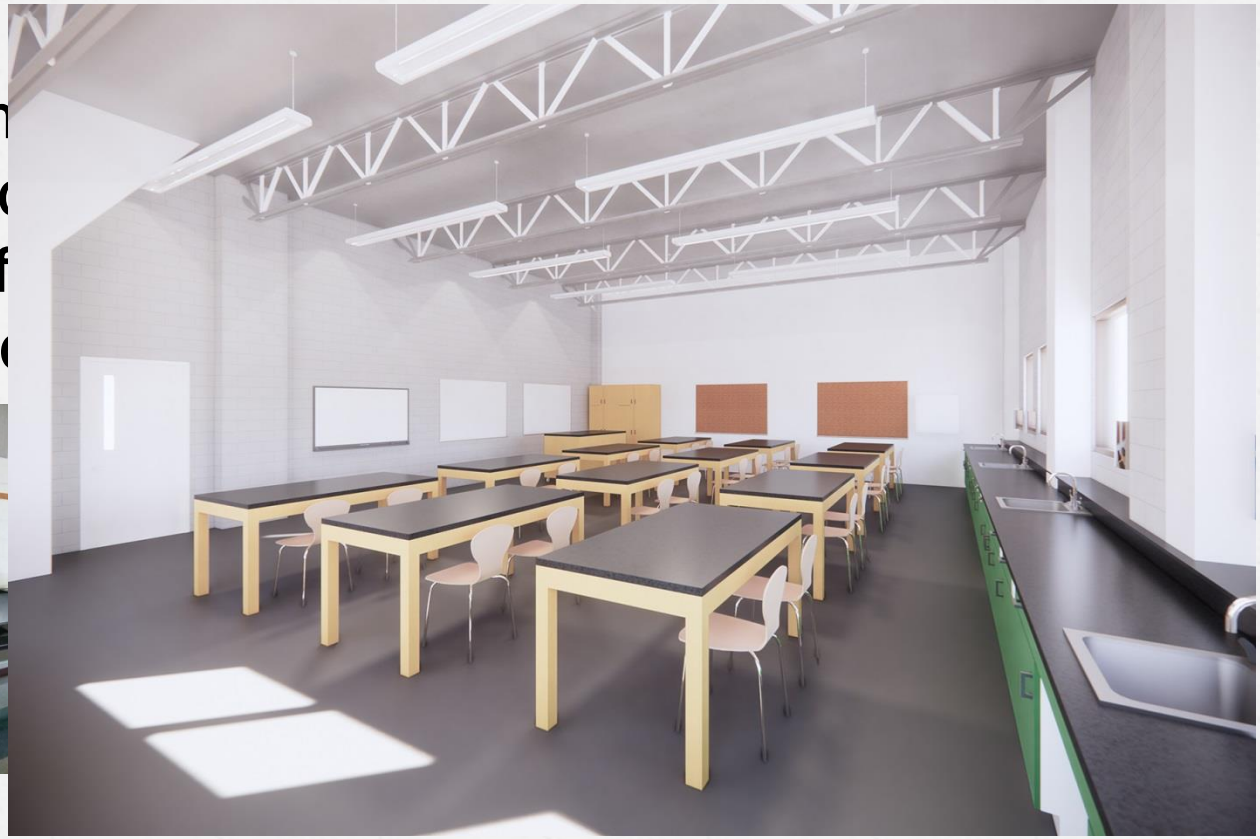
Proposal

- Add a second floor and “bump out” to existing Weight Room
- Create:
  - Engineering Classroom
  - Computer Science Classroom
  - Wellness Classroom
  - Modern Cross-Training Fitness Center

By-Product of Proposal

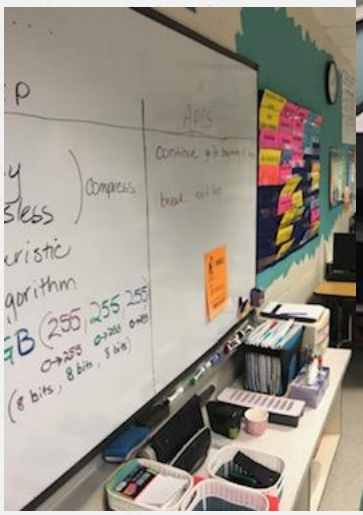
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By-Product of Proposal

- Room 21
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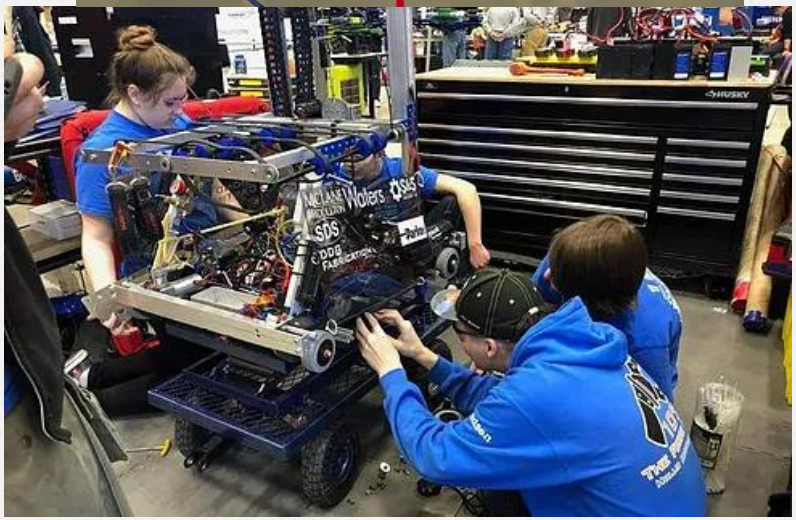
By-Product of Proposal

- Room 362 becomes Directed Study Classroom
- Room 370 becomes a Math Classroom
- Greater flexibility with schedule given additional classrooms

By-Product of Proposal

- Appropriate space/classrooms for Robotics Team (2:30-10:00)
- Engineering
- Computer science
- Wellness
- Directed Study
- Mini Gym

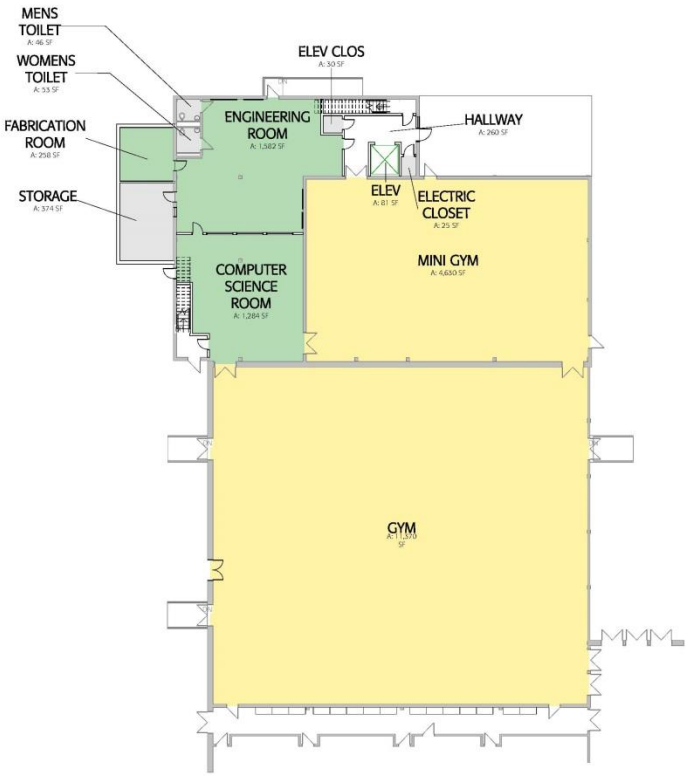




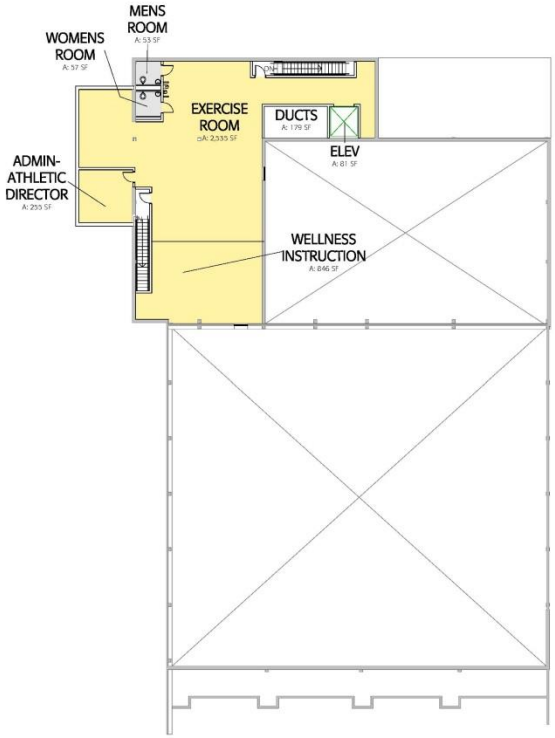
By-Product of Proposal

- Athletic Director's Office becomes Athletic Trainer's Office with appropriate privacy





1 LEVEL 1 - FLOOR PLAN PRESENTATION - OPTION 1
Scale: 1/16" = 1'-0"



2 LEVEL 2 - FLOOR PLAN PRESENTATION - OPTION 1
Scale: 1/16" = 1'-0"

Department Legend
- Core Area
- Facilities Support
- Specialized Classroom

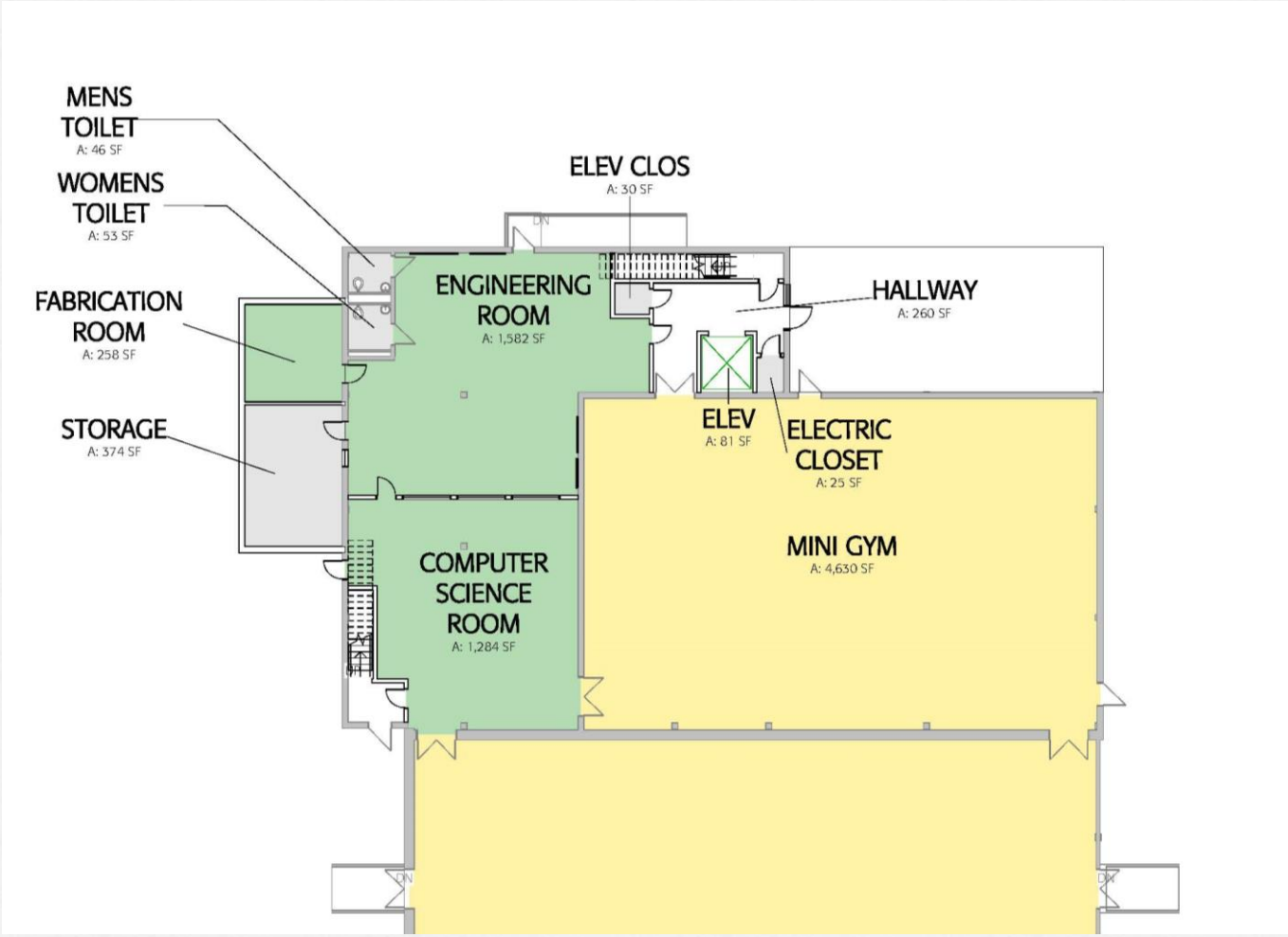
PROPOSED PLANS

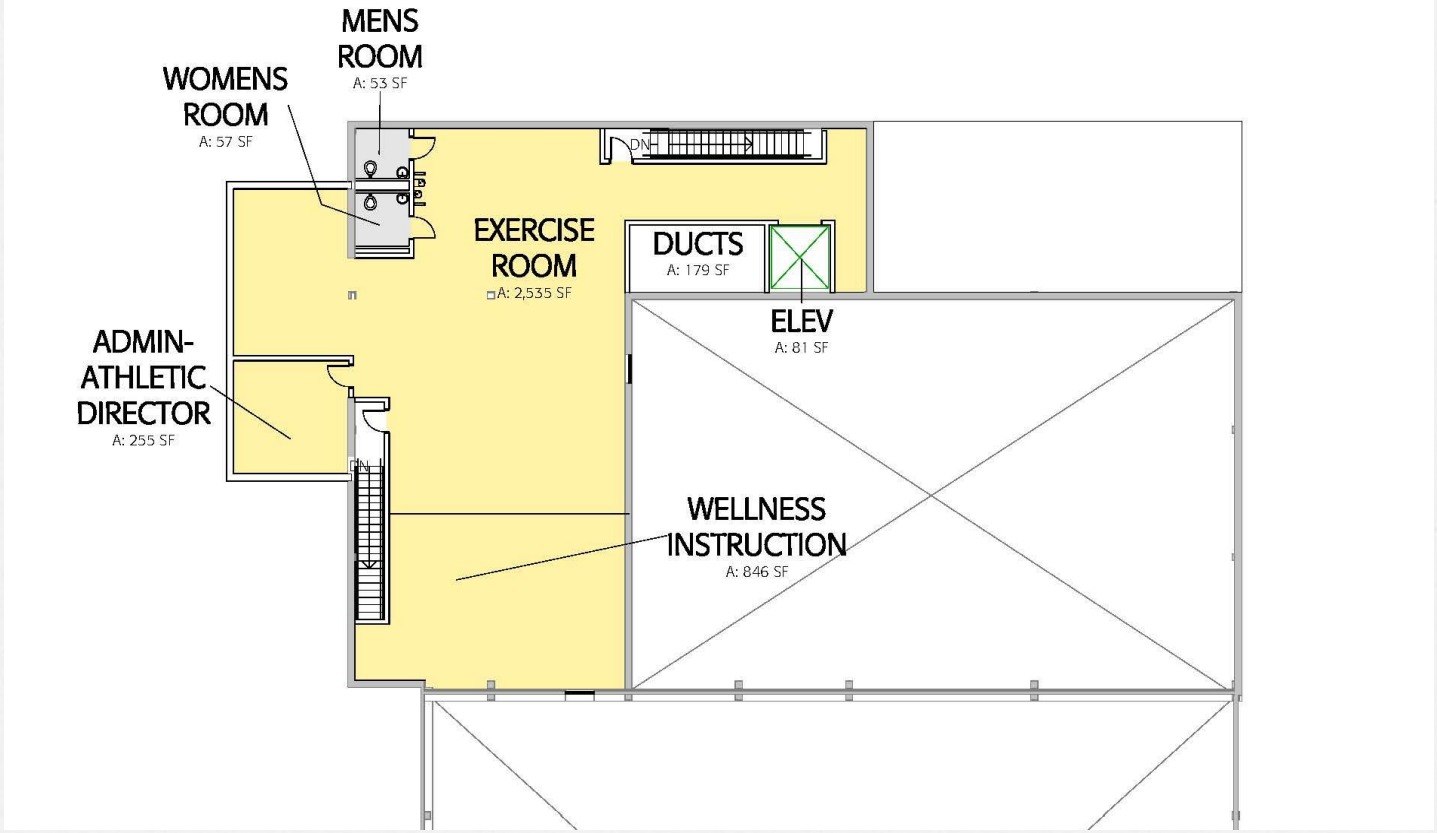
Hollis Brookline High School

Hollis, New Hampshire

12/7/18

banwell ARCHITECTS


MENS TOILET
A: 46 SF
WOMENS TOILET
A: 53 SF
FABRICATION ROOM
A: 258 SF
STORAGE
A: 374 SF
ELEV CLOS
A: 30 SF
ENGINEERING ROOM
A: 1,582 SF
HALLWAY
A: 260 SF
ELEV
A: 81 SF
ELECTRIC CLOSET
A: 25 SF
COMPUTER SCIENCE ROOM
A: 1,284 SF
MINI GYM
A: 4,630 SF


MENS
ROOM
A: 53 SF
WOMENS
ROOM
A: 57 SF
EXERCISE
ROOM
A: 2,535 SF
DUCTS
A: 179 SF
ELEV
A: 81 SF
ADMIN-
ATHLETIC
DIRECTOR
A: 255 SF
WELLNESS
INSTRUCTION
A: 846 SF
DN
DN

Design Needs

- Flexible work space
- Storage
- Ceiling mounted electrical
- Open table/build space
- Space for high end laptops with graphics to handle CAD



Cost: STEM Center Renovation

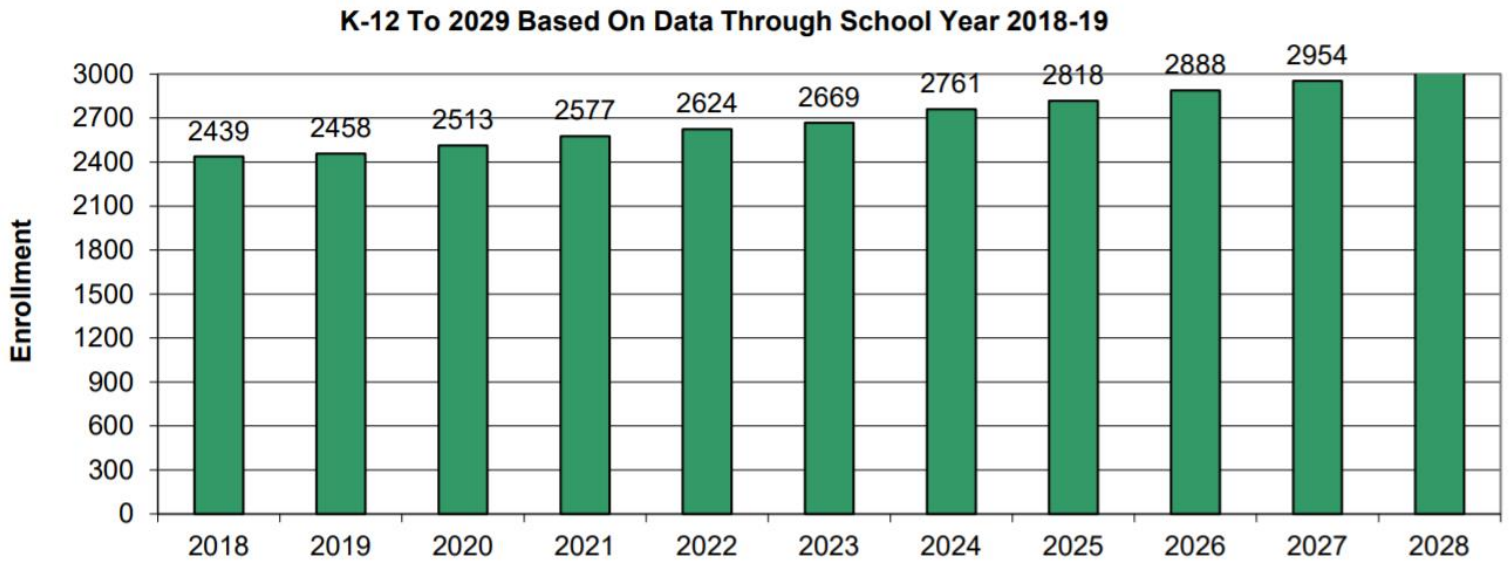
$2,060,000

STEM Equipment & Athletics Equipment funded through private donations (HB Elevates)

Cost Analysis

STEM Bond Impact Summary	Bond		
	Total	Hollis	Brookline
Principal (in $ M)	$2.06	$1.39	$0.67
Term	10	10	10
Interest Rate	3.50%	3.50%	3.50%
Interest Cost	$402,160	$270,978	$131,182
Total P+I	$2,462,160	$1,659,019	$803,141
CUMULATIVE Tax $/$100K		$122	$122
FY20 (interest only)	**$43,060**	$29,014	$14,046
FY20 Tax Rate Impack/K		**$0.02**	**$0.02**
FY20 Tax $/$100K		$2	$2
Avg Annual FY21+	$241,910	$163,000	$78,910
Avg Annual FY21 + Tax Rate/K		$0.12	$0.12
Avg Annual FY21 + Tax $/$100K		**$12**	**$12**

SAU #41, NH Projected Enrollment



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School District: SAU #41 Hollis-Brookline, NH **10/18/2018**

Enrollment Projections By Grade*

Birth Year	Births		School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2013	76		2018-19	57	146	147	158	164	182	186	204	172	220	211	217	211	221	0	2439	2496
2014	81		2019-20	58	148	177	152	170	176	186	192	209	176	224	214	219	215	0	2458	2516
2015	100		2020-21	60	182	174	185	163	183	180	193	198	211	179	226	216	223	0	2513	2573
2016	104	(prov.)	2021-22	61	190	217	181	197	174	187	186	201	201	215	180	228	220	0	2577	2638
2017	88	(est.)	2022-23	63	162	225	227	194	211	178	194	192	204	205	219	181	232	0	2624	2687
2018	90	(est.)	2023-24	64	164	199	234	243	208	216	185	202	194	208	208	222	186	0	2669	2733
2019	93	(est.)	2024-25	66	170	196	208	250	260	212	223	194	205	198	210	210	225	0	2761	2827
2020	95	(est.)	2025-26	67	174	203	205	221	268	266	220	229	198	208	201	212	213	0	2818	2885
2021	94	(est.)	2026-27	69	171	208	212	219	237	274	275	231	232	201	209	203	216	0	2888	2957
2022	92	(est.)	2027-28	70	168	205	217	226	235	243	284	285	235	237	202	211	206	0	2954	3024
2023	93	(est.)	2028-29	72	170	202	214	232	243	240	251	297	289	240	242	204	216	0	3040	3112

Note: Ungraded students (UNGR) often are HS students whose anticipated years of graduation are unknown, or students with special needs - UNGR not included in Grade Combinations for 7-12, 9-12, etc.

Based on an estimate of births | Based on children already born | Based on students already enrolled

Projected Enrollment in Grade Combinations*

Year	K-3	4-6	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2018-19	615	572	1187	1579	782	596	392	1252	860
2019-20	647	554	1201	1586	763	577	385	1257	872
2020-21	704	556	1260	1669	782	602	409	1253	844
2021-22	785	547	1332	1734	775	588	402	1245	843
2022-23	808	583	1391	1787	768	590	396	1233	837
2023-24	840	609	1449	1845	797	581	396	1220	824
2024-25	824	695	1519	1918	834	622	399	1242	843
2025-26	803	754	1557	1984	913	647	427	1261	834
2026-27	810	786	1596	2059	1012	738	463	1292	829
2027-28	816	762	1578	2098	1047	804	520	1376	856
2028-29	818	734	1552	2138	1077	837	586	1488	902

Projected Percentage Changes

Year	K-12	Diff.	%
2018-19	2439	0	0.0%
2019-20	2458	19	0.8%
2020-21	2513	55	2.2%
2021-22	2577	64	2.5%
2022-23	2624	47	1.8%
2023-24	2669	45	1.7%
2024-25	2761	92	3.4%
2025-26	2818	57	2.1%
2026-27	2888	70	2.5%
2027-28	2954	66	2.3%
2028-29	3040	86	2.9%
Change		601	24.6%

*Projections should be updated annually to reflect changes in in/out-migration of families, real estate sales, residential construction, births, and similar factors.

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