



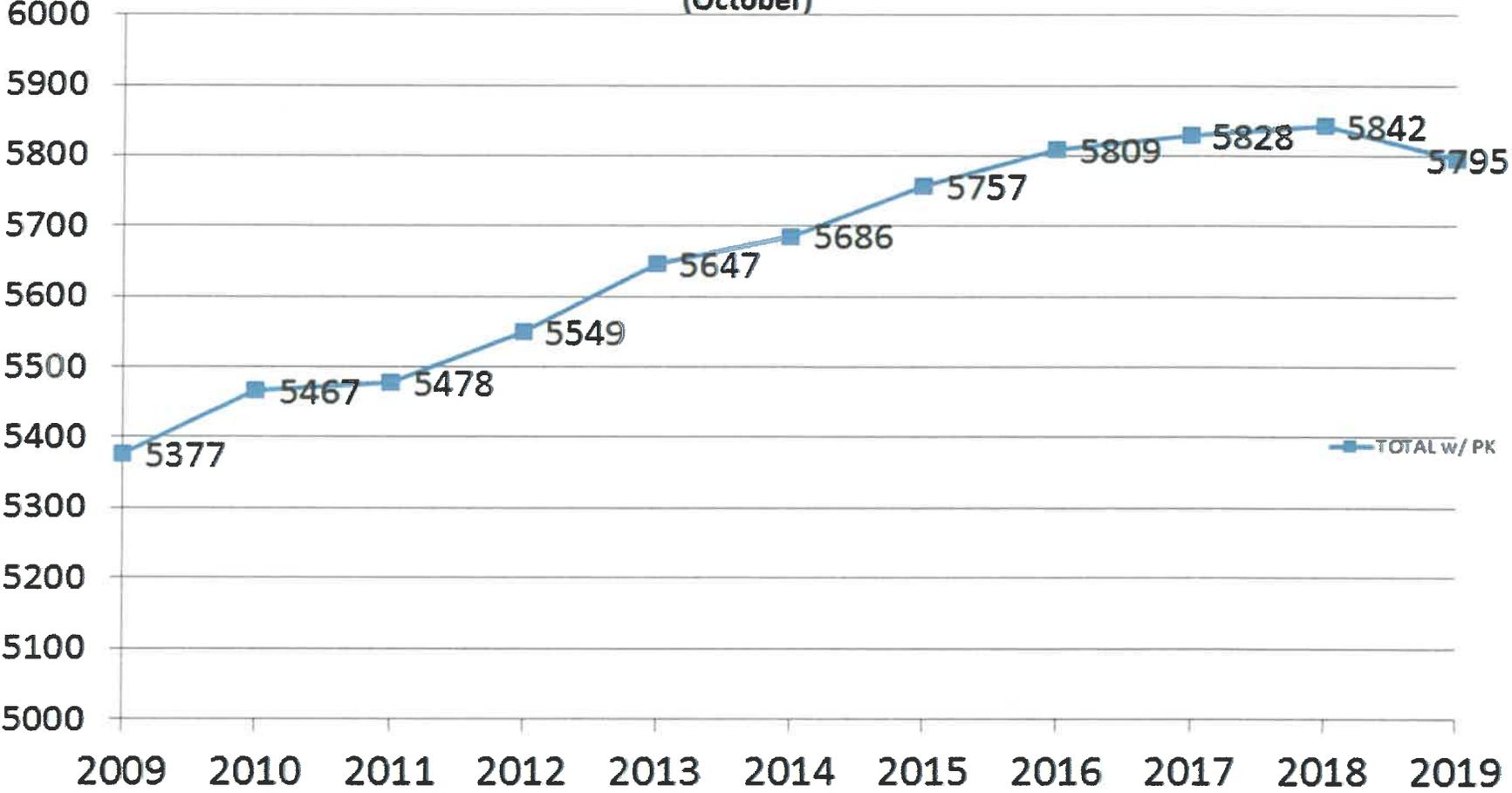
Braintree Public Schools

Braintree School Committee
FY21 Recommended Budget

FY21 BUDGET DEVELOPMENT

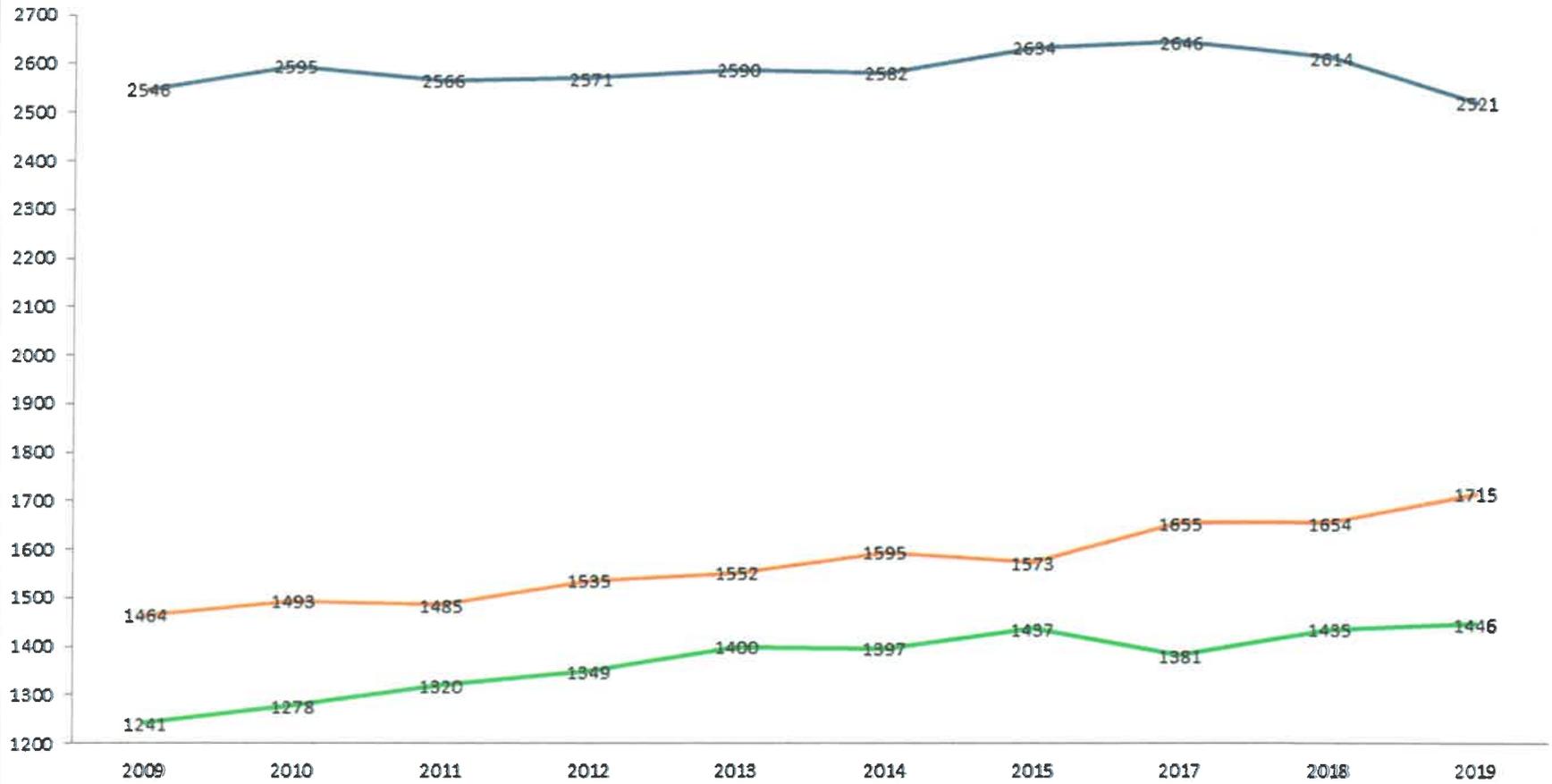
ENROLLMENT

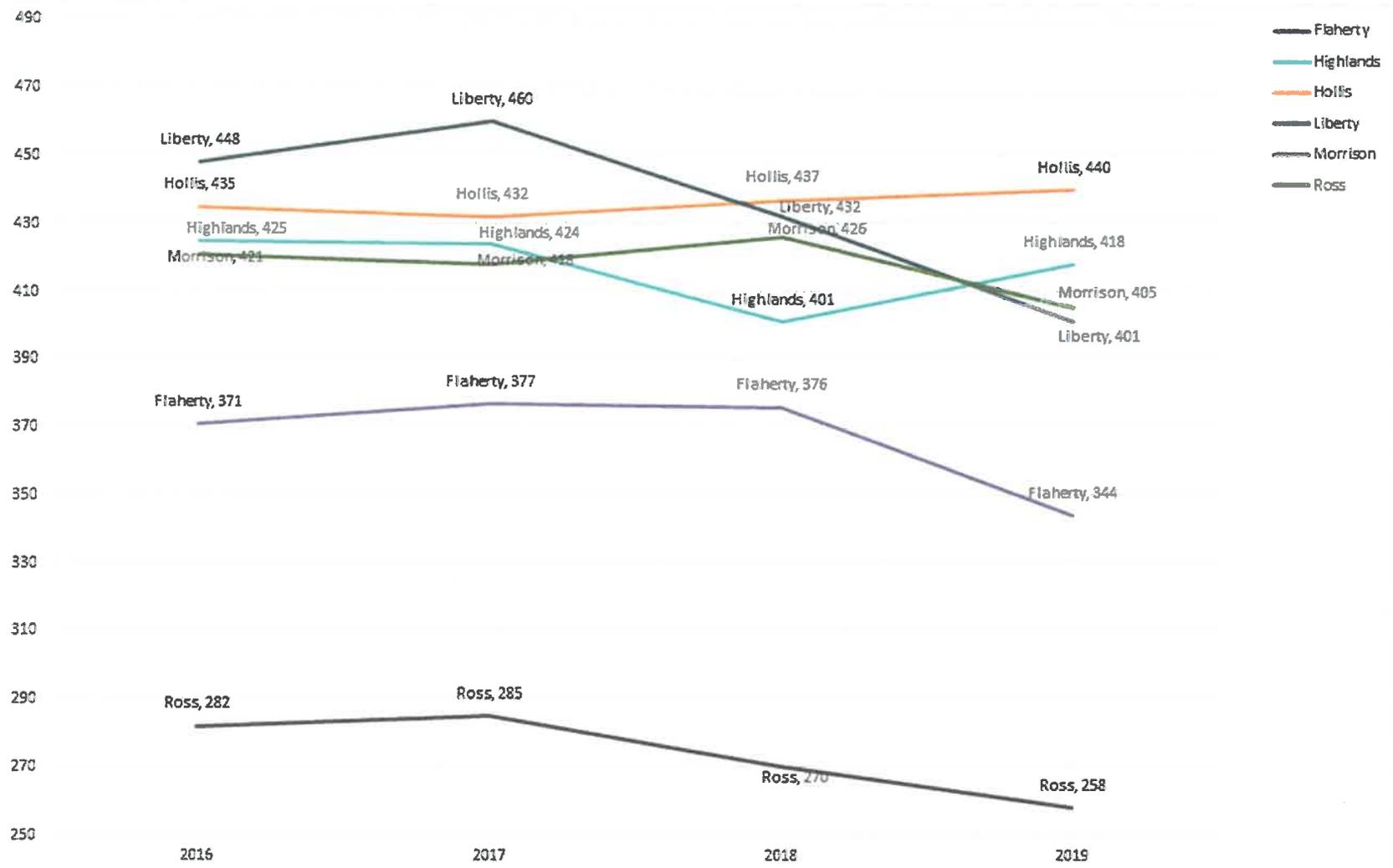
TOTAL BPS ENROLLMENT
(October)



BPS Enrollment by Grade Span

All Middle High (No SP 18+) All Elementary





A Changing Demographic

RACE	% of District 1997-1998	% of District 2007-2008	% of District 2017-2018	% of District 2018-2019	% of District 2019-2020
African American	2.5	3.4	4.8	4.8	4.6
Asian	2.9	7.7	17.3	19.8	21.6
Hispanic	1	3.4	4.6	4.8	4.7
Native American	0.1	0.2	0.3	0.1	0.1
White	93.5	84.6	71.6	68.8	67.2
Native Hawaiian, Pacific Islander	Not Avail	0.1	0.1	0.1	0.1
Multi-Race, Non-Hispanic	Not Avail	0.7	1.3	1.5	1.6

Source: <http://profiles.doe.mass.edu/statereport/enrollmentbyracegender.aspx>

English Language Learners by School

SCHOOL	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
Pre-K Center	6	18	25	49	45
Monatiquot Kindergarten Center	14	24	25	35	40
Flaherty Elementary School	22	31	28	30	21
Highlands Elementary School	18	14	21	19	28
Hollis Elementary School	21	28	28	31	24
Liberty Elementary School	29	37	32	40	33
Morrison Elementary School	39	43	39	29	29
Ross Elementary School	36	44	46	39	39
East Middle School	5	17	26	30	37
South Middle School	18	14	15	14	12
Braintree High School	20	37	37	40	31
TOTALS	228	307	322	356	339

Source: <http://profiles.doe.mass.edu/statereport/selectedpopulations.aspx>

English Language Learners

BPS v. State

YEAR	% Total BPS Enrollment Receiving EL	% Total State Enrollment EL	% BPS First Lang not English	% State First Lang not English
2013	2.6	7.7	7.9	17.3
2014	3.0	7.9	8.2	17.8
2015	3.9	8.5	9.7	18.5
2016	4.0	9.0	11.7	19.0
2017	5.0	9.5	13.7	20.1
2018	5.5	10.2	15.1	20.9
2019	5.8	10.5	16.9	21.9
2020	5.8	10.8	18.4	23.0

BPS EL reached 1% for the first time in 2003, and 2% for the first time in 2010.

Source: <http://profiles.doe.mass.edu/statereport/selectedpopulations.aspx>

FY21 BUDGET DEVELOPMENT

FY18, FY19 & FY20 SUMMARY

FY18 APPROVED ADDITIONS

Description	Amount	Notes
Elementary Adj. Counselor	\$65,000	Primary assignment to Flaherty for district-wide program support
Create ABLES Classroom (incoming MS students)	\$95,150	Staffing
	\$50,000	Specialized support (OT, PT, BCBA, etc.) – to include district-wide supports
	\$70,000	Modular unit (5 year lease, per year cost)
NEASC	\$40,000	BHS accreditation process – fee & visitation cost
MCAS Prep	\$25,000	Replacement of unfunded DESE grant
ELL Translation & Interpretation Services	\$30,000	Compliance with legal requirements – vital document translation & Interpretive services
1.0 Mathematics @SMS	\$60,000	Enrollment driven: Class size reduction (26-27 to 22-23)

FY19 APPROVED ADDITIONS

Description	Amount	Notes
1.0 Morrison Developmental 1	\$84,490	Student need/enrollment driven: Teacher + Paraprofessional
1.0 BHS Strives Teacher	\$65,490	Student need/enrollment driven: Spectrum Disorder Program
.5 South G8 Resource	\$32,745	Enrollment & Program driven (Addition of ABLES Classroom FY18)
Special Education/Student Services Contracted Services	\$44,150	Psych Evals, OT/PT, transportation, interpretation & translations for IEP ELL students
1.0 BHS Guidance Counselor	\$65,490	Enrollment driven: Current caseload 315:1; New caseload 260:1 (MASCA recommended)
1.0 Kindergarten Teacher (Hollis)	\$9,490 (net)	Enrollment driven. Projected net based on additional tuition revenue
1.0 BHS Biology	\$65,490	Enrollment driven.

FY20 APPROVED ADDITIONS

Description	Notes
2 X .62 Nurses EMS & SMS; Float CNA	DPH grant expired: Maintains current staffing level
.5 ELL Preschool Teacher	Change in law: unfunded mandate
1.0 SPED Transition Coordinator - Post Graduate	Increase in enrollment – restructuring of current model
1.0 Hollis Gr 1 Teacher	Enrollment driven: Offset from Grade 5 Flaherty Reduction
.5 Preschool Teacher	Enrollment driven; increases existing .5 to 1.0
.2 MSKC Mathematics Specialist	Instructional support in mathematics
1.0 ELA South MS	Enrollment Driven
1.0 BHS Mathematics/CS	Enrollment & Program Driven
1.0 Facilities Manager	1.0 Facilities Manager: created by eliminating 1.5 FTE

FY21 BUDGET

FY21 RECOMMENDED BUDGET

Some Terms & Background

- Contractual Steps & Lanes
 - Steps are based on years of experience
 - Lanes are based on degrees (Bachelors, Masters, Doctoral)
- Content Area Directors Budget: \$550,000 - all instructional materials K-12
- ESCO Project

BPS Historical Funding

FISCAL YEAR	Chapter 70 Funding	Change \$	Change %	School budget	Change \$	Change %	Town Allocation	Change \$	Change %
FY14	\$13,863,901	\$317,002	2.34%	\$54,780,737	\$2,880,491	5.55%	\$40,916,836	\$2,563,489	6.68%
FY15	\$14,627,262	\$763,361	5.51%	\$57,698,512	\$2,917,775	5.33%	\$43,071,250	\$2,154,414	5.27%
FY16	\$15,291,040	\$663,778	4.54%	\$59,508,827	\$1,810,315	3.14%	\$44,217,787	\$1,146,537	2.66%
FY17	\$16,589,497	\$1,298,457	8.49%	\$62,108,827	\$2,600,000	4.37%	\$45,519,330	\$1,301,543	2.94%
FY18	\$17,201,085	\$611,588	3.69%	\$64,709,631	\$2,600,804	4.19%	\$47,508,546	\$1,989,216	4.37%
FY19	\$17,817,105	\$616,020	3.58%	\$67,321,556	\$2,611,925	4.04%	\$49,504,451	\$1,995,905	4.20%
FY20	\$18,297,651	\$480,546	2.70%	\$70,628,795	\$3,307,239	4.91%	\$52,331,144	\$2,826,693	5.71%
FY21*	\$18,781,860	\$484,209	2.65%	\$73,218,902	\$2,590,107	3.67%	\$54,437,042	\$2,105,898	4.02%

*PROPOSED

FY21 Budget Drafts

BUDGET	FY20	FY21	CHANGE \$	CHANGE %	NOTES
FY20 APPROVED	\$70,628,795				
Level Service As of January 3rd, 2020		\$73,760,970	\$3,157,365	4.47%	Moving current year expense and contractually obligated funding forward.
Preliminary Draft Budget		\$73,418,902	\$2,790,107	3.95%	Preliminary Draft
Recommended Budget		\$73,218,902	\$2,590,107	3.67%	Recommended Budget

FY21 Adjustments to Level Service

Description	Amount	Notes
East Needs	\$333,454	Opening of Building
Specialized Paras Cont.	\$35,483	Contractual
SPED Transportation Vendors	\$84,975	Increase to total
Tuition Reimb Bank	\$25,000	Contractual, and new reimbursement bank
Non-instructional Software Maintenance	\$22,815	Asset Essentials & Event Manager
MIIA Insurance	\$65,531	Premium increase due to change in bus premium calculation and increase to School Dept allocation
TOTAL	\$567,258	

FY21 East Staffing Needs

Positions Needed	Amount
1.0 Assistant Principal	\$113,547
1.0 Guidance Counselor	\$68,805
1.0 Custodian x 2	\$95,998
.2 Art Teacher	\$13,791
.4 Music Teacher	\$27,522
.2 PE Teacher	\$13,791
TOTAL	\$333,454

FY21 Expense Adjustments - Reductions

Description	Amount	Notes
Director of Personnel & Student Services	\$(143,517)	Position cut
Grade 3 Liberty	\$(66,801)	Position cut- Enrollment
Adjustments to January 3rd Level Service	\$(117,568)	Updates to early draft
SPED Tuitions	\$(345,125)	SPED tuitions; SPED needs per projection
Reallocation of Expenses to Grant/Revolving	\$(212,861)	Integrated Preschool; SPED Admin; PreK Teacher
HVAC	\$(100,000)	Expect Esco project will reduce need for maintenance
Professional Development Contracted Services	\$(82,000)	Reduced for TLA
Printing/Advertising	\$(10,000)	Reduction based on historical spend
Summer Custodial Personnel	\$(10,000)	Reduce use
Professional Development Non-salary	\$(10,000)	Reduced need
Rubbish Collection	\$(8,000)	New contract, Town covers
TOTAL	\$(1,105,872)	

ENERGY CONSERVATION MEASURE OPPORTUNITIES

	Energy Conservation Measures	Capital Improvement	Maintenance Reduction	Savings Driver	Improved Learning Environment	Aesthetics
1	LED Lighting & Controls		✓	✓	✓	✓
2	Energy Management Control Systems		✓	✓	✓	
3	Building Weatherization			✓	✓	
4	Pipe & Fitting Insulation			✓	✓	
5	Steam Trap Repairs & Replacements		✓	✓	✓	
6	Plug Load & Computer Power Controls			✓		
7	Walk-In Cooler Controls & High Efficiency Motors			✓		
8	High School Energy Efficient Transformers	✓	✓	✓		
9	Water Conservation		✓	✓		✓
10	New Boilers	✓	✓			
11	Flaherty Elementary Hot Water Heating Conversion & New Boilers	✓	✓		✓	
12	HVAC & Controls Commissioning & Repairs	✓	✓		✓	

Total Project Investment: \$9,718,735

Annual Guaranteed Savings: \$464.428

ESCO Funding

- Funding of \$8.9M or 10.3M was approved by CO 18-004(2) on 2/27/18
- \$8.9M of short-term Bond Anticipation Notes due June 2019 were issued at the time
- \$8.75M in bonds were issued to retire the BANs in 2019
- FY21 debt service costs on the \$8,750,000 bonds dated June 12, 2019 issued are principal \$310,000 and interest \$336,950 for a total debt service cost of \$649,950
- Guaranteed annual savings are based on reduction in energy consumption - baseline year = \$464,428
- Project was completed at the end of December, 2019, with punch list items recently finished.
- First project audit will happen this summer

LED Lighting & Controls

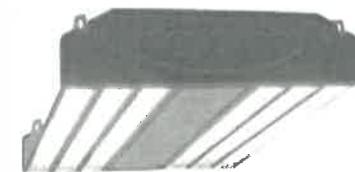
1,800 new LED fixtures, 4,700 fixture retrofits and 400 occupancy sensors
Improved light quality through a higher color rendering index
Long life LED lighting will reduced BPS staff time spend replacing lamps & ballasts



New lighting will provide consistent and better quality illumination



Hard-to-reach exterior fixtures will require less maintenance with long-life LED fixtures



New lighting will improve visibility with a clean white light in the gymnasiums

Water Conservation

Over 400 new pieces of china and flush valves

Over 400 faucet aerators to be installed

Piston-style flush valves will maintain reduced water flow rates over time



The existing dishwasher at Monatiquot leaks water and requires regular repairs



Energy Efficient Transformers

Existing transformers are 45-years old and past their useful life

28 new energy efficient transformers to be installed

New transformers will be relocated to meet current code clearance requirements



This transformer at the High School shows signs of insulation breakdown

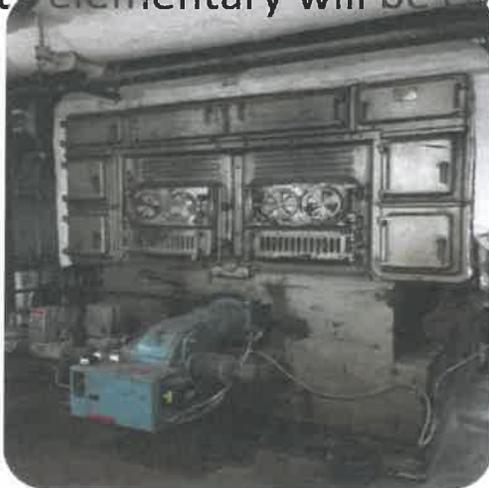
NEW PRIMARY & BACKUP BOILERS

New higher efficiency boilers will be provided as the primary building heating source

Eleven new boilers installed across seven elementary schools

Asbestos on the removed boilers will be remediated

Flaherty elementary will be converted to hot water heating



The old boilers are Flaherty and Morrison Elementary will be replaced with more efficient and reliable condensing hot water boilers.

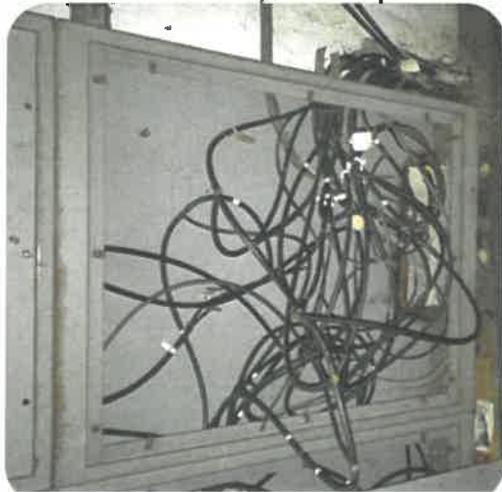
Energy Management Control Systems (EMCS) HVAC Commissioning & Repairs

HVAC commissioning existing-to-remain systems will restore proper and efficient operation of controlled HVAC equipment and systems

New EMCS will automatically enable HVAC systems and modulate heating, cooling, and ventilation to maintain space temperature setpoints

Over 200 networked energy management points of control added to the schools

Web and smartphone password-protected monitoring of school HVAC systems



Leaking pneumatic lines, like those shown above at Braintree High School, will be repaired or replaced with more modern systems to increase occupant comfort as part of the HVAC Commissioning & Repair ECM

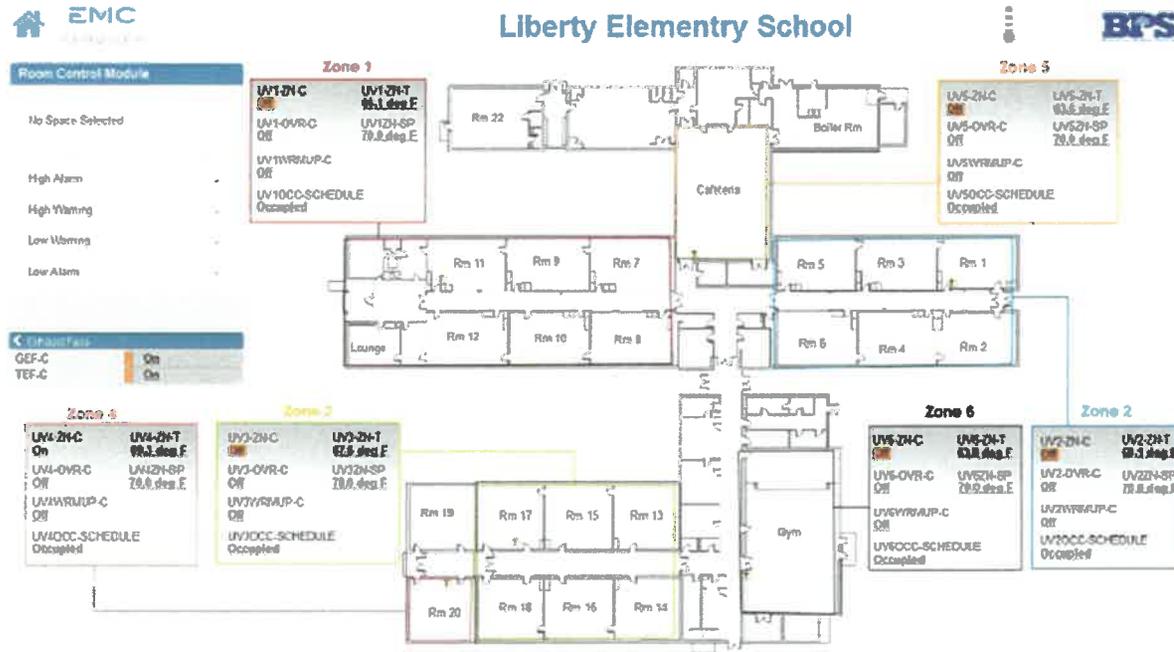


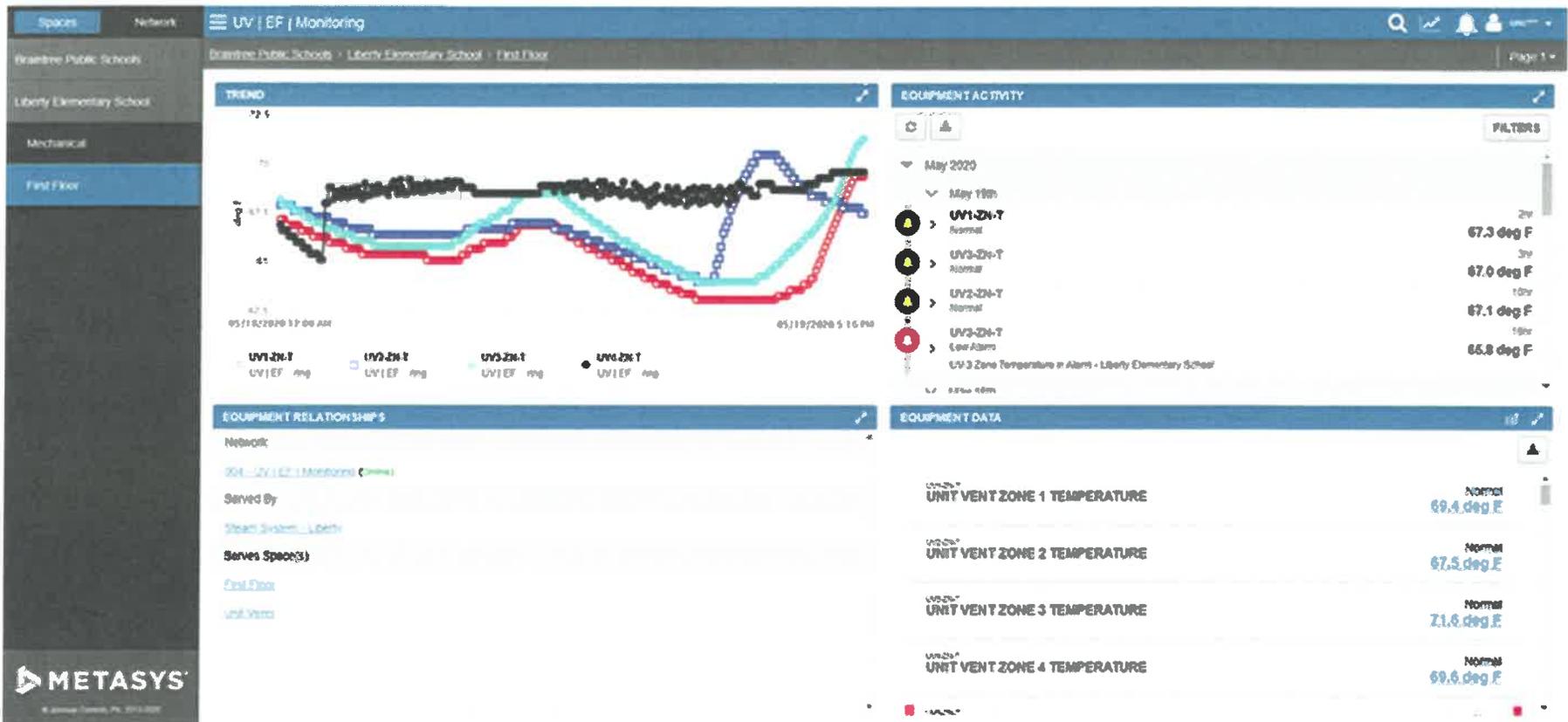
The new EMS will provide remote access to the control of the schools HVAC systems.

Metasys® Graphics Export

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Space: First Floor





Facilities Dude

Asset Essentials | ASSETS

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Columns | View | (Share) Assets - Default | Search | Advanced Filters

Location	Category	Name	Asset ID	Site	Location	Category	Asset Status
		Air Compressor, 75 HP	88A_ACM_301	Brantree High School	Roof mechanical room	Air Compressor	Available
		Air Compressor, 75 HP	402_ACM_301	Highlands Elm School	Boiler room	Air Compressor	Available
		Air Compressor, 8.75 HP	403_ACM_302	Wells Elm School	Boiler room	Air Compressor	Available
		Air Compressor, 2 HP	81A_ACM_301	Fishery Elm School	Boiler room	Air Compressor	Available
		Air Compressor, 2 HP	402_ACM_301	Wells Elm School	Boiler room	Air Compressor	Available
		Air Compressor, 2 HP	403_ACM_302	Wells Elm School	Fire sprinkler riser room	Air Compressor	Available
		Air Compressor, 2 HP	405_ACM_303	Ross Elm School	Boiler room	Air Compressor	Available
		Air Compressor, 2 HP	410_ACM_302	Ross Elm School	Boiler room	Air Compressor	Available
		Air Compressor, 3 HP	88A_ACM_302	Brantree High School	Boiler room	Air Compressor	Available
		Air Compressor, 3 HP	402_ACM_301	Highlands Elm School	Boiler room	Air Compressor	Available
		Air Compressor, 3 HP	128_ACM_301	Liberty Elm School	Generator room	Air Compressor	Available
		Air Compressor, 3 HP	403_ACM_302	Handout Kindergarten	Boiler room	Air Compressor	Available
		Air Compressor, 3 HP	403_ACM_301	Morrison Elm School	Boiler room	Air Compressor	Available
		Air Conditioner, 1 TON	88A_ACU_301	Brantree High School	Classroom	Air Conditioner	Available
		Air Conditioner, 1 TON	88A_ACU_302	Brantree High School	Classroom	Air Conditioner	Available
		Air Conditioner, 1 TON	402_ACU_301	Highlands Elm School	Classrooms	Air Conditioner	Available
		Air Handler - 10 Floor, Intake, 8,901 to 13,00	88A_AH2_B-1-10 Floor	Brantree High School	Roof mechanical room	Air Handling Unit	Available
		Air Handler - 10 Floor, Intake, 13,001 to 15,00	88A_AH1_A-3-10 Floor	Brantree High School	Roof mechanical room	Air Handling Unit	Available
		Air Handler - 10 Floor, Intake, 15,001 to 15,00	88A_AH2_C-1-10 Floor	Brantree High School	Roof mechanical room	Air Handling Unit	Available

Facilities Dude

Asset Essentials | WORK ORDERS

Refresh - Fast (Every 1 Min) | Columns | View | (Shared) Work Orders - Default | Search | Advanced Filters | Summary

Work Order #	Type	Source Site	Source Locality	Room or Area Number	Work Category	Originator Last Name	WO Status	Priority	Orign	Search Asset ID	Source User	Assigned	Expected
000002020	Shed Repair	Colbert Admin Building	Maintenance Shop	Carpentry Shop	Electrical	Cushing	Completed	Medium	Non-PH		Charles Cushing	05-13-2020 08:43:00 AM	
000002024	Control	Worship Park School	Communcat		Electrical	Cushing	Completed	Medium	Non-PH		Charles Cushing	05-13-2020 06:31:00 AM	
000002022	Hot Water Heater	Colbert Admin Building	Throughput Building	Boiler Room	Electrical	Cushing	Completed	Medium	Non-PH		Charles Cushing	05-13-2020 08:26:00 AM	
000002021	315 Section	Worship High School		241	Painting	Clark	Completed	Low	Non-PH		Joseph Clark	05-11-2020 09:08:00 AM	
000002020	325 Section	Worship High School		323	Painting	Clark	Completed	Medium	Non-PH		Joseph Clark	05-11-2020 05:07:00 AM	
000002019	241 Section	Worship High School		241	Painting	Clark	Completed	Medium	Non-PH		Joseph Clark	05-08-2020 09:18:00 AM	
000002018	301 Section	Worship High School		301	Painting	Clark	Completed	Medium	Non-PH		Joseph Clark	05-06-2020 09:15:00 AM	
000002044	WARTING POWER OUTAGE	Worship High School	Throughput Building		Electrical	Cushing	Completed	Critical	Non-PH		Charles Cushing	04-29-2020 08:01:00 AM	
000002162	Change Key Controlled Light MATHY to Trussid Switch	Worship High School	Zambak	1st Floor E. Walking Pathways	Electrical	Bradford	Completed	Medium	Non-PH		Charles Cushing	04-01-2020 10:54:00 AM	
000002157	Walls multiple doors	Walls Park School	Throughput Building		Electrical	Cushing	Completed	High	Non-PH		Charles Cushing	03-18-2020 10:56:00 AM	
000002156	Door 8 does not close correctly. The door bracket is	Worship High School	Boys Locker Room	near Field Door door # 8	Carpentry	Bradford	Completed	Medium	Non-PH		John Wright	03-16-2020 12:33:00 PM	
000002154	WAS learning center	Worship High School		room #150	Painting	Clark	Completed	Medium	Non-PH		Joseph Clark	03-11-2020 09:06:00 AM	
000002153	We have a electrical switch that needs to be repa	Worship High School	Kitchen	Kitchen	Electrical	Smith	Completed	High	Non-PH		Charles Cushing	03-10-2020 12:12:00 PM	
000002152	House 1 and	Worship High School	House 1	House 1	Painting	McFar	Completed	Medium	Non-PH		Mark McCahan	03-12-2020 10:21:00 AM	
000002149	Room three office	Worship High School			Painting	Clark	Completed	Medium	Non-PH		Joseph Clark	03-11-2020 12:08:00 PM	
000002148	Room two office	Worship High School			Painting	Clark	Completed	Medium	Non-PH		Joseph Clark	03-11-2020 12:08:00 PM	
000002147	Temp Pump Wiring	Larry Clark School	Boiler room		Electrical	Cushing	Completed	High	Non-PH		Charles Cushing	03-10-2020 07:03:00 PM	
000002146	Hot water tank	Highlands Elem School	Boiler room		Plumbing	Kramer	Completed	Critical	Non-PH		Steve Kramer	03-10-2020 10:12:00 AM	
000002145	Door 8 doesn't lock. This is the old (Yard?)	Worship High School	Boys Locker Room	Side door # 8	Carpentry	Bradford	Completed	High	Non-PH		John Wright	03-11-2020 09:24:00 AM	
000002144	WARTING	South Woods School	Hallway	hallway next to aud	Electrical	Thomas	Completed	Medium	Non-PH		Charles Cushing	03-10-2020 08:42:00 AM	

FY21 BUDGET ARTICLES

Article 1) Elementary Schools Administration	\$	1,527,194
Article 2) Middle Schools Administration	\$	985,832
Article 3) High School Administration	\$	1,168,114
Article 4) Curriculum and Instruction	\$	54,979,718
Article 5) Curriculum and Professional Development	\$	269,215
Article 6) Building and Grounds Maintenance and Utilities	\$	5,160,631
Article 7) General Education Transportation	\$	1,616,945
Article 8) Athletics	\$	824,782
Article 9) All Other District-wide Services	\$	5,365,809
Article 10) Technology and Data Processing	\$	1,320,662
TOTAL FY21 Braintree Public Schools Budget	\$	73,218,902

3.67%