

Foxborough Public Schools
Measures of Student Achievement
Baselines and Benchmarks for Improvement

Introduction:

There are currently 2,631 students enrolled in the Foxborough Public Schools: 838 at Foxborough High School, 816 at the Ahern Middle School, 316 at the Burrell Elementary School, 393 at the Igo Elementary School, and 243 at the Taylor Elementary School. Included in that population are 39 English language learners whose first language is not English. Foxborough's per pupil expenditure for FY 2015 was \$15,207 compared to the statewide average per pupil expenditure of \$14,936. The following information provides further background and context for our baselines and goals for student achievement:

Students Eligible for Free or Reduced Lunch	2011	2012	2013	2014	2015	2016
District-Wide	13.44%	16.27%	16.19%	16.75%	16.62%	*18.62%
Foxborough High School	11.83%	16.01%	15.50%	15.10%	15.90%	*18.38%
Ahern Middle School	13.93%	14.79%	16.78%	18.11%	17.05%	*20.47%
Burrell Elementary School (excludes preschool)	13.06%	18.37%	15.30%	19.38%	15.98%	*15.82%
Igo Elementary School	19.18%	18.93%	20.41%	19.50%	18.73%	*20.61%
Taylor Elementary School	10.18%	17.14%	11.76%	12.31%	14.75%	*12.35%
*pending final applications (application due date is Oct. 18, 2016)						

Special Education Population	2011	2012	2013	2014	2015	2016
District-Wide	16.8 %	15.7%	15.1%	15.62%	16.78%	17.60%
Foxborough High School	16.2%	17.9%	17.3%	16.72%	16.96%	18.14%
Ahern Middle School	17.3 %	17.5%	17.1%	17.65%	18.13%	18.75%
Burrell Elementary School (excludes preschool)	15.3 %	12.9%	12.1%	13.56%	16.80%	11.08%
Igo Elementary School	13.0 %	11.5%	10.4%	13.50%	13.62%	16.54%
Taylor Elementary School	10.5 %	13.2%	11.3%	11.94%	16.80%	13.58%

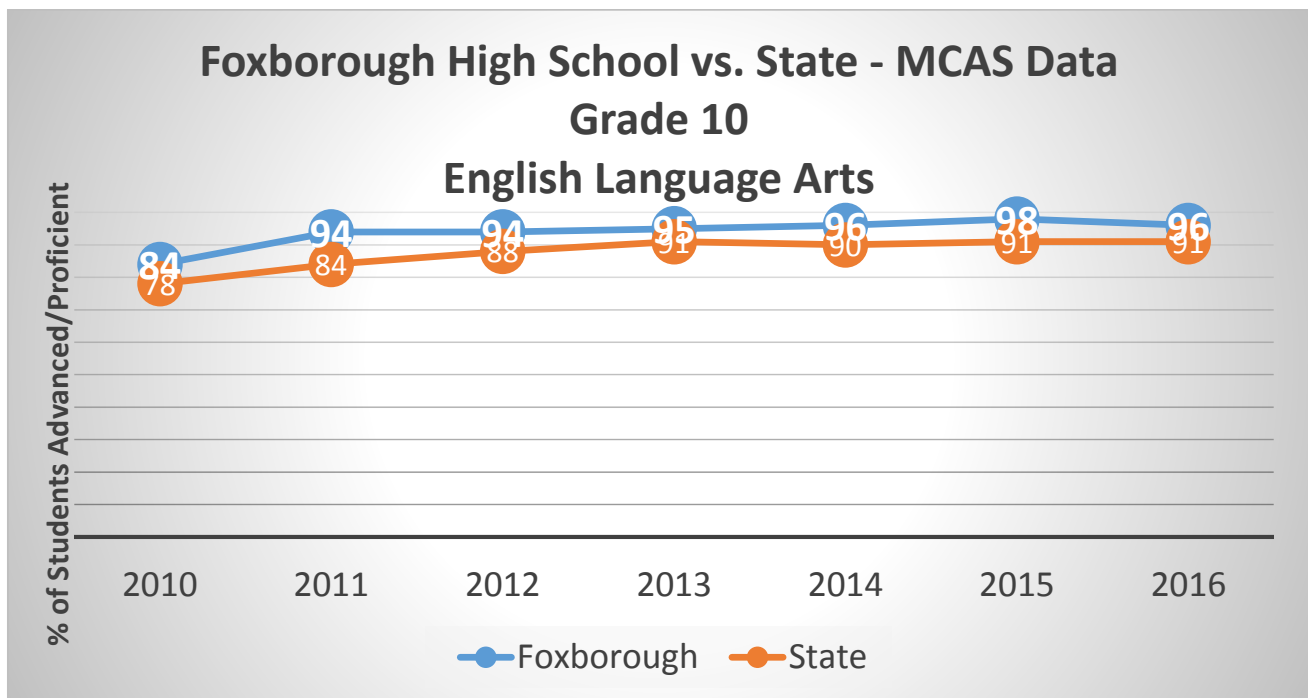
Our process for identifying data to measure student achievement, establishing baselines, and setting future benchmarks for improvement has been in place for many years at this point and continues to involve a team of administrators and coordinators throughout the district. As different groups of students are measured variables can result in annual comparisons being unreliable therefore a three year “three year rolling average” is utilized for most assessments. The process of creating baseline and benchmark goals for district assessments provides an opportunity to identify possible strengths and weakness of our curriculum and instructional programs. Multiple measures in addition to state standardized assessments will continue to be important measures for assessing student academic achievement.

For assessments that continue to remain the same new baselines and goals have been set using a 3-year rolling average for years 2014-2016. This includes all district based assessments and specific MCAS assessments. MCAS was only administered for science in grades 5 and 8 and at the high school level. Students in grade 10 continued with the MCAS in ELA, math and science as it remains a graduation requirement. Due to Foxborough's participation with the Partnership for Assessment of Readiness for College and Careers (PARCC) for the last two years and the fact that Massachusetts will transition to a Next-Generation MCAS in 2017 goals have not been set for grades 3-8 for state assessments. In the future spring 2017 state assessment results will serve as a new baseline.

Foxborough High School: BASELINE AND BENCHMARKS

MULTI-YEAR COMPARISON State Standardized Assessments

FOXBOROUGH HIGH SCHOOL MCAS - ENGLISH LANGUAGE ARTS						
GRADE 10 <i>(2016 percentages based on 187 students)</i>	Adv. & Prof.					NI & Fail.
	Advanced	Proficient		Needs Improvement	Failure	
2016	49	47	96	3	1	4
2015	50	48	98	1	0	1
2014	47	49	96	1	2	3
2013	53	41	95	4	2	6
2012	45	49	94	4	3	7
2011	48	46	94	5	0	5
2010	24	60	84	14	1	15
2009	35	55	90	10	1	11
2008	36	50	86	12	1	14
2007	21	59	80	15	5	20
2006	22	68	90	7	3	10
2005	31	47	78	18	3	21
2004	27	55	82	16	2	18
2003	35	49	84	14	2	16
2002	32	44	76	20	4	24
2001	26	39	65	26	9	35



Summary Data Statements – English Language Arts

GRADE 10:

- In 2016, 96% of students at Foxborough High School achieved a rating of Proficient or Advanced on the grade 10 ELA portion of the MCAS exam. This continues to be above the state average of 91%.

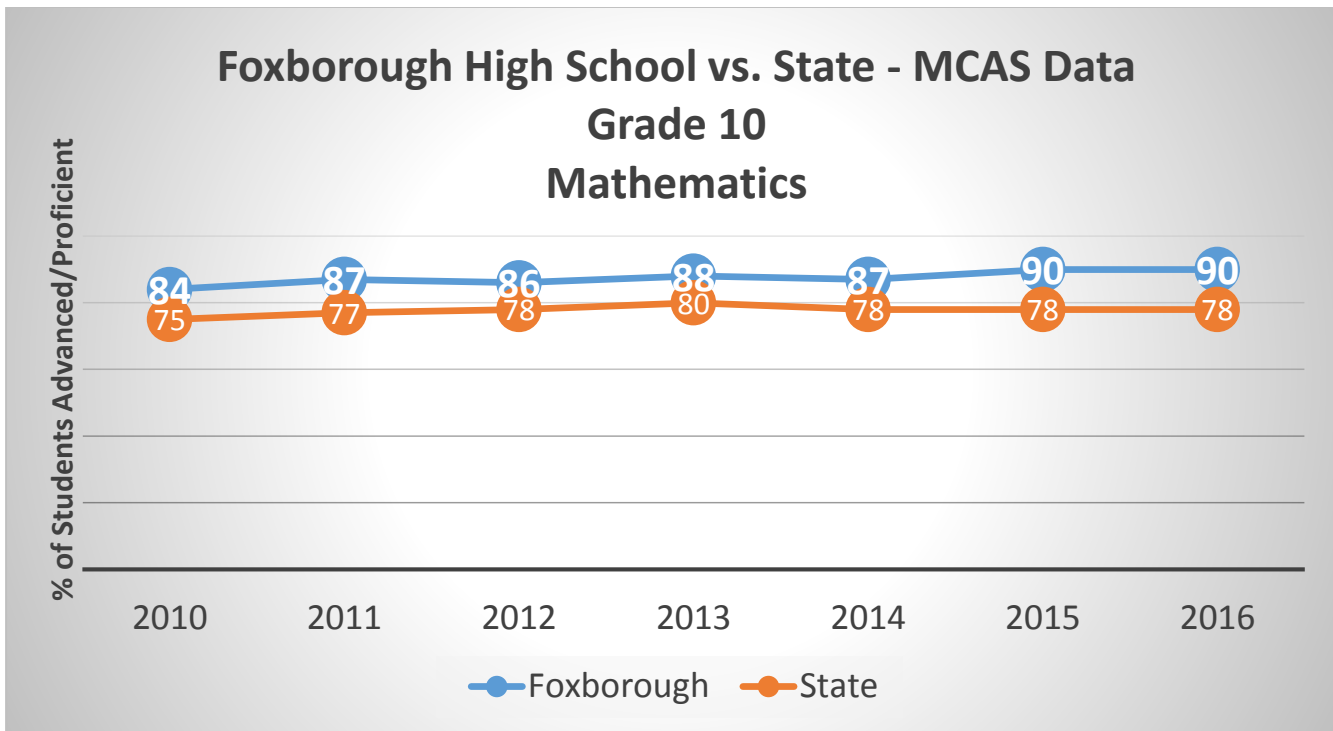
Data to support:

- MCAS Multi-Year Comparison for English Language Arts
- DESE Summary of State Results 2016

Root Causes:

- Carefully written curriculum that is closely aligned with state standards and implemented at all levels.
- Continued implementation of the John Collins writing program throughout all grades and levels.
- Improved utilization of ELA tutor(s) by teachers and students.
- Improved focus on formative assessment and skill-building in all grades and levels.

FOXBOROUGH HIGH SCHOOL MCAS - MATHEMATICS						
GRADE 10 <i>(2016 percentages based on 185 students)</i>	Advanced	Proficient	Adv. & Prof.	Needs Improvement	Failing	NI & Fail.
2016	65	25	90	8	2	10
2015	64	26	90	8	2	10
2014	61	26	88	9	4	13
2013	66	22	88	7	5	12
2012	55	31	86	8	6	14
2011	63	22	85	14	1	15
2010	59	25	84	13	3	16
2009	59	26	85	13	2	15
2008	52	34	86	10	3	13
2007	48	33	81	14	5	19
2006	52	31	83	11	6	17
2005	50	29	79	13	9	22
2004	38	35	73	22	5	27
2003	37	40	77	19	5	24
2002	31	34	65	25	9	34
2001	26	41	67	20	14	34



Summary Data Statements – Mathematics

GRADE 10:

- The number of students scoring at the Advanced/Proficient level continues to be above the state average. In 2016, 90% of students at Foxborough High School achieved a rating of Proficient or Advanced on the grade 10 Mathematics portion of the MCAS exam compared to the state average of 78%. Overall, 99% of the students passed the MCAS on their first attempt.

Data to support:

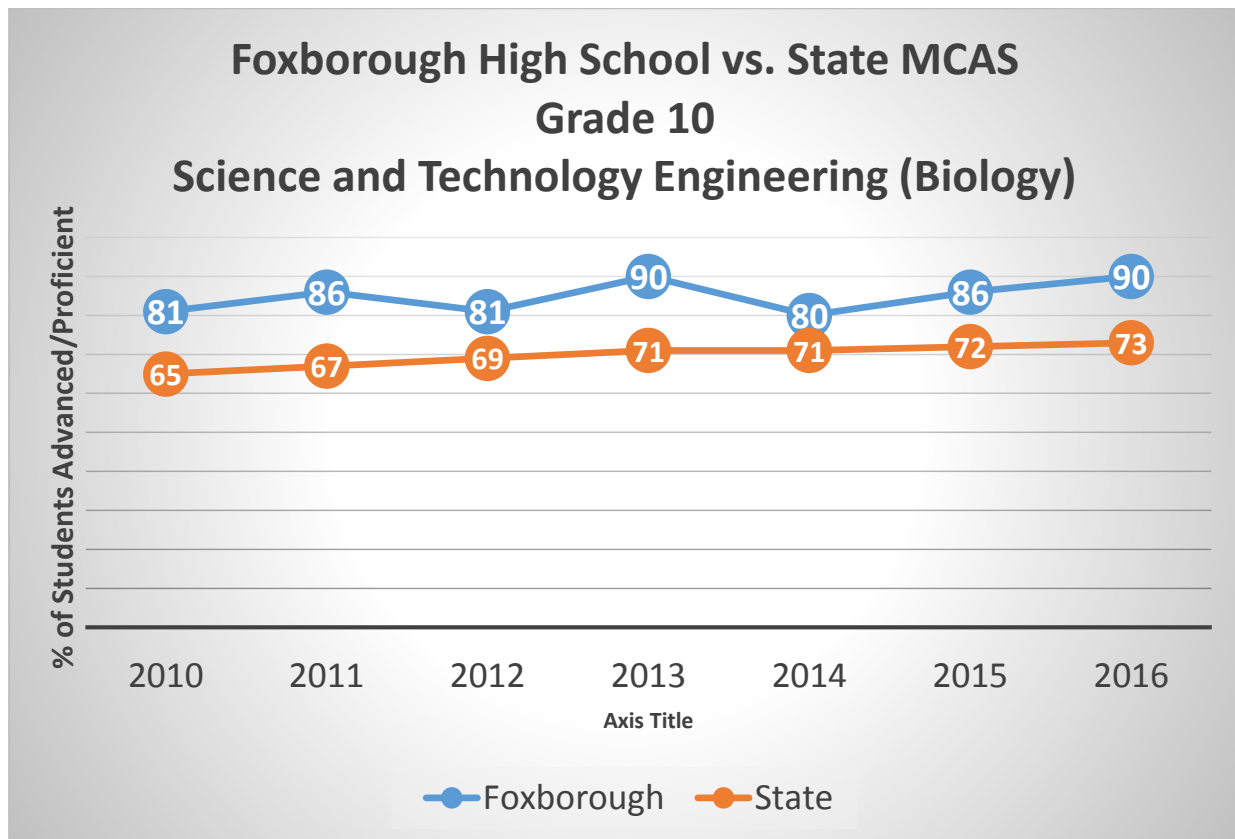
- 2016 DESE Summary Report of State Results
- 2016 MCAS Math Item Analysis Reports

Root Causes:

- Instituted a Math Boot Camp for at risk students.
- Curriculum that is closely aligned with state standards implemented across all levels.
- Increased use of formative assessments.
- Continued work in the classroom on writing for open response questions.

FOXBOROUGH HIGH SCHOOL MCAS - SCIENCE AND TECHNOLOGY

GRADE 9/10 <i>(2016 percentages based on 183 students)</i>	Adv. & Prof.					NI & Fail.
	Advanced	Proficient	Needs Improvement	Failure		
2016	42	49	90	8	2	10
2015	35	51	86	12	1	13
2014	43	37	80	17	3	20
2013	42	47	90	8	2	10
2012	27	54	81	14	5	19
2011	32	54	86	12	2	14
2010	19	62	81	15	5	20
2009	20	58	78	19	3	22
2008	21	50	71	22	7	29
2007	11	45	56	28	17	45



MCAS Data Science / Biology	NEW BASELINE 2010-2012 3- year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3- year rolling average	Fall 2016	BENCHMARK Fall 2019 3-year benchmark goal
Grade 10 % of students Advanced / Proficient	82.67	85	85%	85.7%	90%	88%

Note: Due to curriculum shifts, beginning in 2017 primarily grade 9 students will be tested on the Biology MCAS.

Summary Data Statements – Science & Technology/Engineering

OVERALL:

1. Foxborough’s 2016 MCAS performance in Science is relatively consistent district wide. District wide Foxborough outperforms the State by 9% for students scoring Advanced/Proficient. Grade 5 exceeds the state by 6%, grade 8 by 10% and grade 10 by 17%. More specifically, grade 10 exceeds the state by 12% of students scoring Advanced in 2016. CPI data shows the Foxborough’s performance across all three tests are consistent, with CPI ratings ranging from 2.0 to 8.1 points above the state.

Data to support:

- a. 2016 MCAS Performance Categories
- b. 2016 MCAS CPI data (Foxborough vs. State)

GRADE 10: 2016 MCAS BIOLOGY EXAM

2. Foxborough High School students continue to perform at very high levels on the MCAS Biology exam

Data to support:

- a. The percentage of Foxborough High School students passing the MCAS Biology exam on their first attempt continues to be over 95% (2016: 98% passing rate).

Root Causes:

- a. Very close alignment and integration of state standards and curriculum.
- b MCAS testing has been a part of students' entire academic lives; students and teachers alike approach the exams with appropriate seriousness.

3. Foxborough High School students continue to perform at levels well above state averages on the MCAS Biology exam.

Data to support:

- a. Percent of Students Scoring Advanced/Proficient, 2016: 90.6% FHS vs. 73% state
- b. Percent of Students Scoring Needs Improvement/Failing, 2016: 9.4% FHS vs. 26% state

Root Causes:

- a. See above

Foxborough High School: BASELINE AND BENCHMARKS GOALS Cont'd

Advanced Placement (AP) Data (Average Score)	BASELINE 2010-2012 3 Year Rolling Average	3 Year Report Fall 2015 Goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3- year rolling average	2016	BENCHMARK Fall 2019 3-year benchmark goal
# of AP students	128	143	165	192	220	203
# of tests administered	241	305	321	374	458	430
Percentage Scoring 3 or better (0-5 scale)	83%	83%	84%	78.6%	73.6%	79%

Advanced Placement (AP) Data (Average Score)	2010	2011	2012	2013	2014	2015	2016
# of AP students	121	117	127	140	163	192	220
# of tests administered	214	210	240	299	303	362	458
# of AP students Scoring 3 or better (0-5 scale)	93	91	107	125	128	161	162
Percentage Scoring 3 or better (0-5 scale)	76.9%	77.8%	84.3%	89.3%	78.5%	83.9%	73.6%

Foxborough High School: BASELINE AND BENCHMARKS GOALS Cont'd.

S.A.T. Data (Average Scores)	BASELINE 2010-2012 3- year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3- year rolling average	2016	BENCHMARK Fall 2019 3-year benchmark goal
CRITICAL READING	524.33	530	537	526	519	531
CRITICAL WRITING	533.33	545	541	527	513	532
MATH	547.33	550	549	536	534	538
ACT Data (Average Scores)	BASELINE 2011-2013 3-year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3-year rolling average	2016	BENCHMARK Fall 2019 3-year benchmark goal
ENGLISH	22.1	23.1	22.7	22.7	22.4	24
MATH	23.1	24.1	23.3	23.2	22.9	24
READING	22.8	23.8	23.8	24.0	23.6	24
SCIENCE	22.0	23.0	22.6	22.9	22.8	24
COMPOSITE	22.6	23.6	23.3	23.2	23.1	24

Continuing Education	NEW BASELINE 2010-2012 3- year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3- year rolling average	2016	BENCHMARK Fall 2019 3-year benchmark goal
Total percentage of Continuing Education	91.67	92	90%	90%	89%	92%

State Standardized Assessments

PARCC Grades 3-8

ENGLISH LANGUAGE ARTS

2016 PARCC English Language Arts							
	Foxborough Level 4 & 5 % Meeting Expectations	*State Level 4 & 5 %	Foxborough Level 5	Foxborough Level 4	Foxborough Level 3	Foxborough Level 2	Foxborough Level 1
Grade 3	69	53	13	55	21	9	2
Grade 4	69	56	14	55	21	7	3
Grade 5	61	59	5	56	23	11	5
Grade 6	55	59	4	51	33	9	3
Grade 7	70	61	17	54	20	7	3
Grade 8	66	60	12	54	21	7	5
Grades 3-8	65	58	11	54	23	8	3

*State data for 2016 obtained from Robert Lee at DESE and represents schools in Commonwealth who took PARCC. (72% of MA Students took PARCC.)

PARCC - English Language Arts - Foxborough 2 Year Comparison				
	Levels 4 & 5 % Meeting Expectations		Levels 1 - 3 % Not Meeting Expectations	
	2015	2016	2015	2016
Grade 3	66	69	34	32
Grade 4	78	69	22	31
Grade 5	58	61	42	39
Grade 6	57	55	44	45
Grade 7	63	70	36	30
Grade 8	68	66	33	33
Grades 3-8	65	65	35	34

State Standardized Assessments Cont'd...

PARCC Grades 3-8

MATHEMATICS

2016 PARCC Mathematics							
	Foxborough Level 4 & 5 % Meeting Expectations	*State Level 4 & 5 %	Foxborough Level 5	Foxborough Level 4	Foxborough Level 3	Foxborough Level 2	Foxborough Level 1
Grade 3	82	58	30	52	14	5	0
Grade 4	60	54	9	51	29	9	3
Grade 5	64	51	7	57	19	13	4
Grade 6	60	48	6	54	28	9	2
Grade 7	66	48	13	53	26	6	2
Grade 8	74	50	16	58	16	6	4
Grades 3-8	67	52	13	54	22	8	3

*State data for 2016 obtained from Robert Lee at DESE and represents schools in Commonwealth who took PARCC. (72% of MA Students took PARCC.)

PARCC – Mathematics - Foxborough 2 Year Comparison				
	Levels 4 & 5 % Meeting Expectations		Levels 1 - 3 % Not Meeting Expectations	
	2015	2016	2015	2016
	Grade 3	67	82	34
Grade 4	61	60	38	41
Grade 5	48	64	52	36
Grade 6	74	60	26	39
Grade 7	61	66	38	34
Grade 8	79	74	21	26
Grades 3-8	65	67	35	33

Summary Data Statements – Science Engineering Technology

GRADES 5-8:

- In the 2015-2016 school year the new Massachusetts Science and Technology Engineering standards were fully implemented at the Ahern Middle School. It is important to note that the science MCAS administered in spring 2016 remained an assessment of the previous standards. Thus we see a slight decline in our overall performance as reflected in the table below. The Department of Elementary and Secondary Education (DESE) has assured us that we should not be concerned with a dip in our scores during this transition as ultimately our students will be better prepared moving forward.

Data to support:

- MCAS Performance Categories Multi-Year Comparison

	Grade 5		Grade 8	
	P & A	W & NI	P & A	W & NI
2009	50%	50%	57%	43%
2010	55%	45%	57%	43%
2011	49%	51%	50%	50%
2012	62%	38%	58%	42%
2013	56%	45%	42%	58%
2014	54%	46%	50%	49%
2015	59%	41%	58%	42%
2016	53%	48%	51%	49%

Root Causes:

- The grade 5 MCAS assessment incorporates concepts taught in grades 3, 4, and 5.
- The grade 8 MCAS assessment incorporates concepts taught in grades 6, 7, and 8.
- The new standards were not assessed on the spring 2016 assessment.

MCAS – Science Engineering Technology

MCAS Data Science	NEW BASELINE 2010-2012 3- year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3- year rolling average	Fall 2016	BENCHMARK Fall 2019 3-year benchmark goal
Grade 5 % of students Advanced / Proficient	55.33	60	56.33	56	53	Due to new standards that will be phased in over the next two years, goals have not been set. *For detailed information on this transition refer to the "Transition Plan for MCAS STE Tests" included with this packet.
Grade 8 % of students Advanced / Proficient	55	60	50	54	51	

Ahern Middle School BASELINE AND BENCHMARK GOALS

Scholastic Reading Inventory (SRI) Data	NEW BASELINE 2010-2012 3- year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	NEW BASELINE 2014-2016 3- year rolling average	Fall 2016	BENCHMARK Fall 2019 3-year benchmark goal
Grade 5 % of students Advanced / Proficient	78	80	83.9	84.3	82	86
Grade 6 % of students Advanced / Proficient	79	81	83.9	82.6	82	84
Grade 7 % of students Advanced / Proficient	84.6	86	86.4	84.8	82	87
Grade 8 % of students Advanced / Proficient	82.6	84	85.6	85.6	86	87

Elementary Schools Combined BASELINE AND BENCHMARK GOALS

Developmental Reading Inventory (DRA): % of students meeting the grade level benchmark on the June DRA	NEW BASELINE DRA2 (only 2012 data used)	BENCHMARK Fall 2015 3-year benchmark goal DRA2	3 YEAR REPORT FALL 2015 (2013-2015)	NEW BASELINE DRA2 (2014-2016)	Fall 2016 DRA2	BENCHMARK Fall 2019 3-year benchmark goal DRA2
Grade K (DRA level 3)	87	88	83.2	83.9	87.5	88
Grade 1 (DRA level 16)	64	67	67.0	68.9	72.6	73
Grade 2 (DRA level 28)	*58	*61	61.3	62.86	68.9	66.6
Grade 3 (DRA level 38)	62	65	62.6	60.6	58.6	65
Grade 4 (DRA level 40)	61	64	73.4	71.2	70.5	73.3

*written component enters at grade 2

Elem. Schools Combined BASELINE AND BENCHMARK GOALS Cont'd

Kindergarten Letter/Sound Identification:	NEW ASSESSMENT & New BASELINE (2012 data used)			BENCHMARK Fall 2015 3-year benchmark goal			3 YEAR REPORT FALL 2015 2013-2015			NEW BASELINE 2014-2016			FALL 2016			BENCHMARK FALL 2019 3 – year benchmark goal		
	Grade K	91	79	55	92	81	60	96.4	88.7	76.4	97	92.4	84.8	96.2	96.3	88.7	98	94.2

Writing Assessment: % of students meeting the grade level benchmark on the district's June common writing assessment	NEW BASELINE 2010-2012 3- year rolling average	BENCHMARK Fall 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013- 2015	NEW BASELINE 2014*- 2016 3- year rolling average	FALL 2016	BENCHMARK Fall 2019 3-year benchmark goal
Grade 1 (4/6 points)	80	83	83.5	*85.4	*85.4	87
Grade 2 (4/6 points)	73	76	83.8	*68.4	*68.4	69.8
Grade 3 (4/6 points)	75	78	*56.7	62.8 (2-year avg.)	68.9	65.3
Grade 4 (6/10 points)	77	80	*68.5	73.8 (2-year avg.)	79.1	76.8

*New Assessment –1 year of data

Mathematics: % of students meeting grade level benchmarks on new math assessments - June	NEW ASSESSMENT & New BASELINE (2012 data used)	BENCHMARK 2015 3-year benchmark goal	3 YEAR REPORT FALL 2015 2013-2015	New BASELINE (2014-2016)	Fall 2016	BENCHMARK 2019 3-year benchmark goal
Grade K	90	92	88*	92	91	92
Grade 1	82	84	91*	86	81	88
Grade 2	88	90	92*	89	90	91
Grade 3	74	78	79	79	80	81
Grade 4	81	83	81	80	81	83

*2 year rolling average used