



Milton Public Schools  
Budget  
FY2015-2016

Warrant Committee Presentation  
December 18, 2014

# Vision of Milton Public Schools

*The Vision of the Milton Public School system is to build and strengthen a dynamic community that challenges all students to thrive and achieve.*

*In order to create the educational system that supports this vision for all students and advances the Milton Public Schools, the following Advancement Budget initiatives outline the priorities of the FY16 Milton Public Schools budget.*

# Advancement Budget Initiatives

## FY 14 and FY 15

1. Emphasizing Early Literacy Achievement (PreK-3)
2. Closing the Proficiency Gaps (PreK-12)
3. Advancing Science and STEM (Science, Technology, Engineering & Math) Initiatives (PreK-12)

# Advancement Initiatives

## FY 14 and FY 15 Implementation

- The Milton Public Schools was fortunate to receive \$515,000 in “Advancement” funding for the 2013-14 school year and \$538,000 for the 2014-2015 school year. These funds were utilized over the last 18 months to hire staff, purchase materials, provide professional development for teachers, and provide extended learning opportunities for students throughout the school year.
- The initiatives are based on the research and input of the Milton Public Schools Full Leadership Team. The implementation of the initiatives is the coordinated and collaborative effort of the Leadership Team.
- The implementation is in year two of our plan to increase the student outcomes of all students in the areas of Literacy and Science/ STEM as well as to accelerate the learning outcomes of targeted student groups who are not meeting with the level of success expected by the Milton Public Schools.

# **Initiative 1: Emphasizing Early Literacy Achievement**

# Early Literacy

## Research

....**Reading is the cornerstone of academic success.** There is a **limited window of time** in which to prevent reading difficulties and promote reading achievement; for most children what happens (or doesn't happen) **from infancy through age 9 is critical.**

**By third grade, reading struggles are strongly linked to later school difficulties,** as well as behavioral problems, depressions and dysfunctional and/or negative peer relationships.

What's more, research indicates that **74 percent of children whose reading skills are less than sufficient by third grade have a drastically reduced likelihood of graduating from high school.**

As a result, these children are **unlikely to develop the skills essential for participating fully in this knowledge-based economy** and for experiencing life success.

*Dr. Nonie K. Lesaux in Turning the Page: Refocusing Massachusetts for Reading Success (2010)*

# Early Literacy

## Identified Need

Data is consistent among cohorts that did not have access to our grade 1 or 2 advancement initiatives:

- 29% of Grade 3 students scored below Proficient on the Spring 2012 English/Language Arts MCAS
- 28% of Grade 3 students scored below Proficient on the Spring 2013 English/Language Arts MCAS
- 31% of Grade 3 students scored below Proficient on the Spring 2014 English/Language Arts MCAS

# Early Literacy FY14 Budget

## New Personnel

- 2 Reading Specialists providing direct service to students in grades 1 and 2
- 1 Digital Education Specialist providing direct support to elementary students and teachers in technology

## Instructional Support

- Formative (Progress Monitoring) Assessments implemented for students in grades 1 and 2
- Reading Curriculum materials purchased to support Readers'/Writers' Workshop serving students in grades 1 and 2
- Professional development provided to all elementary teachers in assessment implementation, data analysis and Readers' Workshop



# Early Literacy

## FY 14 Preliminary Results

Internal reading assessments showed significant growth in grades 1 and 2:

- Grade 1 English students improved from 68% on or above benchmark in September 2013 to 86% on or above benchmark in June 2014
- Grade 2 English students improved from 81% on or above benchmark in September 2013 to 86% on or above benchmark in June 2014

# Early Literacy FY15 Budget

## New Personnel

- Additional Reading Specialist to provide direct service to students in grade 3
- Parent Outreach Liaison to work with parents and guardians who are not involved in the public schools and to create readiness opportunities for students entering the schools

## Instructional Support

- Non-fiction leveled readers for grades K-5
- Pre-K texts and materials for pilot preschool targeted for children identified by Outreach Liaison
- Additional professional development for all elementary teachers in assessment implementation, data analysis and Readers' Workshop

# Early Literacy

## FY 16 Budget Request

### New Personnel

- \$30,000 – Extend pilot preschool program to a district-wide program (two sessions per day, 5 days per week) based at one school
  - Extend current part-time staff member to full-time

### Instructional Support

- \$5,000 – Purchase additional preschool materials to accommodate more students in expanded program
- \$20,000 – Implement town-wide Saturday program for third graders identified for early literacy support
- \$50,000 – Provide additional Professional Development Opportunities
  - Summer Professional Development Institute on Early Literacy (\$20,000)
  - Consultant to provide school-year PD on Readers' and Writers' Workshop (\$30,000)
- \$20,000 – Purchase leveled reading books (fiction and nonfiction) to guarantee equal access of all students to differentiated texts in grades K through 3

# Early Literacy

## Metrics to Measure Progress and Outcomes

- Grade K-3 Formative Classroom Reading Assessments [Fountas and Pinnell Benchmark Assessment System; Scholastic Reading Inventory (SRI); Kindergarten Work Sampling System]
- Grade 3 Spring 2015 MCAS Results (first cohort to be tested)

## Anticipated Outcomes

- All students will read at grade level by the end of third grade
- Milton Public Schools third graders will meet the DESE Spring 2015 MCAS Cumulative Proficiency Index (CPI) target of 93.7

# **Initiative 2: Closing the Proficiency Gaps (PreK-12)**

# Closing the Proficiency Gaps

## Research

A Roadmap to Closing the Proficiency Gap submitted by the DESE's Proficiency Gap Task Force in April of 2010 states that “experience tells us that there are **consistent contributing factors that combine to produce underperformance.**”

Milton's Advancement Budget addresses four of these factors:

1. **Lagging early literacy.** “...lagging reading skills in the early grades. If unaddressed, these deficiencies generate a disadvantage from which many never recover.”
2. **Not enough time in school.** “Children in challenging circumstances may simply need more time in school to achieve proficiency.”
3. **Lack of effective analysis of data.**
4. **Differences in educator effectiveness.**

# Closing the Proficiency Gaps

## Identified Needs

At the elementary level, proficiency gaps exist:

- Between the High Needs\* subgroup and Non-High Needs students in ELA and Math
- Between African American/Black and Hispanic/Latino in ELA and Math as compared to Asian and White

\* High Needs subgroup includes students with disabilities, students identified as low income, and English Language Learners

# Closing the Proficiency Gaps

## Identified Needs

At the middle and high school levels, proficiency gaps exist between all subgroups and their counterparts in ELA , Math and STE (Science, Technology/Engineering)



# Closing the Proficiency Gaps FY14 Budget

## New Positions

None

## Instructional Support

- Programs and instructional materials to support extended day and extended year learning opportunities for students not meeting benchmarks
- Software used for elementary student assessment, data collection and analysis
- Student assessments implemented in ELA

# Closing the Proficiency Gaps

## FY 14 Preliminary Results

- District-wide, the gaps in ELA and STE between African American/Black students and white students decreased between 2013 and 2014
- At the middle school, the number of students in the High Needs subgroup who scored Proficient or Advanced in ELA increased by 11%
- At the high school, 96% of students are Proficient/Advanced in ELA, 92% in Math, and 88% in Science

# Closing the Proficiency Gaps

## FY15 Budget

### New Positions

- District-wide Digital Education Administrator to support the integration of digital technology
- Data Specialist to support data-driven instruction and to analyze student data and trends

### Instructional Support

- Extended day and extended year learning opportunities at all levels (including the Summer Scholars program, the Pierce Academy and the Calculus Project)
- Ongoing professional development on addressing the proficiency gap
- Writers' Workshop materials for Elementary students

# Closing the Proficiency Gaps

## FY 16 Budget Request

### New Positions

- \$60,000 – Interim High School Reading Specialist:
  - Provide targeted assistance for students identified as at risk by class performance, internal assessments and/or MCAS
- \$60,000 – Interim Intermediate (grades 4 & 5) Elementary Reading Specialist:
  - Provide targeted assistance for students identified as at risk by class performance, internal assessments and/or MCAS (pre-Advancement cohorts)

### Instructional Support

- \$25,000 - Calculus Project
  - Continue targeted summer pre-teaching sessions and school year tutorials to support at risk students beginning in grade 7 to achieve in the Honors Math track through Calculus
- \$20,000 – Pierce Academy
  - Targeted extended day instruction for students identified as at risk by class performance, internal assessments and/or MCAS
- \$10,000 – High School Bridge Program
  - Targeted summer instruction for rising 9<sup>th</sup> graders at risk

# Closing the Proficiency Gaps

## FY 16 Budget Request

### New Positions

### Instructional Support

- \$20,000 – Elementary Extended Day/Year
  - Targeted instruction for students identified as at risk by class performance, internal assessments and/or MCAS
- \$20,000 – Assessment Software for Middle School and High School
  - Software such as Edwin Teaching & Learning or Galileo to assess and monitor student performance
- \$10,000 – Summer PD Institute on Proficiency Gap
- \$8,000 – New Writing Program at Middle School (texts, materials, PD)

# Closing the Proficiency Gaps

## Metrics to Measure Progress and Outcomes

- District-wide formative assessments used in all English, Math and Science MPS classrooms [Fountas and Pinnell Benchmark Assessment System; Scholastic Reading Inventory (SRI); Elementary, Middle and High School Common Unit Assessments; Edwin Teaching and Learning or Galileo in Middle and High School]
- Individual Student Success Plans
- Student data analysis meetings (quarterly review of effectiveness of interventions/strategies)
- Study Island
- Spring 2015 MCAS Results

## Anticipated Outcomes

- All subgroups will meet their DESE-determined CPI targets
- Individual students who participate in the programs will achieve a Student Growth Percentile of 50 or higher

# Initiative 3: Advancing Science and STEM (Science, Technology, Engineering & Math) Initiatives

# Advancing Science & STEM

## Research

The National Research Council report, “Monitoring Progress Toward Successful K-12 STEM Education (2012),” recognizes the important foundation laid in elementary school and sets out three goals for U.S. K-12 STEM education:

- Expand the number of students who ultimately pursue advanced degrees and careers in STEM fields, and broaden the participation of women and minorities
- Expand the STEM-capable workforce and broaden the participation of women and minorities
- Increase science literacy for all students

The report also emphasizes the importance of the following:

- Content and quality of curriculum
- Teachers’ content knowledge
- Use of instructional practices that have been shown to improve outcomes



# Advancing Science & STEM

## Identified Needs

Data is consistent among cohorts that had limited access to our current advancement initiatives:

### Grade 5 STE:

- 37% of students scored below Proficient in Spring 2012
- 30% of students scored below Proficient in Spring 2013
- 36% of students scored below Proficient in Spring 2014

### Grade 8 STE:

- 52% of students scored below Proficient in Spring 2012
- 58% of students scored below Proficient in Spring 2013
- 52% of students scored below Proficient in Spring 2014

### High School Biology:

- 18 % of students scored below Proficient in Spring 2012
- 9% of students scored below Proficient in Spring 2013
- 10% of students scored below Proficient in Spring 2014

# Advancing Science & STEM FY14 Budget

## New Positions

- Elementary Science administrator to coordinate instruction and STEM implementation

## Instructional Support

- WeDo Robotics materials and equipment for Grade 2 STEM Implementation
- Hands on science materials and lab kits for grades 6-8 providing an in-depth and engaging curriculum aligned to state standards
- Professional development for Pierce science teaching staff for new materials, instructional practices and assessments

# Advancing Science & STEM

## FY 14 Preliminary Results

- At the middle school, the number of students with disabilities who scored Proficient or Advanced in STE increased by 10%
- At the elementary level, the number of grade 5 students who scored Warning in STE was decreased by half
- At the high school, there were significant decreases in gaps (CPI) between: low-income and non-low-income, African American/Black and White, and students with and without disabilities

# Advancing Science & STEM FY15 Budget

## New Positions

## Instructional Support

None

- Hands-on science kits and materials for Grades 3-5
- Creative Computing program for English Innovation Pathway in Grade 3
- Professional Development for new science and STEM materials and programs

# Advancing Science & STEM

## FY16 Budget Request

### New Positions

- \$48,000 – Middle school STEM/Technology teacher (0.8 fte)
  - Reorganize elective offerings to allow all students to take advantage of STEM and ISSTEM (Intensive Studies in Science, Technology, Engineering and Mathematics) electives

### Instructional Support

- \$25,000 – Additional ISSTEM materials;
  - Curriculum such as Project Lead the Way
- \$10,000 - Purchase texts, equipment and additional supplies for the expansion of STEM in the English Innovation Pathway program through Grade 4
- \$35,000 - Purchase elementary science materials for Grades K, 1 and 2
  - Update materials to better align with Science Curriculum Frameworks and to support efforts to have all students attain Proficiency in science

# Advancing Science & STEM

## FY16 Budget Request

### New Positions

### Instructional Support

- \$70,000 – High School Science Materials
  - Update Biotech lab equipment to work towards becoming a PTC (Parametric Technology Corp.) Academy School
  - Begin introduction of digital equipment into all science classes
- \$20,000– Summer PD Institute on Science & STEM
- \$10,000 – Provide targeted professional development to support teachers in the use of elementary, middle and high school science materials/kits

# Advancing Science & STEM

## Metrics to Measure Progress and Outcomes

- District-wide grade level assessments of students' mastery at the end of each science unit in grades K through 8 and in STEM units in grades 1 through 4
- Spring 2015 Science MCAS scores

## Anticipated Outcomes

The district will meet the DESE 5<sup>th</sup>, 8<sup>th</sup>, and 10<sup>th</sup> grade CPI Science targets on the Spring 2016 MCAS exam

# FY 16 Advancement Resources Required

| ADVANCEMENT BUDGET           | Staff  | Technology                            | Instructional Texts and Materials   | Extended Time on Learning Salaries and Professional Development (PD)   |
|------------------------------|--|---------------------------------------|---|--|
| Early Literacy               | \$30,000 – PreSchool Teacher (0.5 FTE)   |                                       | \$5,000 – Pre-K Texts and Materials *<br>\$20,000 – Elementary Leveled Readers*   | \$20,000 – Saturday program for 3 <sup>rd</sup> graders<br>\$20,000 – Summer Institute on Early Literacy PD*<br>\$30,000 – Consultant PD on Readers’/Writers/ Workshop*                                      |
| Closing the Proficiency Gaps | \$60,000 – High School Reading Specialist<br>\$60,000 – Grade 4 – 5 Reading Specialist | \$20,000 – MS/HS Assessment Software* | \$8,000 – Middle School Writing Texts & Materials*  | \$10,000 – Summer PD Institute on Proficiency Gap *<br>\$20,000 Elementary Extended Day/Year<br>\$20,000 – Pierce Academy<br>\$10,000 – High School Bridge Program<br>\$40,000 – <i>The Calculus Project</i> |
| Science/ STEM                | \$48,000 – Middle School STEM/Tech Teacher (0.8 FTE)                                   |                                       | \$35,000 – Science Materials K-2*<br>\$10,000 – STEM materials (grade 4)*<br>\$25,000 – ISSTEM materials*<br>\$70,000 – HS Science materials* | \$20,000 – Summer Institute Science & STEM PD *<br>\$10,000 – Elementary Science PD*   |
| Subtotals:                   | \$198,000  | \$20,000                              | \$173,000   | \$200,000  |
| <b>Total Advancement</b>     | <b>3.3 FTEs</b>  |                                       |   | <b>\$591,000</b>   |

\* could be funded through one –time funds (\$283,000)



# Special Education

Why are Special Education costs so high and why do they keep rising?

# Special Education

Increased Special Education costs due to:

1. DESE regulations & refinement of our practices
2. Development of MPS Special Education Programs
  - Investment in long range savings
  - In absence of services, need to contract out
3. Out of District (OOD) tuition costs
4. Transportation for OOD & Homeless students
5. Stimulus funds eliminated /Circuit Breaker fluctuations

# Special Education

## MPS SPED DEVELOPMENT

1. New England Center for Children (NECC) Partners Program:
  - Current Program for MPS Elementary Autistic students, contracted through NECC
  - \$174K for 8 students
2. New MPS Partners Program 2013-14
  - 4-5 ADDITIONAL Primary ASD students; would otherwise require OOD
    - If OOD, \$360-\$405K + TRANSPORTATION for each student
  - MPS “Partners Program” Development proposal
    - 1 SpEd teacher, 5 ABA Paraprofessionals
    - NECC BCBA, Curriculum & Consultation fee

# Special Education

## OOD TUITION COSTS

- Private schools apply to DESE for Program Reconstruction which results in their being approved to charge higher tuition rates to School Districts
  - FY12 = 6/23 programs increased Tuition
  - FY13 = 8/23 Programs increased Tuition

EXAMPLE of one School's FY12 per diem Rate increases:

Boston Higashi Day    \$245.13 -> \$312.17    = \$8K increase

Boston Higashi Res    \$488.54 -> \$545.60    = \$10K increase

# Special Education

## OOD TUITION COSTS

| School Year | Number of OOD students | Cost for OOD placements |
|-------------|------------------------|-------------------------|
| SY 08-09    | 63                     | \$3,461,741             |
| SY 09-10    | 59                     | \$3,357,450             |
| SY10-11     | 59                     | \$3,709,084             |
| SY11-12     | 60                     | \$3,476,946             |
| SY12-13     | 60                     | \$3,720,575             |
| SY 13-14    | 53                     | \$3,824,238             |

# Special Education

## CIRCUIT BREAKER

Each year, the state of Massachusetts reimburses to school districts, a percentage of special education costs for the costs for individual students, that are over a “Foundation amount”, which is determined annually by DESE.

This reimbursement is primarily applied to tuition costs for Out of District placements, as services for in district special education students rarely go over the Foundation amount.

**Transportation costs are NOT covered**

# Special Education

It is a better practice, both financially and philosophically, to increase the District's capacity to provide for students in our own community schools, rather than to send them out of Milton to costly Out Of District placements.

The challenges and costs of special education are universally experienced in Massachusetts. The high costs of Transportation, without benefit of Circuit Breaker relief, is an issue being debated by legislators now.

# FY 16 School Department Budget Proposal



# FY 15 to FY16 Budget Differences

|  |              |
|--|--------------|
| • Advancement Budget Proposal                          | \$ 591,000   |
| • FY 15 Non-recurring Spending                         | (\$ 500,000) |
| • Negotiated Wage Agreements                           | \$ 1,338,097 |
| • 2 New Special Educators                              | \$ 120,342   |
| • .5 fte Preschool Coordinator                         | \$ 30,086    |
| • 2 Maintenance Salaries to<br>Consolidated Facilities | (\$ 140,000) |
| • SPED Tuition & Bus Increases                         | \$ 102,000   |
| • Facilities costs (utilities & maintenance)           | \$ 100,000   |
| • All other costs                                      | \$ 95,085    |
| Total:   | \$ 1,736,610 |

# FY 15 to FY16 Budget Differences

## Advancement Budget Proposal

- Early Literacy \$125,000
- Closing the Proficiency Gaps \$248,000
- Science/STEM \$218,000

Total: \$591,000

(\$198,000 for 3.3 fte positions, \$90,000 for extended day/year salaries, \$303,000 in non-salary spending)

# FY 15 to FY16 Budget Differences

## Negotiated Wage Agreements

- Rollover of existing staff
- Includes steps, lanes and COLA (1%/1% split)
- Does not include Advancement salaries
- Does not include new SPED/Preschool positions
- Backs out Maintenance salaries from FY 15

Total:           \$1,338,097   (4.19%)

# FY 15 to FY16 Budget Differences

## 2.5 New Special Education Positions\*

|                            |           |
|----------------------------|-----------|
| – K-8 Inclusion Specialist | \$ 60,171 |
| – High School SPED Teacher | \$ 60,171 |
| – PreSchool Coordinator    | \$ 30,086 |

Total: \$ 150,428

\*Salaries based on Masters Step 5

# FY 15 to FY16 Budget Differences

## Maintenance Positions Transferred to Consolidated Facilities

– 2 positions transferred (\$ 140,000)

Total: (\$ 140,000)

# FY 15 to FY16 Budget Differences

## Special Education Costs

- Out of District Tuition Increase\* \$ 75,000
- Transportation Increase \$ 27,000

Total: \$ 102,000

\*FY 15 included \$100,000 in one time spending, so net spending is actually down by \$25,000

# FY 15 to FY16 Budget Differences

## Facilities Costs

- Heat & Utility Increase                   \$ 55,000
- Maintenance Cost Increase               \$ 45,000

Total:                               \$ 100,000

# FY 15 to FY16 Budget Differences

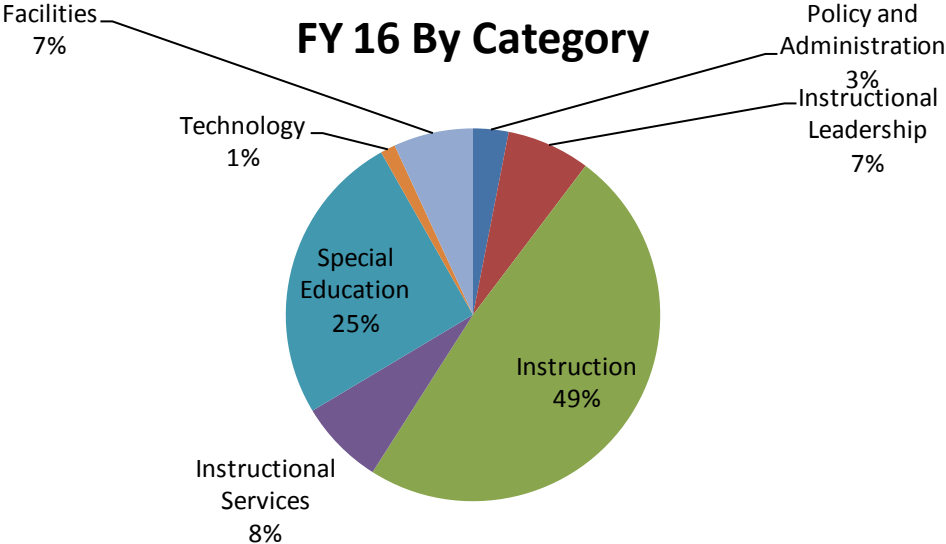
## Other Non-Salary Costs

|                                |             |
|--------------------------------|-------------|
| – Policy & Administration      | (\$ 21,250) |
| – Instructional Leadership     | (\$ 3,500)  |
| – Texts, Materials, Prof. Dev. | \$ 35,835   |
| – Other Instructional Services | \$ 18,000   |
| – SPED Contracted Services     | (\$ 15,000) |
| – Technology Costs             | \$ 81,000   |

Total: \$ 95,085



# FY16 Budget by Category



# FY16 Budget Request

| SCHOOL COMMITTEE CATEGORY          | FY15<br>Budget       | FY 16<br>Budget      | Dollar<br>Change    | %<br>Change | Summary of Budget Drivers<br>Short Notes                       |
|------------------------------------|----------------------|----------------------|---------------------|-------------|--|
| <b>POLICY &amp; ADMINISTRATION</b> | \$ 1,259,300         | \$ 1,263,100         | \$ 3,800            | 0.3%        | Data Specialist phased in (part year) FY 15                    |
| <b>INSTRUCTIONAL LEADERSHIP</b>    | \$ 2,921,625         | \$ 2,971,400         | \$ 49,775           | 1.7%        |  |
| <b>INSTRUCTION</b>                 | \$ 18,963,565        | \$ 20,030,200        | \$ 1,066,635        | 5.6%        | 3.3 Adv Positions  |
| <b>INSTRUCTIONAL SERVICES</b>      | \$ 2,929,700         | \$ 3,034,200         | \$ 104,500          | 3.6%        | Transportation, Residency Stipend for new SRO                  |
| <b>SPECIAL EDUCATION</b>           | \$ 9,961,700         | \$ 10,428,400        | \$ 466,700          | 4.7%        | 4% tuition increase, no increase in SPED aid,<br>2.5 positions |
| <b>TECHNOLOGY</b>                  | \$ 510,000           | \$ 532,200           | \$ 22,200           | 4.4%        | Additional software and supply costs                           |
| <b>FACILITIES</b>                  | \$ 2,812,000         | \$ 2,835,000         | \$ 23,000           | 0.8%        | \$140K Maintenance salary to Town                              |
| <b>TOTALS</b>                      | <b>\$ 39,357,890</b> | <b>\$ 41,094,500</b> | <b>\$ 1,736,610</b> | <b>4.4%</b> | FY16 Budget Request  |
|                                    |                      |                      |                     |             |  |

# FY16 Budget Request One Time Funds

| SCHOOL COMMITTEE CATEGORY       | FY15<br>Budget | FY 16<br>Budget | Dollar<br>Change | %<br>Change | Summary of Budget Drivers<br>Short Notes |
|---------------------------------|----------------|-----------------|------------------|-------------|--|
| General Fund                    | \$ 39,357,890  | \$ 41,094,500   | \$ 1,736,610     | 4.4%        | FY16 Budget Request                      |
| Less FY 15 one-time funds       | \$ (500,000)   |                 |                  |             |  |
| Less FY 16 Advancement one-time |                | \$ (283,000)    |                  |             |  |
| Less FY 16 Other One-Time Funds |                | \$ (141,400)    |                  |             |  |
| Recurring Appropriation         | \$ 38,857,890  | \$ 40,670,100   | \$ 1,812,210     | 4.7%        |  |
|                                 |                |                 |                  |             |  |
|                                 |                |                 |                  |             |  |
|                                 |                |                 |                  |             |  |

\* We are still refining the “one-time funds” number.

# Impact of 2% Reduction

\$1,048,070

To be discussed by School Administration and presented to the School Committee in January

The equivalent of 20 fte positions