

**LEXINGTON SCHOOL COMMITTEE WILL MEET**  
**Tuesday, March 11, 2014**  
**Cary Memorial Building, Battin Hall**  
**1605 Massachusetts Avenue**

**7:30 p.m.    Call to Order and Welcome:**

Public Comment – (Written comments to be presented to the School Committee; oral presentations not to exceed three minutes.)

**7:40 p.m.    Superintendent’s Announcements:**

**7:45 p.m.    School Committee Member Announcements:**

**7:55 p.m.    Agenda:**

1. Superintendent Search Update (10 minutes)
2. Report of the Working Group on Enrollment Study (40 minutes)
3. Recommendation to Address Fiske Overcrowding (40 minutes)
4. Draft 2014-2015 District Goals (30 minutes)


**9:55 p.m.    Consent Agenda (5 minutes):**

1. Homelessness Working Group Liaison Report
2. Vote to accept a \$322 Donation from Wilson Farms’ *Shop at Wilson Farms* School Fundraiser to Be Deposited in the Maria Hastings School Gift Account
3. Vote to Accept a \$1500 Donation from Cubist Pharmaceuticals in Support of the 2014 LHS Science and Engineering Fair
4. Vote to Approve School Committee Minutes of January 7, 2014
5. Vote to Approve and Not Release School Committee Executive Session #1 Minutes of January 28, 2014
6. Vote to Approve and Not Release School Committee Executive Session #2 Minutes of January 28, 2014

**10:00 p.m.    Adjourn:**

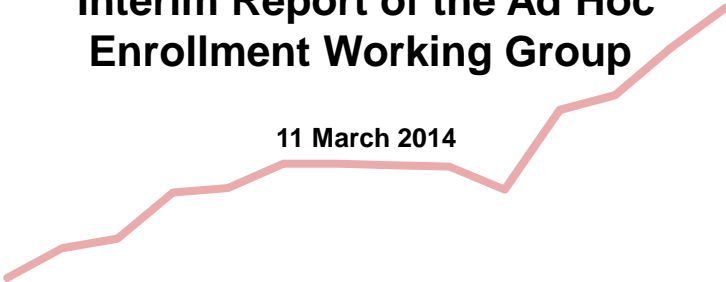
The next meeting of the School Committee is scheduled for Monday, March 24, 2014, at 6:30 p.m. in the Cary Memorial Building, Estabrook Room, 1605 Massachusetts Avenue.


*All agenda items and the order of items are approximate and subject to change.*

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## Interim Report of the Ad Hoc Enrollment Working Group

11 March 2014




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## Challenges Facing Lexington

- Enrollments are approaching capacity limits for current LPS use patterns
- Recurrent enrollment forecast surprise


➔ Need to gain confidence for educational and resource planning



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## Presentation Objectives

- ➔ • **Outline the enrollment working group's (EWG) charter**
- Provide overview of enrollments and current methods
- Share findings regarding enrollment increases
- Provide preliminary guidance on enrollment forecasting




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## Enrollment Working Group (EWG) History

December 2013:

- Ad Hoc Enrollment Working Group is formed to assist the school leadership in enrollment forecasting
  - Membership:
    - Mark Andersen, Ruth Quinn-Berdell, Rod Cole, Tim Dunn, Dan Krupka, Joe Pato
  - Skills:
    - Business Forecasting, Data Privacy, Data Analysis, Demographics, School Enrollment, Planning, Municipal Governance




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## Enrollment Working Group (EWG) History

January 2014:

- The EWG reviews and recommends against outside consultant proposals
- Group agrees to undertake its own study of enrollment and forecasting

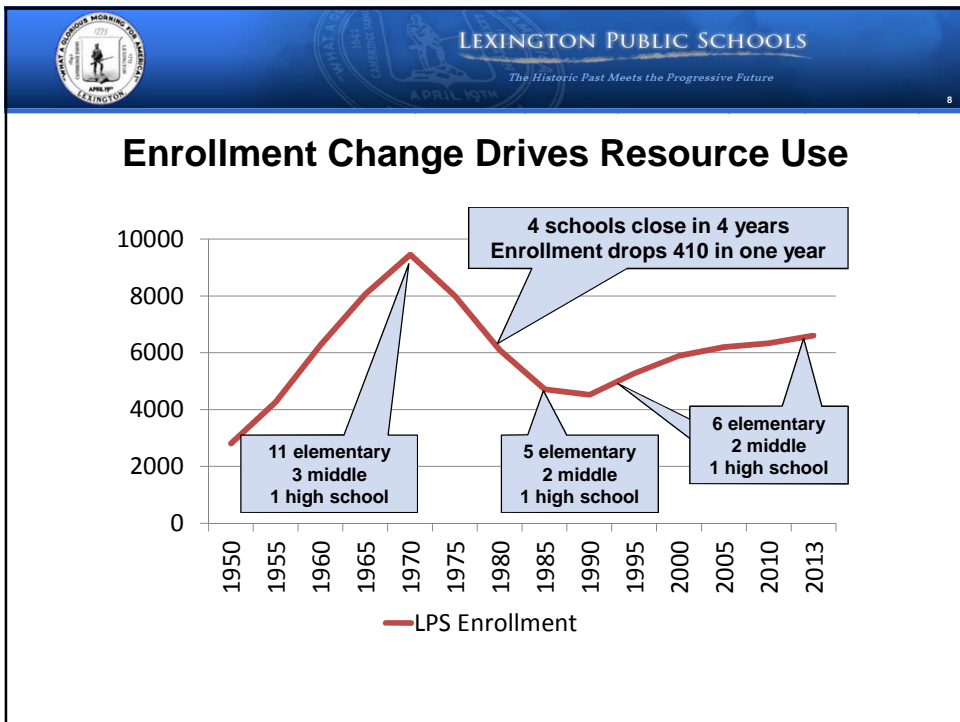
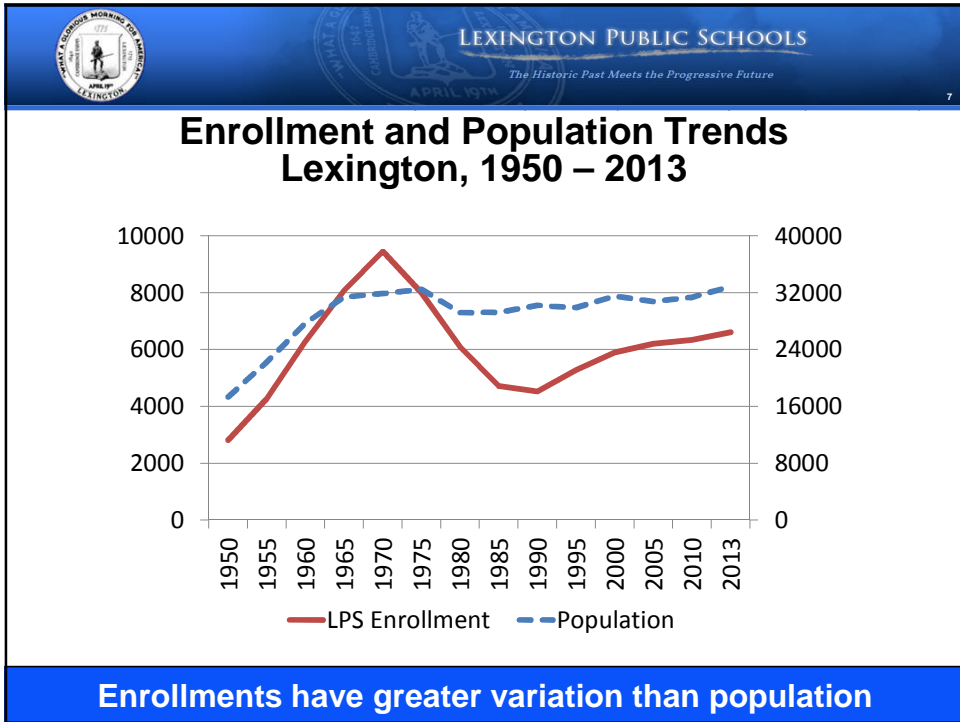


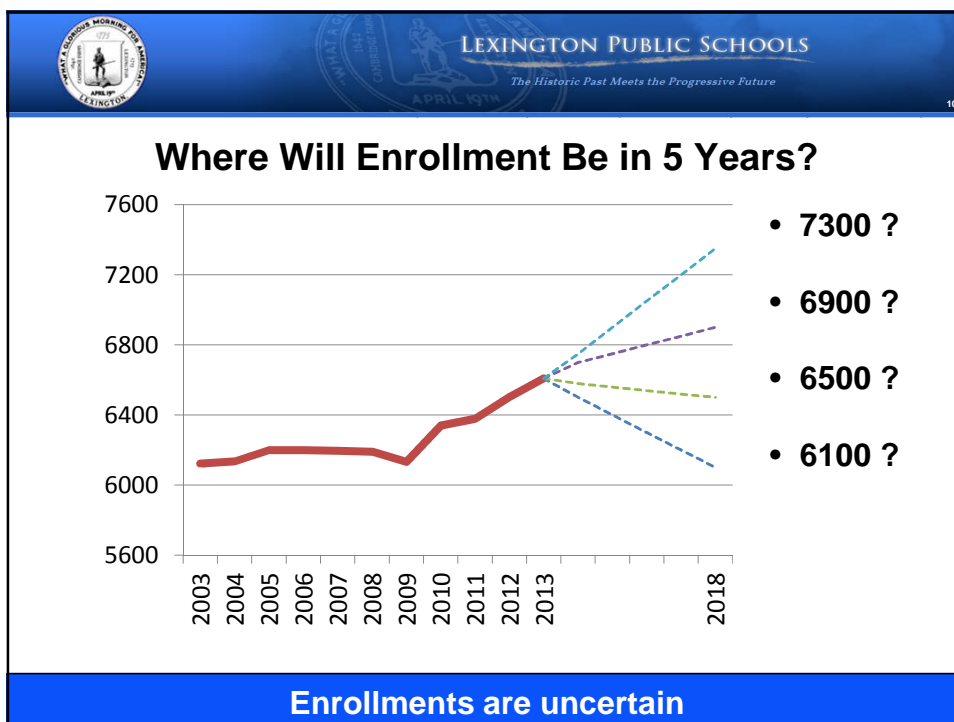
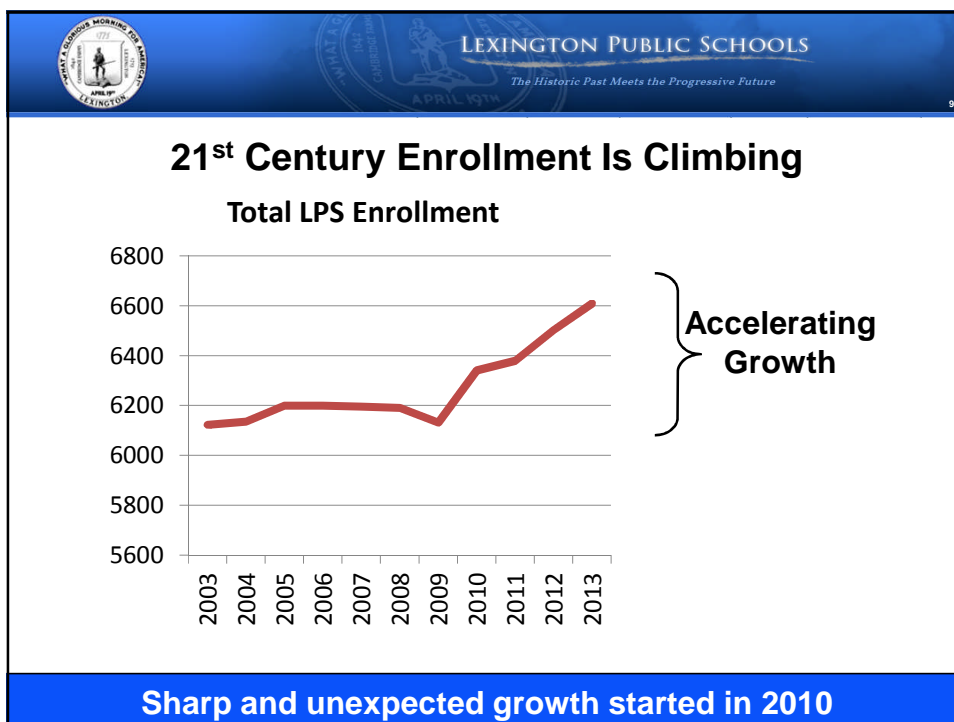
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## Presentation Objectives

- Outline the enrollment working group's (EWG) charter
- ➔ **• Provide overview of enrollments and current methods**
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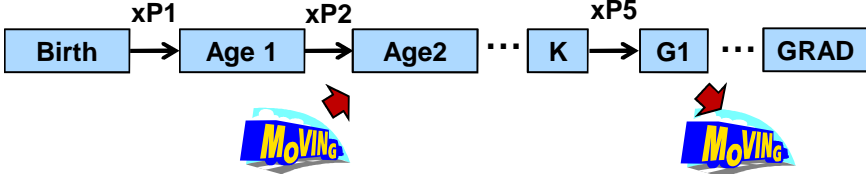





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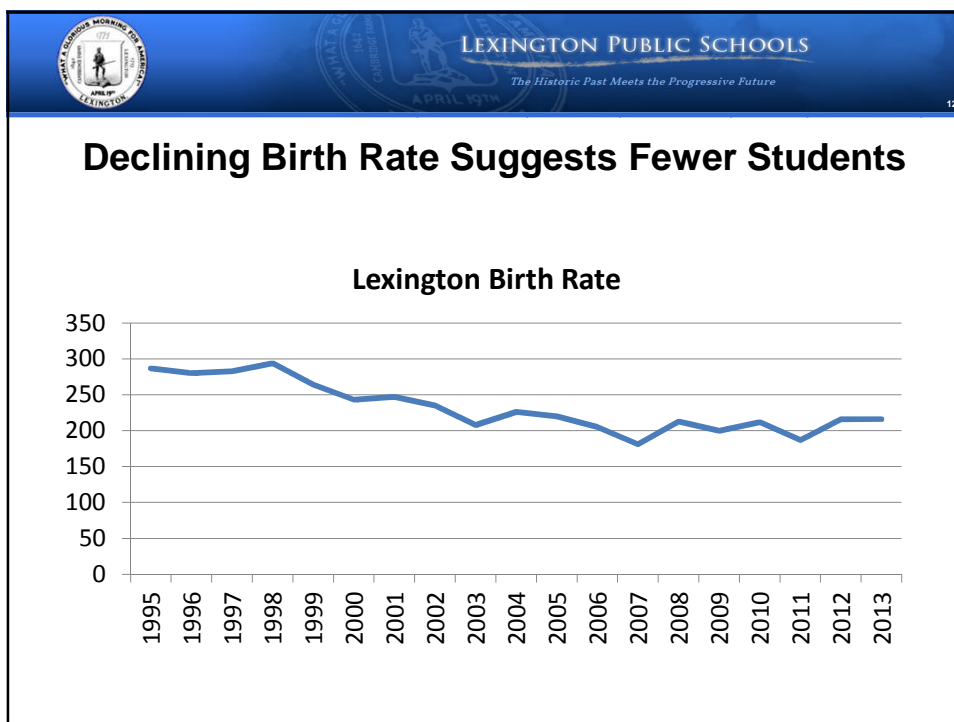
**Cohort Survival Model**

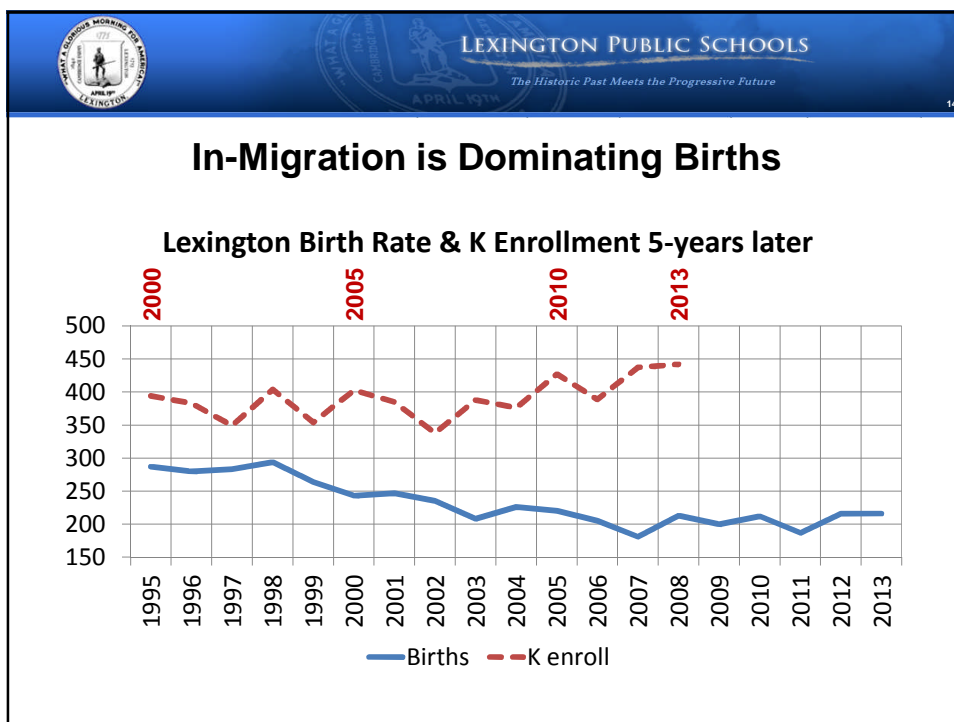
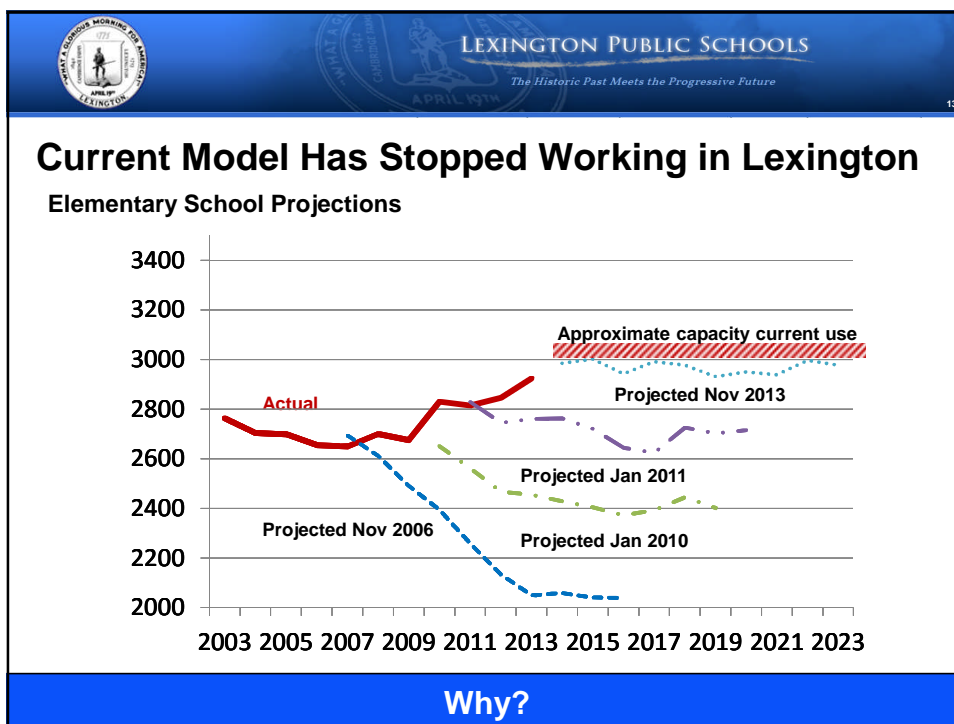
- Model used nationally for mature communities
- Babies are born and progress forward year by year



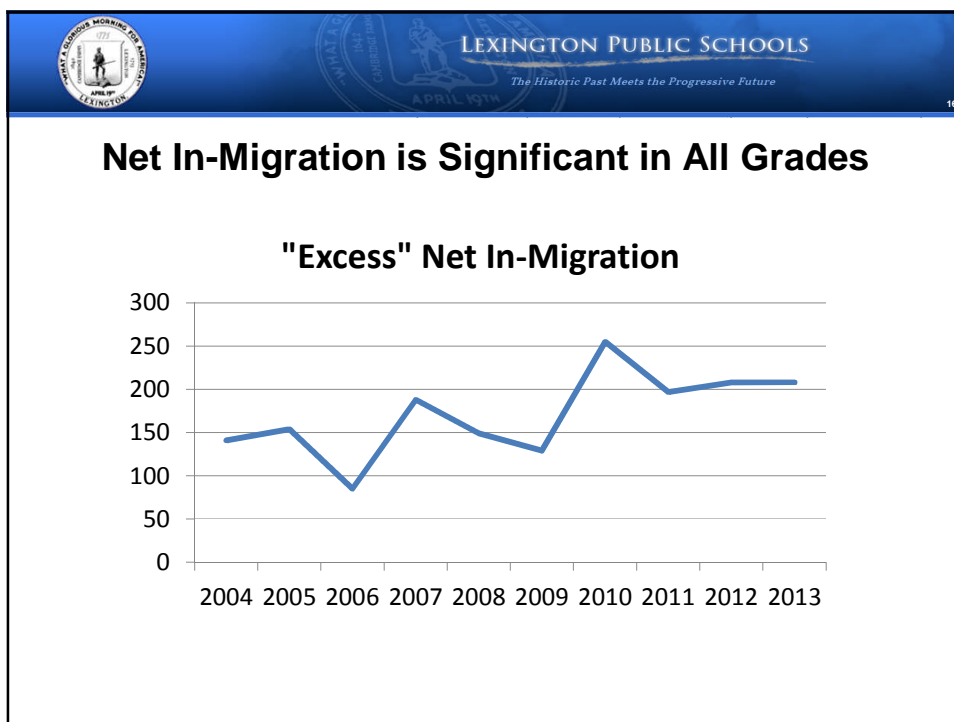
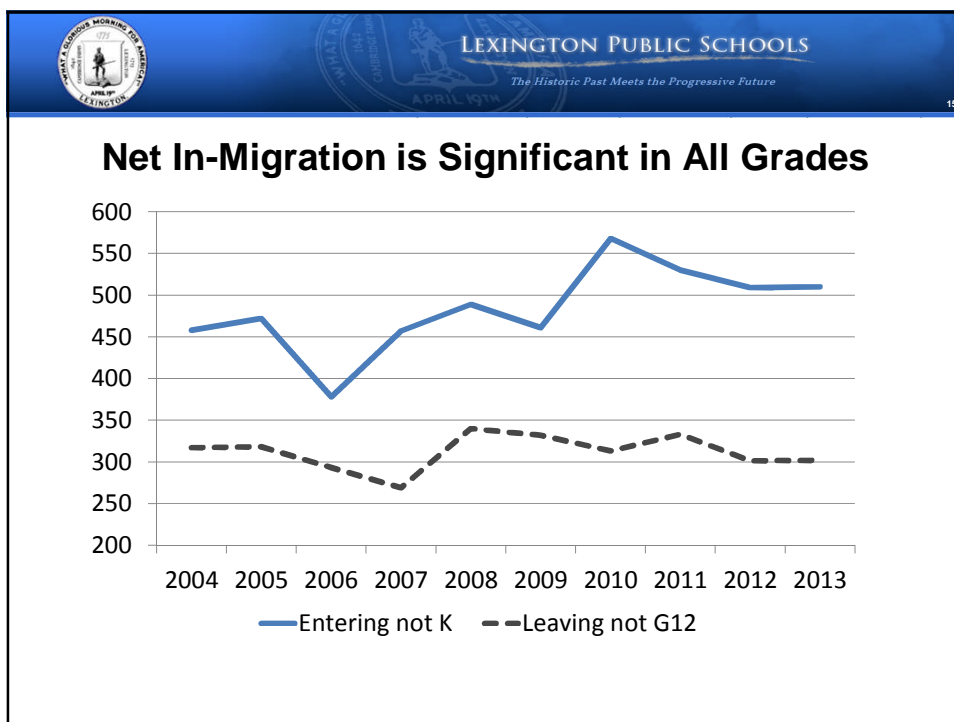
- Students also arrive and leave
  - # of 2-year-olds next year =  $P2 \times \# \text{ 1-year-olds now}$
  - $P2 = 1.05$  predicts a 5% increase in 2-year-olds by next year


**Lexington has used this “Cohort Survival Model”**












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## Possible Growth Factors Considered

<p>1. Changing demographics</p> <ul style="list-style-type: none"> <li>• Family size</li> <li>• Age of home buyers</li> <li>• Oldest child at date of purchase</li> </ul>	<p>4. Accelerating real estate turnover rate</p> <ul style="list-style-type: none"> <li>• Greater likelihood of families making home purchases</li> <li>• Greater rate of families moving into apartments or condos</li> </ul>
<p>2. Mansionization</p>	<p>5. Movement from private schools to public schools</p>
<p>3. Accelerating growth in housing stock</p> <ul style="list-style-type: none"> <li>• Single family</li> <li>• Apartments</li> </ul>	

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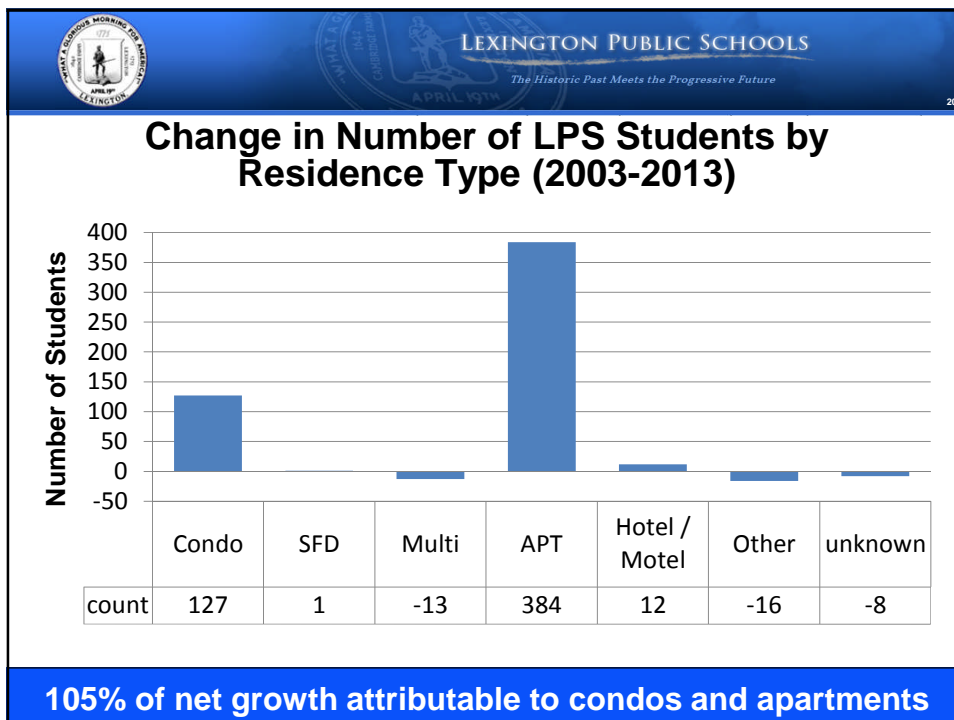
## Findings: Accounting for Increasing Enrollment, 2003-2013

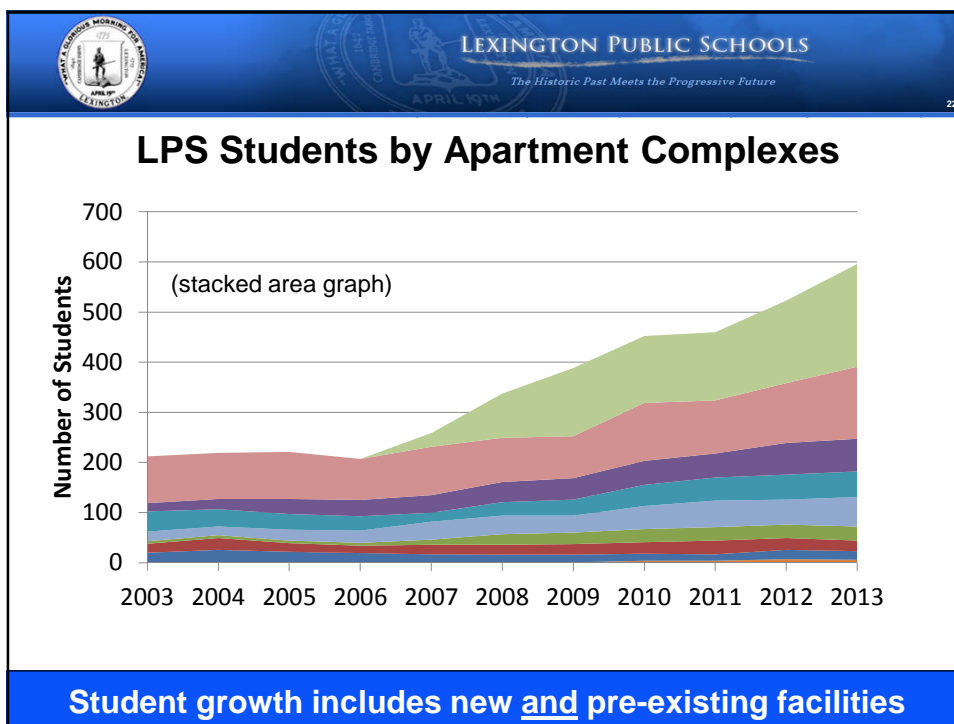
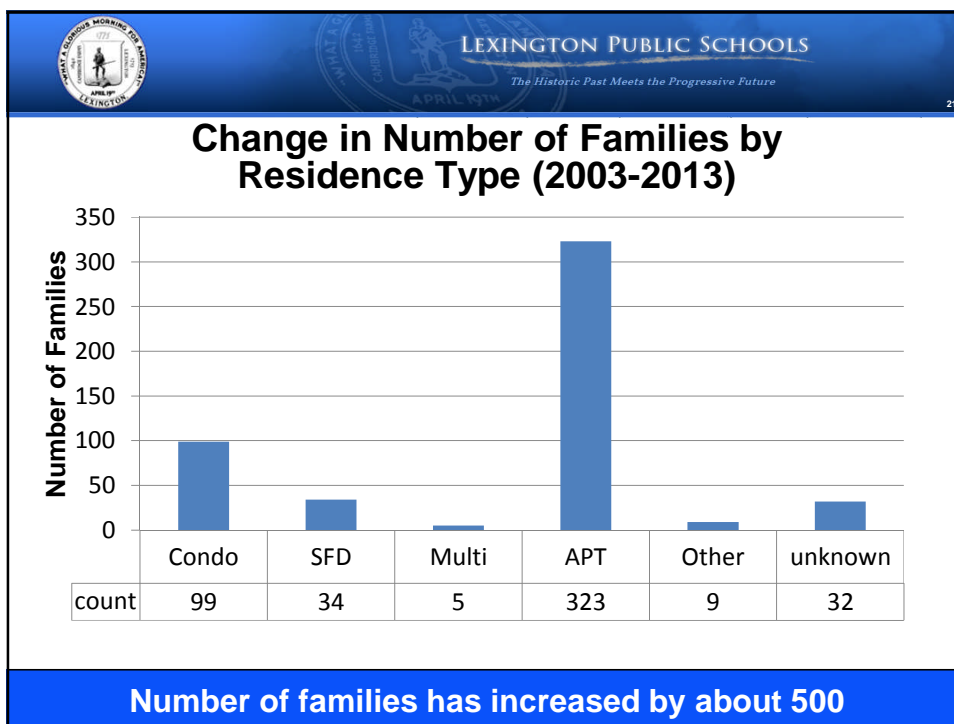
**Large Factors**


- More families with children in apartments and condos
- New apartments and condos (*somewhat expected*)

**Small Factors**

- Family size in apartments – small positive
- Family size in single family homes – small negative








WHAT A ROUGH MORNING FOR A MARCH  
APRIL 19<sup>TH</sup>  
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## Finding: Unexpected Volatility in Student Tenure

- Many Students do not progress from K->Graduation
  - Nearly 50% of 10<sup>th</sup> graders did not start in Kindergarten  
Almost 40% were not in 2<sup>nd</sup> grade
  - Nearly 30% of 6<sup>th</sup> graders were not in LPS for 2<sup>nd</sup> grade
- This is a corollary to in-migration at all grade levels



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## Presentation Objectives

- Outline the enrollment working group's (EWG) charter
- Provide overview of enrollments and current methods
- Share findings regarding enrollment increases
- ➔ • **Provide preliminary guidance on enrollment forecasting**

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## Major Questions

- What are the limits to enrollment growth?
- How much more room available in the faster growing apartment / condo residential category?
- How rapidly might growth occur?
- What is the potential growth in single family dwellings?

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## Hypotheses About Drivers

Potential Drivers


- LPS Reputation
- Economy
- Regional Housing Market
- Aging and Departure of Residents

These factors are all relative and difficult to forecast

*They involve understanding regional and global trends*

←

**Even 3- to 4-year forecasts likely to have large uncertainty**




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## Key Observation

### Flexibility is critical when planning in the face of uncertainty

- Consider multiple scenarios for future enrollment trends
- Create solutions that are flexible and can be adapted




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## Proposed Next Steps for EWG


Process	Action
Methodology Development	<ul style="list-style-type: none"> <li>• Model drivers and estimate “headroom” for growth</li> <li>• Estimate uncertainty ranges</li> <li>• Outline low/mid/high growth scenarios</li> </ul>
Elementary School Forecasting	<ul style="list-style-type: none"> <li>• Integrate school and municipal data to improve records, especially for ages 0-5; track changes on a quarterly basis</li> </ul>
Middle School / High School Forecasting	<ul style="list-style-type: none"> <li>• Forecast with age progression but monitor closely for pattern change</li> </ul>

**Forecasts are possible, although uncertain**


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## Looking Forward




**In the longer term:**

**Plan for a range of enrollment scenarios...**

**even scenarios which pose difficult questions**

**Key challenge for school and town leadership**


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## What Would We Do With Enrollment Scenarios?

Body / Function	Action
School Master Planning	<ul style="list-style-type: none"> <li>Design for high variability</li> <li>Design for high/med/low scenarios</li> </ul>
School Committee	<ul style="list-style-type: none"> <li>Define capacity, classroom size, and allowable facility configurations</li> <li>Plan land use, capital, and operating expenditure for high/med/low scenarios</li> </ul>
School and Town Financial Committees	<ul style="list-style-type: none"> <li>Evaluate high/med/low scenarios for impact on capital and operating budgets</li> </ul>

**Can Lexington influence out-migration, and thereby affect outcomes which occur?**






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## Conclusions

- Migration patterns dominate births for enrollment prediction
- Housing preferences are changing
- Consider multiple scenarios for future enrollment trends
- Create solutions that are flexible and can be adapted


**Flexibility is critical  
when planning in the face of uncertainty**



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## Discussion




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# Backup



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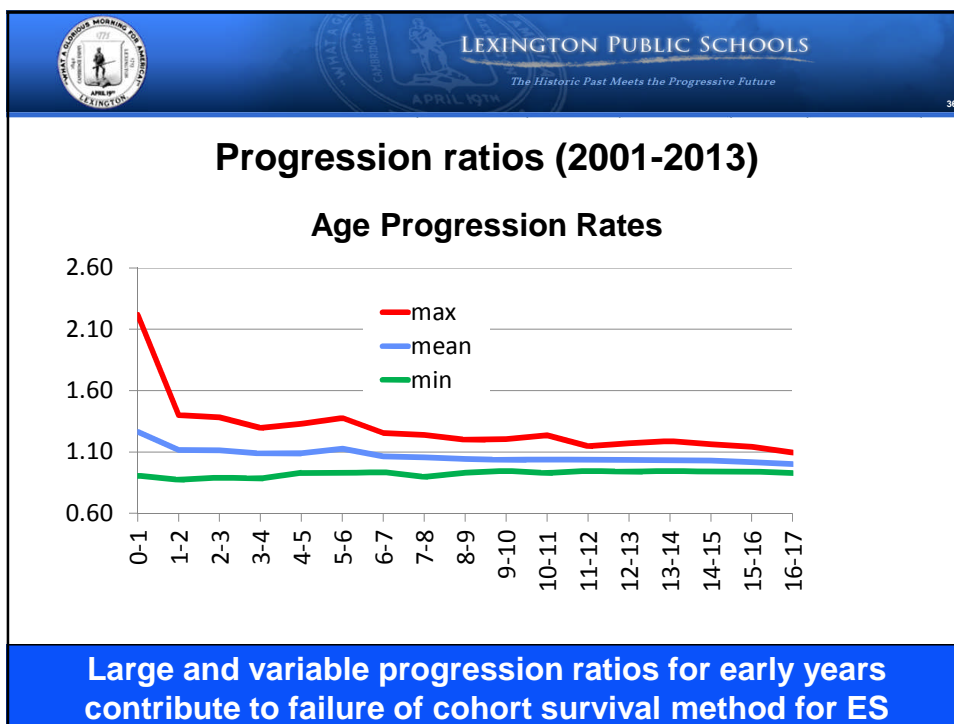
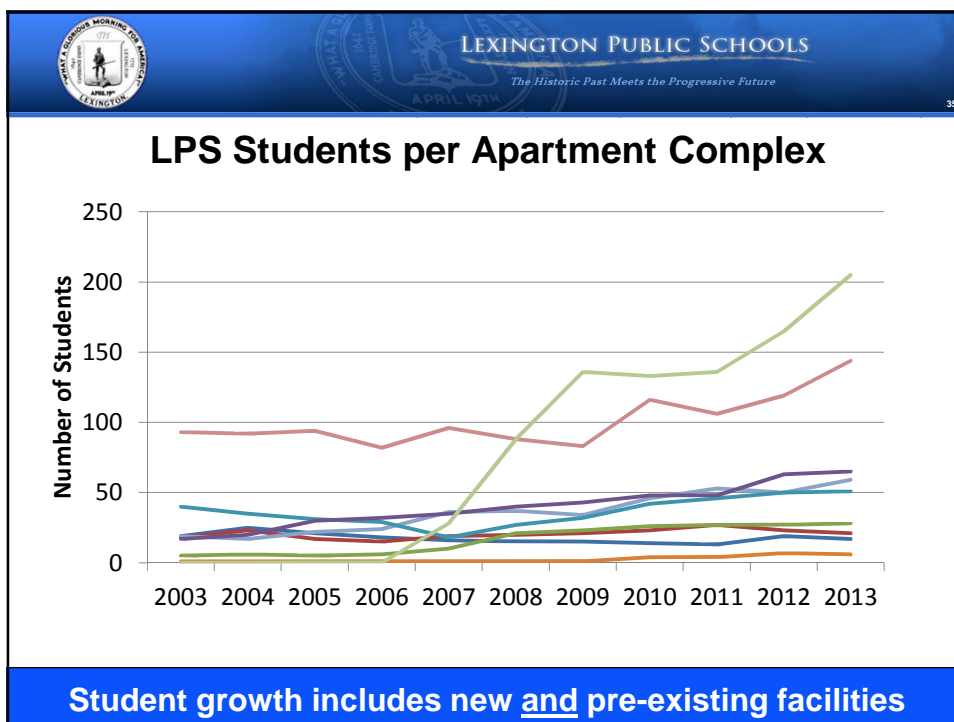
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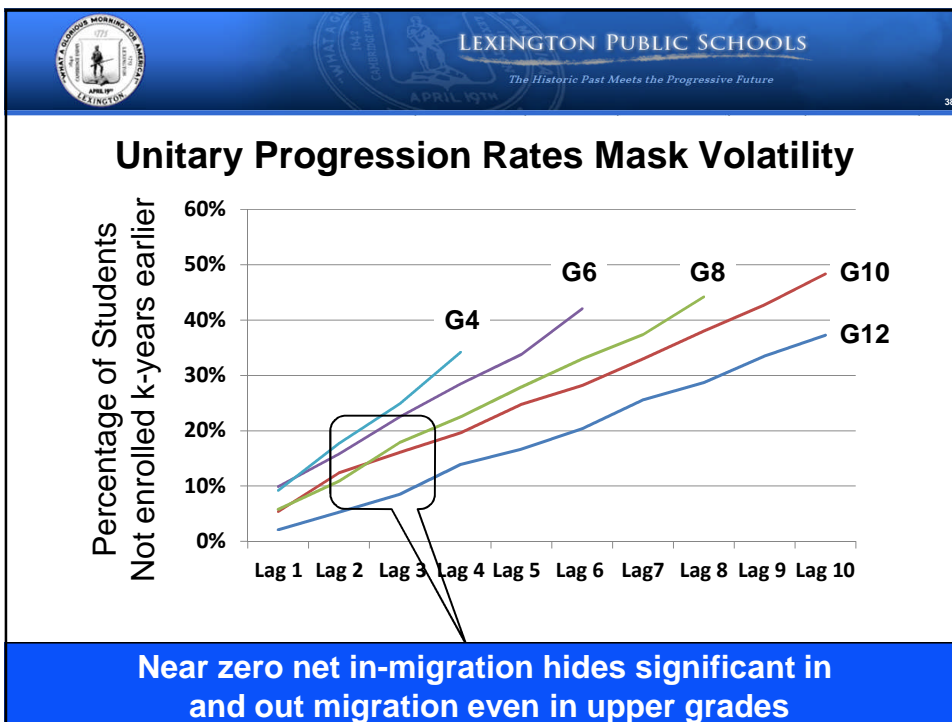
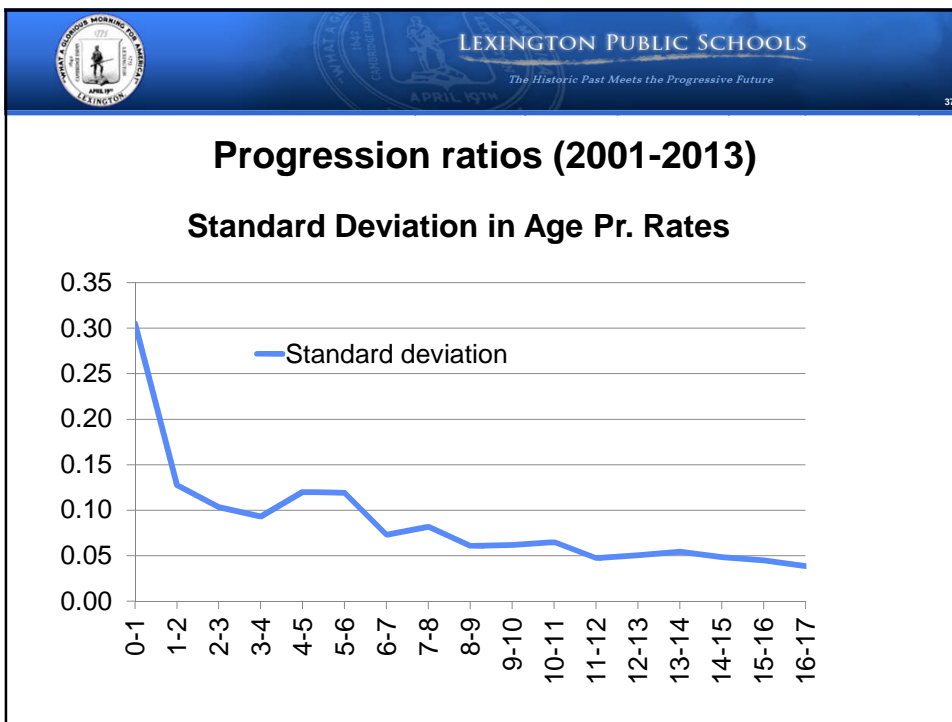
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## Data Sets Used by EWG

**Data sets:**

- **LPS Student Rolls: 2000 – 2013**
- **Town Census: 2000 – 2014 (complete, archival)**
- **Town Assessors data: 2007 – 2014**
- **Town Permit Database: 2004 – 2014**
- **Federal Census: 2000, 2010**





# **Report on Fiske School Overcrowding**

**March 11, 2014**



# Agenda

1. The Problem
2. The Process
3. Options
4. Next Steps

# The Problem

The school is projected to be over capacity  
by 1 room in 2014-2015 (FY 15)

The school is projected to be over capacity  
by 4 rooms in 2015-2016 (FY 16)

# The Process

1. Superintendent's Enrollment Report – Presented to the School Committee on November 19, 2013
2. Citizen Working Group – December 2013 to present
3. Parent meetings (Bridge, Dec. 13; Fiske, Jan. 22; Estabrook, March 6; and Hastings, March 17)



# Options Considered

1. Redistrict students from Fiske to Estabrook
2. Add modular classrooms to Fiske School
3. Use the art or music room
4. Add additional part-time teachers to Grade 5

# Option #1 - Redistricting

Advantage – The Estabrook School has extra classrooms that can absorb some Fiske students

Disadvantage –Redistricting is disruptive to children and the community. Also, any plan may not be viable beyond two years if enrollment continues to increase.

# **Option #2 – Add Modular Classrooms in 2016-2017\***

- Add five unattached modular classrooms
- Add five attached modular classrooms  
(Two classrooms and three classrooms)

\* 2015-16 timeframe may be possible, but the risk of not completing the project by September 2015 is high.

# Five Unattached Modular Classrooms



**Add five modular classrooms that are at least 87 feet from the Fiske School. This option is not practical from a safety and educational perspective.**

# Five Attached Modular Classrooms



**Add two modular classrooms (Close to fire lane and safety needs to be studied)**

**Add three Modular Classrooms (Close to fire lane and safety needs to be studied. Costly retaining wall required)**

# Option #3 – Use Art or Music Room

(Fiske is projected to be over capacity by 1 room)

Grade	Use Class Size Guideline
K	19
	19
	20
	20
1	23
	23
	23
	24
2	22
	22
	22
	23
3	26
	26
	25
4	24
	25
	25
	25
5	22
	22
	21
	21
<b>Total Enrollment</b>	<b>522</b>
<b>Sections</b>	<b>23</b>
<b>Available Classrooms</b>	<b>22</b>
<b>Surplus/Deficit</b>	<b>-1</b>

## School Committee Class Size Guidelines

Kindergarten: 18 to 20 students

Grade 1: 22 to 24 students

Grades 2 to 5: 24 to 26 students

# **Impact – Loss of Art or Music Room**

## **Quality of Instruction**

- A limitation on materials, equipment, and space
- A reduction in the time available to teach (the teacher must set up the class)
- Limited in-depth art projects (space and access to materials)
- Limited space for movement

**Lack of Equity with Programs in Other Schools**

**Music Classes May Disrupt Nearby Classes**

**All Fiske Students Will Be Impacted**

# Option #4 – Add Part-Time Teachers to Large Grade 5 Classrooms

## (Recommended Option)

FY 15 Projected Enrollment Scenarios  
(Status Quo vs. Adding Part-Time Teachers to Grade Five)

Grade	Use Class Size Guideline	Recommended Option
K	19	19
	19	19
	20	20
	20	20
1	23	23
	23	23
	23	23
	24	24
2	22	22
	22	22
	22	22
	23	23
3	26	26
	26	26
	25	25
4	24	24
	25	25
	25	25
	25	25
5	22	28 (add .55 FTE teacher)
	22	29 (add .55 FTE teacher)
	21	29 (add .55 FTE teacher)
	21	
<b>Total Enrollment</b>	<b>522</b>	<b>522</b>
<b>Sections</b>	<b>23</b>	<b>22</b>
<b>Available Classrooms</b>	<b>22</b>	<b>22</b>
<b>Surplus/Deficit</b>	<b>-1</b>	<b>0</b>

### School Committee Class Size Guidelines

Kindergarten: 18 to 20 students

Grade 1: 22 to 24 students

Grades 2 to 5: 24 to 26 students



# 2015-2016 Projected Space Problem

Grade	Use Class Size Guidelines	Use Art and Music Rooms	Use Art and Music Rooms with Larger Class Sizes <i>(add additional Instructional Assistant Support, where needed)</i>
K	17	17	17
	18	18	18
	18	18	18
	18	18	18
	18	18	18
1	21	21	21
	22	22	22
	22	22	22
	22	22	22
2	20	20	25
	20	20	26
	21	21	26
	21	21	26
	21	21	26
3	23	23	23
	23	23	23
	23	23	23
	24	24	24
4	20	20	27
	20	20	27
	20	20	26
	20	20	26
5	25	25	25
	26	26	26
	26	26	26
	26	26	26
<b>Total Enrollment</b>	<b>555</b>	<b>555</b>	<b>555</b>
<b>Sections</b>	<b>26</b>	<b>26</b>	<b>24</b>
<b>Available Classrooms</b>	<b>22</b>	<b>24</b>	<b>24</b>
<b>Surplus/Deficit</b>	<b>-4</b>	<b>-2</b>	<b>0</b>

## School Committee Class Size Guidelines

Kindergarten: 18 to 20 students

Grade 1: 22 to 24 students

Grades 2 to 5: 24 to 26 students

# Next Steps

1. Seek community feedback through mid-April
2. School Committee approves of the best way to respond to Fiske overcrowding in FY 15
3. Update enrollment numbers next fall
4. Continue the Citizen Working Group on School Enrollment
5. Update the K-12 Facility Master Plan
6. Develop space options for the next few years



# Fiske Enrollment / Classroom Shortage Survey Summary Report

March 5, 2014

Current enrollment projections for the Lexington Public Schools (LPS) estimate that there could be a shortage of up to two (2) classrooms at the Fiske School for the 2014-2015 school year, with the shortage potentially increasing to five (5) classrooms in the 2015-2016 school year. To assess parental support for potential solutions to the classroom shortage issue, the Fiske School PTO conducted a brief survey of current and future Fiske parents. The online survey was open for completion from 9:00pm Thursday, February 27<sup>th</sup> through 9:00pm Monday, March 3<sup>rd</sup>. This report summarizes the results of the survey.

## ***Who responded?***

There were 376 total respondents, of whom 337 respondents were identified as the parent of a current or future (within the next 2 years) Fiske School student.

- More than 87% of respondents have at least one child who will attend Fiske School in the 2014-2015 school year.
- More than a third of the respondents (35%) have a preschool-aged child in their family who expect to attend Fiske School in the future, with 65 of these future students expecting to enter Kindergarten at Fiske in the 2015-2016 school year.
- Of those who responded, the distribution of grades in which their children were expected to enroll for the next school year (2014-2015) was as follows:
  - Kindergarten: 54 children expected to be enrolled
  - First Grade: 59 children expected to be enrolled.
  - Second Grade: 72 children expected to be enrolled.
  - Third Grade: 64 children expected to be enrolled.
  - Fourth Grade: 77 children expected to be enrolled.
  - Fifth Grade 66 children expected to be enrolled.

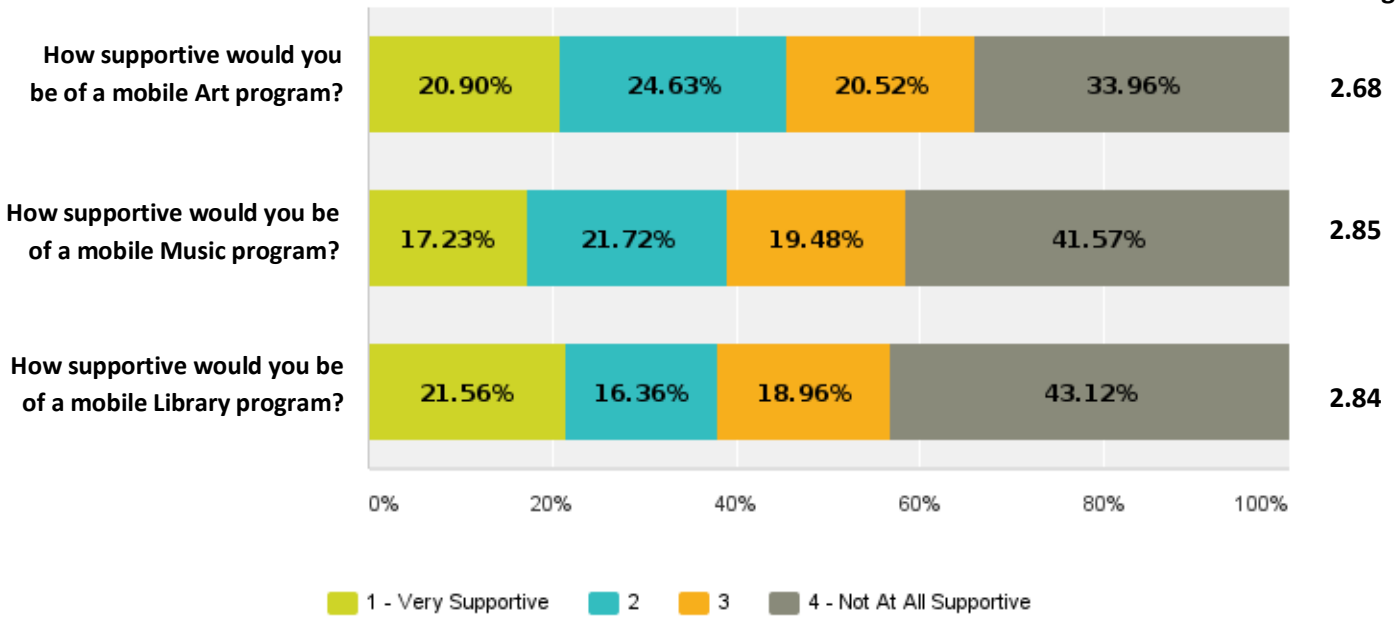
## ***Opinions regarding the potential solution options***

We asked respondents to report their level of support with respect to the following potential solutions:

*Short-Term Option 1: Converting the Fiske School Art Room, Music Room, and/or part of the Library into general education classrooms.* This would mean that the Art and/or Music teachers would transport their program materials on a mobile cart and deliver instruction in the regular classroom setting. The Librarian would present the library program curriculum in the regular classroom setting, but book selection would still occur in the Library.

### Responses to Short Term Option 1 - 269 Respondents

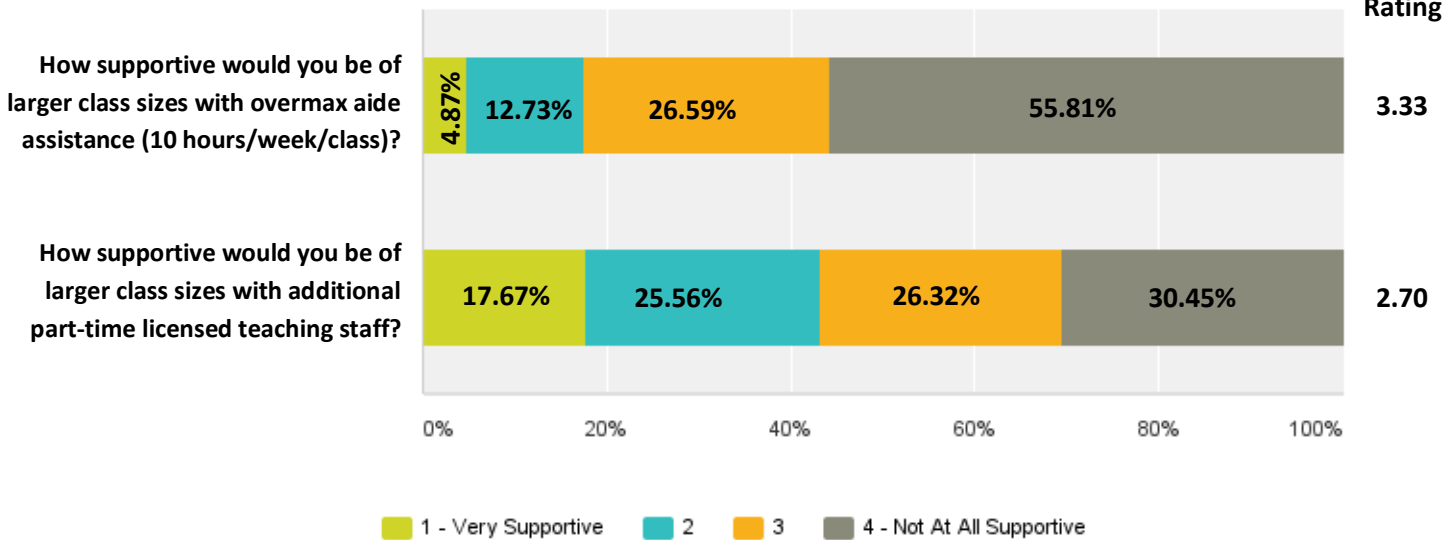
Average Rating



*Short-Term Option 2: Increasing class sizes in two grades with additional teaching support in some of the classes. The grades in which anticipated enrollment will increase the number of classrooms needed in the 2014-15 school year are 3rd and 5th Grades. This could mean either larger class sizes with overmax aide assistance (10 hours/week/class) or larger class sizes with additional part-time licensed teaching staff.*

### Responses to Short Term Option 2 - 267 Respondents

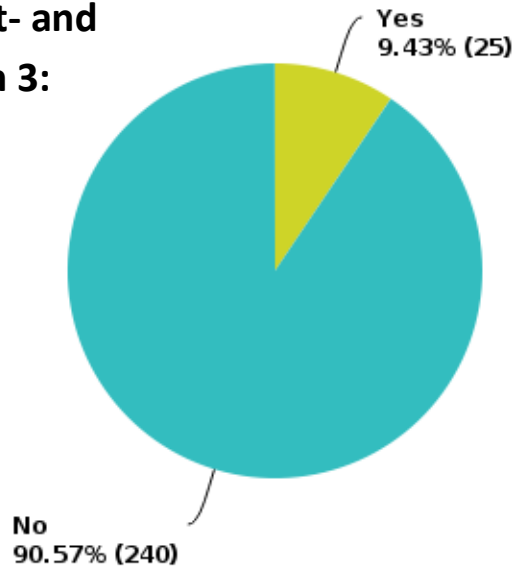
Average Rating



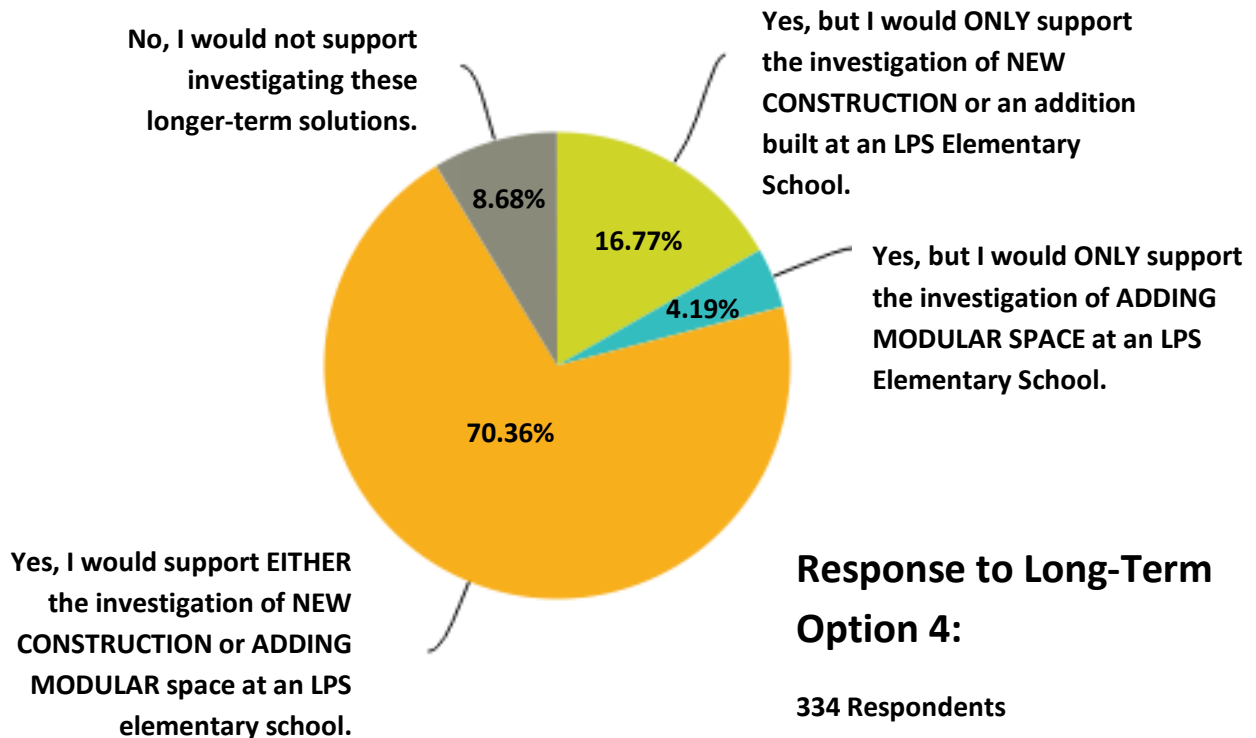
*Short- and Long-Term Option 3: Voluntary redistricting.* Would the respondent be willing to voluntarily redistrict their child(ren) to Estabrook School starting in September 2014?

### Response to Short- and Long-Term Option 3:

265 Respondents



*Long-term Option 4: Construction.* Would you support the investigation of long-term solutions such as building an addition or the construction of modular space either at Fiske or at other elementary schools in the district, which would potentially incur additional costs to Lexington taxpayers? (Note: the number of responses to this particular option is higher because respondents who would not have a child attending Fiske School in the 2014-15 school year were still asked to respond to this particular question.)



## ***Conclusions***

- Of the short-term solutions presented in the survey, there was no "popular" solution. **All of the short-term options presented were undesirable** with the least favorite "to provide for overmax aides in classrooms with larger class sizes."
- **Redistricting** is clearly "unpopular" based on the survey results, but it could be a viable solution if done voluntarily with the 25 respondents who indicated that they would consider redistricting an option for their families.
- Respondents provided very strong support for the investigation of **long-term construction solutions** to the overcrowding issue.

# **Draft FY 15 District Improvement Plan**

*In order to ensure and sustain high academic achievement and pro-social skills for all students, accomplished in the spirit of collaboration, continuous improvement, and respectful and caring relationships, the district is committed to the following goals in FY 15:*

## **Goal 1 – Improve Academic Performance for All Students**

### **1. Supervision and Evaluation**

- Implement the second phase of the new supervision and evaluation system for professional staff members designed to continuously improve professional practice and focus on measurable outcomes for student achievement.
- Provide on-going professional support for all administrators and teachers in the implementation of the state's new educator evaluation system.
- Monitor the collaborative implementation process and recommend refinements to the Lexington Education Association and School Committee.

### **2. Curriculum, Instruction, and Assessment**

- Complete Year 3 of the Social Studies Curriculum review.
- Continue with Year 2 of Guidance program review.
- Assure that the Lexington Public Schools is compliant with the newly edited Massachusetts Framework that meets the Common Core standards in preparation for PARCC administration in 2015.
- Further design and refine targeted student interventions to ensure more consistent and coherent district-wide protocols for all tiers of RtI, both academic and pro-social.
- Continue to provide increased supports for students with social, emotional, and behavioral needs.
- Begin to develop intervention supports for students who enter the Lexington Public Schools from other school districts.
- Design a targeted focus on Response to Intervention (RtI) to yield a more consistent and coherent view of district-wide protocols and procedures for all tiers of RtI in both academic and pro-social domains.
- Deepen the systemic use of data-driven decision-making and research-based accountability measures in the selection and evaluation of programs and services in order to bring about the continuous improvement of student, school, and district outcomes.
- Support teachers, principals, and district staff in strategic planning and to promote a culture of accountability for outcomes.

### **3. Professional Learning**

- Continue to provide high quality, research-based, job-embedded professional learning that expands a teacher's repertoire of assessment strategies, responsive instructional skills, and content knowledge to increase student academic and pro-social learning.
- Further develop and implement a new administrator induction program as part of a long-range plan to provide professional learning opportunities for all school leaders.
- Expand the Wellness program for all employees.

### **4. Technology**

- Develop and implement additional strategies to address the needs of today's learners for mobile learning, socially interactive instructional opportunities, and digitally-rich learning environments.
- Address the policy and infrastructure issues required to expand our capacity to more effectively use mobile devices.
- Build the capacity of the school district to use technology for student assessments and the means for educators to utilize and analyze this information.
- Continue to support the utilization of technology in the implementation of the state's new educator evaluation system.

## **Goal 2 – Improve Social and Emotional Program Supports for All Students**

- Support the expansion of the elementary and middle school Therapeutic Learning Programs and establish consistency among the programs across the district.
- Implement the first phase of the expanded Independent Learning Program at the high school and collaboratively plan the second phase scheduled for 2015-2016.
- Continue to develop school programs that support students with significant emotional needs in collaboration with families and outside mental health organizations.

## **Goal 3 – Improve Safety for All Students and Staff**

- Continue to improve the security of buildings through physical infrastructure changes, modifications, and updating procedures.
- Implement further steps in all school buildings to increase safety if there is a potentially dangerous intruder or major hazardous event.



#### **Goal 4 - Improve the District's Capacity to Respond to Enrollment Increases**

- Continue the work of the Citizens' Working Group on K-12 Enrollment to further identify the drivers of enrollment growth and develop a more reliable model to forecast future enrollment.
- In collaboration with the community and outside organizations, develop multiple options for addressing space issues related to enrollment growth in all schools.

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