

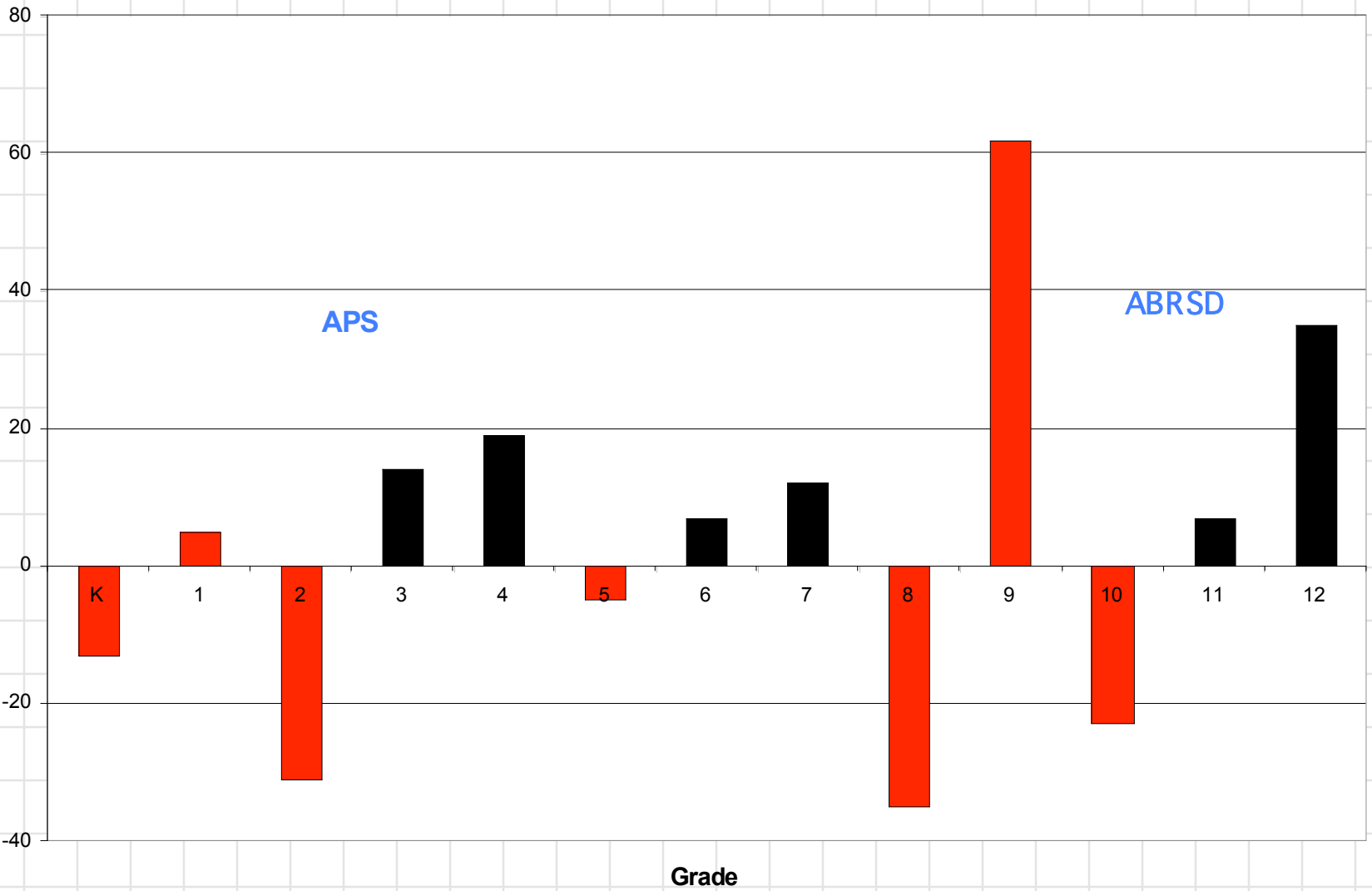
# Update on School Enrollment and Enrollment Projections

Innovation & Information Consultants, Inc.  
Concord, MA

December 20, 2007

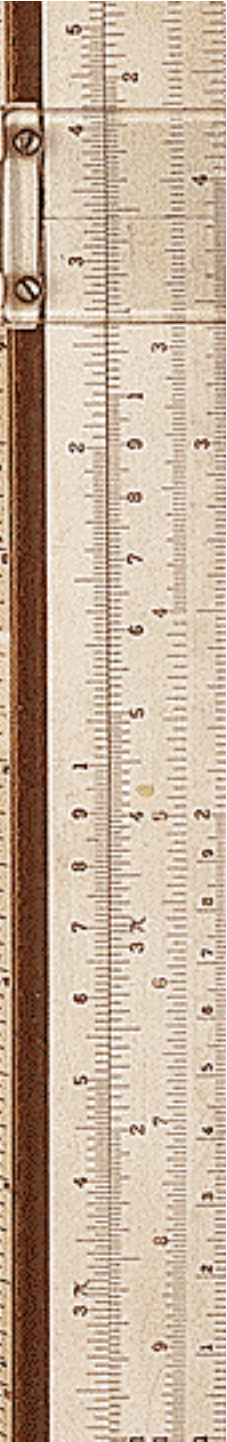
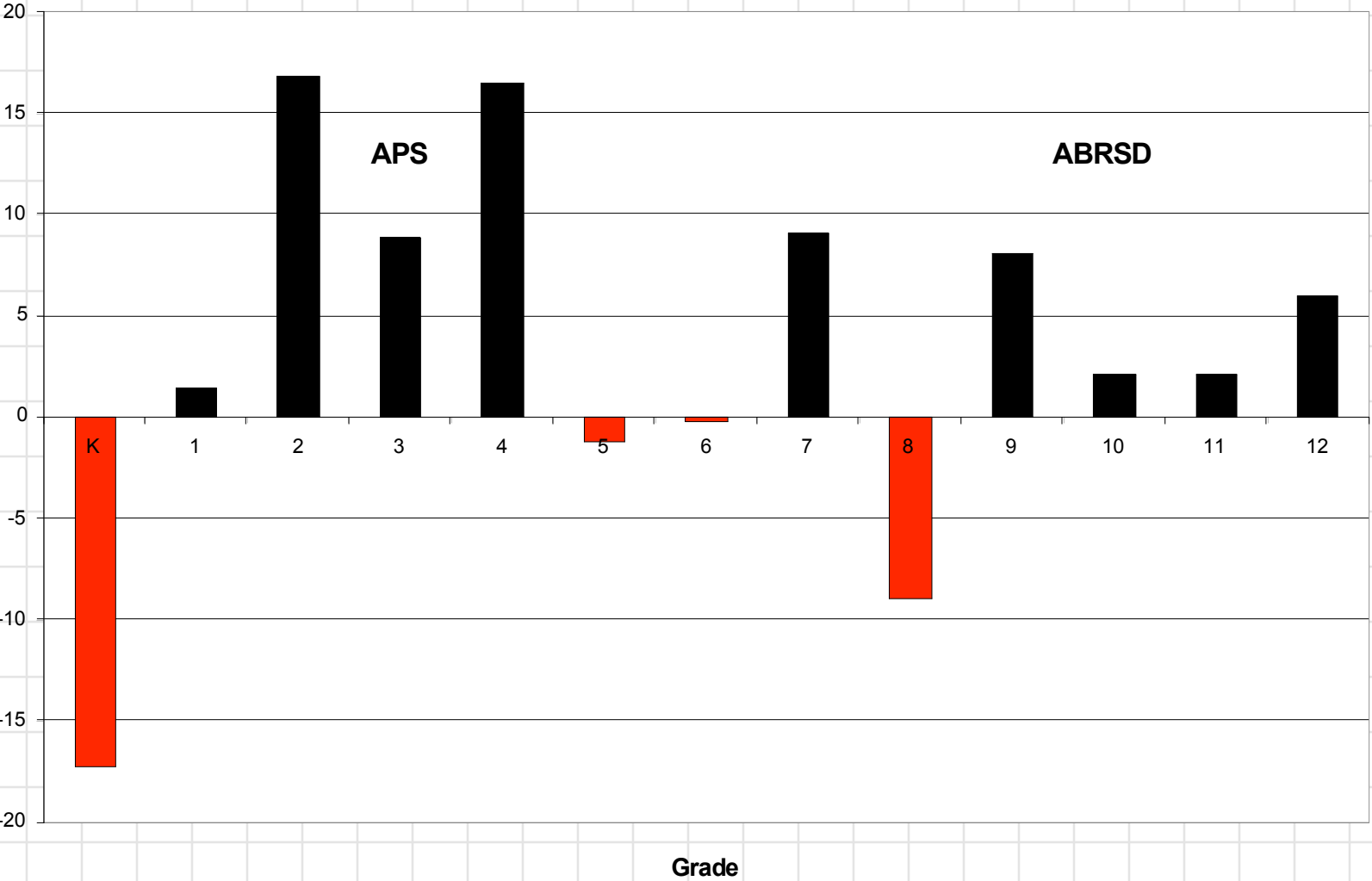


# Change in Enrollment by Grade: APS and Region, 2006 vs. 2007



# Difference between Enrollment Projection and Actual – 2007

## APS and Region



# Enrollment Projections

- Determinants of enrollment:
  - population changes
  - birth rates
  - in/out migration
  - retention rates
  - household size
  - new home construction
  - economic conditions
  - school policies

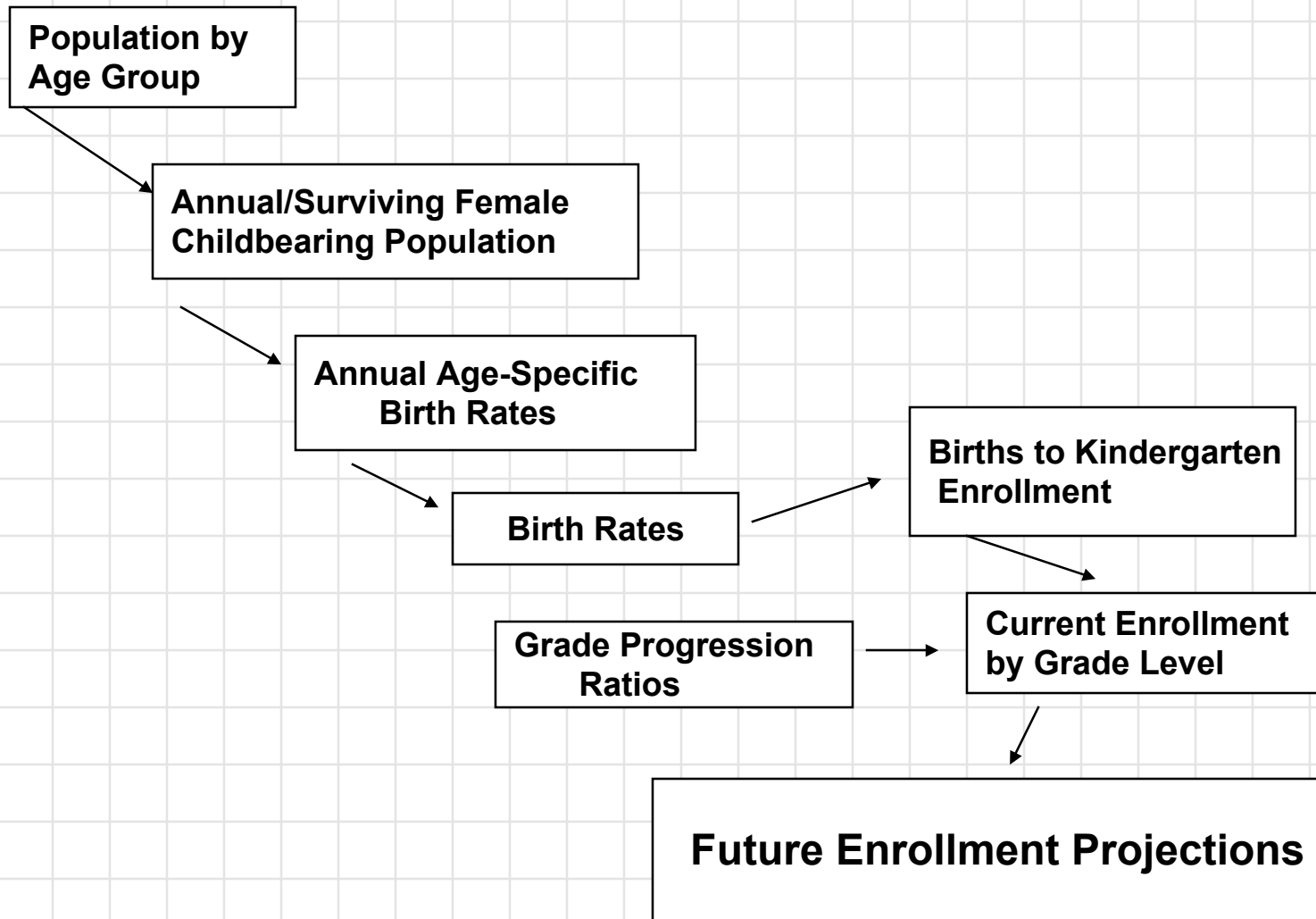


# What is the Cohort Survival Method

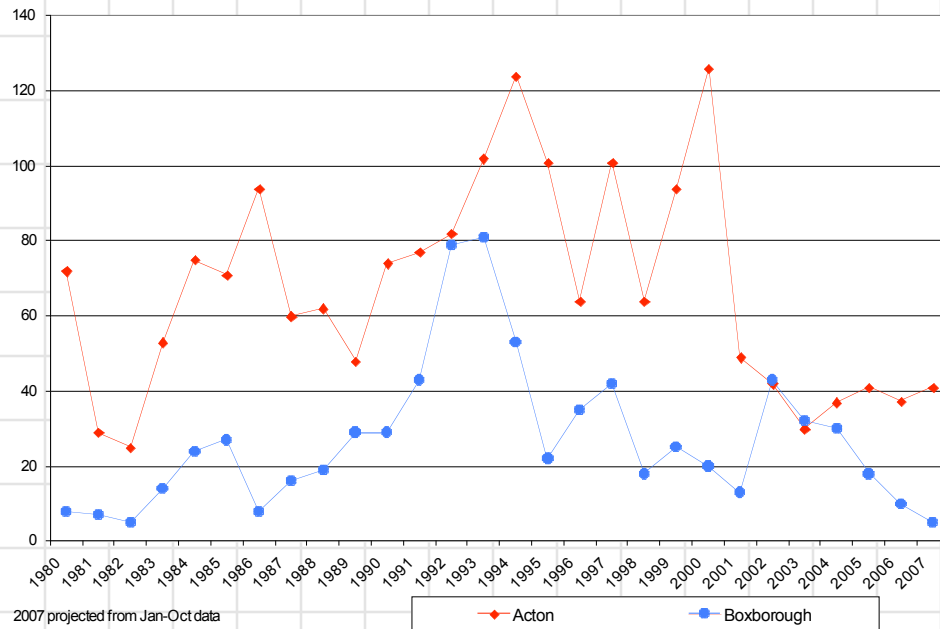
- Computes the ratio of children in one grade compared to the number who “survive” to the next grade
  - Starting point is birth to kindergarten ratio
    - based on relationship between kindergarten enrollments and live births five years earlier
  - Grade progression ratios follow the number of children who advance from one grade to the next
  - Relies on birth data and birth projections
  - Captures effects of net migration, population changes, housing trends



# Use of the Cohort Survival Method



# Building Permits by Town



- Number of permits in Acton has been declining for the last few years
- Boxborough housing permits have been declining since 2002

\* 2006 is extrapolated based on 10 months



# Other Development Considerations

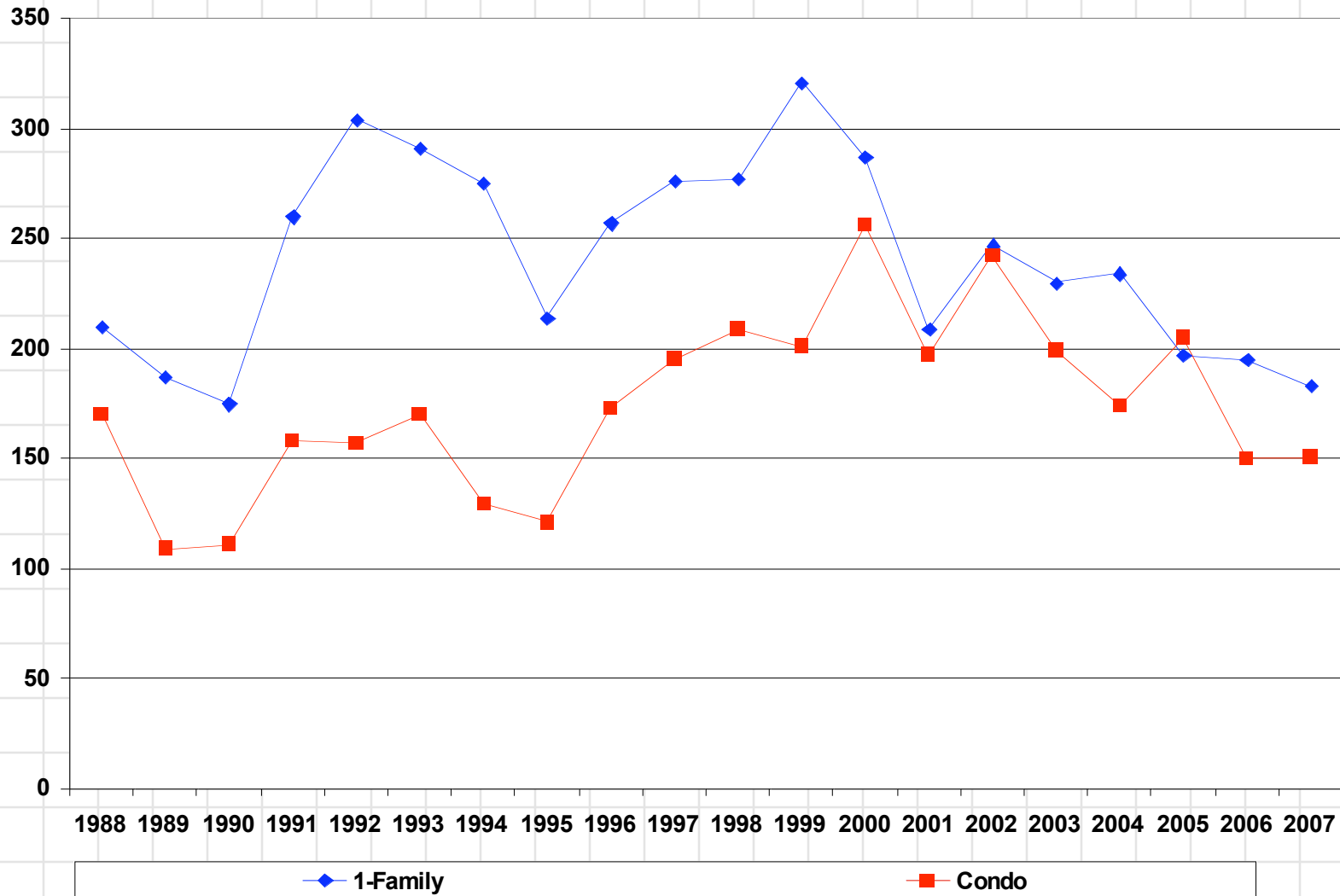
- Examined planned developments, including Chapter 40B projects
- Future projects should be followed, with particular attention to numbers of 1-, 2- or 3-BR units, location of project
  - Statewide analysis predicts 3-BR unit generates 0.9 students
  - Compared with 1-BR = 0.3, 2-BR = 0.5

\* 2006 is extrapolated based on 10 months



# Housing Sales

## 1988-2007

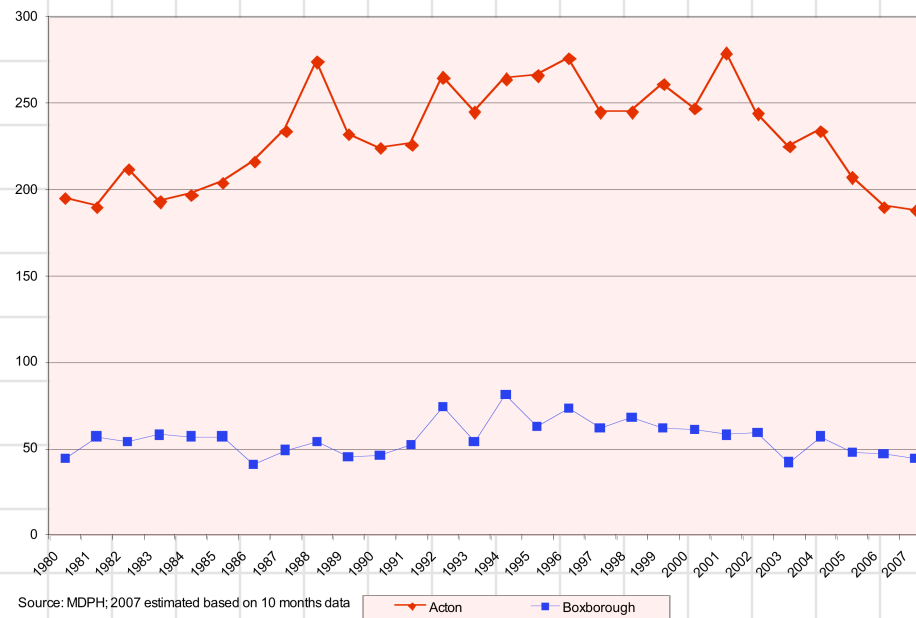


Excludes choice



# Births in Acton and Boxborough

## 1980-2007

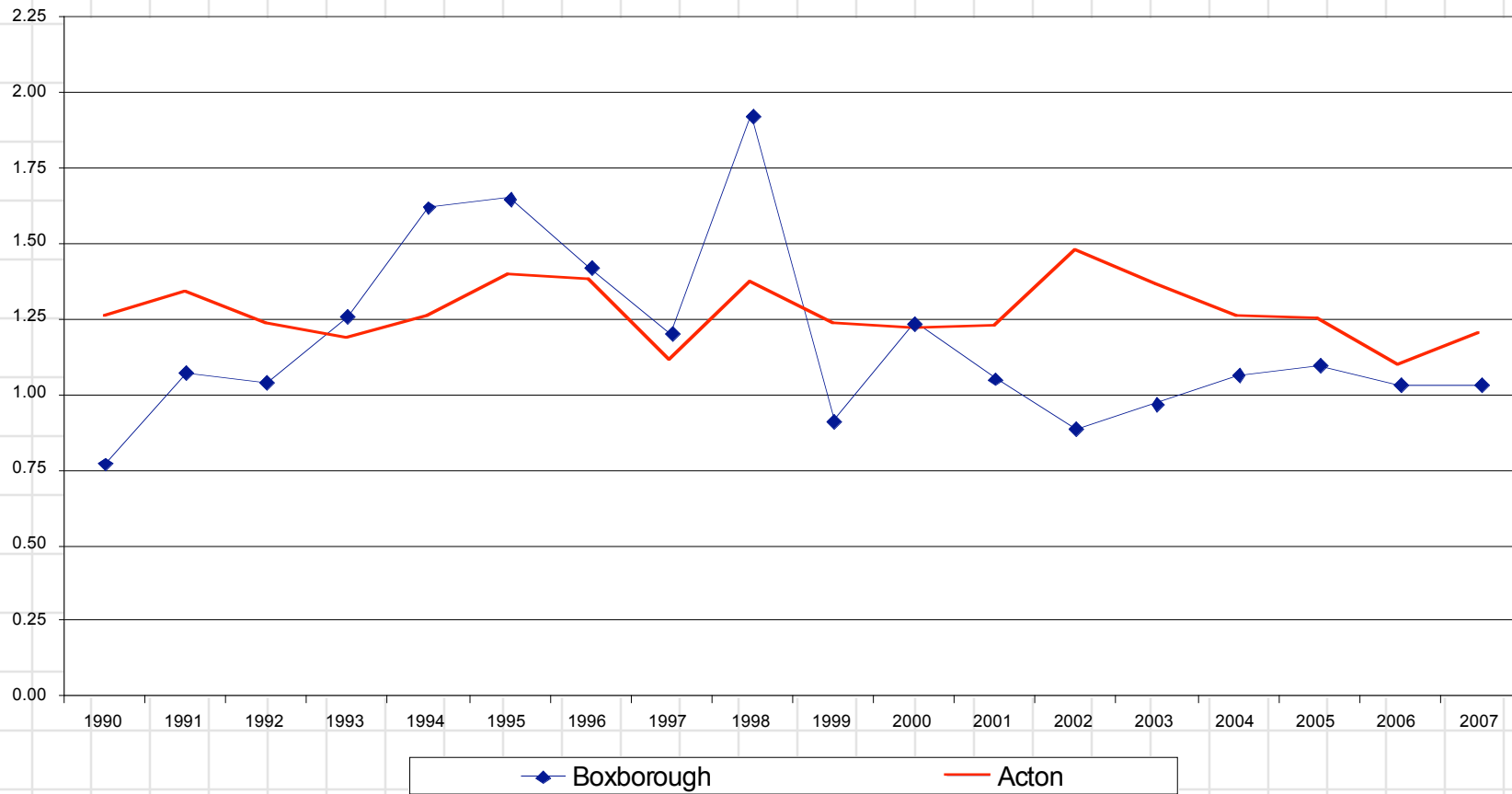


- Acton births declining since 2002, and more in line with 1980s rate
- Boxborough birth rate has declined in recent years
- Reflects larger demographic trend and possibly affordability of each of these communities for first-time home buyers

\* 2006 is extrapolated based on 10 months

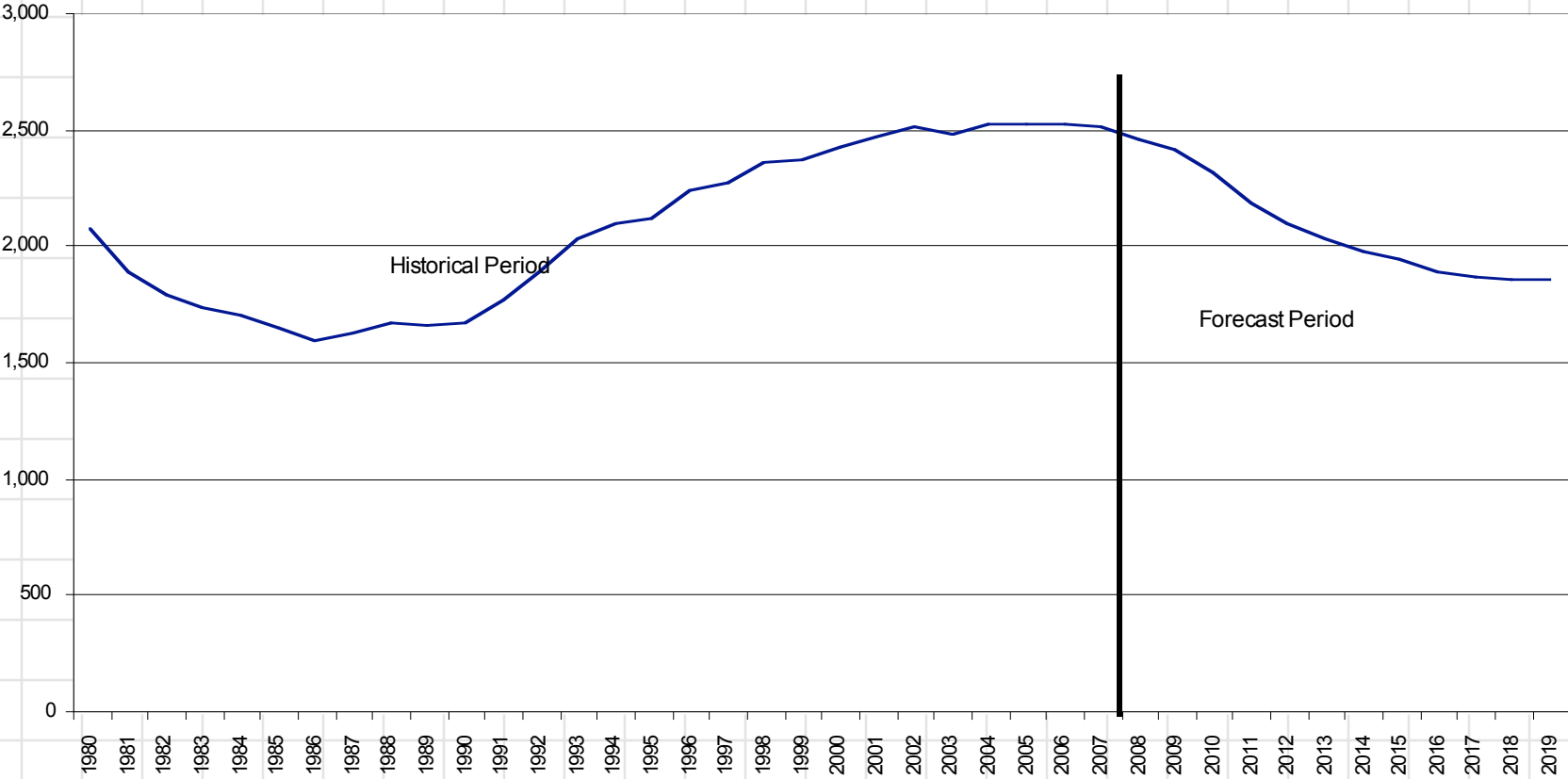


# Comparison of Birth to Kindergarten Ratios

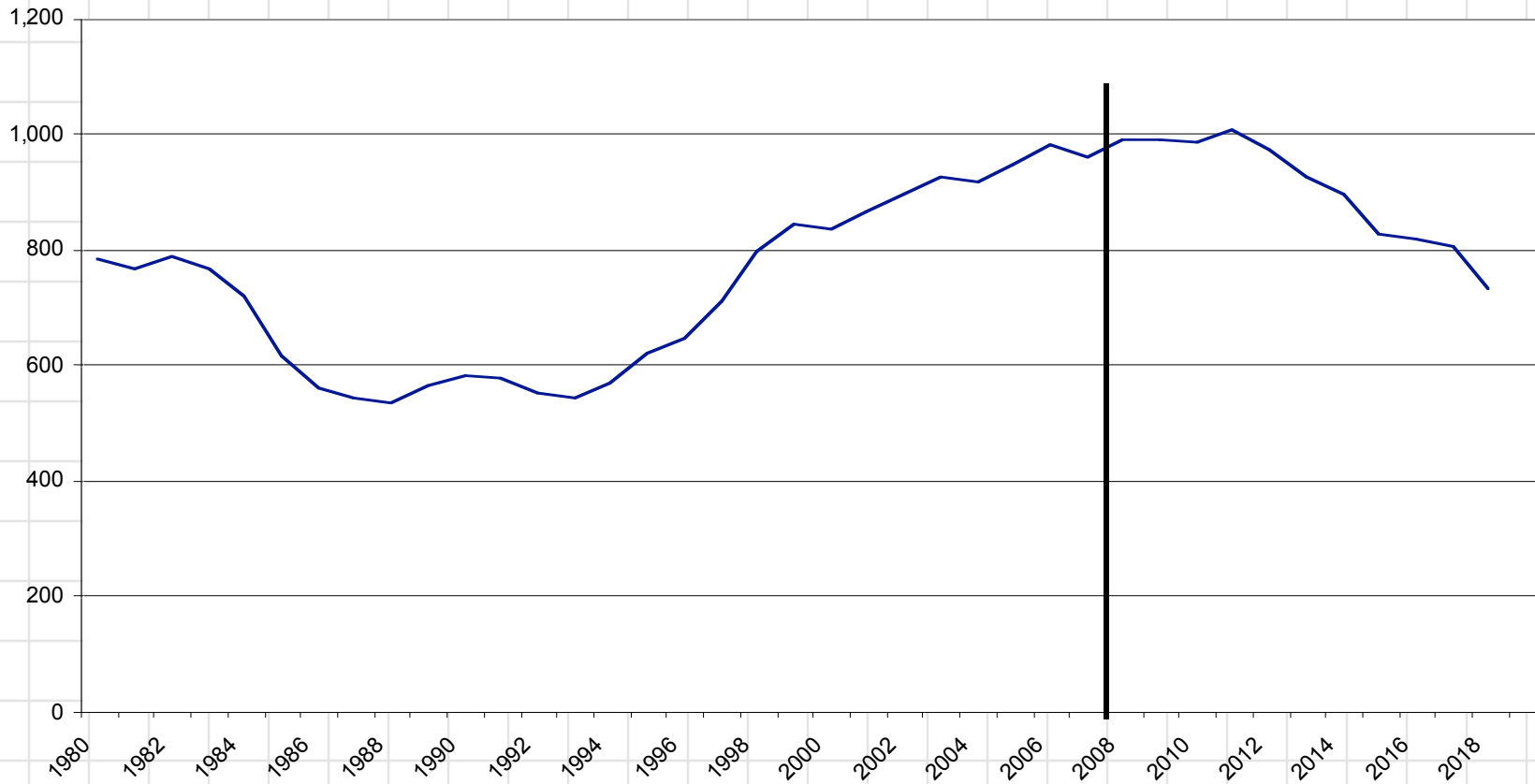


# Acton Public Schools Enrollment

## Kindergarten through 6



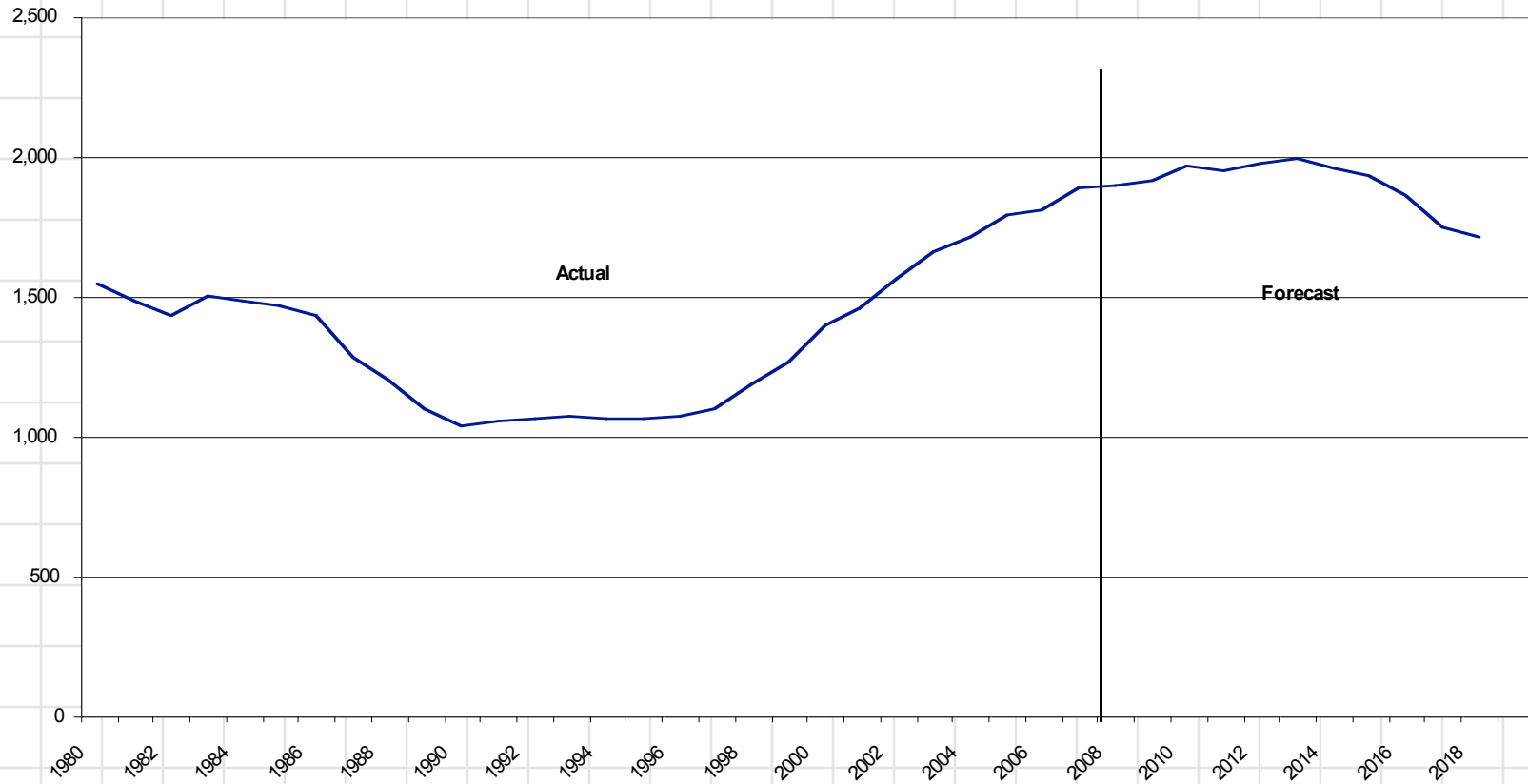
# Junior High Enrollment



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# ABRHS Enrollment

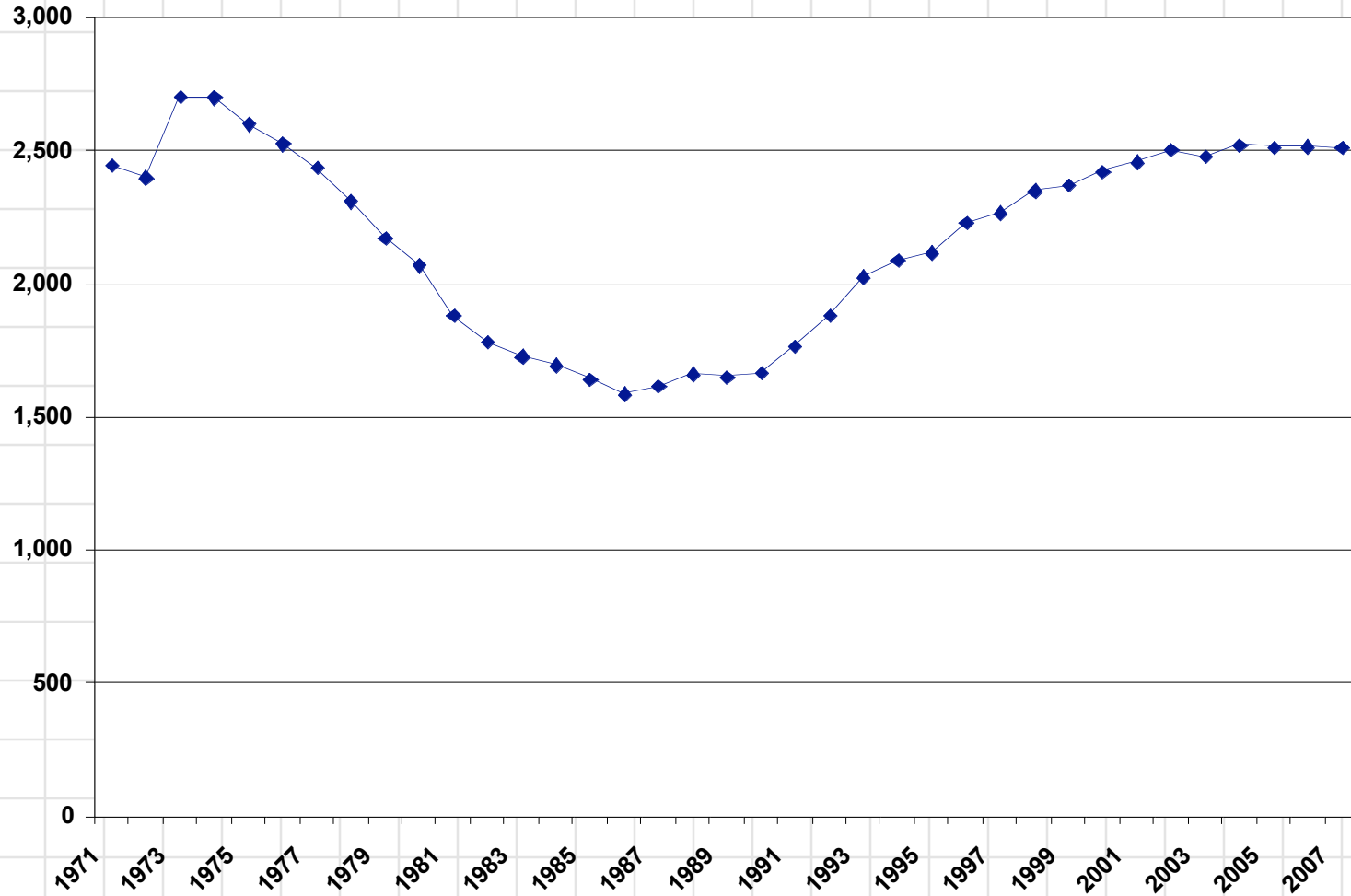


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# History of APS Enrollment

## 1971-2007 Actual

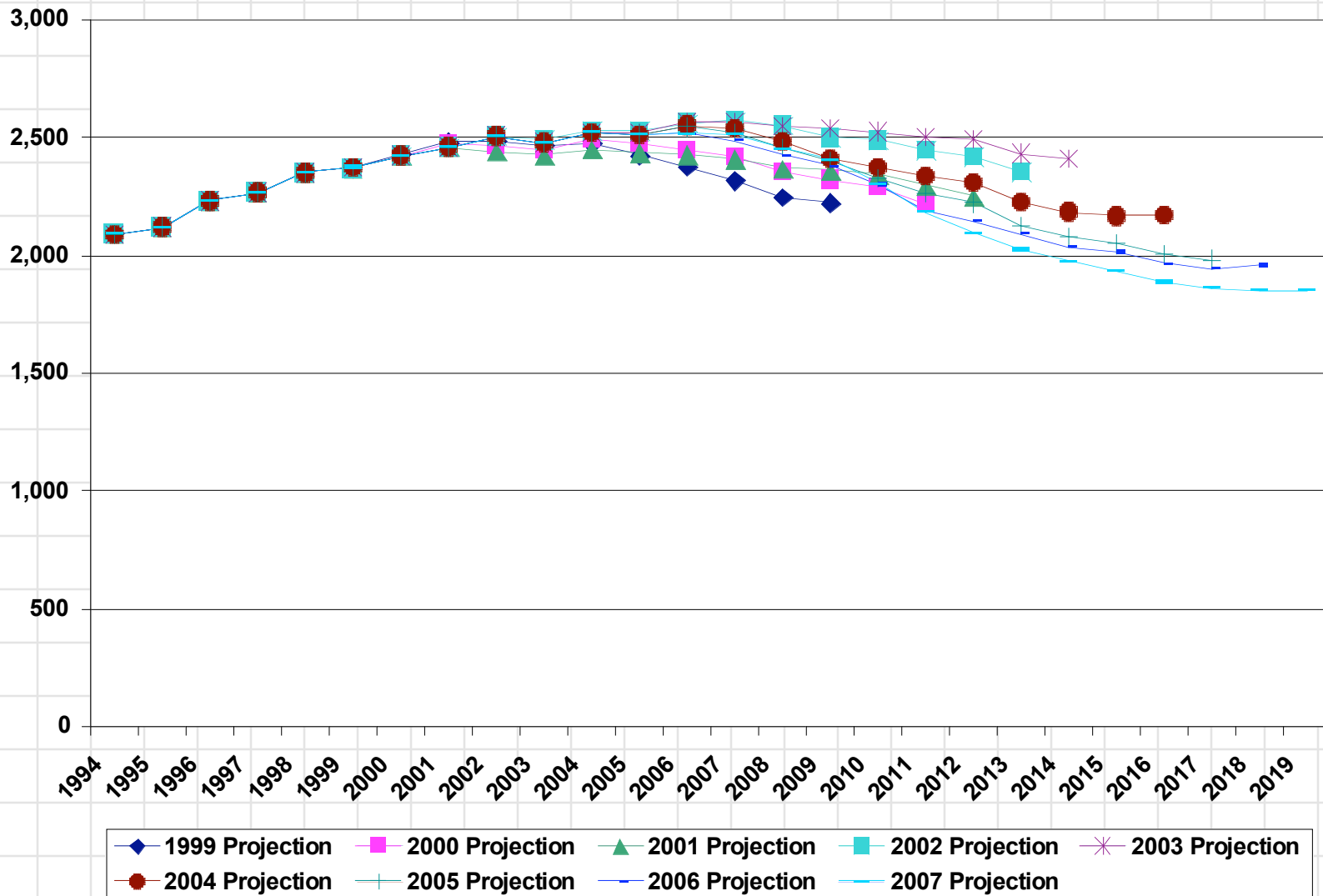


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# Comparison of Enrollment Projections

## Acton Public Schools

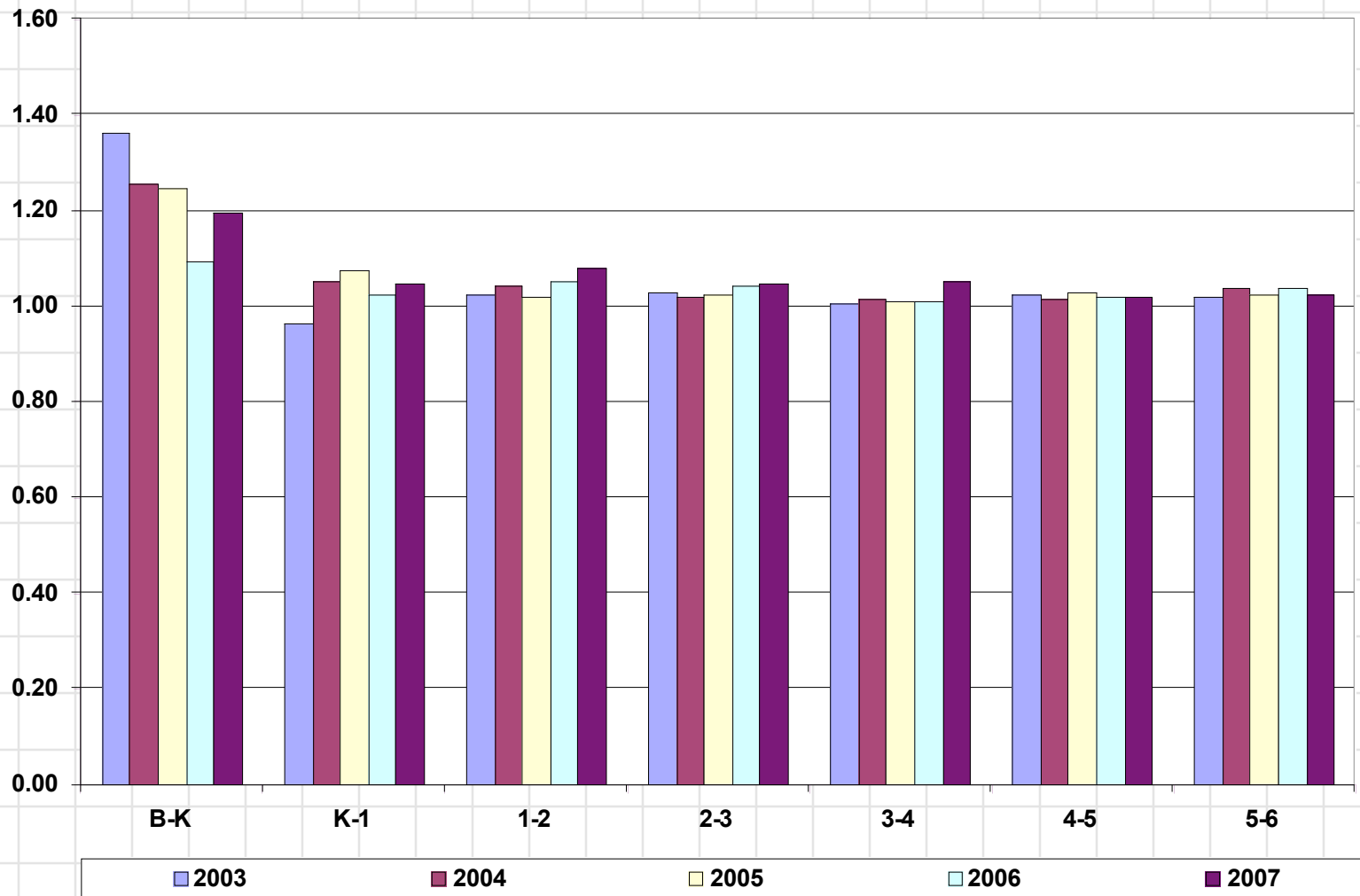


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# Grade Progression Ratios - Acton Public Schools

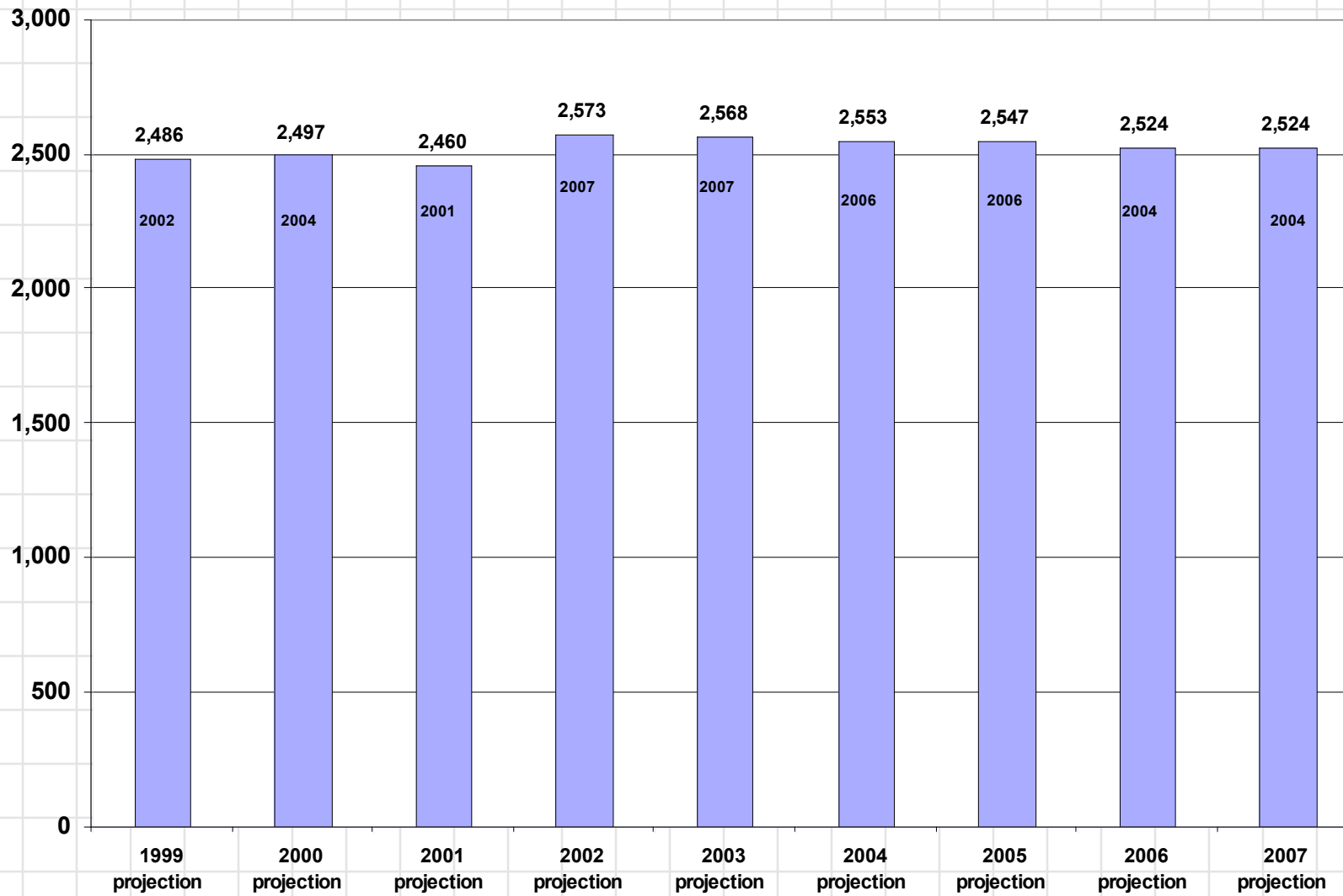
## Five-Year History



Excludes choice



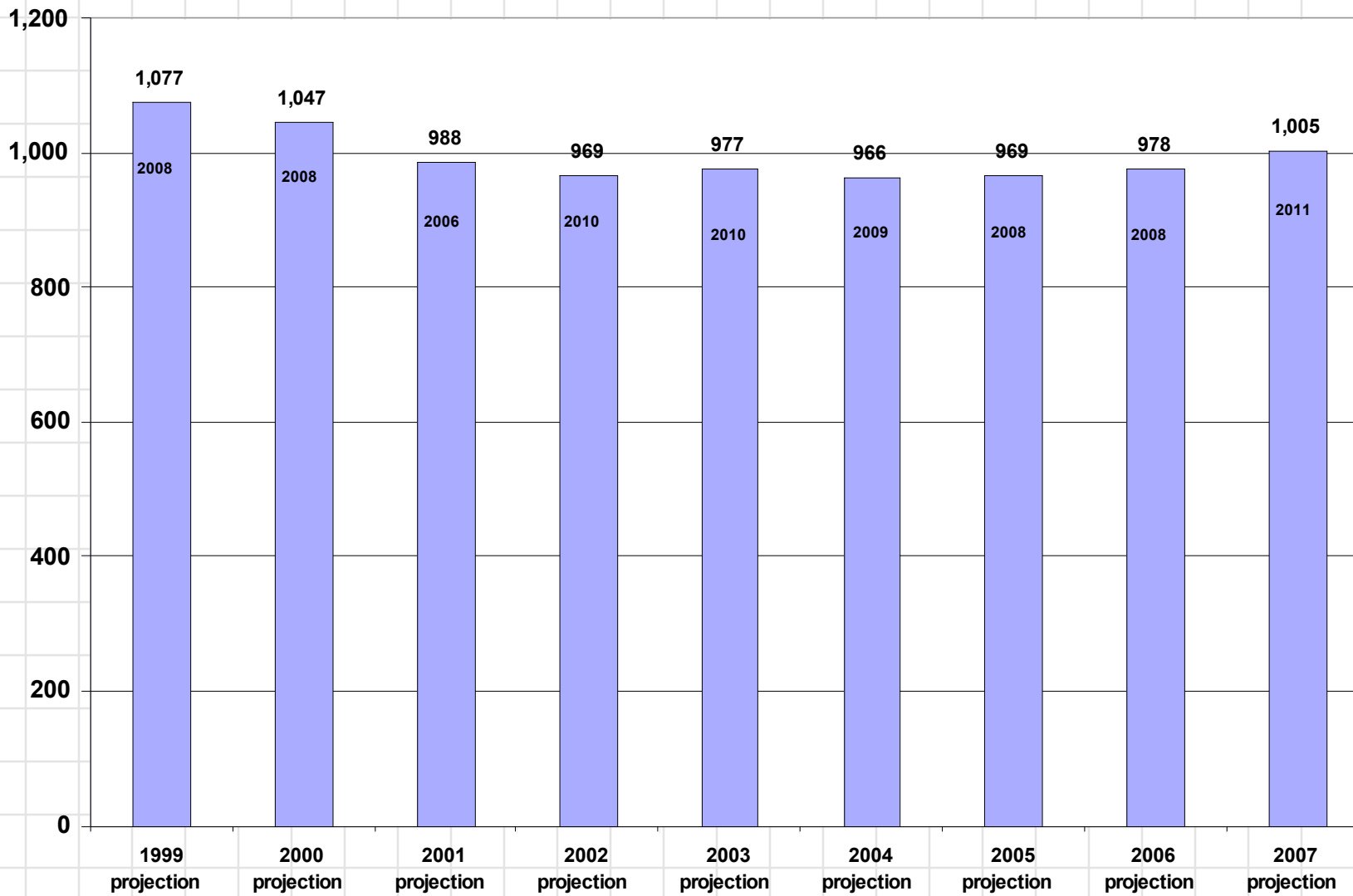
# Comparison of APS Peak



Excludes choice



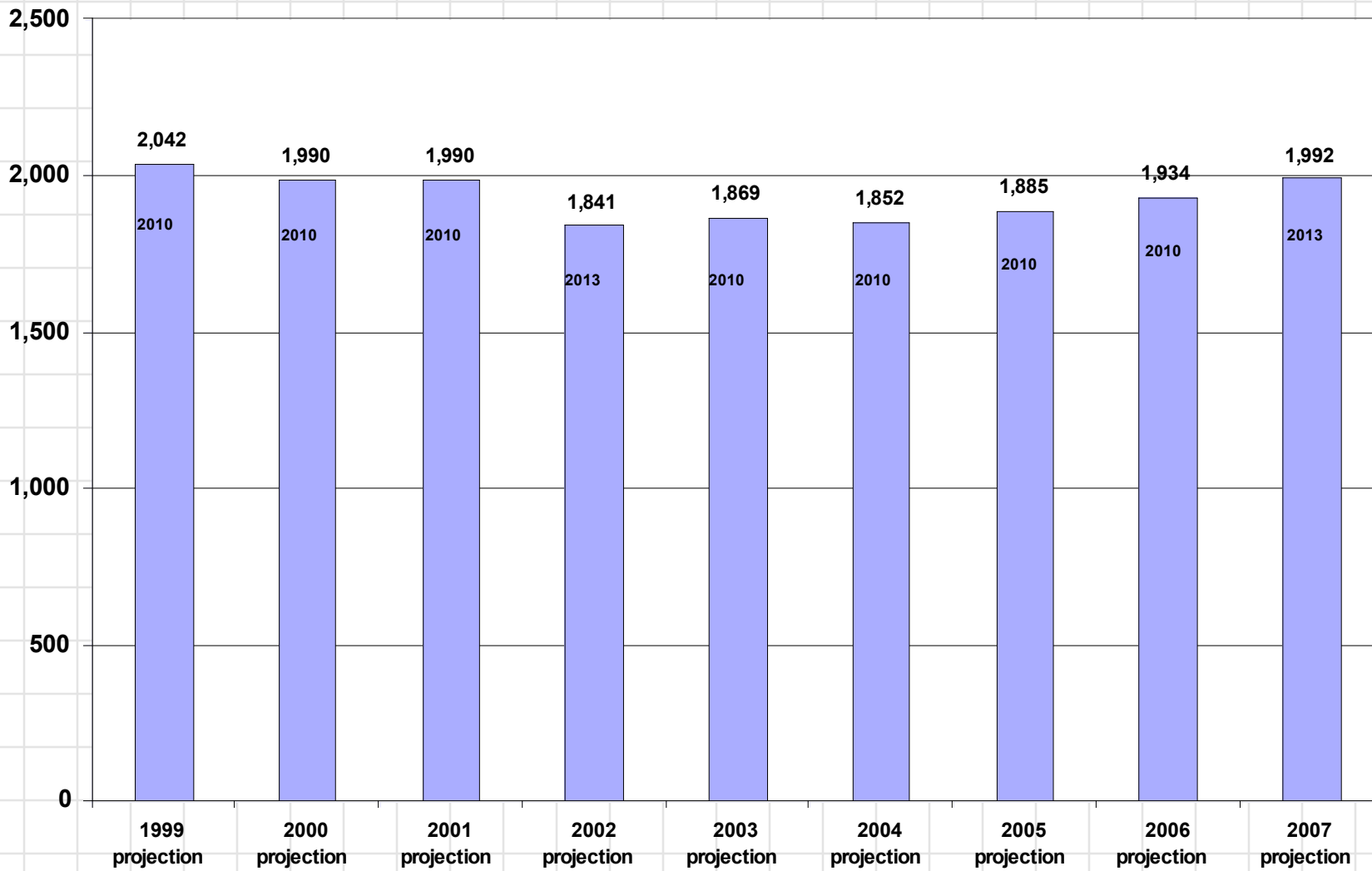
# Comparison of RJ Grey Peak



Excludes choice



# Comparison of ABRHS Peak

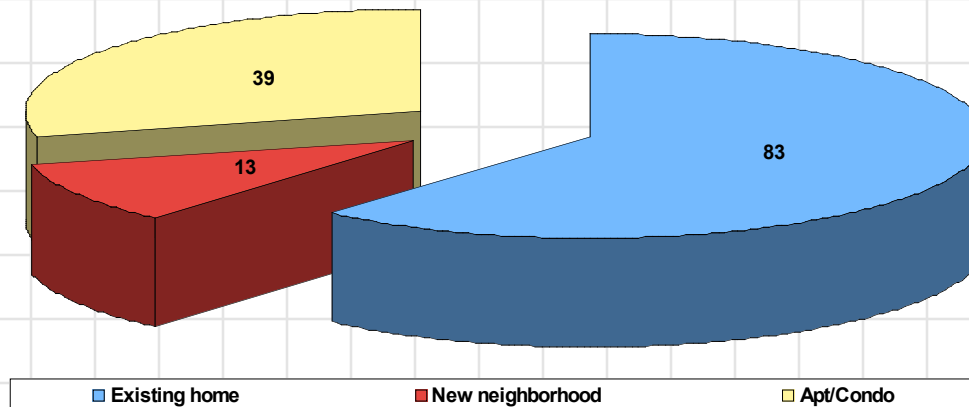


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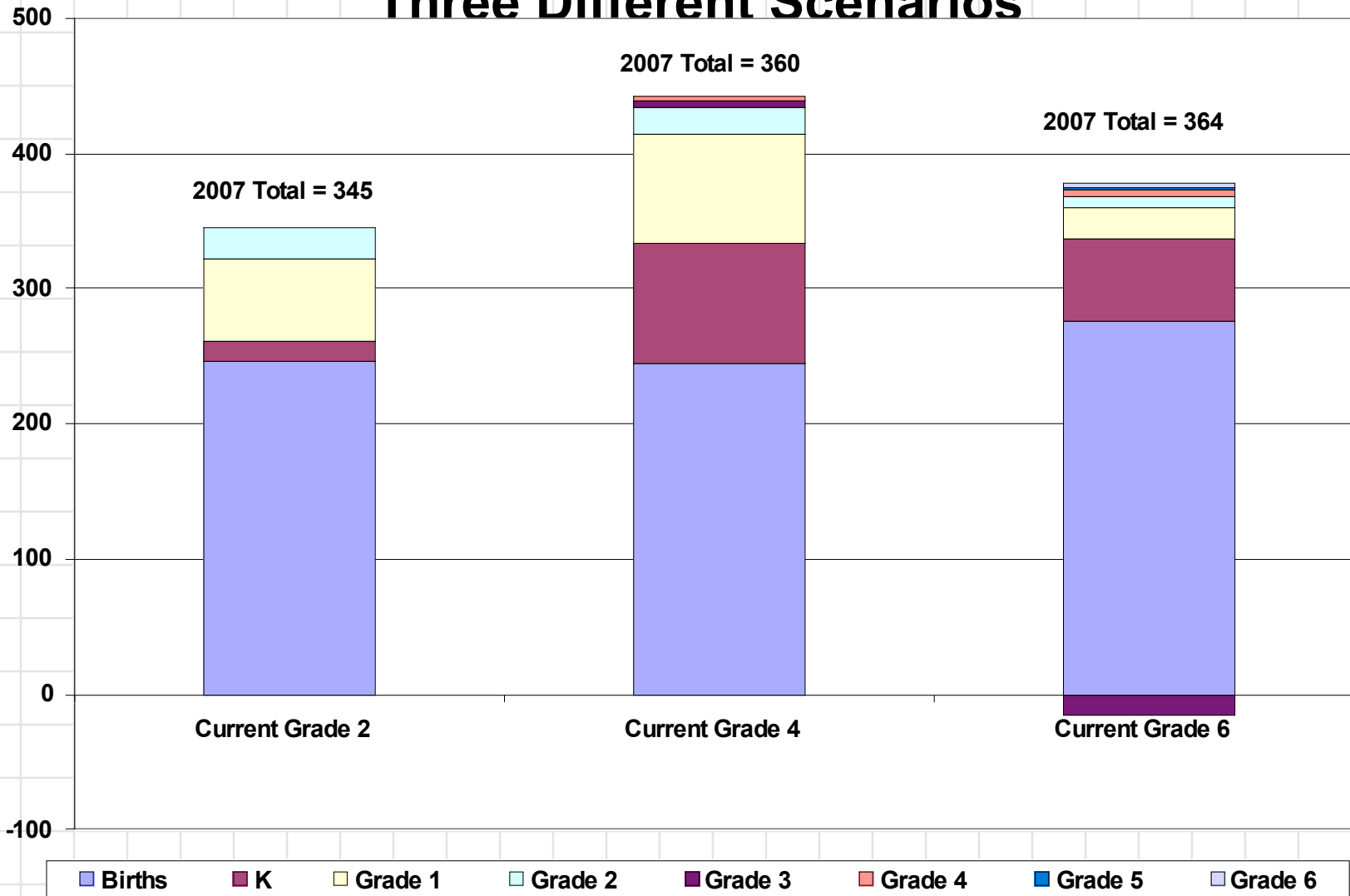
# New Students Summer 2007

- Only reviewed one year of observations
- More than 40 percent of students enrolled in grades 1 and 2
- More than 60 percent of students moved into existing neighborhoods



# Comparison of APS Grade Progression

## Three Different Scenarios



# Summary

- Mass. School Building Authority will provide this model through a web interface
- Recommend that AB/APS continue to update and study enrollment trends each year
- School Committee and District should continue to use the enrollment forecasts to estimate operational needs for future years
- Thank you for your time!

