Enrollment Forecasting/Demographics Subcommittee

Joint City Council/ACPS Subcommittee
(4 members)

LREFP Work Group
Explores the major issues that will impact public school facilities over the long term and guides staff in the development of a draft Long-Range Educational Facilities Plan for consideration by the School Board and City Council.

Sub Committees

- Enrollment Forecasts / Demographics
  Establishing sustainable short and long-term enrollment forecast program

- Facility Capacity Needs Analysis
  Understanding current conditions and needs of the existing facilities

- Educational Specifications / School of the Future
  Planning for our future and matching of facilities to our students and our vision.

Joint Long-Range Educational Facilities Plan
To improve facilities planning, accommodate the growing student population, and enhance educational programs and services.
I. Subcommittee Overview
II. Overview of 2013–2014 Student Enrollment
III. Short-Term Projections–Proposed Methodology
IV. Long-Term Forecast Update
Presentation Overview

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LREFP Purpose

- Improve facilities planning, accommodate the growing student population, and enhance educational program and services.
- Enrollment up 3,100 since 2007 (29.5% increase)
Enrollment Subcommittee Overview

Subcommittee Role

- Review the details of the forecasting research topics

- Collaborate on the development of a short term and long term enrollment forecast

- Report results to the LREFP workgroup
Enrollment Subcommittee Overview

Timeline

- **June**
  - Reviewed role of the subcommittee
  - Reviewed overall work program and research elements: births, cohort survival, capture rates, student generation

- **July**
  - Reviewed research elements: housing affordability programs, aggregate cohort survival, birth rates

- **September**
  - Reviewed research elements: market affordability, cohort survival by individual student

- **October**
  - Reviewed current year enrollment numbers
  - Consolidated research elements to create short & long term assumptions
  - Reviewed multiple forecast scenarios

- **November/December**
  - Produce preliminary long-term forecast
  - Produce recommended short-term and long-term forecasts
  - Develop process for regular updates
## Subcommittee Research Topics

<table>
<thead>
<tr>
<th>Predictors: Effect on enrollment can be quantified and forecast</th>
<th>Future Kindergarten Capture Rate</th>
<th>Future Cohort Survival Rate</th>
<th>Student Generation Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing stock - affordability</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Job growth</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Birth rates</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing stock - age of unit</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net migration - who is moving</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>Student participation rate</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household profiles: income, race/ethnicity, country of origin</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Historic cohort survival rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing stock - size of unit</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influencers: can boost or depress enrollment but difficult to quantify or forecast</td>
<td>Future Kindergarten Capture Rate</td>
<td>Future Cohort Survival Rate</td>
<td>Student Generation Rates</td>
</tr>
<tr>
<td>New school buildings/facilities</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Reputation</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Programmatic initiatives</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability to alternatives for Alexandria public schools</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Multiple Enrollment Forecasts

- **Short Term (1–6 years)**
  - Most specific forecast. Is done for every school by every grade. Informs near-term capacity and operating needs.

- **Mid Term (6–10 years)**
  - Is a citywide forecast. Informs the 10 year Capital Improvement Plan (CIP).

- **Long Term (30 years)**
  - Is citywide forecast. Informs long term public facility needs.
I. Subcommittee Overview
II. Overview of 2013-2014 Student Enrollment
   ➢ Overall
   ➢ By Grade
   ➢ Elementary Growth by Region
   ➢ Actual versus Projected
III. Short-Term Projections- Proposed Methodology
IV. Long-Term Forecast Update
## Overview of 2013–2014 Student Enrollment

### October 1 Student Enrollment

<table>
<thead>
<tr>
<th></th>
<th>FY2014</th>
<th>FY2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Enrollment</td>
<td>13,622</td>
<td>13,114</td>
</tr>
<tr>
<td></td>
<td>3.9% increase from FY13</td>
<td>5.6% increase from FY12</td>
</tr>
<tr>
<td>K–12 Enrollment</td>
<td>13,277</td>
<td>12,759</td>
</tr>
<tr>
<td>Prek Enrollment</td>
<td>285</td>
<td>276</td>
</tr>
<tr>
<td>Growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>2.3%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Middle School</td>
<td>7.9%</td>
<td>4.3%</td>
</tr>
<tr>
<td>High School</td>
<td>5.2%</td>
<td>5.7%</td>
</tr>
</tbody>
</table>

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*ACPS Alexandria City Public Schools*
Overview of 2013–2014 Student Enrollment

Actual Enrollment Trends

ACPS Enrollment By Grade, 1999 - 2013
Overview of 2013–2014 Student Enrollment

October 1 Student Enrollment

- Central: C. Barrett, D. MacArthur, G. Mason
- East: C. Kelly, J.–Houston, L.–Crouch, M. Maury, Mt. Vernon

% Growth- Elementary Level, By Region

[Graph showing % Growth for Central, East, and West regions from FY2009 to FY2014]
## Overview of 2013–2014 Student Enrollment

### Actual vs. Projected – FY2014

<table>
<thead>
<tr>
<th>School Name</th>
<th>FY2014 Final</th>
<th>Projected FY2014 10/1/2013</th>
<th>Projection Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Barrett Total</td>
<td>442</td>
<td>446</td>
<td>+.9%</td>
</tr>
<tr>
<td>Cora Kelly Total</td>
<td>367</td>
<td>373</td>
<td>+1.6%</td>
</tr>
<tr>
<td>Douglas MacArthur Total</td>
<td>715</td>
<td>704</td>
<td>-1.5%</td>
</tr>
<tr>
<td>George Mason</td>
<td>525</td>
<td>512</td>
<td>-2.5%</td>
</tr>
<tr>
<td>James K. Polk</td>
<td>708</td>
<td>690</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Jefferson Houston</td>
<td>385</td>
<td>356</td>
<td>-7.5%</td>
</tr>
<tr>
<td>John Adams</td>
<td>883</td>
<td>874</td>
<td>-1%</td>
</tr>
<tr>
<td>Lyles-Crouch</td>
<td>457</td>
<td>437</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Matthew Maury</td>
<td>461</td>
<td>418</td>
<td>-9.3%</td>
</tr>
<tr>
<td>Mount Vernon</td>
<td>836</td>
<td>768</td>
<td>-8.1%</td>
</tr>
<tr>
<td>Patrick Henry</td>
<td>621</td>
<td>586</td>
<td>-5.6%</td>
</tr>
<tr>
<td>Samuel Tucker</td>
<td>729</td>
<td>740</td>
<td>+1.5%</td>
</tr>
<tr>
<td>William Ramsay</td>
<td>870</td>
<td>831</td>
<td>-4.5%</td>
</tr>
<tr>
<td><strong>ES Total</strong></td>
<td><strong>7,999</strong></td>
<td><strong>7,735</strong></td>
<td><strong>-3.3%</strong></td>
</tr>
<tr>
<td>Francis Hammond MS 1</td>
<td>445</td>
<td>462</td>
<td>+3.8%</td>
</tr>
<tr>
<td>Francis Hammond MS 2</td>
<td>449</td>
<td>459</td>
<td>+2.2%</td>
</tr>
<tr>
<td>Francis Hammond MS 3</td>
<td>447</td>
<td>465</td>
<td>+4%</td>
</tr>
<tr>
<td>George Washington MS</td>
<td>540</td>
<td>580</td>
<td>+7.4%</td>
</tr>
<tr>
<td>George Washington MS 1</td>
<td>540</td>
<td>578</td>
<td>+7%</td>
</tr>
<tr>
<td>George Washington MS 2</td>
<td>540</td>
<td>578</td>
<td>+7%</td>
</tr>
<tr>
<td><strong>MS Total</strong></td>
<td><strong>2,421</strong></td>
<td><strong>2,544</strong></td>
<td><strong>+5.1%</strong></td>
</tr>
<tr>
<td>Minnie Howard Center</td>
<td>695</td>
<td>714</td>
<td>+2.7%</td>
</tr>
<tr>
<td>TC Williams HS</td>
<td>2,498</td>
<td>2,569</td>
<td>+2.8%</td>
</tr>
<tr>
<td><strong>HS Total</strong></td>
<td><strong>3,193</strong></td>
<td><strong>3,283</strong></td>
<td><strong>+2.8%</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>13,613</strong></td>
<td><strong>13,562</strong></td>
<td><strong>-0.37%</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>FY2014 Final</th>
<th>Projected FY2014 10/1/2013</th>
<th>Projection Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>PK</td>
<td>295</td>
<td>285</td>
<td>-3.4%</td>
</tr>
<tr>
<td>K</td>
<td>1,578</td>
<td>1,418</td>
<td>-10.1%</td>
</tr>
<tr>
<td>1</td>
<td>1,484</td>
<td>1,462</td>
<td>-1.5%</td>
</tr>
<tr>
<td>2</td>
<td>1,270</td>
<td>1,255</td>
<td>-1.2%</td>
</tr>
<tr>
<td>3</td>
<td>1,212</td>
<td>1,181</td>
<td>-2.6%</td>
</tr>
<tr>
<td>4</td>
<td>1,085</td>
<td>1,063</td>
<td>-2%</td>
</tr>
<tr>
<td>5</td>
<td>1,013</td>
<td>1,013</td>
<td>+0%</td>
</tr>
<tr>
<td>6</td>
<td>897</td>
<td>946</td>
<td>+5.5%</td>
</tr>
<tr>
<td>7</td>
<td>828</td>
<td>872</td>
<td>+5.3%</td>
</tr>
<tr>
<td>8</td>
<td>758</td>
<td>784</td>
<td>+3.4%</td>
</tr>
<tr>
<td>9</td>
<td>807</td>
<td>892</td>
<td>+10.5%</td>
</tr>
<tr>
<td>10</td>
<td>861</td>
<td>845</td>
<td>-1.9%</td>
</tr>
<tr>
<td>11</td>
<td>809</td>
<td>832</td>
<td>+2.8%</td>
</tr>
<tr>
<td>12</td>
<td>716</td>
<td>714</td>
<td>-0.3%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>13,613</strong></td>
<td><strong>13,562</strong></td>
<td><strong>-0.37%</strong></td>
</tr>
</tbody>
</table>
Presentation Overview

I. Subcommittee Overview
II. Overview of 2013–2014 Student Enrollment
III. Short-Term Projections—Proposed Methodology
   ➢ Foundations
   ➢ Kindergarten Trends and Capture Rates
   ➢ Cohort Survival
   ➢ Enrollment: Historical and Projected
IV. Long-Term Forecast Update
Short–Term Projections: Proposed Methodology

- Foundation of the Short– and Mid–Term Enrollment Forecasts
  - Changes in births
  - Changes in the kindergarten capture rate
  - Changes in cohort survival
  - Changes to student generation rate
Key Assumptions

- Births/Birth Rate
  - Increasing
- Kindergarten Capture Rate
  - FY2014 rate of .581 or 58.1% (projected 64%)
  - FY2013 rate of .66 or 66%
  - Recommend using 5-year average of 60.9% for projections
Alexandria’s Birth Rates are higher than those of Northern Virginia and the nation as a whole.
Birth Data—Virginia Department of Health

- Births to Alexandria mothers
- Revised to ensure valid Alexandria addresses and adjust to months of kindergarten eligibility (October – September)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Births 5 Yrs Before</th>
<th>Kindergarten Enrollment</th>
<th>K Capture</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>2,126</td>
<td>1,179</td>
<td>55.5%</td>
</tr>
<tr>
<td>2010</td>
<td>2,277</td>
<td>1,236</td>
<td>54.3%</td>
</tr>
<tr>
<td>2011</td>
<td>2,133</td>
<td>1,313</td>
<td>61.6%</td>
</tr>
<tr>
<td>2012</td>
<td>2,129</td>
<td>1,364</td>
<td>64.1%</td>
</tr>
<tr>
<td>2013</td>
<td>2,289</td>
<td>1,516</td>
<td>66.2%</td>
</tr>
<tr>
<td>2014</td>
<td>2,442</td>
<td>1,418</td>
<td>58.1%</td>
</tr>
<tr>
<td>2015</td>
<td>2,546</td>
<td>1,550</td>
<td>60.9%</td>
</tr>
<tr>
<td>2016</td>
<td>2,576</td>
<td>1,569</td>
<td>60.9%</td>
</tr>
<tr>
<td>2017</td>
<td>2,584</td>
<td>1,573</td>
<td>60.9%</td>
</tr>
<tr>
<td>2018</td>
<td>2,683</td>
<td>1,634</td>
<td>60.9%</td>
</tr>
<tr>
<td>2019</td>
<td>2,711</td>
<td>1,651</td>
<td>60.9%</td>
</tr>
<tr>
<td>2020</td>
<td>2,762</td>
<td>1,682</td>
<td>60.9%</td>
</tr>
</tbody>
</table>
Short-Term Projections: Proposed Methodology

Cohort Survival: “Grade Cohort Succession”

- Compares the number of students in a grade to the number of students in the previous grade the previous school year.
- Annual ratios are averaged and then used to project future enrollment.
- Using a 3-year average for projections.

3-Year Average FY12–14
- Lower Elementary (K–3) 96.4
- Upper Elementary (3–5) 97.5
- Middle School (6–8) 97.3
- Lower High (8–10) 108.6
- Upper High (10–12) 93.1

3-Year Average FY11–13
- Lower Elementary (K–3) 96.3
- Upper Elementary (3–5) 97.5
- Middle School (6–8) 96.8
- Lower High (8–10) 106.5
- Upper High (10–12) 93.1
Short-Term Projections: Proposed Methodology

Cohort Survival Trends

Grade-to-Grade Cohort Survival
3-Year Moving Average

Enrollment Ratio to Lower Grade Prior Year

Beginning Year of 3-Year Average

Ending Year of 3-Year Average

Grade 9-10
Grade 8-9
Grade 10-11
Grade 11-12
Grade 1-2
Grade 2-3
Grade 3-4
Grade 4-5
Grade 5-6
Grade 6-7
Grade 7-8
Grade 9-10
Grade 10-11
Grade 11-12
Short-Term Projections: Proposed Methodology

Cohort Survival: Historical and Projected

3 Year Average Cohort Survival: Historical and Projected

<table>
<thead>
<tr>
<th>Year</th>
<th>Lower Elem (k-3)</th>
<th>Upper Elem (3-5)</th>
<th>MS</th>
<th>8th-10th</th>
<th>10th-12th</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY00-02</td>
<td>95.8%</td>
<td>96.7%</td>
<td>96.0%</td>
<td>112.9%</td>
<td>82.5%</td>
</tr>
<tr>
<td>FY03-05</td>
<td>94.2%</td>
<td>94.0%</td>
<td>93.7%</td>
<td>106.7%</td>
<td>84.2%</td>
</tr>
<tr>
<td>FY06-08</td>
<td>93.3%</td>
<td>93.0%</td>
<td>94.1%</td>
<td>99.8%</td>
<td>90.9%</td>
</tr>
<tr>
<td>FY09-11</td>
<td>98.5%</td>
<td>98.5%</td>
<td>98.4%</td>
<td>106.5%</td>
<td>93.5%</td>
</tr>
<tr>
<td>FY12-14</td>
<td>96.4%</td>
<td>97.4%</td>
<td>97.3%</td>
<td>108.6%</td>
<td>93.1%</td>
</tr>
<tr>
<td>FY15-17</td>
<td>96.2%</td>
<td>97.0%</td>
<td>95.5%</td>
<td>106.4%</td>
<td>92.3%</td>
</tr>
<tr>
<td>FY18-20</td>
<td>96.7%</td>
<td>97.4%</td>
<td>95.2%</td>
<td>108.3%</td>
<td>92.2%</td>
</tr>
</tbody>
</table>
ACPS Enrollment: Historical and Projected

ACPS Enrollment Growth: Historical and Projected

- Actual Enrollment
- FY15 Projected Enrollment- 3yr CSR
- Last Year's Projections

FY00 FY02 FY04 FY06 FY08 FY10 FY12 FY14 FY16 FY18 FY20

FY 2007

FY 2007

FY 2014

13,622
ACPS Enrollment: Historical and Projected
Next Steps—Short-Term Projections

- Calculate student generation rates for SY2013–2014
- Calculate detailed by school, by grade projections
- Capacity Analysis to determine how the projections affect capacity
Presentation Overview

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## Long–Term Forecasting

<table>
<thead>
<tr>
<th>Short–Term Forecast</th>
<th>Long–Term Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known <strong>births</strong> for recent years</td>
<td>How will births and birth rates change?</td>
</tr>
<tr>
<td><strong>Kindergarten capture</strong> – recent years average from known births</td>
<td>How could kindergarten capture change and why?</td>
</tr>
<tr>
<td><strong>Cohort survival</strong> by grade – recent years average</td>
<td>How could cohort survival change?</td>
</tr>
<tr>
<td>Students from <strong>new development</strong> – approved projects</td>
<td>Approved projects and <strong>potential future projects</strong></td>
</tr>
<tr>
<td><strong>Student generation</strong> per housing unit for existing development and new projects – recent years average</td>
<td>How could student generation to change over time?</td>
</tr>
</tbody>
</table>
Enrollment History Since 1960

Alexandria K-12 School Enrollment and Population Since 1960

Calendar Year

ACPS K-12 Enrollment

Enrollment

Population

Population


[Graph showing enrollment and population trends from 1960 to 2010]
Early 2000s boom brought a big young cohort to the region for jobs. This group is now having families.

The housing boom and subsequent financial crisis disrupted a pattern of moves up and outward in the region as families grow.

Racial and ethnic trends may also have been disrupted by the recent boom and bust.

The 2000s show a substantial disruption in the long-term enrollment trend.
Reduced birth rates per 1000 population as population ages, and among immigrant populations in particular.

Families choosing more urban lifestyles but limited by housing types available.

Nearly all new development is in building types less preferred by families.

Continued pressure on prices and rents as region grows outward may threaten affordability and economic diversity.
## Short-Term vs. Long-Term Trends

<table>
<thead>
<tr>
<th>Short-Term Trend</th>
<th>Long-Term Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Births</strong> and birth rate increasing</td>
<td>Birth rates expected to decline with changing demographics</td>
</tr>
<tr>
<td><strong>Kindergarten capture</strong> – sharp decline from recent peak</td>
<td>Slow decline to somewhat higher than pre-boom and crisis rates</td>
</tr>
<tr>
<td><strong>Cohort survival</strong> at high</td>
<td>Expected slight decline with normalization of markets, but steady with return to the city</td>
</tr>
<tr>
<td><strong>New development:</strong> New housing units about 1% per year</td>
<td>Continued new housing units about 1% per year</td>
</tr>
<tr>
<td><strong>Student generation</strong> dropped in housing bubble, then rose rapidly since 2007</td>
<td>Student generation expected to rise somewhat as current cohorts reach graduation, then gradually decline.</td>
</tr>
</tbody>
</table>
# Predictors Trends

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Current Trend</th>
<th>Expected Future Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing affordability</td>
<td>Decreasing</td>
<td>Neutral or decreasing</td>
</tr>
<tr>
<td>Job growth</td>
<td>Sustained</td>
<td>Sustained</td>
</tr>
<tr>
<td>Age of housing</td>
<td>Average increasing</td>
<td>Average increasing</td>
</tr>
<tr>
<td>Net out-migration of pre-school and school-age children</td>
<td>High during housing bubble, then much lower in crisis</td>
<td>Stabilize at a somewhat higher level than during housing crisis</td>
</tr>
<tr>
<td>Student participation rate</td>
<td>Similar to other area jurisdictions</td>
<td>Remains similar to other area jurisdictions</td>
</tr>
<tr>
<td>Race and ethnicity, income, origins</td>
<td>Hispanic share increasing</td>
<td>Hispanic share increasing</td>
</tr>
<tr>
<td>Historic cohort survival</td>
<td>Stable at lower than recent high</td>
<td>Slight decline</td>
</tr>
<tr>
<td>Size of housing units</td>
<td>Most new units small</td>
<td>Most new units small</td>
</tr>
</tbody>
</table>
## Long-Term Forecasting Methods

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Development Forecast – Growth

Development Forecast by Residential Unit Type

- Senior Housing
- Public Family Housing
- High-Rise Apartment or Condo
- Mid-Rise Apartment or Condo
- Garden Condominium
- Garden Apartment or Co-op
- Duplex and Townhouse
- Single-Family Detached

Number of Dwelling Units

Year

2010 2015 2020 2025 2030 2035 2040

- 23.2%
- 19.2%
- 9.9%
- 15.0%
- 17.9%
- 12.5%
- 7.4%
- 8.2%
- 15.9%
- 9.1%
- 22.7%
- 35.2%

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Enrollment Trends Model

- Model similar to short-term model.
- Assume changes over time in:
  - Birth rates
  - Kindergarten capture
  - Cohort survival
- Assumptions based on:
  - Development forecast
  - Student generation potential by housing type
  - Demographic changes in age, race and ethnicity
Assumptions:
Kindergarten capture falls to slightly lower than 2013, birth rates gradually decline.
Upper trend line would not be expected based on expected fall in birth rates, and requires sustained kindergarten capture rate substantially higher than historic averages.

- **Enrollment Trends Scenario 1, Current 3-Year Average.** Kindergarten capture and cohort survival at 2011-2013 3-year average. Births up 1% per year 2013 and beyond.

- **Enrollment Trends Scenario 2, 2013 Trend Modified.** Kindergarten capture to 57.5%, cohort survival per 2013 rates indefinitely, birth rate per 1000 falls 15% by 2040.
Generation Rate Forecast Model

- Reasonable assumptions for student generation rates by housing type, size and affordability
- Reasonable rates of change in generation rates with changes in occupancy, births and aging of children to school age, more seniors over time
- Generation rates increase somewhat as units age and some become more affordable
- No explicit assumptions about birth rates, kindergarten capture or cohort survival
Current Generation Rates

Student Generation Per Dwelling Unit by Affordability Group and Housing Type
ACPS 2012-2013 School Year

- Public Housing
- Other Income-Limited Housing
- All Other Housing

Housing Type:
- Single-Family Detached
- Townhouse/Duplex
- Garden Apartment
- Garden Condo
- Midrise Apartment
- Midrise Condo
- Highrise Apartment
- Highrise Condo
- Other

Students per Dwelling Unit

[Bar graph showing student generation rates by housing type and affordability group]
Assumptions:

Rates rise until recent cohort starts to graduate.

Rates gradually fall but to higher than recent rates, particularly for single-family, townhouse and affordable units, with return of families to the city.
Students Generated by Housing Type

Calender Year (September Enrollment)

- Income-limited Family Units
- Public Housing Family Units
- High-Rise Apartment/Condo
- Mid-Rise Apartment/Condo
- Garden Condo
- Garden Apartment, Co-Op
- Duplex, Townhouse, Townhouse Condo
- Single-Family Detached
Conceptual Student Generation Scenario

Calendar Year (September Enrollment)

ACPS Students


10,044  11,164  10,143  14,566  16,563  17,375  17,684  17,723

100 students/1000 people

Generation rate scenario applied to housing mix of COG Round 8.2 development forecast.
Demographics: Declining Fertility Rates

Total Fertility Projection
U.S. Census Bureau 2012 Population Projections

Average number of births per woman

Hispanic
Non-Hispanic:
Black
Total
White
Asian and Pacific Islander

2010 2020 2030 2040 2050 2060
Demographics: Aging Population

Senior share nearly doubles as boomers all pass age 65
Develop assumptions for long-term birth rate trends based on demographic scenarios.

Evaluate long-term generation rate trends:
- Review 2013 student generation data
- Consider potential change in affordability of existing units over time.

Prepare candidate scenarios with sensitivity analysis.

Review with enrollment and forecasting committee at next meeting.