

Recent Growth in Alexandria's School Enrollment: The New Normal?

ACPS & City of Alexandria



Purpose of this slide show is to provide the following information:

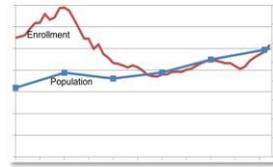
1. What has been happening with school enrollment? When did it start to grow and by how much?
2. School enrollment growth is real and it is not just in Alexandria. It is happening in neighboring jurisdictions, too.
3. In forecasting, we are not just assuming past trends will continue – we are looking to understand this as much as possible to give the best guidance to decision-makers.
4. It is important that the public to know what we know – and what we don't.
5. There are a number of factors that affect enrollment – factors that have limited student enrollment, but also factors that support or encourage enrollment growth.
6. Alexandria has had cycles of enrollment growth followed by enrollment decline...it is possible that this will happen again and we should be prepared for that. We can review the factors that might come into play that would result in a downturn.
7. But it is also possible that this may be a new normal – that there are structural changes that will result in sustained enrollment growth over the long term

The recent trend of growth in school enrollment is a dramatic shift in pattern. It is not just happening to Alexandria but also to other jurisdictions in our region. After a pretty sustained decline, there was an abrupt turnaround. Is it an outgrowth of the recession [that will reverse itself when the recession is over] or does it reflect a more basic and fundamental change to the willingness of families with children to stay in Alexandria to

*raise their children and to send them to Alexandria public schools?
Is this indicative of a change to a more urban vs. suburban lifestyle trend?"*

This Summary

- ▶ Recent and historic enrollment
- ▶ Possible explanations for recent spurt
- ▶ How we estimate future enrollment
 - Basic factors used each year to make short-term projections
 - Limits on ability to forecast school enrollment
 - Our best estimate of what enrollment we may need to provide for
 - Factors that may limit or encourage enrollment growth
- ▶ Long-Range Educational Facilities Plan
 - An 18-month consultant-assisted program to evaluate existing facilities and estimate future needs



Enrollment up 2,600 since 2007

- ▶ What's happening now:
 - Beginning in 2007, ACPS enrollment has increased by 2,589 students (24.6%).
 - Most growth so far: elementary schools
 - Middle schools seeing increases now
 - High school impacts expected in 2017
- ▶ Latest growth follows years of declining enrollment
- ▶ Also happening in Arlington, Fairfax and Montgomery Counties



Examining enrollment growth

▶ Questions:

- Will these years of growth be followed by years of declining enrollment, as it has in the past?
- Or is this a “new normal” where growth continues for an extended period?

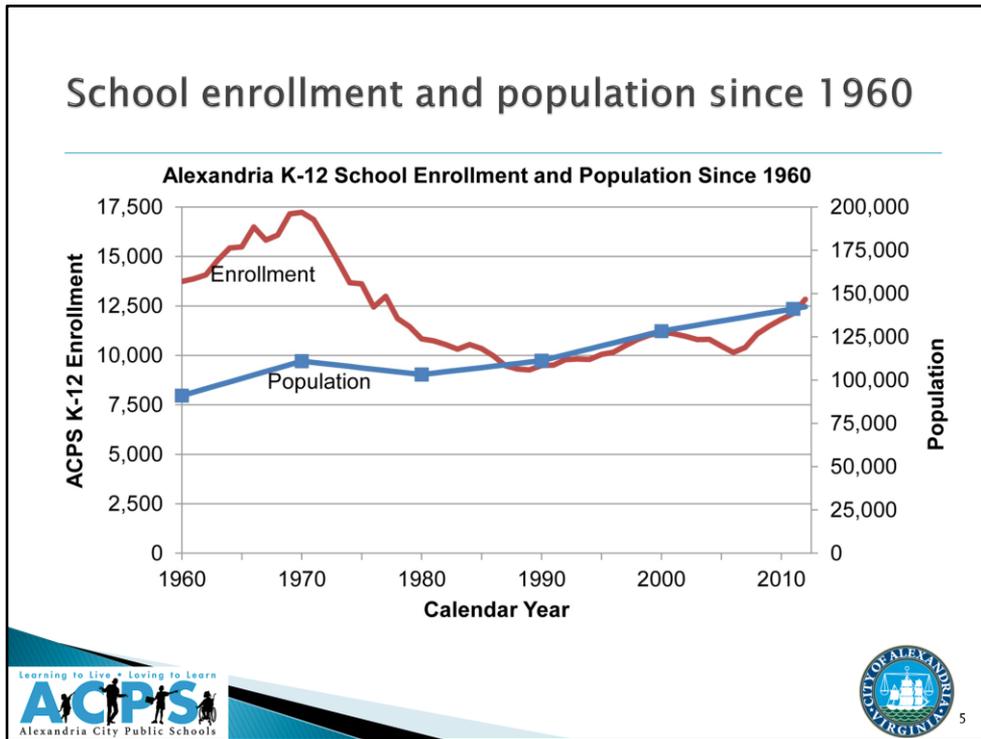
▶ To answer:

- Examine sources and characteristics of recent growth
- Put growth into context (long term, regional)
- Study factors/trends that could spur or limit enrollment growth



To put the current growth in perspective, it helps to review the past decades of demographic change in Alexandria.

School enrollment and population since 1960



There was the baby boom in the 1950s to early 1960s, which resulted in explosive growth of population and school enrollment in the suburbs, starting with inner suburbs like Arlington and Alexandria.

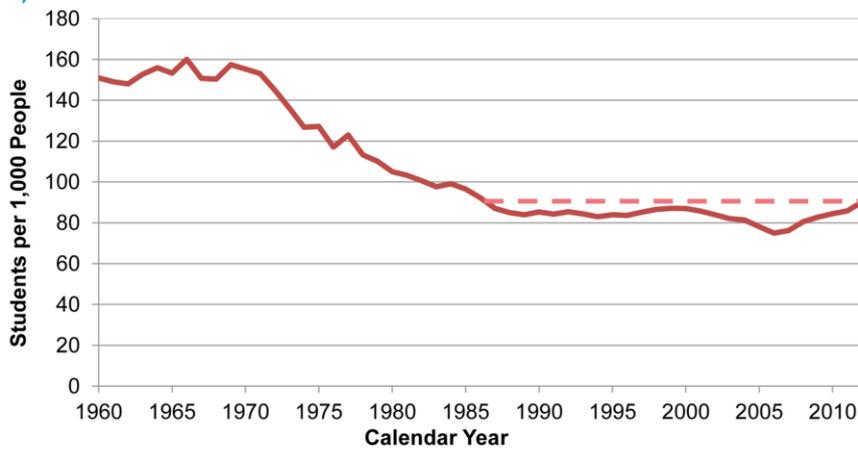
1980 was another major turning point for the City. By then, many of the children born during the baby boom had left the City for college or new jobs...while at the same time, much of the new housing was multifamily, catering to young adults moving to the Washington region to start jobs.

Alexandria's household size dropped substantially by 1980 and it has remained low ever since...because of a comparatively low percentage of children in our population. This was a very dramatic demographic shift – ACPS enrollment fell by 40% from its peak – as the city became more urbanized with more single person households.

That was 30 years ago. Are we seeing a new, equally dramatic shift?

We are seeing evidence of a lot going on – not just some idiosyncratic variation – but the potential that something more structural is going on.

School enrollment, compared to population, was declining for 35+ years – until 2007



In Alexandria, student enrollment -- compared to the population as a whole -- peaked in 1970.

With the exception of a year or two, the this recent period of growth, starting in 2007 and continuing to the present -- is the reversal of a 35+ year trend.

Is it just returning to the stable level of the 1990s after a disruption by the housing boom and bust of the past decade?

Or is this a signal that something fundamental is changing.

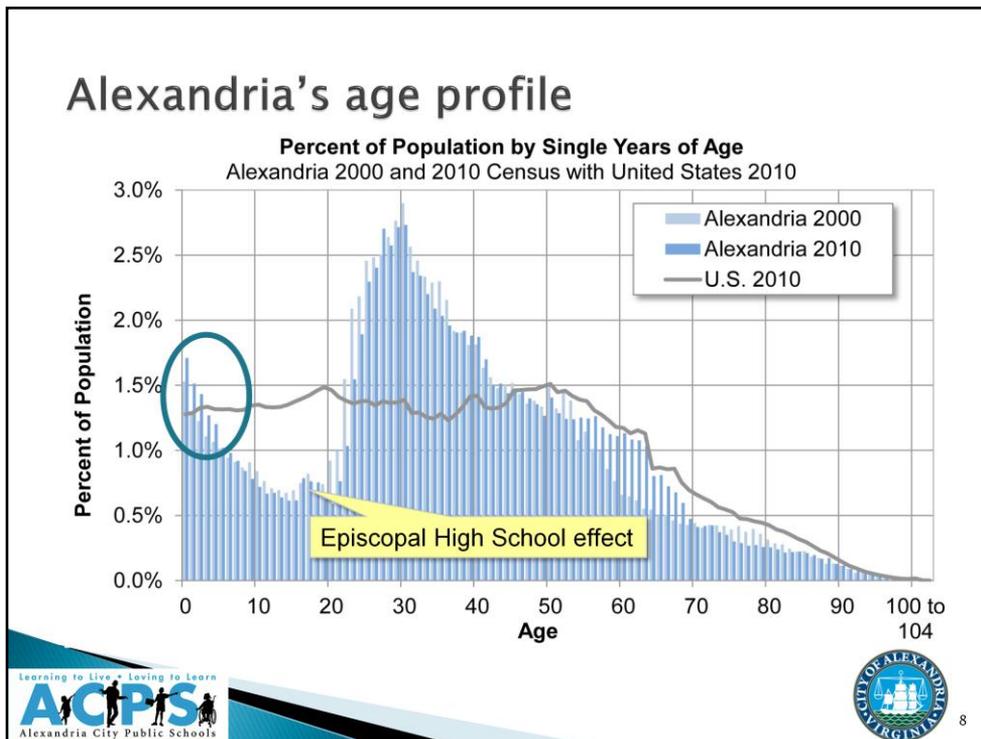
Estimating future enrollment

- ▶ Births, and share of births that become kindergarten students five years later (kindergarten capture)
- ▶ Share of students moving from one grade to the next in each grade (cohort survival)
- ▶ Share of age cohort attending public school

Affected by

- ▶ Factors that determine moves in and out of Alexandria by families with children
- ▶ New development and redevelopment
- ▶ Neighborhood turnover

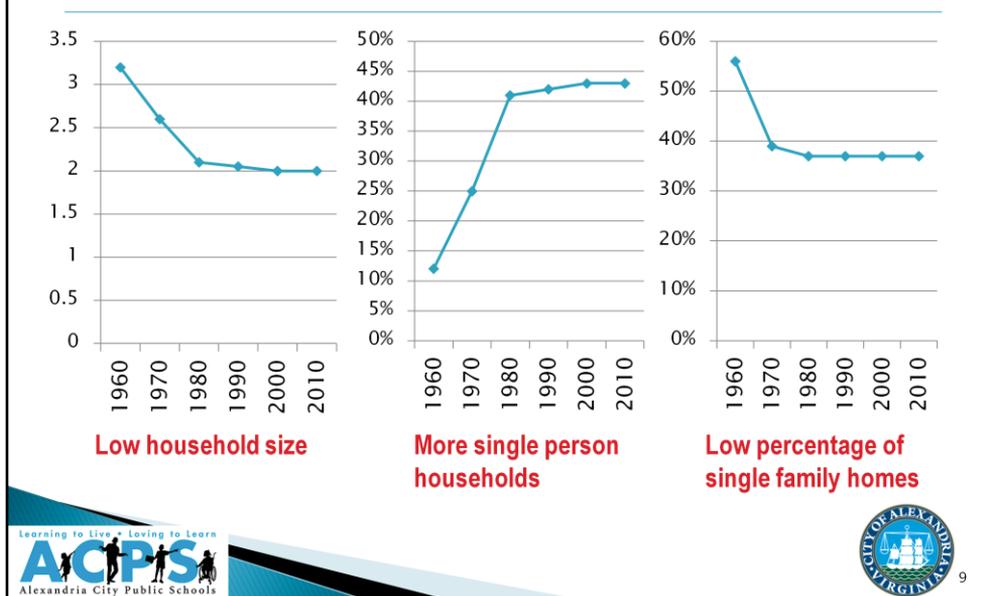




This graphic dramatically illustrates several ideas:

- Alexandria has a relatively low percentage of school age children compared to the United States as a whole
- The number of children at each age is highest for the very youngest children and it declines thereafter -- evidence that more families leave Alexandria to raise their children than move to Alexandria to raise children.
- However, between 2000 and 2010, the number of young children has increased (the number of children 0-5 grew 22%) faster than the population as a whole (9.1%). That was 2010; by now, some of those kids are already in the school system.
- There is a bump in the number of older students – those are students living at Episcopal High School.
- Many Alexandrians come to the City as young adults.
- The earliest Baby Boomers are now older than 65.

Factors affecting the size of Alexandria's school-age population

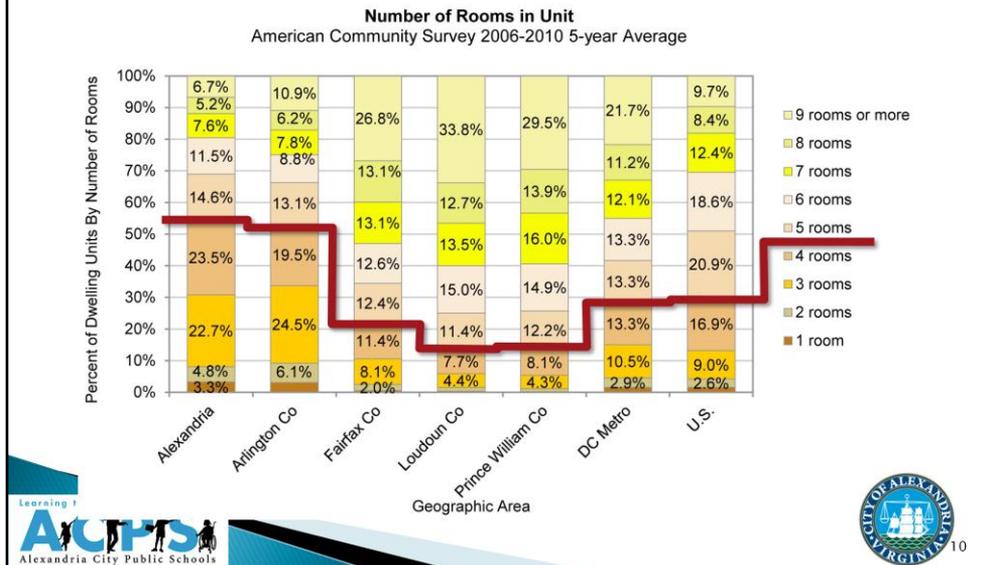


The last two slides show students compared to population as a whole. It is significant that it is so low...so let's explain why that is.

Starting in 1960, Alexandria's household sizes began to get smaller, in part due to a rapid increase in the percentage of single person households. Both trends resulted in fewer households with children. By 1980, the average household size was just over 2 persons – and it has stayed there ever since.

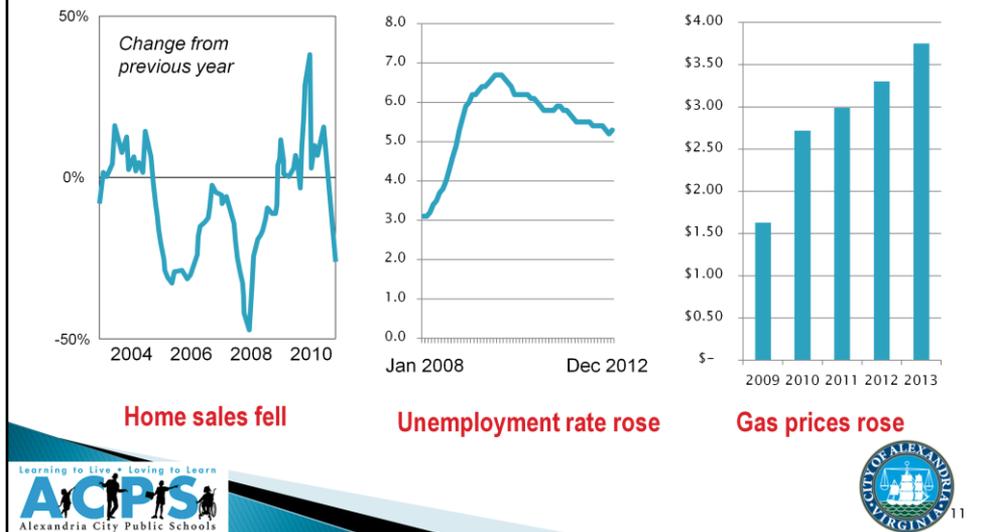
- A major reason: City has been a gateway – primarily people coming as adults to work in the Nation's capital
- Developers met this demand by adding lots of multifamily housing (apartments and condos) to our housing stock.
- Alexandria now has a very high proportion (over 60%) of multifamily housing, which is generally less attractive to families with children than single family housing units for a variety of reasons. For example, many multifamily buildings are not designed to welcome children and do not have amenities that families with children may be looking for, such as indoor or outdoor play spaces.

More than half of Alexandria's housing stock has 4 rooms or less



In the previous slide, it was noted that Alexandria has a high proportion of multifamily housing, which is less attractive to families with children. Even more important is the number of rooms in the housing unit. In general, multifamily units have fewer rooms than single family homes, and so it is not surprising that a high proportion of Alexandria's housing stock has few bedrooms – and those units are less attractive to families with children.

Several factors reduced families ability to move out of the City beginning in 2007



During the years 2000 to 2007 it was relatively easy for families to move from one jurisdiction to another, and, as we have seen, many families chose to move from Alexandria after the birth of a child and before that child started kindergarten. Three reasons why it was fairly easy to move:

- Available credit for homebuying and rising home prices made it fairly easy to qualify for a mortgage.
- Gas prices were low enough that they did not discourage families from moving farther out, where commuting distances are longer and there are fewer alternatives to the auto.
- Unemployment was low, so people felt confident about making a major life decision such as a move.

Families had a very difficult time moving after 2008 because of the real estate crisis, increased job uncertainty, and higher gas costs

Sources:

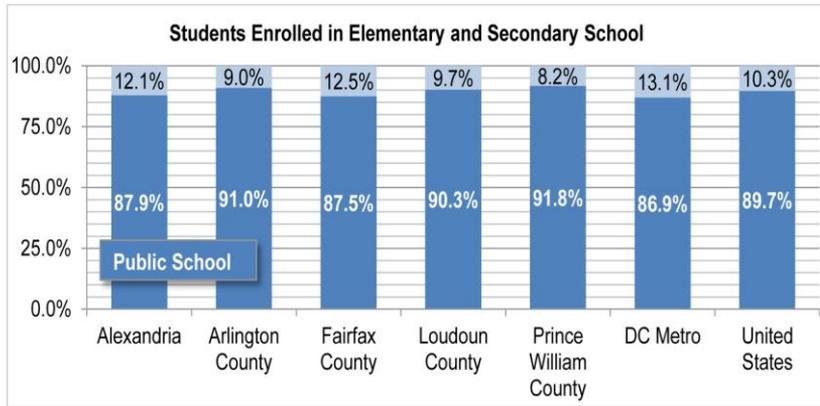
Home sales for the City of Alexandria, source is the Alexandria Dept of Finance

Gas prices for Washington DC Metro Area:

http://gasbuddy.com/gb_retail_price_chart.aspx

Unemployment rate for Washington DC Metro Area: BLS

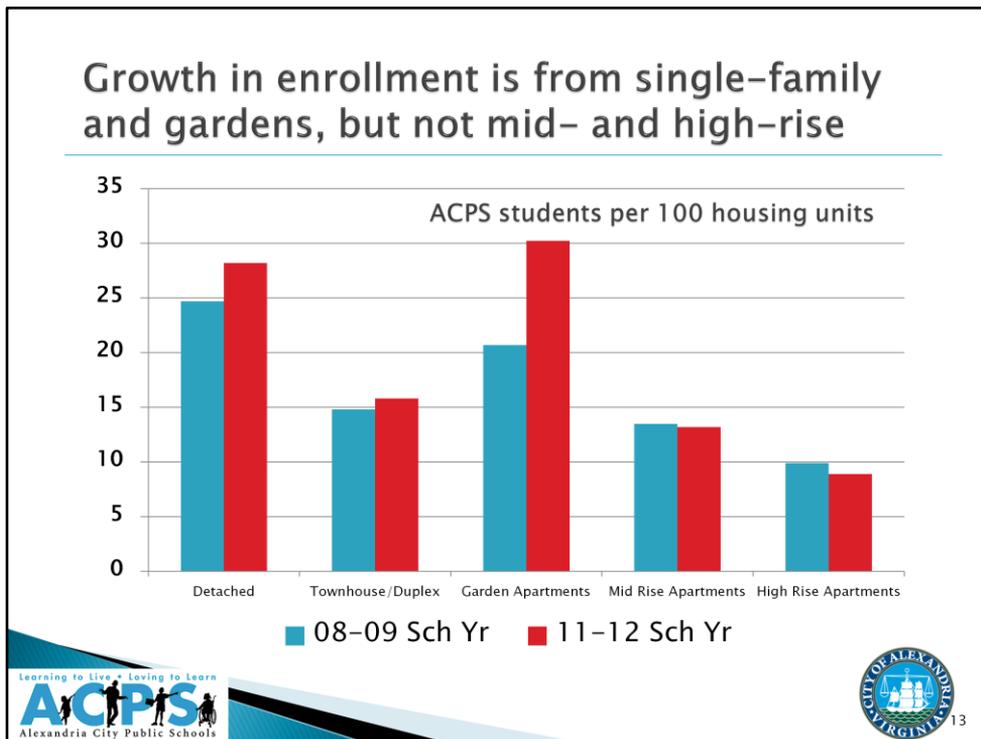
12.1% of Alexandria's children enrolled in school attend private school



American Community Survey 2006-2010 5-year average data, corrected for residential high school population for Alexandria only.



Some of Alexandria's school age children do not attend public school. Alexandria's ratio of public/private school attendance is not markedly different from neighboring jurisdictions, but a slightly greater percentage (about 3 percentage points) attend private school, compared to some of our neighbors.



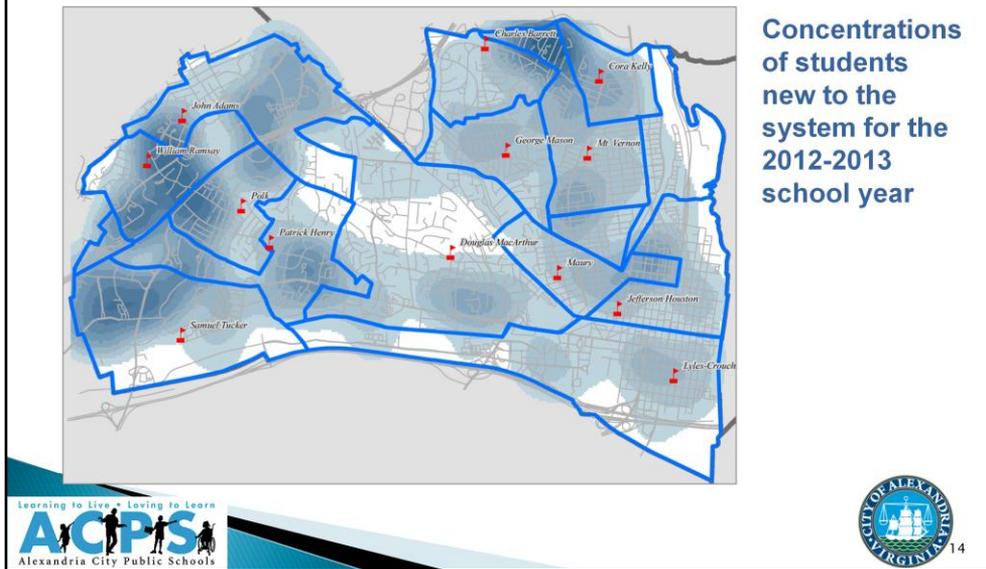
One way that we analyze student enrollment trends is by looking at what types of Alexandria housing generate the most students and how this is changing over time. We call this the student generation rate.

The data show that the housing unit types that generate the most students are single family detached houses, townhouses, and garden apartments. All three of these housing types showed an increase in the student generation rate in the three years between the 2008 and 2012 school years.

Student generation from mid and high rise apartments declined over the three year period. Public housing also has a high student generation rate, but public housing is a tiny fraction of the City’s housing stock.

The housing units in the sample are virtually all existing units, and virtually all of the growth in student enrollment is from existing housing units. Alexandria had little residential development during the 2008-2011 period.

Growth in student enrollment is from existing housing



This is a density map of students who entered the school system for the first time for the 2012-2013 school year. New students are located in the same areas as existing students, and the majority are living in housing units constructed pre-2000. The highest concentrations have the deepest shade of blue. As the previous slide noted, single family and garden apartments have the largest share of Alexandria's public students.

Impact of future development

Students estimated from planned development and redevelopment, 2010-2020

	2010-15	2015-20
Townhouse	74	22
Garden apartment	-63	-274
Mid-rise apartment	103	85
High-rise apartment	-4	40
Total	110	-127

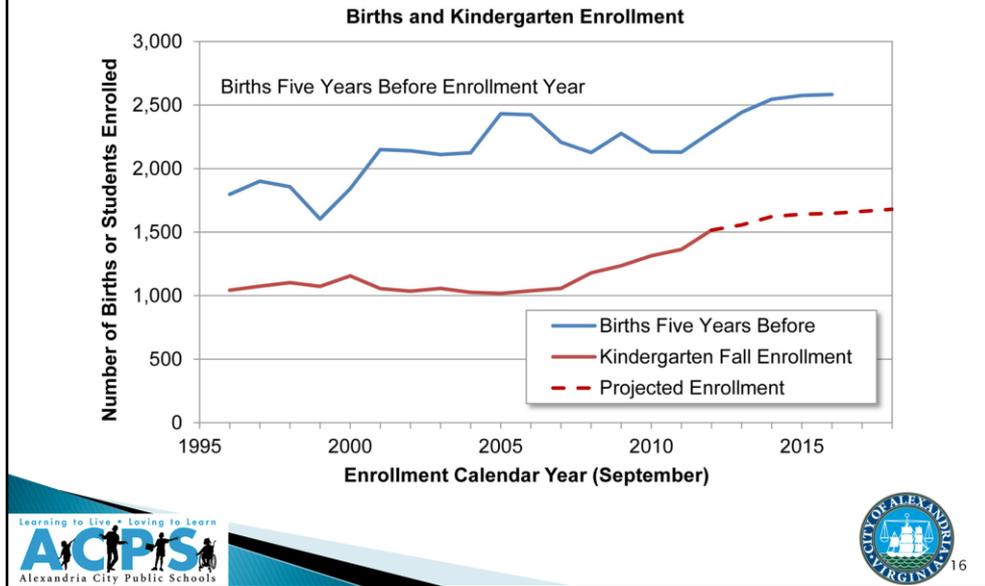


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We use these student generation rates to estimate the impact of future development on student enrollment. We looked at planned development between now and 2020. We applied the 2010-2012-year average student generation rate for uses other than public housing.

While the net effect citywide is not large, different parts of the city will be affected in different ways by new development. Development in Potomac Yard will add students while redevelopment of garden apartments in the Beauregard area will result in fewer students.

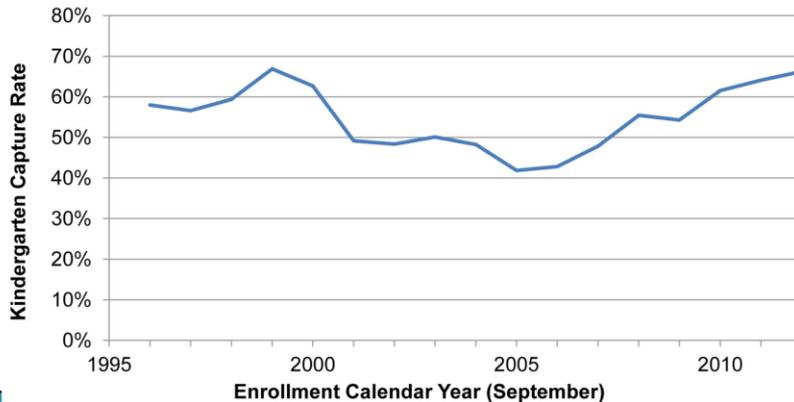
The number of births in the city is going up, as is kindergarten enrollment



The number of births to mothers who live in Alexandria has been increasing. Not rapidly, but this modest increase in births can contribute to increase in student enrollment – if those children are still in Alexandria by the time they reach kindergarten age.

Our “kindergarten capture” rate is increasing

What percentage of the children born in Alexandria attend Alexandria kindergarten 5 years later?

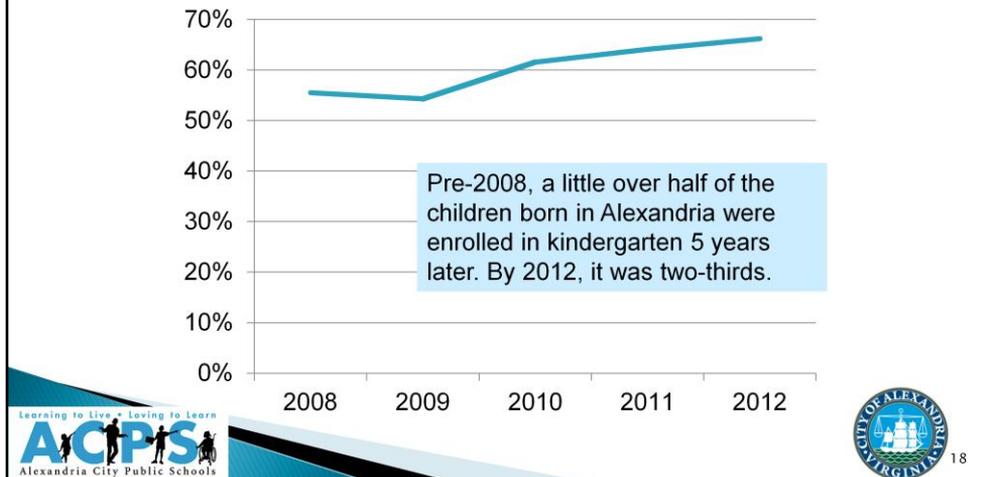


Compounding the effect of the increasing number of births: a higher percentage of children born in Alexandria are entering kindergarten five years later. Pre-2008, a little over half of the children born in Alexandria were enrolled in kindergarten 5 years later. By 2012, it was two-thirds.

For example, if the City has 2,500 births, just a change in the kindergarten capture rate from 50% to 66% adds about 400 students.

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More students are continuing on to the next grade

What is a “Cohort Survival” rate? It tracks the number of students continuing from one grade to the next. Example:

Grade	2010	2011
K	118	121
1	110	116
Cohort Survival from K to 1 st		98%

	Average Cohort Survival		
	Elem.	Middle	High
Pre 2007	93.2%	93.5%	95.1%
Post 2007	97.8%	97.6%	99.8%
Difference	+4.6%	+4.0%	+4.7%

Since 2007, the cohort survival rate has increased at ALL levels



Another way we measure changes in enrollment is through the “cohort survival rate.”

What is a “cohort survival rate?” It tracks the number of students continuing from one grade to the next. Annual ratios are averaged and used to project future enrollment. Also known as *Grade Cohort Succession*. Example:

Summary of key trends

- The latest data for key indicators are continuing to show growth
 - More children being born in Alexandria, but increase is moderating
 - More of the children born in Alexandria are entering kindergarten five years later
 - More of them staying in Alexandria schools after kindergarten...through high school.



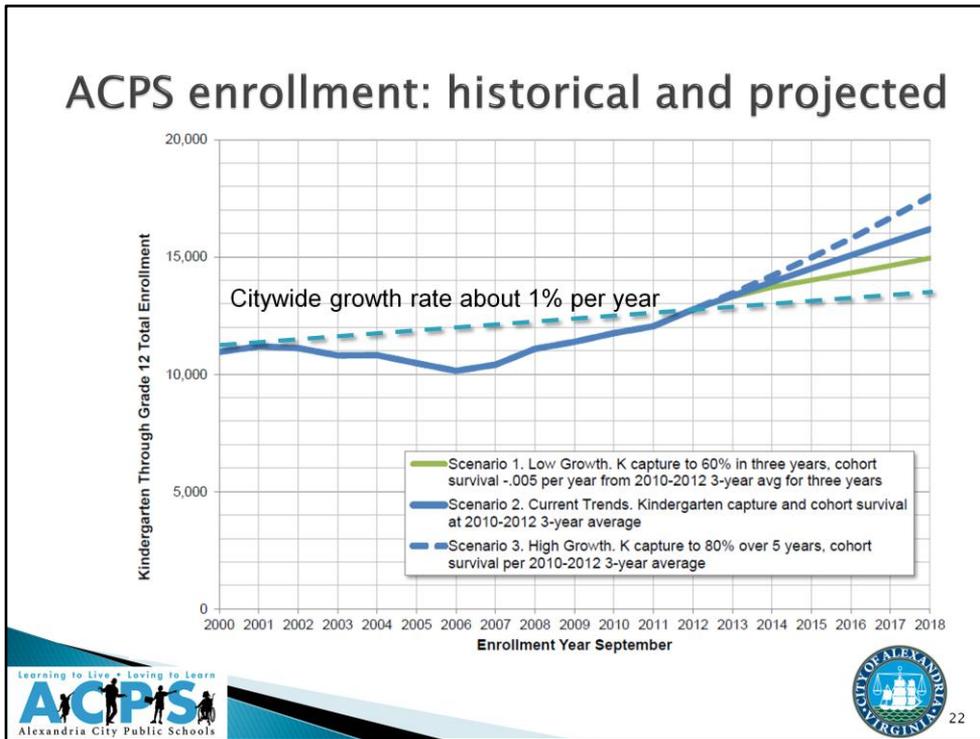
Assumptions for the 2019 medium forecast

- ▶ Births: modest increase continuing recent growth trend
- ▶ Kindergarten capture (3yr average) : 64%
- ▶ Cohort Survival (3yr average)
 - Grades K-5: 96.7%
 - Grades 6-8: 96.5%
 - Grades 9-12: 99.7%
- ▶ New development: apply 3yr average student generation rates
- ▶ Projection for FY2019: **16,270**



This slide reviews the assumptions underlying the medium forecast, which we will show on the next slide. It is important to remember that we have no data showing that enrollment growth has started to slow down.

Key variables are births, kindergarten capture, and cohort survival. For these key variables, we used an average of the past three years for the medium forecast. This results in a lower growth projection than if we were to base the forecast on the most recent single year. Because all three of these variables are increasing, the most recent year records the most rapid growth.



ACPS/COA staff have high, medium, and low school enrollment forecasts through 2019 for use in the current budget process. The medium forecast is the most reasonable maximum forecast for planning purposes and is shown here as a solid blue line.

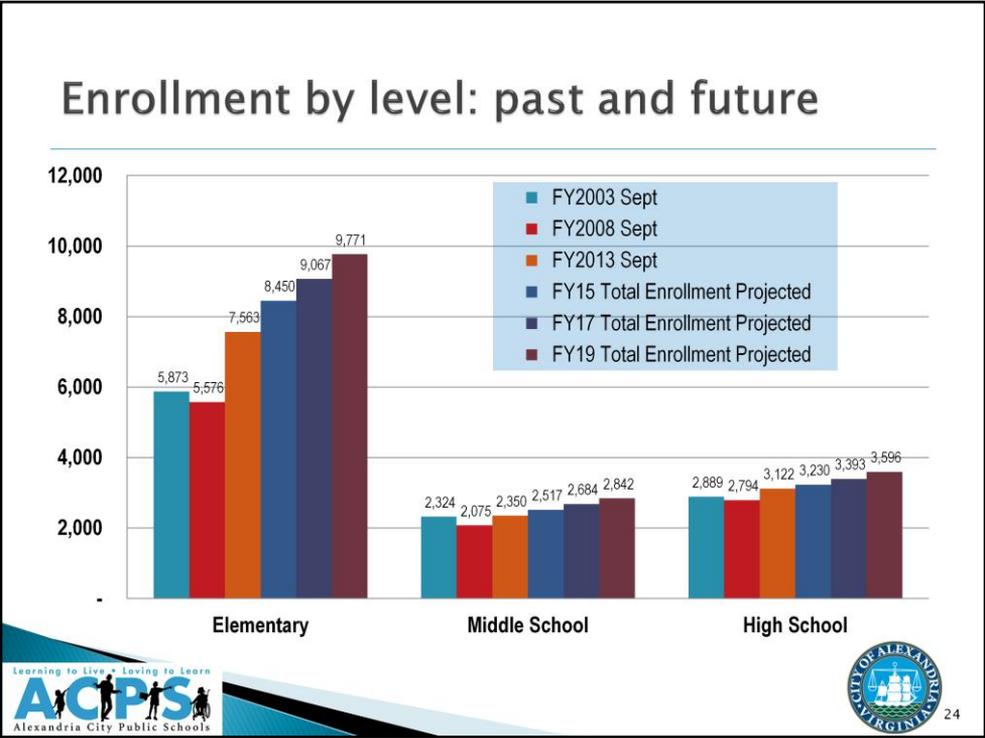
Enrollment Projections FY14–FY19

	Historical (As of September)					FY2013 Sept Preliminary	Projected					
	FY2008	FY 2009	FY 2010	FY 2011	FY 2012		FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Elementary	3.0%	7.2%	6.0%	5.7%	6.6%	5.8%	6.0%	5.2%	4.9%	3.6%	4.3%	3.2%
Middle	-2.7%	5.1%	2.9%	0.9%	1.2%	5.1%	3.2%	3.8%	1.9%	3.2%	4.5%	4.3%
High	3.6%	5.5%	-0.4%	2.8%	-2.1%	5.7%	2.3%	1.2%	2.2%	2.8%	2.4%	2.3%
Total	2.2%	6.3%	3.5%	3.2%	3.3%	5.8%	4.6%	3.9%	3.7%	3.3%	3.9%	3.2%



This shows historical, current, and projected student enrollment in a different way. The gold bar is current enrollment, and it shows that the most recent growth rate – the increase from the 2011-2012 school year to the current school year (2012-2013) was 5.8%, which is quite rapid.

The forecast represents a slower growth rate than that...averaging about 4% growth between now and 2019.



This shows past and future enrollment growth by level. The first three bars in each group shows actual data; the second three bars are projections.

Without action, forecast results in classroom deficits in all areas of the City

Fiscal Year	Central	East	West
FY14	(2.5)	8	(1.5)
FY15	(2.5)	1.5	(6.0)
FY16	(4.0)	(8.0)	(11.0)
FY17	(7.0)	(13.5)	(19.0)
FY18	(20.0)	(27.0)	(41.0)
FY19	(23.5)	(33.5)	(53.0)

Table shows number of classrooms needed to accommodate forecast growth. Does not include possible capacity from construction projects (funded or proposed), class size changes, or other initiatives.

- Central: C. Barrett, D. MacArthur, G. Mason
- East: C. Kelly, J.-Houston, L.-Crouch, M. Maury, Mt. Vernon
- West: J.K. Polk, J. Adams, P. Henry, S. Tucker, W. Ramsay

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To give you a sense of the impact of the enrollment forecast, this table shows the deficit in classrooms that will result without taking some action. There are already some initiatives funded that will add classroom capacity and others that are under consideration now during the current budget process.

These initiatives include class size adjustments, adding portable classrooms, adding classroom additions to existing schools, and new construction.

Capacity Projects– FY14

- ▶ Capacity Projects Approved for FY2014 (begins July 1, 2013)
 - James K. Polk – Second Story Modular Classrooms (4.5)
 - Patrick Henry – New/Expanded building (A/E begins in FY14, will determine classrooms and core facilities to be provided)
 - Charles Barrett – Second Story Modular Classrooms (4), parking lot expansion
 - George Mason – Expand cafeteria
 - Matthew Maury – Additional Classrooms (2)
 - Douglas MacArthur – Additional Classroom (1), cafeteria expansion



Per the City Council adopted CIP on May 6, 2013, the capacity projects listed above have monies beginning in FY14. Council has fully funded the Patrick Henry project. Additional capacity funding will be determined through the next budget cycle. Funding beginning on July 1 does not mean construction will start on July 1.

Capacity Projects– ACPS identified potential for FY15 and beyond

- ▶ **Additional Classrooms**
 - George Mason – Additional classrooms FY15
 - James K. Polk- Additional wing FY15
 - Patrick Henry – Per analysis FY14, avail FY 16, FY17
 - T.C. Minnie Howard- Expansion FY17
- ▶ **Core Space Expansion**
 - Charles Barrett – Cafeteria Expansion FY15
 - Matthew Maury – Parking lot expansion FY15
- ▶ **New Facility**
 - New School, Site TBD FY16
 - Cora Kelly- New Building FY18



This slide reflects capacity projects approved in the School Board’s FY14-23 CIP (adopted March 7, 2013). Capacity funding in FY15 and beyond will be determined through the next budget cycle, with the exception of the fully funded Patrick Henry.

Issues for further study over the next 6 months

- ▶ Economy and Housing Market
 - Ability of families to relocate for larger units
 - Ability to send children to private school
 - Ability to afford housing in Alexandria
 - Transportation impacts (Potomac Yard Metro, Silver Line)
 - Quality of life
- ▶ Demographics
 - Family households choosing urban areas
 - Neighborhood turnover
 - Doubling of 65+ population over long term
- ▶ School System
 - Program and physical changes
 - Reputation



We understand these are related and influence enrollment, but need more study to figure out what the effect is. City and ACPS staff plan to continue to study enrollment trends through the summer to be prepared for the next enrollment forecast update in the fall. Staff will bring the additional analysis, and the updated forecasts, to the Long Range Education Facilities Work Group for review and discussion.

By paying close attention to all of the factors that influence student enrollment, we will be able to detect any changes as soon as possible.

Long Range Educational Facilities Plan Work Group

- ▶ 19 member Work Group jointly created by Superintendent Sherman and City Manager Young
- ▶ 15-18 months timeline



As a result of increasing student enrollment, the LREFP Work Group was formed to explore the major issues that will impact ACPS public school facilities over the long term and guide staff in the development of a draft plan of action.

Work Group- Representation from School Board, City Council, PTA, Business Community, Parks and Recreation Commission, Campagna Center, Northern Virginia Regional Commission, and at-large citizens

- The Plan will include several key “up-datable” elements:
 - Long Range Enrollment Projections (10-year time horizon)
 - Determine Facility Capacity needs and how they will be met
 - Define future educational specifications
 - Shape diverse and vibrant schools through continual analysis of ACPS enrollment practices
 - Explore modernization/renovation options and determine factors that affect new schools as well as off-site academic programs and alternative school locations.
- Ensure that demographic information and educational facility needs will feed into

City planning process.

- Educate and inform the community.
- Improve coordination on capital funding for (new, expanded and modernized) school construction.

For more information and to stay in touch...

The screenshot shows a web page from the City of Alexandria website. The header includes the city logo and navigation links like Home, Residents, Visitors, Business, City Departments, Contact Us, and Search. The main content area is titled 'Planning & Zoning' and features an article about the 'Long-Range Educational Facilities Plan'. The article text describes a joint effort between the City and the Alexandria City Public School System (ACPS) to improve facilities planning. It includes a photograph of a school building and a group of people in front of it, captioned 'Convocation, T.C. Williams 2011'. A sidebar on the right contains 'QUICK LINKS' and 'RESOURCES' sections. At the bottom of the article, there is a list of 'Work Group Members' and contact information for Laurel Hammit.

Planning & Zoning
Page updated Jan 14, 2013 9:31 AM

Long-Range Educational Facilities Plan

The City of Alexandria and the Alexandria City Public School System (ACPS) are jointly developing a work program for a Long Range Educational Facilities Plan to improve facilities planning, accommodate the growing student population, and enhance educational programs and services.

As part of the program, a 19 member work group was established and is comprised of members from the community, ACPS School Board, City Council, Campaigna Center, and the PTA Council, supported by ACPS and City staff. The workgroup meets on a regular basis, generally quarterly, to explore the major issues that will impact public school facilities over the long term and to guide staff in the development of a draft Long Range Educational Facilities Plan for consideration by the School Board and City Council.

The public is invited to all meetings of the work group and is encouraged to stay informed about upcoming meetings through eNews.

- **Work Group Members**
- Joint COA/ACPS Work Program
- LREFP Work Program Supplement
- LREFP Update - October 15, 2012

For more information, please contact Laurel Hammit, Facilities Planner, Alexandria, 70307

Convocation, T.C. Williams 2011

QUICK LINKS

- ▶ About Planning & Zoning
- ▶ Development
- ▶ GIS & Maps
- ▶ Historic Preservation
- ▶ Neighborhood Planning
- ▶ Planning Commission
- ▶ Plans, Projects & Initiatives
- ▶ Statistics & Demographics
- ▶ Zoning Services

RESOURCES

- ▶ Administrative Special Use Permits
- ▶ Alexandria Master Plan & Citywide Chapters
- ▶ Applications & Forms
- ▶ Design Guidelines
- ▶ Development Viewer
- ▶ Frequently Asked Questions
- ▶ P&Z Dockets & Webcasts
- ▶ SUP Viewer
- ▶ Zoning Ordinance

HOW DO I...

www.alexandriava.gov/68540



Questions

