

Chapter 2

The Planning Environment

Facility plans are developed in a dynamic planning environment. The major driver for these plans, since the mid-1980s, has been an enrollment increase of over 68,000 students. Integral to this enrollment growth has been increased diversity, as seen in the wide range of cultures, language groups, and racial and ethnic populations that make up our cosmopolitan county.

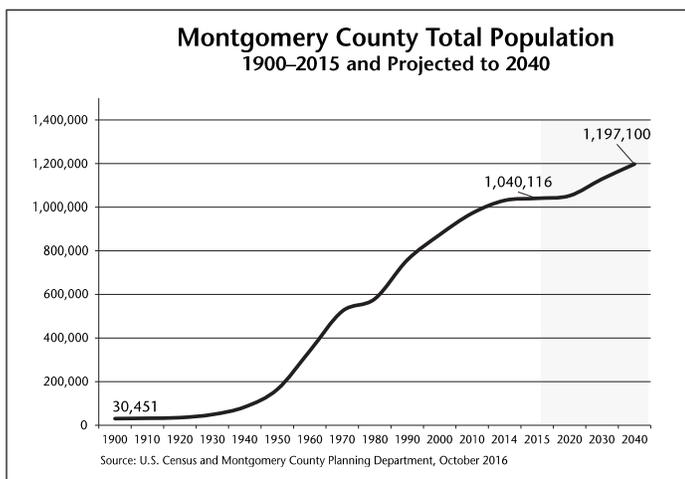
Enrollment growth since 2007 has been particularly strong. Enrollment has increased by 21,497 students in the nine-year period from 2007 to 2016. Most of this enrollment increase, 13,368 students, has occurred at elementary schools. This year, MCPS preliminary enrollment totals 159,242 students, an increase of 2,795 students from the prior year. Total school system enrollment is projected to increase by 9,238 students by the 2022–2023 school year. The significant enrollment increases experienced in the past, and continuing on into the future, create major challenges for our school facilities and our capital program.

Funding for capital projects has not been sufficient to fully address elementary school enrollment increases, and 87 percent of the 388 relocatable classrooms are at elementary schools this year. The backlog of school capacity projects at the elementary school level will be compounded in the coming years as secondary schools receive the large cohort of current elementary school students.

Community Trends

Population

Demographic trends in Montgomery County are part of a national trend in large metropolitan areas where African Americans, Asians, and especially Hispanics, have accounted for most, if not all, of the suburban population growth since 1990. MCPS planners consult various sources to monitor county population trends, including the U.S. Census Bureau, the Maryland Department of Planning, and the Montgomery



County Planning Department. According to the U.S. Census, the total population of Montgomery County increased by 283,089 people between 1990 and 2015, from 757,027 people to 1,040,116 people. All of the county population growth since 1990, is due to increases in non-White race groups and the Hispanic ethnic group. Since 1990, the White, non-Hispanic population has decreased in the county by two percent, while the population of African Americans increased by 75 percent, the population of Asians increased by 118 percent, and the population of Hispanics of any race increased by 197 percent.

A significant share of the population increase in the county is the result of resident births outnumbering deaths by more than 2 to 1. For example, from 2011 through 2015, there were 65,651 births compared to 28,908 deaths in the county for a net natural increase in population of 36,743 residents. The other major factor in population growth is immigration from outside the United States, which has countered the outflow of county population to other places. Between 2010 and 2015, international migration contributed 52,310 residents, while domestic migration resulted in a loss of 21,450 residents. Combined, population migration netted 30,860 more residents between 2010 and 2015. Because of international migration, the percent of foreign-born residents in Montgomery County is greater than any other jurisdiction in Maryland and in the Washington metropolitan area. The American Community Survey of the U.S. Census Bureau reports that the percentage of foreign-born residents in Montgomery County increased from 18.6 percent in 1990, to 32.4 percent in 2014.

Economy

The major economic event of the past ten years is commonly known as the “Great Recession.” This deep recession officially lasted nearly two years, beginning in December 2007 and ending in June 2009. Even after the official end of the recession the economy remained weak and job growth was slow for several more years. Compared to other parts of the nation, data from the U.S. Bureau of Labor Statistics show that Montgomery County fared reasonably well during and after the recession. Whereas national unemployment peaked at 10 percent in October of 2009, Montgomery County’s peak unemployment was six percent in January of 2010. By December 2015, national unemployment dropped to five percent and Montgomery County unemployment to 3.4 percent. Nevertheless, the county economy did experience decline as a result of the recession. Resident employment in the county declined by about 6,400 between 2008 and 2009. Since its lowest point in September 2009, at 492,226, resident employment grew to 525,625 in 2015.

Economic recovery in the county housing market also is evident. The weakest year for new residential starts was 2009, when only 966 units began construction. Considerable improvement

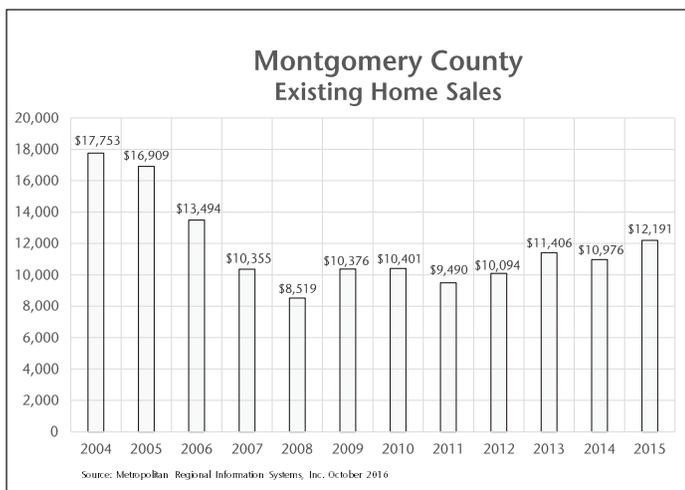
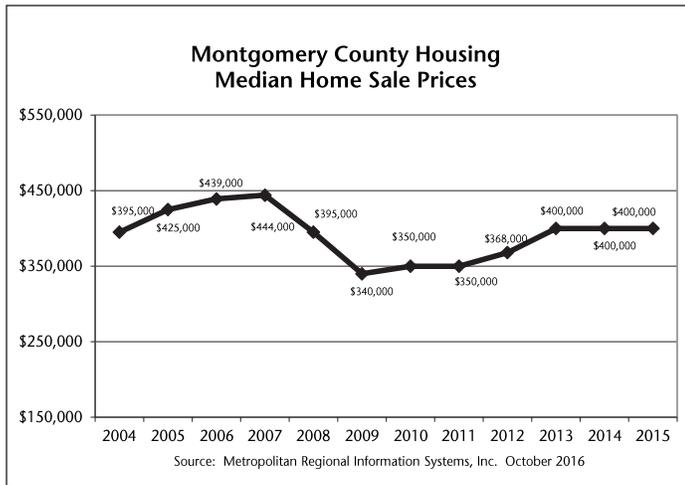
has occurred each year since 2009. In 2015, 4,683 residential starts occurred. In the housing resale market, the weakest year was 2008, when 8,519 existing homes were sold. By 2015, the resale market had improved, with 12,191 existing homes sold. Along with increased activity in both housing sectors have come rising prices. The median sales price of existing homes experienced a bubble that reached \$444,000 in 2007. After the recession hit, the median sales price dropped to \$340,000 in 2009. Median sales prices have gradually risen since the recession, and stood at \$400,000 in 2015.

The recession has had long-lasting impacts on school system enrollment. These impacts are outlined next.

- First, labor force mobility slowed during the recession due to reduced opportunities for employment outside the county. This resulted in less out-migration than is typical. Out-migration has moderated enrollment increases in the past by offsetting in-migration to the county. Due to reduced out-migration during the recession, net migration to MCPS increased, raising enrollment levels a great deal.
- Second, a number of households that experienced job losses in other parts of the country moved to Montgomery County—either for better job prospects or to share housing with parents or relatives who live here.

- Third, decreases in the value of county housing placed many homeowners “under water” in mortgage debt. Consequently, households who might have moved to other parts of the country were forced to stay put. This, too, resulted in less out-migration than in-migration. (Related to the decrease in the value of housing has been a decrease in property tax revenues, which, in turn, has affected funding for school capital projects.)
- Fourth, many families that previously enrolled their children in county private schools were forced to rethink this financial expense. Therefore, for several years a marked increase in students enrolling in MCPS from county private schools further increased enrollment.

The recession impacts listed above compounded one another and resulted in the large enrollment increases we have seen. However, there is one consequence of the recession that will moderate enrollment growth in the next few years. Due to economic uncertainty during the recession years and thereafter, household formation slowed and births decreased. Household formation and decisions on raising children are subject to one’s economic circumstances and outlook. The reduction in births occurred at the national as well as the local level and is now called the “baby recession.” In Montgomery County, 2007 was the peak year for county births, with 13,843 children born. As the recession hit, births went steadily down through 2013, when 13,022 children were born. As these smaller birth cohorts age into elementary schools, they are resulting in a leveling off of elementary school enrollment. However, in the longer term, elementary enrollments will come back up if the stronger economic conditions present today are sustained. In 2014, county births rose for the first time since 2007, with 13,214 children born. This birth cohort will enter MCPS in 2019.



Master Plans & Housing

Traditional suburban residential development is becoming the exception in the county. Clarksburg is the last large suburban community that will be built in the county. A number of large subdivisions in Clarksburg have been constructed and more are on the way. A new school cluster was formed in 2006, when Clarksburg High School opened to accommodate the new communities.

In the past, county development has been characterized by a separation of residential and commercial uses. Today, a desire to mix land uses and enliven communities is guiding new master plans and sector plans. New plans also are driven by the principle of “smart growth” that favors development in transit accessible corridors as a means to reduce reliance on the automobile. In addition, as the availability of land for residential development decreases, infill and redevelopment characterize new housing. Higher housing densities than seen in the past are needed to increase the supply of housing and serve our growing population. Overall, today’s land use planning is resulting in the urbanization of many county areas.

Plans for high-density residential projects have been adopted in recent years for Germantown, the Great Seneca Science Corridor, the White Oak Science Gateway, and at the Glenmont, Shady Grove, White Flint, and Wheaton METRO stations. In 2016, the Montgomery Village Master Plan and the Westbard Sector Plan were adopted. In addition, several plans are under development, including the Bethesda Downtown, Lyttonsville, Rock Spring, Rockville Pike Neighborhood, and White Flint 2 plans. These plans focus on mid-rise and high-rise multi-family housing. MCPS participates in county and city land use planning to ensure adequate school sites are identified and impacts on enrollment are considered. (See Appendix P-1 for further information on the role of MCPS in land use plans.)

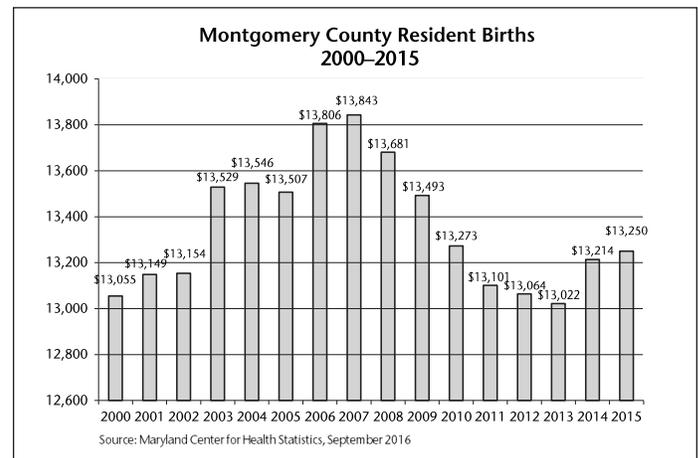
Hundreds of condominiums and apartments have been coming on the market for many years. The market for these multi-family homes is generally driven by a combination of baby boomers reaching retirement age and downsizing, and the millennial generation seeking urban life-styles. Seventy-six percent of residential starts in 2015 were multi-family units. Many of these projects conserve on land by utilizing structured parking garages, an attribute that increases the cost of the units. The number of students that attend schools from high-density multi-family housing has been small. However, because multi-family housing will dominate the new home market for the foreseeable future, MCPS staff regularly examines student generation rates from these units to determine if occupancy trends are changing.

MCPS monitors housing activity in all school service areas through close coordination with the Development Applications and Regulatory Coordination Unit of the Montgomery County Planning Department, and comparable plan review departments in the cities of Gaithersburg and Rockville. Housing plans are factored into school enrollment projections according to building schedules provided by developers. If the economy sees further improvement, and mortgage interest rates stay low, the housing market could become even stronger.

Subdivision Staging Policy

The Montgomery County Subdivision Staging Policy is the tool the county uses to regulate subdivision approvals, ensuring they are commensurate with the availability of adequate transportation and school facilities. The policy includes an annual test of school adequacy that compares projected school enrollment to school capacity in the 25 MCPS school cluster areas. The school test takes into account capital projects that will open within the Capital Improvements Program (CIP) timeframe. Elementary, middle, and high school capacities are tested separately. For each school level, the total projected enrollment of all schools in the cluster is compared to total school capacity five years in the future. The Subdivision Staging Policy is presently under review by the Montgomery County Council. The test will be updated subsequent to Council action in November 2016.

The annual school adequacy test has the following two thresholds: clusters where projected enrollment exceeds capacity and results in school utilizations between 105 and 120 percent require



Results of Subdivision Staging Policy School Test for FY 2017

Based on County Council Approved CIP and Cluster Enrollment Forecasts for 2022-2023 Budget and the Amended FY 2017-2022 Capital Improvements Program (CIP)

See Appendix I for more detailed information.

School Test Level	Cluster Outcomes by Level		
	Elementary Inadequate	Middle Inadequate	High Inadequate
Clusters over 105 percent utilization School facility payment required in inadequate clusters to proceed.	Einstein Gaithersburg Northwood Quince Orchard	Gaithersburg Rockville Wheaton	Blair Churchill Einstein Gaithersburg Walter Johnson Kennedy Richard Montgomery Northwood Paint Branch Quince Orchard
Clusters over 120 percent utilization Moratorium required in cluster that are inadequate.	None	None	None

Source: Montgomery County Public Schools, Division of Long-range Planning, October 2016

a school facility payment in order to obtain building permits; and clusters where projected enrollment exceeds capacity and results in school utilizations exceeding 120 percent are placed in moratorium so that no residential subdivisions may be approved. Because school enrollment growth is strong, many clusters exceed the 105 percent threshold for the school facility payment. Thirteen of the 25 MCPS clusters are in this status for FY 2017. No cluster exceeds the 120 percent threshold for moratorium. Results of the FY 2017 school test are summarized in the table, “Results of Subdivision Staging Policy School Test for FY 2017”. More detailed tables showing the FY 2017 school test results may be found in Appendix D. Additional information on the role of MCPS with respect to the Subdivision Staging Policy can be found in Appendix C-1. The FY 2018 school test that will be adopted July 1, 2017 will incorporate the enrollment projections found in this document and capital projects that were approved by the County Council in May 2016.

Student Population Trends

Resident births, the aging of the student population, and migration are the basic factors that create enrollment change at MCPS. The dip in births mentioned previously and known as the “baby recession” will result in a plateauing of elementary enrollment in the next six years. The number of births in 2014 equates to an average of 36 children born per day to Montgomery County mothers. The upturn in county births in 2015—numbering 13,250 births—is an early indication that in the long term, elementary enrollment could increase again. Children born in 2015 will reach elementary school in 2019, middle school in 2025, and high school in 2028.

The movement up through the grades by students, termed the “aging of the student population,” is the second driver of enrollment change. When the size of the kindergarten is larger than that of Grade 12, then there is a natural increase in total enrollment from one year to the next. During the 2015–2016

school year, there were 11,434 kindergarteners and 10,275 Grade 12 students. The difference between the two grades was 1,159 students. Therefore, in the 2016–2017 school year, a large part of the one-year increase in enrollment of 2,795 students was caused by existing students aging up, as Grade 12 students exiting the system were replaced by a larger group of kindergarten students entering it. During the next six years, the trend of larger kindergarten enrollments and smaller Grade 12 enrollments will be a major source of enrollment growth in middle schools and high schools.

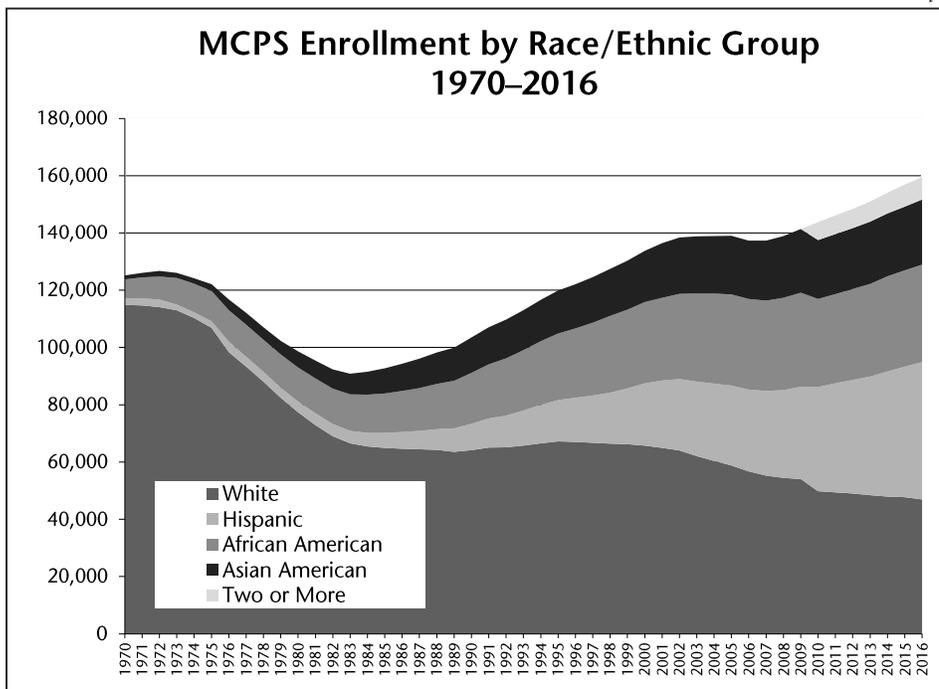
Migration, the third driver of enrollment change, depends on the regional economy, housing costs, and international events. All of these factors have a significant degree of volatility and make movement into and out of MCPS fluctuate from year to year. Records of MCPS student entries and withdrawals show that typically 12,000 to 13,000 new students enter the system each year, while a similar number of students exit the system each year. (These figures do not include students entering kindergarten or students exiting the system at graduation.) In the past nine years, migration-related entries into MCPS have greatly exceeded withdrawals, resulting in increases in enrollment.

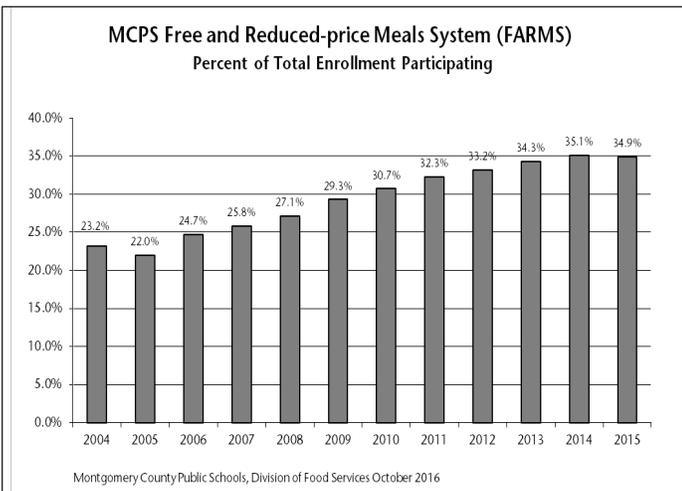
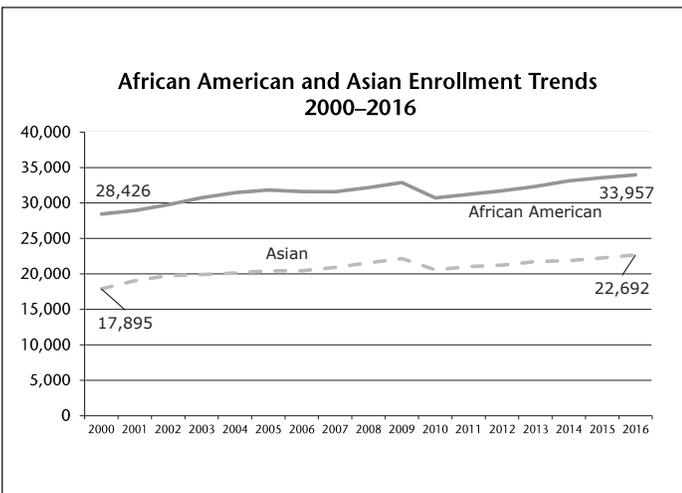
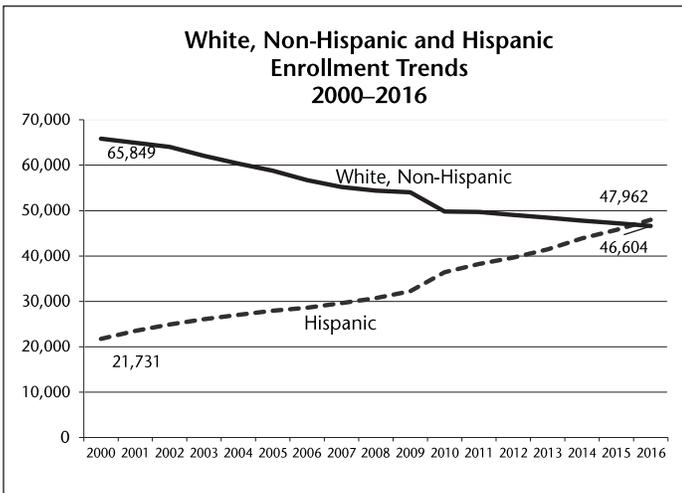
Student Diversity

Records of county resident births show a levelling off in the numbers of births in each race/ethnic group. This is in contrast to large declines, from 1990 to 2010, in the number of White, non-Hispanic births and large increases in births of other race/ethnic groups, especially Hispanics. In the past few years, White, non-Hispanic births have levelled off at about 4,800 per year, African American births at 2,800 per year, Asian births at 2,000 per year and Hispanic births at 3,500 per year. However, it is not known if the recent trends in each race/ethnic group will continue. It is known that the median age for the Hispanic, Asian, and African American population is lower than for the White, non-Hispanic population, and that household size for

these groups exceeds that of White, non-Hispanic households. As these characteristics persist, increasing student diversity will continue, with Hispanic enrollment exceeding that of other groups.

Preliminary MCPS enrollment for the 2016–2017, school year is 159,242 students. Disaggregation of enrollment by race and ethnic group reveals the importance of diversity to enrollment growth. In the 10-year period beginning in 2006, MCPS enrollment grew by 21,444 students, a 16 percent increase over the 2006 enrollment of 137,798 students. Over this period, White, non-Hispanic enrollment declined by 10,122 students or 18 percent. The entire enrollment increase since 2006 is attributed to increases in African American (+2,337), Asian (+2,240), and Hispanic (+19,380) students. In addition, 7,658 students were recorded this year in





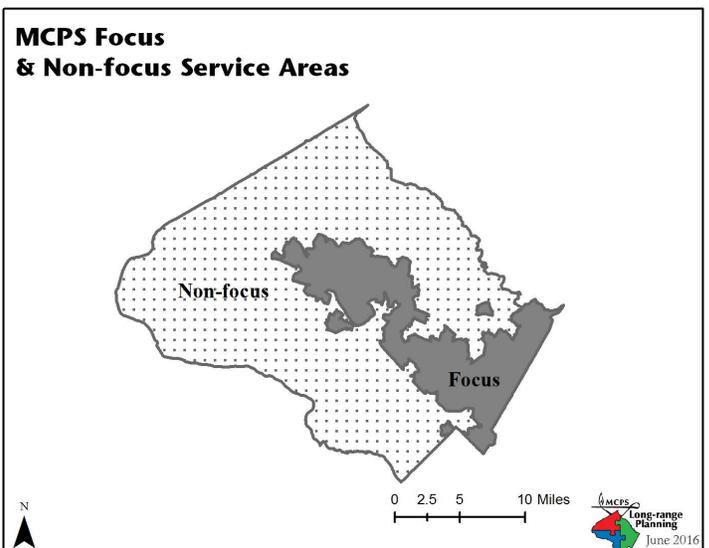
the new category of “two or more races.” MCPS enrollment is now 22 percent African American, 14 percent Asian, 30 percent Hispanic, 29 percent White, non-Hispanic, less than five percent two or more races; less than five percent Native Hawaiian/Pacific Islander; and less than five percent American Indian/Alaskan Native.

The accompanying chart illustrates the trend of increasing student diversity since 1970. This chart shows a trend of demographic

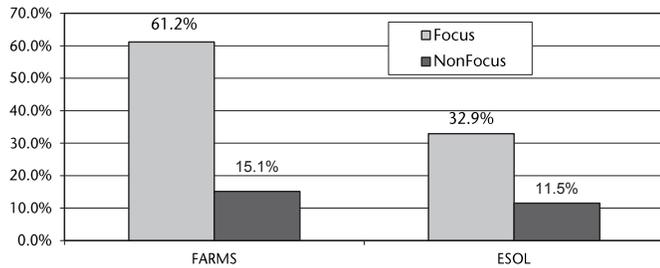
change from a school system that was 92 percent White, non-Hispanic in 1970 to a school system where there is no longer a majority race/ethnic group. Only the four major race/ethnic groups are shown in this graph for the purpose of presenting long-term trends.

Also shown on accompanying charts are enrollments in the four major race and ethnic groups from 2005 to 2015. These charts show how the greatest amount of enrollment change has been in White, non-Hispanic and Hispanic enrollment. The trend lines for these two groups have converged. In the case of Asian and African American enrollment, the increases have been more gradual and the trend lines are running in parallel. Not shown in the charts is enrollment in the “two or more races” category since this category was just established in 2010. However, it can be seen in the accompanying charts how the addition of this new category resulted in a dip in enrollment between 2009 and 2010 in White, non-Hispanic, African American, and Asian students, as some members of these groups began to identify with the “two or more races” category. (See Appendices A-3 and A-4 for trends in enrollment by race and ethnic group.)

Enrollment increases in MCPS special programs that serve the diverse student body occurred at higher rates than in the district as a whole. Student participation in the federal Free and Reduced-price Meals System (FARMS) Program is the school system’s best measure of student socioeconomic levels. In 2005, 30,720 students (22.0 percent of enrollment) participated in the program. By 2015, 54,542 students (34.9 percent of enrollment) participated in the program, an increase of 23,822 students. Student enrollment in the English for Speakers of Other Languages (ESOL) Program is a measure of student ethnic and language diversity. In 2005, 13,464 students (9.7 percent of total enrollment) were in this program. By 2015, 22,490 students (14.4 percent of total enrollment) were in this program, an increase of 9,026 students. In 2015, ESOL students represented 156 countries of origin and spoke 132 different languages. As immigration to the United States has been underway for many years, the share of ESOL students born in the United States has been increasing. U.S.-born students made up 65 percent of ESOL enrollment in 2015.

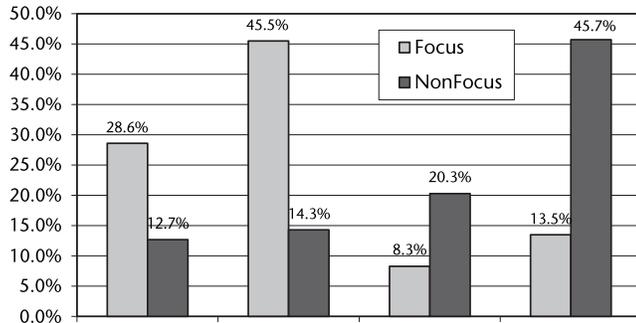


Percent FARMS and ESOL Enrollment at Focus and Non-focus Schools in 2015–2016



Source: Montgomery County Public Schools, Division of Long-range Planning, October 2016

Percent Race/ Ethnic Enrollment at Focus and Non-focus Schools in 2015–16



Source: Montgomery County Public Schools, division of Long-range Planning, October 2016

Focus and Non-focus Elementary Schools

The greatest concentration of student race and ethnic diversity and participation in the FARMS and ESOL programs is found in areas of the county where two conditions exist—major transportation corridors are present and affordable housing is available. In Silver Spring and Wheaton, these conditions are found in communities bordering New Hampshire Avenue, Georgia Avenue, and Columbia Pike. In Rockville, Gaithersburg, and Germantown, these conditions are found in communities bordering I-270 and Route 355. Affordable communities along these transportation corridors are characterized by apartment communities dating from the 1980s and earlier, and neighborhoods with relatively modest townhouses and single-family detached homes. Some of these homes may be occupied by two or more families who share housing costs. Schools in these areas have reduced class-sizes in Grades K–2 in order to address student needs and prepare the students for success in later grade levels.

At one time, communities in the “focus” elementary school service areas had little race and ethnic diversity. The wave of immigration over the past three decades has transformed these communities. In these focus school communities, enrollment

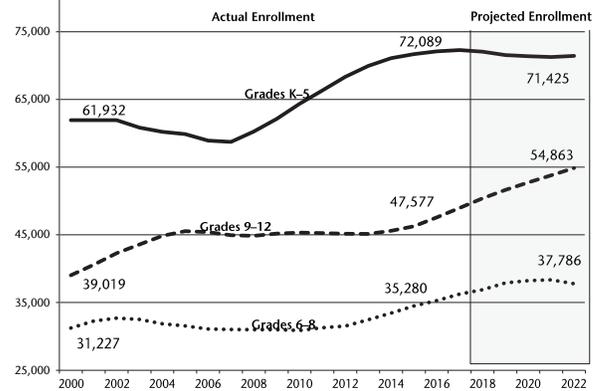
growth has been driven by turnover of existing housing units. There are currently 69 elementary schools in the focus school group (including the upper schools in the case of paired schools) and 66 elementary schools in the non-focus group. The 2015 demographic composition of focus and non-focus schools is compared in the accompanying charts.

MCPS Enrollment Forecast

The school enrollment forecasts presented in this document are based on county births, aging of the current student population, and migration patterns. As county births increased through 2007, more and more kindergarten students entered MCPS. The advent of full-day kindergarten, countywide since 2006, also has been a major factor in elementary school enrollment increases. Due to the decrease in births from 2007 to 2013, elementary enrollment growth will plateau in the next few years. However, due to the large elementary enrollment increases in the past nine years, MCPS is entering a strong period of growth at secondary schools.

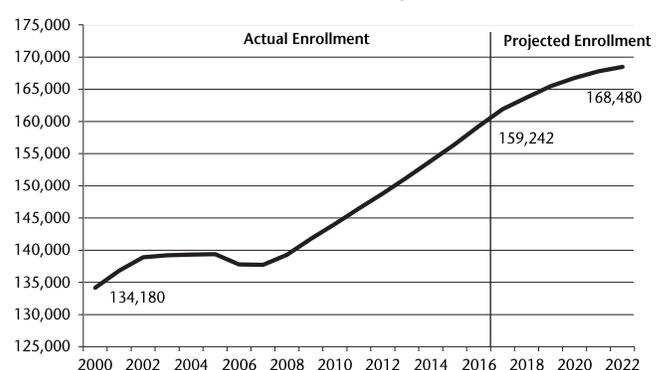
The six-year forecast for Grades K–5 enrollment shows a decrease of 664 students, from the 2016 preliminary enrollment of 72,089 students to the projected 2022 enrollment of 71,425 students. The six-year forecast for Grades 6–8 enrollment shows an increase of 2,506 students from the 2016 preliminary enrollment of 35,280 students to the projected

MCPS Grade Enrollment Projections
Actual 2000–2016 and Projected 2017–2022



Source: Montgomery County Public Schools, Division of Long-range Planning, October 2016

MCPS Total Enrollment Projection
Actual 2000–2016 and Projected 2017–2022



Source: Montgomery County Public Schools, Division of Long-range Planning, October 2016

2022 enrollment of 37,786 students. The six-year forecast for Grades 9–12 enrollment shows an increase of 7,286 students from the 2016 preliminary enrollment of 47,577 students to the projected 2022 enrollment of 54,863 students. The six-year forecast for total MCPS enrollment shows an increase of 9,238 students, from the 2016 preliminary enrollment of 159,242 students to the projected 2022 enrollment of 168,480 students. (See appendices A and B for further details on enrollments by grade level and program and Appendix P-2 for a description of the MCPS enrollment forecasting methodology.)

Summary

The last major period of enrollment increases at MCPS occurred during the 1950s, 1960s, and early 1970s, when children from the Baby Boom era, born between 1946 and 1964, enrolled in schools. Enrollment from this wave of growth peaked in 1972, at 126,912 students. Thereafter, the so-called Baby Bust era saw births decline and MCPS enrollment decrease to a low of 91,030 students in 1983. Since 1983, a much greater “baby boom” has occurred in the county. During the official Baby Boom years, the highest birth year in Montgomery County was 1963 when there were 8,461 resident births. The current baby boom in the county significantly surpasses this figure with births above 13,000 in recent years. Contributing to enrollment increases is the movement of households into the county from other parts of the world and the reduction in out-migration of households in recent years.

The current era of enrollment increases has seen enrollment grow by 65,417 students from 1983–2015. Keeping pace with enrollment growth, implementing full-day kindergarten at all

elementary schools, and accommodating class-size reductions at focus elementary schools have required a major investment in school facilities.

In the 2016–2017 school year, MCPS operates 133 elementary schools, 39 middle schools, 25 high schools, one career and technology high school, one alternative program, and five special program centers, for a total of 204 facilities. Since 1983, MCPS has opened 34 elementary schools, 18 middle schools, and six high schools (including 13 closed schools that were reopened). During the next six years, additional school capacity will be added through new school openings, revitalization/expansion projects, and classroom additions.

Competing with the need for school capacity is the need to preserve our investment in school facilities through a systematic schedule of school revitalization/expansion projects. Since 1983, 69 elementary schools, 14 middle schools, and 14 high schools have been revitalized/expanded. The funding level for school revitalization/expansion projects limits the school system’s ability to keep all schools in good condition. Consequently, the school system places a great emphasis on countywide projects to regularly upgrade building systems in aging facilities. Funding for such capital projects as Heating Ventilation and Air Conditioning (HVAC) and Planned Life-cycle Asset Replacement (PLAR) is important for extending the life-cycle of our schools and keeping all schools in good condition. The facility plans and capital projects described in this document enable the school system to add school capacity, systematically revitalize/expand older schools, and maintain all schools in good condition.

