

BALTIMORE COUNTY PUBLIC SCHOOLS

DATE: August 21, 2012

TO: **BOARD OF EDUCATION**

FROM: S. Dallas Dance, Ph.D., Superintendent

SUBJECT: **UPDATE ON THE NORTHWEST ECONOMIC DEVELOPMENT
AND RESIDENTIAL FORECAST STUDY**

ORIGINATOR: Kara Calder, Executive Director, Planning and Support Operations

**RESOURCE
PERSON(S):**

INFORMATION

That the Board of Education receives an updated on the Northwest Economic Development and Residential Forecast Study.

Attachment I – Executive Summary
Attachment II – Economic & Residential Development Forecast Study

Northwest Economic and Residential Forecast Study Executive Summary

As previously reported, Baltimore County Public Schools (BCPS) enrollment projections published in January 2012 show an increase in students system wide from the current enrollment of 105,315 to 109,133 in 2016 and then to 112,530 in 2021. This represents an increase of 7,215 students, or 6.9%, over ten years. In the northwest planning area of the county, which includes 21 elementary, 5 middle, and 6 high schools, enrollment is projected to increase from the current 22,306 to 23,516 in 2016 and then to 24,568 in 2021. This represents an increase of 2,262 students, or 10.1%, over ten years.

Because the northwest area is projected to grow at a pace greater than the system wide pace and because the area is designated as a growth area by Baltimore County, BCPS conducted a study of the economic and demographic conditions that may impact residential housing patterns and enrollment growth beyond what is captured in the current scope of BCPS projection methodology. In March 2012 BCPS engaged Sage Policy Group and Cropper GIS to accomplish the following objectives:

- Review and validate BCPS projection methodology.
- Deliver data regarding variables that may impact BCPS projections (housing development, pent up demand for home sales, foreclosure market, job market, pace of economic recovery), analyze the implications of these variables, and quantify their potential impact.
- Analyze growth management options and strategies for the short, mid, and long term by community and by school clusters.
- Produce overall findings about expected growth and enrollment management for the area that will support planning over five to seven years.

The work of the study was managed by the Office of Strategic Planning and guided by a steering committee that included BCPS administrators, representatives from Baltimore County Government, and from the community.

The consultants have outlined their methodology and overall findings in the accompanying executive summary. The corresponding full document will be available following tonight's meeting on the BCPS web site at: http://www.bcps.org/offices/strategic_planning/reports.html .

The Superintendent has directed staff to evaluate the consultants' findings and to make recommendations regarding how the study may inform and support the Capital Improvement Plan process, the development of immediate and intermediate relief strategies, and the improvement of the school system's strategic planning activities overall.



The Baltimore County Public Schools

Northwest Planning Region Economic & Residential Development Forecast Study

June 2012



ACKNOWLEDGEMENTS

Sage Policy Group and Cropper GIS Consulting (Sage-Cropper) would like to extend our appreciation to Baltimore County Public Schools for their hard work and dedication on the NW Economic and Residential Forecast Study. We would specifically like to thank Kara Calder, Executive Director, Planning and Support Operations, and the Office of Strategic Planning for their continued support and leadership throughout the process. Additionally, Planning Administrator Ghassan Shan and his team, Pamela Carter and Christopher Brocato, have consistently provided invaluable professional input.

Sage-Cropper would also like to recognize Andrea Van Arsdale, Director of Planning, and Jeff Mayhew, Deputy Director of Planning, for their assistance in providing the data necessary for the project. We also offer our thanks to Massoud Ahmadi, Director of Office of Research, Maryland Department of Housing and Community Development, for his office's support in providing foreclosure data to the team.

Also, we sincerely appreciate the efforts of the planning committee (shown to the right) that met several times during the process. Their input has been vital to the success of the project and full discovery of the various issues the Northwest Planning Region is facing.

THE PLANNING COMMITTEE

Name	Position
Baltimore County Public Schools	
Karen Blannard	Assistant Supt. - Elementary Zone 1
Patricia Lawton	Assistant Supt. - Elementary Zone 2
Melissa DiDonato	Assist. to the Assist. Supt. - Elementary Zone 2
Sharonda L. Gregory	Assist. to the Assist. Supt. - Elementary Zone 3
Penelope E. Martin	Assistant Supt. - Middle Schools
Dr. Edward Newsome Jr.	Assistant Supt. - Middle/High Schools
Michele Prumo	Chief of Staff
Craig Ebersole	Special Assistant, Physical Facilities
Kara Calder	Executive Director - Planning & Sup Ops
Barbara Burnopp	Executive Director - Fiscal Services
Dale Rauenzahn	Executive Director - Student Supp Svc
Clifford Collins	Chair, NW Advisory Council
Nancy Ostrow	President, PTA Council
Ghassan Shah	Planning Administrator-Strategic Planning
Pam Carter	Specialist
Chris Brocato	Planning Analyst
Baltimore County Government	
Keith Dorsey	Budget & Finance
Edward Blades	Budget & Finance
Andrea Van Arsdale	Planning
Dan Gundersen	Economic Development
Jeff Mayhew	Deputy Director - Baltimore Co Planning
Consultants - Sage Policy Group/Cropper GIS	
Matt Cropper	President, Cropper GIS
Jason Gibbs	Cropper GIS
Anirban Basu	President, Sage Policy Group
Carl DeLorenzo	Sage Policy Group
Sayer Niblett	Sage Policy Group

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Executive Summary

Background and Study Objectives

The Baltimore County Public Schools (BCPS) school system is comprised of five Planning Regions, one of which is the Northwest Planning Region. As a community and school planning region, northwest Baltimore County has experienced substantial economic and demographic change over the past decade and the area is projected to change faster than the balance of the county. BCPS hired Sage Policy Group and Cropper GIS (Sage-Cropper) to analyze existing and future economic and demographic conditions in the Northwest Planning Region that may impact residential patterns and enrollment growth beyond what is captured in current BCPS projection methodology. The Sage-Cropper study accomplishes the following objectives:

- Reviews and validates BCPS projection methodology;
- Delivers data regarding variables that may impact BCPS projections;
- Analyzes the implications of these variables, and quantifies their potential impact;
- Identifies and explores growth management options and strategies for the short, mid-, and long terms by community and school clusters; and
- Produces analytical findings regarding expected growth and enrollment management for the area that will support planning efforts over the next five to seven years.

The study, which was overseen by a steering committee comprised of BCPS administrators as well as representatives from Baltimore County Planning, Economic Development, and Budget offices, also provides a variety of possible solutions to address both existing and prospective capacity issues. These solutions are associated with varying degrees of financial, school community and family impacts.

Northwest Planning Region Enrollment Trends

According to BCPS projections, the Northwest Planning Region, which embodies 21 elementary, 5 middle and 6 high schools, is expected to grow more than 10 percent over the next ten years, from 22,306 students during the 2011-12 school year to 24,568 students by the 2021-22 school year. The Northwest Planning region will represent nearly 31 percent of countywide enrollment growth over the next decade. Countywide, BCPS projects enrollment to grow from 105,315 to 109,143 in 2016 and then to 112,530 in 2021, representing an increase of 7,215 students, or 6.9 percent over ten years.

Full-Time Equivalent (FTE) enrollment for 2011-12 in the Northwest Planning Region elementary schools is 10,128, while State-rated capacity (SRC) stands at 10,050 seats. Elementary school capacity utilization therefore approaches 101 percent. At the individual school level, 11 elementary schools are operating at more than 100 percent of SRC, with New Town Elementary School ranking as the most overcrowded at 127 percent. BCPS projections indicate that by the 2021-22 school year 16 elementary schools in the Northwest Planning Region will be operating at more than 100 percent of SRC. New Town Elementary School and Summit Park Elementary School, the two schools with the highest capacity utilization, will both be operating at more than 160 percent under the dynamic status quo.

Study Methods

Sage-Cropper began this four-month exercise by assembling data available from the U.S. Census Bureau, the Maryland Department of Planning, BCPS, the Baltimore County Department of Economic Development, and the Baltimore Metropolitan Council (BMC). A substantial share of collected data pertains to present school enrollment, past, current and prospective capital investment and potential residential development with respect to future growth. The study team deployed mapping software to analyze the data and to identify both imminent and more remote school capacity issues. The study team developed three scenarios, low, mid- and high, to account for possible deviations between enrollment forecasts and actual future enrollment.

Key Analytical Findings

This study has determined that BCPS projection methodology is sound. This is further confirmed by comparisons Sage-Cropper made with Maryland Department of Planning (MDP) projections. While the projection methods used by BCPS and MDP provide results that serve as an excellent basis for planning needs, this study has identified some unique conditions that may result in future enrollment numbers beyond projected baseline levels. These conditions were explored and their effects were analyzed to develop three enrollment projection scenarios. BCPS projections served as a low enrollment scenario, while two additional projections based on anticipated development in the area serve as mid- and high-case scenarios.

Under the low enrollment scenario, BCPS estimates that there will be a need for 1,525 new elementary seats over the next 10 years (by 2021) to establish utilization at 100 percent. Mid- and high-case scenarios are associated with greater demand for new capacity.

Under the mid-case scenario, the Northwest Planning Region would need to add 1,788 seats. The high-case scenario would require 2,781 additional seats to maintain 100 percent utilization into the 2021-22 school year.

One possible option is to simply live with overcrowding. In fact, this is already happening to an extent, with overcrowding most prevalent among elementary schools in the planning region. However, a number of considerations, including those emerging from academic research, indicate that ongoing over-utilization is sub-optimal, particularly in light of the demographics of the Northwest Planning Region. Free and Reduced Meal (FARMS) data indicate a significant rise in lower-income families in some concentrated areas of the Northwest Planning Region. However, the Northwest Planning Region as a whole is consistent with countywide increases in FARMS eligibility. For many years, the academic community has concluded that school overcrowding generates particularly negative outcomes for children associated with lower socioeconomic status. Accordingly, simply living with excess utilization is not a viable option and various relief strategies should be deployed.

Identified Relief Strategies to Address Over Capacity

Broadly, there are four categories of relief strategies. These include: 1) modification of grade configurations; 2) relocation of early childhood and magnet programs; 3) combining elementary and middle schools; and 4) new construction. The study team concludes that the most viable approach is a combination of all four of these strategies in which the first three will provide a greater balance of existing capacity and new construction of approximately 1,500 elementary school seats will provide the additional capacity that will be needed over the next ten years.

1. Modify Grade Configurations

This relief strategy involves grouping grades in non-traditional ways. For example, the study team has determined that among the most viable grade reconfigurations is an option to move 5th grade classes into middle schools. In cases where sufficient capacity exists in adjacent middle schools, moving selected 5th grade cohorts from the elementary schools that feed into these middle schools could provide some relief from overcrowding in coming years. Old Court Middle School and New Town High School currently have excess capacity and would be excellent candidates for accepting students as part of a grade configuration strategy.

2. Relocate early childhood (Campfield ECLDC) and magnet programs

There are presently three magnet programs in the Northwest: Campfield ECLDC, Wellwood and Church Lane. Early childhood and magnet programs that are associated with students from across the county create additional strain on local facilities. These represent natural candidates for relocation since they are not tied to specific zones.

3. Combine elementary and middle schools into K-8 centers

While Northwest Planning Region elementary school capacity utilization is currently at 101 percent, middle school capacity utilization sits at 88 percent. This creates opportunities to shift toward K-8 models. However, this strategy should only be deployed in cases where it does not have a negative effect on educational programming and where all schools are in close proximity and are associated with logical feeder patterns. Opportunity for this strategy is also limited by growth of middle school utilization in the Northwest Planning Region, which is projected to reach 93.7 percent in the 2021-22 school year.

4. Undertake new construction

While expensive, new construction represents an obvious way to address future capacity issues. BCPS student enrollment projections reflect a need for substantial additional elementary school space. This need is apparent in the New Town Cluster and in the Owings Mills Cluster. Under the low case scenario, the New Town Cluster is expected to reach capacity utilization of nearly 140 percent in 2021. In the Owings Mills Cluster, the corresponding statistic is 112 percent.

Funds have been committed to new school construction in the Fiscal Year 2014 Budget. However, one of the challenges to implementation of construction as a relief strategy is that the school system's current site bank includes only one property in the Northwest Planning Region. The school system should consider purchasing available and suitable property.

Conclusion

There are presently school capacity issues in the Northwest Planning Region that will intensify going forward. Fortunately, BCPS benefits from options that can be jointly utilized to balance capacity; options identified through the study team's cluster level analysis. The primary challenge will be combining strategies that enhance efficiency while maintaining the quality of educational programming.

Baltimore County Public Schools
S. Dallas Dance, PhD, Superintendent

Northwest Planning Region Economic & Residential Development Study

Submitted by:



Sage Policy
Group, Inc.

CropperGIS

Baltimore County Board of Education
August 21, 2012



BCPS Enrollment Overview

- Baltimore County Public Schools enrollment projections:
 - From 105,315 in 2011
 - To 112,530 in 2021
- 7,215 student increase (6.9%) over ten years
- Northwest planning area enrollment projections:
 - From 22,306 in 2011
 - To 24,568 by 2021
- 2,262 student increase (10.1%) over ten years

Objectives and Findings

Study Objective:

- Review and validate BCPS projection methodology

Study Findings:

- BCPS projection methodology is sound
- Projections are consistent with Maryland Department of Planning projections

Objectives and Findings

Study Objective:

- Identify variables that may impact BCPS projections, analyze implications of variables, and quantify their potential impact

Study Findings:

- The region has unique conditions that may result in future enrollment numbers beyond projected baseline levels.
- The consultants pose various growth scenarios based on these conditions to show possible deviations between enrollment forecasts and actual future enrollment.

Objectives and Findings

Study Objective:

- Analyze growth management options and strategies for the short, mid, and long term by community and by school clusters.

Study Findings:

- Four categories of relief strategies:
 - 1)modification of grade configurations
 - 2)relocation of early childhood and magnet programs
 - 3)combining elementary and middle schools
 - 4)new construction.

Objectives and Findings

Study Objective:

- Produce overall findings about expected growth and enrollment management for the area that will support planning over five to seven years.

Study Findings:

- The most viable approach is a combination of all four strategies in which the first three provide a greater balance of existing capacity and new construction of approximately 1,500 elementary school seats provides additional capacity needed over the next ten years

Next Steps

- Study findings will help inform:
 - Development of the Capital Improvement Plan
 - Planning for capacity relief strategies for schools
 - Improvement in the school system's strategic planning activities overall



The Baltimore County Public Schools

Northwest Planning Region Economic & Residential Development Forecast Study

June 2012



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Key Analytical Findings

This study has determined that BCPS projection methodology is sound. This is further confirmed by comparisons Sage-Cropper made with Maryland Department of Planning (MDP) projections. While the projection methods used by BCPS and MDP provide results that serve as an excellent basis for planning needs, this study has identified some unique conditions that may result in future enrollment numbers beyond projected baseline levels. These conditions were explored and their effects were analyzed to develop three enrollment projection scenarios. BCPS projections served as a low enrollment scenario, while two additional projections based on anticipated development in the area serve as mid- and high-case scenarios.

Under the low enrollment scenario, BCPS estimates that there will be a need for 1,525 new elementary seats over the next 10 years (by 2021) to establish utilization at 100 percent. Mid- and high-case scenarios are associated with greater demand for new capacity.

Under the mid-case scenario, the Northwest Planning Region would need to add 1,788 seats. The high-case scenario would require 2,781 additional seats to maintain 100 percent utilization into the 2021-22 school year.

One possible option is to simply live with overcrowding. In fact, this is already happening to an extent, with overcrowding most prevalent among elementary schools in the planning region. However, a number of considerations, including those emerging from academic research, indicate that ongoing over-utilization is sub-optimal, particularly in light of the demographics of the Northwest Planning Region. Free and Reduced Meal (FARMS) data indicate a significant rise in lower-income families in some concentrated areas of the Northwest Planning Region. However, the Northwest Planning Region as a whole is consistent with countywide increases in FARMS eligibility. For many years, the academic community has concluded that school overcrowding generates particularly negative outcomes for children associated with lower socioeconomic status. Accordingly, simply living with excess utilization is not a viable option and various relief strategies should be deployed.

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1. Modify Grade Configurations

This relief strategy involves grouping grades in non-traditional ways. For example, the study team has determined that among the most viable grade reconfigurations is an option to move 5th grade classes into middle schools. In cases where sufficient capacity exists in adjacent middle schools, moving selected 5th grade cohorts from the elementary schools that feed into these middle schools could provide some relief from overcrowding in coming years. Old Court Middle School and New Town High School currently have excess capacity and would be excellent candidates for accepting students as part of a grade configuration strategy.

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4. Undertake new construction

While expensive, new construction represents an obvious way to address future capacity issues. BCPS student enrollment projections reflect a need for substantial additional elementary school space. This need is apparent in the New Town Cluster and in the Owings Mills Cluster. Under the low case scenario, the New Town Cluster is expected to reach capacity utilization of nearly 140 percent in 2021. In the Owings Mills Cluster, the corresponding statistic is 112 percent.

Funds have been committed to new school construction in the Fiscal Year 2014 Budget. However, one of the challenges to implementation of construction as a relief strategy is that the school system's current site bank includes only one property in the Northwest Planning Region. The school system should consider purchasing available and suitable property.

Conclusion

There are presently school capacity issues in the Northwest Planning Region that will intensify going forward. Fortunately, BCPS benefits from options that can be jointly utilized to balance capacity; options identified through the study team's cluster level analysis. The primary challenge will be combining strategies that enhance efficiency while maintaining the quality of educational programming.

1.0 Introduction

1.1 Project Overview and Objectives

The Baltimore County Public Schools' Northwest Planning Region has undergone significant change over the past 10 years. In particular, the region has been a primary location for residential development. Significant growth has produced challenges and strains on the region's infrastructure. For example, schools and street intersections not initially designed to accommodate recent population growth in the region are now experiencing capacity issues.

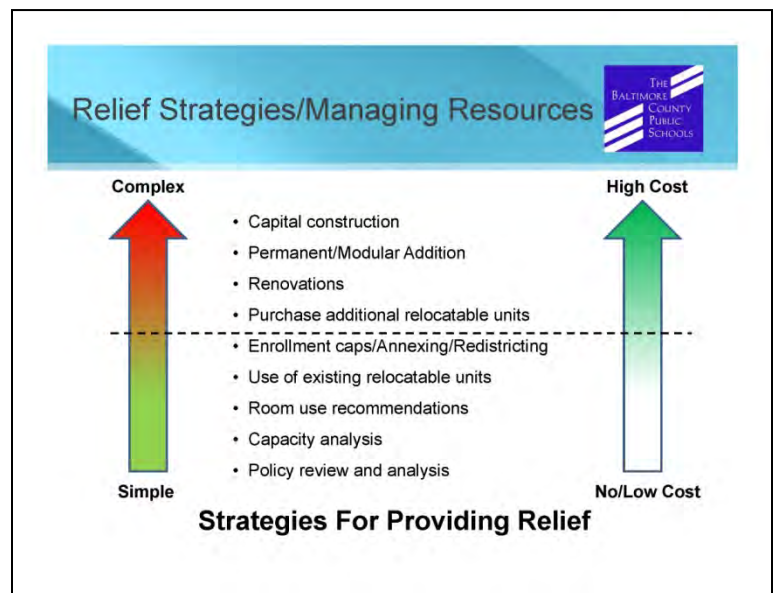
The Baltimore County Public Schools (BCPS) hired Sage Policy Group and Cropper GIS Consulting (Sage-Cropper) to analyze the conditions in the Northwest Planning Region. Sage-Cropper was tasked with 3 primary duties:

1. Study the existing conditions of the Northwest Planning Region as they relate to school capacity and population;
2. Analyze future economic and demographic growth that could affect the region's schools; and
3. Identify relief strategies that the school system could consider to provide relief to buildings that are over capacity.

BCPS organized a team of advisors comprised of senior leaders and/or planners from across county government. Members of the workgroup provided Sage-Cropper with necessary data and offered invaluable insight into educational considerations and community dynamics.

The steering committee reviewed work being performed by the study team on a monthly basis and provided feedback regarding relief strategies Sage-Cropper developed over the course of the study's research phase. In total, Sage-Cropper met with the workgroup on four (4) separate occasions to review findings and discuss the needs of the Northwest Planning Region. Analytic concepts explored during these meetings included:

- Modify Grade Configurations;
- Relocate early childhood (Campfield ECLDC) and magnet programs;
- Combine elementary and middle schools into K-8 centers; and
- Undertake new construction.



1.2 Data Collection

The first phase of the process was data collection. Sage-Cropper assembled the following items from:

- Baltimore County Public Schools
 - Current school attendance zones (elementary, middle, high);
 - Current school locations;
 - BCPS Site bank properties;
 - Geocoded student enrollment data (both historical and current);
 - School capacity information;
 - Planned school construction, renovation, or consolidation;
 - Recent changes to school facility capacity in the area and any recent redistricting changes;
 - Board of Education relevant policies and rules; and
 - Enrollment forecasts.
- Baltimore County Department of Economic Development
 - Current development list showing existing approved developments in the county;



- Economic development plans;
 - County Master Plan 2020; and
 - Housing foreclosure information / underwater mortgages.
- Baltimore Metropolitan Council
 - Existing GIS subdivision layers;
 - Plans for new developments in northwest Baltimore County;
 - Plans and contacts for military base realignment/expansion; and
 - Other pertinent housing data from the Metropolitan Planning Commission (MPC).

1.3 Data Analysis

Sage-Cropper incorporated collected data into Geographic Information Systems (GIS). Data were analyzed extensively to determine trends and relationships between enrollment and regional macroeconomic conditions. The following details the study team's analytical methodology:

- Existing Housing Development Analysis
 - Determine trends in historic student enrollment by subdivision and community;
 - Analyze subdivisions by type, age, cost of housing, and pupil yield;
 - Determine whether subdivisions and communities are gaining or losing students;
 - Review, analyze, and compare current Baltimore County subdivision list (SLIST) data with regional and national development and real estate trends;
 - Map major developments;
 - Compare BCPS enrollment projections (10 year) with Baltimore County Adequate Public Facilities Ordinance (APFO) methods of evaluating future student yields from approved SLIST developments;
 - Analyze the rate of existing housing turnover (including sales, rentals and foreclosures), migration trends and their impact on enrollment; and
 - Determine the impact of major triggers and trends on population growth and decline (e.g. Planned Unit Developments [PUD's], military base realignments and closures [BRAC], etc.).
- Student Enrollment, Demographics, and Trend Analysis
 - Examine historical BCPS enrollment and Census 2010 data in the following categories: income, race, type of household, and house/unit tenure and age; and
 - Analyze Census data and projections through 2020.
- Economic Development Analysis
 - Analyze the impact of Baltimore County Master Plan 2020;
 - Review of Baltimore County economic development plans;
 - Review of job forecast and activities at major employers; and
 - Determine growth trends in the Northwest Planning Region.
- School System Trends

Sage-Cropper reviewed the school system's enrollment trends to explore alternatives to redistricting that could provide relief to schools. Alternatives include moving special programs from schools that are over-utilized or various policies that would bring students to schools from beyond their assigned attendance zones. Many factors that affect enrollment were examined and related to school capacity. This work included:

- Review of BCPS facility inventory and verification of Northwest Planning Region capacity (Educational Facilities Master Plan 2011);
- Analysis and verification of Northwest Planning Region current enrollment and projections through 2020;
- Analysis of private school enrollment trends to determine future impacts on BCPS enrollment;
- Analysis of current distribution of students, with respect to school capacities and school choice options (magnet programs, special permission transfer, etc.);

- Review of changes in the instructional models and trends of students and support services that may impact capacity (e.g. Early childhood, homeless, English Language Learners, Special Education, Title I, Advanced Placement, On-Line Learning etc.); and
- Review of BCPS relief strategies, policies and rules that impact student enrollment and facility capacity.
- School Site Analysis

Sage-Cropper reviewed school sites within the BCPS site bank to determine whether various locations were optimal for potential school sites. Sites were examined for feasibility based on demographic forecasts and whether or not considered sites complied with Maryland State Department of Education (MSDE) recommended usage guidelines. Work for this part of the project included:

- Review of current school sites and site bank properties to determine if their sizes and locations were sufficient to meet future needs;
- Review of Baltimore County vacant properties list for viable school sites in growth areas;
- Recommendation of locations (public and private) to consider for future site bank acquisition as appropriate;
- A simple real estate analysis of potential school and program sites including non-traditional models (e.g. urban vs. rural, lot size, footprint, etc.);
- Review of nexus of growth and gaps of service to determine where BCPS capital/non-capital relief strategies may potentially be fruitfully implemented;
- Review of BCPS history of capital and non-capital relief strategies;
- Recommendation of relief strategies in alignment with current relief strategies and best practices; and
- Recommendation of policy changes that would accommodate new paradigms for future school sites and facilities.
- Development of Relief Strategies

Sage-Cropper developed a series of conceptual relief strategy scenarios based on data and information studied during the course of the project. These scenarios include:

- Modification of grade configurations;
- Relocation of Early childhood and magnet programs;
- Combination of elementary and middle schools into K-8 centers; and
- Undertaking of new construction.

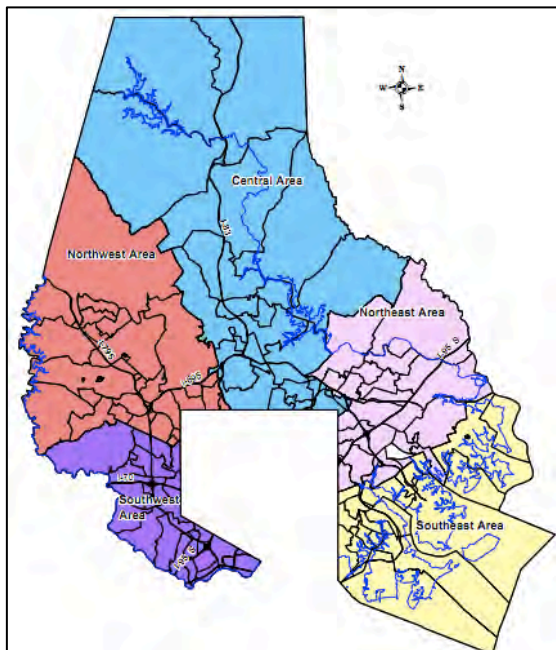
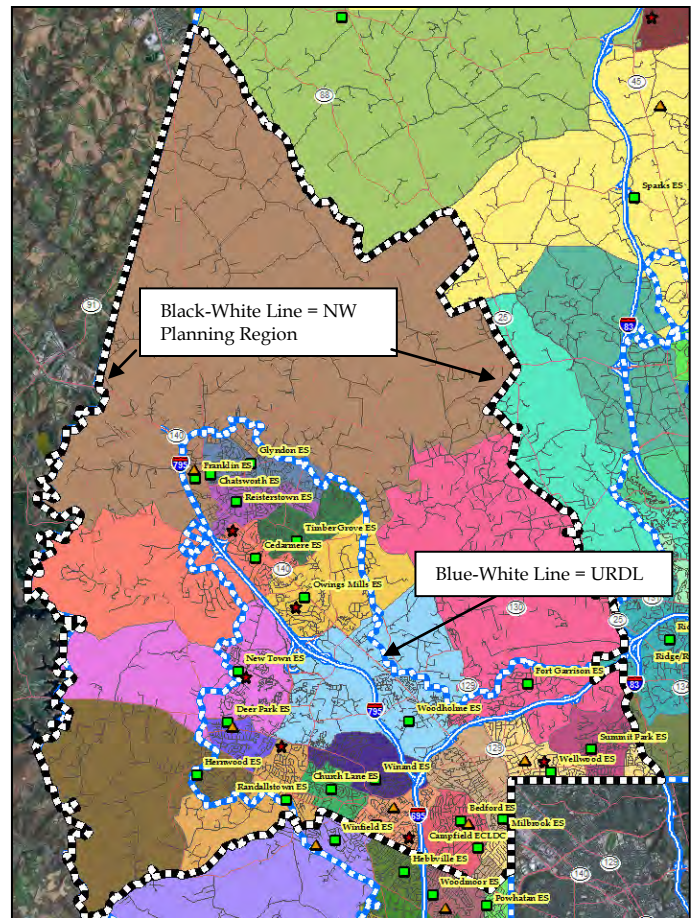
2.0 Planning Considerations

2.1 Northwest Planning Region: Elementary, Secondary, and Magnet School Conditions

The Northwest Planning Region is comprised of 20 elementary schools, 5 middle schools, 6 high schools and one early childhood learning and development center.¹ The region has the second highest non-white population in Baltimore County. Minority enrollment in the region was 77.65 percent in 2011 according to the BCPS.² At that time, the region served more than 22,000 students.^{3,4}

Other characteristics of the Northwest Planning Region include:

- Schools with enrollment at 90 percent or more of their State Rated Capacity (SRC) include 14 elementary schools, three middle schools, and three high schools;
- Relocatable classrooms in use during 2010-2011 totaled 44 (1,054 seats);
- Average age of facilities is 46 years; and
- Average percentage of students on free/reduced price meals is 43.97 percent.⁵



Schools, residential construction, and economic growth are highly restricted within the Urban Rural Demarcation Line (URDL). Although the Northwest Planning Region is large, only a small portion of the land within the region is capable of supporting increased density. This is evident when analyzing current population density, school locations, and growth pressures in the Northwest Planning Region. In other words, the research shows that the population within the Northwest Planning Region is already highly dense and any new housing growth will only increase residential and business density, thus further impacting school capacity. It should be noted that many planners favor development in already developed areas in order to maximize utilization of available infrastructure and to help preserve open space in other parts of the community.

¹ Projections for Baltimore County Public Schools, September 30, 2012-2021, Northwest Planning Region Revised 2/12/2012

² BCPS, "2011 BCPS Educational Facilities Master Plan (EFMP)," July 1, 2011.

³ Projections for Baltimore County Public Schools, September 30, 2012-2021, Northwest Planning Region Revised 2/12/2012

⁴ 22,306

⁵ BCPS, "2011 BCPS Educational Facilities Master Plan (EFMP)," July 1, 2011.

Elementary schools within the Northwest Planning Region are either at capacity or are overcrowded. When reviewing the total full-time equivalent (FTE) enrollment of the area in relation to state rated capacity (SRC), there are 10,128 elementary students with 10,050 seats allocated for the region. This equates to 100.8 percent of total capacity.

Eleven elementary schools are operating over 100 percent of SRC, with New Town Elementary School the highest at 127 percent of its total capacity. Some school zones cross over into the Northwest Planning Region from adjacent regions. These schools from other regions were also analyzed as they affect or have the potential to affect capacity issues in the Northwest Planning Region.

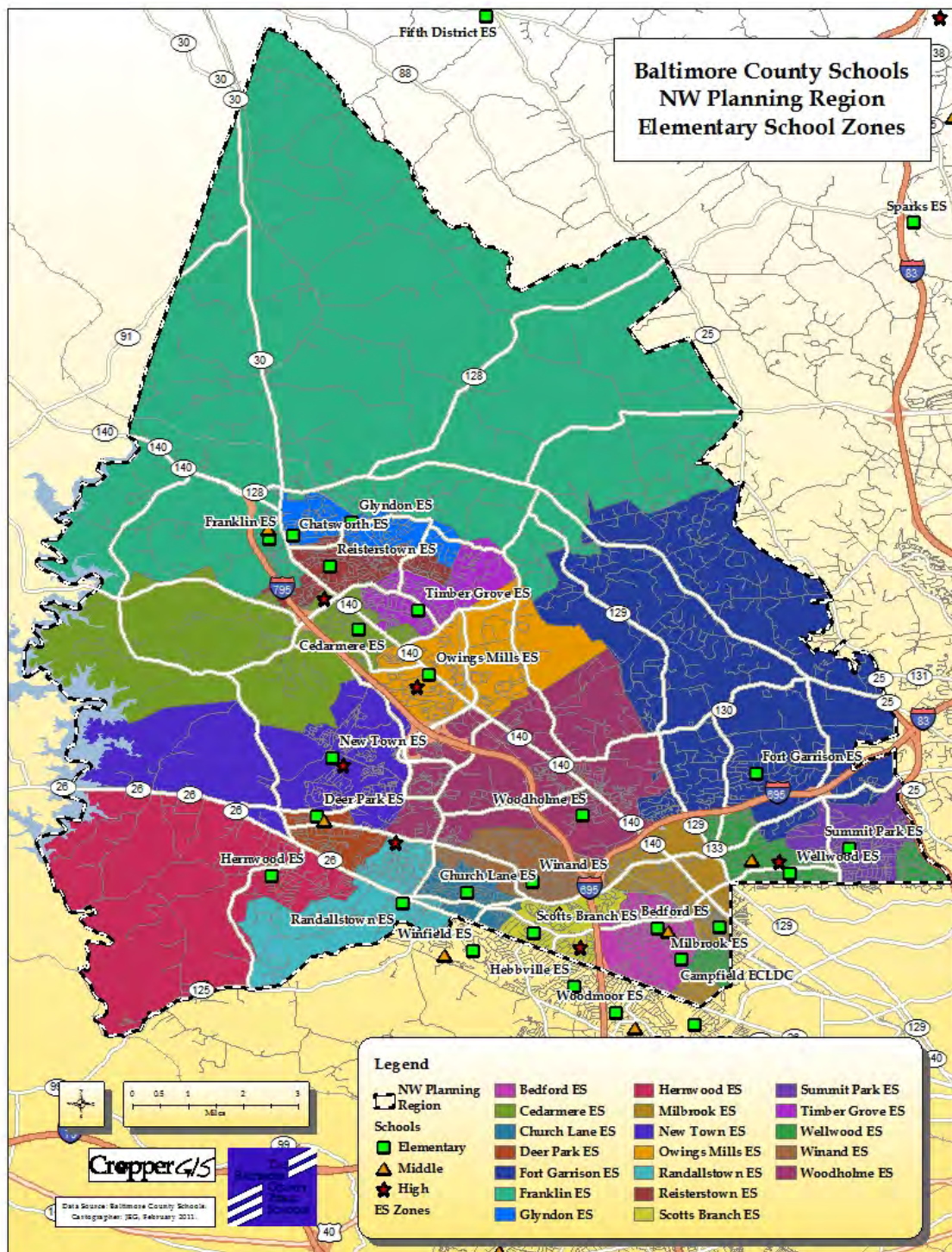
Middle schools are operating at 88.4 percent utilization with 5,131 students and 5,806 seats. High schools are operating at 85.1 percent of capacity with 6,727 students and 7,903 seats. MSDE calculates SRC for secondary schools using an 85 percent utilization rate for standard classrooms. BCPS uses 90 percent utilization as an indicator that additional space is needed.

NW Planning Region ES Enrollment and Capacity			
ES Zone	Enrollment	Capacity	Utilization
Bedford ES	260	309	84.14%
Campfield Center	258	322	80.12%
Cedarmere ES	456	474	96.20%
Chatsworth ES	385	442	87.10%
Church Lane ES	477	476	100.21%
Deer Park ES	380	451	84.26%
Fort Garrison ES	462	431	107.19%
Franklin ES	494	473	104.44%
Glyndon ES	470	520	90.38%
Hernwood ES	363	428	84.81%
Milbrook ES	337	319	105.64%
New Town ES	884	697	126.83%
Owings Mills ES	736	699	105.29%
Randallstown ES	387	398	97.24%
Reisterstown ES	510	450	113.33%
Scotts Branch ES	554	511	108.41%
Summit Park ES	428	336	127.38%
Timber Grove ES	553	600	92.17%
Wellwood ES	462	455	101.54%
Winand ES	491	583	84.22%
Woodholme ES	781	676	115.53%
Total ES	10,128	10,050	100.78%
Source: BCPS 2011-2012 FTE Enrollment			

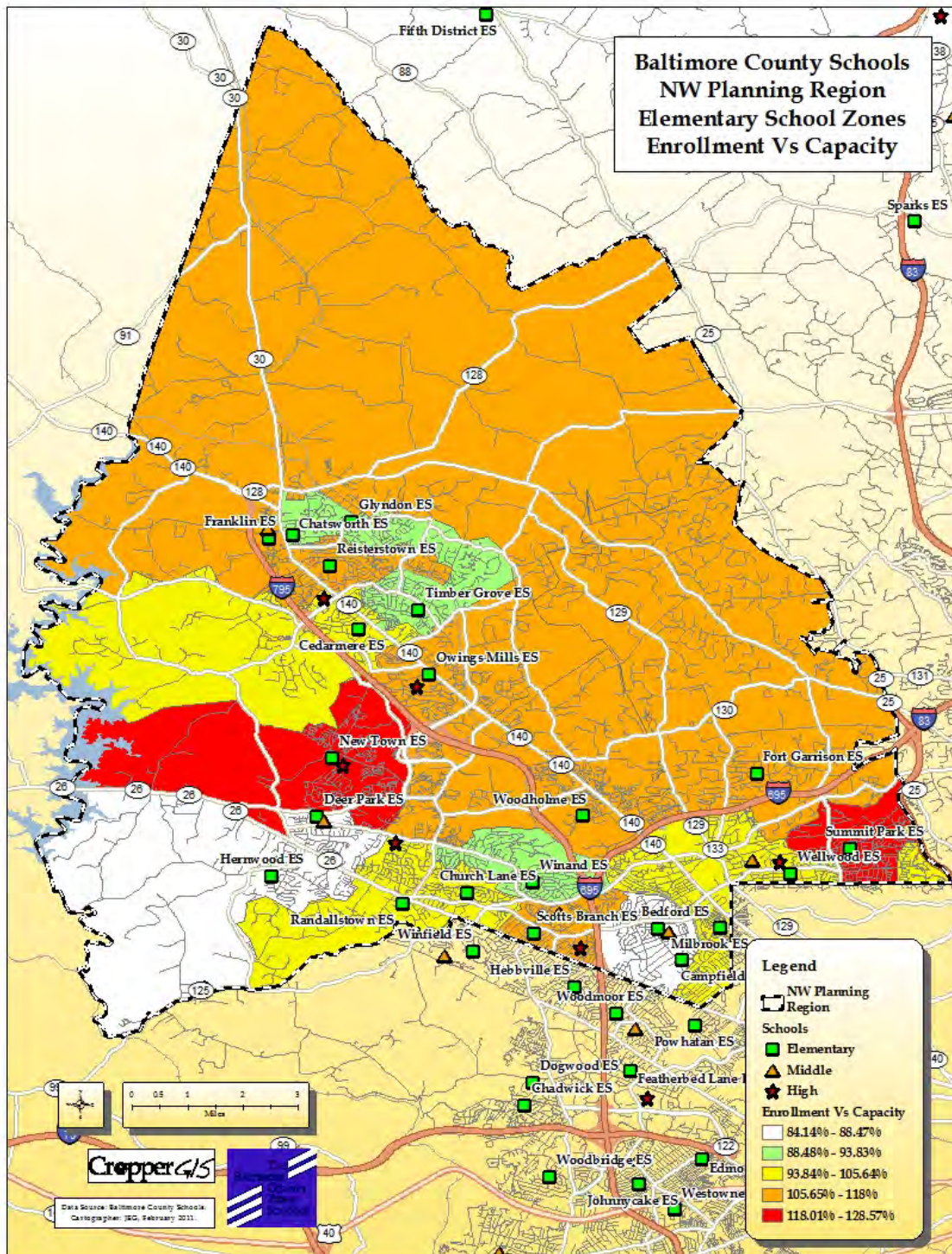
NW Planning Region MS Enrollment and Capacity			
MS Zone	Enrollment	Capacity	Utilization
Deer Park MS	1,235	1,368	90.28%
Franklin MS	1,292	1,389	93.02%
Old Court MS	572	983	58.19%
Pikesville MS	1,017	1,006	101.09%
Sudbrook Magnet MS	1,015	1,060	95.75%
Total MS	5,131	5,806	88.37%
Source: BCPS 2011-2012 FTE Enrollment			

NW Planning Region HS Enrollment and Capacity			
HS Zone	Enrollment	Capacity	Utilization
Franklin HS	1,524	1,647	92.53%
Milford Mill HS	1,373	1,465	93.72%
New Town HS	869	1,303	66.69%
Owings Mills HS	968	1,103	87.76%
Pikesville HS	898	1,006	89.26%
Randallstown HS	1,095	1,379	79.41%
Total HS	6,727	7,903	85.12%
Source: BCPS 2011-2012 FTE Enrollment			

The map below shows elementary school zones within the Northwest Planning Region. The tables on the previous page indicate that eleven schools are over 100 percent of capacity, whereas four schools are operating at 80-85 percent of capacity. Redistricting is a common method to help balance building utilization within an area. One of the first approaches to redistricting is to assess the building utilization of the schools in an area and to determine if there are overcrowded schools adjacent to under-utilized buildings. In the Northwest Planning Region, overcrowded schools are located throughout. Another challenge to using redistricting as a relief strategy is that schools with available space do not have enough seats to help relieve overcrowded buildings. Aggregate elementary school utilization in the Northwest Planning Region is over 100 percent SRC, so redistricting alone is not an effective relief strategy as it would leave all schools operating over their state rated capacities.



The map below shows elementary school zones in relation to building utilization. Any zone that is yellow, orange, or red is operating at over 94 percent of SRC. Yellow areas are at 94-105 percent of SRC, orange areas are at 105-118 percent, and red areas are at 118-125 percent. White-colored areas are those that are operating at the lowest utilization (84-88 percent of SRC) and green areas are operating at 88-94 percent of SRC. There is opportunity to partially balance utilization by moving attendance zones. However, because the overall capacity utilization rate exceeds the region-wide SRC, complete balance is impossible under current conditions. There is also significant residential growth planned, which will exacerbate overcrowding in the Northwest Planning Region.



Elementary Schools: Existing Conditions and Future Projections (if no space is added)

School planners (including BCPS) establish clusters by grouping together geographically-proximate schools. The Northwest Planning Region is comprised of six (6) clusters. Utilization details pertaining to schools contained within each cluster are provided in the table below and are color-coded. For example, red highlights in the table indicate a school utilization rate greater than 115 percent of SRC. An examination of the utilization classifications in the table indicates that a majority of schools in the Northwest Planning Region exceed 100 percent utilization. In addition, schools within certain clusters currently under 100 percent utilization are forecast to exceed 100 percent utilization by 2021.

ELEMENTARY SCHOOLS		70%-	70%+	80%+	85%+	90%+	95%+	100%+	115% +			
NW Planning Region	State	Util	Util	Util	Util	Util	Util	Util	Util	Util	Util	Util
	CAP	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Deer Park ES	451	84.3%	90.0%	93.8%	92.0%	91.6%	92.9%	93.6%	94.2%	96.2%	98.2%	100.7%
New Town ES	697	126.8%	140.3%	150.8%	163.7%	165.9%	167.1%	165.1%	163.7%	163.7%	163.7%	163.7%
Woodholme ES	676	115.5%	121.3%	126.9%	134.2%	135.4%	136.7%	136.8%	137.6%	138.3%	139.1%	139.8%
New Town Cluster Total	1,824	112.1%	120.8%	127.9%	135.0%	136.2%	137.5%	137.0%	136.8%	137.6%	138.4%	139.3%
Bedford ES	309	84.1%	86.7%	82.8%	84.1%	93.5%	91.9%	88.3%	85.8%	86.4%	86.4%	86.1%
Campfield Center	322	80.1%	85.1%	83.5%	84.8%	88.2%	90.4%	90.1%	89.4%	91.9%	92.9%	93.8%
Milbrook ES	319	105.6%	112.9%	106.0%	105.3%	110.0%	114.7%	118.8%	117.2%	119.1%	119.7%	120.4%
Summit Park ES	336	127.4%	139.6%	150.0%	157.4%	168.5%	169.6%	169.9%	171.4%	169.9%	168.5%	167.0%
Wellwood ES	455	101.5%	106.8%	111.4%	112.3%	115.8%	117.6%	117.4%	116.7%	119.8%	121.5%	122.6%
Summit Park Cluster Total	1,741	100.2%	106.7%	107.6%	109.6%	115.9%	117.5%	117.6%	116.8%	118.3%	118.7%	119.0%
Cedarmere ES	474	96.2%	98.9%	103.0%	106.1%	106.1%	101.3%	102.3%	103.4%	105.3%	107.4%	109.7%
Fort Garrison ES	431	107.2%	109.7%	113.5%	112.1%	111.4%	111.8%	110.0%	108.4%	110.2%	110.9%	111.4%
Owings Mills ES	699	105.3%	105.6%	109.6%	113.6%	113.9%	112.9%	114.3%	115.5%	117.7%	120.0%	122.7%
Timber Grove ES	600	92.2%	92.3%	92.0%	92.0%	96.7%	97.0%	97.0%	98.0%	99.2%	99.7%	100.5%
Owings Mills Cluster Total	2,204	100.1%	101.4%	104.1%	105.8%	107.0%	105.9%	106.2%	106.7%	108.5%	110.0%	111.7%
Church Lane ES	476	100.2%	103.6%	102.5%	103.8%	102.7%	102.1%	101.9%	104.4%	105.3%	106.5%	108.2%
Scotts Branch ES	511	108.4%	110.6%	114.1%	118.6%	120.4%	122.1%	123.3%	123.3%	123.3%	123.3%	123.3%
Winand ES	583	84.2%	87.8%	87.7%	90.9%	93.3%	94.9%	95.9%	97.6%	96.7%	95.9%	96.7%
Scotts Branch Cluster Total	1,570	96.9%	100.0%	100.8%	103.8%	105.0%	105.9%	106.6%	108.0%	108.0%	108.0%	108.9%
Chatsworth ES	442	87.1%	88.9%	88.7%	89.6%	87.8%	88.0%	87.8%	88.5%	89.4%	90.0%	90.7%
Franklin ES	473	104.4%	105.9%	103.2%	102.1%	107.6%	108.0%	108.0%	109.1%	110.1%	111.0%	111.6%
Glyndon ES	520	90.4%	90.2%	87.9%	86.3%	90.8%	91.2%	91.2%	91.9%	92.9%	93.5%	94.2%
Reisterstown ES	450	113.3%	116.4%	120.0%	123.3%	118.7%	114.7%	114.7%	116.0%	117.1%	118.0%	118.7%
Reisterstown Cluster Total	1,885	98.6%	100.1%	99.6%	99.9%	101.0%	100.3%	100.2%	101.2%	102.2%	102.9%	103.6%
Hernwood ES	428	84.8%	87.4%	87.4%	84.6%	91.6%	93.0%	93.7%	94.6%	96.5%	98.4%	100.5%
Randallstown ES	398	97.2%	98.2%	97.2%	94.2%	98.0%	98.2%	98.0%	98.2%	99.5%	101.0%	103.3%
Hernwood Cluster Total	826	90.8%	92.6%	92.1%	89.2%	94.7%	95.5%	95.8%	96.4%	97.9%	99.6%	101.8%
NW ELEMENTARY TTL	10,050	100.8%	104.6%	106.7%	109.0%	111.4%	111.7%	111.8%	112.2%	113.3%	114.2%	115.2%

Secondary Schools: Existing Conditions and Future Projections (if no space is added)

The table below shows building utilization over time at the middle and high school level. Blue to green colored cells represent under-utilized (<70 percent) to efficient use of space (80-85 percent). Yellow to red colored cells identify schools that are approaching overcrowding (90 percent) to those that are significantly overcrowded (>115 percent).

Looking at the total utilization across all Northwest Planning Region middle schools and high schools, it is evident that the schools are currently operating at an efficient utilization, but are forecast to grow slightly in the out-years, bringing them into the 90-100 percent capacity utilization range. Old Court Middle School and New Town High School are currently under-utilized, which creates an opportunity to balance secondary school populations within the Northwest Planning Region.

SECONDARY SCHOOLS		70%-	70%+	80%+	85%+	90%+	95%+	100%+	115% +			
NW Planning Region	State	Util	Util	Util	Util	Util	Util	Util	Util	Util	Util	Util
	CAP	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Deer Park Middle	1,368	90.3%	94.4%	93.6%	87.6%	88.2%	89.3%	92.5%	91.1%	92.3%	95.0%	98.5%
Franklin Middle	1,389	93.0%	91.4%	91.9%	92.8%	90.4%	93.3%	94.5%	99.9%	96.9%	98.6%	99.1%
Old Court Middle	983	58.2%	53.9%	58.2%	58.2%	62.7%	64.0%	66.9%	63.9%	63.9%	63.1%	65.5%
Pikesville Middle	1,006	101.1%	101.2%	101.8%	98.7%	95.9%	98.1%	101.7%	105.0%	105.9%	103.7%	104.1%
Sudbrook Middle	1,060	95.8%	95.6%	97.3%	96.8%	96.8%	96.8%	96.8%	96.8%	96.8%	96.8%	96.8%
NW MIDDLE TOTAL	5,806	88.4%	88.2%	89.3%	87.5%	87.3%	88.9%	91.0%	92.0%	91.7%	92.3%	93.7%
Franklin High	1,647	92.5%	91.5%	91.5%	89.2%	87.7%	87.1%	87.1%	85.1%	89.3%	89.5%	91.1%
Milford Mill Academy	1,465	93.7%	98.4%	104.0%	103.7%	102.8%	101.2%	99.0%	96.8%	96.8%	99.2%	99.9%
New Town High	1,303	66.7%	62.2%	61.6%	61.7%	61.4%	62.2%	63.9%	66.2%	68.8%	71.7%	74.5%
Owings Mills High	1,103	87.8%	85.7%	86.5%	92.7%	93.7%	95.0%	93.4%	92.3%	94.0%	95.5%	97.3%
Pikesville High	1,006	89.3%	91.6%	96.6%	99.6%	97.4%	97.7%	98.5%	97.3%	101.7%	106.7%	107.7%
Randallstown High	1,379	79.4%	78.6%	75.8%	73.8%	74.0%	75.4%	76.1%	80.1%	82.2%	83.3%	82.4%
NW HIGH TOTAL	7,903	85.1%	84.9%	86.1%	86.5%	85.8%	86.0%	85.9%	85.8%	88.3%	90.3%	91.4%

Magnet Programs, Charter Schools and School Choice Policy

BCPS provides a variety of specialized program options through its magnet schools. The unique educational experiences that these magnet programs provide add value to the BCPS system. However, there is currently only one charter school in the BCPS school system. The success of BCPS magnet programs and the choices they provide may be a reason that more charter schools have not been established in the school system.

This study examined the effects of magnet programs and school choice on enrollment at neighborhood schools to explore whether or not current boundaries were appropriately sized and if adjustments to enrollment policy could be implemented to improve utilization balance. The findings were that enrollment choice is not the cause of imbalanced utilization at the elementary school level, although at school choice is the likely cause of underutilization at Old Court Middle School and New Town High School. There is currently a policy in place to allow schools operating over capacity to deny enrollment requests from out-of-zone students. This policy is sufficient to address any utilization imbalances caused by enrollment choice and any additional policy restrictions may detract from the value of school choice.

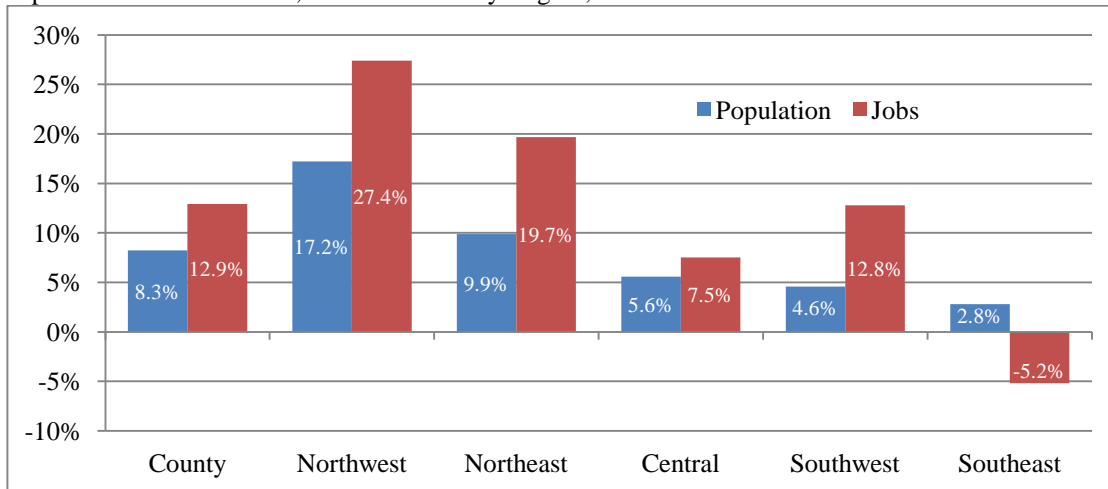
2.2 Northwest Planning Region: Demographics and Economic Conditions

At the heart of school capacity planning are enrollment projections. These projections must incorporate substantial amounts of information, including data regarding economic, demographic, and residential development trends. This section of the report provides statistical detail and narrative regarding those trends.

Population and Job Growth

As one of Baltimore County's designated growth areas, it comes as little surprise that Owings Mills and the Northwest Planning Region are adding population and employment more rapidly than the balance of the County. This pattern will likely continue given the immense level of developer interest in and around Owings Mills, with developers presently dueling one another to attract permits, tenants, and financing.

Population and Job Growth, Baltimore County Region, 2000-2010

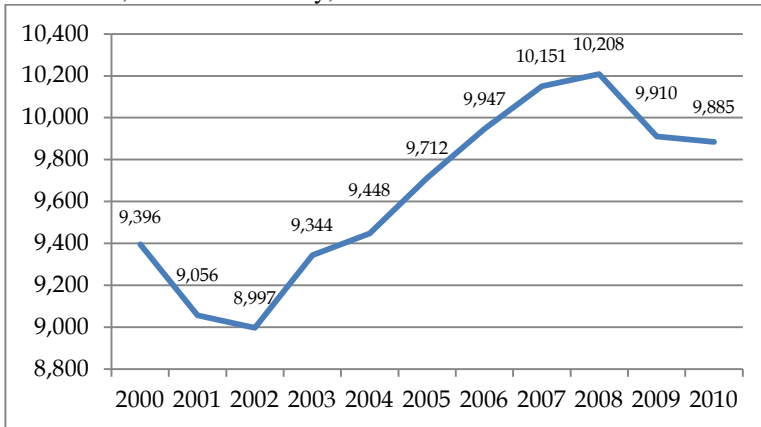


Source: Baltimore Metropolitan Council

The pace of economic expansion in the northwest portion of the county has been rapid. Between 2000 and 2010, this section of the county added 27,220 to its population and gained 22,515 jobs. These absolute gains translate into 17.2 percent population growth and 27.4 percent employment growth. The corresponding figures for all of Baltimore County are 8.3 percent and 12.9 percent, respectively.

That said, there might be a lull in enrollment growth sometime in the future. The economic downturn impacted household formation and birthrates, with the number of live births in the county declining from 10,208 in 2008 to 9,885 in 2010. This represents a decline of 3.2 percent. With the economy now recovering, there is a presumption that the birthrate has stabilized and may now be rising. The impact is likely to be too small to alter enrollment forecasts meaningfully. Moreover, given the housing development proposed for the Northwest Planning Region, the impact of reduced births for two to three years may be more than fully offset by migration to northwest Baltimore County from other parts of the region, state, and nation.

Live Births, Baltimore County, 2000-2010

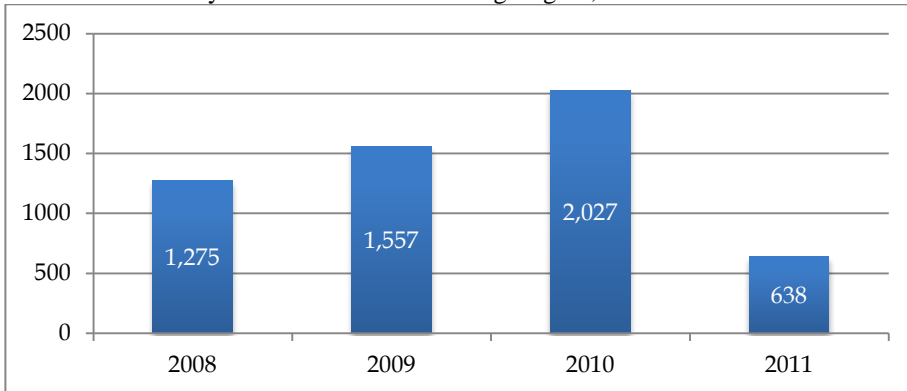


Source: Maryland Department of Health and Mental Hygiene, Maryland Vital Statistics Reports

Foreclosure Activity

One would suspect that the ongoing foreclosure crisis that impacted many parts of Maryland, including the northwest corner of Baltimore County, would have substantially impacted enrollment figures. The logic is that displaced families may leave the community, thereby diminishing the community's school-age population.

Foreclosure Activity in the Northwest Planning Region, 2008-2011



Source: Maryland Foreclosure Task Force

Northwest Planning Region FTE Enrollment, 2008-2011

	2008	2009	2010	2011	Net Change 2008-2011
<i>Elementary</i>	9,564	9,723	9,850	10,128	564
<i>Middle</i>	4,928	5,022	5,063	5,131	203
<i>High</i>	7,153	6,928	6,827	6,727	-426
Total Northwest Enrollment	21,645	21,673	21,740	21,986	341

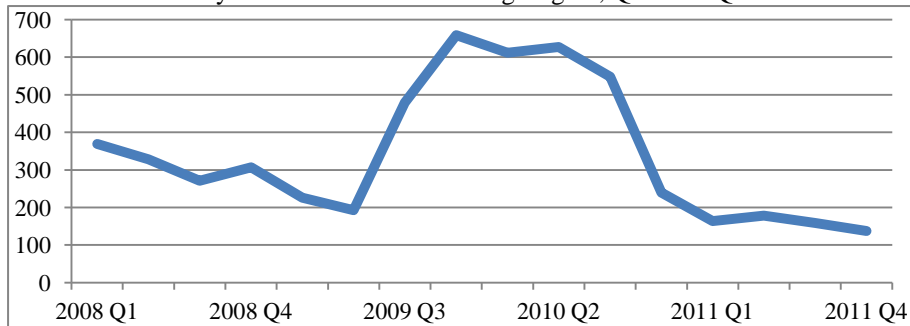
Source: BCPS FTE Enrollment

This simply did not occur. First, the notion that people simply disappear from the community is likely not valid. While people may be forced from their homes, they may remain in the community, and there would be several factors tying them firmly to the Northwest Planning Region and Baltimore County. People are tied to the community through their jobs, family connections, regional loyalty, and a desire to maintain as much stability for their children as possible.

The public school system also gained new students who had been attending independent and parochial schools. From 2007 to 2011, an average of 423 students a year left private schools and enrolled in elementary, middle and high schools in the Northwest Planning Region.

The other aspect of foreclosure activity worth noting is that the level of foreclosures has declined substantially over the past year. In other words, whatever effect the foreclosure crisis would have had on enrollment has likely already transpired. Therefore, the issue of foreclosures should not dominate discussions regarding enrollment forecasts going forward and should not persuade stakeholders that substantial corresponding adjustments are required.

Foreclosure Activity in the Northwest Planning Region, Q1 2008-Q4 2011



Source: Maryland Foreclosure Task Force

Base Realignment and Closure (BRAC)

While base realignment is largely an Anne Arundel County and Harford County event, Baltimore County is participating economically through the engagement of its labor force. As of 2009, Baltimore County housed the third highest number of Fort Meade employees behind Anne Arundel and Howard Counties. While the exact work locations of the contractor-tail⁶ positions affiliated with Fort Meade and Aberdeen are not known, there is strong evidence that many, probably most, of these jobs will be located as close as possible to the two locations. Baltimore County's Northwest Planning Region will certainly be a logical choice for many new residents based on its proximity to both bases.

Looking Forward

The notion that the Northwest Planning Region will experience more rapid population growth in the years ahead is reflected in population projections supplied by the Baltimore Metropolitan Council. According to Council projections, the population in the Northwest Planning Region will increase by more than 12,000 people, representing population growth of 6.7 percent between 2010 and 2030. Countywide population is expected to grow by 5.6 percent over the same period. Overall, the Northwest Planning Region is expected to account for 27 percent of all net new population in Baltimore County over the next two decades.

Baltimore County and Northwest Planning Region: Total Population and Population Change, 2010-2030

							2010-2030 Forecasted Growth	
	2000	2010	2015	2020	2025	2030	Net	Percent
County	754,292	816,550	834,619	846,973	856,934	862,208	45,658	5.59%
Northwest	158,000	185,220	191,647	194,112	196,348	197,568	12,348	6.67%

Source: Baltimore Metropolitan Council

The Council predicts that job growth will trend similarly. Employment in the Northwest Planning Region is expected to grow by almost 13.4 percent between 2010 and 2030. Countywide employment is expected to grow by close to 9.3 percent. The nearly 14,000 new jobs forecast for the Northwest Planning Region will represent 29.5 percent of overall employment growth in the County.

⁶ The shift of economic activity to Fort Meade and Aberdeen Proving Grounds will include a number of federal contractors who work directly with and for some of the Department of Defense agencies that will become base residents. These companies and their workers are collectively referred to as the "contractor-tail."

Baltimore County and Northwest Planning Region: Total Employment (Jobs) and Employment Growth, 2010-2030

							<u>2010-2030 Forecasted Growth</u>	
	<u>2000</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>Net</u>	<u>Percent</u>
County	452,475	510,894	529,642	544,607	552,536	558,327	47,433	9.28%
Northwest	82,196	104,711	109,414	115,645	117,503	118,687	13,976	13.35%

Source: Baltimore Metropolitan Council

In addition, the Baltimore County Department of Economic Development recently released its 2012 “Strategic Operations Plan”, which identifies nine employment centers where private investment could improve future growth and employment. In the Northwest Planning Region, the Liberty Road Corridor and Owings Mills Growth Area represent two of these centers. The Plan’s key objectives include the county’s ability to:

- Attract more professional office space, local and nationally-recognized retailers and restaurants to the Liberty Road corridor to complement its strong residential communities; and
- Bring to fruition a fully built-out, signature-designed Owings Mills downtown area with access to transit and an integrated mix of retail, residential and entertainment communities.⁷

These types of developments will attract younger workers and their families seeking to live in areas characterized by new urbanist development.

⁷ Baltimore County, Maryland. Department of Economic Development, “Strategic Operations Plan,” 2012.

2.3 Development Activity in the Northwest Planning Region

Owings Mills Growth Area

The most noteworthy growth in population in the Northwest Planning Region has been attributable to growth in the Owings Mills Growth Area, which covers 9,685 acres and is bounded by Winands Road on the south, Red Run stream on the west, Gwynnbrook Road on the north, and Garrison Forest and St. Thomas Lane to Reisterstown Road on the east.⁸ Major residential, commercial, and office development has occurred in this area over the last quarter century and has contributed significantly to the County's economic well-being. In 2000 there were 13,500 residential units in the Owings Mills Growth Area. By 2010 that number had grown to 18,300.

The area supports approximately 50,000 full or part-time jobs and the area's population is associated with above average household incomes and education levels. This growth has created a robust consumer market and the area has experienced substantial public and private investment since its establishment in 1979.⁹ During the 2000-2007 time period, growth in residential units in the Owings Mills Growth Area represented nearly 23 percent of growth across all nine Land Management Areas in Baltimore County.¹⁰ As reflected in the table below, between 2000 and 2009, the Owings Mills Growth Area experienced expansion of nearly 4,700 residential units.

New Residential Units in Owings Mills Growth Area, 2000-2009 (Baltimore County)

	Single Family Detached	Single Family Semi-Detached	Single Family Attached	Multi-Family	Total Units
Growth Area-Owings Mills (GA-OM)	922	49	1,247	2,476	4,694

Source: Baltimore County, Maryland, "Master Plan 2020"

Regional Planning Districts

Regional Planning Districts (RPDs) are unincorporated communities defined for regional planning purposes. These districts remain constant for decades. During the period 2000-2007, the Randallstown and Reisterstown-Owings Mills RPDs experienced some of the most forceful growth among all RPDs.¹¹ The table below provides statistical detail regarding growth in residential construction in some of the fastest-growing RPDs over this period.

New Residential Units in Selected Regional Planning Districts, 2000-2007 (Baltimore County)

Regional Planning District (RPD)	RPD Number	Single Family Detached	Single Family Semi-Detached	Single Family Attached	Multi-Family	Institutional (unit or bed)	Total Units
Reisterstown-Owings Mills	306	780	32	575	1,040	359	2,786
Randallstown	312	771	49	1,072	1,393	278	3,563
Greenspring Valley-Pikesville	313	418	1	84	549	12	1,064
Liberty/Lochearn	319	600	56	82	462	0	1,200

Source: Baltimore County Office of Planning, Planning Research Report, Volume 4, 2008: New Residential Construction and Redevelopment. Chart 7

Local Community Plans

Local community plans represent an important aspect of Baltimore County master planning and have important implications for school facility needs and the quality of education. Community plans provide policy framework for the Board of Education to monitor growth patterns and project student enrollment in public schools in the area. The following adopted community plans are included in Master Plan 2010 and are relevant to the Northwest Planning Region:

⁸ See map 16 of Baltimore County Master Plan.

⁹ Baltimore County, Maryland, "Master Plan 2020"

¹⁰ Baltimore County Office of Planning, Planning Research Report, Volume 4, 2008: New Residential Construction and Redevelopment. Chart 5

¹¹ Baltimore County Office of Planning, Planning Research Report, Volume 4, 2008: New Residential Construction and Redevelopment.

Adopted Community Plans Relevant to the Northwest Planning Region

Plan	Date
Greenspring/East Pikesville Community Action Plan	8/7/2000
Greenspring/East Pikesville Community Action Plan (New Version)	2/22/2011
Hannover Pike Corridor Study	4/19/1993
Liberty Road Revitalization Area (also in Southwest Area)	10/7/1991
Liberty West Community Plan	12/18/2006
Lochearn/Forest Garden/Haywood Heights Community Action Plan	5/6/2002
Owings Mills Park and Open Space Concept Plan	5/15/1995
Pikesville Revitalization Plan Update 2003	10/7/1991
Pikesville, Maryland Revitalization Plan	10/7/2003
Ralston Community Plan	10/5/1998
Rosewood Institutional Educational Center Plan	5/27/2010
Sudbrook Park Community Plan	4/5/1999
Woodlawn/Liberty Community Plan (also in Southwest Area)	5/17/1993

Source: BCPS, "2011 BCPS Education Facilities Master Plan (EFMP)," July 1, 2011

Educational Facilities

Over the past 10 years, State and County investments in educational facility expansions have been made in order to keep pace with growth and meet the area's educational needs. In 2008, BCPS expanded Cedarmere Elementary School's student capacity by 112 seats through a \$1.8 million investment that added two classrooms and three kindergarten classrooms. Located on New Town Boulevard, New Town Elementary School opened in 2001 with a student capacity of 697 seats. Following that, New Town High School was opened in 2003. It occupies a 64-acre site on New Town Boulevard and boasts capacity of 1,303 seats. The fledgling high school was also recognized by the Maryland State Department of Education for overall performance on the 2008 Maryland School Assessment.¹² The tables below detail some of the investments in Northwest Planning Region educational facilities since 1990.

New Schools Constructed Since 1990 in Northwest Planning Region

School	Year
New Town Elementary School	2001
New Town High School	2003
Woodholme Elementary School	2005
Windsor Mill Middle School	2006

Source: BCPS, "2011 BCPS Educational Facilities Master Plan (EFMP)," July 1, 2011

Additions Constructed Since 1990 in Northwest Planning Region

School	Year	School	Year
Milford Mill Academy High School	1992	Deer Park Elementary School	2000
Owings Mills High School	1993	Deer Park Magnet Middle School	2000
Franklin Middle School	1994	Franklin High School	2000
Fort Garrison Elementary School	1995	Timber Grove Elementary School	2000
Summit Park Elementary School	1995	Winand Elementary School	2000
Owings Mills Elementary School	1997	Randallstown Elementary School	2003
Franklin Elementary School	1998	Kenwood High School	2007
Glyndon Elementary School	1999	Cedarmere Elementary School	2010
Franklin Middle School	1999		

Source: BCPS, "2011 BCPS Educational Facilities Master Plan (EFMP)," July 1, 2011

¹² Ibid.

Sizeable Development Planned for the Region

As the Owings Mills growth area continues to mature, comprehensive planning has continued to encourage efficient development. Master Plan 2020 specifically provides that the County should work with the property owners of the former Solo Cup Plant to evaluate rezoning and redevelopment opportunities to accommodate a mix of employment, retail or residential uses on the site. The revamped plant location will include a blend of retail and restaurant space anchored by a Wegmans supermarket. Additional planned projects include the transformation of the Owings Mills Mall into a lifestyle shopping center, a mixed-use development project at the Owings Mills Metro Center, construction of the largest branch of the Baltimore County Public Library, construction of a center for the Community College of Baltimore County, and an expansion of Stevenson University.

The Liberty Road Corridor is a vibrant area with high average daily traffic counts and strong median household income levels. A Wal-Mart Superstore is set to open in the latter half of 2012 and opportunities are ripe for national restaurant development in this area. Northwest Hospital's expansion is driving growth in the office sector and the growth of medical offices in the Liberty Road Corridor is expected to continue.¹³

Baltimore County's diverse business community is already home to industry leaders in rapidly growing sectors such as healthcare IT, cybersecurity, investment/money management and digital media. As development continues in the Northwest Planning Region, especially in areas such as Owings Mills and the Liberty Road Corridor, and as companies continue to identify business opportunities within Baltimore County, new markets in areas such as healthcare innovation, secure shared services and cyber security, next-generation IT and manufacturing product development are likely to emerge.

¹³ The Daily Record, "Baltimore County 2012 Growth & Progress Report."

2.4 Future Development and School Capacity in the Northwest Planning Region

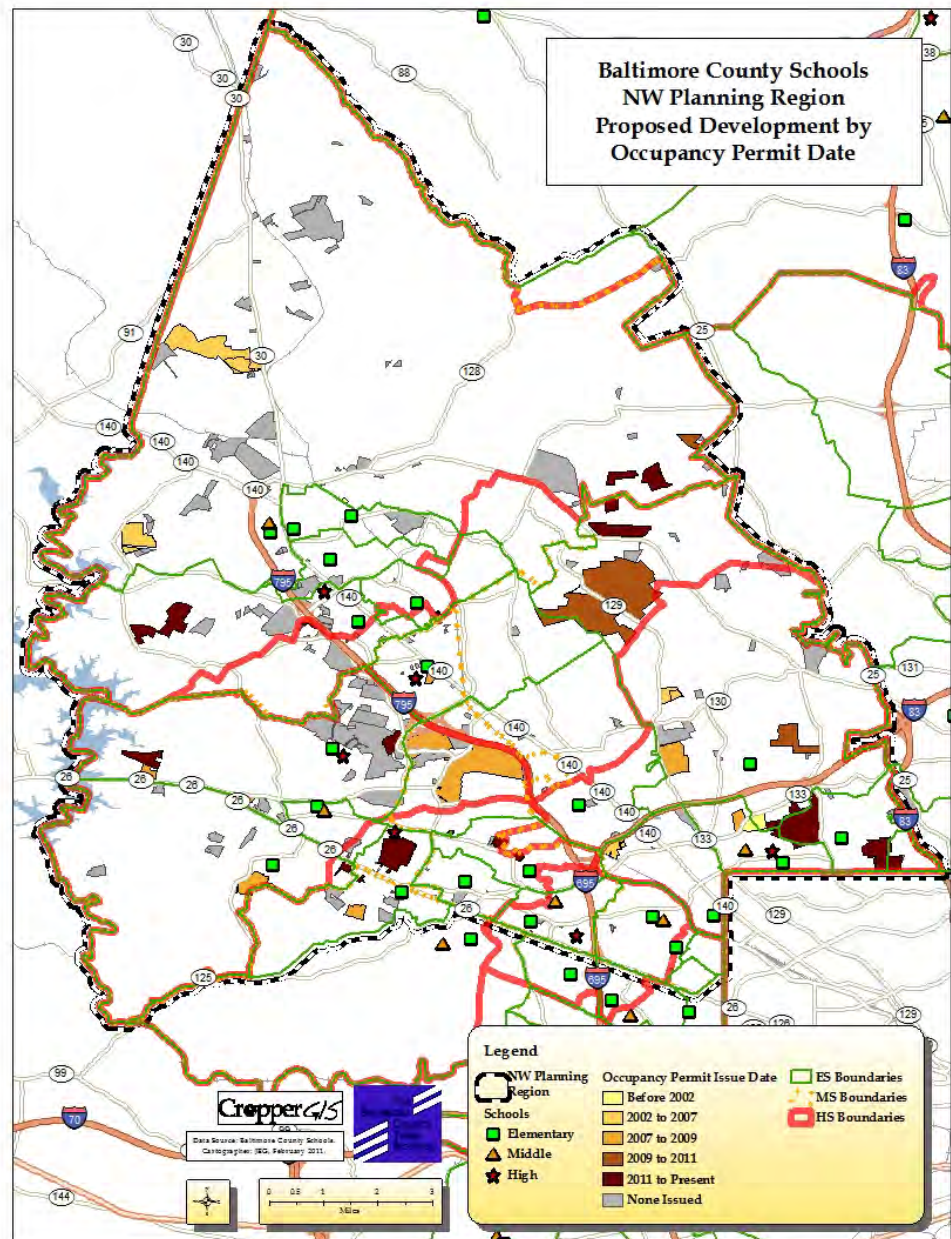
Owings Mills Growth Area

The Baltimore County 2020 Master Plan points out that the quality of public schools in the Owings Mills Growth Area is critical to its ability to attract new businesses and development to the area, and to maintain a healthy community. In pursuit of the objective of competitive schools, the master plan has adopted a policy to “continue the County’s commitment to quality education in the Owings Mills Growth Area” which includes the following actions:

- (1) Continue to monitor residential growth and plan for necessary school facilities; and
- (2) Construct a new elementary school on the Ballard/Cover property.¹⁴

Future development is also scheduled for the planned Metro Centre at Owings Mills. The 2020 Master Plan envisions the Metro Centre enhancing the Owings Mills Mall with a mixed-use, transit oriented development concept. It will integrate a “dynamic mix of residential, office, retail, restaurants, a new public library, a community college building, and a year-round public gathering space.”¹⁵ Another policy goal of the master plan is to reinvigorate the long-standing development plan to make the Owings Mills Town Center the mixed-use “downtown” of the Owings Mills Growth Area. To achieve this the master plan proposes the following actions:

- (1) Support efforts to expedite development of the Metro Centre and ensure that the new library and community college facility will be built;
- (2) Collaborate with Mall owners to develop and implement a mixed-use development plan based on successes such as the redevelopment of the Hunt Valley Town Centre; and
- (3) Provide a safe vehicular and pedestrian connection between the Owings Mills Mall and the Metro Centre.¹⁶



¹⁴ Baltimore County, Maryland, “Master Plan 2020”

¹⁵ Ibid.

¹⁶ Ibid.

Planned developments will increase enrollment in Northwest Planning Region schools by attracting more families to the area. BCPS provides data regarding school enrollment and annually updates forecasts of enrollment going forward ten years. The table below details the most recent enrollment forecasts for Northwest Planning Region schools.

Actual and Forecasted Enrollment, Baltimore County Public Schools, September 30, 2012-2021, Northwest Planning Region, Revised 2/12/2012

	Elementary Schools (21)	All NW Middle Schools (5)	All NW High Schools (6)	Northwest Planning Region
State Capacity	10,050	5,806	7,903	23,759
Actual 2011	10,448	5,131	6,727	22,306
Projected Enrollment				
2012	10,837	5,122	6,708	22,667
2013	11,049	5,183	6,804	23,036
2014	11,282	5,079	6,834	23,195
2015	11,521	5,069	6,783	23,373
2016	11,557	5,160	6,799	23,516
2017	11,567	5,285	6,788	23,640
2018	11,609	5,344	6,784	23,737
2019	11,719	5,327	6,979	24,025
2020	11,802	5,357	7,137	24,296
2021	11,903	5,440	7,226	24,568
Growth in Enrollment 2011-2021	1,455	309	499	2,263
Percent Change 2011-2021	13.93%	6.02%	7.42%	10.15%
Over/Under (-) Capacity in 2021	1,853	-366	-677	
Notes: State Rated Capacity is defined as the "maximum number of students that reasonably can be accommodated in a facility without significantly hampering delivery of the educational program." Relocatable classrooms are not included in SRC. FTE: Accurate projections are essential for determining budget, allocating staff, distributing resources, and planning capital projects. Projections are based on official September 30 enrollment counts and are revised annually by the Office of Strategic Planning. Projection numbers are total headcount, not Full Time Equivalent (FTE). Therefore, at the elementary school level, a conversion is required to accurately compare projections to capacity. Source: Baltimore County Public Schools 2011-2020 Enrollment Projections," Prepared by the Office of Strategic Planning				

Over Capacity Northwest Planning Region Schools

	09/30/2011 FTE	2011 SRC	SRC less FTE	FTE/SRC (%)	2021 FTE/SRC (%) Based on Current Enrollment Projections
<i>Elementary Schools</i>					
Church Lane ES	477	476	-1	100.21%	110.29%
Fort Garrison ES	462	431	-31	107.19%	111.37%
Franklin ES	494	473	-21	104.44%	114.16%
Milbrook ES	337	319	-18	105.64%	120.38%
New Town ES	884	697	-187	126.83%	164.99%
Owings Mills ES	736	699	-37	105.29%	128.33%
Reisterstown ES	510	450	-60	113.33%	123.33%
Scotts Branch ES	554	511	-43	108.41%	123.29%
Summit Park ES	428	336	-92	127.38%	168.15%
Wellwood ES	462	455	-7	101.54%	122.64%
Woodholme ES	781	676	-105	115.53%	139.79%
<i>Middle Schools</i>					
Pikesville MS	1,017	1,006	-11	101.09%	104.08%

Source: Baltimore County Public Schools 2011-2020 Enrollment Projections," Prepared by the Office of Strategic Planning

Presently no Northwest Planning Region middle or high schools are above 115 percent capacity, although Pikesville Middle School is over capacity, at a little over 101 percent as of September 2011. Elementary schools in the area continue to feel the most strain to accommodate students and three Northwest Planning Region elementary schools currently exceed 115 percent of SRC. The table below details by how much each school is over capacity and shows the capacity of nearby schools.

Northwest Planning Region Schools that Exceed Capacity by More than 115%

School with FTE over 115% of SRC	Adjacent Schools	9/30/11 FTE	2011 SRC	FTE less SRC
New Town Elementary School (126.83%)		884	697	187
	Cedarmere ES	456	474	-18
	Deer Park ES	380	451	-71
	Hernwood ES	363	428	-65
	Owings Mills ES	736	699	37
	Woodholme ES	781	676	105
Summit Park Elementary School (127.38%)		428	336	92
	Fort Garrison ES	462	431	31
	Riderwood ES	506	463	43
	Wellwood ES	462	455	7
	West Towson ES	519	451	68
Woodholme Elementary School (115.53%)		781	676	105
	Deer Park ES	380	451	-71
	Fort Garrison ES	462	431	31
	Milbrook ES	337	319	18
	New Town ES	884	697	187
	Owings Mills ES	736	699	37
	Randallstown ES	387	398	-11
	Winand ES	491	583	-92

Source: Baltimore County Public Schools 2011-2020 Enrollment Projections," Prepared by the Office of Strategic Planning

The table above also reflects utilization at some of the schools adjacent to the most capacity-strained schools. Although many are already suffering from a similar level of capacity strain, some could still absorb students. Collectively, schools adjacent to New Town Elementary School could accommodate 154 students based on enrollment in 2011. This still falls short of the 187 seats by which New Town Elementary School is above capacity. Summit Park Elementary School was above capacity by 92 students in 2011, or 127.38 percent of SRC, making it the most capacity constrained elementary school in the Northwest Planning Region measured by percentage. The four schools proximate to Summit Park Elementary School are already serving more students than their state rated capacities dictate, making it potentially difficult to alleviate overcrowding by shifting students to nearby schools. Woodholme Elementary School was at over 115 percent of its state rated capacity in 2011.

Adjacent schools that have excess capacity include Deer Park Elementary School, Randallstown Elementary School, and Winand Elementary School. Collectively they have 174 extra seats. However, it should also be noted that some of the schools nearby are also in proximity of New Town Elementary School, one of the other capacity strained elementary schools in the Northwest Planning Region.

Some schools in the Northwest Planning Region have excess capacity, which could potentially relieve some of the strain on schools presently serving more students than can comfortably be accommodated. The table below provides details of enrollment and state rated capacity for Northwest Planning Region elementary schools that are presently below capacity.

Elementary Schools in the Northwest Planning Region with Excess Capacity

	09/30/2011 FTE	2011 SRC	FTE/SRC	SRC less FTE
<i>Elementary School</i>				
Bedford Elementary School	260	309	84.14%	49
Campfield ECLDC	258	322	80.12%	64
Cedarmere Elementary School	456	474	96.20%	18
Chatsworth Elementary School	385	442	87.10%	57
Glyndon Elementary School	470	520	90.38%	50
Hernwood Elementary School	363	428	84.81%	65
Randallstown Elementary School	387	398	97.24%	11
Timber Grove Elementary School	553	600	92.17%	47
Winand Elementary School	491	583	84.22%	92

Source: Baltimore County Public Schools 2011-2020 Enrollment Projections," Prepared by the Office of Strategic Planning

Demographic and Instructional Program Implications

Some student populations have unique enrollment patterns, programmatic requirements, and facility needs that must be considered for future school planning. These populations include: Free and Reduced Meal recipients (FARMS); homeless students; Special Education students; and, early childhood students. Demographic changes that may affect the size of these student groups relative to the overall student population may result in adjustments to projected facility needs.

BCPS does not anticipate any major demographic shifts in most of these student populations. FARMS, Special Education and early childhood student enrollments are expected to grow at a rate consistent with overall enrollment while the rate of homeless student enrollment is expected to decrease slightly. Although minimal demographic shifts in these categories are expected, there is a possibility that state requirements that lead school systems to offer early childhood programs may change and increase the student pool. BCPS must also consider the possibility that the state will require any early childhood programs that school systems form to be expanded from half-day to full day as it has already done with Kindergarten.

To prepare for changes in early childhood eligibility and program requirements, BCPS has examined how these factors may affect enrollment. Three scenarios have been developed using current enrollment numbers to show how changes to the early childhood program would affect facility utilization. The first scenario assumes a full day program and examines how utilization would be affected if the current early childhood population and eligibility rules are maintained. The second scenario maintains a half-day program, but examines how utilization would be affected if eligibility is expanded to all 4 year olds. The third scenario assumes a full day program and examines how utilization would be affected if eligibility is expanded to all 4 year olds.

The current Full Time Equivalent (FTE) enrollment for early childhood through Fifth Grade is 48,977 system wide and 10,128 in the Northwest Planning Region. System wide utilization is at 100.09 percent and utilization in the Northwest Planning Region is at 100.78 percent. In the first scenario BCPS FTE would increase to 50,521 with utilization at 103.25 percent. The Northwest Planning Region FTE would increase to 10,383 with utilization at 103.31 percent. In the second scenario, BCPS FTE would increase to 51,452 with utilization at 105.15 percent and the Northwest Planning Region FTE would increase to 10,683 with utilization at 106.3 percent. In the third scenario BCPS FTE would increase to 55,513 with utilization at 113.45 percent and the Northwest Planning Region FTE would increase to 11,500 with utilization at 114.43 percent.

Potential Impact of Out-of-Home Placements on BCPS enrollment

According to the Governor's Office for Children's FY2010 Out-of-Home Placement and Family Preservation Resource Plan, Baltimore County is home to the largest number of licensed group home beds in the state. These group homes serve children between the ages of 0 and 18, which mean that many of them are of school age. The vast majority attend public schools in the jurisdiction of the group home as opposed to their jurisdiction of origin. Baltimore County's share equates to roughly 26 percent of the state's total.¹⁷ The table on the following page provides the number of group home beds by county. Data from the late 1990s indicate that the west and northwest areas of the county are associated with the greatest concentration of group homes. This is still likely the case.¹⁸ For planning purposes, it may make sense for BCPS officials to consult with the Department of Human Resources (DHR) Office of Licensing and Monitoring regarding current locations of group homes in the northwest corridor.

Group home placement in Maryland has been declining recently (40 percent between FY2007 and FY2009). However, the prospect of students entering the county's school system via the Department of Social Services remains.¹⁹ This form of entry impacts capacity utilization. While obtaining precise enrollment estimates of the children in group homes in BCPS schools would require further investigation. The maximum conceivable number is provided in the exhibit above (1,328). This is roughly equivalent to the population of two entire schools.

Exhibit: Number of Group Home Beds by County (Top 10), 2010

County	Licensed Bed Capacity	% of Total Statewide
Baltimore County	1,328	25.9%
Baltimore City	1,021	19.9%
Montgomery	620	12.1%
Prince George's	548	10.7%
Out-of-state	358	7.0%
Washington	243	4.7%
Allegany	156	3.0%
Charles	147	2.9%
Dorchester	120	2.3%
Frederick	114	2.2%

Source: Governor's Office for Children

Recent changes to federal child welfare policy will impact state out-of-home placement rates. The Fostering Connections Act of 2008 rendered important changes, including new options for states to receive federal reimbursements. States are implementing required changes by revising existing state child welfare policies. New legislation has also been enacted.

In Maryland, DHR is using its portion of grant funding to 1) increase the number of children placed with family members, 2) increase constructive involvement of extended family members to remove children from dangerous circumstances, and 3) promote family permanency by strengthening the ties children have with relatives.²⁰ If successful, DHR's efforts have the potential to reduce group home placements, which would likely reduce enrollment impacts.

¹⁷ <http://www.goc.maryland.gov/PDF/LegReports/OOH/FY%202010%20Out-of-Home%20Placement%20and%20Family%20Preservation%20Resource%20Plan%2012-6-10.pdf>

¹⁸ http://articles.baltimoresun.com/1999-04-11/news/9904110234_1_group-homes-baltimore-county-west-side

¹⁹ National Association of Public Child Welfare Administrators. <http://www.napcwa.org/Legislative/docs/Maryland.pdf>

²⁰ <http://www.hunter.cuny.edu/socwork/nrcfcpp/grantees/documents/mdhr.pdf>

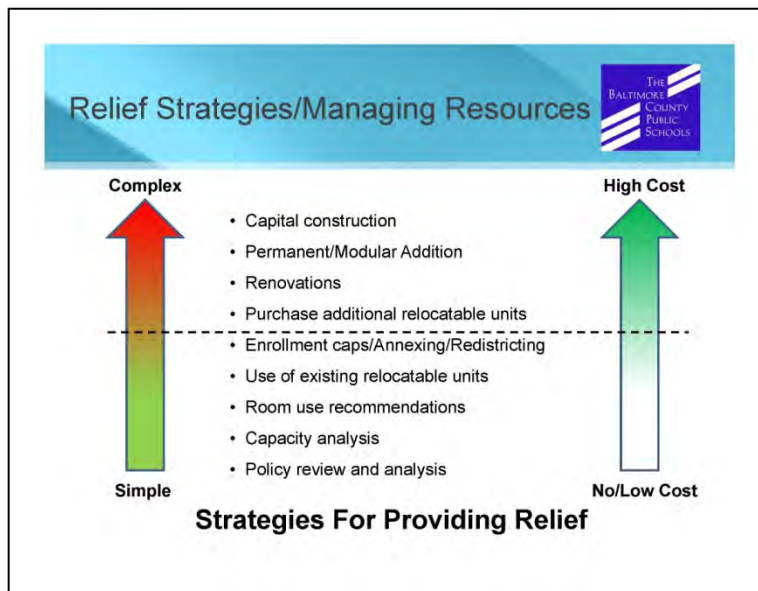
2.5 Northwest Planning Region School Enrollment Trends

According to the Strategic Planning Update provided to the Baltimore County Board of Education on March 6, 2011 and the Capacity and Relief Strategies Update on August 29, 2011, there are many variables that impact school capacity and student enrollment. Rising birth rates, greater housing availability, and continuing development all impact school enrollment in Baltimore County and must be addressed by planners. Variables impacting school capacity include²¹:

- Changes in state capacity formula;
- Full-day kindergarten;
- Early Childhood Education;
- Instructional support services;
- Special education; and
- Computer labs.

Variables impacting enrollments²² include:

- Births;
- Immigration;
- Residential development, pupil yield, housing turnover;
- Title I transfer option;
- Program placement (e.g. magnet, English for Speakers of Other Languages, cluster);
- Charter school; and
- Student/parent choice (Board Policy 5140).



²¹ Baltimore County Public Schools, Dr. Joe A. Hairston, Superintendent, "Enrollment and Capacity Update," September 20, 2011.

²² Ibid.

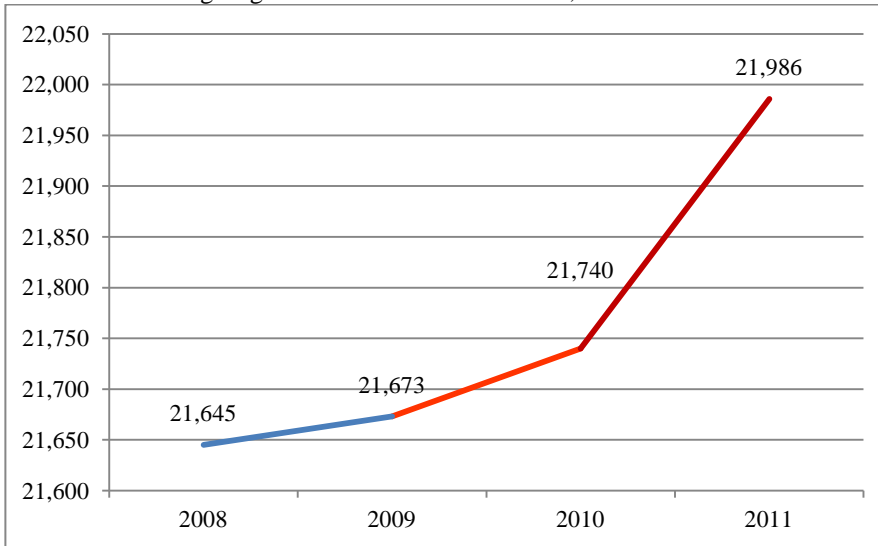
School Enrollment in Recent Years

Northwest Planning Region FTE Enrollment, 2008-2011

	2008	2009	2010	2011	Net Change 2008-2011
<i>Elementary</i>	9,564	9,723	9,850	10,128	564
<i>Middle</i>	4,928	5,022	5,063	5,131	203
<i>High</i>	7,153	6,928	6,827	6,727	-426
Total Northwest FTE Enrollment	21,645	21,673	21,740	21,986	341

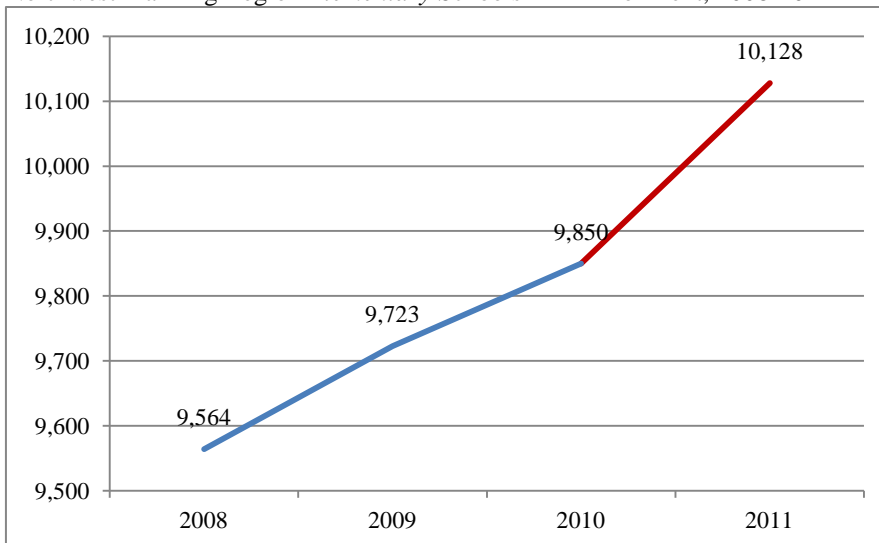
Source: BCPS FTE Enrollment

Northwest Planning Region Schools FTE Enrollment, 2008-2011



Source: BCPS FTE Enrollment

Northwest Planning Region *Elementary* Schools FTE Enrollment, 2008-2011



Source: BCPS FTE Enrollment

3.0 Enrollment and Capacity Projections

3.1 Comparisons of BCPS vs. MDP enrollment projections (2012-2021)

MDP v. BCPS Enrollment Projections

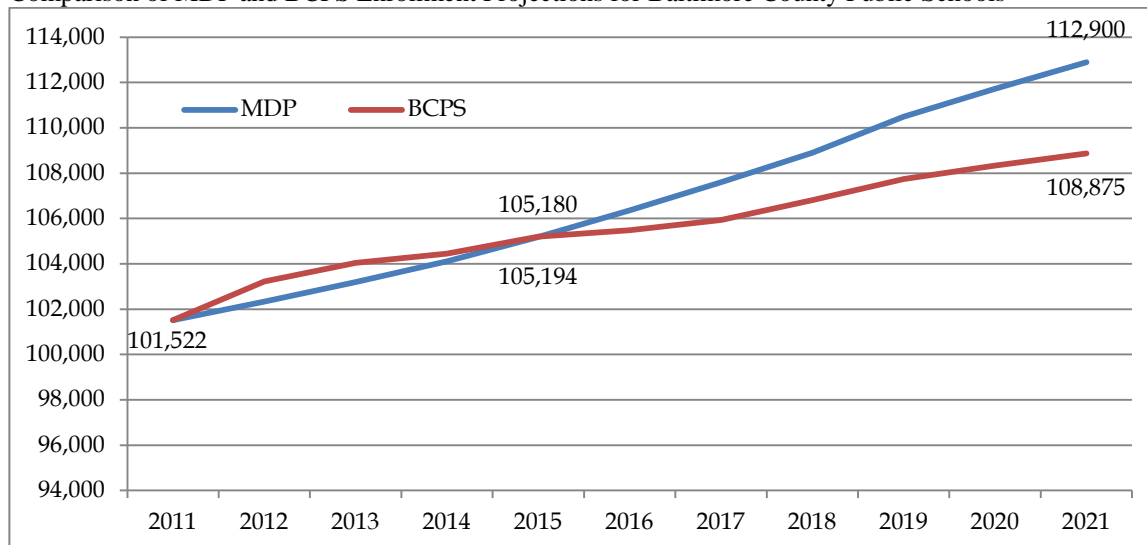
Both the Maryland Department of Planning (MDP) and BCPS produce enrollment projections. Local school systems are required to produce enrollment projections within 5% of state projections. BCPS consistently achieves this objective. However, the data below, presented in both table and graph form, reflect the fact that these projections often differ, a testament to the difficulty of producing forecasts in the presence of variables such as births, residential development and demographic shifts such as the tendency of younger families to replace older families in existing residential units. As an example, the difference for 2021 exceeds 4,000 pupils, which is the equivalent of several schools' populations. It is also important to note that MSDE projections do not include early childhood (Pre-Kindergarten) students. Therefore, to more easily compare the two projections, early childhood students were subtracted from the BCPS estimates. The BCPS projections provided above do not include early childhood students and therefore are inconsistent with numbers in the report, which do.

Comparison of MDP and BCPS Enrollment Projections for Baltimore County Public Schools

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MDP	101,522	102,340	103,190	104,120	105,180	106,360	107,600	108,900	110,500	111,720	112,900
BCPS	101,522	103,224	104,038	104,456	105,194	105,488	105,928	106,803	107,748	108,331	108,875
Difference	0	884	848	336	14	-872	-1,672	-2,097	-2,752	-3,389	-4,025
% Difference	0.00%	0.86%	0.82%	0.32%	0.01%	-0.82%	-1.55%	-1.93%	-2.49%	-3.03%	-3.57%

Notes:
1. Early childhood enrollments are not included.
2. All numbers reflect an enrollment date of September 30th of given year.
3. % Difference = (BCPS Projection-MDP Projection) / BCPS Projection
4. Positive percentages indicate a BCPS projection is *greater than* the MDP projection. Negative percentages indicate MDP projections *greater than* BCPS.
Source: Comparison of Projections, Baltimore County Public Schools and Maryland Department of Planning, 2012-2021, Prepared by the Baltimore County Public Schools Office of Strategic Planning, March 2012

Comparison of MDP and BCPS Enrollment Projections for Baltimore County Public Schools



Source: Comparison of Projections, Baltimore County Public Schools and Maryland Department of Planning, 2012-2021, Prepared by the Baltimore County Public Schools Office of Strategic Planning, March 2012

MDP Enrollment Projection Methodology

According to MDP, the “methodology used in preparing the enrollment projections involves an explicit effort to use the Maryland Department of Planning’s latest age-specific population projections for each political subdivision to guide the selection of key parameters used to develop grade-specific school enrollment projections.”²³ Thus, the age-specific population projections provide a starting point for deriving the public school enrollment projections.” Population projections (by age and sex): for each jurisdiction are used to estimate the following parameters relevant to school enrollment:

- Projected school-age population; and
- Projected births.

MDP also incorporates a ‘Grade Succession’ methodology, which combines historical birth and enrollment data by political subdivision with data on projected births and their historic relationship to kindergarten and first-grade enrollment; the ratio of kindergarten and first grade enrollment for the specified historical period to eligible live births five and six years previous. Finally, these variables are used to determine a series of ratios that reflect projected grade cohort survival. The ratios selected are used to generate grade-specific school enrollments that consider the effects of occurrences, such as child mortality, migration, public and private school transfers, secondary school dropouts, and grade level matriculation.

²³ Maryland Department of Planning, “*Public School Enrollment Projections 2009-2018*,” section titled “*Methodology*” beginning on page 47.

3.2 BCPS Enrollment Projections

BCPS enrollment projections, produced by the Office of Strategic Planning (OSP), rely primarily on Cohort Survival Methodology, which is based upon “the expectation that students matriculating through grade levels follow predictable and measurable patterns of graduating to the next highest grade level each successive year.”^{24,25} Projections submitted for the Educational Facilities Master Plan must fall within 5 percent of state baselines to qualify for approval of capital projects. BCPS projections for 2011-2020 are within 5 percent for all 10 years of MDP projections.²⁶

More importantly, BCPS projections have been incredibly accurate relative to actual enrollment, which is reflected in the table below. This suggests that significant weight should be placed upon the BCPS enrollment projections for out years. Previous projections tended to over-predict enrollment modestly, likely a reflection of decreased development activity relative to expectations due to economic downturn (e.g., 2006 projection for 2011 – see below).

BCPS Enrollment Projection Accuracy

Projection	2007	2008	2009	2010	2011
From 2006	105,330	105,672	105,558	105,695	106,147
From 2007		103,360	104,037	104,360	105,109
From 2008			104,155	104,167	104,371
From 2009				104,012	104,711
From 2010					105,195
<i>Actual</i>	<i>104,714</i>	<i>103,643</i>	<i>103,832</i>	<i>104,331</i>	<i>105,315</i>
1 Year % Accuracy	99.42%	99.73%	99.69%	99.69%	99.89%

Source: Baltimore County Public Schools 2011-2020 Enrollment Projections,
Prepared by the Office of Strategic Planning

²⁴ “Baltimore County Public Schools 2011-2020 Enrollment Projections,” Prepared by the Office of Strategic Planning, revised 02/01/2012.

²⁵ Other factors and data projections considered by BCPS include:

- Birth data-used to anticipate incoming kindergarten enrollments with a five-year delay;
- Trend analysis of each year’s Grade 6 and Grade 9 feeder schools in conjunction with current Grade 5 and Grade 8 populations are used to project grade levels involving movement of students between schools.²⁵

The Office of Strategic Planning also works with the Baltimore County Office of Planning to identify data trends and similar topics associated with school enrollment.

Long range projections take into consideration:

- New housing construction
- Areas experiencing turnover of housing without children to housing with children

Each year projections are submitted to the Maryland Department of Planning (MDP) to be compared with state projection baselines.

²⁶ Ibid.

3.3 Forecast Considerations in Northwest Baltimore County

There are a number of key considerations that help stakeholders understand how current projections may fare in the future as development accelerates and as demographics shift. The discussion below provides some detail regarding these considerations. Overall, these factors are likely to be consistent with greater demand for school capacity than presently projected. Much of this has to do with development potential, which is vast in northwest Baltimore County. But much of this also has to do with demographics, including the demographics of age. In recent years, school age population growth has tended to be suppressed by the aging of the Baby Boomers out of prime child-bearing years. But as Generation Y comes of age (born 1980-1999 according to an oft-utilized generational definition), fertility rates are likely to climb quickly.

- Average median age in Northwest Planning Region rose from 37.7 in 2000 to 41.5 in 2010, with the implication that population is now more associated with empty nesters and a shrinking population of school-age children. This is perfectly consistent with current expectations and slowly growing enrollment, including at the elementary school level;
- Total population in the Northwest Planning Region's elementary school areas collectively expanded by 17.5 percent between 2000 and 2010; and
- The white population declined by nearly 8 percent while the African-American population expanded by nearly 50 percent, Asian population by more than 80 percent and "other" by 177 percent. This indicates that the northwest section of the county has changed significantly over the past decade. Many observers are unlikely to be aware of this sea-change given that it has taken place over time and therefore does not represent the type of jarring one-time event that enters into memory. But the data are clear -- the northwest section of the county has changed and there are likely to be significant facility demand and instructional implications. The tables below provide relevant statistical detail.

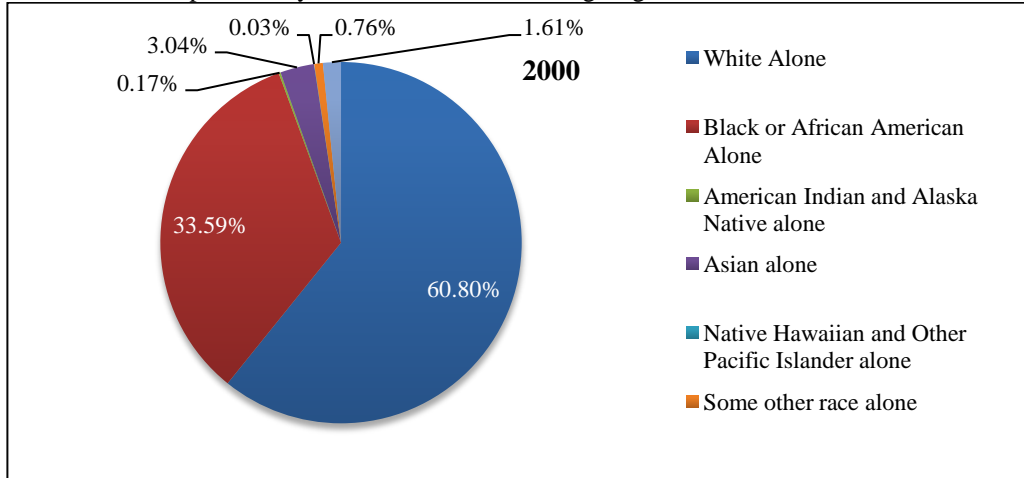
Selected Population Characteristics, All Northwest Planning Region Elementary School Areas,
Percent Change 2000-2010

Total Population	Single Race						Population of two or more races
	White	Black or African American	American Indian & Alaska Native	Asian	Native Hawaiian & Other Pacific Islander	Other	
17.46%	-7.74%	50.41%	64.60%	81.41%	129.27%	176.58%	78.15%

Source: U.S. Census Bureau

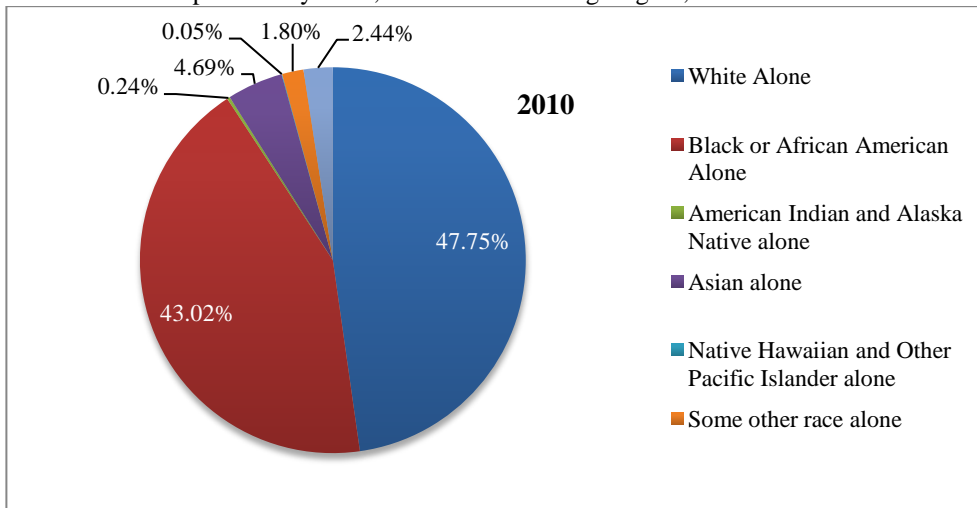
Not only is the number of students a variable, so too is their socioeconomic standing. Northwest Baltimore County has become more dependent upon food assistance, more diverse and more oriented around single-parent households. Depending upon the types of housing that are developed, these patterns may persist.

Breakdown of Population by Race, Northwest Planning Region, 2000



Source: U.S. Census Bureau

Breakdown of Population by Race, Northwest Planning Region, 2010



Source: U.S. Census Bureau

Though the number of households rose significantly over the course of a decade in northwest Baltimore County, average household size barely budged – 2.48 in 2000 versus 2.47 in 2010. The stability in household size is somewhat surprising given the large increase in the number of single-parent households. While the total number of households increased 14 percent between 2000 and 2010, married couple households were up less than 5 percent. By contrast, single parent households were up more than 40 percent.

Family Household Characteristics, Northwest Planning Region, 2000-2010

All Northwest Elementary School Areas	Total Family Households	Married Couple	Male Householder-No Wife Present	Female Householder-No Husband Present
2000	42,002	32,290	2,141	7,568
2010	47,906	33,799	3,032	11,072
Growth 2000-2010	14.06%	4.67%	41.62%	46.30%

Source: U.S. Census Bureau

Northwest Baltimore County demographics have also shifted greatly in terms of income. In 2003-2004, less than a third of elementary school children were associated with the Free and Reduced Meal Students (FARMS) program. By 2011, this number was approaching 50 percent. Similar patterns can be observed among middle and high schoolers, though the increase in high school FARMS participation is also likely due to efforts to overcome stigma associated with the designation and to report program eligibility more accurately.

Free and Reduced Meals as a Percent of Total Meals, Northwest Planning Region, 2003-2011

	2011	2010	2009	2008	2007	2006	2005	2004-2005	2003-2004	Percentage point growth 2003-2004
Elementary Schools	46.74%	44.46%	40.85%	37.93%	35.91%	34.93%	35.43%	33.62%	32.49%	14.25%
Middle Schools	45.02%	42.82%	40.31%	35.81%	32.77%	32.57%	33.86%	31.09%	29.47%	15.55%
High Schools	42.08%	38.09%	35.25%	31.96%	29.82%	26.42%	26.13%	20.34%	20.12%	21.96%
Northwest Planning Region Total	44.95%	42.11%	38.98%	35.52%	33.19%	31.58%	32.04%	28.82%	27.84%	17.11%
Baltimore County	44.76%	42.29%	39.30%	36.48%	34.40%	32.83%	33.11%	30.79%	29.80%	14.96%

Source: Maryland State Department of Education

Free and Reduced Meals as a Percent of Total Meals, Northwest Planning Region, 2003-2011

Northwest Planning Region	<u>2003-2004</u>	<u>2011</u>	<u>% Change 2003-2011</u>
Total	23530	22307	-5.20%
Free and Reduced	6550	10026	53.07%
F&R/Total	27.84%	44.95%	

Source: Maryland State Department of Education

4.0 Development Potential and Student Yield

4.1 Projected Student Yields and Active Development in the Northwest Planning Region

New residential development in the Northwest Planning Region will add to the area's student population. To determine how much of an effect new development might have, it is necessary to know the types of housing planned to be constructed and the average yield factors (number of students per unit) for those types of units. The following analysis relies on land use details in approved development plans that were collected from the County's "S" List and yield factors from a 2009 study of Baltimore County. The list of approved developments was refined to include only those developments for which an occupancy permit had been issued since January 1, 2009. The yield factors used were a composite of the 2009 study's yields for Election Districts 2, 3 and 4, which cover the majority of the Northwest Planning Region.

The tables below reflect a select sampling of active developments in the Northwest Planning Region. The first table shows summary details for each development and the second provides detail on the mixture of residential development types for each.

Name of Development	Date of Last Occupancy Permit	ES Zone	Student Yields	Student Counts				Total Lots			All Residential Development		
				ES	MS	HS	All	Proposed	Developed	% Complete	Proposed	Developed	% Complete
BONNIE VIEW ESTATES	20120106	Summit Park ES	0.3353	45	9	4	58	275	173	63%	275	173	63%
BRIDLE RIDGE (ALT C)	20091030	Fort Garrison ES	0.0000	0	0	0	0	49	16	33%	49	16	33%
CAVES VALLEY GOLF CLUB	20100126	Fort Garrison ES	0.0385	0	1	0	1	34	26	76%	34	26	76%
CHERRY HILL COURT EAST & WEST	20110103	Cedarmere ES	0.3125	2	3	0	5	61	16	26%	61	16	26%
ESPLANADE AT RED RUN	20111121	New Town ES	0.0784	5	2	1	8	258	102	40%	258	102	40%
FINNS LANDING	20110420	Woodholme ES	0.4167	2	1	2	5	18	12	67%	18	12	67%
GREENSPRING QUARRY RESIDENTIAL	20110831	Summit Park ES	0.0590	17	3	4	24	593	407	69%	593	407	69%
HEATHER GLENN	20111207	Winand ES	0.0000	0	0	0	0	25	12	48%	25	12	48%
MEDFORD	20090918	Franklin ES	0.0000	0	0	0	0	19	13	68%	19	13	68%
NANCY LEE FARMS	20110125	Franklin ES	0.2667	1	2	1	4	16	15	94%	16	15	94%
OWINGS OVERLOOK	20111229	Winand ES	0.2927	13	3	8	24	84	82	98%	84	82	98%
ROLAND PROPERTY	20110909	Timber Grove ES	0.5556	4	4	2	10	19	18	95%	19	18	95%
TUFTON SPRINGS II	20111004	Franklin ES	0.5000	3	2	0	5	16	10	63%	16	10	63%
WORTHINGTON VALLEY - NEW SUBMITTAL	20110729	Fort Garrison ES	0.2308	3	0	0	3	42	13	31%	42	13	31%

Name of Development	Single-Family Detached			Single-Family Attached			Multi-Family			Proposed Development by Category			
	Proposed	Developed	% Complete	Proposed	Developed	% Complete	Proposed	Developed	% Complete	Residential	SFD	SFA	MF
BONNIE VIEW ESTATES	275	173	63%	0	0		0	0		100%	100%	0%	0%
BRIDLE RIDGE (ALT C)	49	16	33%	0	0		0	0		100%	100%	0%	0%
CAVES VALLEY GOLF CLUB	34	26	76%	0	0		0	0		100%	100%	0%	0%
CHERRY HILL COURT EAST & WEST	0	0		61	16	26%	0	0		100%	0%	100%	0%
ESPLANADE AT RED RUN	0	0		244	88	36%	14	14	100%	100%	0%	95%	5%
FINNS LANDING	18	12	67%	0	0		0	0		100%	100%	0%	0%
GREENSPRING QUARRY RESIDENTIAL	83	80	96%	0	0		510	327	64%	100%	14%	0%	86%
HEATHER GLENN	25	12	48%	0	0		0	0		100%	100%	0%	0%
MEDFORD	19	13	68%	0	0		0	0		100%	100%	0%	0%
NANCY LEE FARMS	16	15	94%	0	0		0	0		100%	100%	0%	0%
OWINGS OVERLOOK	84	82	98%	0	0		0	0		100%	100%	0%	0%
ROLAND PROPERTY	19	18	95%	0	0		0	0		100%	100%	0%	0%
TUFTON SPRINGS II	16	10	63%	0	0		0	0		100%	100%	0%	0%
WORTHINGTON VALLEY - NEW SUBMITTAL	42	13	31%	0	0		0	0		100%	100%	0%	0%

The table below indicates average student yield factors from studies undertaken in 2004 and 2009. These yield factors are disaggregated by residential development type and grade cohort. Average yield factors are shown for Election Districts 2, 3 and 4 and for Baltimore County as a whole.

The yield factors in the 2004 and 2009 studies show a high level of consistency among grade cohorts and geographies. The student yield counts shown on the following page were calculated using the 2009 average student yield factors for districts 2, 3 and 4. These student yield factors were used because they are the most recent figures available, they correspond geographically with the Northwest Planning Region and their consistency with figures from the 2004 study confirms that they are reliable and valid indicators of student yields.

Comparison of 2004 & 2009 Student Yield Studies				
	Countywide		Districts 2,3 & 4*	
	2004	2009	2004	2009
Single Family Detached				
ES	0.2057	0.2259	0.1750	0.2133
MS	0.0993	0.1277	0.0994	0.1383
HS	0.1618	0.1903	0.1597	0.1967
Total	0.4668	0.5439	0.4341	0.5483
Single Family Attached				
ES	0.2235	0.2169	0.1806	0.1595
MS	0.1109	0.0948	0.0766	0.0705
HS	0.1132	0.1180	0.0900	0.0992
Total	0.4476	0.4297	0.3472	0.3292
Multifamily				
ES	0.0567	0.0606	0.0700	0.0658
MS	0.0268	0.0272	0.0313	0.0250
HS	0.0364	0.0351	0.0408	0.0367
Total	0.1199	0.1229	0.1421	0.1275
*The majority of the NW Planning Region lies within these 3 districts.				

The tables below show student yields based on undeveloped lots in platted and approved development plans. The first table supplies yields for only developments considered active (with occupancy permits issued since Jan. 1, 2009). The second shows yields for all existing undeveloped residential lots. Both tables use the yield factors for Districts 2, 3 and 4 for 2009.

All Active Developments (Occupancy Permit Issued Since Jan 1, 2009)									
Development Type	Undeveloped Lots	2009 Yield Factors				Student Yields			
		ES	MS	HS	Total	ES	MS	HS	Total
Single Family Detached	236	0.2133	0.1383	0.1967	0.5483	50	33	46	129
Summit Park Cluster	105					22	15	21	58
Owings Mills Cluster	87					19	12	17	48
Reisterstown Cluster	13					3	2	3	7
Hernwood Cluster	1					0	0	0	1
Scotts Branch Cluster	15					3	2	3	8
New Town Cluster	15					3	2	3	8
Single Family Attached	336	0.1595	0.0705	0.0992	0.3292	54	24	33	111
Owings Mills Cluster	45					7	3	4	15
Hernwood Cluster	135					22	10	13	44
New Town Cluster	156					25	11	15	51
Multifamily	183	0.0658	0.0250	0.0367	0.1275	12	5	7	23
Summit Park Cluster	183					12	5	7	23
Total	755					116	61	86	263

All Developments on S List									
Development Type	Undeveloped Lots	2009 Yield Factors				Student Yields			
		ES	MS	HS	Total	ES	MS	HS	Total
Single Family Detached	944	0.2133	0.1383	0.1967	0.5483	201	131	186	518
Summit Park Cluster	126					27	17	25	69
Owings Mills Cluster	434					93	60	85	238
Reisterstown Cluster	160					34	22	31	88
Hernwood Cluster	94					20	13	18	52
Scotts Branch Cluster	79					17	11	16	43
New Town Cluster	51					11	7	10	28
Single Family Attached	1127	0.1595	0.0705	0.0992	0.3292	180	79	112	371
Summit Park Cluster	65					10	5	6	21
Owings Mills Cluster	204					33	14	20	67
Hernwood Cluster	270					43	19	27	89
Scotts Branch Cluster	9					1	1	1	3
New Town Cluster	579					92	41	57	191
Multifamily	2880	0.0658	0.0250	0.0367	0.1275	190	72	106	367
Summit Park Cluster	219					14	5	8	28
Owings Mills Cluster	315					21	8	12	40
Hernwood Cluster	100					7	3	4	13
New Town Cluster	2246					148	56	82	286
Total	4951					571	282	403	1256

Under the low enrollment scenario, BCPS estimates that there will be a need for 1,525 new elementary seats over the next 10 years (by 2021) to establish utilization at 100 percent. Mid- and high-case scenarios are associated with greater demand for new capacity. Under the mid-case scenario, the Northwest Planning Region would need to add 1,788 seats. The high-case scenario would require 2,781 additional seats to maintain 100 percent utilization into the 2021-22 school year.

One possible option is to simply live with overcrowding. In fact, this is already happening to an extent, with overcrowding most prevalent among elementary schools in the planning region. A number of considerations, including those emerging from academic research, indicate that ongoing over-utilization is sub-optimal, particularly in light of the demographics of the Northwest Planning Region. FARMS data indicate a significant rise in lower-income families in the Northwest Planning Region. Though some of the increase in the share of students qualifying for food assistance is attributable to BCPS efforts to induce more accurate reporting, Census and other data indicate that the community's income demographics have changed.

Though there are portions of Baltimore County associated with lower incomes than the Northwest Planning region, certain communities within the planning area are associated with elevated (FARMS) shares. For instance, in the Scotts Branch Cluster, the FARMS share was 64 percent in 2011. In the Hernwood Cluster, it was 63 percent, up from 43 percent in 2003-2004.

For many years, the academic community has concluded that school overcrowding generates particularly negative outcomes for children associated with lower socioeconomic status. For instance, Rivera-Batiz and Marti (1995) conclude that "the proportion of sixth graders in over-utilized facilities passing the minimum standards for the . . . reading examination was between 4 to 9 percentage points *below* that in schools that were not overcrowded, holding other things constant." For the mathematics test, "the proportion of sixth graders who passed the exam was between 2 to 6 percentage points *below* that in schools that were not overcrowded, other things held constant"²⁷

The implication is that simply living with excess utilization is not a viable option and that various relief strategies should be deployed. The study team was not tasked with specifically recommending what strategies should be implemented. Rather, the study team's efforts are focused upon providing stakeholders with a comprehensive assessment of available options from which to select.

Beyond School-Based Relief Strategies – The Relevance of Adequate Public Facilities Ordinances

Adequate Public Facilities Ordinances (APFOs) are a growth management tool used to slow the rate of development when public facilities such as roads and schools are over capacity. Considering the current levels of utilization of school facilities in the Northwest Planning Region and levels of projected growth, additional residential development will put a tremendous strain on school facilities. The current APFO should be examined to determine its relationship to BCPS enrollment growth.

²⁷ Rivera-Batiz, F.L. and Marti, L. (1995). *A School System at Risk: A Study of the Consequences of Overcrowding in New York City Public Schools*. New York: Institute for Urban and Minority Education, Columbia University. (p.10, emphasis in original).

5.0 Relief Strategies Advantages and Limitations

It has been determined that the Northwest Planning Region of the BCPS system requires additional space to accommodate existing students and future potential. A series of relief strategies were explored to determine the various ways that space can be added into the area to relieve overcrowding. These strategies are consistent with relief strategies that BCPS has historically utilized to generate relief. Offered strategies have been explored along the dimensions of magnitude of relief, duration of relief, student achievement, cost and complexity.

For the Northwest Planning Region, strategies explored include:

- Modify Grade Configurations;
- Relocate early childhood (Campfield ECLDC) and magnet programs;
- Combine elementary and middle schools into K-8 centers; and
- Undertake new construction.

Use of relocatable units is encouraged as a method to provide relief on a temporary basis and should only be used long enough until permanent space is available for the students, or if an adjacent school can provide relief through redistricting. The core issue in the Northwest Planning Region is overcrowding at the elementary school level. Middle and high Schools are not significantly under-utilized and are operating efficiently when examining utilization at the regional level. There is opportunity to leverage space at the various levels through grade configuration adjustments to provide better balance, but there remains a need to add space.



Below are some facts about the existing conditions and building utilizations within the Northwest Planning Region:

- 1,447 Total student increase forecasted (2012-2021)
 - 1,101 forecast in first 5 years (2012-2016) and
 - 346 forecast in last 5 years (2017-2021)
- 10,050 Seats: current Elementary School Capacity (SRC)
 - 10,128 FTE 2011 enrolled;
 - 11,229 forecast by 2016 (FTE); and
 - 11,575 forecast by 2021 (FTE)
- Need 1,525 additional seats in 10 yrs (by 2021) to be at 100 percent utilization;
- Need 2,811 additional seats in 10 yrs (by 2021) to be at 90 percent utilization; and
- Need 3,568 additional seats in 10 yrs (by 2021) to be at 85 percent utilization.

In order to plan pro-actively and to operate the region's schools at an efficient level, BCPS must consider adding enough space to have some room for the normal fluctuations in school enrollment. The school system must add at a minimum of 1,525 (to be at 100 percent utilization) up to a maximum of 3,586 seats (to be at 85 percent utilization).

6.0 Summary of Region-wide Analytical Findings

This study examined the factors contributing to overcrowding of school facilities in the Northwest Planning Region and explored strategies to provide relief to schools operating above capacity. The findings of this examination of the NW Planning Region as a whole led to the development of elementary school clusters as a tool for effectively addressing capacity concerns and applying relief strategies. Section 7 of this report presents findings and specific relief strategies for each of these clusters. The level of detail it supplies renders it an indispensable tool for the school system moving forward. While each of the clusters faces unique challenges, there are some overarching themes throughout the Northwest Planning Region. Listed below are five key points that provide a broader context through which to view each of the cluster specific conclusions presented in section 7.

- BCPS projections for student enrollment highlight a need for additional elementary school space in the Northwest Planning Region. To maintain a school utilization rates at or below 100 percent, the school system will need to add new elementary school seats through new construction in the Northwest Planning Region;
- BCPS enrollment projections are based on cohort survival methodology. Because these projections are based on student data, dramatic changes in development and economic activity will not be captured using this technique. Accordingly, two additional enrollment scenarios were projected for this study. The first examined how a moderate level of development would affect enrollment and the second examined how a higher level of development would affect enrollment. Each of these projections was based on the typical student yields associated with expected development types. The moderate level projection anticipates completion of all active developments in the area. Active development was defined as any platted and approved development for which an occupancy permit had been issued since January 1, 2009. The high level projection anticipated the completion of all platted and approved developments in the area. Each of these projections is associated with additional need for student space, with the high level projection indicating a long-term need for space that would require the construction of a third new school;
- The school system should consider relocating or modifying the delivery of magnet and early childhood programs outside the Northwest Planning Region if possible. Programs that are associated with countywide enrollment create additional strains on local facilities. These types of programs are excellent candidates for relocation since they are not tied to a particular attendance zone or specific geography;
- In cases where there is excess middle school space and overlapping elementary schools are over-utilized, the school system should consider modified grade configurations. This could implicate the transition of fifth grade from elementary schools to the middle school they feed into or the combination of programs into K-8 centers; and
- The school system should consider purchasing available property in the Northwest Planning Region. There is a projected need for 1,500 additional seats if all other relief strategies are undertaken. The Fiscal Year 2014 Budget includes funds dedicated to new school construction. The current site bank includes only one property in the area, which may not be suitable for the school system's needs. Purchasing additional sites now will better position the school system to provide new facilities as need arises. BCPS should consider a real estate study to identify property that may be suitable to add to the site bank.

7.0 Cluster Specific Conclusions

New Town Cluster

Profile

The New Town Cluster includes Deer Park Elementary School, New Town Elementary School, and Woodholme Elementary School. The elementary schools in this cluster feed into Deer Park Middle School, Old Court Middle School, Pikesville Middle School, New Town High School, Randallstown High School, Pikesville High School and Owings Mills High School.

Already, the New Town Cluster is associated with over-utilization. Presently, aggregate utilization for elementary schools is 112.12 percent. Together Deer Park, New Town, and Woodholme Elementary Schools are projected to be 380 students over capacity in 2012, 684 students over capacity by 2016, and 716 students over capacity by 2021, bringing aggregate utilization to 139.25 percent over the course of a decade (absent any countervailing strategic implementation).

This cluster represents the greatest focus of concern for BCPS as the school system responds to rapid and dynamic community growth. It is paramount that BCPS position itself strategically to prepare for the needs of this cluster over the next five to ten years. Current BCPS projections anticipate that rapid enrollment growth will continue in this cluster. The chart below reflects the severity of the problem:

School	State Rated Capacity	2011 FTE Enrollment	2011 % SRC	2016 FTE Projected	2016 % SRC	2021 FTE Projected	2021 % SRC
Deer Park ES	451	380	84.26%	419	92.90%	454	100.67%
New Town ES	697	884	126.83%	1165	167.14%	1141	163.70%
Woodholme ES	676	781	115.53%	924	136.69%	945	139.79%
Cluster Total	1824	2045	112.12%	2508	137.50%	2540	139.25%
Cluster +/- SRC		+221		+684		+716	

Economic and Residential Development Forecast

The New Town Cluster overcrowding is largely a reflection of rapid population growth. Between 2000 and 2010, total population in the cluster expanded nearly 30 percent, easily the most rapid pace among the six clusters (Hernwood cluster was second at 16.9 percent).

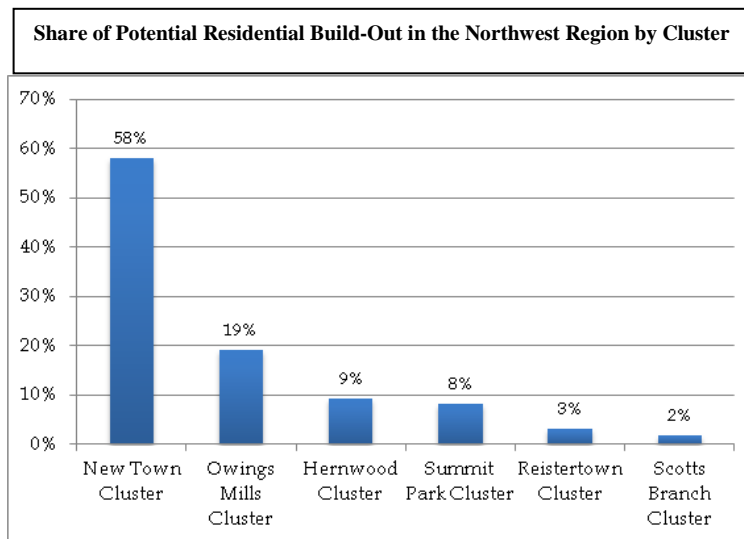
Among the 55 years and older demographic, population expansion was nearly 74 percent, again easily the most rapid among the six clusters. This suggests the possibility of significant household turnover as people approach and reach retirement age, creating opportunities for younger families with school-age children to move into an already crowded cluster. Of the six clusters in the Northwest Planning Region, New Town is associated with the second lowest FARMS share. In 2011, the share stood at 40.2 percent, up from 26.2 percent in 2003-2004.

Moreover, New Town is associated with vast development potential. An analysis of SLIST data indicates that New Town represents 58 percent of residential development potential in the Northwest Planning Region. All of these data indicate that New Town is a prime candidate for bold, strategic initiatives to offset projected overcrowding.

Build-Out Impact

Projections do not accommodate or address current permitted, but not yet built, housing developments in the region, and thus may fluctuate greatly over the next 4-7 years. The two scenarios below build on the aggregate BCPS student population projection by considering the effects of the completion of active permitted development (moderate build-out) and all permitted developments (high build-out). These figures are based on student yield factors for the types of development and number of units permitted in this cluster. The moderate build-out projection is based on the completion of all active, permitted development (occupancy permit issued since Jan. 1, 2009) within five years. The high build-out projection is based on 30 percent of all permitted development being completed within five years and the remaining 70 percent being completed in the following five years.

Scenario	2016 Adjusted for Buildout	2021 Adjusted for Buildout
Cluster Moderate Buildout Total	2536	2568
Cluster +/- SRC	+712	+744
Cluster % SRC	139.04%	140.79%
Cluster High Buildout Total	2583	2791
Cluster +/- SRC	+759	+967
Cluster % SRC	141.61%	153.02%



Relief Strategies Implemented for 2012/2013

- Policy Review and Analysis
 - Limiting special permission transfer and conducted residency audit at New Town Elementary School and Woodholme Elementary School in accordance with Policy 5140
- Room Use Recommendations
 - Use of Parks & Recreation space as a classroom during school day at New Town Elementary School.
 - New Town Elementary School and Woodholme Elementary School using “zero capacity” rooms (art, music, labs, etc.) as grade-level classrooms
- Use of Existing Relocatables
 - New Town Elementary School: 9 classrooms (+207 seats)
 - Woodholme Elementary School: 5 classrooms (+115 seats)
- Program annexation, relocation
 - New Town Elementary School early childhood relocated to Deer Park Elementary School in 2011 (continuing).
 - New Town Elementary School CLS Cluster Special Education Program relocated to Hernwood Elementary School in 2012
 - Woodholme Elementary School preschool (2010) and early childhood (2011) programs relocated to Winand Elementary School (continuing)

Relief Strategies for Future Consideration

1. Policy Review and Analysis (ongoing)

- New Town Elementary School and Woodholme Elementary School continue to restrict special permission transfers and conduct audits as needed per Policy 5140
 - i. Advantages: No cost to BCPS
 - ii. Limitations: None

2. Capacity Analysis (August 2012)

- New Town Elementary School and Hernwood Elementary School capacities will change to reflect space utilization due to program relocation
 - i. Advantages: Accurate room use reporting, promotes efficient use of available space, no cost to BCPS
 - ii. Limitations: None

3. Use of existing relocatable units

- Maximize use of relocatable units at New Town Elementary School and Woodholme Elementary School
- Deer Park Elementary School currently has no relocatable classrooms (-45 students in 2012)
 - i. Advantages: Less disruptive and more cost-effective than other options
 - ii. Limitations:
 - 1. Site limitations – New Town Elementary School, Woodholme Elementary School likely at capacity on campuses
 - 2. Efficiency is maximized when school reaches about 120 percent of capacity, core facilities become insufficient.

4. Use of available space at middle schools – annexation, grade and program reconfiguration, program relocation

- Deer Park Middle School projected over/under capacity for 2012 = -77 students. 15 percent of school population is in the magnet program
- Pikesville Middle School projected over/under capacity for 2012 = +12 students. Not feasible
- Old Court Middle School projected over/under capacity for 2012 = -453 students. Grade absorption possible
- Consider grade annexation (temporarily relocating approximately 150 students without integrating instructional programs) to Deer Park Middle School and/or Old Court Middle School
 - i. Advantages
 - 1. Use of available space at an under-utilized facility
 - 2. New Town Elementary School: relocating a grade level to Deer Park Middle School would yield partial relief (New Town would remain 318 over by 2016, 146 percent capacity)
 - 3. Woodholme Elementary School: relocating a grade level to Old Court Middle School would yield relief (Woodholme Elementary School would remain 98 over by 2016, 114 percent capacity)
 - 4. New Town Elementary School is a 100 percent feeder to Deer Park Middle School
 - ii. Limitations
 - 1. Deer Park Middle School has insufficient space unless the magnet program is eliminated or curtailed, phase out of some/all magnet students would take two years
 - 2. May have implications for parents, students regarding perception of available programs of choice
 - 3. New Town Elementary School and Woodholme Elementary School would require additional strategies for short- and long-term relief
 - 4. Woodholme Elementary School feeds to Old Court Middle School, Deer Park Middle School, and Pikesville Middle School, annexation may be disruptive
 - 5. Transport distance (Woodholme Elementary School, Old Court Middle School)
- Consider grade and program reconfiguration (i.e. integrated elementary and middle school programs, K-3 or 4 in one building, 4 or 5-8 in the other) for New Town Elementary School/Deer Park Middle School and Woodholme Elementary School/Old Court Middle School
 - i. Advantages
 - 1. Use of available space at an under-utilized facility
 - 2. For New Town Elementary School/Deer Park Middle School, by 2016 combined over/under capacity = +132 students (106 percent)
 - 3. For Woodholme Elementary School/Old Court Middle School, by 2016 combined over/under capacity = -26 students (98 percent)

ii. Limitations

1. Woodholme Elementary School feeds to Old Court Middle School, Deer Park Middle School, and Pikesville Middle School, may require a boundary change for implementation to align feeder pattern
2. Deer Park Middle School magnet program would need to be eliminated or curtailed to accommodate program reconfiguration; phase out of some/all magnet students would take two years
3. Schools may continue to require additional relief
4. Transport distance
5. Has significant educational implications beyond the purview of this study

5. Use of available space at high schools - annexation, grade and program reconfiguration, program relocation

- Consider annexing a grade level from New Town Elementary School (approximately 150 students) to New Town High School
- New Town High School projected over/under capacity for 2012 = -493 students, no change to 2016. Grade absorption possible
 - i. Advantages
 1. Use of available space at an under-utilized facility on an adjacent campus
 - ii. Limitations
 1. Creating right-sized classrooms, dedicated entrances, etc. will require capital modification
 2. Only a partial solution, New Town Elementary School will continue to require significant relief
 3. May require onsite administrator

6. Redistricting among adjacent elementary schools

- Consider changing boundaries to balance enrollments at adjacent schools. Schools within 90.00 percent capacity and greater are not considered able to accommodate students:
 - i. Cedarmere Elementary School (adjacent)
 1. 2012: -5 students, 2016: +6 students
 2. Cannot accommodate additional students
 - ii. Deer Park Elementary School (within cluster but currently under capacity)
 1. 2012: -45 students, 2016: -32 students
 2. Cannot accommodate additional students
 - iii. Fort Garrison Elementary School (adjacent)
 1. 2012: +42 students, 2016: +51 students
 2. Cannot accommodate additional students
 - iv. Hernwood Elementary School (adjacent)
 1. 2012: -54 students, 2016: -30 students
 2. Capacity will decrease in 2012
 3. Cannot accommodate additional students
 - v. Milbrook Elementary School (adjacent)
 1. 2012: +41 students, 2016: +47 students
 2. Cannot accommodate additional students
 - vi. New Town Elementary School (within cluster, over capacity)
 1. 2012: +281 students, 2016: +468 students
 2. Cannot accommodate additional students; requires urgent relief
 - vii. Owings Mills Elementary School (adjacent)
 1. 2012: +39 students, 2016: +90 students
 2. Cannot accommodate additional students
 - viii. Randallstown Elementary School (adjacent)
 1. 2012: -7 students, 2016: -7 students
 2. Cannot accommodate additional students
 - ix. Winand Elementary School (adjacent)
 1. 2012: -71 students, 2016: -30 students
 2. Already accommodating early childhood programs formerly at Woodholme Elementary School
 3. Cannot accommodate additional students
 - x. Woodholme Elementary School (within cluster, over capacity)
 1. 2012: +144 students, 2016: +248 students
 2. Cannot accommodate additional students; requires urgent relief

- Advantages
 - i. No cost to BCPS
- Limitations
 - i. Insufficient space in adjacent schools to balance enrollments by redistricting without additional seats.

7. Site Acquisition

- BCPS is in clear need of a suitable site bank property in this cluster.
- BCPS owns the Randall Ridge Site, adjacent to nearby Randallstown HS. This site has previously been considered “not viable” for school construction due to environmental constraints
 - i. Advantages
 - 1. Acquire sites for future school construction
 - ii. Limitations
 - 1. Funding availability
 - 2. Site availability

8. New Construction

- Add 700-900 elementary seats within this cluster (new construction and/or additions) – typically recommended when projected enrollments of schools in cluster exceed capacity for extended period of time and schools have exhausted other relief options, to address capacity concerns between years 2014-2021. This is based on the 2021 BCPS enrollment projections (+716), and the potential future 2021 build-out (+961) as noted above.
 - i. Advantages
 - 1. Adds a new, modern instructional facility to the BCPS inventory
 - 2. New facility has a much longer life and use span than existing facilities and those with renovations and/or additions
 - 3. Strategic redistricting to accommodate the new school can relieve overcrowding of a number of schools for an extended period of time
 - 4. Enables all schools in the cluster to deliver instructional programming more effectively
 - 5. May eliminate the need to accommodate students in relocatable classrooms
 - 6. A long-term solution
 - ii. Limitations
 - 1. BCPS does not own a site within this cluster. No site has been identified. Randall Ridge, in the Hernwood cluster, could be reassessed, but in the past has not been considered viable.
 - 2. Will necessitate redistricting of students from crowded schools to the new facility and/or other existing schools.

Summit Park Cluster

Profile

The Summit Park Cluster includes Bedford Elementary, Campfield Early Childhood Learning and Development Center (Campfield ECLDC), Milbrook Elementary School, Summit Park Elementary School, and Wellwood Elementary School. The elementary schools in this cluster feed into Pikesville Middle School, Pikesville High School, Milford Mill Academy and Woodlawn High School. Elementary school enrollment in this cluster is 1,741. Within five years, this total is expected to expand rapidly to 2,046 students, which will drive utilization from almost 100 percent to more than 117 percent. Thereafter, enrollment growth is expected to slow, rising to only 2,071 after ten years, which is associated with utilization of 118.95 percent.

The Milbrook Elementary School boundary includes one additional satellite area. The Wellwood Elementary School boundary includes three additional satellite areas. Wellwood Elementary School also contains a magnet program. 31 percent of the out-of-boundary students attending Wellwood Elementary School do not reside in the Northwest Planning Region. The cluster contains 1,741 seats. There are 1,713 BCPS elementary school students residing within the cluster, which would ordinarily render the cluster at 98.39 percent capacity utilization if only cluster students were attending these schools. Programs and choices, including early childhood, special education, magnet, and special permission transfers create significant demands on space within this cluster.

School	State Rated Capacity	2011 FTE Enrollment	2011 % SRC	2016 FTE Projected	2016 % SRC	2021 FTE Projected	2021 % SRC
Bedford ES	309	260	84.14%	284	91.91%	266	86.08%
Campfield ECLDC	322	258	80.12%	291	90.37%	302	93.79%
Milbrook ES	319	337	105.64%	366	114.73%	384	120.38%
Summit Park ES	336	428	127.38%	570	169.64%	561	166.96%
Wellwood ES	455	462	101.54%	535	117.58%	558	122.64%
Cluster Total	1741	1745	100.23%	2046	117.52%	2071	118.95%
Cluster +/- SRC		+4		+305		+330	

Economic and Residential Development Forecast

An analysis of the SLIST reveals that the Summit Park Cluster accounts for 8.3 percent of total development potential among the six clusters in the Northwest Planning Region. However, much of this potential development is slated to take place over the next five years. When one analyzes all active developments, which encompass those associated with occupancy permits issued since January 1, 2009, Summit Park's development share rises to 38 percent. Some of this development will consist of multifamily units. In fact, Summit Park will be the only cluster associated with active multifamily development. Among active developments, the Summit Park cluster is also associated with the highest number of single-family detached units.

This anticipated development mix is not reflected in enrollment projections. This has been a community associated with slow population growth, both overall and for the 55+ segment.

Socioeconomically, the FARMS proportion for this cluster ranks 3rd highest (48 percent) among the 6 clusters. The FARMS share has risen roughly 13 percentage points since 2003-2004, which is consistent with what has been observed in the Northwest Planning Region generally.

Build-Out Impact

BCPS enrollment projections do not accommodate or address current permitted, but not yet built, housing developments in the Northwest Planning Region, and thus may fluctuate greatly in 4-7 years. The two scenarios below build on the aggregate elementary school student population projection above by considering the effects of the completion of active permitted development (moderate build-out) and all permitted developments (high build-out). These figures are based on student yield factors for the types of development and number of units permitted in this cluster. The moderate build-out projection is based on the completion of all active, permitted development (occupancy permit issued since Jan. 1, 2009) within five years. The high build-out projection is based on 30 percent of all permitted development being completed within five years and the remaining 70 percent being completed in the following five years.

Scenario	2016 Adjusted for Build-out	2021 Adjusted for Build-out
Cluster Moderate Build-out Total	2080	2105
Cluster +/- SRC	+339	+364
Cluster % SRC	119.47%	120.91%
Cluster High Build-out Total	2061	2123
Cluster +/- SRC	+320	+382
Cluster % SRC	118.38%	121.94%

Relief Strategies Implemented for 2012/2013

- Policy Review and Analysis
 - Schools near or over capacity will continue to restrict special permission transfers per Policy 5140
- Room Use Recommendations
 - Schools using “zero capacity” rooms (art, music, labs, etc.) as grade-level classrooms
- Use of Existing Relocatables
 - Campfield ECLDC: 3 relocatables being utilized for Judy Center
 - Milbrook Elementary School: 1 classroom (+23 seats)
 - Summit Park Elementary School: 5 classrooms (+115 seats)
 - Wellwood Elementary School: 2 classrooms (+46 seats), may be exceeded
- Program annexation, relocation
 - Campfield ECLDC accommodates:
 - Bedford Elementary School (-41 students in 2012) Early Childhood and Kindergarten
 - Milbrook Elementary School (+41 students in 2012) Early Childhood and Kindergarten
 - Randallstown Elementary School (-7 students in 2012) Early Childhood
 - Scotts Branch Elementary School (+54 students in 2012) Early Childhood
 - Wellwood Elementary School (+31 students in 2012) Early Childhood

Relief Strategies for Future Consideration

1. Policy Review and Analysis (ongoing)

- Schools in this cluster will continue to restrict special permission transfers and conduct residency audits as needed per policy 5140
 - i. Advantages – No cost to BCPS
 - ii. Limitations – None

2. Use of existing relocatable units

- Maximize use of relocatable units at schools within the Summit Park Elementary School Cluster
 - i. Advantages – less disruptive and more cost-effective than other options
 - ii. Limitations
 - 1. Site limitations
 - 2. Efficiency is maximized when school reaches about 120percent of capacity, core facilities become insufficient.

3. Consider redistricting among adjacent elementary schools

- Consider changing boundaries to balance enrollments among adjacent schools. Two schools in this cluster (Milbrook Elementary School and Wellwood Elementary School) contain non-contiguous satellite areas
- Campfield ECLDC has no boundary and serves early childhood and Kindergarten students from specific schools
- Cluster and adjacent schools and available space are noted below. Schools within 90.00 percent capacity and greater are not considered able to accommodate students:
 - i. Bedford Elementary School (within cluster, over capacity)
 - 1. 2012: -41 students, 2016: +6 students
 - 2. Cannot accommodate additional students
 - ii. Campfield ECLDC (within cluster, early childhood center)
 - 1. 2012: -45 students, 2016: -32 students
 - 2. Cannot accommodate additional students
 - iii. Milbrook Elementary School (within cluster, over capacity)
 - 1. 2012: +41 students, 2016: +47 students
 - 2. Cannot accommodate additional students
 - iv. Summit Park Elementary School (within cluster, over capacity)
 - 1. 2012: +133 students, 2016: +234 students
 - 2. Cannot accommodate additional students
 - v. Wellwood Elementary School (within cluster, over capacity)
 - 1. 2012: +31 students, 2016: +80 students
 - 2. Cannot accommodate additional students
 - vi. Powhatan Elementary School (adjacent)
 - 1. 2012: -51 students, 2016: -53 students
 - 2. Cannot accommodate additional students
 - vii. Woodmoor Elementary School (adjacent)
 - 1. 2012: -102 students, 2016: -131 students
 - 2. Can accommodate some students
 - viii. Hebbville Elementary School (adjacent)
 - 1. 2012: -216 students, 2016: -212 students
 - 2. Can accommodate some students
 - ix. Scotts Branch Elementary School (adjacent)
 - 1. 2012: +54 students, 2016: +113 students
 - 2. Cannot accommodate additional students
 - x. Winand Elementary School (adjacent)
 - 1. 2012: -71 students, 2016: -30 students
 - 2. Cannot accommodate additional students
 - xi. Woodholme Elementary School (adjacent)
 - 1. 2012: +144 students, 2016: +248 students
 - 2. Cannot accommodate additional students
 - xii. Fort Garrison Elementary School (adjacent)
 - 1. 2012: +42 students, 2016: +51 students
 - 2. Cannot accommodate additional students
 - xiii. Riderwood Elementary School (adjacent)
 - 1. 2012: +35 students, 2016: +31 students
 - 2. Cannot accommodate additional students
 - xiv. West Towson Elementary School (adjacent)
 - 1. 2012: +140 students, 2016: +220 students
 - 2. Cannot accommodate additional students
- Advantages
 - i. No cost to BCPS
 - ii. Hebbville Elementary School and Woodmoor Elementary School may provide some relief through an annex, program movement, or boundary change.
 - iii. Opportunity to reconsider satellite attendance boundaries to improve feeder patterns and neighborhood integrity.
- Limitations
 - i. Redistricting can only provide partial relief in this cluster.
 - ii. Comprehensive redistricting would require coordination with other relief strategies.

4. Program modification, annexation, or relocation within the cluster: Wellwood Elementary School

- Wellwood Elementary School is a comprehensive elementary school with an attendance boundary and a magnet program.
- Wellwood Elementary School has a capacity of 455, with a current enrollment of 462 FTE (+7 over capacity, 101.54 percent)
- Of the 462 total students currently attending Wellwood ES, 122 reside outside the attendance boundary (26.40 percent)
- Projections show Wellwood Elementary School growing to 535 FTE (+80, 117.58 percent) by 2016 and 558 FTE (+103, 122.64 percent) by 2021
- Modifying/restricting the magnet enrollment of Wellwood Elementary School could stabilize enrollments.
 - i. Advantages
 - 1. Takes advantage of usable instructional space in BCPS facilities
 - ii. Limitations
 - 1. May have implications for parents, students regarding perception of available programs of choice

5. Program modification, annexation, or relocation within the entire cluster: Campfield ECLDC

- Campfield ECLDC formerly functioned as a comprehensive elementary school with an attendance boundary.
- Campfield ECLDC currently operates as an early childhood center providing early childhood and Kindergarten programs for Bedford Elementary School, Milbrook Elementary School, Randallstown Elementary School, Scotts Branch Elementary School, and Wellwood Elementary School.
- Repurpose the Campfield building as a comprehensive elementary school with a geographic boundary. Early childhood and Kindergarten students residing outside the established Campfield ES boundary would return to their home elementary schools.
- If Campfield was repurposed from an ECLDC to a comprehensive school, the capacity would increase from its current SRC of 322 to an estimated 405.
- All schools in the Cluster would be involved in the boundary change. If the historic Campfield boundary were restored, Campfield would absorb the Milbrook satellite area, and the Wellwood Elementary School satellite area adjacent to Campfield.
 - i. Advantages
 - 1. If the Campfield building was reconfigured to a comprehensive elementary school with its historical boundary, it would currently be at 85 percent capacity
 - 2. Hebbville Elementary School may provide the relief required for Scotts Branch Elementary School to accommodate returning early childhood and kindergarten programs
 - 3. Opens up space for K-5 students living in the immediate vicinity of the school
 - 4. Opportunity to create contiguous attendance zones, eliminate satellite boundaries for the area and provide much needed relief to cluster schools
 - 5. Early childhood and kindergarten students accommodated in home schools
 - 6. If combined with modification/restriction of the Wellwood Elementary School magnet program draw, Summit Park Elementary School, and Milbrook Elementary School may be relieved
 - ii. Limitations
 - 1. May have implications for parents, students regarding perception of available programs of choice
 - 2. The scope of the Wellwood Elementary School magnet attendance draw areas would need to be limited
 - 3. Capital and operating funding considerations
 - 4. Cluster program students (e.g. special education, early childhood, kindergarten) returning to home schools may increase staff and building utilization demands and costs

6. Site Acquisition

- BCPS is likely in need of a suitable site bank property in this cluster and/or a full analysis of potential for development on existing campuses.
 - i. Advantages
 - 1. Acquire sites for future school construction
 - 2. Understand full potential of existing campuses and facilities
 - ii. Limitations
 - 1. Funding availability
 - 2. Site availability

7. New Construction (additions)

- Add 305-380 elementary seats within this cluster to address capacity concerns between years 2016-2021. This is based on the 2021 BCPS enrollment projections (+320), and the potential future 2021 build-out (+380) as noted above.
- Will likely need to be coordinated with strategies above for long-term relief.
 - i. Advantages
 1. Adds necessary additional seats
 2. New construction and renovation adds functional life to facility and helps modernize instructional space
 3. Associated strategic redistricting can relieve overcrowding of a number of schools for an extended period of time
 4. May eliminate the need to accommodate students in relocatable classrooms.
 5. Provides a long-term solution
 - ii. Limitations
 1. More cost-effective options appear to be available for this cluster for short-term relief

Owings Mills Cluster

Profile

The Owings Mills Cluster includes Cedarmere Elementary School, Fort Garrison Elementary School, Owings Mills Elementary School, and Timber Grove Elementary School. The elementary schools in this cluster feed into Pikesville Middle School, Franklin Middle School, Deer Park Middle School, Pikesville High School, Owings Mills High School and Franklin High School. Enrollment in this cluster is forecast to grow by 254 elementary students by 2021-22. This will lead to elementary school buildings in the Owings Mills Cluster operating at 111.7 percent of their capacity.

School	State Rated Capacity	2011 FTE Enrollment	2011 % SRC	2016 FTE Projected	2016 % SRC	2021 FTE Projected	2021 % SRC
Cedarmere ES	474	456	96.20%	480	101.27%	520	109.70%
Fort Garrison ES	431	462	107.19%	482	111.83%	480	111.37%
Owings Mills ES	699	736	105.29%	789	112.88%	858	122.75%
Timber Grove ES	600	553	92.17%	582	97.00%	603	100.50%
Cluster Total	2204	2207	100.14%	2333	105.85%	2461	111.66%
Cluster +/- SRC		+3		+129		+257	

Economic and Residential Development Forecast

Data indicate that the Owings Mills cluster represents 17.5 percent of active development in the Northwest Planning Region. With an analysis of the SLIST to determine potential build-out capacity, the figure rises to 19.2 percent. Considering the anticipated product mix, the Owings Mills cluster has the potential to add more than 27 percent of all net new enrollment that could occur as the result of potential new development. Moreover, the study team believes that the SLIST does not fully capture the true potential for Owings Mills development because of possible rezoning. Even without consideration of this complete development potential, the cluster is anticipated to be above capacity going forward, with anticipated utilization approaching 112 percent over the course of a decade using BCPS data alone.

The average age in this cluster has increased over the past decade. In the Owings Mills cluster, the 55+ population expanded 46.3 percent between 2000 and 2010 compared with overall population growth of 12.1 percent. This creates the potential for significant housing turnover during the current decade as the 55+ segment of the population approaches and eventually reaches retirement age. This could translate into an unanticipated enrollment trend.

Socioeconomically, the Owings Mills cluster is as challenged as the entire Northwest Area. In 2003-2004, the FARMS share stood at 30.6 percent. By 2011, this figure had risen to 44.1 percent, which ranks this cluster fourth highest along this dimension among the six clusters.

Build-Out Impact

BCPS enrollment projections do not accommodate or address current permitted but not yet built housing developments in the region, and thus may fluctuate greatly in 4-7 years. The two scenarios below build on the aggregate elementary student population projection above by considering the effects of the completion of active permitted development (moderate build-out) and all permitted developments (high build-out). These figures are based on student yield factors for the types of development and number of units permitted in this cluster. The moderate build-out projection is based on the completion of all active, permitted development (occupancy permit issued since Jan. 1, 2009) within five years. The high build-out projection is based on 30 percent of all permitted development being completed within five years and the remaining 70 percent being completed in the following five years.

Scenario	2016 Adjusted for Build-out	2021 Adjusted for Build-out
Cluster Moderate Build-out Total	2359	2487
Cluster +/- SRC	+155	+283
Cluster % SRC	107.03%	112.84%
Cluster High Build-out Total	2378	2607
Cluster +/- SRC	+174	+403
Cluster % SRC	107.89%	118.28%

Relief Strategies Implemented for 2012/2013

- Policy Review and Analysis
 - Schools near or over capacity restrict special permission transfers per Policy 5140
- Room Use Recommendations
 - Schools using “zero capacity” rooms (art, music, labs, etc.) as grade-level classrooms.
- Use of Existing Relocatables
 - Fort Garrison Elementary School, 2 relocatables (+46 seats)
 - Owings Mills Elementary School, 3 classrooms (+69 seats)

Relief Strategies for future consideration

1. Policy Review and Analysis (ongoing)

- Schools in this cluster will continue to restrict special permission transfers and conduct residency audits as needed per Policy 5140
 - i. Advantages – No cost to BCPS
 - ii. Limitations – None

2. Use of existing relocatable units

- Maximize use of relocatable units at schools within the Owings Mills Elementary School Cluster
 - i. Advantages
 - 1. Less disruptive and more cost-effective than other options.
 - ii. Limitations
 - 3. Site limitations
 - 4. Efficiency is maximized when school reaches about 120 percent of capacity, core facilities become insufficient.

3. Consider redistricting among adjacent elementary schools

- Consider changing boundaries to balance enrollments among adjacent schools. Cluster and adjacent schools and available space are noted below. Schools within 90.00 percent capacity and greater are not considered able to accommodate additional students:
 - i. Cedarmere Elementary School (within cluster, at capacity)
 - 1. 2012: -5 students, 2016: +6 students
 - 2. Cannot accommodate additional students
 - ii. Fort Garrison Elementary School (within cluster, over capacity)
 - 1. 2012: +42 students, 2016: +51 students
 - 2. Cannot accommodate additional students
 - iii. Owings Mills Elementary School (adjacent, over capacity)

1. 2012: +39 students, 2016: +90 students
2. Cannot accommodate additional students
- iv. Timber Grove Elementary School (within cluster, within capacity)
 1. 2012: -46 students, 2016: -18 students
 2. Cannot accommodate additional students
- v. Franklin Elementary School (adjacent, over capacity)
 1. 2012: +28 students, 2016: +38 students
 2. Cannot accommodate additional students
- vi. Glyndon Elementary School (adjacent, within capacity)
 1. 2012: -51 students, 2016: -46 students
 2. Cannot accommodate additional students
- vii. Milbrook Elementary School (adjacent, over capacity)
 1. 2012: +41 students, 2016: +47 students
 2. Cannot accommodate additional students
- viii. New Town Elementary School (adjacent, over capacity)
 1. 2012: +281 students, 2016: +468 students
 2. Cannot accommodate additional students
 3. Requires urgent relief
- ix. Pinewood Elementary School (adjacent, over capacity)
 1. 2012: +20 students, 2016: +27 students
 2. Cannot accommodate additional students
- x. Reisterstown Elementary School (adjacent, over capacity)
 1. 2012: +74 students, 2016: +66 students
 2. Cannot accommodate additional students
- xi. Riderwood Elementary School (adjacent, over capacity)
 1. 2012: +35 students, 2016: +31 students
 2. Cannot accommodate additional students
- xii. Summit Park Elementary School (adjacent, over capacity)
 1. 2012: +133 students, 2016: +234 students
 2. Cannot accommodate additional students
- xiii. Wellwood Elementary School (adjacent, over capacity)
 1. 2012: +31 students, 2016: +80 students
 2. Cannot accommodate additional students
- xiv. Woodholme Elementary School (adjacent, over capacity)
 1. 2012: +144 students, 2016: +248 students
 2. Cannot accommodate additional students
 3. Requires urgent relief
- Advantages
 - i. No cost to BCPS
- Limitations
 - i. Insufficient space in adjacent schools to balance enrollments by redistricting without additional seats

4. Consider available space in cluster middle and high schools

- Review capacity availability at the receiver middle and high schools:
 - i. Deer Park Magnet Middle School, 2012: -77 students, 2016: -146 students
 1. May accommodate additional students, may require restriction, modification to magnet program. Strategy was also considered in New Town cluster analysis
 - ii. Franklin Middle School, 2012: -119 students, 2016: -93 students
 1. Cannot accommodate additional students
 - iii. Pikesville Middle School, 2012: +12 students, 2016: -19 students
 1. Cannot accommodate additional students
 - iv. Franklin High School, 2012: -140 students, 2016: -212 students
 1. Can possibly accommodate some students, but geographically distant from nexus of students
 - v. Owings Mills High School, 2012: -158 students, 2016: -55 students
 1. Cannot accommodate additional students
 - vi. Pikesville High School, 2012: -85 students, 2016: -23 students
 1. Cannot accommodate additional students
 - vii. Advantages

1. No cost to BCPS
- viii. Limitations
 1. Deer Park Middle School has insufficient space unless the magnet program is restricted or modified. Deer Park Middle School was used in New Town cluster analysis.
 2. Franklin High School may have space, but not located near need

5. Site Acquisition

- i. BCPS is in need of a suitable site bank property in this cluster and/or a full analysis of potential for development on existing campuses.
- ii. Advantages
 1. Acquire sites for future school construction.
 2. Understand full potential of existing campuses and facilities.
- iii. Limitations
 1. Funding availability
 2. Site availability

6. New Construction

- Add 150-400 elementary school seats within this cluster to address capacity concerns between years 2016-2021. This is based on the 2021 BCPS enrollment projections (+129), and the potential future 2021 build-out (+403) as noted above
 - i. Advantages
 1. Adds a new, modern instructional facility to the BCPS inventory
 2. New facility has a much longer life and use span than existing facilities
 3. Strategic redistricting to accommodate the new school can relieve overcrowding of a number of schools for an extended period of time
 4. May eliminate the need to accommodate students in relocatable classrooms
 5. Offers a long-term solution
 - ii. Limitations
 1. More cost-effective options appear to be available for this cluster

Scotts Branch Cluster

Profile

The Scotts Branch Cluster includes Church Lane Elementary School, Scotts Branch Elementary School, and Winand Elementary School. Elementary schools in this cluster feed into Old Court Middle School, Pikesville Middle School, Randallstown High School, Milford Mill Academy and Pikesville High School. Enrollment in this cluster is forecast to grow by 187 elementary students by 2021-22. This will lead to school buildings in the Scotts Branch Cluster holding 108.85 percent of their capacity. However, enrollment at Scotts Branch Elementary School is projected to increase at a rate disproportionate to the other schools in the cluster, necessitating fairly aggressive relief strategies in the coming years.

School	State Rated Capacity	2011 FTE Enrollment	2011 % SRC	2016 FTE Projected	2016 % SRC	2021 FTE Projected	2021 % SRC
Church Lane ES	476	477	100.21%	486	102.10%	515	108.19%
Scotts Branch ES	511	554	108.41%	624	122.11%	630	123.29%
Winand ES	583	491	84.22%	553	94.85%	564	96.74%
Cluster Total	1570	1522	96.94%	1663	105.92%	1709	108.85%
Cluster +/- SRC		-48		+93		+139	

Economic and Residential Development Forecast

Socioeconomically, the Scotts Branch cluster looks much like the Hernwood cluster. At 64 percent, the FARMS share is elevated. The Scotts Branch cluster is also not associated with significant planned residential build-out. In fact, of the six clusters, Scotts Branch appears to have the least long-term potential for new residential development.

This is attributable both to a dearth of developer interest as well as to a relative absence of buildable lots. According to the SLIST, the cluster represents less than 2 percent of potential residential unit build-out in the Northwest Planning Region.

Past suppressed development expectations are neatly reflected in enrollment estimates and projections. Utilization presently stands at less than 97 percent among elementary schools, partially a reflection of the fact that the number of family households expanded just 4.4 percent between 2000 and 2010, the slowest pace among the six clusters.

Like the Reisterstown and Owings Mills clusters, the Scotts Branch cluster has experienced sizeable growth in the 55+ population. Between 2000 and 2010, the 55+ segment expanded nearly 63 percent. On average, this cluster has become older more quickly than any of the other clusters. Overall population growth in Scotts Branch has been relatively slow.

This creates the possibility of rapid housing turnover going forward, which in turn generates the potential for more rapid enrollment growth than currently anticipated. Moreover, given the price points associated with housing in the area, it is quite likely that Scotts Branch will absorb a disproportionate share of lower income households.

Build-Out Impact

These figures are based on student yield factors for the types of development and number of units permitted in this cluster. The moderate build-out projection is based on the completion of all active, permitted development (occupancy permit issued since Jan. 1, 2009) within five years. The high build-out projection is based on 30 percent of all permitted development being completed within five years and the remaining 70 percent being completed in the following five years.

Scenario	2016 Adjusted for Build-out	2021 Adjusted for Build-out
Cluster Moderate Build-out Total	1666	1712
Cluster +/- SRC	+96	+142
Cluster % SRC	106.11%	109.04%
Cluster High Build-out Total	1666	1727
Cluster +/- SRC	+96	+157
Cluster % SRC	106.11%	110.00%

Relief Strategies Implemented for 2012/2013

- Use of Existing Relocatables
 - Scotts Branch Elementary School, 2 relocatables (+46 seats)
- Relocations
 - Scotts Branch early childhood (4 sessions x 20 = approximately 80 students) housed at Campfield ECLDC
 - Winand Elementary School is providing relief for Woodholme Elementary School by serving Preschool (3 year old program) and early childhood students
 - Winand Elementary School has been a Title I receiver school

Relief Strategies for Future Consideration

1. Policy Review and Analysis (ongoing)

- Schools in this cluster can restrict special permission transfers per Policy 5140.
 - i. Advantages – No cost to BCPS
 - ii. Limitations – None

2. Use of existing relocatable units

- Maximize use of relocatable units at schools within the Scotts Branch Elementary School Cluster
 - i. Advantages
 - 1. Less disruptive and more cost-effective than other options
 - ii. Limitations
 - 1. Site limitations
 - 2. Efficiency is maximized when school reaches about 120 percent of capacity, core facilities become insufficient.

3. Program modification, annexation, or relocation within the cluster: Church Lane Elementary School

- Church Lane Elementary School is a comprehensive elementary school with an attendance boundary and a magnet program
- Church Lane Elementary School has a capacity of 476, with a current enrollment of 477 FTE (+1 over capacity, 100.21 percent)
- Of the 487 total students currently attending Church Lane ES, 149 reside outside the attendance boundary (30.59 percent), and 60 of the 149 reside outside of the Northwest Planning Region
- Projections show Church Lane Elementary School growing to 586 FTE (+10, 102.10 percent) by 2016 and 515 FTE (+39, 108.19 percent) by 2021
- Modifying or restricting magnet enrollment at Church Lane Elementary School could stabilize enrollments
 - i. Advantages
 - 1. Takes advantage of usable instructional space in BCPS facilities
 - ii. Limitations
 - 1. May have implications for parents and students regarding perception of available programs of choice

4. Program modification, annexation, or relocation within the cluster: Scotts Branch Elementary School

- Scotts Branch Elementary School has a capacity of 511, with a current enrollment of 554 FTE (+43 over capacity, 108.41 percent)
- Scotts Branch Elementary School early childhood students are served by Campfield ECLDC
- Projections show Scotts Branch Elementary School growing to 624 FTE (+113, 122.11 percent) by 2016 and 630 FTE (+119, 123.29 percent) by 2021

- If Scotts Branch Elementary School were to recover its early childhood (e.g. reconfiguration of Campfield ECLDC as a comprehensive elementary school), adjacent Hebbville Elementary School (Southwest Planning Region) may be able to provide relief
 - i. Advantages
 - 1. Takes advantage of usable instructional space in BCPS facilities
 - ii. Limitations
 - 1. None

5. Consider available space in cluster middle and high schools

- Review capacity availability at the receiver middle and high schools:
 - i. Old Court Middle School, 2012: -453 students, 2016: -354 students
 - 1. Can accommodate students
 - ii. Pikesville Middle School, 2012: +12 students, 2016: -19 students
 - 1. Cannot accommodate additional students
 - iii. Milford Mill Academy, 2012: -24 students, 2016: +17 students
 - 1. Cannot accommodate additional students
 - iv. Randallstown High School, 2012: -295 students, 2016: -339 students
 - 1. Can accommodate students
 - v. Pikesville High School, 2012: -85 students, 2016: -23 students
 - 1. Cannot accommodate additional students
 - vi. Advantages
 - 1. Use of available space at an under-utilized facility.
 - 2. Old Court Middle School may prove a better option for relief in this cluster than in the New Town cluster because Scotts Branch Elementary School is a 100 percent feeder to Old Court Middle School, while Woodholme Elementary School is not
 - vii. Limitations
 - 1. May have educational implications beyond the purview of this study
 - 2. May require reconfiguration of grade levels between elementary and secondary schools
 - 3. Only two secondary schools within the cluster can provide relief
 - 4. May disrupt feeder patterns

6. Consider redistricting among adjacent elementary schools

- Consider changing boundaries to balance enrollments among adjacent schools
 - i. Advantages
 - 1. No cost to BCPS
 - ii. Limitations
 - 1. BCPS does not typically consider redistricting for this small magnitude of students, as more efficient and practical relief options exist, however, may be an appropriate strategy when combined with others

Reisterstown Cluster

Profile

The Reisterstown Cluster includes Chatsworth Elementary School, Franklin Elementary School, Glyndon Elementary School, and Reisterstown Elementary School. Elementary schools in this cluster feed into Franklin Middle School, Hereford Middle School, Franklin High School, Owings Mills High School and Hereford High School. Elementary schools in this cluster are presently at capacity, with utilization just under 99 percent. Enrollment in this cluster is forecast to grow by 94 elementary students by 2021-22. If no changes are made, utilization will rise to nearly 104 percent, making the Reisterstown Cluster the second least crowded in the Northwest Planning Region (after Hernwood Cluster). Chatsworth School has no geographic boundary and accepts students through application to its magnet program. Ninety-seven percent of the students at Chatsworth School reside in the Northwest Planning Region. Chatsworth School also serves several special education cluster programs.

School	State Rated Capacity	2011 FTE Enrollment	2011 % SRC	2016 FTE Projected	2016 % SRC	2021 FTE Projected	2021 % SRC
Chatsworth ES	442	385	87.10%	389	88.01%	401	90.72%
Franklin ES	473	494	104.44%	511	108.03%	528	111.63%
Glyndon ES	520	470	90.38%	474	91.15%	490	94.23%
Reisterstown ES	450	510	113.33%	516	114.67%	534	118.67%
Cluster Total	1885	1859	98.62%	1890	100.27%	1953	103.61%
Cluster +/- SRC		-26		5		68	

Economic and Residential Development Forecast

As one of the more fully built-out communities within the Northwest Area, development pressures associated with the Reisterstown Cluster are relatively suppressed. An analysis of active development indicates that this cluster is associated with less than 2 percent of planned residential construction. The SLIST reveals a potential unit construction share of 3.2 percent. However, there is still the possibility that enrollment will rise faster than might be expected given the anticipated lack of new construction. The population aged 55+ expanded greatly in this community between 2000 and 2010.

That older population surged 44.6 percent compared with overall population growth within the cluster of 13.4 percent. Over the current decade, much of this population will reach retirement age, setting the stage for substantial housing turnover. This in turn will create opportunities for younger families with school-age children to inhabit the cluster, thereby increasing enrollment rapidly despite the absence of substantial new construction.

Socioeconomically, it can be argued that this is the least challenging of the six clusters. In 2003-2004, the FARMS share stood at 18.8 percent. By 2011, this figure expanded to 34.4 percent, still the lowest among the six clusters.

Build-Out Impact

These figures are based on student yield factors for the types of development and number of units permitted in this cluster. The moderate build-out projection is based on the completion of all active, permitted development (occupancy permit issued since Jan. 1, 2009) within five years. The high build-out projection is based on 30 percent of all permitted development being completed within five years and the remaining 70 percent being completed in the following five years.

Scenario	2016 Adjusted for Build-out	2021 Adjusted for Build-out
Cluster Moderate Build-out Total	1893	1956
Cluster +/- SRC	+8	+71
Cluster % SRC	100.42%	103.77%
Cluster High Build-out Total	1900	1987
Cluster +/- SRC	+15	+102
Cluster % SRC	100.80%	105.41%

Relief Strategies Implemented for 2012/2013

- Room Use Recommendations
 - Schools using “zero capacity” rooms (art, music, labs, etc.) as grade-level classrooms
- Use of Existing Relocatables
 - Franklin Elementary School, 2 relocatables (+46 seats)
 - Reisterstown Elementary School, 4 relocatables (+92 seats)

Relief Strategies for Future Consideration

1. Policy Review and Analysis (ongoing)

- Schools in this cluster may restrict special permission transfers per Policy 5140
 - i. Advantages – No cost to BCPS
 - ii. Limitations – None

2. Use of existing relocatable units

- Maximize use of relocatable units at schools within the Reisterstown ES Cluster
 - i. Advantages
 - 1. Less disruptive and more cost-effective than other options
 - ii. Limitations
 - 1. Site limitations
 - 2. Efficiency is maximized when school reaches about 120 percent of capacity, core facilities become insufficient.

Hernwood Cluster

Profile

The Hernwood Cluster includes Hernwood Elementary School and Randallstown Elementary School. Elementary schools in this cluster feed into Deer Park Middle School, Windsor Mill Middle School, New Town High School and Randallstown High School. Enrollment in this cluster is forecast to grow by 91 elementary students by 2021-22. This will lead to school buildings in the Hernwood Cluster operating at 101.8 percent of their capacity by 2021.

School	State Rated Capacity	2011 FTE Enrollment	2011 % SRC	2016 FTE Projected	2016 % SRC	2021 FTE Projected	2021 % SRC
Hernwood ES	428	363	84.81%	398	92.99%	430	100.47%
Randallstown ES	398	387	97.24%	391	98.24%	411	103.27%
Cluster Total	826	750	90.80%	789	95.52%	841	101.82%
Cluster +/- SRC		-76		-37		15	

Economic and Residential Development Forecast

Socioeconomically, the Hernwood Cluster is arguably the most challenging. The FARMS share stood at nearly 63 percent as of 2011, having risen from a proportion of 43 percent in 2003-2004. In other words, the increase in FARMS share was significantly greater than in the balance of the Northwest Area. While the Scotts Branch cluster is associated with a slightly higher FARMS share, its share rose more slowly between 2003-2004 and 2011. This challenging socioeconomic environment is associated with a relative lack of development/investment momentum. Though the Hernwood Cluster represents 18 percent of active development, it represents less than 10 percent of potential residential unit build-out. A history of relative under-investment has resulted in the Hernwood Cluster's status as the least utilized cluster (as a fraction of capacity).

Build-Out Impact

These figures are based on student yield factors for the types of development and number of units permitted in this cluster. The moderate build-out projection is based on the completion of all active, permitted development (occupancy permit issued since Jan. 1, 2009) within five years. The high build-out projection is based on 30 percent of all permitted development being completed within five years and the remaining 70 percent being completed in the following five years. The number in parentheses shows how many additional seats are needed to maintain this cluster at 100 percent capacity.

Scenario	2016 Adjusted for Build-out	2021 Adjusted for Build-out
Cluster Moderate Build-out Total	811	863
Cluster +/- SRC	-15	+37
Cluster % SRC	98.18%	104.48%
Cluster High Build-out Total	809	911
Cluster +/- SRC	-17	+85
Cluster % SRC	97.94%	110.29%

Relief Strategies Implemented for 2012/2013

- Capacity Analysis
 - Hernwood Elementary capacity analysis will likely result in a slight decrease of SRC
- Use of Existing Relocatables
 - Hernwood Elementary School, 2 relocatables (+46 seats)
- Relocation
 - Hernwood Elementary School will receive New Town Elementary School special education cluster program (CLS)

Relief Strategies for Future Consideration

1. Policy Review and Analysis (ongoing)

- Schools in this cluster may restrict special permission transfers per Policy 5140
 - i. Advantages:
 - 1. No cost to BCPS
 - ii. Limitations:
 - 1. None

2. Use of existing relocatable units

- Maximize use of relocatable units at schools within the Hernwood Elementary School Cluster, if needed
 - i. Advantages
 - 1. Less disruptive and more cost-effective than other options
 - ii. Limitations
 - 1. Site limitations
 - 2. Efficiency is maximized when school reaches about 120 percent of capacity, core facilities become insufficient.

Conclusion

This study reflects and analyzes significant school capacity pressures within the BCPS' Northwest Planning Region. These pressures are felt profoundly at the elementary school level, particularly in the New Town and Owings Mills clusters.

To alleviate excess capacity utilization in the short, intermediate and long terms, the Sage-Cropper study team has offered myriad possible strategies. However, realistically, implementation and adoption of the most viable of these strategies will still leave a demand for at least two new elementary schools in the Northwest Planning Region. One of the challenges to implementation is that the school system's current site bank includes only one property in the Northwest Planning Region. The school system should consider purchasing available and suitable property.

Appendix A: Northwest Planning Region Elementary School Enrollment Trends

Exhibit: Northwest Planning Region Elementary Schools FTE Enrollment, 2007-2011

	<u>2007</u>	<u>2011</u>	<u>Net Change 2007-2011</u>	<u>% Change 2007-2011</u>
Schools that experienced enrollment declines				
Hernwood Elementary School	450	363	-87	-19.33%
Bedford Elementary School	307	260	-47	-15.31%
Deer Park Elementary School	413	380	-33	-7.99%
Milbrook Elementary School	346	337	-9	-2.60%
Randallstown Elementary School	394	387	-7	-1.78%
Church Lane Elementary School	481	477	-4	-0.83%
Cedarmere Elementary School	457	456	-1	-0.22%
No Change				
Franklin Elementary School	494	494	0	0.00%
Schools that experienced enrollment increases				
Chatsworth Elementary School	384	385	1	0.26%
Timber Grove Elementary School	550	553	3	0.55%
Glyndon Elementary School	460	470	10	2.17%
Wellwood Elementary School	438	462	24	5.48%
Winand Elementary School	445	491	46	10.34%
Reisterstown Elementary School	458	510	52	11.35%
Campfield Center	230	258	28	12.17%
Owings Mills Elementary School	648	736	88	13.58%
Scotts Branch Elementary School	482	554	72	14.94%
Woodholme Elementary School	676	781	105	15.53%
Fort Garrison Elementary School	398	462	64	16.08%
Summit Park Elementary School	352	428	76	21.59%
New Town Elementary School	661	884	223	33.74%
All Northwest Planning Region Elementary Schools				
	9524	10128	604	6.34%

Exhibit: Northwest Planning Region Middle Schools FTE Enrollment, 2007-2011

	<u>2007</u>	<u>2011</u>	<u>Net Change 2007-2011</u>	<u>% Change 2007-2011</u>
Schools that experienced enrollment declines				
Franklin Middle School	1,369	1,292	-77	-5.62%
Schools that experienced enrollment increases				
Sudbrook Middle School (Magnet)	1,004	1,015	11	1.10%
Old Court Middle School	552	572	20	3.62%
Deer Park Middle School (Magnet)	1,134	1,235	101	8.91%
Pikesville Middle School	917	1,017	100	10.91%
All Northwest Planning Region Middle Schools				
	4,976	5,131	155	3.11%

Exhibit: Northwest Planning Region High Schools FTE Enrollment, 2007-2011

	<u>2007</u>	<u>2011</u>	<u>Net Change 2007-2011</u>	<u>% Change 2007-2011</u>
Randallstown High School	1,272	1,095	-177	-13.92%
Owings Mills High School	1,086	968	-118	-10.87%
Milford Mill Academy	1,537	1,373	-164	-10.67%
New Town High School	963	869	-94	-9.76%
Pikesville High School	966	898	-68	-7.04%
Franklin High School	1,591	1,524	-67	-4.21%
All Northwest Planning Region High Schools	7,415	6,727	-688	-9.28%

Appendix B: Demographics and Foreclosures

Employment

Exhibit: Total Employment (Jobs) and Forecasted Employment Change, 2010-2030, Baltimore County and Northwest Planning Region

<u>Year</u>	<u>County</u>	<u>Northwest</u>
2010	510,894	104,711
2015	529,642	109,414
2020	544,607	115,645
2025	552,536	117,503
2030	558,327	118,687
<u>Employment Change</u>		
2010-2015	18,748	4,703
2015-2020	14,965	6,231
2020-2025	7,929	1,858
2025-2030	5,791	1,184

Source: Baltimore Metropolitan Council, Round 7C forecasts, June 2010

Population Characteristics

Exhibit: Total Population and Forecasted Population Change, 2010-2030, Baltimore County and Northwest Planning Region

<u>Year</u>	<u>County</u>	<u>Northwest</u>
2010	816,550	185,220
2015	834,619	191,647
2020	846,973	194,112
2025	856,934	196,348
2030	862,208	197,568
<u>Population Change</u>		
2010-2015	18,069	6,427
2015-2020	12,354	2,465
2020-2025	9,961	2,236
2025-2030	5,274	1,220

Source: Baltimore Metropolitan Council, Round 7C forecasts, June 2010

Exhibit: Selected Age Groups 2000-2010, Northwest Planning Region Elementary School Zones

	Percent Change 2000-2010	
	<u>Total Population</u>	<u>Population Aged 55 +</u>
Bedford	5.49%	19.11%
Cedarmere	10.71%	26.69%
Church Lane	20.90%	31.90%
Deer Park	5.02%	47.52%
Fort Garrison	5.17%	28.06%
Franklin	28.87%	71.36%
Glyndon	5.13%	50.49%
Hernwood	17.34%	26.81%
Millbrook	1.52%	0.59%
New Town	51.55%	101.97%
Owings Mills	24.70%	35.84%
Randallstown	14.48%	29.01%
Reisterstown	6.12%	11.99%
Scotts Branch	9.92%	25.96%
Summit Park	12.07%	37.99%
Timber Grove	7.96%	94.74%
Wellwood	6.93%	6.63%
Winand	1.06%	130.55%
Woodholme	32.72%	71.60%

Source: U.S. Census Bureau

Exhibit: Total Population in Northwest Planning Region Elementary School Zones, 2000-2010

	Total Population		2000-2010	
	<u>2000</u>	<u>2010</u>	<u>Net Change</u>	<u>Percent Change</u>
New Town	9,950	15,079	5,129	51.55%
Woodholme	12,776	16,956	4,180	32.72%
Franklin	9,158	11,802	2,644	28.87%
Owings Mills	10,380	12,944	2,564	24.70%
Church Lane	5,044	6,098	1,054	20.90%
Hernwood	5,559	6,523	964	17.34%
Randallstown	7,364	8,430	1,066	14.48%
Summit Park	7,109	7,967	858	12.07%
Cedarmere	7,211	7,983	772	10.71%
Scotts Branch	8,803	9,676	873	9.92%
Timber Grove	7,906	8,535	629	7.96%
Wellwood	9,744	10,419	675	6.93%
Reisterstown	7,723	8,196	473	6.12%
Fort Garrison	11,112	11,687	575	5.17%
Glyndon	7,408	7,788	380	5.13%
Deer Park	5,433	5,706	273	5.02%
Bedford	6,881	7,259	378	5.49%
Millbrook	10,362	10,519	157	1.52%
Winand	7,452	7,531	79	1.06%

Source: U.S. Census Bureau

Exhibit: Population Aged 55+ in Northwest Planning Region Area Elementary School Zones, 2000-2010

			2000-2010	
	<u>2000</u>	<u>2010</u>	<u>Net Change</u>	<u>Percent Change</u>
Winand	1689	3894	2205	130.55%
New Town	1474	2977	1503	101.97%
Timber Grove	988	1924	936	94.74%
Woodholme	2250	3861	1611	71.60%
Franklin	1945	3333	1388	71.36%
Glyndon	1020	1535	515	50.49%
Deer Park	825	1217	392	47.52%
Summit Park	1769	2441	672	37.99%
Owings Mills	1303	1770	467	35.84%
Church Lane	1329	1753	424	31.90%
Randallstown	1658	2139	481	29.01%
Fort Garrison	3500	4482	982	28.06%
Hernwood	1175	1490	315	26.81%
Cedarmere	1431	1813	382	26.69%
Scotts Branch	1637	2062	425	25.96%
Bedford	1884	2244	360	19.11%
Reisterstown	1376	1541	165	11.99%
Welwood	2849	3038	189	6.63%
Millbrook	4093	4117	24	0.59%

Source: U.S. Census Bureau

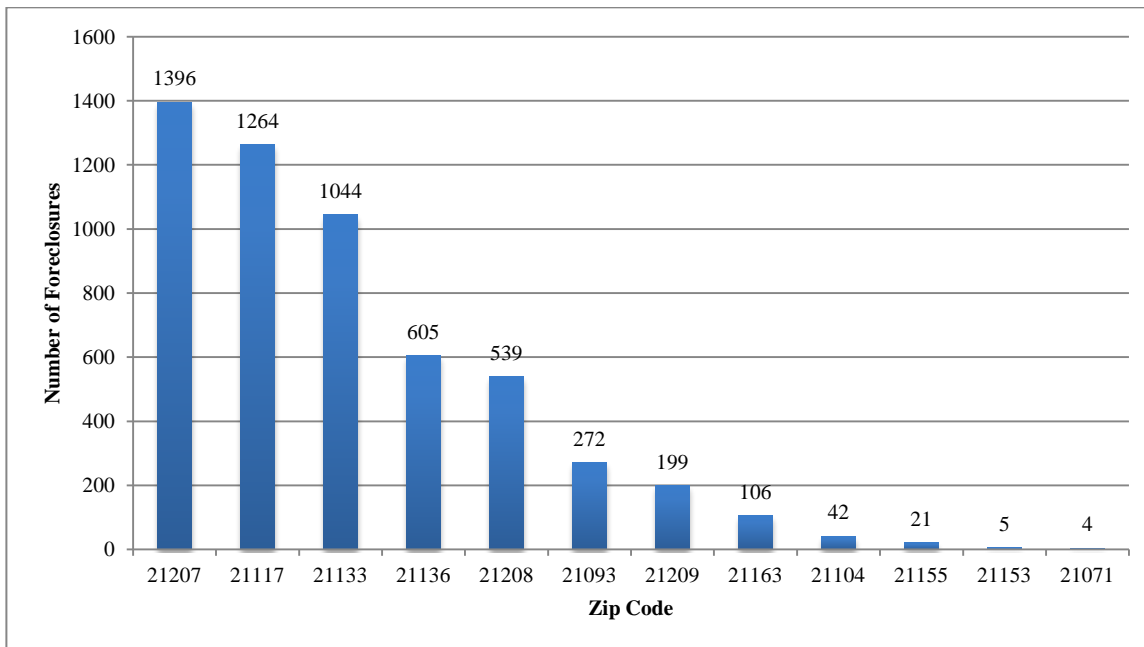
Housing and Foreclosures

Exhibit: Total Housing and Housing Change, 2010-2030, by School Administrative Area, Baltimore

<u>Year</u>	<u>County</u>	<u>Northwest</u>
2010	325,160	73,110
2015	334,879	76,141
2020	342,550	77,712
2025	346,884	78,662
2030	349,054	79,152
2010-2015	9,719	3,031
2015-2020	7,671	1,571
2020-2025	4,334	950
2025-2030	2,170	490

Source: Baltimore Metropolitan Council, Round 7C forecasts, June 2010

Exhibit: Foreclosure Activity in the Northwest Planning Region by zip code, Q1 2008-Q4 2011



Source: Maryland Foreclosure Task Force

<u>Zip Code</u>	<u>Name</u>
21207	Gwynn Oak
21117	Owings Mills
21133	Randallstown
21136	Reisterstown
21208	Pikesville
21093	Lutherville-Timonium
21209	Baltimore
21163	Woodstock
21104	Marriottsville
21155	Upperco
21153	Stevenson
21071	Glyndon

Appendix C: Selected Data by Cluster

Exhibit: Selected Age Groups 2000-2010, Northwest Planning Region Elementary School Clusters

<u>Percent Change 2000-2010</u>		
	Total Population	Population Aged 55 +
Bedford Elementary School	5.49%	19.11%
Campfield Center Milbrook Elementary School	1.52%	0.59%
Summit Park Elementary School	12.07%	37.99%
Wellwood Elementary School	6.93%	6.63%
Cluster Average	6.50%	16.08%
Cedarmere Elementary School	10.71%	26.69%
Fort Garrison Elementary School	5.17%	28.06%
Owings Mills Elementary School	24.70%	35.84%
Timber Grove Elementary School	7.96%	94.74%
Cluster Average	12.14%	46.33%
Chatsworth Elementary School		
Franklin Elementary School	28.87%	71.36%
Glyndon Elementary School	5.13%	50.49%
Reisterstown Elementary School	6.12%	11.99%
Cluster Average	13.37%	44.61%
Hernwood Elementary School	17.34%	26.81%
Randallstown Elementary School	14.48%	29.01%
Cluster Average	15.91%	27.91%
Church Lane Elementary School	20.90%	31.90%
Scotts Branch Elementary School	9.92%	25.96%
Winand Elementary School	1.06%	130.55%
Cluster Average	10.63%	62.80%
Deer Park Elementary School	5.02%	47.52%
New Town Elementary School	51.55%	101.97%
Woodholme Elementary School	32.72%	71.60%
Cluster Average	29.76%	73.70%

**Exhibit: Total Population Growth 2000-2010, Northwest Planning Region
Elementary School Clusters**

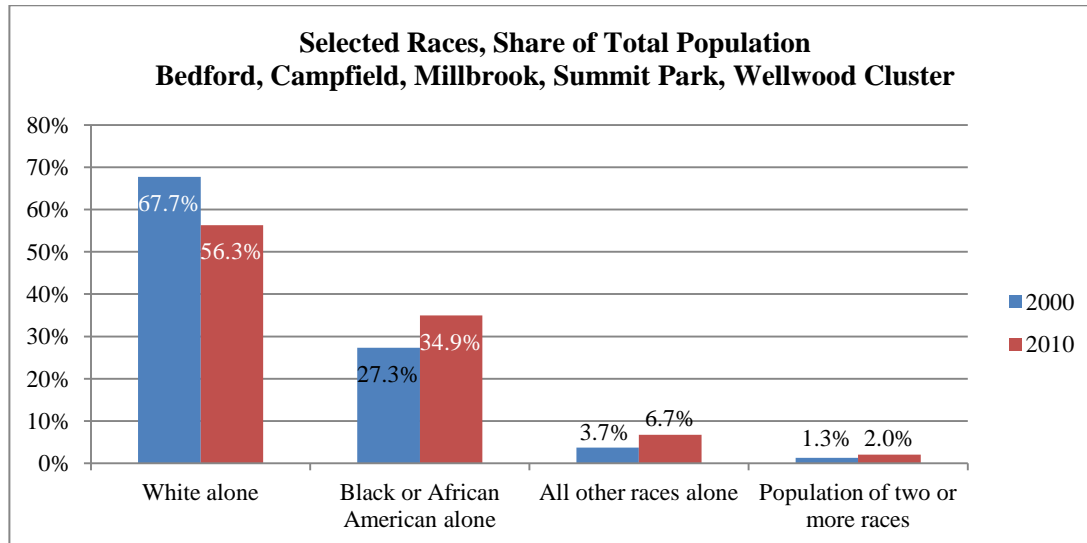
Total Population	2000-2010			
	<u>2000</u>	<u>2010</u>	<u>Net Change</u>	<u>Percent Change</u>
Bedford Elementary School	6,881	7,259	378	5.49%
Campfield Center				
Milbrook Elementary School	10,362	10,519	157	1.52%
Summit Park Elementary School	7,109	7,967	858	12.07%
Wellwood Elementary School	9,744	10,419	675	6.93%
Cedarmere Elementary School	7,211	7,983	772	10.71%
Fort Garrison Elementary School	11,112	11,687	575	5.17%
Owings Mills Elementary School	10,380	12,944	2564	24.70%
Timber Grove Elementary School	7,906	8,535	629	7.96%
Chatsworth Elementary School				
Franklin Elementary School	9,158	11,802	2644	28.87%
Glyndon Elementary School	7,408	7,788	380	5.13%
Reisterstown Elementary School	7,723	8,196	473	6.12%
Hernwood Elementary School	5,559	6,523	964	17.34%
Randallstown Elementary School	7,364	8,430	1066	14.48%
Church Lane Elementary School	5,044	6,098	1054	20.90%
Scotts Branch Elementary School	8,803	9,676	873	9.92%
Winand Elementary School	7,452	7,531	79	1.06%
Deer Park Elementary School	5,433	5,706	273	5.02%
New Town Elementary School	9,950	15,079	5129	51.55%
Woodholme Elementary School	12,776	16,956	4180	32.72%

**Exhibit: Change in Population Aged 55+, Northwest Planning Region
Elementary School Clusters, 2000-2010**

Population Aged 55+	2000-2010			
	<u>2000</u>	<u>2010</u>	<u>Net Change</u>	<u>Percent Change</u>
Bedford Elementary School	1,884	2,244	360	19.11%
Campfield Center				
Milbrook Elementary School	4,093	4,117	24	0.59%
Summit Park Elementary School	1,769	2,441	672	37.99%
Wellwood Elementary School	2,849	3,038	189	6.63%
Cedarmere Elementary School	1,431	1,813	382	26.69%
Fort Garrison Elementary School	3,500	4,482	982	28.06%
Owings Mills Elementary School	1,303	1,770	467	35.84%
Timber Grove Elementary School	988	1,924	936	94.74%
Chatsworth Elementary School				
Franklin Elementary School	1,945	3,333	1388	71.36%
Glyndon Elementary School	1,020	1,535	515	50.49%
Reisterstown Elementary School	1,376	1,541	165	11.99%
Hernwood Elementary School	1,175	1,490	315	26.81%
Randallstown Elementary School	1,658	2,139	481	29.01%
Church Lane Elementary School	1,329	1,753	424	31.90%
Scotts Branch Elementary School	1,637	2,062	425	25.96%
Winand Elementary School	1,689	3,894	2205	130.55%
Deer Park Elementary School	825	1,217	392	47.52%
New Town Elementary School	1,474	2,977	1503	101.97%
Woodholme Elementary School	2,250	3,861	1611	71.60%

Summit Park Cluster (Bedford, Campfield Center, Millbrook, Summit Park & Wellwood)

<u>Growth 2000-2010</u>	<u>Single Race</u>			<u>Population of two or more races</u>
	White	Black or African American	All Others	
Bedford	-22.1%	18.0%	113.2%	84.9%
Campfield Center				
Millbrook	-24.0%	82.1%	108.7%	86.7%
Summit Park	7.3%	141.0%	198.2%	105.6%
Wellwood	14.3%	47.0%	95.6%	76.9%
Cluster Total	-2.6%	49.6%	113.9%	86.3%

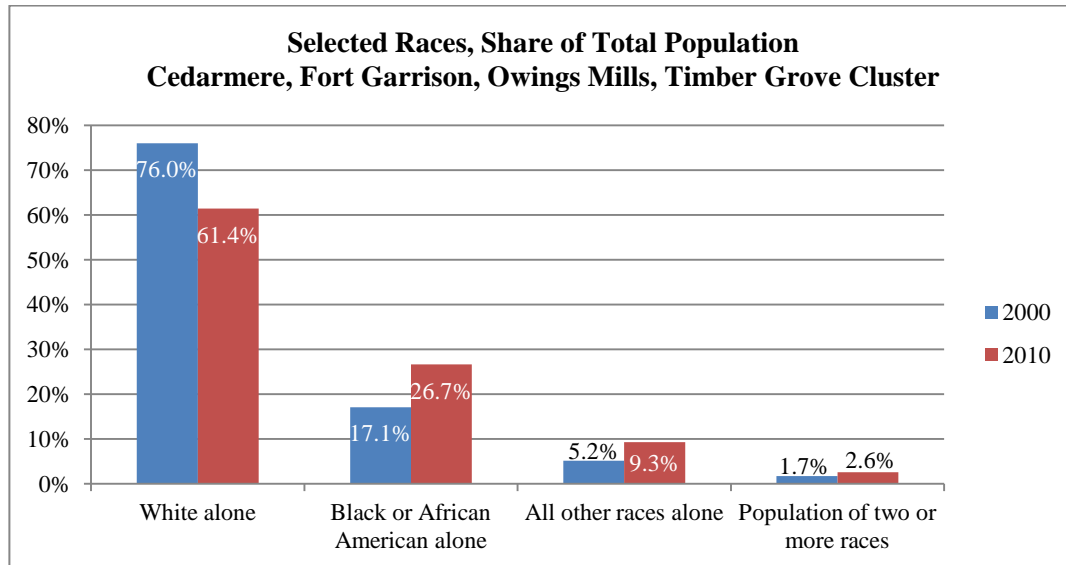


<u>Family Households: Percent Change 2000-2010</u>				
	Total Family Households	Married Couple	Male Householder-No Wife Present	Female Householder-No Husband Present
Bedford	1.99%	-4.50%	28.69%	11.62%
Campfield Center	N/A			
Millbrook	10.50%	-5.99%	52.17%	60.22%
Summit Park	13.62%	9.46%	47.46%	43.02%
Wellwood	20.17%	13.89%	39.00%	62.89%
Cluster Total	12.31%	4.27%	41.53%	43.01%

<u>Free & Reduced Meals/Total</u>	<u>2003-2004</u>	<u>2011</u>
Bedford	47.61%	66.28%
Campfield Center	39.74%	68.72%
Millbrook	48.56%	75.36%
Summit Park	11.04%	11.60%
Wellwood	29.03%	34.49%
Cluster Total	35.02%	48.08%

Owings Mills Cluster (Cedarmere, Fort Garrison, Owings Mills & Timber Grove)

<u>Growth 2000-2010</u>	<u>Single Race</u>			<u>Population of two or more races</u>
	White	Black or African American	All Others	
Cedarmere	-14.0%	61.9%	129.8%	80.4%
Fort Garrison	2.2%	96.0%	16.0%	172.3%
Owings Mills	-19.6%	75.6%	193.5%	77.6%
Timber Grove	-13.8%	84.5%	56.4%	23.3%
Cluster Total	-9.2%	75.0%	102.7%	70.1%

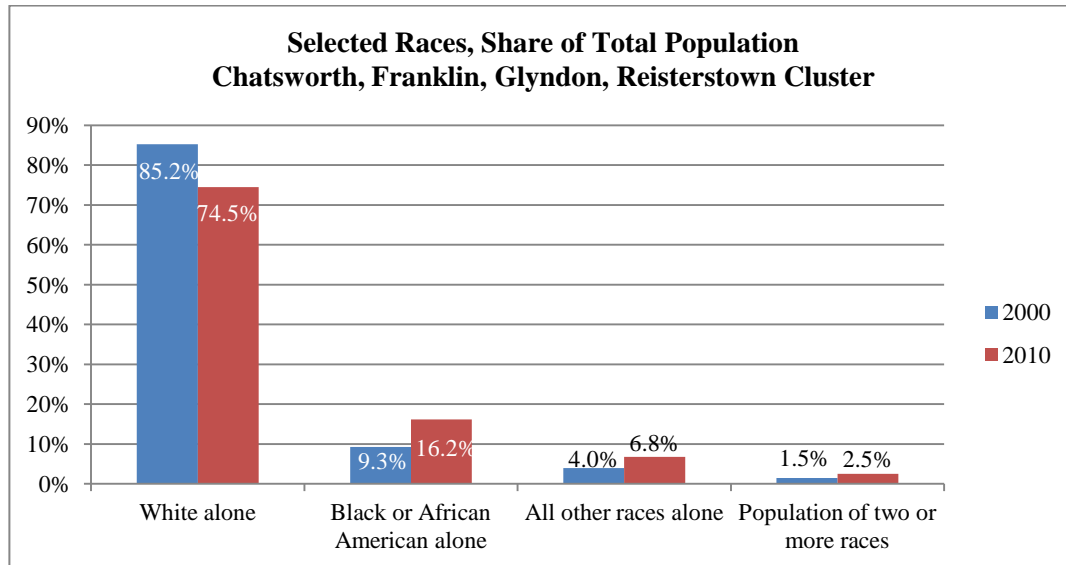


<u>Family Households: Percent Change 2000-2010</u>				
	Total Family Households	Married Couple	Male Householder-No Wife Present	Female Householder-No Husband Present
Cedarmere	8.11%	4.49%	13.82%	21.07%
Fort Garrison	6.47%	4.20%	31.25%	44.87%
Owings Mills	15.66%	1.31%	22.22%	54.36%
Timber Grove	6.78%	1.26%	19.84%	22.95%
Cluster Total	9.14%	3.05%	20.82%	36.62%

<u>Free & Reduced Meals/Total</u>	<u>2003-2004</u>	<u>2011</u>
Cedarmere	24.91%	41.77%
Fort Garrison	3.73%	7.39%
Owings Mills	48.65%	65.89%
Timber Grove	32.44%	46.18%
Cluster Total	30.56%	44.12%

Reisterstown Cluster (Chatsworth, Franklin, Glyndon & Reisterstown)

<u>Growth 2000-2010</u>	<u>Single Race</u>			<u>Population of two or more races</u>
	White	Black or African American	All Others	
Chatsworth	N/A			
Franklin	14.9%	302.7%	157.9%	150.6%
Glyndon	-8.8%	77.6%	36.5%	54.8%
Reisterstown	-12.2%	63.8%	124.1%	87.4%
Cluster Total	0.0%	100.0%	94.3%	88.6%

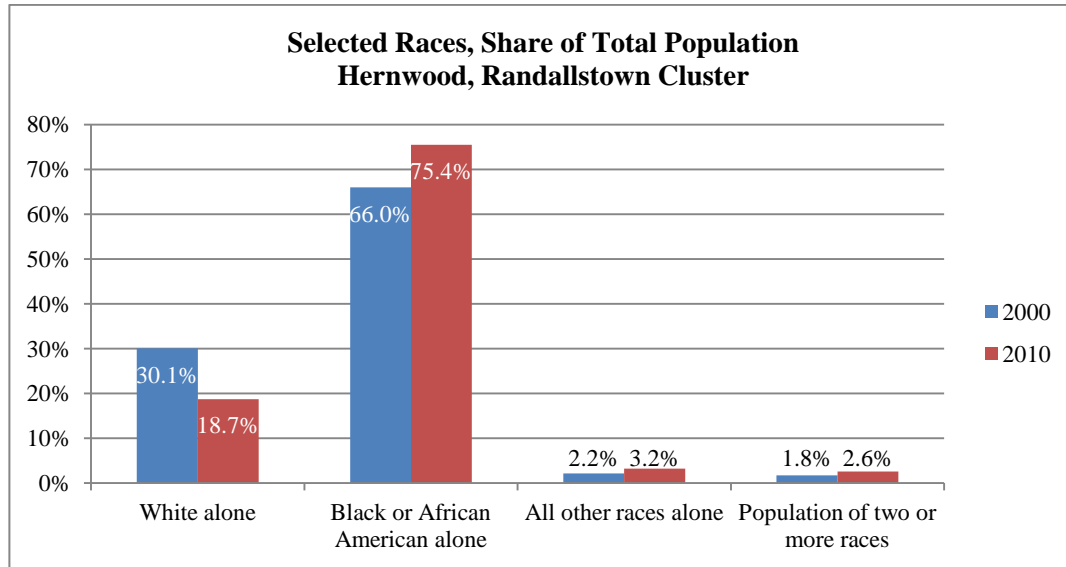


<u>Family Households: Percent Change 2000-2010</u>				
	Total Family Households	Married Couple	Male Householder-No Wife Present	Female Householder-No Husband Present
Chatsworth	N/A			
Franklin	26.16%	18.08%	100.00%	89.34%
Glyndon	6.02%	-0.25%	15.53%	37.29%
Reisterstown	6.74%	-3.03%	51.11%	40.71%
Cluster Total	14.09%	6.58%	52.71%	51.02%

<u>Free & Reduced Meals/Total</u>	<u>2003-2004</u>	<u>2011</u>
Chatsworth	17.86%	15.75%
Franklin	10.69%	19.37%
Glyndon	25.05%	49.37%
Reisterstown	21.66%	48.68%
Cluster Total	18.81%	34.42%

Hernwood Cluster (Hernwood & Randallstown)

<u>Growth 2000-2010</u>	<u>Single Race</u>			<u>Population of two or more races</u>
	White	Black or African American	All Others	
Hernwood	-17.9%	34.9%	34.4%	43.7%
Randallstown	-37.2%	30.6%	104.5%	94.5%
Cluster Total	-27.9%	32.3%	73.1%	68.1%

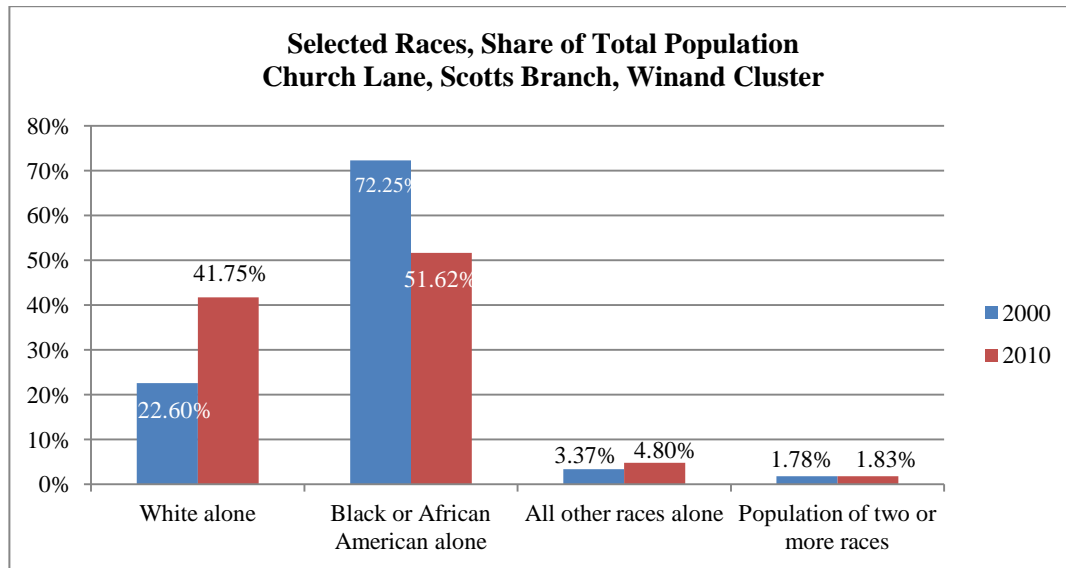


<u>Family Households: Percent Change 2000-2010</u>				
	Total Family Households	Married Couple	Male Householder-No Wife Present	Female Householder-No Husband Present
Hernwood	13.30%	-4.83%	61.90%	69.31%
Randallstown	13.57%	5.49%	32.52%	36.64%
Cluster Total	13.45%	0.98%	42.47%	50.51%

<u>Free & Reduced Meals/Total</u>	<u>2003-2004</u>	<u>2011</u>
Hernwood	43.33%	63.47%
Randallstown	42.31%	62.28%
Cluster Total	42.86%	62.86%

Scotts Branch Cluster (Church Lane, Scotts Branch & Winand)

<u>Growth 2000-2010</u>	<u>Single Race</u>			<u>Population of two or more races</u>
	White	Black or African American	All Others	
Church Lane	-50.2%	46.4%	90.3%	63.2%
Scotts Branch	321.6%	-92.4%	110.3%	-39.0%
Winand	-24.8%	10.1%	-23.0%	31.1%
Cluster Total	90.0%	-26.5%	46.6%	5.5%

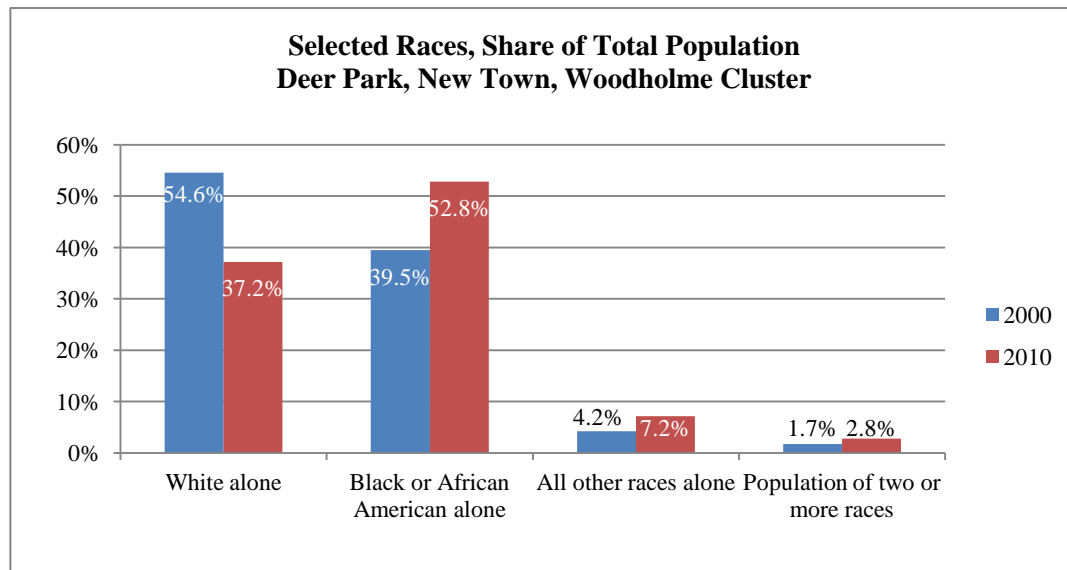


<u>Family Households: Percent Change 2000-2010</u>				
	Total Family Households	Married Couple	Male Householder-No Wife Present	Female Householder-No Husband Present
Church Lane	9.73%	-14.80%	78.13%	77.44%
Scotts Branch	2.89%	66.78%	-54.21%	-70.37%
Winand	2.61%	-5.39%	46.99%	24.32%
Cluster Total	4.45%	14.62%	-4.15%	-17.79%

<u>Free & Reduced Meals/Total</u>	<u>2003-2004</u>	<u>2011</u>
Church Lane	39.84%	59.63%
Scotts Branch	64.08%	75.44%
Winand	37.97%	56.64%
Cluster Total	47.72%	64.22%

New Town Cluster (Deer Park, New Town & Woodholme)

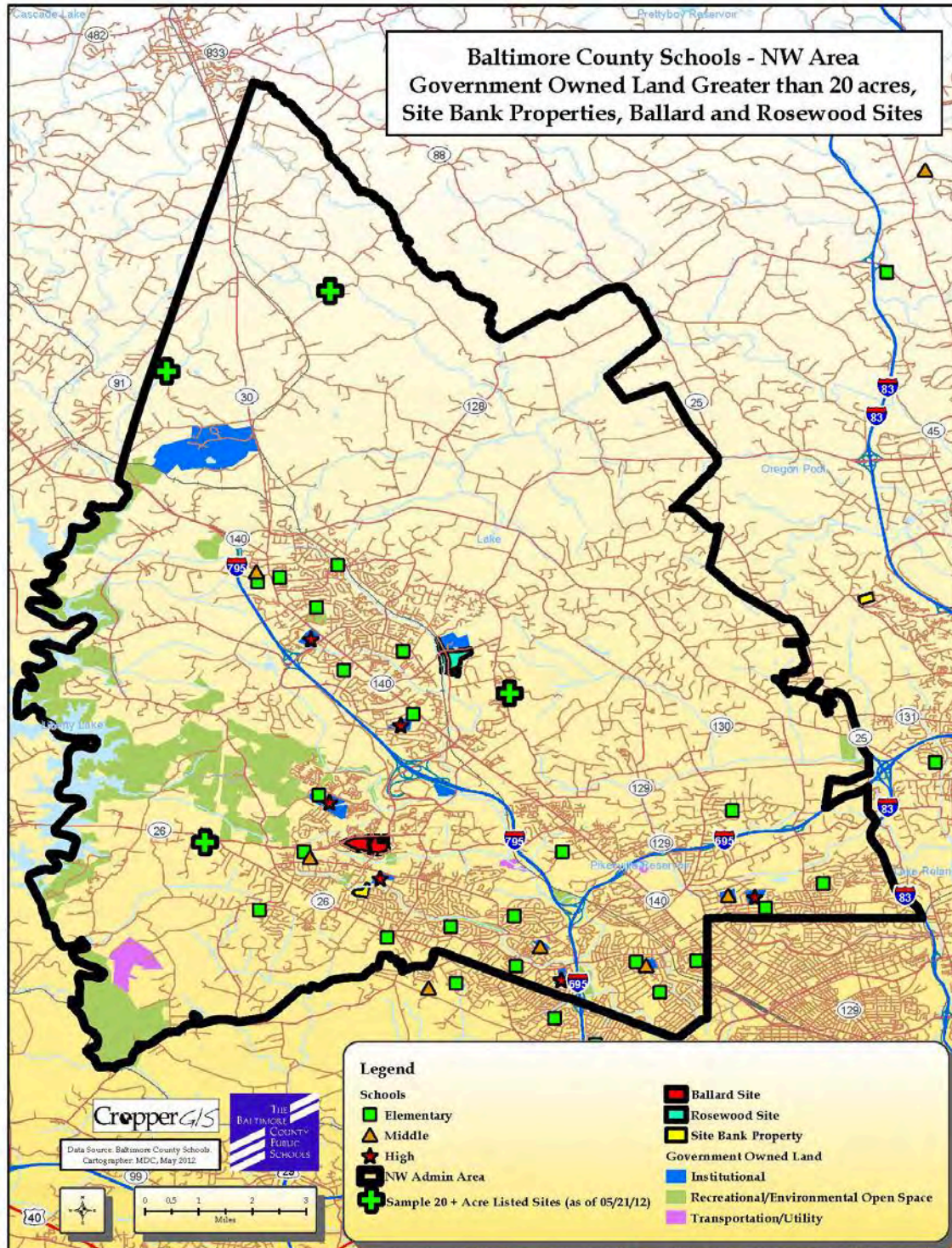
<u>Growth 2000-2010</u>	<u>Single Race</u>			<u>Population of two or more races</u>
	White	Black or African American	All Others	
Deer Park	-44.9%	14.6%	-2.8%	18.4%
New Town	-10.2%	146.1%	184.4%	124.0%
Woodholme	-3.9%	99.2%	109.1%	179.7%
Cluster Total	-8.6%	79.4%	128.5%	115.0%



<u>Family Households: Percent Change 2000-2010</u>				
	Total Family Households	Married Couple	Male Householder-No Wife Present	Female Householder-No Husband Present
Deer Park	5.48%	-3.96%	22.33%	19.95%
New Town	45.95%	27.12%	117.12%	126.33%
Woodholme	25.23%	13.93%	57.65%	61.24%
Cluster Total	28.92%	16.23%	65.36%	66.85%

<u>Free & Reduced Meals/Total</u>	<u>2003-2004</u>	<u>2011</u>
Deer Park	38.89%	57.61%
New Town	19.18%	31.63%
Woodholme	N/A	41.23%
Cluster Total	26.19%	40.24%

The map below shows government owned land greater than 20 acres, site bank properties in the Northwest Planning Region. This map also shows the Ballard and Rosewood sites.



Appendix E: Live-In Student Counts Compared to School Capacity

Elementary Zone	Total Live-In	Total Enrollment	Live-In Attend-In	Live-In Attend-Out	Live-Out Attend-In	State Rated Capacity (SRC)	Current Utilization	Live-In as Percent of SRC
Bedford ES	357	260	248	109	12	309	84.14%	115.53%
Cedarmere ES	484	438	413	71	25	474	92.41%	102.11%
Church Lane ES	347	467	317	30	150	476	98.11%	72.90%
Deer Park ES	388	361	327	61	34	451	80.04%	86.03%
Fort Garrison ES	393	462	378	15	84	431	107.19%	91.18%
Franklin ES	479	482	412	67	70	473	101.90%	101.27%
Glyndon ES	544	459	454	90	5	520	88.27%	104.62%
Hernwood ES	378	353	316	62	37	428	82.48%	88.32%
Milbrook ES	485	337	326	159	11	319	105.64%	152.04%
New Town ES	964	875	861	103	14	697	125.54%	138.31%
Owings Mills ES	748	697	668	80	29	699	99.71%	107.01%
Randallstown ES	411	387	352	59	35	398	97.24%	103.27%
Reisterstown ES	573	489	471	102	18	450	108.67%	127.33%
Scotts Branch ES	660	554	542	118	12	511	108.41%	129.16%
Summit Park ES	360	424	353	7	71	336	126.19%	107.14%
Timber Grove ES	623	542	536	87	6	600	90.33%	103.83%
Wellwood ES	396	462	341	55	121	455	101.54%	87.03%
Winand ES	448	440	366	82	74	583	75.47%	76.84%
Woodholme ES	832	781	745	87	36	676	115.53%	123.08%

All calculations based on K-5 enrollment and Live-In. Source: 2011-12 student database.

Middle School Zone	Total Live-In	Total Enrollment	Live-In Attend-In	Live-In Attend-Out	Live-Out Attend-In	State Rated Capacity (SRC)	Current Utilization	Live-In as Percent of SRC
Deer Park MS	1,297	1,235	1,044	253	191	1,368	90.28%	94.81%
Franklin MS	1,426	1,291	1,262	164	29	1,389	92.94%	102.66%
Old Court MS	906	571	557	349	14	983	58.09%	92.17%
Pikesville MS	1,195	1,017	966	229	51	1,006	101.09%	118.79%

All calculations based on 6-8 enrollment and Live-In. Source: 2011-12 student database.

High School Zone	Total Live-In	Total Enrollment	Live-In Attend-In	Live-In Attend-Out	Live-Out Attend-In	State Rated Capacity (SRC)	Current Utilization	Live-In as Percent of SRC
Franklin HS	1,691	1,524	1,474	217	50	1,647	92.53%	102.67%
Milford Mill	1,330	1,371	988	342	383	1,465	93.58%	90.78%
New Town HS	1,100	869	806	294	63	1,303	66.69%	84.42%
Owings Mills HS	989	968	790	199	178	1,103	87.76%	89.66%
Pikesville HS	963	898	805	158	93	1,006	89.26%	95.73%
Randallstown HS	1,434	1,095	995	439	100	1,379	79.41%	103.99%

All calculations based on 9-12 enrollment and Live-In. Source: 2011-12 student database.

Glossary

APFO report: Adequate Public Facilities Ordinance report furnished by the Baltimore County Department of Planning to indicate overcrowded school facilities.

Baltimore County Master Plan: Guidelines and policies adopted at least every ten years by the Baltimore County Council “for sustaining livable communities and achieving balanced development in Baltimore County.”

BCPS: Baltimore County Public Schools.

Baltimore County Public Schools Office of Strategic Planning (OSP): Oversees analysis of demographic data to forecast projected future enrollment levels, develop facility growth strategies, and publish reports including the Educational Facilities Master Plan.

Baltimore Metropolitan Council: The regional planning agency for the Baltimore metropolitan area.

BRAC: Military base re-alignment and closure.

Educational Facilities Master Plan (EFMP): Annual document submitted by BCPS to the Maryland Department of Planning to identify projected BCPS school facility needs.

ESOL: English for Speakers of Other Languages program.

FARMS: Free and Reduced Meal Student. Qualifications are determined by the Baltimore County Schools Office of Food and Nutrition Services based on household income.

Full Time Equivalent Enrollment (FTE): Adjusted weighted enrollment that accounts for students enrolled in partial-day programs (including pre-indergarten and half-day kindergarten programs).

Growth Area (GA): Designated by the County to facilitate targeted planning and development according to “smart growth” principles. These areas receive priority funding.

GIS: Geographic Information Systems analysis software.

Maryland Foreclosure Task Force: Established by the Governor in August 2011 to examine foreclosure trends throughout the State, as well as develop relevant policies and strategies.

MPC: Baltimore Metropolitan Planning Commission.

MDP: Maryland Department of Planning.

MSDE: Maryland State Department of Education.

Northwest Planning Region: Region defined by Baltimore County consisting almost entirely of Council Districts 2, 3, and 4 (boundaries can be viewed on pg. 22 of this report). Contains 32 public education facilities.

Planned Unit Development (PUD): Process overseen by the Baltimore County Department of Planning by which “residential and/or commercial uses are approved subject to restrictions calculated to achieve the compatible and efficient use of land, including the consideration of any detrimental impact upon adjacent residential communities.”

Regional Planning District (RPD): Areas defined by Census geographical boundaries. There are 31 Regional Planning Districts in Baltimore County.

Subdivision List (SLIST): List of approved subdivision plans and building permits reported by the Baltimore County Department of Planning.

Glossary Continued

State Rated Capacity (SRC): Defined by the Maryland State Department of Education as “the maximum number of students that reasonably can be accommodated in a facility without significantly hampering delivery of the educational program.” Does not include relocatable spaces.

Student yield factor: Indication of the number of students per dwelling unit. Calculated by dividing the number of students in a given area by the number of dwelling units in that area.

Title I transfer option: Provision under the 2001 No Child Left Behind Act. Mandates that school districts that receive Title I funds provide students who attend Title I schools (as identified by the Maryland State Department of Education) the option to transfer to another public school within the district.

Urban Rural Demarcation Line (URDL): Established by Baltimore County in 1967. Designates County urban areas that had or would receive public water and sewer infrastructure. Aimed to identify urban areas that would support commercial and residential development, and maintain agricultural use of existing rural land.

Utilization measurement: Percentage of schools’ FTE enrollments compared to their respective State rated capacities.