2007 Annual Growth Report

Harford County Government
Department of Planning and Zoning

Amended January, 2009

David R. Craig
Harford County Executive
Preserving Harford's Past; promoting Harford's future

Lorraine Costello
Director of Administration

C. Pete Gutwald
Director of Planning and Zoning

This document is available in alternative format upon request.

AMENDMENT TO 2007 ANNUAL GROWTH REPORT

Background:

In accordance with the Harford County Adequate Public Facilities provisions (Section 267-104) of the Harford County Code, testing for adequate school capacities shall occur on June 1 and December 1 of each year. Therefore, amendments to the 2007 Annual Growth Report are required and include updated enrollment figures and projections based on September 30, 2008 enrollment figures. Based on the adequacy standards outlined below, the Annual Growth Report is amended to reflect current enrollments and projections as of September 30, 2008.

Adequacy Standards:

The adopted adequacy standards for the Public School system are 105 percent of the rated capacity within 3 years for both elementary and secondary schools. Included with this amendment to the 2007 Annual Growth Report are Tables 6, 7, and 8, the utilization charts for the elementary, middle, and high schools. These tables identify current enrollment figures as of September 30, 2008, and include projections through the 2011/2012 school year. Preliminary plans for new major subdivisions (subdivisions of greater than five lots) cannot be approved in elementary or secondary school districts where full-time enrollment currently exceeds or is projected to exceed 105 percent of the capacity within three years.

Elementary Schools:

Twenty-four of thirty-two elementary schools in Harford County meet adequacy standards. The schools listed below in Table 1 do not meet the adequacy standards established. Major subdivision plans (subdivisions of greater than five lots) within these attendance areas will not be approved, but will continue to be reviewed and placed on a waiting list beginning January 1, 2009 until capacity is available.

Table 1

School	Year	Actual / Projected Students	Utilization Rate
Emmorton	2008/2009	676	123%
Forest Lakes	2008/2009	664	121%
Fountain Green	2008/2009	651	114%
Hickory	2008/2009	696	112%
Magnolia	2008/2009	536	107%
Prospect Mill	2008/2009	931	137%
Wm. Paca / Old Post Rd.	2008/2009	995	106%
Youth's Benefit	2008/2009	1,072	120%

Joppatowne Elementary School currently exceeds 105 percent utilization, although an addition is planned to open September 2009, thereby increasing the state-rated capacity to 653. Therefore, major subdivisions (subdivisions of greater than five lots) within this attendance area will be removed from the waiting list for review and preliminary plan approval beginning January 1, 2009.

Hickory Elementary School is projected to exceed 105 percent utilization within the next three years. Therefore, major subdivisions (subdivisions of greater than five lots) within this attendance area will be reviewed and placed on a waiting list until capacity is available.

Secondary Schools:

Currently all seventeen middle and high schools in Harford County meet adequacy standards, including C. Milton Wright High School, which is projected to be below 105 percent utilization within the next three years. Therefore, major subdivisions (subdivisions of greater than five lots) within this attendance area will be removed from the waiting list for review and preliminary plan approval beginning January 1, 2009.

The 2007 Annual Growth Report

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EXECUTIVE SUMMARY

In accordance with the Harford County Adequate Public Facilities provisions (Section 267-104) of the Harford County Code, the Harford County Annual Growth Report must be updated annually to identify any facilities that are below the County's adopted minimum standards. This year's Annual Growth Report includes information and analysis regarding Public Schools, the Water and Sewerage System, and Road Intersections.

Harford County Public Schools:

The adopted adequacy standards for the Public School system are:

Elementary Schools - 105 percent of rated capacity within 3 years.
Secondary Schools - 105 percent of rated capacity within 3 years.

Under current law, preliminary plans for major subdivisions (subdivisions of greater than five lots) cannot be approved in elementary and secondary school districts where the full-time enrollment currently exceeds, or is projected to exceed, 105 percent of the capacity within three years. Currently, twenty-four of thirty-two elementary schools and sixteen of seventeen middle and high schools meet adequacy standards. The following schools listed below do not meet the adequacy standards established.

Elementary Schools	Year	Actual / Projected Students	Utilization Rate
Emmorton Elementary	2007/2008	666	121%
Forest Lakes Elementary	2007/2008	696	127%
Fountain Green Elementary	2007/2008	662	116%
Joppatowne Elementary	2008/2009	523	108%
Magnolia Elementary	2008/2009	528	106%
Prospect Mill Elementary	2007/2008	961	141%
William Paca / Old Post Road Elementary	2008/2009	999	106%
Youth's Benefit Elementary	2007/2008	1,065	120%
Secondary Schools	Year	Actual / Projected Students	Utilization Rate
C. Milton Wright High School	2010/2011	1,780	106%

Beginning July 1, 2008, major subdivision plans within these attendance areas will not be approved but will be reviewed and placed on a waiting list until capacity is available. The Aberdeen High School addition is planned to open September, 2008 and will provide relief to the attendance area.

Harford County Water and Sewerage System:

Based on the Adequate Public Facilities Ordinance and the Harford County Water and Sewer Design Guidelines, preliminary plan approvals, public works utility agreements, and building permits in areas served by public water and sewer systems can be approved only where adequate capacity exists in the water and wastewater treatment facilities and in distribution and collection lines serving the area.

The County water system's current average daily usage is 12.9 MGD (Million Gallons Per Day), with a peak day demand of 16.6 MGD. In addition, the County has contracts with the municipalities totaling 2.5 MGD; for a total demand of 19.1 MGD. The Water Treatment capacity is 20.4 MGD.

The total average sewerage flows, system capacity, and average reserve for the four service areas within Harford County are listed below.

Harford County 2007 Sewerage Capacity by Service Area in Million Gallons Per Day (MGD)

Service Area	Total Flow	System Capacity	Average Reserve
Harford County-Sod Run	11.7	20.0	8.3
Joppatowne	0.73	0.95	0.22
Spring Meadows	0.01	0.01	0.00
Whiteford-Cardiff	0.03	0.12	0.09

The determination of water or sewerage capacity in a specific area of the County can be found in the "Water and Sewer 2007 Adequate Public Facilities Report" with appropriate guidance from the Department of Public Works. A determination of adequacy is made prior to preliminary plan approval, site plan approval, public works utility agreement execution, and building permit approval.

The water system is evaluated for adequacy for providing flows during the maximum day demand, while maintaining system pressures required to deliver fire flows. Water booster stations and/or transmission lines, service mains, storage tanks, and water treatment plants are evaluated. Areas within the Harford County Development Envelope that exist at the highest elevations of the water pressure zones are evaluated for adequacy on a case-by-case analysis. The anticipated growth within the County is accommodated through a combination of developer funded projects and the County Capital Improvement Program.

Currently, there is an estimated 1.3 MGD of water capacity available in the Abingdon Water Treatment Plant service area. Funding, right-of-way acquisition, and construction plans have been completed for the expansion of the Abingdon Water Treatment Plant, with construction anticipated to be completed in the spring of 2011.

The sewer system is evaluated to accommodate expected peak flows through collectors, interceptors, pump stations, force mains, and wastewater treatment plants. Should a problem exist in a collector sewer, it is the developer(s) responsibility to resolve the inadequacy. Inadequacies at major pumping stations and wastewater treatment plants are resolved by programmed capital projects or by projects cooperatively supported by a group of developers.

Harford County Road System:

To determine existing service levels at intersections and the impact of additional traffic, a Traffic Impact Analysis (TIA) must be submitted for developments that generate 249 trips per day at the time of preliminary/site plan review. Proposed development located within the Route 40 Commercial Revitalization District will not be required to submit a Traffic Impact Analysis unless the proposed use will generate 1,500 trips per day at the time of preliminary/site plan review.

The adequacy standards for road intersections within the study area are based on the property's location within or outside the Development Envelope and are defined as follows:

> ***Inside the Development Envelopment*:** Level of Service (LOS) D.
> If existing LOS is E or F at an intersection within the Development Envelope, the developer must mitigate the development's new trips.
>
> ***Outside the Development Envelope:*** Level of Service (LOS) C.
> If the existing LOS is D or lower, then the developer must mitigate the development's new trips.

A developer is required to provide improvements at intersections within the study area where trips generated by the development lower the LOS below the adopted standards. These improvements must bring the LOS to the adopted standard. If the TIA determines that the existing level of service does not meet the adopted standards, the subdivider must mitigate the impact of the trips generated from the development site. The study area is defined for areas within and outside the development envelope as:

> ***Inside the Development Envelope*:** The TIA study area shall include all the existing County and State roads from point of entrance of site to the second intersection of an arterial roadway or higher functional classification road, in all directions. Developments which generate 1,500 or more trips per day may be required to expand the study area.
>
> ***Outside the Development Envelope:*** The TIA study area shall include all existing County and State roads from point of entrance to first intersection of a major collector or higher functional classification road, in all directions.

The determination of existing and projected Levels of Service is calculated in the Traffic Impact Analysis, which is performed by the developer and reviewed by the Departments of Planning and Zoning and Public Works.

In addition to the review of individual Traffic Impact Analyses, the Departments of Planning and Zoning and Public Works have studied a number of major roads and intersections to identify existing conditions. This list of roads represents a cross section of key intersections located inside, outside, and on the fringes of the Development Envelope.

There are three signalized intersections and nine unsignalized intersections with one or more movements operating at a LOS E (or D outside Development Envelope) or lower during peak hours. The evaluation of the LOS is determined by performance of the intersection during one hour peak traffic periods in the a.m. and/or p.m. The following intersections contain one or more movements that operate at an unacceptable LOS:

1. Maryland 24 / Maryland 924 / Tollgate Road
2. Maryland 22 and Thomas Run Road / Schucks Road
3. Maryland 24 and Bel Air South Parkway
4. Interstate 95 and Maryland 24 Ramp
5. Business US 1 and Henderson Road
6. Maryland 147 and Connolly Road
7. Maryland 23 and Grafton Shop Road
8. Tollgate Road and MacPhail Road
9. US 1 and Milton Avenue
10. US 1 and Reckord Road
11. Maryland 22 and Aldino-Stepney Road
12. Maryland 155 and Earlton Road

Developments that impact these intersections will be required to mitigate their impacts to the intersection.

INTRODUCTION

The Annual Growth Report is an ongoing analysis of growth trends, facility capacity, and service performance. This report was prepared by the Department of Planning and Zoning in coordination with the Department of Public Works - Water and Sewer and Engineering Divisions and the Board of Education. This report provides information on the present development activity as well as past trends and future projections for Harford County and the region.

The information in this report will be used by public officials, citizens, and private developers for various purposes:

- to assess facility adequacy during the development review and approval process;
- to assess facility capacity in regard to zoning reclassification decisions;
- to support the evaluation of priority projects in the annual Capital Budget review;
- to identify critical deficiencies which require prompt attention by the County.

GROWTH TRENDS

Population Projection Methodology

Yearly estimates of population and households in Harford County for the Annual Growth Report are determined from the 2000 Census. This data is adjusted to reflect a number of variables including building permits, average household size, and household vacancy rates. The 5 and 10 year projections are based on these estimates with a growth factor applied to determine the rate and quantity of growth in the County. This growth factor is based on the number of building permits anticipated to be issued each year. It is important to note that projections are based on past trends and land availability. The population projections for the five remaining jurisdictions in the Baltimore Region are based on an interpolation of the Baltimore Metropolitan Council's Round 7A population forecast.

The population/household projections are compared to the Residential Vacant Land Inventory and reallocated based on the availability of residential capacity. A component of the residential land inventory is the number of net planned units remaining. The total planned units remaining is calculated by subtracting the total new residential building permits issued from the total preliminary plan approved units. Subdivision plans with 6 or more units remaining and approved municipality plans are included. Currently, there are 7,250 planned units remaining as of December 31, 2007.

The 2000 Census information at the census block level is utilized for specific analysis of each facility regarding area maps and demographic information. Building permits are identified by facility areas and by subdivision name and/or address of each building permit for each year. This provides the needed information on growth trends by facility service area.

Table 1
Harford County - Baltimore Region
Residential Permit Activity
2003 - 2007

Jurisdiction	2003	2004	2005	2006	2007	Total	Percentage of Baltimore Region
Harford County	1,992	1,779	2,113	1,015	806	7,705	16.9%
Anne Arundel County	2,998	2,380	3,014	1,465	1,851	11,708	25.6%
Baltimore City	829	723	1,262	1,081	449	4,344	9.5%
Baltimore County	2,817	2,209	1,990	2,223	1,143	10,382	22.7%
Carroll County	988	923	675	515	310	3,411	7.5%
Howard County	1,453	1,840	1,781	1,699	1,390	8,163	17.9%
Total	**11,077**	**9,854**	**10,835**	**7,998**	**5,949**	**45,713**	**100.0%**

Source: Baltimore Metropolitan Council, March, 2008.

Table 2
Harford County - Baltimore Region
Population and Household Projections
2007 - 2017

Jurisdiction	2007 Population	2007 Households	2012 Population	2012 Households	2017 Population	2017 Households
Harford County	244,130	91,430	263,920	100,440	275,380	106,560
Anne Arundel County	521,220	196,460	537,900	205,840	550,040	213,800
Baltimore City	652,820	260,780	663,560	269,620	673,160	276,440
Baltimore County	804,800	321,760	826,780	332,680	838,040	337,500
Carroll County	173,360	61,040	183,040	65,020	191,480	68,860
Howard County	278,280	104,020	293,340	113,120	306,240	121,240
Total	**2,674,610**	**1,035,490**	**2,768,540**	**1,086,720**	**2,834,340**	**1,124,400**

Source: Baltimore Metropolitan Council, March, 2008.

Table 3
Harford County - Baltimore Region
Employment Projections
2007 - 2017

Jurisdiction	2007 Employment	2012 Employment	2017 Employment
Harford County	119,320	134,740	145,860
Anne Arundel County	327,760	353,720	383,560
Baltimore City	445,100	455,340	465,540
Baltimore County	496,260	511,660	520,920
Carroll County	79,500	85,300	87,400
Howard County	184,640	203,800	221,420
Total	**1,652,580**	**1,744,560**	**1,824,700**

Source: Baltimore Metropolitan Council, March, 2008.

Table 4
Harford County
Non-Residential Permit Activity
New Permits Valued $50,000 and Over

Permit Type	2003		2004		2005		2006		2007	
	Number of Permits	Square Footage	Number of Permits	Square Footage	Number of Permits	Square Footage	Number of Permits	Square Footage	Number of Permits	Square Footage
Commercial	4	195,886	36	461,819	33	691,534	21	237,953	23	219,660
Industrial	2	604,853	7	615,313	9	61,082	17	174,590	13	879,800
Institutional	5	114,987	18	123,150	22	313,231	33	342,869	23	42,186
Utilities	1	18,758	2	0	2	0	2	0	1	0
Other	1	14,400	5	38,640	1	8,400	2	161,000	1	82,620
Total	**13**	**948,884**	**68**	**1,238,922**	**67**	**1,074,247**	**75**	**916,412**	**61**	**1,224,266**

Source: Baltimore Metropolitan Council, March, 2008.

Table 5
Harford County
Non-Residential Permit Activity
Additions, Alterations, and Repairs Valued $50,000 and Over

Permit Type	2003		2004		2005		2006		2007	
	Number of Permits	Square Footage	Number of Permits	Square Footage	Number of Permits	Square Footage	Number of Permits	Square Footage	Number of Permits	Square Footage
Commercial	29	NA	43	NA	33	NA	31	NA	34	NA
Industrial	2	NA	8	NA	1	NA	1	NA	1	NA
Institutional	13	NA	19	NA	4	NA	11	NA	10	NA
Utilities	1	NA	3	NA	1	NA	0	NA	2	NA
Total	**45**	**NA**	**73**	**NA**	**39**	**NA**	**43**	**NA**	**47**	NA

NA: Data Not Available

Source: Baltimore Metropolitan Council, March, 2008.

PUBLIC SCHOOLS

Introduction

To assess current and future adequacy of the public school facilities, the capacities of the existing schools, the utilization of the schools, and future populations are analyzed. The data in this report regarding the public school system are aggregated by the elementary/middle/high school districts and include school enrollments, County-rated capacities for each school facility, utilization of each school facility, and five-year projected school enrollments (Tables 6, 7, and 8). Modified school enrollment projections are included and take into account planned units remaining and projected units from vacant land zoned for residential purposes (Tables 9 and 10). In addition, development information such as building permits issued by dwelling type (Tables 11, 12, and 13) and population and household estimates (Tables 14, 15, and 16) are included in this report. School maps and pupil yield factors by dwelling unit type are included in the Appendix.

Analysis

Each school facility has been analyzed in terms of past growth trends, current conditions, and future enrollment projections. The information is based on factual data and is aggregated by the current school districts. The information in this report is based on factual data. Based on the Adequate Public Facilities provision of the County Code (Section 267-104), the levels of service standard for Public Schools are:

Elementary – 105 percent of rated capacity within 3 years
Secondary – 105 percent of rated capacity within 3 years

Elementary Schools

Under current law, preliminary plans for major subdivisions (subdivisions of greater than five lots) cannot be approved in elementary school districts where the full-time enrollment currently exceeds, or is projected to exceed, 105 percent of the capacity within three years. Currently, twenty-four of thirty-two elementary schools meet adequacy standards. The following schools listed below do not meet the adequacy standards established.

Elementary Schools	Year	Actual / Projected Students	Utilization Rate
Emmorton Elementary	2007/2008	666	121%
Forest Lakes Elementary	2007/2008	696	127%
Fountain Green Elementary	2007/2008	662	116%
Joppatowne Elementary	2008/2009	523	108%
Magnolia Elementary	2008/2009	528	106%
Prospect Mill Elementary	2007/2008	961	141%
William Paca / Old Post Road Elementary	2008/2009	999	106%
Youth's Benefit Elementary	2007/2008	1,065	120%

Beginning July 1, 2008 major subdivision plans within these attendance areas will not be approved but will continue to be reviewed and placed on a waiting list until capacity is available.

Secondary Schools

Under current law, preliminary plans for major subdivisions (subdivisions of greater than five lots) cannot be approved in secondary school districts where the full-time enrollment currently exceeds, or is projected to exceed, 105 percent of the capacity within three years. Currently, sixteen of seventeen middle and high schools meet adequacy standards. The following school listed below does not meet the adequacy standards established.

Secondary Schools	Year	Actual / Projected Students	Utilization Rate
C. Milton Wright High School	2010/2011	1,780	106%

Beginning July 1, 2008 major subdivision plans within this attendance area will not be approved but will continue to be reviewed and placed on a waiting list until capacity is available. The Aberdeen High School addition is planned to open September, 2008 and will provide relief to the attendance area.

School Enrollment Projection Methodology

The methodology for projecting students utilizes historical data for live births and the number of children enrolled in public schools. Using these data, a series of ratios that reflect grade cohort survival are developed. These ratios include consideration of a number of factors:

1. Births in a given year which affect subsequent kindergarten and first grade enrollments.
2. Net migration of school age children.
3. Net transfer of children between public and private schools.
4. Non-promotion of children to the next grade level.
5. Dropouts in the later years of secondary school.
6. Shifts between regular grade and upgraded groups other than special education.

This technique of establishing a ratio is used for each successive grade. For example, a ratio is developed between the number of children actually in the first grade in 2000 and the number in the second grade the following year. The ratio, therefore, represents the number of first graders who advance to the second grade. If significant variations exist (such as a rapid increase in home building), then factors such as pupil yields for subdivision activity and development trends must be measured.

In order to ensure accurate projections, development monitoring is a key activity because housing expansion periods have a direct impact on school enrollments. A primary means of calculating projected student enrollment due to a housing expansion period is by using pupil yield factors for new developments.

Pupil yield factors are determined by researching the number of students from a particular community/subdivision who are actually attending their home school. By dividing the number of

students accounted for by the number of dwelling units, a pupil generation factor is determined. It is important to note that different pupil yield factors are generated depending on housing type (single family, townhouse, apartment, etc.) and school level (elementary, middle, and high). Surveys of sample subdivisions to assess an accurate yield factor are completed on a regular basis. (See Appendix)

Modified School Enrollment Methodology

Utilizing our regional cooperative forecast methodology, a projection of housing units was determined for each school district. It is imperative to note that these projections are constrained by countywide estimates. The number and type of units was based on the existing zoning. Once the number and type of units were determined and projected by year, a pupil yield factor was applied to determine the total number of new pupils by school district.

The methodology for determining a growth factor included a multi-step process. The process included utilization of the existing grade cohort succession methodology and the pupil yield factor. A factor was applied to the existing grade cohort succession ratio per school if the pupil yield factor identified an increase in the average number of students. In order to maintain a consistent application, all calculations were based on the Harford County Public School system's definition of "unadjusted" enrollment projections. No assumptions will be made in terms of school capacities or utilization of existing facilities.

Table 6 (effective 1/09)
Harford County Elementary Schools
Utilization Chart
2008

Elementary School	State-Rated Capacity	Actual 2008 - 2009 ENROLL	Actual 2008 - 2009 % UTIL.	Projected 2009 - 2010 ENROLL	Projected 2009 - 2010 % UTIL.	Projected 2010 - 2011 ENROLL	Projected 2010 - 2011 % UTIL.	Projected 2011 - 2012 ENROLL	Projected 2011 - 2012 % UTIL.
Abingdon	821	775	94%	762	93%	755	92%	757	92%
Bakerfield	455	458	101%	471	104%	473	104%	477	104.8%
Bel Air	500	493	99%	498	100%	491	98%	499	100%
Church Creek	789	723	92%	758	96%	787	100%	797	101%
Churchville	388	363	94%	339	87%	349	90%	351	90%
Darlington	192	125	65%	109	57%	112	58%	118	61%
Deerfield	555	520	94%	493	89%	496	89%	501	90%
Dublin	295	230	78%	240	81%	249	84%	246	83%
Edgewood	511	351	69%	329	64%	317	62%	313	61%
Emmorton	549	**676**	**123%**	**695**	**127%**	**705**	**128%**	**711**	**130%**
Forest Hill	581	564	97%	574	99%	568	98%	563	97%
Forest Lakes	548	**664**	**121%**	**675**	**123%**	**667**	**122%**	**652**	**119%**
Fountain Green	571	**651**	**114%**	**642**	**112%**	**638**	**112%**	**629**	**110%**
G. Lisby at Hillsdale	432	333	77%	336	78%	343	79%	344	80%
Hall's Cross Rds	632	405	64%	424	67%	435	69%	448	71%
Havre de Grace	574	375	65%	403	70%	419	73%	445	78%
Hickory	622	**696**	**112%**	**700**	**113%**	**694**	**112%**	**695**	**112%**
Homestead/Wakefield	907	880	97%	894	99%	903	100%	880	97%
Jarrettsville	520	414	80%	426	82%	428	82%	439	84%
Joppatowne*	484	526	109%	532	81%	532	81%	548	84%
Magnolia	499	**536**	**107%**	**550**	**110%**	**557**	**112%**	**565**	**113%**
Meadowvale	568	528	93%	479	84%	487	86%	479	84%
Norrisville	252	192	76%	186	74%	185	73%	175	69%
North Bend	513	399	78%	401	78%	392	76%	398	78%
North Harford	487	449	92%	447	92%	439	90%	432	89%
Prospect Mill	680	**931**	**137%**	**946**	**139%**	**949**	**140%**	**953**	**140%**
Ring Factory	549	500	91%	495	90%	475	87%	463	84%
Riverside	522	484	93%	436	84%	441	84%	452	87%
Roye-Williams	752	407	54%	389	52%	367	49%	359	48%
Wm Paca / Old Post Rd	940	**995**	**106%**	**1,009**	**107%**	**1,029**	**109%**	**1,034**	**110%**
Wm. S. James	476	467	98%	427	90%	420	88%	432	91%
Youth's Benefit	890	**1,072**	**120%**	**1,093**	**123%**	**1,098**	**123%**	**1,103**	**124%**
TOTAL	18,054	17,182	95%	17,158	95%	17,200	95%	17,258	96%

* Joppatowne Elementary School Addition/Moderization is planned to open September, 2009; capacity will increase to 653.

Source: Harford County Public Schools and Dept. of Planning and Zoning, November, 2008.

Table 7 (effective 1/09)

Harford County Middle Schools

Utilization Chart

2008

Middle School	State-Rated Capacity	Actual 2008 - 2009 ENROLL	Actual 2008 - 2009 %UTIL	Projected 2009 - 2010 ENROLL	Projected 2009 - 2010 %UTIL	Projected 2010 - 2011 ENROLL	Projected 2010 - 2011 %UTIL	Projected 2011 - 2012 ENROLL	Projected 2011 - 2012 %UTIL
Aberdeen	1,709	1,120	66%	1,128	66%	1,115	65%	1,091	64%
Bel Air	1,318	1,249	95%	1,242	94%	1,249	95%	1,267	96%
Edgewood	1,370	1,028	75%	1,040	76%	984	72%	990	72%
Fallston	1,105	905	82%	890	81%	908	82%	884	80%
Havre de Grace	775	613	79%	605	78%	567	73%	550	71%
Magnolia	1,073	785	73%	764	71%	698	65%	709	66%
North Harford	1,243	1,134	91%	1,118	90%	1,084	87%	1,040	84%
Patterson Mill	733	763	104%	769	104.9%	758	103%	724	99%
Southampton	1,540	1,295	84%	1,233	80%	1,198	78%	1,221	79%
Alternative Education/RAACS	100	48							
Total	10,966	8,940	82%	8,789	81%	8,561	79%	8,476	78%

Source: Harford County Public Schools and Dept. of Planning and Zoning, November, 2008.

Table 8 (effective 1/09)

Harford County High Schools

Utilization Chart

2008

High School	State-Rated Capacity	Actual 2008 - 2009 ENROLL	Actual 2008 - 2009 %UTIL	Projected 2009 - 2010 ENROLL	Projected 2009 - 2010 %UTIL	Projected 2010 - 2011 ENROLL	Projected 2010 - 2011 %UTIL	Projected 2011 - 2012 ENROLL	Projected 2011 - 2012 %UTIL
Aberdeen*	1,683	1504	89%	1,476	89%	1,454	88%	1,455	88%
Bel Air	1,423	1380	97%	1,318	93%	1,363	96%	1,362	96%
C. Milton Wright	1,678	1587	95%	1,626	97%	1,563	93%	1,540	92%
Edgewood	1,380	1123	81%	1,091	79%	1,084	79%	980	71%
Fallston	1,529	1365	89%	1,264	83%	1,122	73%	1,165	76%
Harford Technical	966	1040	108%	1,057	109%	1,070	111%	1,079	112%
Havre de Grace	850	764	90%	799	94%	821	97%	824	97%
Joppatowne	1,105	969	88%	939	85%	965	87%	876	79%
North Harford	1,603	1367	85%	1,381	86%	1,381	86%	1,419	89%
Patterson Mill	1,030	701	68%	891	87%	871	85%	854	83%
Alternative Education	225	137							
Total	13,472	11,937	89%	11,842	89%	11,694	88%	11,554	87%

Source: Harford County Public Schools and Dept. of Planning and Zoning, November, 2008.

Table 9

Harford County
Modified Elementary School Enrollment Projections

School District	2007	2008	2009	2010	2011	2012	2013	2014	2015
ABINGDON	754	765	739	734	739	757	768	784	815
modified	**754**	**765**	**750**	**757**	**773**	**804**	**827**	**856**	**902**
BAKERSFIELD	445	449	447	453	458	475	480	489	506
modified	**445**	**449**	**492**	**548**	**608**	**688**	**759**	**843**	**950**
BEL AIR	469	473	463	441	438	451	467	475	494
modified	**469**	**473**	**469**	**453**	**456**	**476**	**499**	**514**	**541**
CHURCH CREEK	713	698	699	703	698	711	736	751	778
modified	**713**	**698**	**732**	**771**	**801**	**854**	**922**	**981**	**1,060**
CHURCHVILLE	359	326	329	333	337	350	359	398	414
modified	**359**	**326**	**337**	**349**	**361**	**383**	**401**	**452**	**479**
DARLINGTON	130	126	127	129	138	131	140	158	163
modified	**130**	**126**	**131**	**137**	**151**	**148**	**162**	**187**	**198**
DEERFIELD	540	513	521	534	536	564	582	647	669
modified	**540**	**513**	**523**	**538**	**542**	**572**	**592**	**660**	**685**
DUBLIN	226	237	242	251	251	248	253	257	264
modified	**226**	**237**	**246**	**259**	**263**	**264**	**273**	**281**	**293**
EDGEWOOD	385	373	373	366	362	364	373	379	393
modified	**385**	**373**	**374**	**368**	**365**	**368**	**378**	**385**	**400**
EMMORTON	666	668	674	683	696	704	726	739	766
modified	**666**	**668**	**698**	**733**	**774**	**810**	**863**	**908**	**972**
FOREST HILL	576	588	591	583	576	584	605	613	634
modified	**576**	**588**	**596**	**593**	**591**	**604**	**631**	**645**	**672**
FOREST LAKES	696	694	702	696	693	706	726	741	769
modified	**696**	**694**	**711**	**714**	**720**	**743**	**773**	**799**	**838**
FOUNTAIN GREEN	662	671	669	672	673	693	708	721	747
modified	**662**	**671**	**669**	**672**	**673**	**693**	**708**	**721**	**747**
G. LISBY AT HILLSDALE	296	307	293	292	296	303	316	323	334
modified	**296**	**307**	**296**	**298**	**305**	**316**	**332**	**342**	**357**
HALLS CROSS ROADS	402	400	412	431	441	465	464	472	488
modified	**402**	**400**	**418**	**443**	**459**	**490**	**495**	**510**	**534**
HAVRE DE GRACE	359	393	433	472	509	534	545	551	571
modified	**359**	**393**	**458**	**527**	**597**	**658**	**705**	**749**	**814**
HICKORY	691	714	706	692	693	727	730	744	769
modified	**691**	**714**	**717**	**714**	**727**	**773**	**788**	**815**	**854**
HOMESTEAD/WAKEFIELD	894	896	892	906	901	919	953	973	1,010
modified	**894**	**896**	**917**	**957**	**978**	**1,024**	**1,089**	**1,140**	**1,212**
JARRETTSVILLE	440	449	476	500	531	557	567	578	598
modified	**440**	**449**	**484**	**517**	**558**	**595**	**615**	**636**	**668**
JOPPATOWNE	502	523	522	531	545	558	558	567	586
modified	**502**	**523**	**544**	**576**	**614**	**653**	**679**	**716**	**768**
MAGNOLIA	521	528	526	528	530	543	550	560	581
modified	**521**	**528**	**542**	**561**	**580**	**611**	**637**	**666**	**710**
MEADOWVALE	529	481	483	505	507	527	542	601	622
modified	**529**	**481**	**506**	**552**	**579**	**627**	**672**	**771**	**827**
NORRISVILLE	206	205	211	220	216	220	234	236	243
modified	**206**	**205**	**216**	**230**	**231**	**240**	**261**	**269**	**282**
NORTH BEND	399	391	386	380	381	394	407	415	431
modified	**399**	**391**	**397**	**402**	**415**	**441**	**467**	**489**	**521**
NORTH HARFORD	478	476	478	478	474	501	505	514	532
modified	**478**	**476**	**492**	**506**	**517**	**561**	**581**	**607**	**645**
PROSPECT MILL	961	989	1,002	1,012	1,011	1,047	1,075	1,093	1,128
modified	**961**	**989**	**1,019**	**1,046**	**1,063**	**1,118**	**1,165**	**1,203**	**1,260**
RING FACTORY	527	519	510	491	474	501	509	518	539
modified	**527**	**519**	**518**	**507**	**498**	**535**	**552**	**570**	**602**
RIVERSIDE	531	483	478	486	495	507	515	576	596
modified	**531**	**483**	**507**	**546**	**588**	**636**	**682**	**797**	**865**
ROYE-WILLIAMS	472	444	420	402	400	413	428	439	456
modified	**472**	**444**	**433**	**427**	**438**	**465**	**495**	**521**	**555**
WM PACA/OLD POST RD	983	999	1,008	1,028	1,041	1,054	1,073	1,094	1,133
modified	**983**	**999**	**1,050**	**1,113**	**1,172**	**1,234**	**1,304**	**1,380**	**1,482**
W.S. JAMES	480	447	446	440	453	457	466	517	536
modified	**480**	**447**	**449**	**446**	**461**	**468**	**480**	**535**	**557**
YOUTHS BENEFIT	1,065	1,079	1,077	1,076	1,080	1,118	1,134	1,152	1,193
modified	**1,065**	**1,079**	**1,101**	**1,125**	**1,154**	**1,219**	**1,262**	**1,309**	**1,383**
Total	17,357	17,304	17,335	17,448	17,573	18,083	18,494	19,075	19,758
Total - modified	**17,357**	**17,304**	**17,793**	**18,384**	**19,012**	**20,068**	**21,049**	**22,256**	**23,633**

Source: Harford County Dept. of Planning and Zoning, May 2008.

Table 10

Harford County
Modified Secondary School Enrollment Projections

Middle School

School District	2006	2007	2008	2009	2010	2011	2012	2013	2014
Aberdeen	1,095	1,112	1,106	1,110	1,044	972	979	998	1,048
modified	**1,095**	**1,112**	**1,143**	**1,185**	**1,154**	**1,116**	**1,166**	**1,233**	**1,340**
Bel Air	1,244	1,211	1,155	1,193	1,183	1,131	1,105	1,121	1,149
modified	**1,244**	**1,211**	**1,164**	**1,211**	**1,211**	**1,168**	**1,152**	**1,179**	**1,219**
Edgewood	1,142	1,083	1,043	1,004	973	939	962	941	968
modified	**1,142**	**1,083**	**1,083**	**1,084**	**1,094**	**1,101**	**1,174**	**1,198**	**1,283**
Fallston	926	944	1,040	957	976	943	958	981	1,025
modified	**926**	**944**	**1,049**	**974**	**1,003**	**978**	**1,003**	**1,037**	**1,093**
Havre de Grace	610	579	528	489	479	493	546	531	556
modified	**610**	**579**	**548**	**528**	**539**	**577**	**663**	**669**	**726**
Magnolia	872	800	771	730	709	673	710	696	716
modified	**872**	**800**	**803**	**794**	**806**	**801**	**883**	**906**	**973**
North Harford	1,153	1,166	1,129	1,092	1,105	1,090	1,101	1,124	1,174
modified	**1,153**	**1,166**	**1,154**	**1,142**	**1,181**	**1,192**	**1,232**	**1,285**	**1,371**
Patterson Mill	**736**	**729**	**718**	**712**	**711**	**677**	**663**	**633**	655
modified	**736**	**729**	**725**	**726**	**732**	**704**	**697**	**673**	**704**
Southampton	1,252	1,312	1,271	1,262	1,299	1,260	1,258	1,252	1,321
modified	**1,252**	**1,312**	**1,278**	**1,276**	**1,320**	**1,288**	**1,293**	**1,294**	**1,373**
Total	8,294	8,936	8,761	8,549	8,479	8,178	8,282	8,277	8,612
Total - modified	**8,294**	**8,936**	**8,947**	**8,921**	**9,041**	**8,926**	**9,263**	**9,473**	**10,081**

High School

School District	2006	2007	2008	2009	2010	2011	2012	2013	2014
Aberdeen	1,573	1,606	1,552	1,409	1,419	1,406	1,355	1,351	1,243
modified	**1,573**	**1,606**	**1,600**	**1,504**	**1,564**	**1,601**	**1,597**	**1,647**	**1,576**
Bel Air	1,398	1,487	1,381	1,276	1,247	1,221	1,186	1,196	1,151
modified	**1,398**	**1,487**	**1,393**	**1,299**	**1,283**	**1,270**	**1,247**	**1,271**	**1,238**
C. Milton Wright	1,750	1,755	1,677	1,780	1,751	1,799	1,759	1,787	1,746
modified	**1,750**	**1,755**	**1,698**	**1,821**	**1,812**	**1,882**	**1,862**	**1,912**	**1,890**
Edgewood	1,167	1,182	1,128	1,031	1,002	957	911	886	853
modified	**1,167**	**1,182**	**1,179**	**1,134**	**1,158**	**1,165**	**1,171**	**1,204**	**1,228**
Fallston	1,453	1,397	1,279	1,239	1,253	1,255	1,266	1,215	1,194
modified	**1,453**	**1,397**	**1,292**	**1,264**	**1,291**	**1,305**	**1,329**	**1,288**	**1,279**
Havre de Grace	770	766	789	767	749	703	638	627	630
modified	**770**	**766**	**812**	**815**	**822**	**800**	**756**	**772**	**805**
Joppatowne	1,005	1,062	989	950	911	870	820	779	760
modified	**1,005**	**1,062**	**1,031**	**1,033**	**1,034**	**1,034**	**1,024**	**1,024**	**1,052**
North Harford	1,382	1,428	1,389	1,406	1,400	1,373	1,347	1,351	1,317
modified	**1,382**	**1,428**	**1,421**	**1,470**	**1,496**	**1,501**	**1,507**	**1,546**	**1,543**
Patterson Mill	438	422	602	780	768	758	755	749	717
modified	**438**	**422**	**608**	**795**	**792**	**791**	**798**	**801**	**777**
Total	10,936	11,105	10,786	10,638	10,500	10,342	10,037	9,941	9,611
Total - modified	**10,936**	**11,105**	**11,034**	**11,135**	**11,252**	**11,349**	**11,291**	**11,465**	**11,388**

Source: Harford County Dept. of Planning and Zoning, May, 2008.

Table 11

Harford County Residential Building Permit Activity

by Elementary School District

2003 - 2007

	2003					2004					2005					2006					2007				
	BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE				
SCHOOL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL
Abingdon	0	81	0	0	81	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
Bakerfield	30	0	0	0	30	15	0	0	0	15	9	4	0	0	13	2	0	0	1	3	2	0	12	0	14
Bel Air	1	60	168	0	229	1	0	247	0	248	8	14	96	0	118	5	6	12	0	23	1	8	0	0	9
Church Creek	47	144	38	1	230	107	148	0	1	256	17	151	0	0	168	3	27	12	0	42	0	126	12	0	138
Churchville	20	0	0	0	20	31	0	0	1	32	19	0	0	1	20	11	0	0	0	11	10	0	0	0	10
Darlington	11	0	0	1	12	8	0	0	1	9	31	0	0	2	33	2	0	0	1	3	3	0	0	0	3
Deerfield	118	0	0	0	118	5	0	0	0	5	3	0	0	0	3	0	0	0	0	0	3	0	0	0	3
Dublin	19	0	0	0	19	15	0	0	0	15	18	0	0	2	20	9	0	0	0	9	7	0	0	0	7
Edgewood	0	0	0	0	0	2	0	0	0	2	17	58	0	0	75	0	24	0	0	24	0	24	0	0	24
Emmorton	54	72	0	0	126	61	27	0	0	88	35	92	80	0	207	26	57	16	0	99	7	50	0	0	57
Forest Hill	31	31	0	1	63	26	0	0	0	26	14	4	0	0	18	11	12	0	0	23	1	4	0	0	5
Forest Lakes	61	0	0	0	61	26	0	0	0	26	29	0	0	0	29	21	0	0	0	21	18	0	0	0	18
Fountain Green	27	0	0	0	27	22	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G. Lisby at Hillsdale	11	0	0	0	11	4	0	0	0	4	5	0	0	0	5	6	0	0	0	6	4	0	0	0	4
Hall's Cross Roads	12	0	0	0	12	26	3	0	0	29	41	92	0	0	133	3	14	0	0	17	1	19	0	0	20
Havre de Grace	0	12	0	0	12	18	24	98	0	140	140	150	20	0	310	95	103	48	0	246	24	42	32	0	98
Hickory	8	0	48	0	56	9	30	0	3	42	54	23	48	0	125	36	0	0	0	36	6	0	0	1	7
Homestead/Wakefield	81	4	0	0	85	36	4	0	0	40	46	8	0	0	54	26	42	40	0	108	19	49	0	0	68
Jarrettsville	59	0	0	0	59	21	0	0	1	22	24	0	0	1	25	44	0	0	2	46	15	0	0	1	16
Joppatowne	73	8	0	0	81	8	0	0	0	8	27	0	0	0	27	24	0	0	0	24	3	0	0	0	3
Magnolia	30	0	0	0	30	16	0	0	0	16	1	0	0	0	1	0	0	0	0	0	5	28	0	0	33
Meadowvale	80	12	0	0	92	17	39	0	0	56	5	69	0	0	74	7	0	0	0	7	2	11	0	0	13
Norrisville	18	0	0	0	18	8	0	0	2	10	22	0	0	2	24	17	0	0	1	18	4	0	0	0	4
North Bend	36	0	0	2	38	34	0	0	2	36	32	0	0	1	33	16	0	0	2	18	12	0	0	0	12
North Harford	51	0	0	0	51	54	0	0	2	56	46	0	0	0	46	19	0	0	0	19	19	0	0	0	19
Prospect Mill	41	79	0	0	120	23	100	16	0	139	6	48	64	0	118	1	0	5	0	6	0	0	32	0	32
Ring Factory	4	0	0	0	4	2	0	0	0	2	14	0	0	0	14	4	0	0	0	4	34	0	0	0	34
Riverside	12	0	0	2	14	8	0	132	0	140	3	0	64	0	67	28	4	48	0	80	8	0	0	0	8
Roye-Williams	32	0	0	0	32	28	0	0	0	28	19	0	0	0	19	0	29	28	0	57	0	23	24	0	47
Wm. Paca/Old Post Rd	111	0	0	0	111	137	0	0	0	137	175	99	0	0	274	15	0	0	0	15	6	45	0	0	51
Wm. S. James	2	0	0	0	2	0	0	0	0	0	3	0	0	2	5	5	15	0	0	20	4	15	0	0	19
Youth's Benefit	148	0	0	0	148	128	0	0	0	128	55	0	0	0	55	30	0	0	0	30	28	0	0	0	28
TOTAL	1,228	503	254	7	1,992	898	375	493	13	1,779	918	812	372	11	2,113	466	333	209	7	1,015	248	444	112	2	806

* Note: Permit totals revised to reflect cancelled permits.

Source: Harford County Dept. of Planning & Zoning, May, 2008

KEY:

SF = Single Family Dwelling
TH = Townhouse
APT / CO = Apartment / Condominium
MH = Mobile Home

Table 12

Harford County Residential Building Permit Activity

by Middle School District

2003 - 2007

	2003					2004					2005					2006					2007				
	BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE				
SCHOOL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL
Aberdeen	133	144	38	1	316	182	151	0	1	334	93	247	0	0	340	16	70	40	1	127	7	168	48	0	223
Bel Air	62	163	216	0	441	69	0	247	0	316	78	96	224	0	398	60	98	28	0	186	10	89	0	0	99
Edgewood	231	81	0	0	312	146	0	0	0	146	196	157	0	0	353	17	24	0	0	41	15	69	0	0	84
Fallston	229	0	0	2	231	163	0	0	0	163	96	0	64	0	160	92	0	48	0	140	62	7	0	0	69
Havre de Grace	97	24	0	1	122	50	63	98	2	213	185	219	20	2	426	110	103	48	1	262	30	53	32	0	115
Magnolia	113	8	0	0	121	31	0	132	0	163	29	0	0	0	29	40	4	0	0	44	9	28	0	0	37
North Harford	195	0	0	3	198	150	0	0	7	157	145	4	0	6	155	87	12	0	5	104	49	4	0	1	54
Patterson Mill	80	4	0	0	84	34	31	0	0	65	70	18	0	2	90	34	22	40	0	96	53	26	0	0	79
Southampton	88	79	0	0	167	73	130	16	3	222	26	71	64	1	162	10	0	5	0	15	13	0	32	1	46
TOTAL	1,228	503	254	7	1,992	898	375	493	13	1,779	918	812	372	11	2,113	466	333	209	7	1,015	248	444	112	2	806

Note: Permits totals revised for cancelled permits.

Source: Harford County Dept. of Planning & Zoning, May, 2008

KEY:

SF = Single Family Dwelling
TH = Townhouse
APT / CO = Apartment / Condominium
MH = Mobile Home

Table 13

Harford County Residential Building Permit Activity

by High School District

2003-2007

	2003					2004					2005					2006					2007				
	BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE					BUILDING PERMITS ISSUED BY DWELLING TYPE				
SCHOOL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL	SF	TH	APT/ CO	MH	TOTAL
Aberdeen	133	144	38	1	316	182	151	0	1	334	93	247	0	0	340	16	70	40	1	127	7	168	48	0	223
Bel Air	62	163	216	0	441	69	0	247	0	316	78	96	224	0	398	60	98	28	0	186	10	89	0	0	99
C.M. Wright	88	79	0	0	167	73	130	16	3	222	26	71	64	1	162	10	0	5	0	15	13	0	32	1	46
Edgewood	231	81	0	0	312	146	0	0	0	146	196	157	0	0	353	17	24	0	0	41	15	69	0	0	84
Fallston	229	0	0	2	231	163	0	0	0	163	96	0	64	0	160	92	0	48	0	140	62	7	0	0	69
Havre de Grace	97	24	0	1	122	50	63	98	2	213	185	219	20	2	426	110	103	48	1	262	30	53	32	0	115
Joppatowne	113	8	0	0	121	31	0	132	0	163	29	0	0	0	29	40	4	0	0	44	9	28	0	0	37
North Harford	195	0	0	3	198	150	0	0	7	157	145	4	0	6	155	87	12	0	5	104	49	4	0	1	54
Patterson Mill	80	4	0	0	84	34	31	0	0	65	70	18	0	2	90	34	22	40	0	96	53	26	0	0	79
TOTAL	1,228	503	254	7	1,992	898	375	493	13	1,779	918	812	372	11	2,113	466	333	209	7	1,015	248	444	112	2	806

Note: Permits totals revised for cancelled permits.

Source: Harford County Dept. of Planning & Zoning, May, 2008

KEY:

SF = Single Family Dwelling
TH = Townhouse
APT / CO = Apartment / Condominium
MH = Mobile Home

Table 14
Harford County Population and Households
by Elementary School District*

2003 - 2007

	2003*		2004*		2005*		2006*		2007*	
SCHOOL	Households	Population	Households	Population	Households	Population	Households	Population	Households	Population
Abingdon	4,054	10,926	4,131	11,115	4,133	11,086	4,133	11,057	4,133	11,034
Bakerfield	2,946	7,940	2,974	8,003	2,989	8,017	3,001	8,029	3,004	8,020
Bel Air	3,334	8,986	3,552	9,557	3,787	10,160	3,899	10,433	3,921	10,470
Church Creek	3,139	8,460	3,357	9,034	3,601	9,659	3,760	10,060	3,800	10,146
Churchville	2,085	5,620	2,101	5,652	2,129	5,711	2,148	5,747	2,159	5,763
Darlington	1,021	2,752	1,031	2,775	1,040	2,790	1,071	2,866	1,074	2,868
Deerfield	2,432	6,556	2,544	6,847	2,549	6,838	2,552	6,828	2,552	6,814
Dublin	1,302	3,509	1,321	3,554	1,335	3,581	1,355	3,625	1,363	3,638
Edgewood	1,389	3,744	1,389	3,738	1,391	3,731	1,462	3,912	1,485	3,965
Emmorton	2,678	7,218	2,798	7,528	2,881	7,729	3,078	8,235	3,172	8,469
Forest Hill	2,182	5,881	2,242	6,033	2,267	6,080	2,284	6,110	2,306	6,156
Forest Lakes	3,179	8,569	3,237	8,711	3,262	8,750	3,288	8,798	3,309	8,836
Fountain Green	2,555	6,886	2,581	6,944	2,601	6,979	2,601	6,960	2,601	6,946
G. Lisby at Hillsdale	1,939	5,226	1,949	5,245	1,896	5,086	1,958	5,238	1,964	5,243
Hall's Cross Roads	1,920	5,175	1,932	5,198	1,959	5,256	2,085	5,580	2,102	5,612
Havre de Grace	3,007	8,105	3,018	8,122	3,151	8,454	3,460	9,257	3,730	9,963
Hickory	2,509	6,762	2,562	6,899	2,603	6,982	2,720	7,276	2,754	7,353
Homestead/Wakefield	5,158	13,901	5,237	14,091	5,274	14,150	5,326	14,249	5,428	14,494
Jarrettsville	2,251	6,067	2,307	6,207	2,329	6,247	2,353	6,294	2,396	6,398
Joppatowne	3,433	9,251	3,510	9,446	3,518	9,437	3,544	9,481	3,567	9,523
Magnolia	1,507	4,061	1,535	4,131	1,550	4,159	1,551	4,151	1,551	4,142
Meadowvale	2,441	6,580	2,529	6,804	2,582	6,926	2,652	7,096	2,659	7,099
Norrisville	894	2,410	913	2,452	921	2,470	943	2,524	961	2,565
North Bend	2,272	6,124	2,308	6,211	2,341	6,281	2,373	6,349	2,390	6,381
North Harford	2,329	6,277	2,377	6,397	2,432	6,525	2,476	6,625	2,494	6,660
Prospect Mill	3,724	10,038	3,842	10,339	3,976	10,666	4,089	10,941	4,094	10,931
Ring Factory	2,357	6,352	2,361	6,352	2,363	6,338	2,376	6,357	2,380	6,354
Riverside	2,672	7,203	2,685	7,224	2,818	7,559	2,881	7,709	2,957	7,897
Roye-Williams	1,475	3,976	1,506	4,051	1,589	4,264	1,550	4,148	1,604	4,284
Wm. Paca/Old Post Rd	5,334	14,376	5,439	14,636	5,569	14,940	5,830	15,598	5,844	15,604
Wm. S. James	1,900	5,122	1,902	5,119	1,902	5,103	1,907	5,102	1,926	5,143
Youth's Benefit	5,407	14,572	5,547	14,927	5,671	15,212	5,723	15,312	5,752	15,357
TOTAL	84,826	228,620	86,718	233,340	88,410	237,165	90,430	241,950	91,430	244,130

* Note: Population / Household figures are as of April 1 each year.

Source: Harford County Dept. of Planning and Zoning, May, 2008.

Table 15
Harford County Population and Households
by Middle School District

2003 - 2007

SCHOOL	2003*		2004*		2005*		2006*		2007*	
	Households	Population	Households	Population	Households	Population	Households	Population	Households	Population
Aberdeen	11,877	32,010	12,177	32,765	12,494	33,515	12,817	34,292	12,938	34,545
Bel Air	9,885	26,642	10,304	27,726	10,604	28,446	10,985	29,391	11,162	29,804
Edgewood	13,900	37,464	14,197	38,200	14,335	38,454	14,671	39,251	14,710	39,276
Fallston	8,139	21,937	8,359	22,492	8,515	22,843	8,667	23,187	8,800	23,496
Havre de Grace	6,743	18,173	6,858	18,452	7,060	18,938	7,475	19,998	7,758	20,716
Magnolia	7,151	19,274	7,266	19,552	7,421	19,907	7,449	19,929	7,490	20,000
North Harford	9,230	24,878	9,419	25,346	9,571	25,673	9,719	26,002	9,818	26,214
Patterson Mill	5,795	15,617	5,875	15,807	5,936	15,923	6,022	16,111	6,113	16,322
Southampton	12,105	32,626	12,264	33,000	12,474	33,466	12,629	33,788	12,643	33,758
TOTAL	84,826	228,620	86,718	233,340	88,410	237,165	90,430	241,950	91,430	244,130

* Note: Population / Household figures are as of April 1 each year.

Source: Harford County Dept. of Planning and Zoning, May, 2008.

Table 16
Harford County Population and Households
by High School District

2003 - 2007

SCHOOL	2003*		2004*		2005*		2006*		2007*	
	Households	Population	Households	Population	Households	Population	Households	Population	Households	Population
Aberdeen	11,877	32,010	12,177	32,765	12,494	33,515	12,817	34,292	12,938	34,545
Bel Air	9,885	26,642	10,304	27,726	10,604	28,446	10,985	29,391	11,162	29,804
C. Milton Wright	12,105	32,626	12,264	33,000	12,474	33,466	12,559	33,602	12,643	33,758
Edgewood	13,900	37,464	14,197	38,200	14,335	38,454	14,490	38,768	14,710	39,276
Fallston	8,139	21,937	8,359	22,492	8,515	22,843	8,851	23,680	8,800	23,496
Havre de Grace	6,743	18,173	6,858	18,452	7,060	18,938	7,221	19,320	7,758	20,716
Joppatowne	7,151	19,274	7,266	19,552	7,421	19,907	7,826	20,938	7,490	20,000
North Harford	9,230	24,878	9,419	25,346	9,571	25,673	9,598	25,680	9,818	26,214
Patterson Mill	5,795	15,617	5,875	15,807	5,936	15,923	6,084	16,278	6,113	16,322
TOTAL	84,826	228,620	86,718	233,340	88,410	237,165	90,430	241,950	91,430	244,130

* Note: Population / Household figures are as of April 1 each year.

Source: Harford County Dept. of Planning and Zoning, May, 2008.

WATER AND SEWERAGE

Introduction

The data included in this section for the water and sewerage system are aggregated by the water and sewer service area, which essentially reflects the Development Envelope as defined in the 2004 Harford County Land Use Element Plan. Additional information is included in this report on water/sewerage usage by dwelling type; for nonresidential uses, an inventory of existing water consumption/sewerage flows, demand projections (including the basis for their computation), and a list of capital projects is contained in the County's Capital Improvements Program for expanding facilities, including project status. This information is extracted from Sections IV and V of the "2007 Water and Sewer Adequate Public Facilities Report."

Water and Sewer Facility Projection Methodology

Water:

The Harford County water service area is divided into four pressure zones because of varying topography within the Development Envelope. To provide an adequate supply of water, the transmission lines, and pumping and storage facilities for all zones must be sized for estimated future demands. In 1997, the average daily water demand by customers served by the County's central system was approximately 9.6 MGD, with a corresponding maximum day demand of approximately 14.3 MGD. In 2007, the County's average day and maximum day demands were 12.9 MGD and 16.6 MGD, respectively. In addition to the County demand, the County has contracts with Aberdeen and Maryland American Water (Bel Air) totaling 2.5 MGD. The combined customer and contracted demand is 19.1 MGD. To keep pace with the projected growth, staged construction programs are established that distribute required capital costs for improvements and/or additions to the County’s system over a period of years.

Currently, there is an estimated 1.3 MGD of water capacity available in the Abingdon Water Treatment Plant service area. Funding, right-of-way acquisition, and construction plans have been completed for the expansion of the Abingdon Water Treatment Plant, with construction anticipated to be completed in the spring of 2011.

There are seven multiple-use water systems that are not maintained or operated by Harford County, but are subject to the APF provision of the County Code. These systems are listed below:

1) Maryland-American Water Co.
2) Conowingo Power Co.
3) Campus Hills Water Works Inc.
4) Darlington
5) Greenridge Utilities Inc.
6) Lakeside Vista
7) Bel Air Heights

Sewerage:

The sewage flows to Harford County's existing Sod Run and Joppatowne Wastewater Treatment Plants (WWTP) originate from a portion of the Development Envelope. The area between the municipalities of Aberdeen and Havre de Grace, as well as the cities themselves, are within the Development Envelope and are served by the municipal sewerage facilities. A complete "Sewer System Capacity Analysis" is included in the “2007 Water and Sewer Adequate Public Facilities Report.”

The average daily influent flow to the Sod Run WWTP in 2007 was approximately 11.7 MGD, exclusive of recycle flows and septage. The average daily influent flow to the Joppatowne WWTP in 2007 was approximately 0.73 MGD. The average daily influent flows for Spring Meadows in 2007 is 0.01 MGD. The determination of future wastewater flows to wastewater treatment plants is made by using population and household projections developed by the Harford County Department of Planning and Zoning for the years 2000 through 2025. The projections were distributed by transportation analysis zones (TAZs) by aggregating the ultimate development in terms of equivalent dwelling units into sewerage drainage areas. In order to keep pace with projected growth, the expansion of the Sod Run Wastewater Treatment Plant from 12 MGD in 1995 to 20 MGD was completed in 2000.

There are two private multi-use sewerage systems in the County. The Conowingo-Susquehanna Power Company provides sewerage service to the Conowingo Power Plant, some surrounding residences, and the Swan Harbor Dell Mobile Home Park which serves about 160 units. In addition, a sanitary sewer collection system has been established in Whiteford-Cardiff, which serves the properties within an established sanitary subdistrict. This system was made operational in 2001 with 172 mandatory hook-ups completed in 2002. Treatment for this subdistrict is provided by Delta Borough, Pennsylvania with a current permitted average flow of 0.12 MGD.

Table 17

JANUARY - DECEMBER 2007
WATER CONSUMPTION & SEWAGE GENERATIONS

This table reflects the total number of water and sewer customers and the water consumption and sewage generations for residential and commercial/industrial users.

	2007
Total Number of Connections	41,407
WATER	
Total Number of Connections	38,813
Average Water Production	12.9 MGD
Maximum Day Water Production	16.6 MGD
Average Water Usage per Connection (gal/day)	332
Residential Unit Water Usage (gal/day)	154
Average Commercial/Industrial Water Usage (gal/day)	6,406
SEWAGE	
Total Number of Sewer Connections	39,520
Average Sewage Flows	12.4 MGD
Maximum Day Sewage Flows	27.6 MGD
Average Sewage per Connection (gal/day)	314
Residential Sewage Generation (gal/day)	154
Average Commercial/Industrial Sewage Generation (gal/day)	6,406

- MGD = Million Gallons per Day

Source: 2007 Adequate Public Facilities Report, Dept. of Public Works, Division of Water and Sewer.

Table 18

HARFORD COUNTY SYSTEM WATER PRODUCTION PROJECTIONS

SYSTEM WIDE RESIDENTIAL/ COMMERCIAL INDUSTRIAL WATER DEMAND	YEAR																		
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2010	2015	2020	2025
First Zone																			
Avg. Day, mgd	3.2	3.4	4.1	4.05	4.5	4.5	4.6	3.5	5.1	5.7	3.6	3.8	4.2	3.6	4.2	6.7	9.1	11.4	15.2
Max. Day, mgd	4.6	4.8	6	4.8	6.5	6.6	6.5	4.6	9.1	7.8	4.7	4.8	5.9	4.9	5.8	9.5	12.8	16.7	22.0
Total of Second, Third and Fourth Zones																			
Avg. Day, mgd	3.5	3.7	3.8	4.5	5	5	5.7	5.9	6.4	5.8	7.5	7.5	7.7	8.0	7.8	6.6	7.3	9.1	9.9
Max. Day, mgd	3.9	4	5.6	5.9	6.8	6.9	7.3	6.9	7.1	8.1	8.2	8.2	8.5	9.1	8.8	9.8	10.7	13.2	14.4
Aberdeen																			
Avg. Day, mgd	0	0	0.5	0.05	0.03	0.01	0.3	0.26	0.26	0.47	0.5	0.21	0.2	0.2	0.5	0.3	0.4	0.5	0.5
* Max. Day, mgd	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chapel Hill																			
Avg. Day, mgd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0	2.0	2.0	2.0
* Max. Day, mgd	0	0	0	0	0	0	0	0	0	0	0	0	1.5*	1.5*	1.0 A	3.0	3.0	3.0	3.0
Maryland-American Water Co.																			
Avg. Day, mgd	0	0	0	0	0.07	0.01	0.01	0.19	0.01	0.16	0.001	0.02	0.03	0.03	0.4 A	0.2	0.25	0.3	0.35
* Max. Day, mgd	0	0	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total																			
Avg. Day, mgd	6.7	7.1	8.4	8.6	9.6	9.5	10.6	9.9	11.8	12.1	11.6	11.6	12.1	11.8	12.9	15.8	19	23.4	28.0
Max. Day, mgd	8.5	8.8	12.1	11.2	14.3	14.5	14.8	12.5	17.2	16.9	13.9	14	15.4	15.0	16.6	23.3	27.5	33.9	40.4

*-Allocated maximum day flow projections based on service agreements.
A - Actual flows

Source: 2007 Haford County Adequate Public Facilities Report, Dept. of Public Works, Water and Sewer Division.

Table 19

Harford County Present and Projected Sewerage Demands and Planned Capacities in Million Gallons Per Day (MGD)

SERVICE AREA	PLANNING YEAR	NUMBER OF CONNECTIONS	DOMESTIC FLOW (ADF)	INDUSTRIAL FLOW (ADF)	INFILTRATION / INFLOW (ADF)	TOTAL FLOW	SYSTEM CAPACITY
HARFORD COUNTY	1993	17,684	7.7	0.4	1	9.1	10
	1995	22,050	7.7	0.5	1.4	9.6	12
	2000	27,561	9.3	0.6	1.7	11.6	20
	2007	36,214	8.9	1.6	1.2	11.7	20
	2010	39,507	8.8	1.74	2.2	12.74	20
	2025	45,872	10.3	4.18	2.4	16.88	20
JOPPATOWNE	1993	2,607	0.59	0	0.19	0.78	0.75
	1995	2,607	0.56	0	0.19	0.75	0.75
	2000	3,107	0.65	0	0.19	0.84	0.95
	2007	3,257	0.60	0.04	0.09	0.73	0.95
	2010	3,440	0.66	0.04	0.08	0.78	0.95
	2025	3,475	0.76	0.04	0.1	0.90	0.95
SPRING MEADOWS	1993	51	0.01	0	0	0.01	0.01
	1995	51	0.01	0	0	0.01	0.01
	2000	52	0.01	0	0	0.01	0.01
	2007	53	0.01	0	0	0.01	0.01
	2010	53	0.01	0	0	0.01	0.01
	2025	53	0.01	0	0	0.01	0.01
WHITEFORD - CARDIFF	2004	178	0.02	0	0.01	0.03	0.12
	2007	179	0.02	0	0.01	0.03	0.12
	2010	179	0.03	0.01	0.02	0.06	0.12
	2025	179	0.09	0.01	0.02	0.12	0.12

Source: 2007 Harford County Adequate Public Facilities Report, Dept. of Public Works, Division of Water and Sewer.

Table 20
2007 EXISTING WATER & SEWER CAPITAL PROJECTS

The Capital Improvement Program establishes projects for expanding and improving water and sewer facilities. This list of 2007 Capital Projects includes the project status.

PROJECT NO.	PROJECT NAME	PROJECT STATUS
6440	Infiltration/Inflow	- Flow Monitoring, Televising & Smoke Testing: on-going - Charwood Ct. Cured-In-Place Contract - Construction Complete - Sheffield Ct. – Pipe Rehabilitation Complete
6458	Lower Bynum Run Parallel Interceptor	Phase 5: Construction Complete
6613	Church Creek Pump Station and Force Main Replacement	Design Phase & Easement Acquisition
6634	Lower Bynum Run Interceptor Parallel	Phase 1 & Phase 2: Design Complete & Easement Acquisition
6635	Oaklyn Manor/Mandeville Road Sewer Petition	Construction Phase
6646	Foster Branch Pump Station and Force Main	Construction Phase
6647	Riverside Force Main	Construction Phase
6665	Joppatowne Pump Station # 47 and Parallel Sewer	Design Phase & Easement Acquisition
6671	Abingdon Water Treatment Plant Expansion	Design Phase
6678	Stans Road and Dugan Drive Sewer Petition	Construction Phase
6685	Paul's Utility Pump Station Replacement	Construction Phase
6687	Abingdon Road Water Main	Design Phase
6690	MD Route 24 Water Transmission Main	Study Phase
6692	Bush Creek Pump Station Replacement	Design Phase
6696	Haverhill Pump Station Replacement	Design Phase
6697	Riviera Drive Pump Station Replacement	Design Phase
6699	Winters Run Pump Station Outfall Sewer	Design Phase
----	Oaklyn Manor Phase II Petition	Grant Funding Acquisition

ROAD SYSTEM

Introduction

The information for the APF Road System contained in this section includes the following: signalized and unsignalized intersection capacity analysis results - existing conditions (Tables 21 and 22), average daily count locations (Table 23), a list of approved County capital projects funded for construction in FY 07 (Table 24)**,** and a list of State consolidated transportation program projects funded for construction in FY 07 (Table 25). This information will help identify existing deficiencies in the road system and guide both County and State capital project funding to the most critical road projects.

The intent of the APF Roads provisions of the County Code is to create a mechanism that requires proposed development to make appropriate and reasonable road improvements, based on the proposed development's impact to the road.

Road Intersection Analysis Methodology

A key feature of the APF Road Intersection regulations is the requirement for preparation of a traffic impact analysis (TIA) for residential and nonresidential uses that generate more than 249 trips per day. Proposed development located within the Route 40 Commercial Revitalization District will not be required to submit a Traffic Impact Analysis unless the proposed use will generate 1,500 trips per day at the time of preliminary/site plan review. The TIA provides information regarding the impact of generated trips from proposed land uses on traffic safety and traffic operation within a designated area and recommends solutions to mitigate the impact. The method of conducting a Traffic Impact Analysis is outlined in the "Harford County Traffic Impact Analysis Guidelines."

A complete TIA includes the following:

- The designation of the study area as required in the APF regulations based on whether the proposed development is inside or outside of the Development Envelope.

  Inside the Development Envelope:
  The TIA shall include all the existing County and State roads from the point of entrance of site to the second intersection of an arterial roadway or higher functional classification road, in all directions. Developments which generate 1,500 or more trips per day may be required to expand the study area.

  Outside the Development Envelope:
  The TIA shall include all existing County and State roads from point of entrance to first intersection of a major collector or higher classification road, in all directions.

- An analysis of existing conditions including traffic counts, lane configuration, and signal timings.

- An analysis of background conditions without site development, including growth in background traffic, future traffic generated by nearby proposed developments, and the determination of Levels of Service with any approved/funded State and County Capital projects.

- An analysis of the projected conditions with site development, including the traffic being generated by the proposed development and the background traffic.

- An explanation of the results with recommended improvements as necessary.

The developer is required to provide improvements where the trips generated by the development reduce the Level of Service (LOS) from adequate to a LOS below the standard. The standard for intersections within the Development Envelope will be LOS D. If existing LOS is E or F at an intersection within the Development Envelope, the developer must mitigate the impact of the development's new trips. The standard for intersections outside the Development Envelope will be LOS C. If the existing LOS is D or lower, then the developer must mitigate the impact of the development's new trips.

In addition to the review of individual Traffic Impact Analyses, the Departments of Planning and Zoning and Public Works have studied a number of major roads and intersections to identify existing conditions. This list represents a cross section of key intersections located inside, outside, and on the fringes of the Development Envelope. There are three signalized intersections and nine unsignalized intersections with one or more movements operating at a LOS E (LOS D outside the Development Envelope) or lower during peak hours. The evaluation of the LOS is determined by performance of the intersection during one hour peak traffic periods in the a.m. and/or p.m. The following intersections contain one or more movements that operate at an unacceptable LOS:

Developments that impact these intersections will be required to mitigate their impacts to the intersection.

1. Maryland 24 / Maryland 924 / Tollgate Road
2. Maryland 22 and Thomas Run Road / Schucks Road
3. Maryland 24 and Bel Air South Parkway
4. Interstate 95 and Maryland 24 Ramp
5. Business US 1 and Henderson Road
6. Maryland 147 and Connolly Road
7. Maryland 23 and Grafton Shop Road
8. Tollgate Road and MacPhail Road
9. US 1 and Milton Avenue
10. US 1 and Reckord Road
11. Maryland 22 and Aldino-Stepney Road
12. Maryland 155 and Earlton Road

Table 21

Signalized Intersection Capacity Analyses

Level Of Service And Delay In Seconds

2004 - 2007

Intersection	2004 Peak Hour Level Of Service / Delay In Seconds	2005 Peak Hour Level Of Service / Delay In Seconds	2006 Peak Hour Level Of Service / Delay In Seconds	2007 Peak Hour Level Of Service / Delay In Seconds
Maryland Route 7 and U.S. Route 40	C / 32.4		C / 27.6	
Maryland Route 924 and Moores Mill Road	C / 24.0		C / 33.4	
Maryland Route 24 and Trimble Road	C / 42		C / 28.6	
Maryland Route 152 and U.S. Route 1	C / 43.8		D / 47.0	
Maryland Route 24 and U.S. Route 1	C / > 35		D / 39.7	
Maryland Route 152 and Trimble Road	C / 24.3		C / 20.7	
Maryland Route 24 and Jarrettsville Road	C / 20.6		C / 22.4	
Maryland Route 152 and Hanson Road	C / 28.8		C / 22.7	
Maryland Route 152 and Singer Road	D / 37.6		C / 30.1	
Maryland 22 and Thomas Run Road/Schucks Road	NA		D / 42.6	
Maryland Route 22 and Brier Hill Road		C / 24.7		B / 16.7
Maryland Route 22 and Maryland Route 136		C / 34.6		C / 29.0
Maryland Route 24 and Bel Air South Parkway		D / 36.6		E / 58.7
Maryland Route 24 and Forest Valley Road*		F / 121.5		C / 21.0
Maryland Route 24 and Plumtree Road		D / 34.5		C / 31.8
Maryland Route 24 and Ring Factory Road		D / 39.8		D / 48.0
Maryland Route 24 and Maryland Route 924 (Tollgate)		F / 132.6		F / > 80
Maryland Route 543 and U.S. Route 1		C / 22.3		C / 29.6
Maryland Route 543 and Maryland Route 22		D / 35.1		C / 29.8
Maryland Route 924 and Abingdon Road		D / 42.6		C / 33.5

NA: Not available
* Signalized in 2007

Source: Harford County Dept. of Planning and Zoning, April, 2008.

Table 22

Unsignalized Intersection Capacity Analyses

Level Of Service And Delay In Seconds

2004 - 2007

Intersection	2004 Peak Hour Level Of Service / Delay In Seconds	2005 Peak Hour Level Of Service / Delay In Seconds	2006 Peak Hour Level Of Service / Delay In Seconds	2007 Peak Hour Level Of Service / Delay In Seconds
Interstate 95 and Maryland Route 24 Ramp	F / >60		F / >60	
Business US 1 and Henderson Road	D / 29.4		E / 35.5	
Maryland 147 and Connolly Road	F / 80.5		F / 113.4	
Maryland 23 and Grafton Shop Road	NA		F / 127.1	
Tollgate Road and MacPhail Road	NA		F / 54.5	
US 1 and Milton Avenue	F / 73.9		F / 245.9	
US 1 and Reckord Road	F / 67.5		F / 95.5	
Maryland 7 and Brass Mill Road	NA		C / 21.3	
Maryland 715 and Old Philadelphia Road	B / 17.9		C / 22.9	
Woodsdale Road and Box Hill Corporate Center Drive	NA		C / 18.8	
Maryland Route 7 and Maryland Route 159		B / 12.5		B / 13.2
Maryland Route 7 and Joppa Farm Road		E / 35.8		D / 32.5
Maryland Route 159 and Spesutia Road		B / 10.4		B / 13.2
Maryland 155 and Earlton Road		E / 36.3		D / 31.2
Maryland 543 and Henderson Road		D / 34.2		D / 26.2
Tollgate Road and Ring Factory Road*		D / 27.3		A / 7.8
Maryland 22 and Aldino-Stepney Road		E / 36.0		E / 49.2
Macphail and Ring Factory Road		B / 12.1		B / 14.7

NA: Not Available
* Roundabout constructed in 2007

Source: Harford County Dept. of Planning and Zoning, April, 2008.

Table 23

48 Hour Average Weekday Daily Traffic Volume And Locations

2004 - 2007

Road Name	Location	2004 Average Daily Count	2005 Average Daily Count	2006 Average Daily Count	2007 Average Daily Count
Beards Hill Road	North of Churchville Road	11,670		8,025	
Carrs Mill Road	North of Maryland Route 152	8,747		8,756	
Chapel Road	North of Interstate 95	1,700		2,406	
Jarrettsville Road	East of Maryland Route 24	11,670		7,930	
Jarrettsville Road	West of Maryland Route 24	7,065		5,550	
Maryland Route 7	West of Maryland Route 24	7,775		7,840	
Moores Mill Road	West of Coconut Court	10,211		10,653	
Moores Mill Road	West of Old English Court	8,676		7,877	
Pleasantville Road	North of Putnam Road	3,843		3,608	
Stepney Road	North of Interstate 95	1,382		1,442	
U.S. Route 1	North of Maryland Route 152	31,125		27,282	
U.S. Route 40	North of Maryland Route 24	22,075		24,530	
Abingdon Road	North of Interstate 95		10,519		10,396
Hanson Road	South of Silverbell Road		3,602		2,740
Hanson Road	West of Maryland Route 24		11,246		11,960
Maryland Route 24	North of Singer Road		45,250		44,410
Maryland Route 152	South of U.S. Route 1		24,050		24,570
Maryland Route 543	South of Maryland Route 22		19,175		18,982
Plumtree Road	East of Maryland Route 24		5,307		6,071
Ring Factory Road	West of Maryland Route 24		3,765		4,596
Ring Factory Road	East of Maryland Route 24		8,639		8,924
Singer Road	West of Maryland Route 24		7,984		8,556
Singer Road	East of Maryland Route 24		9,776		9,832
Trimble Road	East of Maryland Route 24		5,711		5,179
Trimble Road	West of Maryland Route 24		5,478		7,321
Vale Road	West of U.S. Route 1 Overpass		8,253		8,697

Source: Harford County Dept. of Planning and Zoning, April, 2008.

Table 24

List of Approved County Capital Projects

Funded for Construction in FY 08

Bridge Painting	**Surface Coatings**
Bridge Rehabilitation	**Repairs**
Road and Bridge Scours	**Repairs**
Harford Creamery Road Bridge #104	**Replacement**
Ruff's Mill Road Bridge #190	**Replacement**
Ryan Road Bridge #61	**Replacement**
Southampton Road Bridge #47	**Replacement**
Thomas Run Road Bridge #34	**Replacement**
Cedar Lane, MD 136-Cedarday	**Upgrade & realign**
Culvert Rehabilitation	**Replacement/Rehabilitation/Repair**
Perryman Access – MD 715 Connection	**Construct 1,000 feet of new roadway**
Robinhood Road, US 40 – Titan Terrace	**Upgrade**
Vale Road – West of MD 924 to Grafton Shop Road	**Upgrade**
Wheel Road, Laurel Bush-Fairway	**Upgrade**
Wheel Road / Laurel Bush Rd Intersection Improvement	**Roundabout**
Winters Run Road @ MD 7	**Intersection Improvement**
Foster Branch @ Trimble Road	**Intersection Improvement**

Table 25

State Consolidated Transportation Program

Funded for Construction in FY 08

MD 24 – Singer Road to MD 7	**Grade separate MD 24/MD 924/ Tollgate intersection and upgrade I-95/MD 24 interchange**
US 40 – MD 152 to MD 24	**Streetscape**
MD 132 – Beards Hill Road to MD 462	**Resurface**
US 1 – Connolly Road to MD 147/Bus US 1	**Widen and provide left turn lanes at intersections**
MD 755 – MD 24 to Willoughby Beach Road	**Streetscape**
MD 924 – MD 22 to Maulsby Street	**Streetscape and sidewalk retrofit**
Ma and Pa Heritage Trail – Tollgate parking lot to Edgeley Grove Farm	**Extension**

APPENDIX

PUPIL YIELD FACTORS

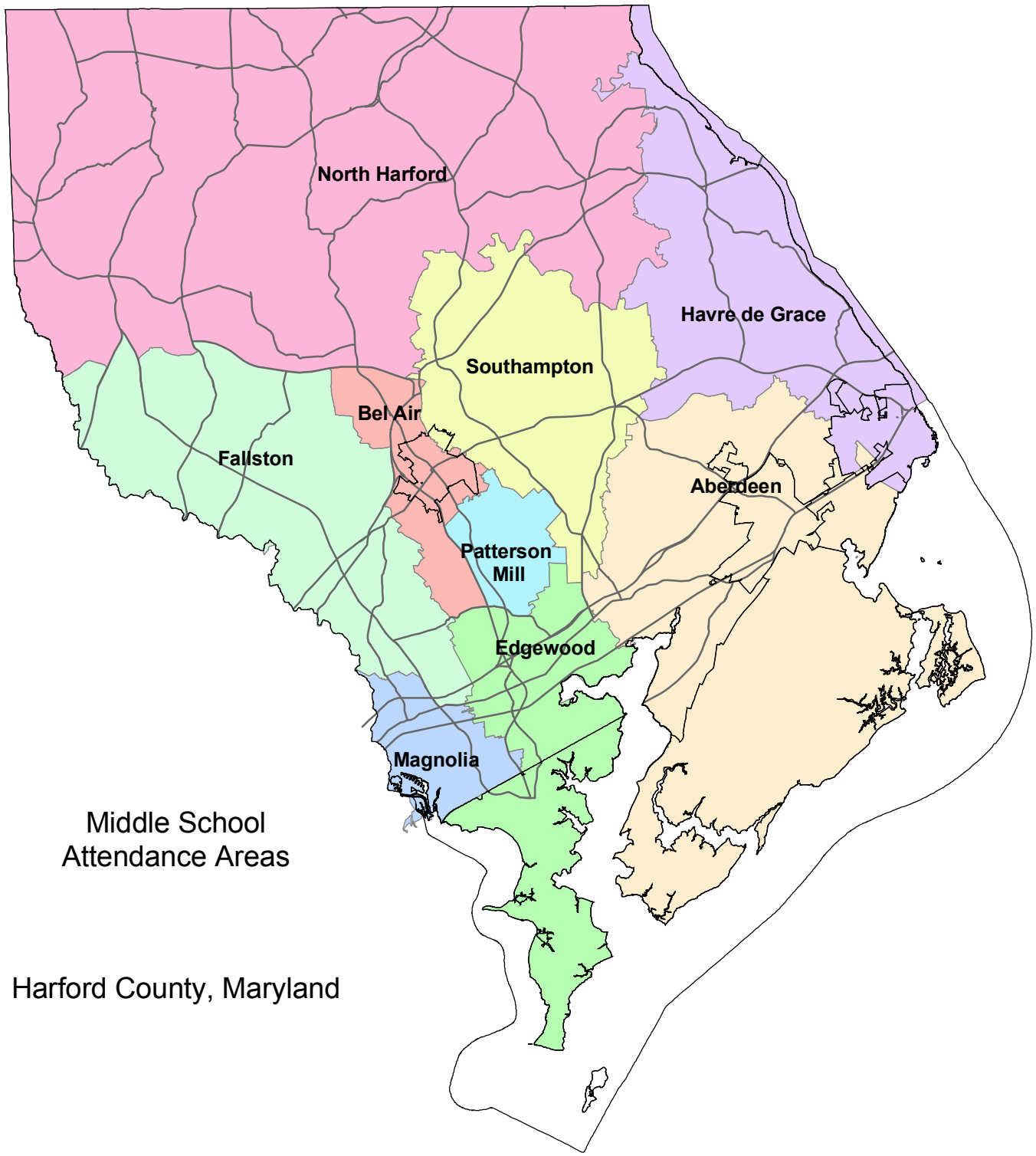
Forty-seven subdivisions were selected from various geographic locations throughout Harford County, to include single family dwellings, townhouse units, apartments/condominium units, and mobile home units. The subdivisions selected represented newly constructed and established subdivisions ranging in size from 23 units to 2,395 units. Additionally, subdivisions were selected to provide a broad range of attendance areas across the County. A count was made of each student who resided in each of the forty-seven subdivisions studied. The data were tabulated by unit type, and the specific pupil yields were calculated for each subdivision in the elementary, middle, and high schools.

	GRADES		
UNIT TYPE	**K-5**	**6-8**	**9-12**
Single Family	.31	.16	.20
Townhome	.23	.11	.14
Apartments (2 Bdrms)	.05	.02	.02
Condo (2+ Bdrms)	.05	.02	.02
Mobile Home	.13	.05	.07

Elementary School Attendance Areas

Harford County, Maryland

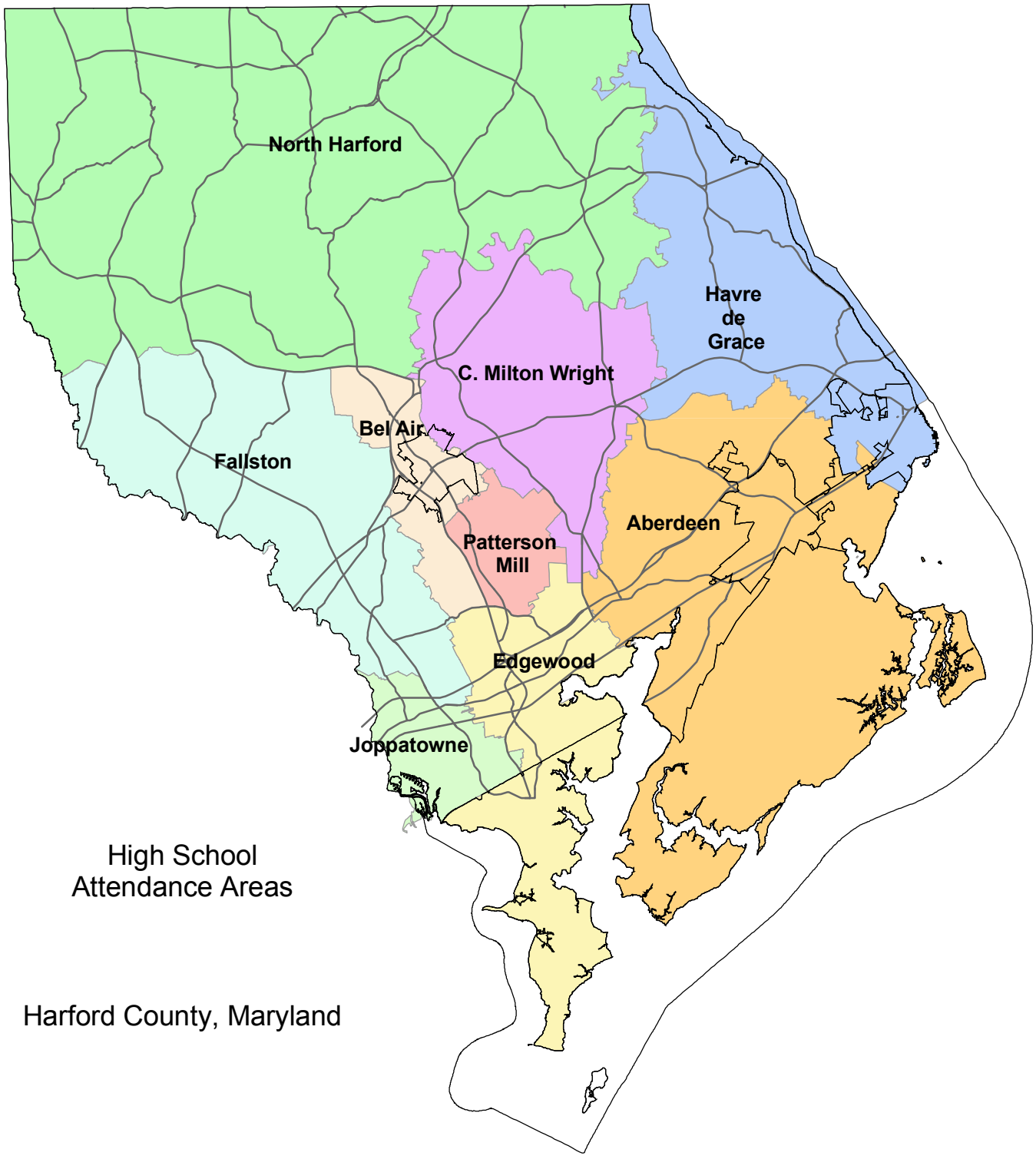
SOURCE: Harford County Public Schools, September 2006.



Middle School Attendance Areas

Harford County, Maryland

SOURCE: Harford County Public Schools, September 2006.



High School Attendance Areas

Harford County, Maryland

SOURCE: Harford County Public Schools, September 2006.