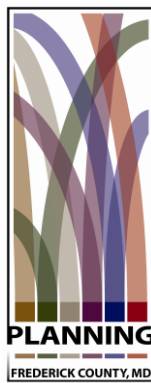


**2010 FREDERICK COUNTY COMPREHENSIVE PLAN**

**RESIDENTIAL NEEDS AND  
DEVELOPMENT CAPACITY ANALYSIS**

**June 2010**



Prepared by

Frederick County Division of Planning



## INTRODUCTION

This report has been revised to reflect the residential development capacity of the County Comprehensive Plan, which was adopted on April 8, 2010.

This analysis focuses on residential development to identify approximate needs for residential land and the number of dwellings based on a projected 2030 household population for the County. The purpose of this analysis will address the following:

- Compares the residential development potential based for the previous Comprehensive Plan, which is a compilation of the eight region plans adopted between 1997 and 2008 with the 2010 County Comprehensive Plan.
- The residential development potential is prepared only for the community growth areas.
- Compare the residential development potential with residential dwelling needs based on the projected 2030 household population for the County.
- Document the sources of the data, assumptions used in the analysis and the methodology.

## METHODOLOGY

The methodology for this analysis is divided into two parts, Part 1 – Projecting Residential Needs and Part 2 – Determining Residential Capacity. begins with the identification of projected needs for residential development. The inputs for this analysis are described below.

### Part 1 – Projecting Residential Needs

(A) Residential Development Pipeline – This data references the number of lots/dwellings that have been approved and how much of the approved development is unbuilt i.e. the pipeline. The Division of Planning collects this data from the subdivision and site plan records of the respective municipalities and from the County’s Division of Permitting and Development Review.

(B) Projected Dwellings – This number is derived from the household population projection for the County for the year 2030. This projection is prepared by the Maryland Department of Planning. Applying a projected household figure (persons/household) to the projected increase in population from 2008 to 2030 yields the number of dwellings needed to accommodate that population. From this total is subtracted the approved but unbuilt residential developments i.e. pipeline to derive the net number of dwellings needed beyond what is approved in the pipeline.

(C) Projected Acreage – This last input in determining residential needs derives the approximate acreage of land needed to accommodate the net number of dwellings/lots. This calculation uses an assumption for the type of dwellings to be constructed to have an increasing proportion of townhouses and multi-family versus single-family dwellings. Various density scenarios for each dwelling type are provided to show a range of acreages that would be needed.

## Part 2 – Determining Development Capacity

The second part of the analysis involves the preparation of development capacity, which is the amount of development that can be accommodated based on the build out of the Comprehensive Plan. The development capacity focuses on the lands with a residential land use plan designation within the community growth areas. A separate analysis includes land within a community growth area but designated Agricultural/Rural. The analysis uses tax assessment records of developed properties applied to aerial photography to produce a first cut of properties that are developed, undeveloped, or underdeveloped. This information was mapped and reviewed by staff to confirm the developed/undeveloped status for each parcel.

This analysis also tracks approved residential developments that are in the pipeline. Those projects that are partially constructed were generally categorized as undeveloped though their development potential is based on the development approvals rather than the application of a development assumption to the undeveloped acreage. Therefore, the undeveloped acreage does not include those properties designated as pipeline. The pipeline dwelling units are indicated in a separate column.

### RESIDENTIAL DEVELOPMENT PIPELINE

The following information describes how many residential lots/dwelling units have already received some level of development approval but are not yet built. These lots/dwellings units are commonly referred to as the “pipeline”. The pipeline data captures residential developments approved under the County’s jurisdiction as well as by the municipalities.

Under the County’s jurisdiction the pipeline includes any lot or dwelling unit approved for residential use including those zoned Agricultural and Resource Conservation in addition to developments zoned residential, Planned Unit Development (PUD), or Mixed Use Development (MXD).

Pipeline data is also provided for the municipalities with a breakdown between the pipeline just for the City of Frederick and the other eleven municipalities.

For the purposes of this analysis the traditional pipeline information will be used. The traditional pipeline is simply the total number of dwellings/lots approved minus the number of building permits issued.

### 2010 County Comprehensive Plan Pipeline

The following table summarizes the pipeline based on the adopted 2010 Plan. Since the 2010 Plan contracted several community growth areas there were several developments previously in the residential pipeline that have been removed from the pipeline. These developments totaled approximately 2,485 dwellings.

## Part 1 A - Residential Pipeline Summary

### 2010 County Comprehensive Plan

Jurisdiction	Traditional Pipeline	Recorded Lots/Dwellings Available	Unrecorded Pass APFO	Pending APFO
Municipalities (except Frederick City)	2,245	274	1,880	91
Frederick City	5,296	1,078	4,218	0
<b>Municipal Subtotal</b>	<b>7,541</b>	<b>1,352</b>	<b>6,098</b>	<b>91</b>
Lots of Record	1,489	1,489	0	0
County Inside CGA's	8,396	1,183	4,234	2,979
County Outside CGA's	124	84	40	0
<b>County Subtotal</b>	<b>10,009</b>	<b>2,756</b>	<b>4,274</b>	<b>2,979</b>
<b>Total</b>	<b>17,550</b>	<b>4,108</b>	<b>10,372</b>	<b>3,070</b>

**Traditional Pipeline:** Dwelling Units Approved less the number of Building Permits Issued.

**Dwelling Units Approved:** Includes units approved at the Preliminary Plan, Phase II, or Phase I PUD or MXD Plan stage.

**Unrecorded Pass APFO:** The number of lots in a subdivision which have not yet been recorded but have passed the APFO.

**Pending APFO:** The number of lots in a subdivision which have not passed the APFO.

Source: Frederick County Division of Planning, City of Frederick Planning Department, December 2009

## PROJECTED RESIDENTIAL DWELLING AND LAND NEEDS

The following analysis uses the projected household population for the County by 2030 to project an approximate number of dwellings (Part 1B) and the amount of acreage (Part 1C) needed to accommodate the projected population growth.

### Part 1B Methodology

The needs analysis starts with the projected increase in household population from 2008 to 2030. This projection is taken from the Maryland Department of Planning, Planning Data Services. To develop a more accurate projection of residential needs this analysis will use the household population for the County rather than the total population. These are defined as follows:

Household Population – excludes those living in group quarters, which includes colleges, hospitals, nursing homes, jails, resident treatment facilities, and military housing. These group quarter populations are subtracted from the total population resulting in the household population.

Total Population – includes group quarter population + household population.

For 2030 the State projects the following:

Total Population	331,700
Group Quarters Pop.	7,948
Household Population	<u>323,752</u>

The projected number of persons/household of 2.65 persons/household would then be applied to the household population increase of 95,700 (between 2008 and 2030). This would result in a gross need for approximately 36,100 new dwellings. From this gross dwellings needs the pipeline dwellings would be subtracted resulting in a net dwelling need. It is this net dwelling number that would be compared with the residential development capacity of undeveloped land to gauge the degree to which the 2010 Plan addresses the projected 2030 needs.

### Part 1C Methodology

This part of the analysis takes the net dwellings needed to determine the acreage of land needed to accommodate the net dwellings. This analysis applies several density scenarios, low – mid – high, to provide a range of acreage needs and to illustrate how density can affect the amount of land needed to accommodate development. All of the density scenarios assume a mix of 50% single-family detached, 30% townhouses, and 20% multi-family.

<b>Part 1B: Projected Dwellings Needed</b>			
Projected 2030 HH Pop.	323,700	Projected Additional Population 2008-2030 <sup>1</sup>	95,700
Current 2008 HH Pop.	228,100	Projected 2030 Household Size <sup>2</sup>	2.65
Current Household Size	2.72	(rounded) Gross Dwellings Needed	36,100
Current House Type Mix <sup>5</sup> :	60% SF 25% TH 15% MF	(rounded) Dwellings in Pipeline <sup>3</sup> - 2010 PLAN	17,550
		<b>(rounded) Net Dwellings Needed - 2010 PLAN</b>	<b>18,550</b>

<b>Part 1C: Projected Acreage Needed – 2010 PLAN</b>								
<b>Dwelling Type</b>	<b>Unit Mix<sup>4</sup></b>	<b>Total Dwellings Needed by Type</b>	<b>Density Scenarios</b>					
			<b>Low</b>		<b>Mid</b>		<b>High</b>	
			<b>Dwellings Per Acre</b>	<b>Acres Needed</b>	<b>Dwellings Per Acre</b>	<b>Acres Needed</b>	<b>Dwellings Per Acre</b>	<b>Acres Needed</b>
Single Family	50%	9,275	2	<b>4,638</b>	3.5	<b>2,650</b>	5	<b>1,855</b>
Townhouse	30%	5,565	5	<b>1,113</b>	7	<b>795</b>	10	<b>557</b>
Multi-Family	20%	3,710	10	<b>371</b>	15	<b>247</b>	20	<b>186</b>
<b>Total</b>		<b>18,550 dwellings</b>		<b>6,122 acres</b>		<b>3,692 acres</b>		<b>2,597 acres</b>

- (1) Maryland Department of Planning, Planning Data Services, October 2008
- (2) Maryland Department of Planning
- (3) Frederick County Division of Planning, includes municipalities
- (4) Projected Mix from Frederick County FY 2008-2014 Capital Improvements Program
- (5) SF: Single Family Dwellings, TH: Townhouses, MF: Multi-Family Dwellings

## **PART 2 – DEVELOPMENT CAPACITY ANALYSIS**

This portion of the report documents the development capacity of both the previous Plan, which is a compilation of the County’s eight region plans adopted between 1997 and 2008 and the 2010 Plan. The analysis focuses only on the Community Growth Areas, including both municipal and unincorporated, to determine the development capacity assuming build out of the land designated for residential. The following parameters were used in this analysis.

- Development potential is based on the residential land use plan designation not the current zoning of a parcel. Properties within a growth area but designated Agricultural/Rural as a Future Growth Area are described separately.
- For Municipal Growth Areas the analysis includes the development potential for properties within the current municipal boundary.
- The analysis breaks down the residential development potential into a pipeline category, which reflects approved residential projects (including municipal projects) and potential from undeveloped land designated for residential but not having any development approvals.

### **Table Heading Descriptions**

- Acreage Designated Residential – properties with a land use plan designation of the Low, Medium, or High Density Residential
- Residential Acreage Undeveloped – undeveloped properties not including those in the pipeline or other lots of record.
- Pipeline Dwellings – number of approved lots/dwellings
- Undeveloped Land Dwellings – potential number of lots/dwellings on properties using residential development assumptions. Does not include pipeline properties or other lots of record.
- Total Potential Dwellings – Pipeline dwellings + Undeveloped Land Potential dwellings

### **Residential Development Assumptions**

To determine the residential development potential for undeveloped land, not in the pipeline the following assumptions will be used:

- Low Density Residential – 75% net acreage @ 3.5 dwellings/acre
- Medium Density Residential – 75% net acreage @ 7.5 dwellings/acre
- High Density Residential – 75% net acreage @ 15 dwellings/acre



## Previous Plan - Residential Development Capacity

Growth Area	Acreage Designated Residential	Residential Acreage Undeveloped	Pipeline Dwellings	Undeveloped Land Dwellings	Total Potential Dwellings
<b>Adamstown Region</b>					
Adamstown	494	14	87	36	123
Buckeystown	567	194	0	508	508
Point of Rocks	271	17	97	44	141
<i>Subtotal</i>	<i>1,332</i>	<i>225</i>	<i>184</i>	<i>588</i>	<i>772</i>
<b>Brunswick Region</b>					
Brunswick	1,943	1,109	1,577	1,860	3,437
Jefferson	475	101	199	267	466
<i>Subtotal</i>	<i>2,418</i>	<i>1,210</i>	<i>1,776</i>	<i>2,127</i>	<i>3,903</i>
<b>Frederick Region</b>					
Ballenger Creek	1,348	76	3,110	363	3,473
* Frederick	1,851	940	5,296	3,726	9,022
Frederick SE	230	47	0	124	124
<i>Subtotal</i>	<i>3,429</i>	<i>1,063</i>	<i>8,406</i>	<i>4,213</i>	<i>12,619</i>
<b>Middletown Region</b>					
Braddock Heights	1,417	524	0	1,376	1,376
Fountaindale	892	59	0	155	155
Middletown	1,268	522	166	1,522	1,688
Myersville	419	156	159	191	350
<i>Subtotal</i>	<i>3,996</i>	<i>1,261</i>	<i>325</i>	<i>3,244</i>	<i>3,569</i>
<b>New Market Region</b>					
Holly Hills	661	50	0	131	131
Linganore	2,630	306	3,401	952	4,353
Mount Airy	518	52	0	136	136
New Market	673	268	257	290	547
Spring Ridge	1,855	528	192	1,386	1,578
<i>Subtotal</i>	<i>6,337</i>	<i>1,204</i>	<i>3,850</i>	<i>2,895</i>	<i>6,745</i>
<b>Thurmont Region</b>					
Emmitsburg	659	332	52	842	894
Thurmont	1,712	606	34	3,391	3,425
<i>Subtotal</i>	<i>2,371</i>	<i>938</i>	<i>86</i>	<i>4,233</i>	<i>4,319</i>
<b>Urbana Region</b>					
Monrovia	1,092	96	2,708	252	2,960
Urbana	933	0	1,015	0	1,015
<i>Subtotal</i>	<i>2,025</i>	<i>96</i>	<i>3,723</i>	<i>252</i>	<i>3,975</i>
<b>Walkersville Region</b>					
Libertytown	609	441	10	1,159	1,169
Walkersville	1,188	231	65	606	671
Woodsboro	371	175	7	434	441
<i>Subtotal</i>	<i>2,168</i>	<i>847</i>	<i>82</i>	<i>2,199</i>	<i>2,281</i>
<b>Overall Total</b>	<b>24,076</b>	<b>6,844</b>	<b>18,432</b>	<b>19,751</b>	<b>38,183</b>

Source: Frederick County Division of Planning

\* "Acreage Designated Residential" and "Residential Acreage Undeveloped" for the Frederick Community Growth Area does not include Frederick City. Acreage indicated includes only County portion of Community Growth Area. However, dwelling units totals for "Pipeline Dwellings", "Undeveloped Land Dwellings", and "Total Potential Dwellings" does include Frederick City.

**2010 Plan - Residential Development Capacity**

<b>Growth Area</b>	<b>Acreage Designated Residential</b>	<b>Residential Acreage Undeveloped</b>	<b>Pipeline Dwellings</b>	<b>Undeveloped Land Dwellings</b>	<b>Total Potential Dwellings</b>
<b>Adamstown Region</b>					
Adamstown	493	12	87	32	119
Buckeystown	428	69	0	181	181
Point of Rocks	240	0	97	0	97
<i>Subtotal</i>	<i>1,162</i>	<i>81</i>	<i>184</i>	<i>213</i>	<i>397</i>
<b>Brunswick Region</b>					
Brunswick	1,377	433	1,505	1,234	2,739
Jefferson	389	10	199	28	227
<i>Subtotal</i>	<i>1,766</i>	<i>442</i>	<i>1,704</i>	<i>1,262</i>	<i>2,966</i>
<b>Frederick Region</b>					
Ballenger Creek	1,386	83	3,110	520	3,630
Frederick *	941	111	5,296	4,109	9,405
Frederick SE **	196	36	0	1,095	1,095
<i>Subtotal</i>	<i>2,523</i>	<i>230</i>	<i>8,406</i>	<i>5,723</i>	<i>14,129</i>
<b>Middletown Region</b>					
Fountaindale	303	8	0	20	20
Middletown	649	-4	166	28	194
Myersville	375	5	159	14	173
<i>Subtotal</i>	<i>1,327</i>	<i>9</i>	<i>325</i>	<i>61</i>	<i>386</i>
<b>New Market Region</b>					
Holly Hills	634	24	0	64	64
Linganore	2,206	313	2,596	973	3,569
Mount Airy	517	51	0	135	135
New Market	672	110	257	289	546
Spring Ridge	1,839	420	192	1,102	1,294
<i>Subtotal</i>	<i>5,868</i>	<i>918</i>	<i>3,045</i>	<i>2,563</i>	<i>5,608</i>
<b>Thurmont Region</b>					
Emmitsburg	574	231	52	670	722
Thurmont	1,473	425	34	2,335	2,369
<i>Subtotal</i>	<i>2,047</i>	<i>656</i>	<i>86</i>	<i>3,004</i>	<i>3,090</i>
<b>Urbana Region</b>					
Monrovia	387	0	1,100	0	1,100
Urbana	970	0	1,015	0	1,015
<i>Subtotal</i>	<i>1,357</i>	<i>0</i>	<i>2,115</i>	<i>0</i>	<i>2,115</i>
<b>Walkersville Region</b>					
Libertytown	262	186	10	489	499
Walkersville	901	195	65	513	578
Woodsboro	298	119	7	363	370
<i>Subtotal</i>	<i>1,461</i>	<i>501</i>	<i>82</i>	<i>1,365</i>	<i>1,447</i>
<b>Overall Total</b>	<b>17,510</b>	<b>2,838</b>	<b>15,947</b>	<b>14,192</b>	<b>30,139</b>

Source: Frederick County Division of Planning

\* "Acreage Designated Residential" and "Residential Acreage Undeveloped" for the Frederick Community Growth Area does not include Frederick City. Acreage indicated includes only County portion of Community Growth Area. However, dwelling units totals for "Pipeline Dwellings", "Undeveloped Land Dwellings", and "Total Potential Dwellings" does include Frederick City.

\*\* "Undeveloped Land Dwellings" based on preliminary potential of Mixed Use in 355/85 Corridor.

## **Future Growth Area Development**

The designation of land within a community growth area as Agricultural/Rural is referred to as a Future Growth Area to signify that this land would be appropriate for development but in a time frame generally beyond 20 years. It is assumed that land designated Agricultural/Rural would be considered for a Low Density Residential designation at a subsequent comprehensive plan update. The development potential from the Future Growth Areas would be in addition to the undeveloped land development potential from the development capacity tables. For the purposes of calculating the residential development capacity it is assumed that all land defined as a Future Growth Area would be developed as Low Density Residential based on a density of 3.5 dwellings/acre on a net acreage of 75%.

### **Future Growth Areas**

Community Growth Area	Previous Plan		Adopted Plan	
	Acres	Potential Dwellings (1)	Acres	Potential Dwellings (1)
Ballenger Creek	0	0	163	0 (6)
Brunswick	579	1,520	14	0 (6)
Emmitsburg	189	496	29	0 (6)
Fountaindale	0	0	9	22
Frederick (2)(3)(4)	0	0	738	2,897
Jefferson	176	462	56	147
Linganore	0	0	33	85
Middletown	0	0	221	580
Myersville	0	0	64	167
Urbana (5)	1,225	2,625	0	0
<b>Total</b>	<b>2,169</b>	<b>5,103</b>	<b>1,326</b>	<b>3,899</b>

(1) Assumed Low Density Residential @ 3.5 dwelling units (du) per acre with net acreage of 75%

(2) Adopted Plan Acres includes 71 acres under an agricultural preservation easement (not included in potential dwellings calculation).

(3) Adopted Plan Dwellings: County AG/Rural land with City of Frederick Low Density Residential designation assumes @ 3.5 dwelling units (du) per acre with net acreage of 75%

(4) Adopted Plan Dwellings: County AG/Rural land with City of Frederick Medium Density Residential designation assumes @ 7.5 dwelling units (du) per acre with net acreage of 75%

(5) Urbana current plan acreage based on 3.5 dwelling units (du) per acre and a net acreage of 70% and subtracts 150 acres for park and school sites.

(6) These lands likely to develop as commercial or industrial.

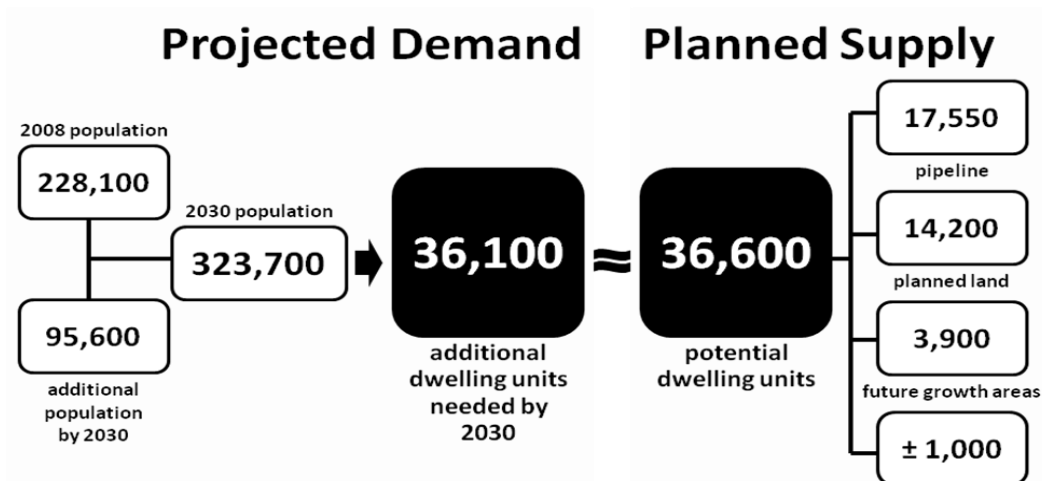
## **Development Capacity Analysis and Comparison**

The relevant comparison between the projected residential needs for 2030 and the development capacity of previous and the 2010 Plan focuses on the net dwelling needs determined in the Part 1 analysis on page 5 with the undeveloped land potential dwellings from the two development capacity tables on pages 7 and 8. The undeveloped land potential is based on the amount of land designated for residential, which is also affected by changes in the community growth boundaries.

It should also be noted that the undeveloped land potential is only for the community growth areas, while there will be additional residential development potential from agricultural subdivisions and miscellaneous R-1 subdivisions in the areas designated Rural Residential.

### **Residential Pipeline Summary**

- Looking at how many years of supply the pipeline will provide and assuming an average construction rate of 1,200 - 1,500 dwellings/year for perhaps the next five to ten years. Based on this average the 2010 Plan pipeline of 17,550 dwellings would accommodate approximately 12 – 15 years of residential development. Housing demand, economic conditions and ability to pass APFO may affect the time frame.
- The 17,550 pipelines dwellings will accommodate approximately 49% of the projected 2030 needs of 36,100 dwellings.
- Municipal Pipeline, of the 7,550 Dwelling Units:
  - 1,500 du's in City of Brunswick
  - 5,200 du's in City of Frederick
- County Pipeline, of the 10,000 Dwelling Units:
  - 27% Recorded Lots, 43% Unrecorded Pass APFO, 30% Pending APFO
  - 2,550 lots/dwellings are in age restricted developments (Landsdale and Ballenger Run PUD's)
  - 55% of pending APFO Units are in Lake Linganore
  - 75% are in 8 developments



### **Previous Plan vs. 2030 Projected Residential Needs**

- The undeveloped land dwelling potential (19,751 du's) of the Previous Plan exceeds the 2030 net projected needs (18,550 du's) by 1,201 dwellings.
- The Previous Plan included approximately 6,844 acres of land designated for residential development and is currently undeveloped. This acreage does not include undeveloped land that has approved residential development as part of the pipeline. This acreage exceeds the projected needs of the mid density scenario (3,198 acres) described on page 5, by 3,646 acres.
- When the development potential from the Future Growth Areas (5,103 dwellings) is added to the undeveloped land potential the excess capacity over the 2030 needs is increased to 6,304 dwellings.

### **2010 Plan vs. 2030 Projected Residential Needs**

- The undeveloped land dwelling potential (14,200 du's) of the 2010 Plan falls 4,350 dwellings below the 2030 net projected needs of 18,550 du's.
- The 2010 Plan includes approximately 2,838 acres of land designated for residential development and is currently undeveloped. This acreage does not include undeveloped land that has approved residential development as part of the pipeline. This acreage is just below the projected needs of 3,692 acres based on the mid density scenario described on page 5.
- When the development potential from the Future Growth Areas (3,900 dwellings) is added to the undeveloped land potential the gap with the 2030 needs is reduced to 450 dwellings.

### **2010 Plan vs. the Previous Plan**

- The 2010 Plan reduces the residential development potential of the undeveloped land by 5,559 dwellings from the Previous Plan.
- The 2010 Plan reduces the amount of land designated for residential and undeveloped from the Previous Plan by approximately 4,006 acres.
- While the overall amount of potential development in the Future Growth Areas is reduced by 1,204 dwellings there are more community growth areas that have portions of the growth areas designated Agricultural/Rural and in the Future Growth Area category.