

Development Monitoring System Report Howard County, Maryland

Prepared by Howard County Department of Planning and Zoning

April 2017

Development Monitoring System Report

Date Issued:

April 2017

Reporting Period:

January 1, 2016 to December 31, 2016 With countywide summaries from 2012

Produced by:

Howard County Department of Planning and Zoning Research Division

Howard County Department of Planning and Zoning:

Valdis Lazdins, Director
Amy Gowan, Deputy Director
Jeff Bronow, Chief, Division of Research
Beth Burgess, Chief, Division of Resource Conservation
Chad Edmondson, Chief, Division of Development Engineering
Geoff Goins, Chief, Division of Public Service & Zoning Administration
Kristen O'Connor, Chief, Division of Comprehensive and Community Planning
Kent Sheubrooks, Chief, Division of Land Development

Research Division Contributing Staff:

Terry Bromery, David Dell, Lisa Kenney, Sharon Melis, Carrie Vogel

County Executive:

Allan H. Kittleman

County Council:

Jon Weinstein, Chair Calvin Ball, Vice Chair Greg Fox Mary Kay Sigaty Jennifer Terrasa

Planning Board:

Phil Engelke, Chair Erica Roberts, Vice Chair Tudy Adler Ed Coleman Jacqueline Easley

For More Information:

Howard County Department of Planning and Zoning Research Division 3430 Court House Drive Ellicott City, Maryland 21043 E-mail: JBronow@howardcountymd.gov

Phone: (410) 313-4370

Table of Contents

Executive Summary	1
Adequate Public Facilities Act	1
Development Monitoring System Report	
Additional Reporting Requirements and Timeframe	
Residential Development	3
Total Housing Activity	3
Moderate Income Housing Units (MIHU)	4
Rural Land Preservation	4
Non-Residential Development	5
Smart Growth Information	7
Smart, Green and Growing Legislation	
Regulatory Activity	
General Plan Amendments and Related Legislation in Support of the General Plan	
Zoning Regulation Amendments (and related)	
Subdivision & Land Development Regulation Amendments (and related)	
Zoning Map Amendments	
Major Infrastructure	
New Roads and Substantial Changes in Roads	13
School Additions and Renovations	
Other Major Community Facilities and Infrastructure (valued at over \$1 million)	
Consistency	
Lot Densities	16
Lot Density by Planning Area	16
Lot Density Inside Versus Outside PFA	
Local Growth Goal	
Howard County's Growth Goal	
Progress Towards Growth Goal	
Resources to Achieve Goal	20

Residential Development	21
Recorded Residential Subdivisions	
Summary of Latest Reporting Period	
Last Year's Projects - Greater than 20 Units	
Five Year Results	
In-Process Residential Subdivisions	
Number of Plans	
Number of Potential Units	25
Number of Acres	27
Major Projects	27
Approved Residential Site Development Plans	30
Summary of Latest Reporting Period	30
Last Year's Projects - Greater than 20 Units	31
Five Year Results	31
In-Process Residential Site Development Plans	33
Number of Plans	33
Number of Potential Units	33
Number of Acres	34
Major Projects	34
Residential Building Permits & Use and Occupancy Permits	36
Issued Building Permits	
Issued Use and Occupancy Permits	
Age-Restricted and Moderate Income Housing Units	40
In-Process Plans	
Approved Site Development Plans	
Use & Occupancy Permits	
Land Preservation	
Agricultural Land Preservation Program	
Other Rural Easement Dedication	
Total Preserved Land in the Rural West.	
Neighborhood Preservation in the East	
Total Preservation Easements in the East	
Total Preserved Land in the East	48

Non-Residential Development	51
Non-Residential Subdivisions	51
Recorded Plans	51
In-Process Plans	52
Approved Non-Residential Site Development Plans	53
Summary of Last Year	53
Last Year's Projects - Greater than 10,000 Square Feet	54
Five Vear Results	56
In-Process Non-Residential Site Development Plans	57
In Process Plans	57
Major Projects Non-Residential Building Permits Summary of Last Year	57
Non-Residential Building Permits	59
Summary of Last Year	59
Last Year's Projects - Greater than 30,000 Square Feet	60
Five Year Results	62
Employment Estimates	63
Job Potential from Site Development Plans	63
Job Potential from Issued Building Permits	63
State DLLR and U.S. BEA Employment Estimates	

Executive Summary

Adequate Public Facilities Act

The Adequate Public Facilities Act of 1992 addresses "the need to provide a growth management process that will enable the County to provide adequate public roads and schools in a timely manner and achieve General Plan growth objectives. This process is designed to direct growth to areas where an adequate infrastructure exists or will exist."

Adoption of the Adequate Public Facilities Act (commonly known as APFO) in 1992 has allowed the County to effectively manage the amount and distribution of residential growth in accordance with growth policy set by the General Plan. Prior to adoption of APFO, the County was averaging more than 3,000 new houses per year. This rate has been reduced by about half since the adoption of the 2000 General Plan, which established the annual number of housing unit allocations for new homes that can move through the development process. Howard County's latest general plan, *PlanHoward 2030*, adopted in July 2012 maintains the same pace of overall housing unit growth but under a new geographic distribution aligned with Designated Place Types in addition to Planning Areas (See *PlanHoward 2030* Map 6-2 on Page 6.) This new allocation distribution became effective March 14, 2013, when the APFO legislation was amended to align with PlanHoward 2030.

Also part of APFO are the Open/Closed Schools test, which limits construction in areas of the County facing school overcrowding, and the adequate roads test which determines necessary road improvements. In addition, excise taxes on new construction fund road and school capacity needs to keep pace with new growth.

APFO has been effective in phasing growth, either through "forced phasing" due to restricted numbers of allocations allowed each year, or developer planned phasing prompted in part by APFO allocation limits. Known phasing of subdivisions coupled with growth controls helps in planning for future infrastructure needs and provide for the timely construction of schools, roads, and other public infrastructure.

Development Monitoring System Report (DMS)

This is the 25th annual Development Monitoring System report prepared by the Department of Planning and Zoning. The report tabulates and analyzes recent and current development activity at each stage of the County's land development review and approval process. These stages include subdivision plans, site development plans, building construction permits and use and occupancy permits. Both approved and currently in-process plans are tabulated. Current year as well as a five year history are discussed. The report is divided into Residential and Non-Residential sections. Map 6-2 from PlanHoward 2030 on Page 6 shows the five Planning Areas that are used in the analysis.

Development activity in Downtown Columbia is included in the DMS report given that the implementation of the Downtown Columbia Plan has begun.

Additional Reporting Requirements and Timeframe

Amendments to State law enacted in 2009, known collectively as the Smart, Green and Growing legislation, requires that local jurisdictions report on development activity, comment on consistency with state and local smart growth goals, track defined measures and indicators, and report on APFO restrictions in priority funding areas and the resolution of the restrictions. These reports are due in July covering development activity for the previous calendar year.

Most of the reporting requirements outlined in the Smart, Green and Growing legislation were already covered in this DMS report. There are some additional items, however, that are new. Thus, an additional section has been added beginning on Page 7. The additional information includes smart growth measures and indicators, planning-related regulatory amendments, and new General Plan elements and amendments. Newly built infrastructure is also reported on. This is followed by a discussion on whether these changes are consistent with Howard County's General Plan and other policies.

Another key reporting requirement is an analysis of residential development density that occurred during the last calendar year both inside and outside the county's priority funding area (PFA). Related to this is a discussion on Howard County's growth goals, and how recent development and planning activity is consistency with these goals. A discussion on

APFO restrictions, which is required to be reported every other year, is not included in this year's report but was included in last years.

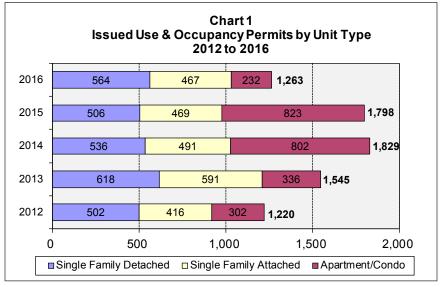
The reporting of these additional items meet the State planning requirements and also enable a better understanding of Howard County's land development issues, policies and goals.

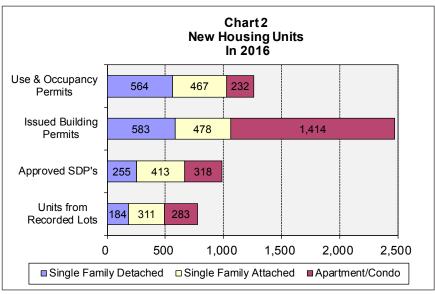
Residential Development

Total Housing Activity

- During the latest reporting period, from January through December 2016, 1,263 housing units were built. This is a decrease from the previous reporting period when 1,798 units were built, and the second lowest number built over the last five years (Chart 1).
- Of the 1,263 completed units last year, 45% were single family detached units, 37% were townhouse units and 18% were apartment units (condo or rental). Greater percentages of townhouse and apartment units are likely to persist given the zoning of the remaining undeveloped land in the County as well as higher density redevelopment initiatives.
- Over the last five years, there has been an annual average of 1,531 new housing units built in the County. About 36% of these have been single family detached units, 32% single family attached or townhouse units, and 33% apartment units (including both rental and condo).
- Last year, 38% of all units were built in Ellicott City, 34% in Elkridge, 17% in the Southeast, 9% in the Rural West, and 1% in non-Downtown Columbia. No new units were completed in Downtown Columbia. (See the map on Page 6 that show these five planning areas.)
- There were 2,475 building permits issued (housing starts) during 2016 (Chart 2). This is 53% more than the 1,620 permits issued in 2015.
- In 2016, there was potential for 986 housing units from recorded lots and 778 units approved in site development plans (Chart 2).
- As of December 31, 2016, there were 9,245 units in the subdivision process. This represents all units in plans under review prior to being recorded. This compares to 9,241 units in process for the prior reporting period (December 31, 2015).
- A significant number of the in-process units—7,463 or 81% of the total 9,245—are included in future phases of phased projects with development planned as far out as 2026. The larger phased plans include Laurel Park Station and Maple Lawn South in the Southeast; The Overlook at Blue Stream, Oxford Square, Howard Square and the Park at Locust Thicket in Elkridge; Turf Valley and Westmount in Ellicott City; The Enclave at Tierney Farm and Simpson Oaks in Columbia; and the Crescent Property in Downtown Columbia.

• Countywide, 16% of the units in process on December 31, 2016, were single family detached units. About 15% were single family attached units and another 69% were apartment units (including both condo and rental).





Age-Restricted Units

- There were 334 age-restricted housing units built in 2016, 26% of the 1,263 total units built in the County. Of these, 89 were single family detached units, 64 were townhouse units and 181 were apartment or condo units.
- As of December 31, 2016, there were 12 age-restricted units in the planning process, all of which are single family attached units in a single subdivision plan called Village Crest Senior Towns in Ellicott City. For the previous reporting period there were 22 age-restricted units in process.
- Since the 2004/2005 DMS, which was the first time age-restricted units were reported soon after recently passed regulatory changes enabling more of these type of units, 19% of all new homes built in Howard County have been age-restricted.

Moderate Income Housing Units (MIHU)

- During 2016 there were 106 MIHU units in approved plans—63 town-house units and 43 apartment or condo units. This is more than the 90 approved MIHU units the previous reporting period.
- As of December 31, 2016, there were 891 MIHU units in process—2 single family detached units, 63 townhomes, and 826 apartment or condo units. About 44% of the units are in Elkridge, 32% in Downtown Columbia, 17% in the Southeast, 5% in Ellicott City, and 2% in Columbia. There were 625 MIHU units in process the previous reporting period.
- Of the 891 MIHU units in process, none are in age-restricted projects.

Rural Land Preservation

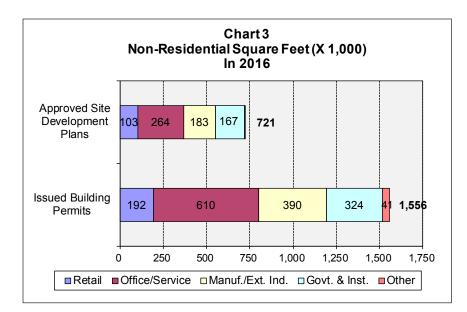
- In 2016, one purchase settlement totalling 59 acres were added to the County's Agricultural Land Preservation Program. An additional 232 acres of environmentally sensitive land were permanently preserved in the Rural West through subdivision activity using the cluster subdivision zoning regulations and Density/Cluster Exchange Options (DEO/CEO).
- Preservation easements in the Rural West have been steadily increasing and now total 31,014 acres. This includes 22,282 acres of agricultural preservation easements and 8,732 acres of environmental preservation parcels dedicated through the subdivision process. This totals 33% of all land in the Rural West. Including park land, WSSC land and other environmental easements, 45% of the Rural West is now permanently preserved.

Land Preservation in the East

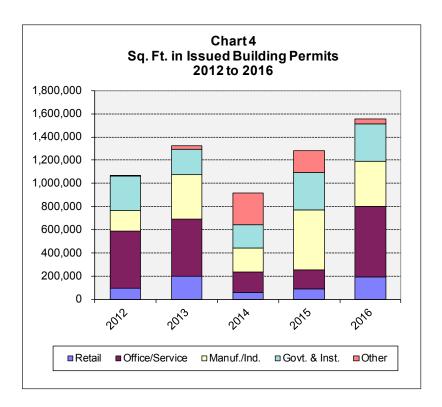
- In 2016, 42 acres were preserved in eastern Howard County as part of the Neighborhood Preservation Program. That program, which began in 2008, now includes a total of 73 acres of permanently preserved land in the east and has allowed for the density transfer of 48 dwelling units to other parts of eastern Howard County.
- Including all other preservation easement types—historic, Maryland environmental and other land trusts, and agricultural easements—a total of 693 acres are permanently preserved in eastern Howard County.
- When including County and State parks, WSSC land, non-County open space such as HOA land and Columbia Association open space, the total preserved land in eastern Howard County is 18,291 acres, 28% of all land in the east.

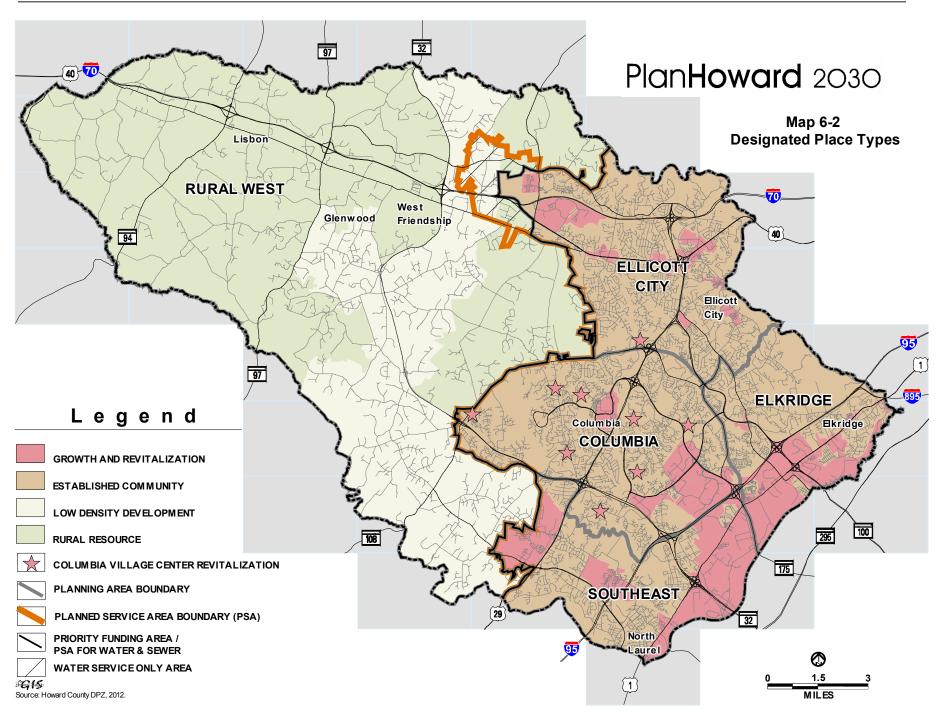
Non-Residential Development

- In 2016, a little more than 720,000 square feet of building space were approved in site development plans. Building permits were issued for almost 1.6 million square feet. (Chart 3).
- As shown in Chart 4 there was an increase in the square footage of issued building permits last year, from 1.28 million square feet issued in 2015 to 1.56 million square feet issued in 2016, which was the most in the last five years.
- Over the last five years, there was an annual average of 894,000 square feet in approved non-residential site development plans and 1.23 million square feet in issued non-residential building permits.
- About 34% of the new building space constructed last year is located in Downtown Columbia and 33% in the Southeast. About 14% of the total was constructed in non-Downtown parts of Columbia, 13% in Elkridge, 4% in Ellicott City, and 2% in the Rural West.



- As of December 31, 2016, there were 870,000 square feet of non-residential in-process in site development plans. This is 64 percent more than the 529,000 square feet in process the previous year.
- According to the State Department of Labor, Licensing and Regulation, Howard County gained 4,000 jobs last year (1st quarter 2015 to 1st quarter 2016 estimates). The total number of jobs in Howard County as of the 1st quarter 2016 was 165,038.





Smart Growth Information

Smart, Green and Growing Legislation

This section of the DMS report has been produced to satisfy amendments to State law enacted in 2009, known collectively as the Smart, Green and Growing legislation. All jurisdictions in Maryland are required to report on development activity, comment on consistency with state and local smart growth goals, track defined measures and indicators, and report on APFO restrictions in priority funding areas and the resolution of the restrictions. (Note that reporting on APFO restrictions are required every other year. Reporting on this is included in this year's DMS report.) These reports are due in July covering development activity for the previous calendar year.

This DMS report, issued annually by DPZ as required by the county's 1992 APFO law, already includes most of what is required per the State law and these items continue to be covered in the subsequent sections of this report. There are some additional items, however, that were not included. The purpose of this section is to cover these additional items. Note that this DMS report also include 5 year development summaries and other information that satisfy the more recent 2013 amendments to the Smart, Green and Growing legislation.

This section summarizes planning-related regulatory activity including zoning map and text amendments, subdivision and land development regulation amendments, and new General Plan elements and amendments. Newly built infrastructure is also reported on, including new roads and other major transportation facilities, major water and sewer facilities, and new schools and school additions. A discussion on whether these changes are consistent with Howard County's General Plan follows.

Another key reporting requirement is residential development density that occurred during the last calendar year both inside and outside the county's Priority Funding Area (PFA). Related to this is a discussion on Howard County's growth goals and how recent development and planning activity is consistent with these goals.

Regulatory Activity

General Plan Amendments and Related Legislation in Support of the General Plan

The following highlights General Plan amendments and other adopted legislation in 2016 in support of the current General Plan, known as *Plan-Howard* 2030.

CR 93-2016 — Designating Long Reach as a Sustainable Community

This resolution endorses the designation of Long Reach as a Sustainable Community for approval either directly by the State Department of Housing and Community Development or through the State Smart Growth Subcabinet. It also adopts the Sustainable Community Plan described in the County's Sustainable Community Application and indicates an endorsement by the County Executive.

CR 92-2016 — NPDES Financial Assurance Plan

This resolution approves a financial assurance plan for Howard County's National Pollutant Discharge Elimination System, Municipal Separate Storm Sewer System permit programs, in accordance with Section 4-202.1 of the Environment Article of the Annotated Code of Maryland. It also indicates an endorsement by the County Executive.

CR 91-2016 — Neighborhood Business Works Program Financing

This resolution supports the provision of financing by the Maryland Department of Housing and Community Development, Neighborhood Business Works Program to Hi Pro Production and Media, LLC located on Main Street, Ellicott City, to promote community revitalization goals in this locally designated revitalization area.

<u>CR 36-2016 — Approving the 2015 Amendment to the Howard County Master Plan for Water and Sewerage</u>

This resolution approves the 2015 Amendment to the Howard County Master Plan for Water and Sewerage based on and including: 1) A determination of future water and sewer system flow projections and infrastructure needs, 2) Changes to the Planned Service Area that have been implemented as amendments to both the *General Plan 2000* and through the adoption of *PlanHoward 2030*, 3) The progress of projects for future

water supply and sewerage treatment needs in the county and outside of the county, including improvements to the Baltimore City water supply and expansion of the Patapsco Wastewater Treatment, which are coordinated with Baltimore City and Baltimore County, 4) The review of water and sewer service priorities for properties in the Planned Service Area, and 5) Changes in the anticipated alignment, location, and sizing of future facilities.

CR 35-2016 — Bicycle Master Plan and Complete Streets Policy

This resolution approves a Bicycle Master Plan for Howard County and endorses a Complete Streets policy as the road use approach for Howard County, and requests that the County Executive take certain actions.

CR 28-2016 — Howard County Inventory of Scenic Roads

This resolution approves an amendment to the Howard County Inventory of Scenic Roads adding Haviland Mill Road, a rural, historically significant road to the inventory.

CR 105-2016 — Downtown Columbia Tax Increment Financing

This resolution designates contiguous property in Downtown Columbia as a development district for purposes of the Tax Increment Financing Act, and designates a special taxing district area and creates certain special taxing funds associated with this area.

<u>CR 103-2016 — Downtown Columbia Development Rights and Responsibilities Agreement</u>

This resolution approves and authorizes the execution of a Development Rights and Responsibilities Agreement by Howard Research and Development Corporation and Howard County in accordance with Title 16, Subtitle 17 of the Howard County Code to further the goals and implementation of development in Downtown Columbia.

<u>CB 78-2016 — Agricultural Preservation Installment Purchase Agreement</u>

This bill approves and provides for a multi-year Installment Purchase Agreement by Howard County to acquire development rights in approximately 109.07 acres of agricultural land located at 755 East Watersville

Road, Mt. Airy, Howard County, Maryland, at a maximum purchase price of \$3,404,600.

<u>CB 77-2016 — Agricultural Preservation Installment Purchase Agreement</u>

This bill approves and provides for a multi-year Installment Purchase Agreement by Howard County to acquire development rights on approximately 166.82 acres of agricultural land located at 15325 Leondina Drive, Howard County, Maryland, at a maximum purchase price of \$6,584,100.

<u>CB 76-2016 — Agricultural Preservation Installment Purchase Agreement</u>

This bill approves and provides for a multi-year Installment Purchase Agreement by Howard County to acquire development rights in approximately 29.62 acres of agricultural land located at 3844 Jennings Chapel Road, Woodbine, Howard County, Maryland, at a maximum purchase price of \$797,400.

<u>CB 70-2016 — Establish Fund for Permanent Public Improvements</u> in Downtown Columbia

This bill establishes a special non-lapsing reserve fund for permanent public improvements in Howard County that consist of educational and cultural facilities to serve Downtown Columbia.

CB 68-2016 — Agricultural Land Preservation Board Duties

This bill amends the duties of the Agricultural Land Preservation Board related to recommendations on agricultural preservation easements and commercial solar facility conditional uses.

CB 67-2016 — Historic Preservation Commission Approvals

This bill provides that minor alterations are exempt from the Historic Preservation Commission certificate of approval requirement, clarifies that there shall be an Executive Secretary of the Historic Preservation Commission, and adds that certain landscape features are eligible property for reasons of qualifying for certain tax credits.

<u>CB 56-2016 — Crescent Property Special Taxing District</u>

This bill levies and provides for the collection of a special tax on property within the special taxing district in the downtown Columbia area of Howard County, Maryland known as the "Crescent Special Taxing District" for up to \$90,000,000.

CB 55-2016 — APFO & Affordable Housing in Downtown Columbia

This bill amends the County Code exempting Downtown Columbia from a certain provision of the Adequate Public Facilities Ordinance, and amends certain payments for affordable housing required by each developer of residential property within Downtown Columbia.

<u>CB 54-2016 — Affordable Housing, Parking, and Art in Downtown</u> Columbia

This bill establishes a new configuration of affordable housing in Downtown Columbia, provides for certain parking requirements related to residential units in Downtown Columbia, and requires that certain types of construction provide for art in the community.

CB 53-2016 — Housing Unit Allocations in Downtown Columbia

This bill amends *PlanHoward 2030*, changing the number of housing unit allocations available to developers of new residential units in Downtown Columbia for the period 2015 to 2030.

CB 52-2016 — Affordable Housing in Downtown Columbia

This bill amends the Downtown Columbia Plan revising the Downtown Columbia affordable housing program, sets forth methods for the development of affordable housing, revises the Downtown Revitalization Phasing Progression to reflect the timing of affordable housing development, and amends certain Community Enhancements, Programs and Public Amenities to reflect the methods for the development of affordable housing.

CB 20-2016 — Watershed Protection and Restoration Fees

This bill authorizes additional credits against Watershed Protection and Restoration Fees under specified circumstances and requires additional information in the annual report.

Zoning Regulation Amendments (and related)

The following highlights all zoning regulation (zoning text) amendments that were approved in Howard County in 2016. Related land use legislation is also included.

CB 72-2016 — Office Transition (OT) District

This bill amends the Howard County Zoning Regulations Office Transition (OT) district to add several new uses to be allowed as a matter of right, and amends the Conditional Use section to allow Child Day Care Centers and Nursery Schools, Day Treatment and Care Facilities and Pet Day Care Facilities as Conditional Uses in the Office Transition (OT) district.

CB 71-2016 — Pet Day Care Facilities Conditional Use

This bill amends the Howard County Zoning Regulations Conditional Use section to clarify that indoor noises at Pet Day Care Facilities Conditional Uses must not be detectable at the lot lines.

CB 60-2016 — Athletic Facilities in the RC and RR Zoning Districts

This bill amends the Howard County Zoning Regulations Conditional Use section to create a new Athletic Facilities, Commercial Conditional Use in the RC and RR zoning districts.

CB 59-2016 — Commercial Solar Facilities on Preservation Parcels

This bill amends the Howard County Zoning Regulations to remove certain restrictions that limit the size of Commercial Solar Facilities on County Preservation Parcels and allows Commercial Solar Facilities as a Conditional Use on RR and RC zoned properties.

CB 46-2016 — Gasoline Service Stations

This bill amends the Howard County Zoning Regulations Gasoline Service Station provisions by creating a new definition for Motor Vehicle Fueling Facility, repealing the Gasoline Service Station Conditional Use, and creating a new Motor Vehicle Fueling Facilities Conditional Use.

CB 34-2016 — Transit Oriented Development (TOD)

This bill amends the Howard County Zoning Regulations' Transit Oriented Development (TOD) District to remove certain residential area restrictions on single-family attached dwellings and amenity areas.

CB 22-2016 — Kennels and Pet Grooming Facilities Conditional Use

This bill amends the Howard County Zoning Regulations' Kennels and Pet Grooming Establishments conditional use to permit the use on 40,000 square-foot residential lots under specified conditions.

CB 2-2016 — Corridor Activity Center (CAC)

This bill amends the Howard County Zoning Regulations' CAC (Corridor Activity Center) Zoning District to allow for the reduction of the commercial space requirement in residential developments, if determined appropriate by the Department of Planning and Zoning.

Subdivision & Land Development Regulation Amendments (and related)

The following highlights all amendments to the Subdivision & Land Development Regulations (and other related land use code amendments) that were approved in Howard County in 2016.

$\frac{CR\ 182\text{-}2016 -- Variance\ From\ Height\ Restrictions\ for\ Compost\ Facility}{cility}$

This resolution grants a variance for government uses from certain height requirements for the construction of a compost facility at the Alpha Ridge Landfill located at 2350 Marriottsville Road.

CB 80-2016 — Prohibition of Environmental Regulation Waivers and Variances for Development in the Tiber Branch Watershed

This bill amends Title 16 and Title 18 of the Howard County Code to prohibit the issuance of waivers or variances to floodplain, wetland, stream, or steep slope regulations for properties located in the Tiber Branch Watershed. This is a result of the July 30 flooding in Downtown Ellicott City.

<u>CB 79-2016 — Howard County Design Manual I (Storm Drainage)</u>

This bill requires that the Howard County Design Manual Volume I (Storm Drainage) be used for a specified purpose, mandates a specified figure for rainfall for certain 100 year storms, and requires certain periodic reviews. This Act applies to a specified area at a specified time and is a result of the July 30 flooding in Downtown Ellicott City.

CR 89-2016 — Adopting the Housing Unit Allocation Chart

This resolution adopts the Housing Unit Allocation Chart for Fiscal Year 2017 pursuant to the Adequate Public Facilities Act of Howard County.

CB 90-2016 — Adopting the Open/Closed Schools Chart

This resolution adopts the Open/Closed Schools chart for Fiscal Year 2017 pursuant of the Adequate Public Facilities Act of Howard County to designate the school regions and school districts that are open for residential development.

CB 15-2016 — Infill Development Regulations

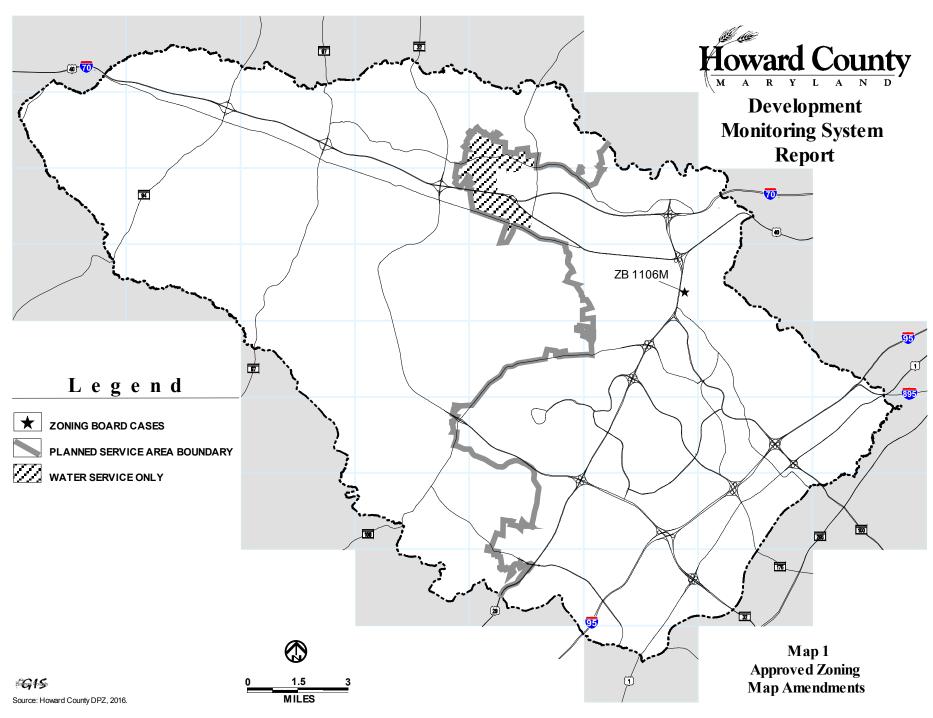
This bill amends the Subdivision and Development of Land Regulations pertaining to residential infill developments with respect to compatibility, unit types, landscaping, interconnectivity and privacy.

Zoning Map Amendments

The following highlights all zoning map amendments including the amendment number, name, and description that were approved in Howard County during 2016. Map 1 shows the location of each. In 2016 there was only one zoning map amendment.

ZB 1106M-2016 — Dorsey's Ridge, LLC

To rezone a 10.9 acre parcel of land located at the terminus of Cooks Lane approximately 1,000 feet northwest of Old Columbia Pike, with addresses of 3956, 3952, and 3960 Cooks Lane, from R-ED (Residential: Environmental Development) to CEF-R (Community Enhancement Floating-Residential).



Page 12

Major Infrastructure

New Roads and Substantial Changes in Roads

In 2016, 4.55 miles of new or extended roadway were constructed in Howard County. These additions were built in 8 new subdivisions as part of developer's agreements executed with the County. There were no roadways or portions of roadways was abandoned in 2016. Detailed information about all roadway construction projects is documented in Howard County's 2016 annual report to the State Highway Administration. The road additions are all shown on Map 2.

School Additions and Renovations

The Howard County Public School System completed a major addition and renovation and an HVAC upgrade/replacement in the 2016 calendar year. Renovation and expansion efforts continue to be concentrated within the priority funding area.

Deep Run Elementary School

The Deep Run Elementary School project renovated the existing one-story structure, originally built in 1989 and last renovated in 1997 and 2008. The building's footprint was also expanded, replacing the modular classrooms with a 100-seat addition and converting open space pods into individual classrooms. In addition, the administrative suite was relocated to the main entrance, two gifted and talented classrooms were relocated from portable classrooms, and the health suite was renovated to meet current state standards. This major project addressed the school's numerous program and functional deficiencies, aging systems, and growing population.

Glenwood Middle School

The Glenwood Middle School Project focused on replacing and upgrading the HVAC systems. Phase I was completed over the summer of 2015 and focused on upgrading the HVAC systems in all the classrooms. Phase II was completed during the summer of 2016. These HVAC upgrades included the installation of new direct digital controls throughout the building, including the media center, administrative offices, gymnasium, cafeteria, and the kitchen. Architectural upgrades were also completed, including the installation of new casework in the classrooms and fresh paint throughout the facility. This project ensures that the indoor air quality of the facility

meets all county and state requirements and provides comfort to students and staff.

Other Major Community Facilities and Infrastructure (valued at over \$1 million)

In 2016 a new \$3.3 million elevated water tank and booster pump station was completed at the Howard County Landfill. Another \$1.3 million booster pump station upgrade was also completed at the northwest quadrant of the US 29 and MD 108 interchange. A \$1.1 million wastewater pump station and force main replacement was installed near the MD 100 and US 1 interchange. DPW also completed grading and sediment control for 3 new commercial buildings and a renovated wash bay at their facility on Old Montgomery Road (\$2 million).

Howard County Recreation and Parks completed another major phase of Troy Hill park valued at \$3 million.

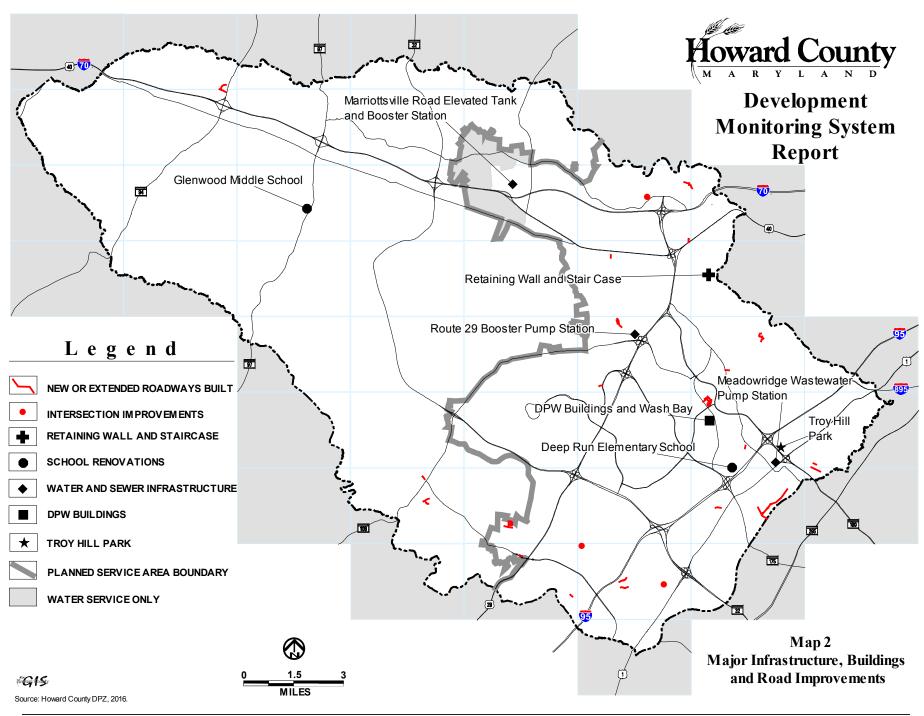
Another \$2.8 million was spent to complete a retaining wall and pedestrian staircase in parking lot E on main street in Ellicott City.

Consistency

The Smart, Green and Growing Legislation requires that development patterns and infrastructure improvements that have occurred over the last year be evaluated for consistency with adopted local plans. An evaluation of whether these changes are consistent with each other as well as the adopted plans of adjoining jurisdictions is also required.

Overall, private development, new infrastructure and regulatory and zoning map amendments that took place in Howard County last year are consistent with our local plans—most importantly the county's General Plan known as *PlanHoward 2030*—as well as with each other and the adopted plans of adjoining jurisdictions.

Howard County's growth policy is to concentrate higher density development in the eastern portion of the county while preserving the Rural West. The development patterns and regulatory initiatives summarized in this report continue to support this goal. For example, all the major community facilities and school projects that have been completed in 2016 are located within the Priority Funding Area. Furthermore, many of the bills and resolutions adopted by the Howard County Council support the furtherance of many *PlanHoward 2030* goals and objectives. This includes the endorsement of the Bicycle Master Plan and Complete Streets policy, a new road added to the Scenic Roads Inventory, affordable housing and tax increment financing bills for Downtown Columbia, designating the Long Reach Village Center as a sustainable community, several agricultural preservation easement approvals, among several other action items listed beginning on Page 8 above.



Lot Densities

The information provided in the subsequent sections of this report include details on the amount, type and location of development in Howard County in 2016. Progress on land preservation is also reported on. The Smart, Green and Growing legislation also requires jurisdictions in Maryland to report on net density of growth both inside outside priority funding areas (PFA).

The Maryland Department of Planning and Zoning was tasked to come up with a methodology on how to do this to achieve statewide consistency. In early 2011, they decided upon a methodology which is to calculate the number of units built divided by the unit lot size. It should be noted that while this methodology is a general determinant of density, it does not address land preservation through the creation of open space and cluster preservation lots resulting from most residential development. Nonetheless, it is a good general way to report on density, achieving consistency across jurisdictions.

Lot Density by Planning Area

Table 1 shows the lot density of residential development in Howard County in 2016 based on building permit completions. A weighted average of density is calculated from built dwelling units and their associated lot size. Note that for multiple units built on a single parcel, only completed projects are included. For example, if only one apartment building on a parcel is completed in 2016, but the project is to include more than one building, then that project and associated density is not counted in the current year. It will be counted in a future year when the entire project is completed. This also applies to rental and condo apartments and condo townhomes.

The greatest average lot density occurred in Elkridge at 23.44 units per acre based on 405 units built. This was followed by the Southeast at 9.93 units per acre, Ellicott City at 9.91 units per acre, and the non-downtown portion of Columbia at 3.58 units per acre. The Rural West, as expected, had the lowest average lot density at 0.89 units per acre. This is shown graphically in Chart 5.

Lot Density Inside Versus Outside PFA

Table 2 shows the lot density inside and outside the PFA. Outside the PFA is the combined results of all planning areas excluding the Rural West. Combining all east county planning areas results in a lot density of 15.85 units per acre. This compares to a much smaller lot density of 0.89 units per acre outside the PFA.

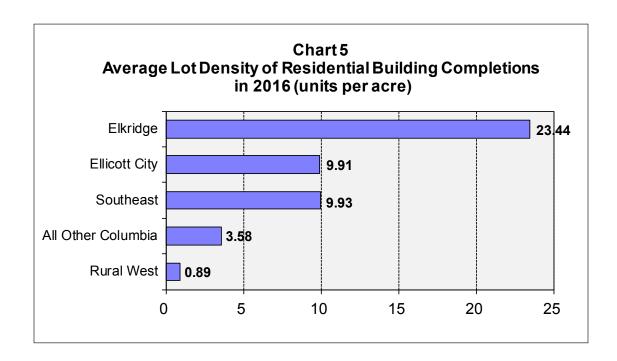
Map 3 shows the location of the completed units and also the relative lot densities. The map includes the PFA line. It is clear from the map that greater lot densities are being achieved inside the PFA.

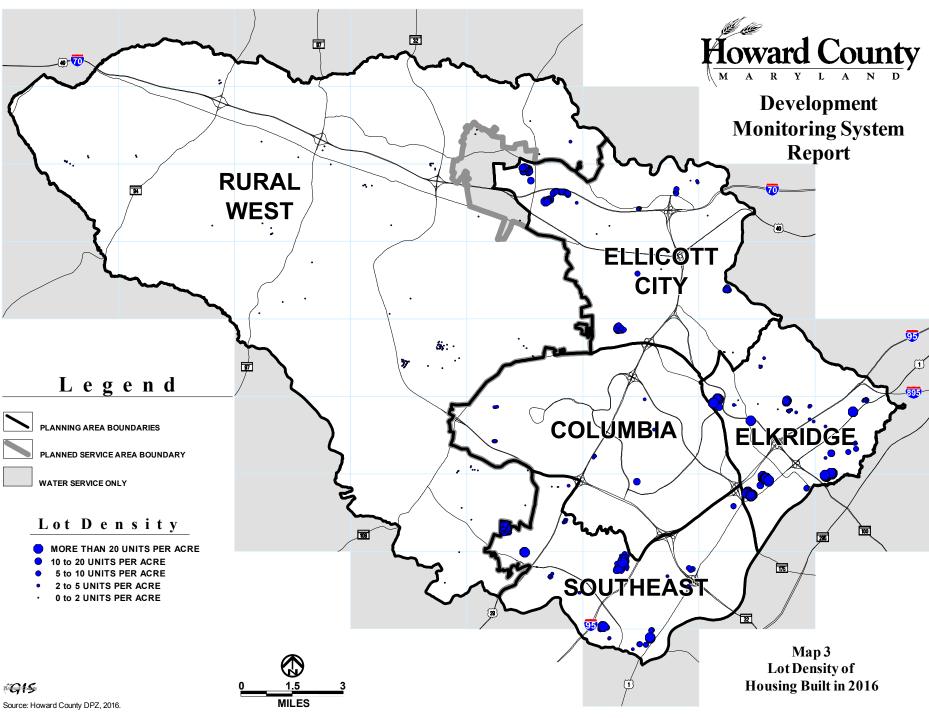
Table 1
Lot Density of Units Built in 2016 - By Planning Area

Planning	ning Units		Total Lot Acres		Density - Units/Acre	
Area	Number	Percent	Number	Percent	(Weighted Avg.)	
Downtown Columbia	0	0%	0	0%	0.00	
All Other Columbia	17	2%	6	2%	3.58	
Elkridge	405	40%	34	10%	23.44	
Ellicott City	264	26%	42	12%	9.91	
Rural West	119	12%	223	65%	0.89	
Southeast	219	21%	37	11%	9.93	
TOTAL	1,024	100%	342	100%	14.12	

Table 2
Lot Density of Total Units Built in 2016 - Inside vs. Outside PFA

Planning	Units		Lot Acres		Density - Units/Acre	
Area	Number	Percent	Number Percent		(Weighted Avg.)	
Inside PFA	905	88%	118	35%	15.85	
Outside PFA	119	12%	223	65%	0.89	
TOTAL	1,024	100%	342	100%	14.12	





Local Growth Goal

The Smart, Green and Growing legislation stipulates that the statewide land use goal is to increase the percentage of growth located within the Priority Funding Areas and to decrease the percentage of growth located outside the Priority Funding Areas (PFA). Under the legislation local jurisdictions are required to report on their local goal, the timeframe for achieving the local goal, the resources necessary for infrastructure inside the priority funding area and land preservation outside the priority funding area, and any incremental progress made towards achieving the local goal.

Howard County's Growth Goal

The basis for Howard County's growth goal is the latest general plan, known as PlanHoward 2030, adopted in July 2012. This plan specifically indicates how many units are to be built each year, both inside and outside the County's Priority Funding Area. The County's Adequate Public Facilities Ordinance (APFO) is the mechanism to ensure that this growth goal is adhered to.

PlanHoward 2030 reduces the annual number of housing unit allocations outside the Priority Funding Area in the Rural West to 100 per year. It had been 150 per year just prior to PlanHoward 2030 based on recent amendments to APFO. Prior to that, with the adoption of the 2000 General Plan in November 2000, the number had been 250 per year. The initial reduction from 250 units to 150 units were based on the re-allocation of 100 units to a new "Green Neighborhood" allocation pool. To receive Green Neighborhood allocations, the project must meet both site and building design criteria for environmental sustainability. Green Neighborhood projects may be located anywhere in the county. With the recent adoption of PlanHoward 2030 an additional 50 units were shifted from the Rural West to the Green Neighborhood allocation pool. This policy change not only potentially reduces the annual number of units built outside the PFA, but also promotes more sustainable development within the County.

The General Plan was also amended in 2010 to allow additional units to Downtown Columbia as part of the Downtown Master Plan. The APFO housing unit allocation chart, adopted annually by the County Council, reflects this change allowing more units in Downtown Columbia.

Table 3 summarizes future growth based on PlanHoward 2030 from 2016 to 2030. A total of 1,400 new units are allocated to areas outside the PFA, representing only 4.8% of all units countywide. The remaining 95.2% of future units are allocated to areas inside the PFA.

Progress Towards Growth Goal

For the current reporting period, based on September 30, 2016, unit counts, 12.2% of all housing units in the County are outside the PFA. The remaining 87.8% are inside the PFA. This is summarized in Table 4.

Comparing this to the PlanHoward 2030 policy of allocating only 4.8% of future units to areas outside the PFA it is clear that progress towards the goal of decreasing the percentage of growth outside the PFA is being met. Table 5 below shows the sum of total units currently built plus those newly allocated by 2030. The percentage of total units outside the PFA will decrease between now and then, from 12.2% currently to 10.7% in 2030.

Table 3
PlanHoward 2030 Growth Projections
2016 to 2030

Total	28,900	100.0%
Outside PFA	1,400	4.8%
Inside PFA	27,500	95.2%

Table 4
Total Built Units in Howard County
September 30, 2016

Total	116,111	100.0%
Outside PFA	14,173	12.2%
Inside PFA	101,938	87.8%

Table 5
Total Units by 2030 based on PlanHoward 2030

· · · · · · · · · · · · · · · · · · ·	tal	145,011 10	0.0%
1115Ide FTA 129,430 09.5	itside PFA	15,573 1	0.7%
Incide DEA 120 439 80 3	ide PFA	129,438 8	9.3%

Resources to Achieve Goal

Besides the County's APFO described above that regulates the timing and location of growth, the Agricultural Land Preservation Program, described in detail beginning on Page 46 of this report, also helps reduce development capacity outside of the PFA while preserving land. The County's rural zoning is an additional mechanism preserving environmental or agricultural easements in place of housing units through a density transfer mechanism. This has been in place since the early 1990s.

Other resources include road and schools excise taxes on new construction. These excise tax revenues are used to fund new major road and school capacity enhancements directly related to new growth. It is the goal to use such revenues for new infrastructure inside the PFA.

The County has also created higher density mixed-use zones along redevelopment areas such as Route 1 and Route 40 over the last decade. These higher density zones have been further increased with the adoption of the 2013 Comprehensive Zoning Plan. This zoning approach has created additional capacity in the east concentrating growth there rather than the Rural West part of the County outside the PFA.

Furthermore, with the adoption of PlanHoward 2030, Designated Places and Growth Tiers are now established in Howard County further limiting growth in the Rural West and concentrating growth in redevelopment areas within the Priority Funding Area. Please refer to *PlanHoward 2030* for a discussion on and maps depicting the Designated Places and Growth Tiers in Howard County.

Residential Development

Recorded Residential Subdivisions

The residential development process in Howard County usually begins with the subdivision of land. Depending upon the size, type and location of subdivision, the process may include:

- a multi-phase plan review process: environmental concept plan, sketch plan, preliminary plan and final plan;
- a consolidated review: environmental concept plan, preliminary equivalent sketch plan and final plan;
- a minor review (four buildable lots or less) involving only an environmental concept plan and a final plan;

Upon final subdivision plan approval, lots can be recorded. It is important to note that not all new housing units, such as apartment buildings and condominium developments on existing parcels, go through the subdivision process. Furthermore, some lots that have been built on in 2016 were recorded or in existence prior to 2012, the first year of this current DMS analysis period. Therefore, units from recorded lots do not reflect all development activity in the County over the current reporting period.

For this report, the number of residential plans recorded, the number of potential units from recorded lots, and the acreage of plans recorded have been compiled by the planning areas shown on the Designated Places Map on Page 6 plus Downtown Columbia as it's own area.

Summary of Latest Reporting Period

For the latest reporting period from January 1, 2016, through December 31, 2016, there was potential for 778 housing units from recorded lots countywide in 99 subdivision plans totaling 2,749 acres (Table 6). The Southeast had the most with 352 units, 45% of the total. Elkridge had 227 units, 29% of the total. The Rural West had potential for 82 units, 11% of the total. There were 59 units in recorded subdivision plans in Ellicott City (8%) and 58 units in Columbia (7%). These represent net new unit potential

and do not include total recorded lots from resubdivisions. For example, resubdivisions may combine existing lots to create a smaller number of new lots compared to the original. Or, subdivisions may be recorded to simply adjust lot lines or add easements. If known, condo and apartment units are included in the unit total for large parcel recordations.

Of the total 2,749 acres recorded, 1,847 acres, or about 67%, were in the Rural West. It should be noted that recorded acreage is not necessarily a clear indicator of development activity given that these figures include subdivisions and resubdivisions with the sole purpose of revising lot lines or adding easements resulting in no additional units.

Table 7 shows new units from recorded lots by unit type. Of the 778 units from recorded lots, 184 are for single family detached units (SFD), 311 are for single family attached or townhouse units (SFA), and 283 are for apartment units (APT). Chart 6 shows these results graphically by Planning Area.

Units Subdivision Plans **Planning** Acreage Number Percent Number Area Number Percent Percent Downtown Columbia 0% 1% 100 4% All Other Columbia 58 7% 10 10% 208 8% 227 29% 26 26% Elkridge 280 10% Ellicott City 59 8% 18 18% 222 8% 82 28 28% Rural West 11% 1.847 67% 45% 16%

16

99

100%

3%

100%

2,749

Table 6 Recorded Residential Subdivisions in 2016

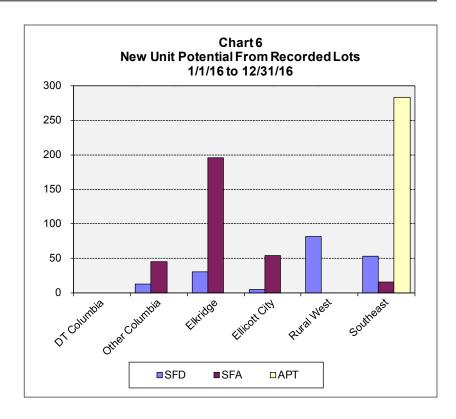
Table 7 Unit Potential from Recorded Lots by Unit Type in 2016

100%

352

778

Planning Area	SFD	SFA	APT	MH	TOTAL PI	ERCENT
Downtown Columbia	0	0	0	0	0	0%
All Other Columbia	13	45	0	0	58	7%
Elkridge	31	196	0	0	227	29%
Ellicott City	5	54	0	0	59	8%
Rural West	82	0	0	0	82	11%
Southeast	53	16	283	0	352	45%
TOTAL	184	311	283	0	778	100%
PERCENT	24%	40%	36%	0%	100%	



Last Year's Projects - Greater than 20 Units

Of the total 778 units from lots recorded for the latest reporting period, 662 or about 85% were in subdivisions consisting of more than 20 units. These larger subdivisions, shown in Table 8, are located in five planning areas. The precise location of these plans are shown on Map 4.

These larger plans include Joseph's Courtyard and Simpson Mill in Columbia; additional townhomes in Howard Square, phases V and VI of Morris Place, and Samuel's Grant in Elkridge; phase V of the Villages at Turf Valley in Ellicott City; phase IV of Walnut Creek in the Rural West; and the Vine apartments and Fox Wood Manor in the Southeast.

Southeast

TOTAL

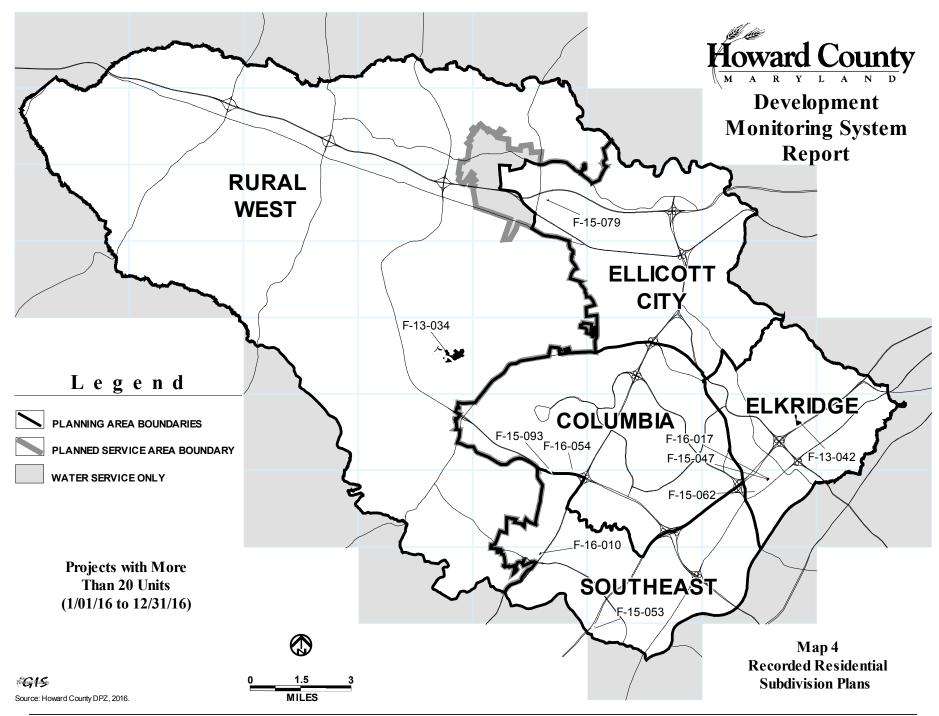


Table 8					
Recorded Residential Subdivision Plans, Projects With More Than 20 Units in 2016					

Planning Area	File Number	Plan Name	Unit Type	Units	Total
All Other Columbia	F-16-054	Joseph's Courtyard (Sanford Place)	SFA	23	
(not Downtown)	F-15-093	Simpson Mill	SFA - Age Restricted	22	45
Elkridge	F-15-062	Howard Square	SFA - 20 MIHU	83	
-	F-16-017	Morris Place - Phase VI	SFA - 11 MIHU	79	
	F-15-047	Morris Place - Phase V	SFA - 5 MIHU	34	
	F-13-042	Samuel's Grant	SFD	23	219
Ellicott City	F-15-079	Villages at Turf Valley - Phase V	SFA	36	36
Rural West	F-13-024	Walnut Creek - Phase IV	SFD	45	45
Southeast	F-16-010	The Vine - Buch Apartments	APT - 43 MIHU	283	
	F-15-053	Fox Wood Manor	SFD, SFA	34	317
TOTAL					662

Five Year Results

Table 9 shows the recorded subdivisions for the last five years beginning in 2012. Over this time period lots for 5,978 units countywide in 508 subdivision plans totaling 11,728 acres were recorded. This equates to an annual average of 1,196 units per year.

Note that the acreage figure represents all acreage on recorded plats including open space and preservation easements, as well as resubdivisions, sending and receiving preservation parcels, and recordations that do not add any new units such as recording for the purpose of adding easements

or adjusting parcel lines.

Table 10 summarizes the number of units from recorded lots by unit type for each of the last five reporting periods. Over this timeframe, recorded lots created the potential for 2,070 single family detached units, 35% of the total 5,978. A total of 1,847, 31%, were for single family attached units and the remaining 2,061, 34%, were for apartments units (rental and condo).

Table 9
Recorded Residential Subdivision, 2012 to 2016

Year	Units	Plans	Acreage
2012	1,742	91	1,334
2013	921	96	2,558
2014	1,629	122	2,517
2015	908	100	2,570
2016	778	99	2,749
TOTAL	5,978	508	11,728
ANNUAL AVG.	1,196	102	2,346

Table 10
Unit Potential From Recorded Lots by Unit Type, 2012 to 2016

Year	SFD	SFA	APT	МН	Total
2012	330	451	961	0	1,742
2013	324	235	362	0	921
2014	686	488	455	0	1,629
2015	546	362	0	0	908
2016	184	311	283	0	778
TOTAL	2,070	1,847	2,061	0	5,978
PERCENT	35%	31%	34%	0%	100%
ANNUAL AVG.	414	369	412	0	1,196

In-Process Residential Subdivisions

As indicated in the previous section, the residential development process in Howard County usually begins with the subdivision of land. Depending upon the size, type and location of subdivision, the process may include:

- a multi-phase plan review process: environmental concept plan, sketch plan, preliminary plan and final plan;
- a consolidated review: environmental concept plan, preliminary equivalent sketch plan and final plan;
- a minor review (four buildable lots or less) involving only and environmental concept plan and a final plan;

This section summarizes residential subdivisions in process, the development stage prior to recordation. Subdivision plans in several stages (environmental concept, sketch, preliminary equivalent sketch, preliminary, and final) are reported. The number of plans, potential units and acreage currently being processed as of December 31, 2016, are tabulated and compared with those in process the prior year (as of December 31, 2015).

Number of Plans

There were 20 less residential plans in process as of December 31, 2016, than there were one year earlier – 154 plans in 2016 compared to 174 in 2015 (Table 11).

For the current year, Ellicott City had the greatest number of residential plans in process with 52, followed by Elkridge with 32, the Rural West with 30, the Southeast with 26, Columbia with 11 and Downtown Columbia with 3.

Of the 154 plans in process on December 31, 2016, 87 were final plans, 30 were environmental concept plans, 22 were preliminary equivalent sketch plans, 13 were sketch plans and 2 were preliminary plans.

Number of Potential Units

There were close to the same number of units in process on December 31, 2016, compared to the previous year -9,245 units compared to 9,241 units (Table 12).

Table 11 Number of Residential Subdivision Plans in Process, 12/31/16 (With comparisons to Countywide total as of 12/31/15)

Planning	Environ- mental		Preliminary Equivelent			TOTAL
Area	Concept	Sketch	Sketch	Preliminary	Final	PLANS
Downtown Columbia	0	0	1	0	2	3
All Other Columbia	0	1	1	0	9	11
Elkridge	10	4	5	1	12	32
Ellicott City	10	3	9	1	29	52
Rural West	3	0	5	0	22	30
Southeast	7	5	1	0	13	26
TOTAL	30	13	22	2	87	154
			•	•		
As of 12/31/15	42	21	16	2	93	174

It is important to note that a significant number of the 9,245 units in process are part of phased projects with building planned for future years. Phasing is often a developer's preference, but also results from APFO regulations that limit the number of allocations available each year. As shown in Table 13, 7,463 units are part of phased plans, with building planned as far out as 2026. Phased plans represent 81% of the total units in process.

The larger phased projects include Laurel Park Station and Maple Lawn South in the Southeast; The Overlook at Blue Stream, Howard Square, Oxford Square, and the Park at Locust Thicket in Elkridge; Turf Valley and Westmount in Ellicott City; the Enclave at Tierney Farm and Simpson Oaks in Columbia; and The Crescent Property in Downtown Columbia.

As reflected in Table 12, 16% of the units in process are single family detached units. About 15% are single family attached units and 69% are apartment units (condo or rental). Table 14 shows details by plan stage and unit type for this year by planning area. Chart 7 graphically illustrates the units in process by unit type for each planning area.

Table 12 Number of Potential Units from Subdivision Plans in Process, 12/31/16 (With comparisons to Countywide total as of 12/31/15)

	Single	Single			
Planning	Family	Family		Mobile	TOTAL
Area	Detached	Attached	Apartments	Homes	UNITS
Downtown Columbia	0	0	2,502	0	2,502
All Other Columbia	276	81	0	0	357
Elkridge	133	309	2,357	0	2,799
Ellicott City	562	777	668	0	2,007
Rural West	213	0	0	0	213
Southeast	298	225	844	0	1,367
TOTAL	1,482	1,392	6,371	0	9,245
PERCENT	16%	15%	69%	0%	100%
			<u> </u>		
As of 12/31/15	1,464	1,681	6,096	0	9,241

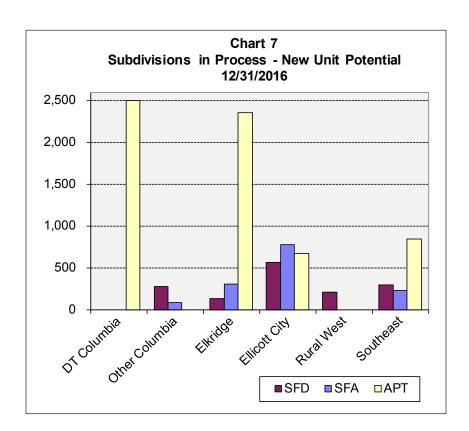


Table 13
Potential Units from Phased Projects in Process, 12/31/16

Planning Area	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
Downtown Columbia	300	300	300	300	300	300	300	200	0	0	2,300
All Other Columbia	48	70	159	55	0	0	0	0	0	0	332
Elkridge	150	756	474	466	308	99	0	0	0	0	2,253
Ellicott City	0	50	221	249	245	190	187	140	89	0	1,371
Southeast	25	300	300	300	250	0	0	0	0	32	1,207
Rural West	0	0	0	0	0	0	0	0	0	0	0
TOTAL	523	1,476	1,454	1,370	1,103	589	487	340	89	32	7,463

Note: Does not include phased project units on already recorded plats or signed SDP's.

Table 14
Number of Potential Units from Subdivision Plans in Process by Unit Type, 12/31/16

Planning		Sketch						
Area	SFD	SFA	APT	МН	TOTAL			
Downtown Columbia	0	0	0	0	0			
All Other Columbia	103	81	0	0	184			
Elkridge	19	0	1,621	0	1,640			
Ellicott City	46	302	266	0	614			
Rural West	0	0	0	0	0			
Southeast	48	208	844	0	1,100			
TOTAL	216	591	2,731	0	3,538			

Preliminary Equivalent Sketch								
SFA	APT	МН	TOTAL					
0	882	0	882					
0	0	0	30					
19	0	0	56					
163	349	0	839					
0	0	0	97					
17	0	0	35					
199	1,231	0	1,939					
	0 0 19 163 0 17	SFA APT 0 882 0 0 19 0 163 349 0 0 17 0	SFA APT MH 0 882 0 0 0 0 19 0 0 163 349 0 0 0 0 17 0 0					

Planning	Preliminary						
Area	SFD	SFA	APT	МН	TOTAL		
Downtown Columbia	0	0	0	0	0		
All Other Columbia	0	0	0	0	0		
Elkridge	40	0	0	0	40		
Ellicott City	30	42	0	0	72		
Rural West	0	0	0	0	0		
Southeast	0	0	0	0	0		
TOTAL	70	42	0	0	112		

		Final		
SFD	SFA	APT	МН	TOTAL
0	0	1,620	0	1,620
143	0	0	0	143
37	290	736	0	1,063
159	270	53	0	482
116	0	0	0	116
232	0	0	0	232
687	560	2.409	0	3.656

	TOTAL - 12/31/16									
SFD	SFA	APT	МН	TOTAL						
0	0	2,502	0	2,502						
276	81	0	0	357						
133	309	2,357	0	2,799						
562	777	668	0	2,007						
213	0	0	0	213						
298	225	844	0	1,367						
1,482	1,392	6,371	0	9,245						

Number of Acres

As of December 31, 2016, a total of 3,400 acres of residential land were in the subdivision process. This is 216 less acres compared to the previous year, at which time there were 3,616 acres in process (Table 15).

Major Projects

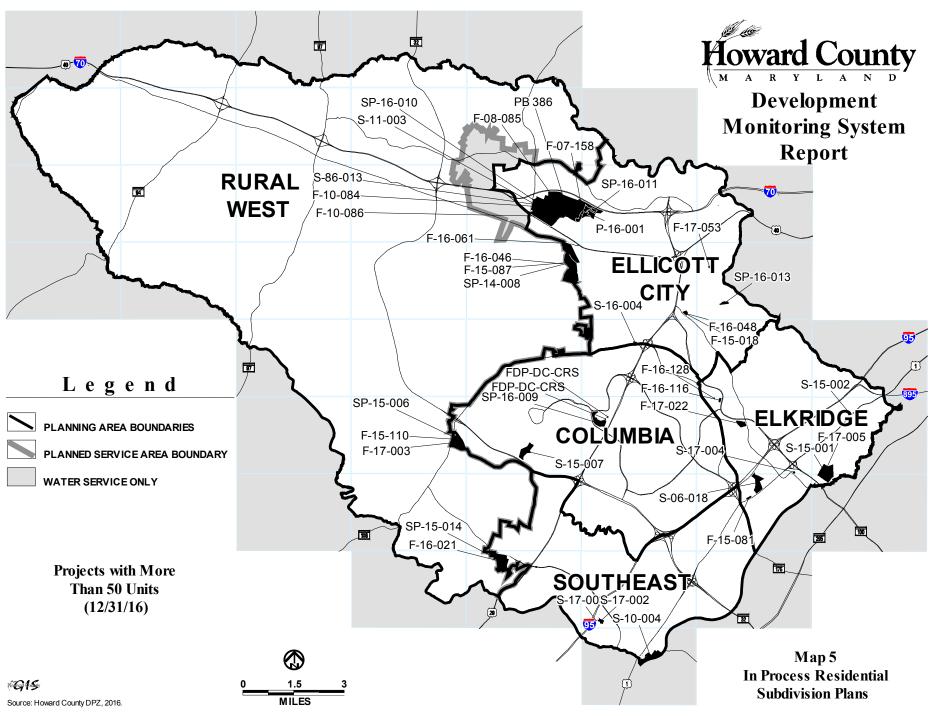
Table 16 shows a list of potential units from larger projects with 50 units or more. This list includes comprehensive and phased projects. Map 5 shows the location of these projects. Some of the larger projects in this list include The Crescent Property, Toby's redevelopment, Simpson Oaks, The Enclave at Tierney Farm, Oxford Square, The Overlook at Blue Stream, The Park at Locust Thicket, Howard Square, Dorsey Center, Turf Valley, Shipley's Grant, Westmount, Taylor Place, and Laurel Park Station. These major projects with 50 or more units total 8,537 units which account for about 92% of the total 9,245 units in the subdivision process.

Table 15
Acreage of Residential Subdivision Plans in Process, 12/31/16
(With comparisons to Countywide total as of 12/31/15)

		Preliminary			
Planning		Equivelent			TOTAL
Area	Sketch	Sketch	Preliminary	Final	ADRES
Downtown Columbia	0	30	0	38	68
All Other Columbia	67	89	0	166	322
Elkridge	237	31	15	112	396
Ellicott City	31	380	24	525	961
Rural West	0	282	0	1,067	1,349
Southeast	69	8	0	228	305
TOTAL	404	821	40	2,098	3,400
As of 12/31/15	467	867	37	2,245	3,616

Table 16
In-Process Residential Subdivision Plans, Projects With More Than 50 Units, 12/31/16

Region	File Number	Plan Name	Unit Type	Units	TOTAL
Downtown Columbia	FDP-DC-CRSCNT-1A, SP-16-009	Downtown Columbia - Crescent	APT - 184 MIHU	2,300	
	FDP-DC-CRSCNT-2	Toby's Redevelopment	APT - 101 MIHU	202	2,502
All Other Columbia	S-15-007	Simpson Oaks	SFD, SFA - 19 MIHU	184	
	F-15-110, F-17-003,SP-15-006	Enclave at Tierney Farm - Phases 1,2,& 3	SFD	148	332
Elkridge	S-15-001	Oxford Square - Remaining Phases	APT - 108 MIHU	723	
_	S-06-018	The Overlook at Blue Stream - Remaining Phases	APT - 98 MIHU	668	
	F-17-022	The Park at Locust Thicket	APT - 40 MIHU	392	
	F-15-081	Howard Square	APT - 78 MIHU	336	
	S-17-004	Dorsey Center - Parcel R	APT - 35 MIHU	230	
	F-17-005	Oxford Square - River Overlook	SFA - 19 MIHU	126	
	F-16-128, F-16-116	Shipley's Grant	SFA - 7 MIHU	87	
	S-15-002	Trotter's Knoll - Section 1	SFA - 8 MIHU	77	2,639
Ellicott City	S-86-013, PB 386	Turf Valley - Remaining Phases	SFA, APT	486	
	F-15-087, F-16-046, 061, SP-14-008	Westmount	SFD	325	
	SP-16-013	Taylor Place - Phase 1	SFA, APT - 26 MIHU	252	
	SP-16-010	Caperton Village at Turf Valley (Clubhouse)	SFA, APT	130	
	F-07-158, F-10-084, F-10-086	Fairways at Turf Valley	SFA	97	
	SP-16-011	Ravenwood at Turf Valley (Bluffs)	APT	90	
	F-15-018, F-16-048	Long Gate Overlook	SFA	84	
	S-16-004	Dorsey Overlook	SFA	75	
	P-16-001	Turf Valley - Pod E	SFD, SFA	72	
	F-08-85	Villages at Turf Valley - Phase 3	SFA	59	
	S-11-003	Turf Valley Clubhouse 2	SFD, SFA	53	
	F-17-053	Burgess Mill Station, Phase 2 Apartments	APT - 6 MIHU	53	
	S-11-003	Turf Valley Clubhouse 2	SFD, SFA	53	1,829
Southeast	S-10-004	Laurel Park Station - All Phases	APT, SFA - 150 MIHU	1,000	
	F-16-021, SP-15-014	Maple Lawn South, Phases 1 & 2	SFD	175	
	S-17-002, S-17-003	Magnolia Manor & Magnolia Manor West	SFD, SFA	60	1,235
TOTAL					8,537



Approved Residential Site Development Plans

The site development plan (SDP) process is usually the next development stage after lots are recorded. Once an SDP is approved, building permits can be issued after which actual land development can begin. SDP approval is therefore a good indicator of near term development activity in the planned service area. However, SDPs are not required for single family detached lots in the Rural West. Consequently, SDPs do not account for all residential growth in the County.

Similar to subdivision activity, site development plan activity has been compiled by the five planning areas. The number of residential site development plans approved, the number of residential lots approved, and the acreage of approved plans have been compiled for each of these areas and are discussed below.

Summary of Latest Reporting Period

From 01/01/2016 thru 12/31/2016 there were 986 housing units approved in 39 site development plans totaling about 232 acres (Table 17). The Southeast had 427 approved units followed by Elkridge with 400 units, Ellicott City with 101, Columbia with 58.

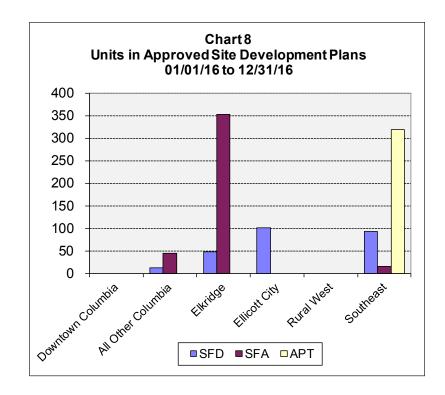
Table 18 shows new units from approved site development plans by unit type. Of the 986 approved units, 26% were for single family detached units, 42% were for single family attached units and 32% for apartment units (rental and condo). Chart 8 shows these results graphically.

Table 17
Approved Residential Site Development Plans in 2016

Planning	Units		Site Dev. Plans		Acreage	
Area	Number	Percent	Number	Percent	Number	Percent
Downtown Columbia	0	0%	0	0%	0	0%
All Other Columbia	58	6%	5	13%	12	5%
Elkridge	400	41%	12	31%	33	14%
Ellicott City	101	10%	8	21%	140	60%
Rural West	0	0%	0	0%	0	0%
Southeast	427	43%	14	36%	47	20%
TOTAL	986	100%	39	100%	232	100%

Table 18
Approved Units in SDP's by Unit Type in 2016

Planning Area	SFD	SFA	APT	МН	TOTAL F	PERCENT
Downtown Columbia	0	0	0	0	0	0%
All Other Columbia	13	45	0	0	58	6%
Elkridge	48	352	0	0	400	41%
Ellicott City	101	0	0	0	101	10%
Rural West	0	0	0	0	0	0%
Southeast	93	16	318	0	427	43%
TOTAL	255	413	318	0	986	100%
PERCENT	26%	42%	32%	0%	100%	



Last Year's Projects - Greater than 20 Units

Of the total 986 units approved in site development plans last year, 862 or about 87% were in part of projects consisting of more than 20 units. These larger projects, shown in Table 19, are located in four planning areas. The location of these plans are shown on Map 6.

Five Year Results

Tables 20 and 21 show the approved residential site development plans from January 1, 2012 to December 31, 2016. Over this five year period 8,254 units were approved countywide in 267 site development plans totaling 1,326 acres.

Table 19
Approved Residential SDP's, Projects With 20 Units or More in 2016

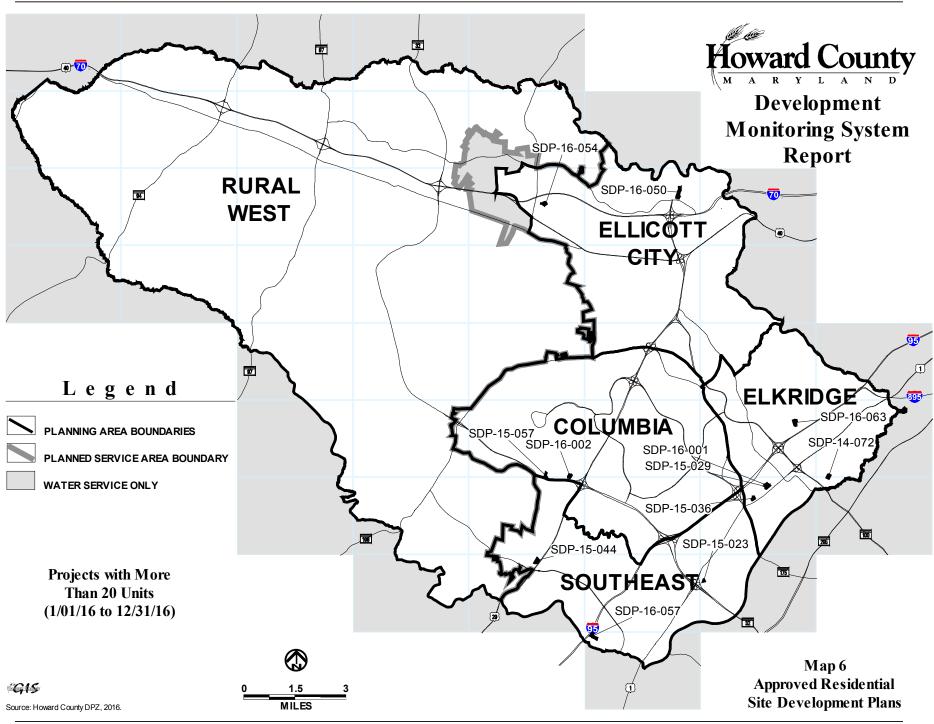
Region	File Number	Plan Name	Unit Type	Units	TOTAL
Columbia	SDP-15-057	Simpson Mill	SFA	22	
	SDP-16-002	Joseph's Courtyard (Sanford Place)	SFA	20	42
Elkridge	SDP-14-072	Oxford Square - Parcel Y	SFA - 24 MIHU	156	
	SDP-15-036	Howard Square	SFA - 20 MIHU	83	
	SDP-16-001	Morris Place	SFA - 11 MIHU	79	
	SDP-15-029	Morris Place	SFA - 5 MIHU	34	
	SDP-16-063	Samuel's Grant	SFD	24	376
Ellicott City	SDP-16-050	Estates at Patapsco Park	SFD	55	
•	SDP-16-054	West End Village (Turf Valley)	SFD	36	91
Southeast	SDP-15-044	The Vine - Buch Apartments	APT - 43 MIHU	283	
	SDP-15-023	Day Resource Center	APT	35	
	SDP-16-057	Fox Wood Manor	SFD, SFA	35	353
TOTAL					862

Table 20 Approved Units in Residential Site Development Plans, 2012 to 20016

Year	SFD	SFA	APT	MH	Total
2012	342	584	741	0	1,667
2013	352	322	1,392	0	2,066
2014	432	621	830	0	1,883
2015	402	444	806	0	1,652
2016	255	413	318	0	986
TOTAL	1,783	2,384	4,087	0	8,254
PERCENT	22%	29%	50%	0%	100%
		•			
ANNUAL AVG.	357	477	817	0	1,651

Table 21
Approved Residential Site Development Plans, 2012 to 2016

Year	Units	Plans	Acreage
2012	1,667	55	312
2013	2,066	56	297
2014	1,883	71	278
2015	1,652	46	207
2016	986	39	232
TOTAL	8,254	267	1,326
ANNUAL AVG.	1,651	53	265



In-Process Residential Site Development Plans

This section summarizes residential site development plans in process. The number of plans, potential units and acreage currently being processed as of December 31, 2016, are tabulated and compared to those in process a year earlier (as of December 31, 2015). SDPs are generally not required for large lots in the Rural West. Consequently, SDPs do not account for all residential growth in the County.

Number of Plans

There were 8 less residential site development plans in process as of December 31, 2016, compared to the prior reporting period, 24 plans compared to 32 plans (Table 22).

Table 22 Number of Residential SDP's In Process, 1/1/15 & 12/31/14

Planning Area	2016	2015
Downtown Columbia	0	0
All Other Columbia	1	4
Elkridge	8	13
Ellicott City	7	7
Rural West	1	2
Southeast	7	6
TOTAL	24	32

Number of Potential Units

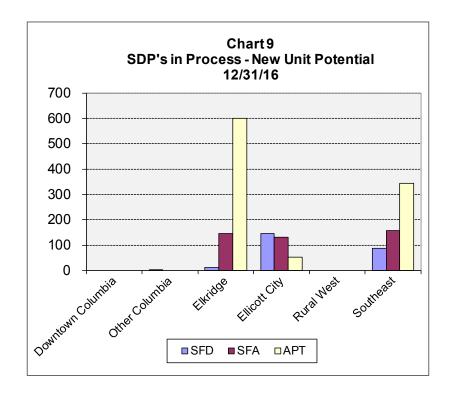
There were 34 more units in process as of December 31, 2016, compared to December 31 of the previous year, 1,675 units compared to 1,641 units (Table 23). The greatest number of units in process are for apartments (including rental and condo) with 998 proposed units in 2016. This is followed by 434 proposed single family attached or townhouse units and 243 single family detached units. Chart 9 graphically illustrates the units in process by unit type for the current year by planning area.

Table 23

Number of Potential Units from Site Development Plans in Process, 12/31/16

(With comparisons to Countywide total as of 12/31/15)

	Single	Single			
Planning	Family	Family		Mobile	TOTAL
Area	Detached	Attached	Apartments	Homes	UNITS
Downtown Columbia	0	0	0	0	0
All Other Columbia	1	0	0	0	1
Elkridge	11	146	601	0	758
Ellicott City	145	132	53	0	330
Rural West	0	0	0	0	0
Southeast	86	156	344	0	586
TOTAL	243	434	998	0	1,675
As of 12/31/15	53	673	915	0	1,641



Number of Acres

As of December 31, 2016, a total of 300 acres of residential land were in the site development plan process. This is less than the previous year when there were 441 acres in process (Table 24).

Major Projects

Table 25 shows a list of potential units from larger projects containing 30 units or more. Map 7 shows the location of these projects. Of the 1,676 units in the site development plan process, 1,547 or about 92% were in projects with more than 30 units.

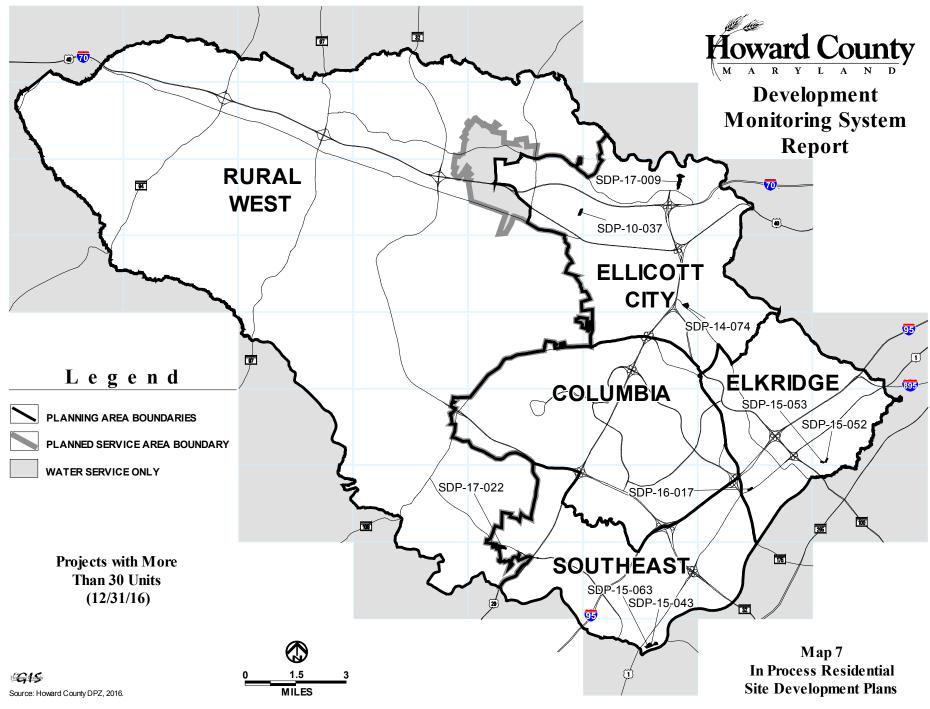
These large projects include Howard Square and Oxford Square in Elkridge; the Estates at Patapsco Park, Long Gate Overlook and Fairways at Turf Valley in Ellicott City; and Laurel Park Station and Maple Lawn South in the Southeast.

Table 24
Acreage of Residential SDP's In Process, 12/31/16 & 12/31/15

Planning Area	2016	2015
Downtown Columbia	0	0
All Other Columbia	1	10.6
Elkridge	36	35
Ellicott City	57	147
Rural West	168	216
Southeast	39	31
TOTAL	300	441

Table 25
In Process Residential Site Development Plans, Projects With More Than 30 Units, 12/31/16

Region	File Number	Plan Name	Unit Type	Units	TOTAL
Elkridge	SDP-16-017	Howard Square	APT - 78 MIHU	344	
	SDP-15-053	Oxford Square, Parcel X	APT - 39 MIHU	257	
	SDP-16-052	Oxford Square, River Overlook	SFA - 19 MIHU	126	727
Ellicott City	SDP-17-009	Estates at Patapsco Park	SFD	136	
	SDP-14-074	Long Gate Overlook	SFA - 8 MIHU	73	
	SDP-10-037	Fairways at Turf Valley, Phase 1	SFA	47	256
Southeast	SDP-15-063	Laurel Park Station	APT - 42 MIHU	280	
	SDP-15-043	Laurel Park Station	SFA, APT - 33 MIHU	220	
	SDP-17-022	Maple Lawn South	SFD	64	564
TOTAL					1,547



Residential Building Permits & Use and Occupancy Permits

The final stage of the development process is the issuance of building permits. This section of the report tabulates building permits for all new residential construction. Once construction is complete and prior to residents moving in, use and occupancy permits are required. These are also tabulated and discussed further below. Both building permits and use and occupancy permits have been compiled by planning area.

Issued Building Permits

Summary of Last Year

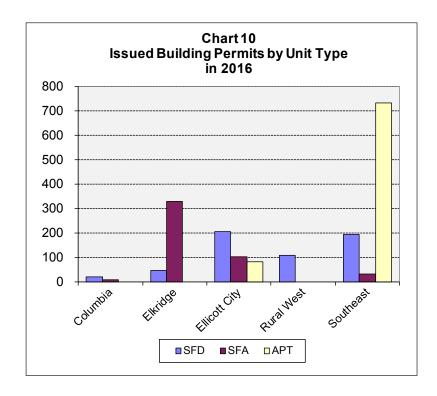
From January 1, 2016, to December 31, 2016, the County issued 2,475 residential building permits for new construction (Table 26). The Southeast had the greatest number issued with 962, followed by Downtown Columbia with 597 and then Ellicott City with 396. Countywide, 57% of the permits were for apartment units (both rental and condo). About 24% were for single family detached units and 19% for single family attached units. Chart 10 shows these results graphically by planning area.

Table 26
Issued Residential Building Permits by Unit Type in 2016

Planning Area	SFD	SFA	APT	МН	TOTAL	PERCENT
Downtown Columbia	0	0	597	0	597	24%
All Other Columbia	23	10	0	0	33	1%
Elkridge	47	329	0	0	376	15%
Ellicott City	208	105	83	0	396	16%
Rural West	111	0	0	0	111	4%
Southeast	194	34	734	0	962	39%
TOTAL	583	478	1,414	0	2,475	100%
PERCENT	24%	19%	57%	0%	100%	

Last Year's Projects - 25 or More Units

Table 27 summarizes the issued residential building permits in larger developments with 25 or more units. About 86%, or 2,128 of the total 2,475 permits issued last year, fall into this category. Map 8 shows the locations of each of the developments.



Five Year Results

Over five years, from 2012 to 2016, a total of 9,527 residential permits have been issued in Howard County (Table 28). This is an average of 1,905 permits per year. Last year's 2,475 issued permits was 53% more than the 1,620 permits issued the year before and the highest since 2013.

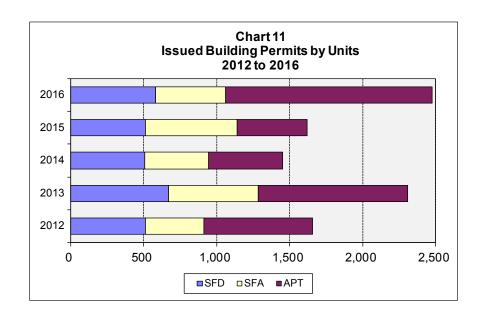
Of the 9,527 total permits issued over the 5 year time period, 2,791, or 29%, were for single family detached units. There were 2,556 permits (27%) for single family attached units and 4,169 permits (44%) for apartment units (both rental and condo). Chart 11 shows the results by unit type graphically over time.

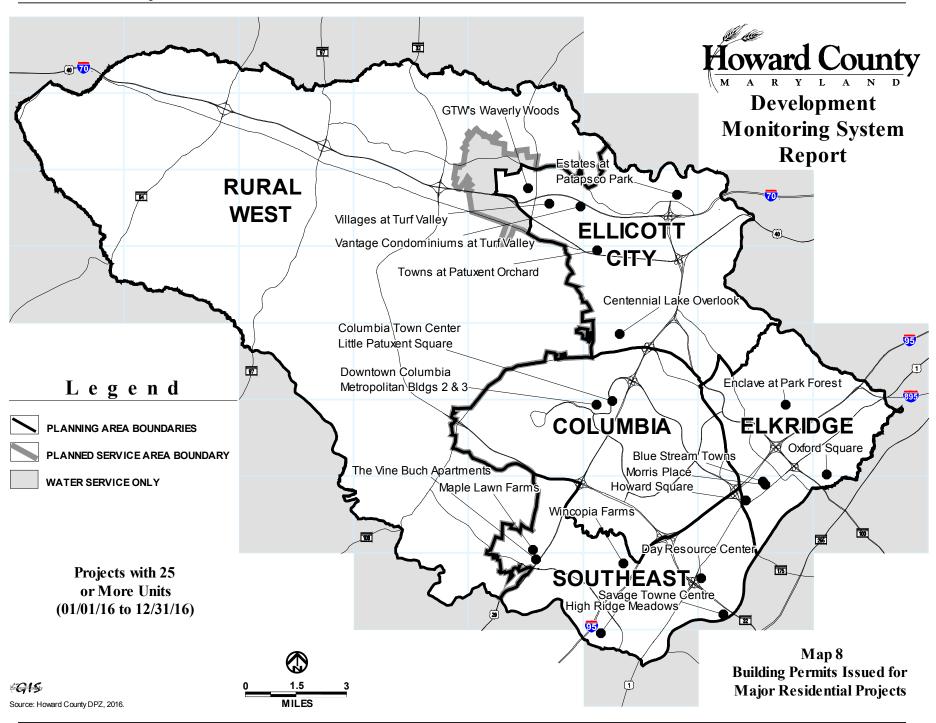
Table 27
Issued Residential Building Permits, Subdivisions With 25 or More Units in 2016

Planning Area	Subdivision	Unit Type	Units	TOTAL
Columbia	Downtown Columbia - Metropolitan Bldgs 2 and 3	Apartments	437	
	Columbia Town Center - Little Patuxent Square	Apartments	160	597
Elkridge	Oxford Square	Townhomes	97	
	Howard Square	Townhomes	89	
	Bluestream Towns	Townhomes	58	
	Morris Place	Townhomes	35	
	Enclave at Park Forest	Single Family Duplex / Townhomes-Age Restricted	27	306
Ellicott City	GTW's Waverly Woods	Single Family Detached/Apartments-Age Restricted	88	
	Villages at Turf Valley	Single Family Detached/Duplex/Townhomes	81	
	Towns at Patuxent Orchard	Townhomes	71	
	Centennial Park Overlook	Single Family Detached	30	
	Vantage Condominiums at Turf Valley	Apartments	30	
	Estates at Patapsco Park	Single Family Detached	25	325
Southeast	Savage Towne Centre	Apartments	416	
	The Vine Buch Apartments	Apartments	283	
	Maple Lawn Farms	Single Family Detached	74	
	Wincopia Farms	Single Family Detached / Townhomes	57	
	Day Resource Center	Apartments	35	
	High Ridge Meadows	Single Family Detached / Townhomes	35	900
TOTAL				2,128

Table 28
Issued Residential Building Permits by Unit Type, 2012 to 2106

Year	SFD	SFA	APT	МН	Total
2012	514	401	744	3	1,662
2013	671	614	1,024	8	2,317
2014	509	435	509	0	1,453
2015	514	628	478	0	1,620
2016	583	478	1,414	0	2,475
TOTAL	2,791	2,556	4,169	11	9,527
PERCENT	29%	27%	44%	0.1%	100%
ANNUAL AVG.	558	511	834	2	1,905





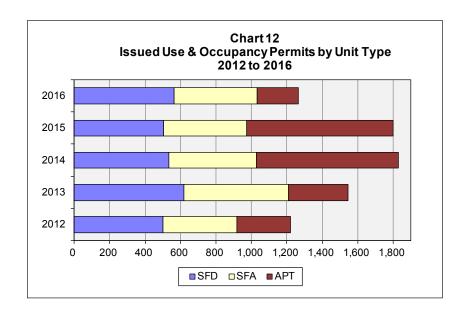
Issued Use and Occupancy Permits

Summary of Last Year

For the latest reporting period from January 1, 2016, to December 31, 2016, the County issued 1,263 use and occupancy permits (Table 29). Of all planning areas, Ellicott City had the most with 476. This is followed by Elkridge with 432, the Southeast with 219, the Rural West with 119, and 17 in Columbia. Countywide, 45% of the permits were for single family detached units, 37% were for single family attached units and 18% were for apartment units (both rental and condo).

Table 29
Issued Use and Occupancy Permits by Unit Type in 2016

Planning Area	SFD	SFA	APT	MH	TOTAL	PERCENT
Downtown Columbia	0	0	0	0	0	0%
All Other Columbia	17	0	0	0	17	1%
Elkridge	64	368	0	0	432	34%
Ellicott City	208	36	232	0	476	38%
Rural West	119	0	0	0	119	9%
Southeast	156	63	0	0	219	17%
TOTAL	564	467	232	0	1,263	100%
PERCENT	45%	37%	18%	0%	100%	



Five Year Results

From 2012 to 2016, a total of 7,655 use and occupancy permits were issued in Howard County (Table 30). This is an annual average of 1,531 permits per year.

Of the 7,655 total use and occupancy permits issued over the five year timeframe, 36% were for single family detached units, 32% for single family attached units, and 33% for apartment units. There were 30% less units built last year compared to the year before, 1,263 completions in 2016 compared to 1,798 in 2015. Chart 12 shows the results by unit type graphically over time.

Table 30 Issued Use and Occupancy Permits by Unit Type, 2012 to 2016

Year	SFD	SFA	APT	МН	Total
2012	502	416	302	0	1,220
2013	618	591	336	0	1,545
2014	536	491	802	0	1,829
2015	506	469	823	0	1,798
2016	564	467	232	0	1,263
TOTAL	2,726	2,434	2,495	0	7,655
PERCENT	36%	32%	33%	0%	100%
	•	•	•		
ANNUAL AVG.	545	487	499	0	1,531

Age-Restricted and Moderate Income Housing Units

In response to policies initially established with the 2000 General Plan, legislation has been adopted to foster the development of age-restricted and moderate income housing units (MIHU).

Age-restricted housing can be built as a conditional use in residential zoning districts as well as by-right in the Planned Office Research (POR), Planned Senior Community (PSC), Community Center Transition (CCT) and Residential: Senior-Institutional (RSI) districts.

The 2004 comprehensive rezoning expanded the MIHU regulations to include more zoning districts. New projects in higher density and mixed-use zones as well as all age-restricted projects must build a certain percentage of affordable units, anywhere from 5% to 15%, depending on particular criteria such as the zone, unit type and density.

The 2013 comprehensive zoning further expanded the MIHU regulations requiring a 10% moderate income unit total in the lower density zones including R-20, R-ED, R-12, R-SC, R-SA-8, RR-DEO, RC-DEO, and R-H-ED. A fee in lieu option applies.

The following summarizes recent development activity of age-restricted and MIHU units from January 1, 2016, to December 31, 2016, as well as some comparisons to the previous year reporting period.

In-Process Plans

Table 31 shows the age-restricted units from in-process plans by unit type and by planning area as of December 31, 2016. This includes both subdivision and site development plans. There were 12 units in process, all of which in are in Elkridge.

All 12 of these units are single family attached units as part of a single project, Village Crest Senior Towns. Map 9 shows the location of this particular project, and it is also included in the summary Table 37.

Compared to last year, there are less age-restricted units in process in this current reporting period, 12 units versus 22 units, respectively.

Table 31

Age Restricted Units from Plans in Process, 12/31/2016

(with comparisons to the previous year)

Janiounio	to the p	31 6 4 10 C	is year,	
SFD	SFA	APT	TOTAL	PERCENT
0	0	0	0	0%
0	0	0	0	0%
0	12	0	12	100%
0	0	0	0	0%
0	0	0	0	0%
0	0	0	0	0%
0	12	0	12	100%
0%	100%	0%	100%	
0	22	0	22	•
	SFD 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SFD SFA 0 0 0 0 0 12 0 0 0 0 0 0 0 12 0% 100%	SFD SFA APT 0 0 0 0 0 0 0 12 0 0 0 0 0 0 0 0 0 0 0 12 0 0% 100% 0%	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Table 32 shows the total MIHU units in process. These total 891, the greatest number of which are in Elkridge. This is more than the number in process the previous year which had 625 in process.

Table 32
MIHU Units from Plans in Process, 12/31/2016
(with comparisons to the previous year)

(11111111111111111111111111111111111111	Jui 100110	10 1110	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	io you.,	
Planning Area	SFD	SFA	APT	TOTAL	PERCENT
Downtown Columbia *	0	0	285	285	32%
All Other Columbia	0	19	0	19	2%
Elkridge	0	36	359	395	44%
Ellicott City	2	8	32	42	5%
Rural West	0	0	0	0	0%
Southeast	0	0	150	150	17%
TOTAL	2	63	826	891	68%
PERCENT	0%	7%	93%	100%	

As of 12/31/15 3 112 510 625

^{*} Includes very low and middle income units and MIHU units in accordance to the DT Columbia Plan.

Table 33 shows just the age-restricted MIHU units in process. For this year, none of the 891 MIHU units are age-restricted. There were also no age-restricted MIHU units in process for the previous reporting period.

Map 10 shows the particular projects that include MIHU units. Table 37 shows the details of each of these projects.

Table 33
Age-Res. MIHU Units from Plans in Process, 12/31/2016
(with comparisons to the previous year)

(111611 55111				,,	
Planning Area	SFD	SFA	APT	TOTAL	PERCENT
Downtown Columbia	0	0	0	0	0%
All Other Columbia	0	0	0	0	0%
Elkridge	0	0	0	0	0%
Ellicott City	0	0	0	0	0%
Rural West	0	0	0	0	0%
Southeast	0	0	0	0	0%
TOTAL	0	0	0	0	0%
PERCENT	0%	0%	0%	0%	
				-	
As of 12/31/15	0	0	0	0	

Approved Site Development Plans

Table 34 shows the age-restricted units in site development plans that were approved between January 1, 2016, and December 31, 2016. There were a total of 22 units approved. This is less than the 194 units approved during the previous reporting period. All 22 units are single family attached in a one project. Map 9 shows the location of this one approved age-restricted project during this time period. Table 38 shows the details for each of the plans (including MIHU's).

Table 35 shows the MIHU units in approved site development plans. A total of 106 units were approved, all but 3 of them in Elkridge. None of these units are age-restricted—shown in Table 36. Map 10 shows the approved projects with MIHU units, and Table 38 shows the plan details.

Table 34

Age Restricted Units from Approved Plans in 2016
(with comparisons to the previous reporting period)

Planning Area	SFD	SFA	APT	TOTAL	PERCENT
Downtown Columbia	0	0	0	0	0%
All Other Columbia	0	22	0	22	100%
Elkridge	0	0	0	0	0%
Ellicott City	0	0	0	0	0%
Rural West	0	0	0	0	0%
Southeast	0	0	0	0	0%
TOTAL	0	22	0	22	100%
PERCENT	0%	100%	0%	100%	
Year 2015	0	0	194	194	•

Table 35
MIHU Units from Approved Plans in 2016
(with comparisons to the previous reporting period)

Planning Area	SFD	SFA	APT	TOTAL	PERCENT
Downtown Columbia	0	0	0	0	0%
All Other Columbia	0	3	0	3	3%
Elkridge	0	60	43	103	97%
Ellicott City	0	0	0	0	0%
Rural West	0	0	0	0	0%
Southeast	0	0	0	0	0%
TOTAL	0	63	43	106	100%
PERCENT	0%	59%	41%	100%	
Year 2015	0	50	40	90	•

Table 36
Age-Res. MIHU Units from Approved Plans in 2016
(with comparisons to the previous reporting period)

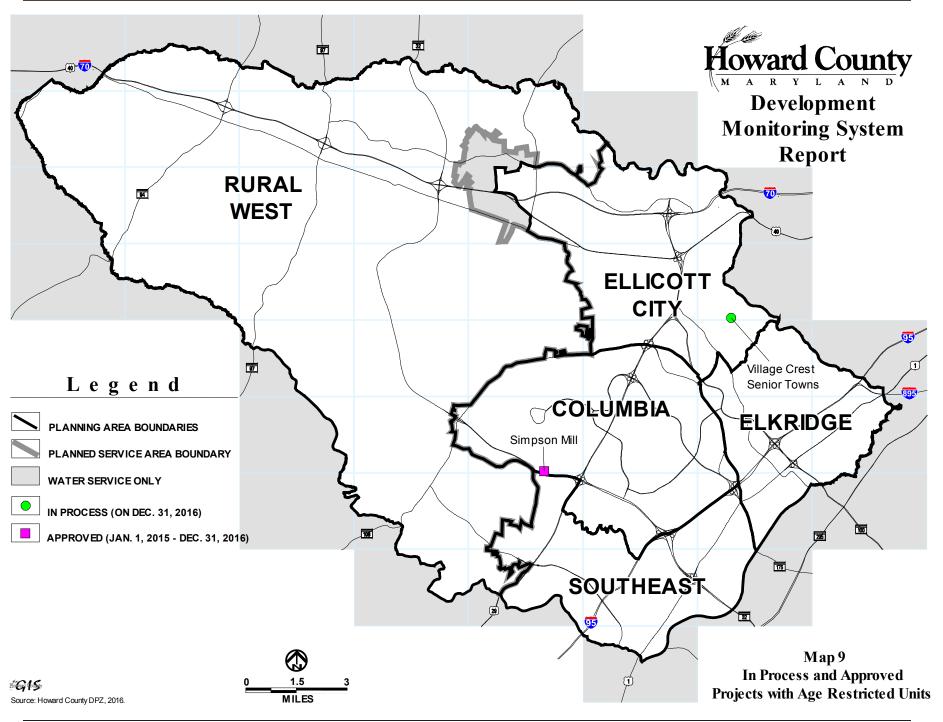
(with compari	sons to	tne prev	ious re	porting pe	erioa)
Planning Area	SFD	SFA	APT	TOTAL	PERCENT
Downtown Columbia	0	0	0	0	0%
All Other Columbia	0	0	0	0	0%
Elkridge	0	0	0	0	0%
Ellicott City	0	0	0	0	0%
Rural West	0	0	0	0	0%
Southeast	0	0	0	0	0%
TOTAL	0	0	0	0	0%
PERCENT	0%	0%	0%	0%	
					_
Year 2015	0	0	4	4	•

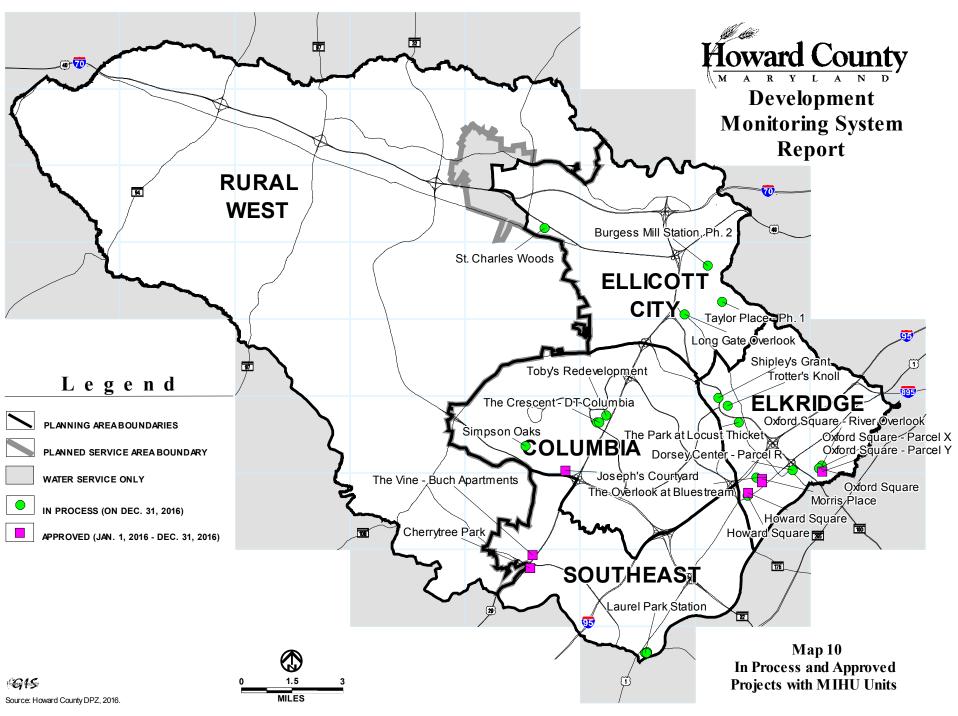
Table 37
In Process Plans With MIHU and Age Restricted Units On December 31, 2016

								MIHU	J Units							Mark	et Rate)
Plan	File		No	t Age	Restric	ted	-	Age Re	stricte	ed		Total	MIHU		Ag	e Rest	ricted l	Jnits
Name	Number	Zoning	SFD	SFA	APT	Total	SFD	SFA	APT	Total	SFD	SFA	APT	Total	SFD	SFA	APT	Total
The Crescent - DT Columbia - Remaining Units	FDP-DC-CRSNT-1A	NT	0	0	113	113	0	0	0	0	0	0	113	113	0	0	0	0
Toby's Redevelopment	FDP-DC-CRSNT-2	NT	0	0	101	101	0	0	0	0	0	0	101	101	0	0	0	0
The Overlook at Blue Stream - Remaining Units	S-06-018	CAC	0	0	98	98	0	0	0	0	0	0	98	98	0	0	0	0
Howard Square	SDP-16-017	CAC	0	0	78	78	0	0	0	0	0	0	78	78	0	0	0	0
Laurel Park Station - Remaining Units	S-10-004	TOD	0	0	75	75	0	0	0	0	0	0	75	75	0	0	0	0
The Crescent - DT Columbia	SP-16-009	NT	0	0	71	71	0	0	0	0	0	0	71	71	0	0	0	0
Oxford Square - Remaining Units	S-15-001	TOD	0	0	69	69	0	0	0	0	0	0	69	69	0	0	0	0
Laurel Park Station	SDP-15-063	TOD	0	0	42	42	0	0	0	0	0	0	42	42	0	0	0	0
The Park at Locust Thicket	F-17-022	R-A-15, POR	0	0	40	40	0	0	0	0	0	0	40	40	0	0	0	0
Oxford Square - Parcel X	SDP-15-053	TOD	0	0	39	39	0	0	0	0	0	0	39	39	0	0	0	0
Dorsey Center - Parcel R	S-17-004	TOD	0	0	35	35	0	0	0	0	0	0	35	35	0	0	0	0
Laurel Park Station	SDP-15-043	TOD	0	0	33	33	0	0	0	0	0	0	33	33	0	0	0	0
Taylor Place - Phase 1	SP-16-013	R-A-15	0	0	26	26	0	0	0	0	0	0	26	26	0	0	0	0
Oxford Square - River Overlook	SDP-16-052	TOD	0	19	0	19	0	0	0	0	0	19	0	19	0	0	0	0
Simpson Oaks	S-15-007	CEF	0	19	0	19	0	0	0	0	0	19	0	19	0	0	0	0
Trotter's Knoll, Section 1	F-17-027	R-SA-8	0	8	0	8	0	0	0	0	0	8	0	8	0	0	0	0
Long Gate Overlook	SDP-14-074	R-A-15	0	8	0	8	0	0	0	0	0	8	0	8	0	0	0	0
Shipley's Grant	F-16-116	R-A-15	0	7	0	7	0	0	0	0	0	7	0	7	0	0	0	0
Burgess Mill Station, Phase 2	SDP-16-016	R-A-15	0	0	6	6	0	0	0	0	0	0	6	6	0	0	0	0
Trotter's Knoll, Section 2	SP-17-005	R-SA-8	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0
St. Charles Woods	SP-15-010	R-ED	2	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0
Village Crest Senior Towns	SDP-17-007	POR	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	12
TOTAL			2	63	826	891	0	0	0	0	2	63	826	891	0	12	0	12

Table 38
Approved SDP's with MIHU and Age Restricted Units in 2016

								MIHU	J Units	;						Mark	et Rate	,
Plan	File		No	t Age	Restric	cted		Age Re	stricte	d		Total	MIHU		Ag	e Rest	ricted l	Jnits
Name	Number	Zoning	SFD	SFA	APT	Total	SFD	SFA	APT	Total	SFD	SFA	APT	Total	SFD	SFA	APT	Total
The Vine - Buch Apartments	SDP-15-044	R-APT	0	0	43	43	0	0	0	0	0	0	43	43	0	0	0	0
Oxford Square - Parcel Y	SDP-14-072	TOD	0	24	0	24	0	0	0	0	0	24	0	24	0	0	0	0
Howard Square	SDP-15-036	CAC	0	20	0	20	0	0	0	0	0	20	0	20	0	0	0	0
Morris Place	SDP-16-001	CAC	0	11	0	11	0	0	0	0	0	11	0	11	0	0	0	0
Morris Place	SDP-15-029	CAC	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0
Joseph's Courtyard (Sanford Place)	SDP-16-002	R-SA-8	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0
Simpson Mill	SDP-15-057	POR	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22
TOTAL	•	•	0	63	43	106	0	0	0	0	0	63	43	106	0	22	0	22





Page 44

Use & Occupancy Permits

Table 39 summarizes the use and occupancy permits issued by unit type for age-restricted units. Between January 1, 2016, and December 31, 2016, 334 age-restricted units were built, 26% of the total 1,263 housing units built in the County over this latest reporting period.

There were 166 more age-restricted units built in the current reporting period compared to the previous period when there were 168 units built.

Since the 2004/2005 DMS, which was the first time age-restricted units were reported soon after recently passed regulatory changes enabling these type of units, 19% of all new homes built in Howard County have been age-restricted. This is summarized in Table 40.

Table 39

Age Restricted Units Built in 2016
(with comparisons to the previous reporting period)

(With Compan					J. 10 day
Planning Area	SFD	SFA	APT	TOTAL	PERCENT
Downtown Columbia	0	0	0	0	0%
All Other Columbia	0	0	0	0	0%
Elkridge	12	23	0	35	10%
Ellicott City	70	25	181	276	83%
Rural West	0	0	0	0	0%
Southeast	7	16	0	23	7%
TOTAL	89	64	181	334	100%
PERCENT	27%	19%	54%	100%	
Year 2015	48	72	48	168	-

Table 40
Age Restricted Units Built Compared to Total Units, 10/01/04 to 12/31/16

					Total All	Age-Restricted
Planning Area	SFD	SFA	APT	TOTAL	Units Built	% of Total
10/04 to 9/05	22	171	291	484	1,650	29%
10/05 to 9/06	35	233	369	637	1,877	34%
10/06 to 9/07	10	168	196	374	1,202	31%
10/07 to 9/08	7	105	130	242	1,602	15%
10/08 to 9/09	0	75	171	246	1,132	22%
10/09 to 12/10 *	0	132	118	250	1,427	18%
01/11 to 12/11	6	46	182	234	1,647	14%
01/12 to 12/12	34	62	115	211	1,220	17%
01/13 to 12/13	37	36	48	121	1,545	8%
01/14 to 12/14	41	56	113	210	1,829	11%
01/15 to 12/15	48	72	48	168	1,798	9%
01/16 to 12/16	89	64	181	334	1,263	26%
TOTAL	329	1,220	1,962	3,511	18,192	19%
PERCENT	9%	35%	56%	100%		

^{*} Extra quarter included due to change in analysis timeframe.

Land Preservation

Agricultural Land Preservation Program

Howard County's Agricultural Land Preservation Program (ALPP) has been the primary tool for preserving farmland. Most of the preserved farmland in this program is from the purchase of easements where a farmer can voluntarily choose to sell a perpetual easement to the County while holding fee simple title to the land and continuing to farm. The easement restricts development on the land and remains with the land even when it is sold.

Agricultural land preservation in the County first began in 1979 using the State's easement purchase program, known as the Maryland Agricultural Land Preservation Foundation (MALPF). The County instituted its own easement purchase program, indicated above, in 1984 and until 1988 both the State and County programs were active in preserving farmland. In 1989 the County initiated the innovative Installment Purchase Agreement (IPA) program to purchase easements. The IPA program has been very successful attracting many new farmers to the County program.

The County's IPA program reached its initial \$55 million authorization limit in Fiscal Year 1997 and the program was temporarily suspended until spring 2000 when the County Council authorized an additional \$15 million in IPA commitments. In June 2002, the County purchased easements on 400.5 acres at a price of \$2.48 million. Subsequent to these purchases, there were no additional acquisitions for several years despite two increases in the maximum offer amount.

In an effort to make easement sales more attractive to farmers, in April 2006 the maximum purchase price was further increased to \$40,000 per acre. A new application period, known as "Batch 13," occurred during the fall of 2006. This batch brought in three applicant properties totaling 253 acres. The ALPP subsequently acquired easements on all three farms between 2007 and 2009.

Building on that success, in the spring of 2009 "Batch 14" was initiated, which attracted 13 high quality applications. All but two of the properties were over 50 acres. Batch 14 was a competitive application cycle, meaning there wasn't enough funding to acquire easements on all of the applicant properties. Offers were made on the top seven scoring farms in early De-

cember 2009. Of those seven properties, two applicants turned down the ALPP offers, so the ALPP extended offers on the next two properties on the list in the summer of 2010. These two properties accepted their offers.

Of the seven total property owners who accepted their ALPP offers, settlement occurred on four of the farms during 2010. The remaining three properties settled in 2011. At the conclusion of Batch 14, 14,631 acres had been preserved through the County purchase program.

Several changes were made to the ALPP prior to its reopening in March 2013. The law was amended to eliminate the batching process so applications are now accepted on a rolling basis. Other changes included reducing the minimum acreage requirement and adding points to the scoring system for properties containing green infrastructure. Since the program reopened, close to 50 property owners have requested scoring for their farms and 20 have fully applied to the program.

From 2013 through 2015, 10 properties totaling 598 acres have been acquired by the ALPP. There was also one MALPF settlement in 2015 on a 71 acre farm. There were three new applicants to the ALPP in 2016, with one 59 acre settlement on a prior year applicant.

Farmland may also be preserved in the ALPP through the dedication of preservation parcels as part of the development process, either as the dedication of sending parcels using the Density/Cluster Exchange Options (DEO/CEO) or the dedication of preservation parcels within cluster subdivisions. The DEO/CEO and cluster subdivision zoning regulations were established in 1992. During the current reporting period, calendar year 2016, no properties were preserved with an agricultural easement through the development process.

As of December 31, 2016, there were 22,319 acres of permanently preserved agricultural land. This includes 15,277 acres of purchased easements through the County's program, 4,100 acres of easements purchased by the State and 2,942 preservation acres dedicated as part of the land development process (Table 41).

Table 41
Agricultural Preservation Easements, December 31, 2016

Туре	Acres	Percent
County Purchased Agric. Easements (1)	15,277	68%
State Purchased Agric. Easements	4,100	18%
Dedicated Agric. Preservation Parcels	2,942	13%
TOTAL	22,319	100%

⁽¹⁾ Note that 37 of these acres are in the east (R-ED zoning) given a preservation parcel crosses over the Priority Service Area line. This was enabled through CB 54-2014.

Other Rural Easement Dedication

As previously indicated, last year no acres were preserved through the development process and enrolled in the Agricultural Land Preservation Program. The total acres of land dedicated in this manner through 2016 is 2,942.

Besides agricultural easements, parcels can also be preserved through the development process as environmental preservation parcels. Over the current reporting period, 232 acres of land in 11 parcels were dedicated as Howard County/Homeowner's Association preservation parcels. Table 42 shows the land preservation totals from dedicated easements through then end of 2016 for all easement types.

Since 1992, preservation easements on 11,674 acres have been created by cluster development and the Density/Cluster Exchange Options. The majority of the total dedicated preservation easements, 6,751 acres, are jointly held by Howard County and various homeowner's associations. As indicated earlier, 2,942 acres are held by the Howard County Agricultural Land Preservation Program. A total of 1,067 acres are jointly held by the Howard County Conservancy and Howard County and 391 acres are jointly held by Howard County and the Patuxent Conservation Corps. The remaining acres are jointly held by Howard County and the Audubon Society and by homeowner's associations and the Audubon Society as well as other holders.

Table 42 also indicates the extent of the developed land resulting from the DEO/CEO and cluster zoning. Since 1992, a total of 16,156 acres have been subdivided using these zoning options in the Rural West. About 28% of this total, or 4,482 acres, is used for the development of residential lots and road right of ways. The remaining 72%, or 11,674 acres, is land in dedicated preservation easements. Of the 4,482 acres subdivided for

residential development, about 440 acres are not yet developed (built on), 3,599 acres are developed (built on) and 443 acres are for roads.

Table 42
Rural Land Preservation Through Dedicated Easements

Residential Unit Cluster Development	Lots	Acres
Undeveloped Lots (By Right)	238	290
Undeveloped Lots (From Density Transfer)	143	150
Total Undeveloped Lots	381	440
Developed Lots (By Right)	2,223	2,463
Developed Lots (From Density Transfer)	1,073	1,136
Total Developed Lots	3,296	3,599
Roadway		443
TOTAL	3,677	4,482

Preservation	Parcels	Acres	
Agricultural Preservation	85	2,942	
Howard County/Homeowner's Association	617	6,751	
Howard County/The Audubon Society	3	69	
Homeowner's Assoc./The Audubon Society	2	61	
Howard County/Howard County Conservancy	31	1,067	
Howard County/Patuxent Conservation Corps. Inc.	16	391	
Other	88	393	
Total Preservation	842	11,674	72.3%
GRAND TOTAL (Includes Res. Develop.)	4,519	16,156	100.0%

Total Preserved Land in the Rural West

Preservation easements in the Rural West discussed above total 31,014 acres. This includes 22,282 acres of agricultural preservation easements and 8,732 acres of environmental preservation parcels dedicated through the subdivision process. This represents about 33% of the approximate 94,660 total acres of land in the Rural West.

Including County and State parks (8,087 acres), WSSC land (2,438 acres), permanent historic easements (103 acres) and other environmental easements (1,159 acres) the total preserved land amounts to 42,801 acres, about 45% of all land in the Rural West.

Map 11 shows the preserved land as of December 31, 2016, including acquired (purchased) agricultural easements, dedicated agricultural and environmental preserved parcels, other environmental easements, as well as WSSC, County and State park land.

Neighborhood Preservation in the East

The Howard County Zoning regulations were amended effective on September 9, 2008 to allow neighborhood preservation parcels in eastern Howard County. Similar to preservation in the Rural West, neighborhood preservation parcels are created in the east by transferring density rights from a sending parcel, which is permanently preserved, to a receiving parcel to allow additional density above what the by right zoning there allows. For each transaction, sending and receiving parcels must be within the same planning area or within a two-mile radius regardless of the planning area. Additionally, sending parcels that contain a historic structure may exchange density with a receiving parcel in any planning area. Properties must be zoned R-ED, R-20, R-12 or R-SC.

For the current reporting period covering calendar year 2016 there were two receiving subdivisions utilizing this option acquiring a total of 23 development rights. These subdivisions received the transferred density from two new sending parcels totalling 42 acres. Table 43 shows the aggregate results since the beginning of this program. A total of 13 neighborhood preservation parcels have been created totaling 73.1 acres. The easement holder for 12 of these acres is Howard County. The Taylor Property Community Association is the holder of the one other easement. Through this process, additional density was created for 17 additional single family detached homes, 6 additional townhomes and 25 additional apartment units on a total of 4.8 acres. These additional units are part of receiving subdivisions that total 903 housing units on 327 acres. Thus far through the end of 2016, 410 of these 903 units are built. It should be noted that 184 of the 327 acres are open space acres as normally required by the zoning and subdivision regulations.

Total Preservation Easements in the East

In addition to neighborhood preservation parcels in the east, there are also 194 acres in permanent historic easements, 316 acres in Maryland Environmental Trust easements, 112 acres in other land trust conservation easements, and 37 acres in a county purchased agricultural preservation easement. Total preservation easements in the east therefore amount to 693 acres. This is summarized in Table 44.

Total Preserved Land in the East

Including County and State parks (10,461 acres), WSSC land (677 acres), non-County Open space such as HOA land (2,836) and Columbia Association open space (3,624 acres) the total preserved land amounts to 18,291 acres, about 28% of all land in the east. Map 11 shows the locations of the preserved land by the various types.

Table 43
Neighborhood Preservation, December 31, 2016

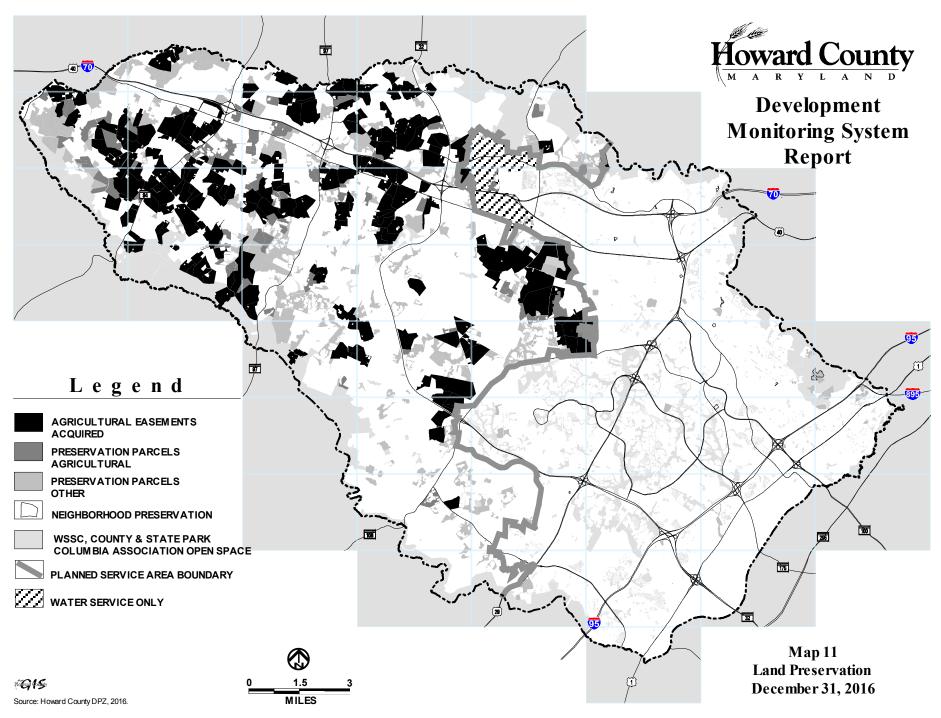
		Unit	t Type			
Receiving Parcels	SFD	SFA	APT	Total	Acres	
Undeveloped Lots (By Right)	208	0	261	469	45.0	
Undeveloped Lots (From Density Transfer)	2	0	22	24	1.1	
Total Undeveloped Lots	210	0	283	493	46.1	
Developed Lots (By Right)	289	60	37	386	66.4	
Developed Lots (From Density Transfer)	15	6	3	24	3.7	
Total Developed Lots	304	66	40	410	70.1	
Open Space					184.0	
Roadway					25.8	
Other					0.9	
Total	514	66	323	903	326.9	81.7%
East Preserved Land - Sending Parcels		Prese	rvation	1		

East Preserved Land - Sending Parcels	Preservation	
Easment Holder	Parcels	Acres
Howard County Government	12	69.8
Maryland Environmental Trust	0	0.0
Maryland Historical Trust	0	0.0
Taylor Properties Community Association, Inc.	1	3.3
Total Preservation	13	73.1 18.3%
GRAND TOTAL		400.0 100.0%

Table 44
East Preservation Easements, December 31, 2016

Acres	Percent
73	100%
194	29%
316	48%
112	17%
37	6%
659	100%
693	
	73 194 316 112 37 659

⁽¹⁾ Total excludes double count of 39 acres on the Belmont propoerty that has both a neighborhood preservation and a permanent historic easement on it.



Residential Development

Non-Residential Development

Non-Residential Subdivisions

For this report, non-residential development is also tabulated by Planning Area. The number of non-residential plans, lots created, and acres of plans recorded and in-process have been compiled for each of these areas and are discussed below. The analysis includes last year's subdivision activity as well as total activity including the previous five years.

Recorded Plans

For the latest reporting period there were 20 non-residential lots recorded countywide in 30 subdivision plans totaling 548 acres (Table 45). It should be noted that many of these are resubdivisions that do not create new lots, but simply create roadway or easements. Some are parcel consolidations where the net number of lots actually get reduced.

Table 45
Recorded Non-Residential Subdivisions in 2016

	Lots		Subdivis	ion Plans	Acreage	
Region	Number	Percent	Number	Percent	Number	Percent
Downtown Columbia	17	85%	2	7%	101	18%
All Other Columbia	3	15%	6	20%	34	6%
Elkridge	(5)	-25%	7	23%	84	15%
Ellicott City	2	10%	3	10%	64	12%
Rural West	0	0%	0	0%	0	0%
Southeast	3	15%	12	40%	265	48%
TOTAL	20	100%	30	100%	548	100%

Table 46 shows the recorded non-residential subdivisions from January 1, 2012 to December 31, 2016. Over this five year period there were 48 non-residential lots recorded countywide in 111 subdivision plans totaling 1,911 acres. This amounts to an annual average over the five year analysis time period of 10 lots in 22 plans encompassing 382 acres.

Table 46
Recorded Non-Residential Subdivisions, 2012 to 2016

Countywide	Lots	Plans	Acreage
2012	4	22	432
2013	4	24	293
2014	8	17	407
2015	12	18	231
2016	20	30	548
TOTAL	48	111	1,911
ANNUAL AVG.	10	22	382

In-Process Plans

Countywide, there were 34 non-residential subdivision plans in process as of December 31, 2016. This compares to 41 plans in process for the previous reporting period (Table 47). Ten plans were in the Southeast, 9 plans in Columbia, 6 plans in Elkridge, 4 plans Downtown Columbia, 3 plans in Ellicott City, and 2 plans in the Rural West. Most of the plans were in the final plan or environmental concept plan stage.

Table 48 shows the number of potential non-residential lots in process. As of December 31, 2016, there were 22 lots in process, compared to 33 in process on December 31, 2015. These include resubdivisions for the purpose of adding roadways or easements and only represent net new lots.

There were a total of 352 non-residential acres in the subdivision process as of December 31, 2016 (Table 49). This compares to 608 acres in process one year earlier. For the current year the greatest acreage amount is in Elkridge (144 acres). This is followed by the Southeast with 119 acres, 40 acres in Downtown Columbia, 21 acres each in Ellicott City and the Rural West, and 7 acres in Columbia.

Table 47

Number of Non-Residential Plans in Process, 12/31/16

with Comparisons to 12/31/2015 Countywide Totals

			Preliminary			
	Environmental		Equivalent			TOTAL
Region	Concept	Sketch	Sketch	Preliminary	Final	PLANS
Downtown Columbia	2	0	1	0	1	4
All Other Columbia	7	0	0	0	2	9
Elkridge	3	1	0	0	2	6
Ellicott City	2	0	1	0	0	3
Rural West	1	0	0	0	1	2
Southeast	4	0	0	0	6	10
TOTAL	19	1	2	0	12	34
12/31/15 Total	20	4	0	1	16	41

Table 48
Non-Residential Lots from Subdivision Plans in Process, 12/31/2016
with Comparisons to 12/31/2015 Countywide Totals

		Preliminary			
		Equivalent			TOTAL
Region	Sketch	Sketch	Preliminary	Final	LOTS
Downtown Columbia	0	9	0	1	10
All Other Columbia	0	0	0	(3)	(3)
Elkridge	6	0	0	0	6
Ellicott City	0	1	0	0	1
Rural West	0	0	0	0	0
Southeast	0	0	0	8	8
TOTAL	6	10	0	6	22
12/31/15 Total	10	0	6	17	33

Table 49
Acreage of Non-Residential Subdivision Plans in Process, 12/31/2016
with Comparisons to 12/31/2015 Countywide Totals

		Preliminary			
		Equivalent			TOTAL
Region	Sketch	Sketch	Preliminary	Final	ACRES
Downtown Columbia	0	30	0	10	40
All Other Columbia	0	0	0	7	7
Elkridge	130	0	0	14	144
Ellicott City	0	21	0	0	21
Rural West	0	0	0	21	21
Southeast	0	0	0	119	119
TOTAL	130	51	0	172	352
12/31/15 Total	209	0	49	350	608

Approved Non-Residential Site Development Plans

The site development plan (SDP) process follows lot creation and is a better gauge of non-residential development activity than subdivision. Once a SDP is approved, construction permits can be issued after which actual land development can begin. Similar to subdivision activity, non-residential site development activity is tabulated by Planning Area. The number of non-residential site development plans approved, the building square footage, and the acreage of approved plans have been compiled for each Planning Area. The analysis includes last year's site development plan activity as well as activity for the previous four reporting periods.

Summary of Last Year

For the latest reporting period 721,415 square feet were approved in 19 site development plans on 154 acres (Table 50). The greatest amount of square footage approved was in the Southeast, followed by Elkridge, Columbia, Downtown Columbia and the Rural West.

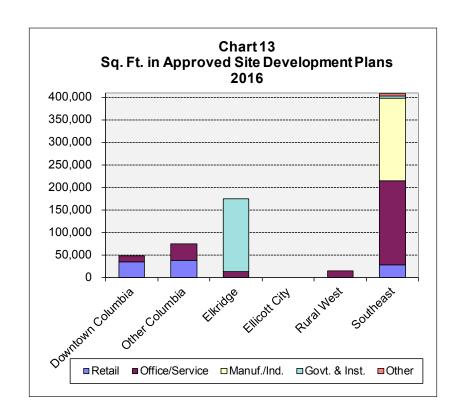
Table 51 shows the approved square footage by building type. About 264,000 square feet, 37% of the total, are for office/service uses, most of which is in the Southeast. About 183,000 square feet, 25% of the total, are for manufacturing/extensive industrial uses, all of which is in the Southeast. Government and institutional uses account for about 167,000 square feet, and retail uses account for about 103,000 square feet. Chart 13 shows this breakdown graphically.

Table 50
Approved Non-Residential Site Development Plans in 2016

,	Square Feet		Site Dev. Plans		Acreage	
Region	Number	Percent	Number	Percent	Number	Percent
Downtown Columbia	48,930	7%	1	5%	5	3%
All Other Columbia	75,194	10%	5	26%	17	11%
Elkridge	173,999	24%	3	16%	18	12%
Ellicott City	0	0%	0	0%	0	0%
Rural West	15,981	2%	2	11%	62	40%
Southeast	407,311	56%	8	42%	52	34%
TOTAL	721,415	93%	19	100%	154	97%

Table 51
Building Square Feet in Approved Non-Residential Site Development Plans
in 2016

111 2010						
		Office/	Manuf./	Govt.		
Region	Retail	Service	Ext. Ind.	& Inst.	Other	TOTAL
Downtown Columbia	35,903	13,027	0	0	0	48,930
All Other Columbia	39,166	36,028	0	0	0	75,194
Elkridge	0	13,281	0	160,718	0	173,999
Ellicott City	0	0	0	0	0	0
Rural West	0	15,981	0	0	0	15,981
Southeast	27,864	186,029	183,026	6,392	4,000	407,311
TOTAL	102,933	264,346	183,026	167,110	4,000	721,415
PERCENT	14.3%	36.6%	25.4%	23.2%	0.6%	100.0%



Last Year's Projects - Greater than 10,000 Square Feet

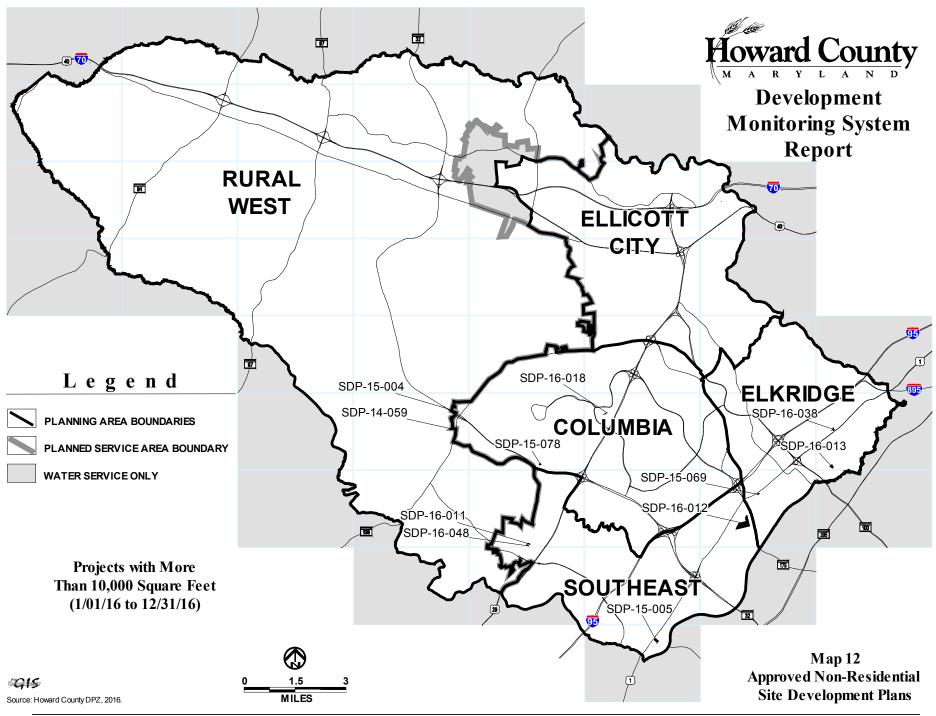
Of the 721,415 square feet of non-residential building space approved in site development plans last year, most all of it was in plans with more than 10,000 square feet. These larger plans are shown in Table 52. The locations of these plans are shown on Map 12.

In Downtown Columbia, one plan with more than 10,000 square feet was approved last year—Merriweather Post Pavilion and Merriweather Park. In the rest of Columbia, two larger plans were approved—the Fino Vino Grace Drive restaurant and office development and a Coleman Fiat auto dealer. In Elkridge, new elementary school #42 located in Oxford Square, the Elkridge Library and Senior Center redevelopment and a new CVS

pharmacy were approved. The Donaldson Funeral Home was approved in the Rural West. In the Southeast, the Maryland Food Center Authority warehouse, retail and office space in the Maple Lawn Business District Area 2, a new office building in Maple Lawn Farms, and a retail, office and warehouse space Napa Washington were all approved in the Southeast.

Table 52
Projects With More Than 10,000 Square Feet in Approved Non-Residential Site Development Plans in 2016

Region	File Number	Plan Name	Use	Building Area	TOTAL
Downtown Columbia	SDP-16-018	Merriweather Post Pavillion & Park	Retail & Office	48,930	48,930
Columbia	SDP-15-078	Fino Vino - Grace Drive	Restaurant & Office	45,978	
	SDP-15-004	Coleman Fiat	Auto Retail Sales & Service	13,952	59,930
Elkridge	SDP-16-013	Elementary School #42	School	116,633	
	SDP-16-038	Elkridge Branch Library and Senior Center	Library and Senior Center	44,085	
	SDP-15-069	CVS Pharmacy	Pharmacy	13,281	173,999
Rural West	SDP-14-059	Donaldson Funeral Home	Funeral Home	15,981	15,981
Southeast	SDP-16-012	Maryland Food Center Authority	Warehouse	160,228	
	SDP-16-011	Maple Lawn Business District Area 2	Retail & Office	104,412	
	SDP-16-048	Maple Lawn Farms	Office	102,264	
	SDP-15-005	Napa Washington	Retail, Office & Warehouse	30,015	396,919
TOTAL		_			695,759



Five Year Results

Table 53 shows the countywide approved non-residential site development plans for the last five reporting periods from January 1, 2012 to December 31, 2016. Over this timeframe there were 112 plans approved on 1,553 acres including close to 4.5 million square feet of building space. This equates to an annual average of about 894,000 square feet of new building space approved per year.

Last year, with 721,415 square feet of approved space, was less than the 1.28 million square feet approved the year before. Chart 14 depicts these annual amounts.

Table 54 shows the five year history by building type. Over the five years, about 39% of the total 4.5 million square feet was for office/service space. About 31% was for manufacturing/extensive industrial space, 18% for government and institutional uses, 10% for retail uses and about 1% for other uses.

Table 53
Approved Non-Residential Site Development Plans
2012 to 2016

2012 to 2010							
Square	Number						
Feet	or Plans	Acreage					
794,171	16	191					
1,091,021	31	424					
583,425	23	379					
1,281,525	23	405					
721,415	19	154					
4,471,557	112	1,553					
894,311	22	311					
	Square Feet 794,171 1,091,021 583,425 1,281,525 721,415 4,471,557	Square Number or Plans 794,171 16 1,091,021 31 583,425 23 1,281,525 23 721,415 19 4,471,557 112					

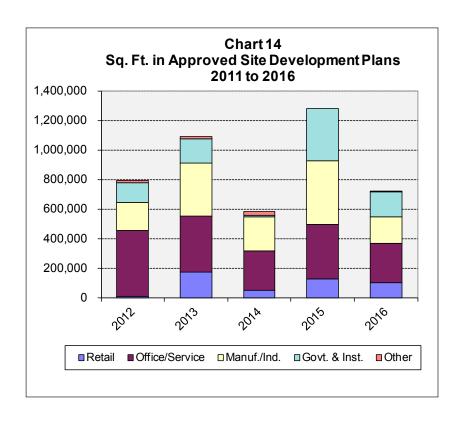


Table 54
Building Square Feet in Approved Non-Residential Site Development Plans 2012 to 2016

		Office/	Manuf./	Govt.		
Year	Retail	Service	Ext. Ind.	& Inst.	Other	TOTAL
2012	10,180	446,128	188,527	136,306	13,030	794,171
2013	175,929	379,888	355,902	164,677	14,625	1,091,021
2014	50,646	265,305	233,866	11,664	21,944	583,425
2015	126,246	373,591	428,019	353,669	0	1,281,525
2016	102,933	264,346	183,026	167,110	4,000	721,415
TOTAL	465,934	1,729,258	1,389,340	833,426	53,599	4,471,557
PERCENT	10.4%	38.7%	31.1%	18.6%	1.2%	100.0%

In-Process Non-Residential Site Development Plans

This section summarizes non-residential site development plans that are in process. The number of plans, potential lots, acreage and square footage of floor space currently being processed as of December 31, 2016, are tabulated and compared with those in process a year earlier.

In Process Plans

Countywide, there were 37 non-residential site development plans in process as of December 31, 2016. These plans include about 870,000 square feet of building space covering 447 acres. This compares to about 529,000 square feet in 32 plans on 357 acres that were in process the previous year (on December 31, 2015).

As shown in Table 55, the Southeast had the most square footage in process, followed by Columbia and then Elkridge. Table 56 shows a more detailed breakdown of square footage by building type. About 572,000 square feet are for office/service uses, 134,000 square feet for government and institutional uses, and 135,000 square feet for retail uses. Manufacturing/extensive industrial space accounts for 23,000 square feet.

Major Projects

Table 57 shows site development plans with buildings greater than 10,000 square feet. Map 13 shows the locations of these projects. These projects account for about 94% of the total 870,000 square feet in process.

Table 55
In-Process Non-Residential Site Development Plans, 12/31/16
with Comparisons to Countywide In-Process on 12/31/15

	Square Feet		Site Dev. Plans		Acreage	
Region	Number	Percent	Number	Percent	Number	Percent
Downtown Columbia	0	0%	1	3%	21	5%
All Other Columbia	320,982	37%	11	30%	105	24%
Elkridge	75,301	9%	8	22%	156	35%
Ellicott City	9,400	1%	4	11%	21	5%
Rural West	6,584	1%	3	8%	76	17%
Southeast	457,447	53%	10	27%	66	15%
TOTAL	869,714	100%	37	100%	447	100%
12/31/2015	529,204		32		357	

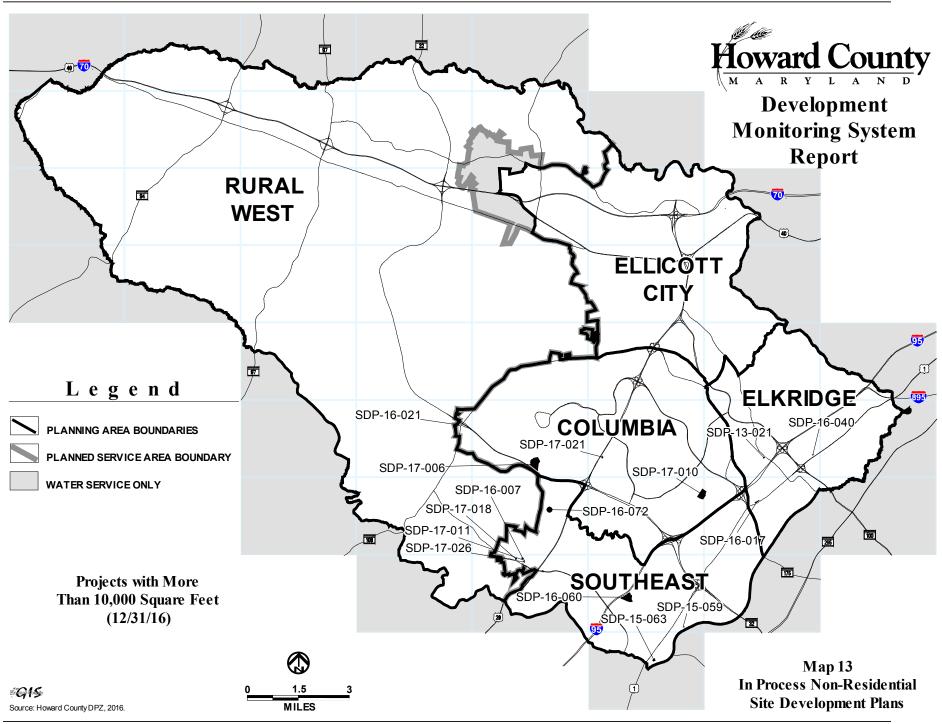
Table 56

Building Square Feet in In-Process Site Development Plans, 12/31/16
with Comparisons to Countywide In-Process on 12/31/15

with companisons to countywide in-Frocess on 12/31/13							
		Office/	Manuf./	Govt.			
Region	Retail	Service	Ext. Ind.	& Inst.	Other	TOTAL	
Downtown Columbia	0	0	0	0	0	0	
All Other Columbia	35,416	255,728	16,893	12,945	0	320,982	
Elkridge	40,857	4,126	6,444	18,709	5,165	75,301	
Ellicott City	9,400	0	0	0	0	9,400	
Rural West	4,868	1,716	0	0	0	6,584	
Southeast	44,393	310,251	0	102,803	0	457,447	
TOTAL	134,934	571,821	23,337	134,457	5,165	869,714	
PERCENT	15.5%	65.7%	2.7%	15.5%	0.6%	100.0%	
		-	•				
12/31/2015	130,473	193,815	30,017	165,734	9,165	529,204	

Table 57
Projects With More Than 10,000 Square Feet in In-Process Non-Residential Site Development Plans, 12/31/16

Region	File Number	Plan Name	Use	Building Area	TOTAL
Columbia	SDP-17-010	7125 Columbia Gateway Drive	Office Building	253,000	
	SDP-16-021	Antwerpen Properties - Ten Oaks	Retail/Restaurant	24,601	
	SDP-17-006	Grace Tech Park	Warehouse	16,893	
	SDP-17-021	Christ Memorial Presbyterian	Church Expansion	12,945	307,439
Elkridge	SDP-16-017	Howard Square	Retail Site	22,304	
	SDP-13-021	Mayfield Logistics Facility	Government Facility	18,709	
	SDP-16-040	Troy Hill Center	Shopping Center	15,990	57,003
Southeast	SDP-16-060	Emerson Corporate Commons	Office Building	184,176	
	SDP-16-007	Maple Lawn Farms	Hotel and Office Building	108,675	
	SDP-17-018	CSH Maple Lawn LLC	Nursing Home	75,000	
	SDP-16-072	Johns Hopkins University - APL	Maintenance Building	27,803	
	SDP-17-026	Maple Lawn Farms	Retail Site	20,258	
	SDP-15-059	Emilia's Acrobatics	Gymnasium	17,400	
	SDP-15-063	Laurel Park Station	Retail Site	12,109	
	SDP-17-011	Maple Lawn Farms	Restaurant	12,026	457,447
TOTAL		-		·	821,889



Page 58

Non-Residential Building Permits

The final stage of the development process is the issuance of building permits. As indicated earlier, in Howard County building permits are required for all new construction. This section of the report tabulates building permits for all new non-residential construction. The number of permits issued as well as the associated square footage by building type have been compiled by planning area. This data comes from the Howard County Department of Inspections, Licenses and Permits.

Summary of Last Year

For the latest reporting period, from January 1, 2016, to December 31, 2016, 89 permits were issued for almost 1.6 million square feet in non-residential building space (Table 58). The greatest amount of square footage was in Downtown Columbia, followed by the Southeast, the rest of Columbia, and Elkridge.

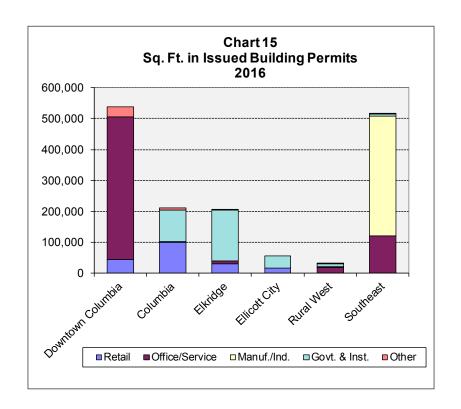
Table 58
Issued Non-Residential Building Permits in 2016

	Square	Feet	Permits Issued		
Region	Number	Percent	Number	Percent	
Downtown Columbia	537,453	35%	11	12%	
All Other Columbia	211,555	14%	32	36%	
Elkridge	205,225	13%	13	15%	
Ellicott City	56,333	4%	8	9%	
Rural West	29,986	2%	8	9%	
Southeast	515,570	33%	17	19%	
TOTAL	1,556,122	100%	89	100%	

Table 59 shows the approved square footage by building type. About 390,000 square feet, 25% of the total, are for manufacturing/extensive industrial uses, the majority of which is in the Southeast. Another 21%, about 323,000 square feet, are for governmental and institutional uses. About 39% of the total, or 609,000 square feet, are for office/service uses, and 12% (192,000 square feet) are for retail uses. Chart 15 shows this breakdown graphically by Planning Area.

Table 59
Building Square Feet in Issued Non-Residential Building Permits in 2016

		Office/	Manuf./	Govt.		
Region	Retail	Service	Ext. Ind.	& Inst.	Other	TOTAL
Downtown Columbia	44,214	460,667	0	0	32,572	537,453
All Other Columbia	99,690	2,173	0	102,405	7,287	211,555
Elkridge	31,523	8,235	0	165,003	464	205,225
Ellicott City	15,850	0	0	40,483	0	56,333
Rural West	0	19,321	2,375	7,970	320	29,986
Southeast	742	119,236	387,793	7,639	160	515,570
TOTAL	192,019	609,632	390,168	323,500	40,803	1,556,122
PERCENT	12.3%	39.2%	25.1%	20.8%	2.6%	100.0%



Last Year's Projects - Greater than 30,000 Square Feet

Of the close to 1.6 million total square feet of non-residential building space in issued permits over the current reporting period, 1.1 million square feet, 68% of the total, were in projects larger than 50,000 square feet. These larger buildings and structures are shown in Table 60. The location of these buildings are shown on Map 14.

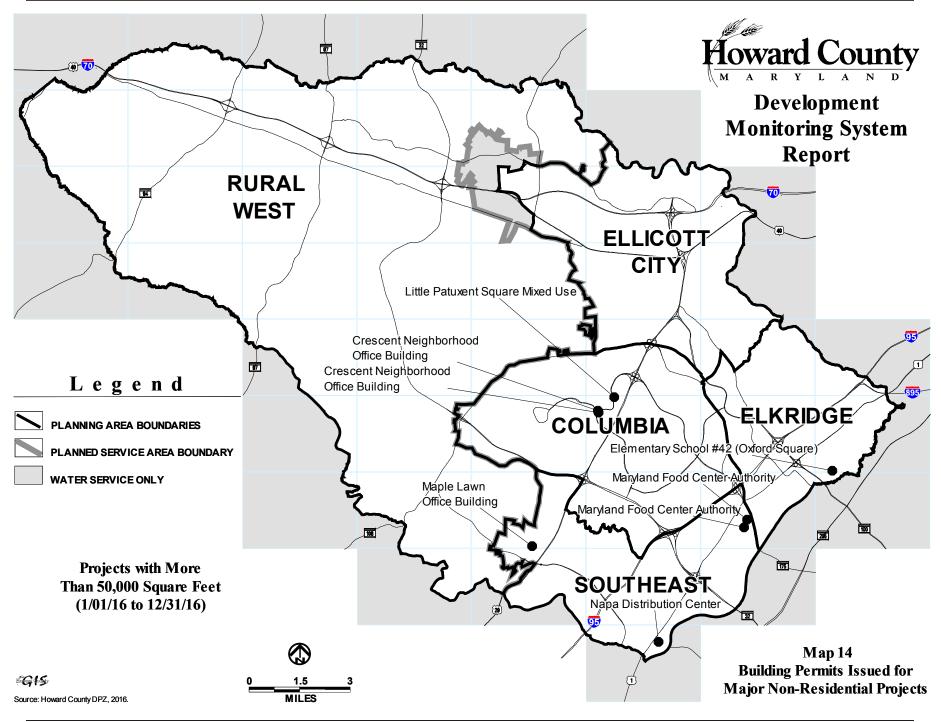
The largest project consists of two new adjacent office buildings in the Crescent Neighborhood in Downtown Columbia (212,000 and 129,000 square feet). Another 119,000 square feet of office space was permitted as part of the mixed-use project known as Little Patuxent Square, also located in Downtown Columbia, near the Lakefront.

In Elkridge, a building permit for a new 117,000 square foot elementary school was issued in 2016. This is the 42nd elementary school to be built in Howard County and is located in the new mixed-use TOD development of Oxford Square.

In the Southeast, two new office/warehouse buildings were permitted as part of the Maryland Food Center Authority (160,000 and 125,000 square feet). Another 104,000 square foot warehouse/distribution addition in the Napa Distribution Center was approved, as well as a new 90,000 square foot office building in Maple Lawn.

Table 60
Building Permits Issued for Major Non-Residential Projects With More Than 50,000 Square Feet in 2016

Region	Name	Proposed Use	Square Feet	TOTAL
Downtown Columbia	Crescent Neighborhood Office Building	Office Buillding	211,887	
	Crescent Neighborhood Office Building	Office Buillding	129,451	
	Little Patuxent Square Mixed Use	Office Buillding	119,329	460,667
Elkridge	Elementary School #42 (Oxford Square)	New Elementary School	116,633	116,633
Southeast	Maryland Food Center Authority	Office/Warehouse Building	160,228	
	Maryland Food Center Authority	Office/Warehouse Building Addition	125,170	
	Napa Distribution Center	Warehouse/Distribution Building Addition	104,415	
	Maple Lawn Office Building	Office Buillding	90,325	480,138
TOTAL		•		1,057,438



Five Year Results

Table 61 shows issued non-residential building permits countywide for the last five reporting periods from 2012 to 2016. Over this five year time-frame there were 394 permits issued for close to 6.2 million square feet of building space. This equates to an annual average of almost 1.2 million square feet per year.

The latest reporting period, with 1.6 million square feet in issued permits, is a 22% increase from the close to 1.3 square feet permitted the year before, and the most of all five years.

Table 62 shows the five year history by building type. Over the five years, 31% of the total 6.2 million square feet was for office/service space. About 27% was manufacturing/extensive industrial space, another 22% for government and institutional uses and 11% for retail space. Chart 16 shows this five year history graphically.

Table 61
Issued Non-Residential Building Permits
2012 to 2016

2012 to 2010					
	Square	Number			
Year	Feet	of Permits			
2012	1,071,462	60			
2013	1,327,421	90			
2014	915,359	67			
2015	1,280,147	88			
2016	1,556,122	89			
TOTAL	6,150,511	394			
ANNUAL AVG.	1,230,102	79			

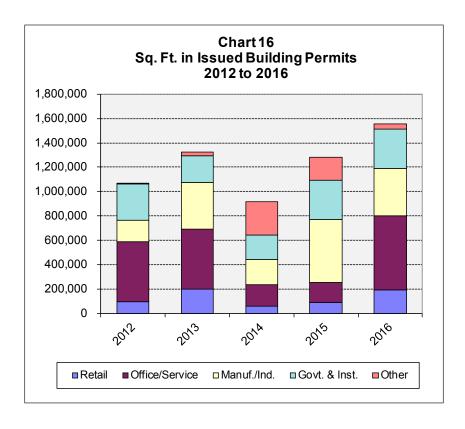


Table 62
Building Square Feet in Issued Non-Residential Building Permits
2012 to 2016

`		Office/	Manuf./	Govt.		
Year	Retail	Service	Ext. Ind.	& Inst.	Other	TOTAL
2012	95,062	493,817	178,211	298,531	5,841	1,071,462
2013	202,457	490,437	383,615	216,024	34,888	1,327,421
2014	61,809	175,405	205,292	199,862	272,991	915,359
2015	92,482	161,620	517,991	321,881	186,173	1,280,147
2016	192,019	609,632	390,168	323,500	40,803	1,556,122
TOTAL	643,829	1,930,911	1,675,277	1,359,798	540,696	6,150,511
PERCENT	10.5%	31.4%	27.2%	22.1%	8.8%	100.0%

Employment Estimates

New job potential has been estimated based on the standard square feet per employee factors shown in Table 63. These factors are multiplied times the square footage of planned building space which is included on approved site development plans and building permits.

Table 63
Square Feet per Employee Standard Factors

Type of Space	SF/Emp.
Retail	400
Office/Service	250
Manufacturing/Extensive Industrial	1,000
Government & Institutional	500

The first section below estimates future employment potential from site development plans. This is followed by an estimate from building permits. The last section discusses estimated actual employment changes as reported by the State Department of Labor, Licensing, and Regulation and the U.S. Bureau of Economic Analysis.

Job Potential from Site Development Plans

Based on the above factors, building space in site development plans approved last year from January 1, 2016, to December 31, 2016, could accommodate an estimated 1,832 employees (Table 64). About 55% of the potential jobs are located in the Southeast, mostly office jobs. About 20% of the potential jobs are located in Elkridge, 13% are located in non-Downtown Columbia, 8% in Downtown Columbia, and 3% in the Rural West.

Countywide, 1,057 potential jobs, about 58% of the total, are office/service jobs. Another 334 are government & institutional jobs (18%), 257 retail jobs (14%), and 183 manufacturing/extensive industrial jobs (10%).

Table 64
Potential Employment from Approved Non-Residential SDP's in 2016
By Use Category

		Office/	Manuf./	Govt.		
Region	Retail	Service	Ext. Ind.	& Inst.	TOTAL	PERCENT
Downtown Columbia	90	52	0	0	142	8%
All Other Columbia	98	144	0	0	242	13%
Elkridge	0	53	0	321	375	20%
Ellicott City	0	0	0	0	0	0%
Rural West	0	64	0	0	64	3%
Southeast	70	744	183	13	1,010	55%
TOTAL	257	1,057	183	334	1,832	100%
PERCENT	14.0%	57.7%	10.0%	18.2%	100.0%	

Job Potential from Issued Building Permits

As shown in Table 65 below, there is a potential of 3,956 new jobs that could be accommodated based on issued building permits. About 62% of the total are potential office/service jobs, mostly in Downtown Columbia. This is followed by 16% government and institutional jobs, 12% retail jobs and 10% manufacturing/extensive industrial jobs.

Table 65
Potential Employment from Issued Building Permits in 2016
By Use Category

		Office/	Manuf./	Govt.		
Region	Retail	Service	Ext. Ind.	& Inst.	TOTAL	PERCENT
Downtown Columbia	111	1,843	0	0	1,953	49%
All Other Columbia	249	9	0	205	463	12%
Elkridge	79	33	0	330	442	11%
Ellicott City	40	0	0	81	121	3%
Rural West	0	77	2	16	96	2%
Southeast	2	477	388	15	882	22%
TOTAL	480	2,439	390	647	3,956	100%
PERCENT	12.1%	61.6%	9.9%	16.4%	100.0%	

State DLLR and U.S. BEA Employment Estimates

The previous sections estimate potential employment from new development. This section provides an overview of estimated employment changes as reported by the State Department of Labor, Licensing, and Regulation (DLLR) and the U.S. Bureau of Economic Analysis (BEA). This would include an increase in employment from new development as well as from any change in the number of jobs in existing building space. The latter would generally be impacted by changes in vacancy rates associated with the economy. It could also be a result of the re-configuration of existing building space resulting in more (or less) jobs per square foot. An example of this is the re-configuration of a warehouse to office use.

DLLR reports statistics produced by Maryland's ES-202 Program. The data are generated and published on a quarterly basis and include all workers covered by the Unemployment Insurance Law of Maryland and the unemployment compensation for federal employees program. Together these two account for approximately 98% of all wage and salary civilian employment. Since wage and salary employment represents approximately 93% of total civilian employment, DLLR estimates that their data reflects over 91% of all civilian employment. However, a comparison of the State data with federal employment data from the Bureau of Economic Analysis (BEA) shows that there are a lot more non-wage and salary jobs. These would include proprietors and also include part-time jobs.

Table 66 shows both DLLR and BEA employment data beginning in 2001. BEA data have a one year reporting time lag resulting in no available data for 2016. Observing State DLLR data, reflecting the first quarter employment data for each year, there has been an average increase of 2,288 jobs per year for the last 15 years. Job losses for 2009 and 2010 due to the most recent recession, and loses in a few other years, as reported by DLLR have lowered this longer term average.

Jobs reported by the BEA through 2015 (the latest year available) result in an annual average of 3,831 new jobs from 2001 to 2015. This higher average job growth reflects the increasing number of proprietors.

For the most recent reporting period, from 2015 to 2016, the State reports an increase of 5,507 jobs in Howard County. This follows a smaller 3,580 job increase the previous year.

Table 67 shows the jobs and average wages by job type as reported by the State DLLR for the first quarter of 2015 and 2016. In the first quarter of 2016, DLLR reported that there were 165,038 jobs in Howard County with an average weekly wage of \$1,232. This compares to 159,531 jobs one year earlier with an average wage of \$1,238 reflecting a 0.5% decrease in average weekly wages over the one year time period.

Table 66
Jobs in Howard County

	DL	LR ¹	BEA ²		
Year	Jobs	Change	Jobs	Increase	
2001	130,717		171,973		
2002	133,338	2,621	174,171	2,198	
2003	133,231	(107)	174,545	374	
2004	136,493	3,262	179,778	5,233	
2005	135,462	(1,031)	185,363	5,585	
2006	141,236	5,774	194,174	8,811	
2007	145,385	4,149	198,615	4,441	
2008	147,573	2,188	200,614	1,999	
2009	142,266	(5,307)	199,142	(1,472)	
2010	141,169	(1,097)	200,591	1,449	
2011	147,357	6,188	206,914	6,323	
2012	154,504	7,147	213,683	6,769	
2013	156,400	1,896	217,518	3,835	
2014	155,951	(449)	219,294	1,776	
2015	159,531	3,580	225,608	6,314	
2016	165,038	5,507			
Average		2,288		3,831	

Maryland State Department of Labor, Licensing and Regulation (1st quarter employment)

^{2.} U.S. Bureau of Economic Analysis (average annual employment)

Table 67
Jobs and Weekly Wages by Industry, 2015 and 2016

	2015		2016		
Job Type	Jobs	Avg. Wage	Jobs	Avg. Wage	
Government Sector					
Federal Government	622	\$1,675	632	\$1,467	
State Government	1,844	\$963	1,818	\$987	
Local Government	14,740	\$1,080	14,949	\$973	
Subtotal/Average	17,206	\$1,089	17,399	\$993	
Goods Producing					
Natural Resources and Mining	265	\$658	261	\$768	
Construction	9,948	\$1,211	11,089	\$1,275	
Manufacturing	7,572	\$1,573	7,747	\$1,510	
Subtotal/Average	17,785	\$1,357	19,098	\$1,364	
Service Providing					
Trade, Transportation, and Utilities	32,898	\$1,063	34,327	\$1,067	
Information	3,310	\$2,118	3,315	\$1,845	
Financial Activities	9,314	\$1,896	9,715	\$1,809	
Professional and Business Services	42,101	\$1,657	44,243	\$1,707	
Education and Health Services	18,197	\$929	18,249	\$860	
Leisure and Hospitality	14,241	\$370	14,342	\$377	
Other Services	4,479	\$684	4,350	\$694	
Subtotal/Average	124,540	\$1,242	128,541	\$1,245	
TOTAL	159,531	\$1,238	165,038	\$1,232	

Source: State Department of Labor, Licensing and Regulation (1st quarter employment). Weekly wages.

Howard County Department of Planning and Zoning 3430 Court House Drive Ellicott City, MD 21043 (410) 313-2350