



THE  
**State  
of Land  
Preservation**  
IN HARFORD COUNTY



**March 2024**

A special report by Tom Daniels, Ph.D. in collaboration with Harford Land Trust.



Cover Photo Credit: Kristin Kirkwood  
Photo Credit: Edwin Remsburg

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# Executive Summary

The purpose of this report is to present a comprehensive overview of the progress to preserve Harford County's rich and varied landscapes now and for future generations.

The report also contains recommendations for continued success of the County's preservation programs for farmland, forests, natural areas, and parks. These programs are principally administered by Harford County Government and are supplemented by Harford Land Trust and The Manor Conservancy and funding from private donors and a variety of state and federal sources.

Harford County is the eighth largest county in Maryland, covering 281,213 acres. Aberdeen Proving Ground encompasses 37,896 acres (13.5% of the County), much of it along the Chesapeake Bay.

More than 63,000 acres of the County have been preserved as of June 2023 through the retirement of development rights, known also as the sale or donation of a conservation easement. This represents an investment of more than \$253 million in public and private funding since 1982 (see Chart 1 on page 2). The land remains in private ownership but cannot be developed except for agriculture, forestry, and open space uses.

State, County, and municipal governments own close to 13,500 acres of parkland, some of which are also preserved through conservation easements or State covenants. State owned lands account for nearly 8,000 acres or two-thirds of the parkland in Harford County.

As of 2020, Harford County's population was close to 261,000 with just under 100,000 households. Notably, in 1960, Harford County had a population of just under 77,000. Then the County's population began to grow rapidly, spurred by the completion of Interstate 95. In the 1960s, the County's population jumped by 50%, adding nearly 40,000 people. In the 1970s, the County grew by another 26%. Land prices rose and land development accelerated both in Harford County and across Maryland.



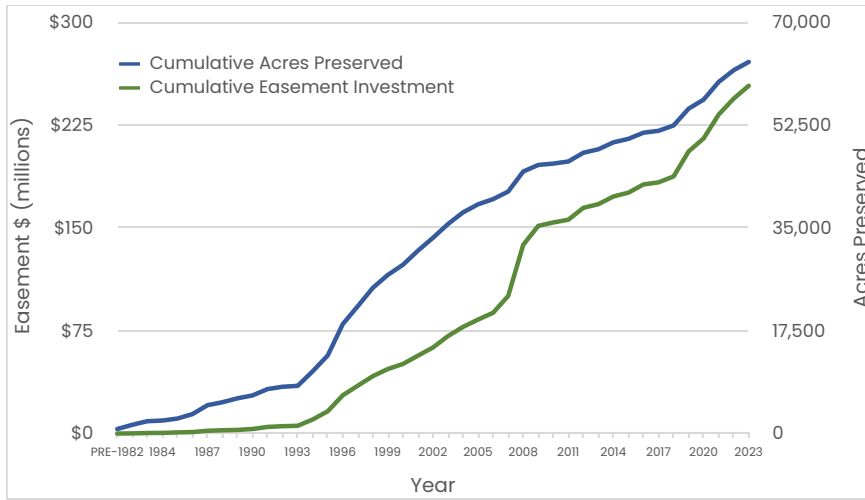
Photo Credit: Shawn Young



*Land preservation happens through the voluntary decisions of landowners to sell or donate their property or to sell or donate their right to develop their land to a government agency or a private, non-profit land trust.*

*Land preservation provides benefits to the economy, environment, and society, making up a triple bottom line of sustainability and value to the community.*

**Chart 1. Cumulative Acres Preserved and Easement Investment in Harford County**



In response, the State of Maryland took the lead in land preservation by creating the Maryland Environmental Trust in 1967 to accept donations of conservation easements on important open lands in return for income tax reductions. In 1969, Maryland established Program Open Space to generate funds for the purchase of land for state and local parks and open space.

In 1977, Maryland formed the nation’s first state-level farmland preservation program, the Maryland Agricultural Land Preservation Foundation. The program provided cash payments for conservation easements thereby creating a preservation option for landowners that could not afford to donate an easement.

The first Harford County family preserved their property in Aberdeen in 1978 with a conservation easement donation to the Maryland Environmental Trust. Modest land preservation efforts continued in the County but were insufficient to balance the explosive growth in the later decades of the twentieth century.

In 1992, Harford County voters overwhelmingly approved a ballot measure to create a County farmland preservation program. The previous year a group of concerned citizens formed the Harford Land Trust, a nonprofit which aimed to access private funding sources for land preservation as well as work with public preservation programs. The Manor Conservancy was launched in 1993 to preserve the historic My Lady’s Manor region of Harford and Baltimore counties.

Harford County benefitted from the designation of two Maryland Rural Legacy areas between 1999 and 2002, the Deer Creek and Manor areas. Beginning in 2006, Aberdeen Proving Ground provided funding for a new program, the Army Compatible Use Buffer program, targeting land preservation near the military installation.

Harford County is projected to add another 30,000 residents by 2045, which will increase the development pressure on open land. Harford County’s most recent master plan, 2016’s HarfordNEXT, set several goals and guidelines to manage the County’s growth. Compact residential development within the

designated Development Envelope for urban growth can continue to accommodate most of the growing population. HarfordNEXT set a goal to reach 75,000 acres of preserved private property by 2040.

From a planning perspective, Harford County has done a good job of balancing population and economic growth along with a steady commitment to land preservation compared to other Maryland counties. The County ranks fifth among Maryland counties in the acres preserved with conservation easements.

Despite past success, achieving the goal of 75,000 acres of private land preserved poses a challenge. Harford County rural lands have suffered moderate to severe fragmentation due to zoning density allowances. Few properties greater than 200 acres remain unpreserved, meaning that preservation efforts must depend on more transactions with smaller acreage landowners. The cost of preservation will continue to rise along with land prices, making the public investment more costly as time goes by.

HarfordNEXT also set a target of 30 acres of public recreational land for every 1,000 residents, in line with State recommendations. When measured against the County’s 2020 population, there are 30.1 acres of recreational land per 1,000 residents. Maintaining this ratio will be difficult as it requires an additional 557 acres of recreational land by 2035.

Land preservation is not a “no growth” strategy. Many counties in Maryland and in other Mid-Atlantic states have preserved large amounts of land and their populations and economies continue to grow. For example, Lancaster County, Pennsylvania added more than 125,000 people between 1990 and 2020 while preserving more than 100,000 acres of farmland. Over the same time, Kent County, Delaware grew by nearly 70,000 people and preserved more than 65,000 acres of farmland.

Land preservation helps to strike a balance between maintaining a quality environment with clean air and water, beautiful and productive landscapes, ample recreation areas, and the economic development that benefits County residents.

The land preservation efforts in Harford County have produced remarkable achievements that all County residents enjoy, but there is more work to be done. The continued success of Harford County’s land preservation efforts will depend on the willingness of landowners to choose to preserve their land and adequate funding from public and private sources.



## Recommended Actions

Maintain Harford County’s ½% real estate transfer tax allocation to the County’s land preservation program.

Maintain the current boundaries of the Development Envelope and use Smart Growth principles to accommodate commercial and residential growth within the Development Envelope.

Adopt Maryland’s goal of preserving 30% of the land in Harford County by 2030 and 40% by 2040.

Utilize payment incentives to attract land preservation in areas at risk of sprawl, such as between the Development Envelope and the Priority Preservation Area.

Target large open space parcels within or adjacent to the Development Envelope for parkland acquisition and maximize the use of Maryland’s Program Open Space funding.

Consider new funding mechanisms and partnerships to preserve critical Green Infrastructure.

Support economic development programs and policies that strengthen agriculture, forestry, and related commercial activities that are compatible with preserved land.



Photo Credit: Debbie Deloach

# Introduction

## A Shifting Landscape in Harford County

**Harford County is part of the Greater Baltimore Metropolitan Area, and more than eight million people live within a one-hour drive of the County. Harford County shares its western boundary with Baltimore County and sits to the northeast of the City of Baltimore. To the east and south, the County borders on two great waterways — the Susquehanna River and Chesapeake Bay. The Mason-Dixon line forms the County’s northern boundary.**

The Piedmont and coastal plain landscape of Harford County features level and productive agricultural soils, rolling hills, stream valleys, and woodlands. According to the 2016 HarfordNEXT Master Plan, 46% of the County is covered in trees and 60% of the County is within a high quality watershed. Tree canopy and high-quality watersheds are co-located primarily in the rural lands outside of Harford’s designated growth area.

Harford County was formed in 1773 and boasts a rich history with many designated historic sites and buildings. There are 68 individual properties on the National Register of Historic Places, 12 National Register Historic Districts, and one National Historic Landmark. Twenty-one of the 68 individual National Register sites are located on land preserved by a conservation easement.

## Rapid Growth and the Preservation Response

In 1959, Harford County was a rural area with 1,300 farms and 165,000 acres of farmland, accounting for almost 60% of the County's land. The County population in 1960 stood at just under 77,000. Then the County's population began to grow rapidly, spurred by the completion of Interstate 95. In the 1960s, the County grew by 50%, adding nearly 40,000 people. In the 1970s, the County's population grew by another 26% (see Chart 2). As land prices rose in Harford County, many landowners had limited options to access capital other than to sell their land to developers. By the late 1980s, population growth had resulted in traffic congestion and strains on schools and public services.

While some County landowners had begun to participate in the Maryland Environmental Trust (MET) and Maryland Agricultural Land Preservation Foundation (MALPF) land preservation programs in the late 1970s and early 1980s, development was far outpacing preservation. The cost of community services to taxpayers, including schools, roads, police, and water and sewer, rose rapidly without the counterbalance of land preservation and smart growth zoning and land development policies.

In response, in 1992, County voters overwhelmingly approved the creation of a County farmland preservation program and enabled the Harford County Council to levy a new tax to fund the program. The Council later passed a one percent real estate transfer tax, half of which would fund the newly formed Harford County Agricultural Land Preservation Program and half to pay for school construction and maintenance.

**Chart 2. Population Growth in Harford County 1960–2020**  
(Source: U.S. Census, projections by Maryland State Data Center)

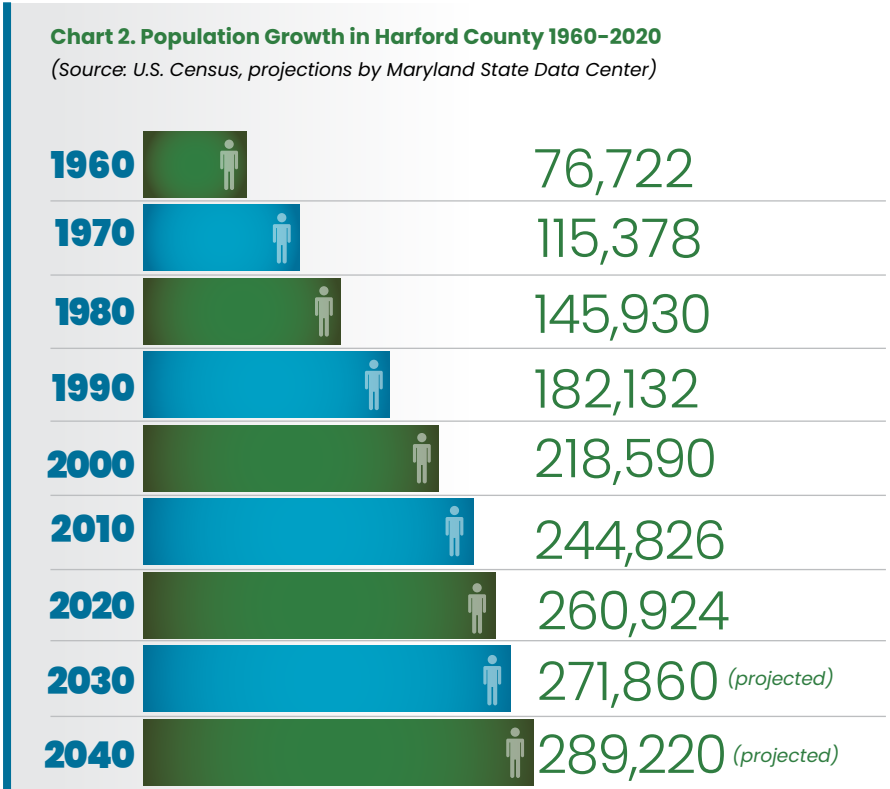


Photo Credit: Judy Dettner



*Two nonprofit land trusts, Harford Land Trust and The Manor Conservancy, were also formed in 1991 and 1993, respectively, in direct response to the rapid development of the prior three decades.*



Photo Credit: Shawn Young

Land preservation in Harford County dramatically accelerated in the early 1990s with more than 23,500 acres preserved between 1992 and 2001, representing a greater than 300% increase from the prior ten-year period. Despite this success, land development, both within and outside of the Development Envelope, continued at a steady pace as Harford County farmland remained largely ripe for development due to generous density allowances.

Harford County adopted its first agricultural zoning in 1957, permitting rural lands to be subdivided into half-acre lots. In 1974, this allowance was changed to permit one lot for every two acres. When the County's Development Envelope was established in 1977, agricultural zoning was amended again to permit one lot for every 10 acres. The concept of family conveyances was also added at this time, allowing additional lots for family members, often resulting in significant increases in subdividable lots. Harford County introduced Village designations and Rural Residential (RR) zoning in 1988 but was largely unsuccessful at curbing residential sprawl into the County's rural areas.

The high number of allowable home lots in the agricultural zone enabled the continued loss of farmland and forest blocks. This created the high degree of low-density residential fragmentation in many areas easily seen in the County's parcel boundary map today.

In 1997, as part of Maryland's Smart Growth legislation, the Rural Legacy program was created to provide funds to help form large contiguous blocks of preserved farmland, forests, open space, and valuable natural areas. Maryland designated the Deer Creek and Manor Rural Legacy Areas, the latter of which also covers a portion of Baltimore County, between 1999 and 2002. The boundary of the Deer Creek Rural Legacy Area was expanded in 2009 to include the northern portion of the watershed.

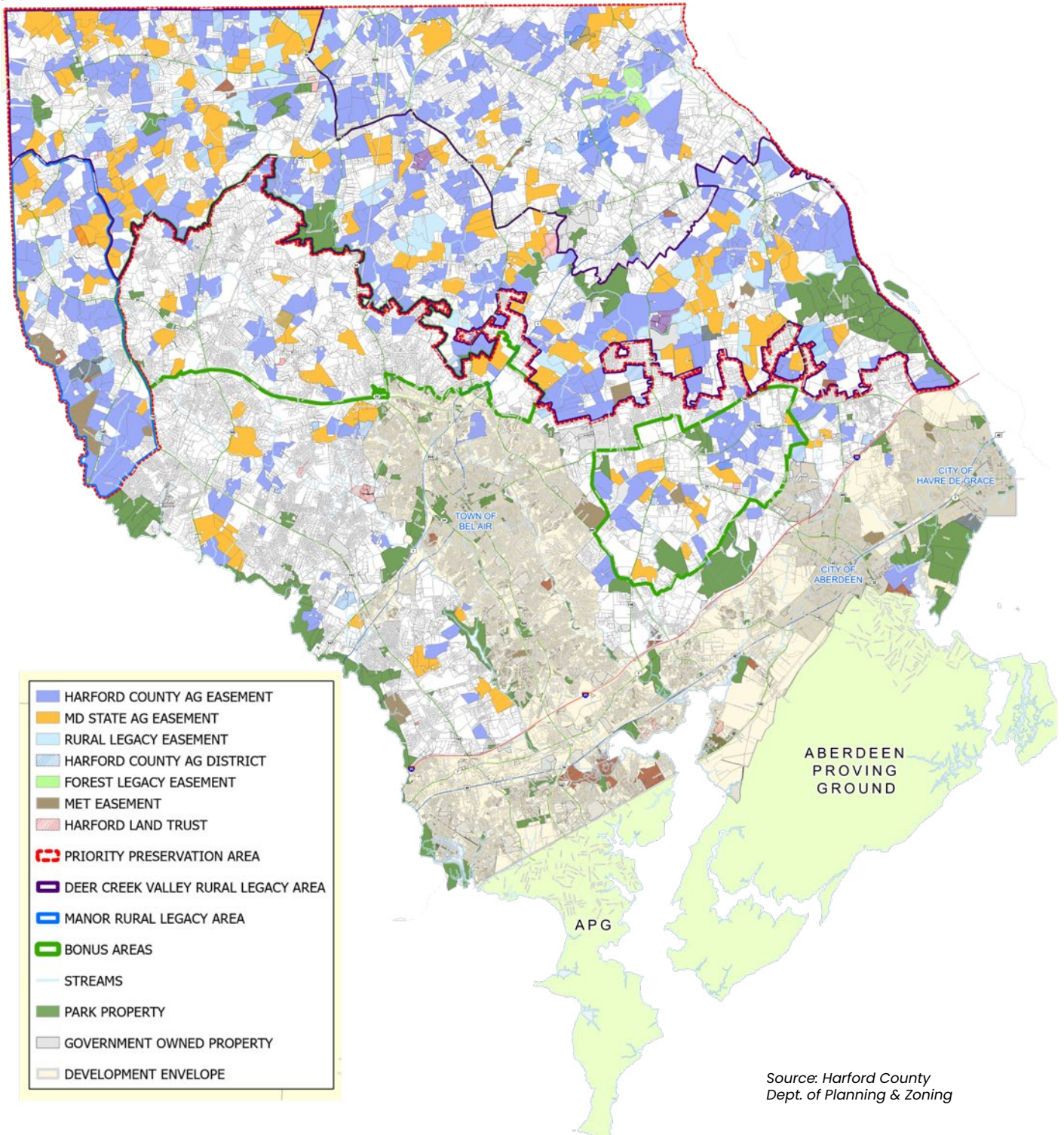
Beginning in 2006, Aberdeen Proving Ground provided funding for a new program, the Army Compatible Use Buffer program, targeting land preservation near the military installation.

In 2009, as required by the State, the County adopted a Priority Preservation Area (PPA) which identifies the County's most concentrated area of agricultural and forestry resources and the primary target area for land preservation. Harford County's PPA was expanded multiple times and, as of 2016, covers more than 110,000 acres, of which 88% are zoned agricultural. It consists of the two Rural Legacy Areas and additional land in the northern part of the County. Agriculture and woodland uses make up almost 85% of the Priority Preservation Area and there are 55 state identified wildlife habitat sites. State legislation also provides targets for preservation in PPAs. More than 45,000 acres of preserved land representing almost 72% of all land preserved in Harford County lies within the Priority Preservation Area (see Figure 1).



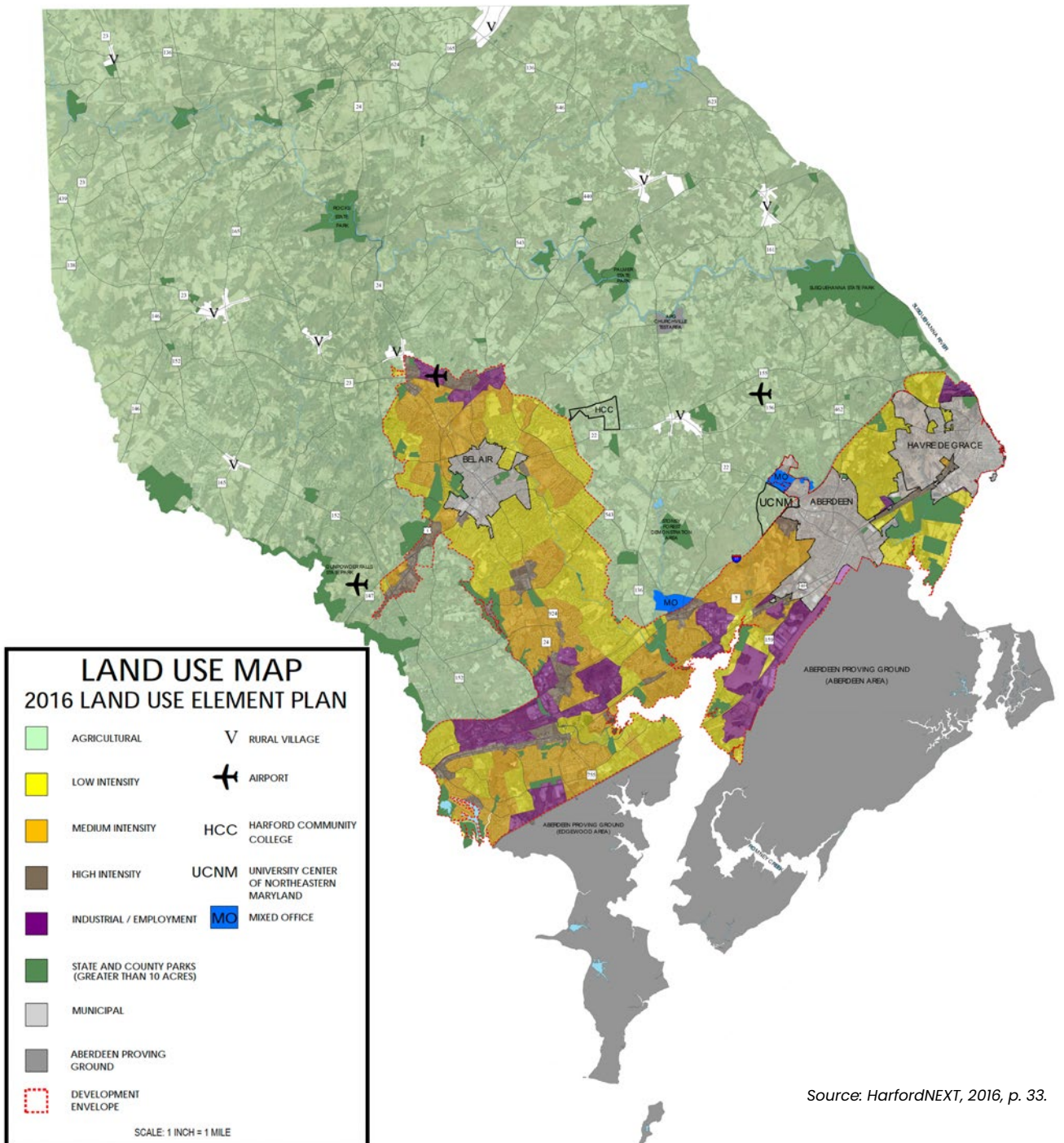
Harford County's preservation efforts were aided by the passage of the Maryland Sustainable Growth and Agricultural Preservation Act in 2012. The legislation resulted in limiting large-lot residential developments in the County to seven lots per parcel in the rural areas as a means of reducing the spread of septic systems.

Figure 1. Land Preservation in Harford County, June 30, 2023



Harford County has carefully separated designated growth areas from the more rural parts of the County. Since 1977, the County has designated a Development Envelope—often described as an inverted T—which encompasses greater Bel Air, Aberdeen, and Havre de Grace as well as the Interstate 95 corridor (see Figure 2). Between 1980 and 2014, out of 54,000 building permits issued in the County, 81% were issued inside the Development Envelope. In 2022, 78% of the 718 residential building permits issued in the County were located inside the Development Envelope, according to the County’s Annual Growth Report.

**Figure 2. Harford County and the Development Envelope.**



Source: HarfordNEXT, 2016, p. 33.



Photo Credit: Joe Subolefsky 

## Development Pressure Today

**In 2023 Harford County had an estimated population of 265,754, an increase of more than 45,000 people and 21% over the 2000 population. This rate of growth is higher than the State of Maryland’s 14% growth rate over the same period. As of 2019, 72% of Harford County’s population lived within the Development Envelope (American Community Survey, 2019).**

Population and parallel development growth will continue in Harford County for the foreseeable future. The combination of an attractive landscape and good location has drawn new residents to the County and convinced longer term residents to stay. As the County’s 2020 Growth Report noted, “Harford County is strategically located on I-95 in the heart of the East Coast and Mid-Atlantic markets. Harford’s location, highly skilled workforce, and progressive, business-friendly environment offers the ultimate setting to a wide range of prospective companies and industry sectors” (p. 3).

Harford County is projected to add another 16,000 residents between 2022 and 2032 and another 14,000 residents by 2045. As noted in the County’s 2022 Annual Growth Report, the Development Envelope has an estimated capacity for approximately 12,200 more dwelling units at current zoning designations. However, municipal annexations have had and will continue to have a significant effect on the County’s main growth area.

*Harford County ranks among the highest in the state in estimated market value of farmland and buildings, at \$10,906 per acre according to the 2017 Census.*

## Harford County's Agricultural Economy

Outside of the Development Envelope, farming is a leading land use and accounts for about one-quarter of all the land in Harford County. Farms are businesses, and farmland protection is economic development. The health of the agricultural economy will influence whether landowners decide to preserve their farms.

Harford County is part of a regional agricultural economy and is closely tied to the agriculturally rich counties of Lancaster and York in Pennsylvania.

In 2017, according to the U.S. Census of Agriculture, Harford County had more than 600 farms which produced almost \$46 million in farm product sales, but this figure does not include the equine industry, an important part of Harford County agriculture. Total economic activity of agriculture, forestry, and related support businesses totals nearly \$1 billion per year (see Table 1).

Corn, hay, and soybeans are the leading crops. Cattle and horses are the leading livestock. Vegetable farms, orchards, wineries, agritourism, and on-farm markets are widespread. The average value of a farm in 2017 was almost \$1.3 million. In Harford County 99% of farms are family-owned.

The average farm size in Harford County is 118 acres, with a median of 27 acres. These data indicate that Harford County's landscape is dominated by many small farms; however, 28 farms in the County operate over 500 acres. Harford County ranks among the highest in the state in estimated market value of farmland and buildings, at \$10,906 per acre according to the 2017 Census.

**Table 1. Total agricultural economic activity in Harford County**

Economic Activity	Revenue	Jobs
Agriculture	\$68.4 million	948
Agricultural support businesses	\$894 million	3,000
Forestry	\$9.2 million	55
<b>TOTAL</b>	<b>\$971.6 million</b>	<b>4,003</b>

(Source: Diriker et al. 2018)

The 2016 HarfordNEXT Master Plan identified 126,362 acres, or approximately 55% of the total land area of the County, in agricultural use. This land includes cropland, pasture, and extensive forested areas. As of June 2023, Harford County has more than 63,000 acres of preserved land, or roughly half of the land in agricultural use.

## Public Open Space

A discussion of public open space is included in this report given the considerable amount of parkland in Harford County. Additionally, the public perception of land conservation is often heavily influenced by the availability and accessibility of parkland. Parkland is essential to community well-being and residents' relationship to the land, whether private or public.

Parks are created through the outright purchase or donation of land. The bulk of parkland in Harford County is government owned and totals nearly 13,500 acres (see Table 2 and Figure 3). The Harford County Board of Education owns a further 1,800 acres of land, including Harford Glen, the County's 264-acre environmental education center. Very few privately owned properties allow free public access.

**Table 2. Public Recreation Lands in Harford County, 2022**

State lands	7,960 acres
County parks	4,891 acres
Municipal parks	324 acres
Board of Education parks (Harford Glen)	264 acres
<b>TOTAL</b>	<b>13,439 acres</b>



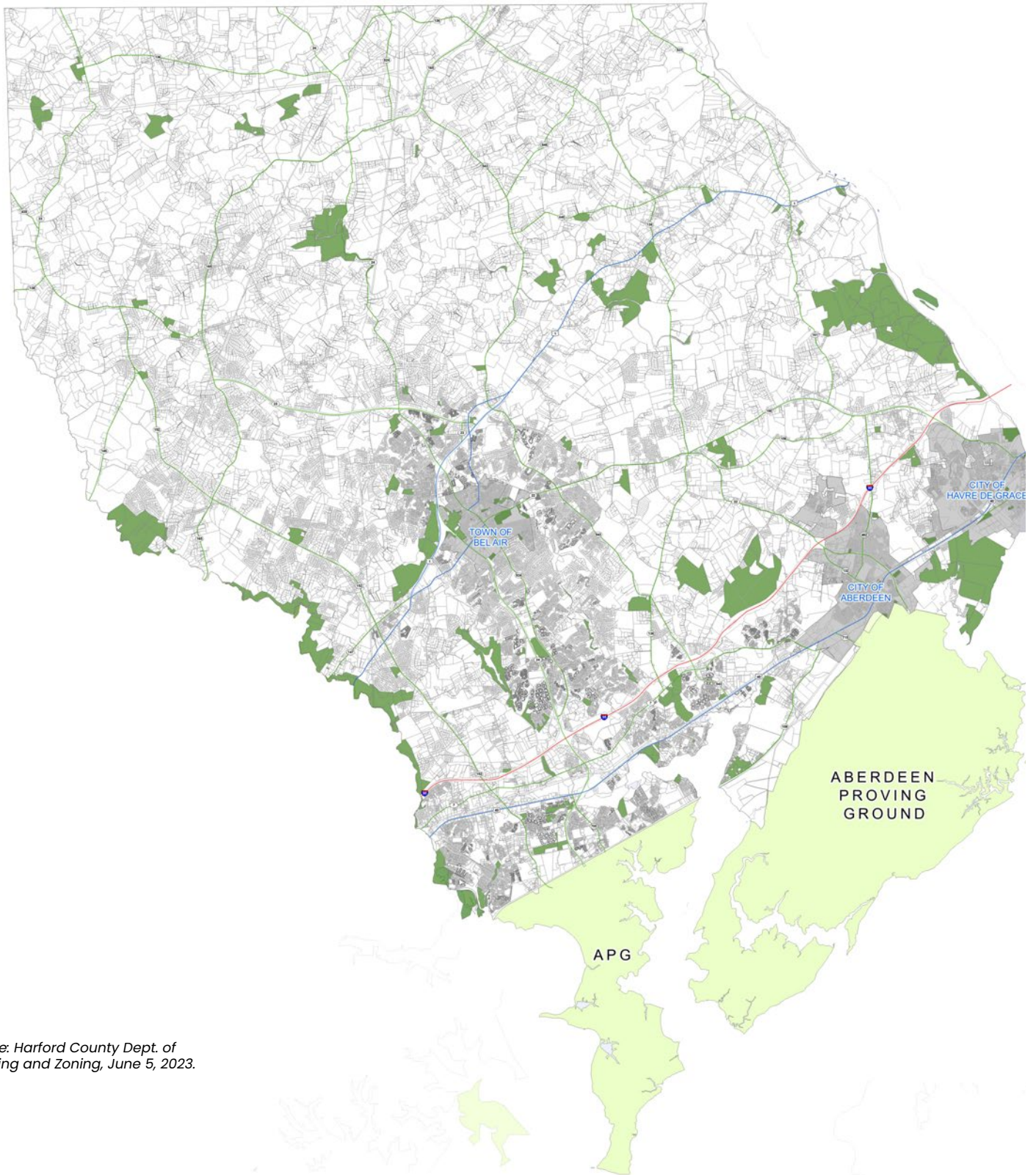
Photo Credit: Joe Subolefsky

Large public purchases of land over 1,000 acres are all but a relic of the past. Most of the large State Park acquisitions occurred in the late 1940s and early 1960s including Rocks, Gunpowder Falls, Susquehanna, and Palmer State Parks which collectively total nearly 6,500 acres. Stoney Demonstration State Forest, covering more than 1,200 acres in Creswell, was purchased in two pieces in 1981 and 2021. Notably, the more recent purchase of roughly 900 acres was made possible in great part due to the Tier 4 designation which would have allowed only 21 homes to be built despite its size and adjacency to I-95. This purchase forms an important greenbelt, permanently restricting the expansion of Aberdeen and the Development Envelope.

Harford County Government and public school system properties over 250 acres include Harford Glen, the Edgely Grove/Tollgate/Heavenly Waters complex, and Oakington Peninsula. Importantly, these parks are all within or adjacent to the Development Envelope providing essential open space access for Harford's urban center. Most of Harford Glen was acquired in 1948 through a low-cost transaction with the U.S. Army. The other two park complexes were purchased piece-meal between 1969 to 2020, representing the precariousness of cobbling together previously fragmented land. Harford County's purchases in the last few decades were funded in large part by Maryland's Program Open Space state and local allocations.

For more than 30 years, Harford Land Trust has played an important role in identifying, brokering, and co-financing County and State parkland and conservation areas. When necessary, HLT has also acquired land and managed it both short and long-term until such time as it can be transferred or sold to local government.

**Figure 3. Park Lands in Harford County**



Source: Harford County Dept. of Planning and Zoning, June 5, 2023.



Photo Credit: Judy Dettner

## What is Land Preservation?

Land preservation is a **voluntary** process by which a landowner sells, donates, or makes a bargain sale of part cash and part donation of the right to develop land to a government agency or a private, non-profit land trust. Selling or donating development rights—also known as selling or donating a **conservation easement**—is the most common method that landowners use to preserve their land. The landowner and a government agency or private land trust sign a Deed of Easement, which spells out the restrictions placed on the land—such as no commercial use, industrial use, or residential subdivisions—and is recorded in the county land records.

Another way that land preservation can happen is when a landowner decides to sell or donate land to a government agency for a public purpose, such as a park, or to a private, non-profit land trust for a nature preserve, which may or may not be open to the public.



*“Preservation is about deciding what is important, figuring out how to protect it, and passing along an appreciation for what was saved to the next generation.”*

*–National Park Service*

In this report, all the conservation easements discussed are permanent. They “run with the land,” so when the land is sold or passed on to heirs, the restrictions in the Deed of Easement apply to all future landowners. The land remains private property and the landowners retain all other rights and responsibilities that go with land ownership, such as the right to lease the land and paying property taxes. The holder of the conservation easement, whether a government agency or a private land trust, has the responsibility to monitor the preserved property to ensure that the landowner is abiding by the terms of the Deed of Easement.

**There are four main compensation options for a conservation easement transaction available to Harford County landowners.**

- 1. Full donation of the conservation easement value;**
- 2. Full cash payment as determined by an appraisal or easement valuation system;**
- 3. “Bargain sale” involving a part cash payment and a part donation; and,**
- 4. Installment Purchase Agreement involving annual payments of tax-free interest and some principal over a certain number of years, usually 10 or 20 years.**

Once a conservation easement is placed on private land, then the real work of land conservation begins. First, the holder of the conservation easement—whether a government agency or a private land trust—must monitor the property to ensure the landowner is abiding by the terms of the Deed of Easement. All land preservation programs in Harford County have monitoring requirements but at different time intervals ranging from every one to ten years.

An important step in the stewardship of preserved land occurs when the land is sold or passed on to heirs. The new landowners need to understand what a conservation easement is and the rights and obligations a conservation easement places on both the easement holder and the landowner.

The durability of conservation easements has been proven time and again. Nonprofit land trusts maintain financial reserves and insurance should legal action be required to uphold the terms of an easement.



## Benefits of Land Preservation

Land preservation provides benefits to the economy, environment, and society, making up a triple bottom line of sustainability and value to the community.

### Economy

- **Promotes economic development** – Farms are businesses. If retaining and growing local business is an economic development goal, land protection is economic development. Harford has approximately 600 farms and total economic activity of agriculture, forestry, and related support businesses totals nearly \$1 billion per year.
- **Promotes local investment** – Farmland preservation spurs further investment. Independent studies in the Mid-Atlantic region show most proceeds of easement payments stay in the local economy to improve farm business infrastructure, buy machinery and land, and/or increase leased land.
- **Protects local jobs** – Working farms create more than 3,000 direct and indirect employment opportunities in Harford County. There are positions on the farms themselves—some jobs require highly skilled workers, while other jobs are available to younger workers or those new to farming. Farms also create jobs in related businesses such as food processing, retail stores, insurance, veterinary care, and equipment sales. Preserved farmland ensures these jobs will be there for the next generation, too.
- **Promotes tourism** – The beauty of farms and rural lands appeals to many people. Agricultural-based tourism (known as agritourism) offers people a chance to enjoy open space in a variety of ways: they might pick their own strawberries, take a tour of a vineyard, or hold their wedding in a bucolic farm setting. Tourists are also attracted to Harford's opportunities for outdoor recreation, including paddling, boating, angling, birding, walking, and hunting. This tourism has ancillary benefits for the community as visitors spend money in nearby hotels, stores, and restaurants.



Photo Credit: Joe Subolefsky

### Environment

- **Protects high-quality agricultural soils** – Harford County is home to some of the most productive, non-irrigated soils in the country. More than 45% of the County's farmland (as measured by total agriculturally assessed land) consists of soils rated Class I and II – prime farmland (Natural Resources Conservation Service). Another 21% is rated Class III – farmland of statewide importance. Prime soils can produce more food per acre with less fertilizer and inputs.
- **Benefits the environment** – Preservation of fields, pastures, and woodlands means clean air, drinkable water, fertile soil, and flood protection. These natural resources can be viewed as capital assets—they have tangible real-world economic value, and, if managed properly, their value does not depreciate over time. Land preservation is also environmental stewardship, as natural resource protections such as stream buffers and prohibitions against dumping and pollutants are built into conservation easements.

## Society

- **Enhances Harford's quality of life** - Studies demonstrate that open spaces can boost the value of neighboring commercial properties. Businesses seeking new locations report that quality of life is a major factor in their decision-making, and cultural and recreational open spaces are important components in creating that quality of life. Protected land generally enhances the value of nearby residential property too. In most cases, home buyers prefer a view of a farm or forest to a view of a developed property and will be more likely to purchase if that view is guaranteed to remain in place.
- **Protects local food production** - Increasingly, consumers want to know who is growing their food and how their food is grown. Availability of local food is vital to our health and wellbeing. As specialty crop production grows, Harford citizens will have more choices of fruits and vegetables, local meats, dairy, nursery plants and other products.
- **Avoids costs through smart growth** - Farmland preservation is a smart growth tool, saving taxpayers money by avoiding costs on expensive infrastructure and other municipal services required by residential property owners, such as schools, police, and fire protection. Haphazard development results in unpredictable and costly infrastructure and services. Concentrated development allows public services and facilities to be sited economically in population centers with the assurance that outlying land will not be developed. A well-organized community with preserved land can balance growth and development while retaining working lands, natural spaces, and recreation opportunities.





Photo Credit: Edwin Remsberg

# Programs and Partners that Protect Land in Harford County

**Land preservation in Harford County features a network of programs (presented below in chronological order), offered by Federal, State, and County governments as well as private, non-profit land trusts. The administrators of these public and private land preservation programs work together to help landowners find the program that best fits their needs. This is especially important because of the variety of land and landowners in Harford County.**

Other tools, including agricultural zoning and preferential tax assessment for farmland and forests can also be effective in controlling sprawl. These tools, however, are not permanent. An act of the Maryland Legislature or County Council can eliminate or modify these regulations at any time.

## Maryland Environmental Trust

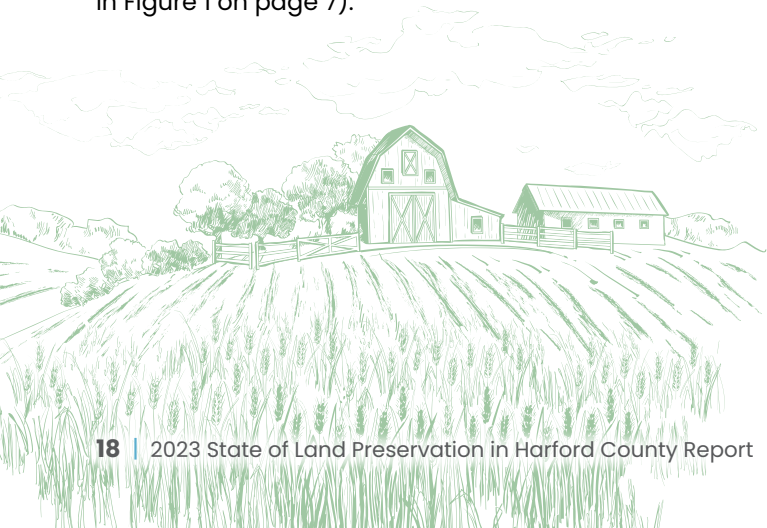
Maryland Environmental Trust (MET) was established by the Maryland Legislature in 1967 to accept the voluntary donation of conservation easements on private land in exchange for income tax deductions under the Internal Revenue Code. Later, in 2001, Maryland approved a 15-year state and local property tax exemption on unimproved land. An easement donation also may qualify for a federal and state income tax deduction, and in some cases could reduce inheritance taxes.

MET is an agency within the Maryland Department of Natural Resources and is governed by a board of trustees. MET received its first donated conservation easement in Harford County in 1978 and has preserved a total of 3,425 acres in the County (the brown properties in Figure 1 on page 7).

## Maryland Program Open Space

Program Open Space (POS) was established by the Maryland Legislature in 1969 to generate public funds for the acquisition of public parkland and open space. POS receives revenue from a 0.5% state transfer tax on the sale price of real estate. POS makes local parkland acquisition and park facilities grants to county and municipal governments and its stateside program funds the purchase of state parks and forests. In addition, POS supports a suite of conservation programs that include Maryland's Rural Legacy program, Maryland Agricultural Land Preservation Foundation, and Maryland Heritage Areas program.

Historically, POS has been the most significant source of funding for parkland acquisition in Harford County. POS funding is closely tied to the County's Land Preservation, Parks, and Recreation Plan. The County has successfully leveraged POS funds often in combination with County general funds, federal funds (particularly through the Army Compatible Use Buffer program), and private philanthropic funds. Notable POS purchases include the enlargement of Rocks State Park (1969), Eden Mill Nature Center (2008), and Stoney Demonstration Forest (2021) as well as the County and HLT's collaborative purchases of Belle Vue Farm (2020) on Oakington Peninsula and Foster Branch Park (2024).



## Maryland Agricultural Land Preservation Foundation

Maryland formed the nation's first state farmland preservation program in 1977, the Maryland Agricultural Land Preservation Foundation (MALPF), managed by the Maryland Department of Agriculture. The mission of MALPF is to preserve productive farmland and woodland, which also may protect wildlife habitat and improve the water quality of the Chesapeake Bay and its tributaries.

MALPF first purchased farmland conservation easements in Harford County in 1982. As of June 2023, the MALPF program has spent more than \$58 million to preserve 16,552 acres in Harford County (the orange properties in Figure 1). In 2022, MALPF payments for conservation easements in Harford County averaged \$6,853 per acre.

MALPF is co-managed by State and County administrators and is funded by a combination of Maryland Program Open Space with match from the County. The program is competitive and prioritizes the preservation of large properties, generally 50 acres or more, with high-quality agricultural soils.

## U.S. Forest Legacy Program

Congress created the federal Forest Legacy program in 1990 to provide matching funds to states for the purchase of conservation easements on important private forestlands. The U.S. Forest Service offers up to 75% of the cost of a conservation easement and a state or local government or land trust must cover at least 25% of the cost. The Forest Legacy program, co-managed by Federal, State, and County administrators is competitive. It has only been used once in Harford County for the 2009 purchase of a conservation on 377 acres within the Broad Creek Memorial Scout Reservation (light green property in Figure 2).

## Harford County Agricultural Land Preservation Program

Harford County began its Agricultural Land Preservation Program in 1992 and, as of June 2023, has preserved 37,341 acres at a cost to the County of \$160.6 million (purple properties in Figure 1 on page 7). This represents a substantial investment in the future of agriculture in Harford County. Table 3 shows a high level of local dollars invested and acres preserved in recent years, a reflection of the funding available from the County real estate transfer tax, and continued popularity among landowners for the County Agricultural Land Preservation Program. In 2022, the County paid an average of \$5,689 an acre for conservation easements.

Harford County's program is competitive. In recent years, there have been 20 to 60 applicants waiting for easement offers each year. Program eligibility requirements, application ranking, and easement payment formula are specified in the County's Code. The program prioritizes property size, development potential, and the agricultural quality of the land.



**Table 3: Harford County Agricultural Land Preservation Program, 2016-2023**

Year	Acres Preserved	Funds Spent
2016	410	\$1,650,000
2017	47	\$177,909
2018	53	\$247,975
2019	2,161	\$13,347,659
2020	683	\$4,530,965
2021	1,959	\$11,667,145
2022	1,448	\$8,237,895
2023 through June 30	1,237	\$8,291,161

Source: Harford County Dept. of Planning & Zoning

Harford County offers both Installment Purchase Agreements and location incentive (bonus) payments. An installment purchase agreement enables a landowner who sells a conservation easement to Harford County to receive an upfront cash payment for 25% of the easement value and 2% of the principal yearly along with annual tax-free interest payments, and the final principal balance at end of 10 or 20 years. Also, the landowner can sell the Installment Purchase Agreement for cash on the municipal bond market before the end of the payment period.

Location incentive payments are offered for properties located in areas with significant development pressure between the Priority Preservation Area and the Development Envelope. As of June 2023, the bonus offered was an additional \$1,000 per acre for properties located within the Jarrettsville/Forest Hill and Creswell areas.



### Harford Legacy Farms

*Farmland preservation in Harford County is closely linked to the County's historic landscape. The Harford Legacy Farm program was created by the Farmers and Community Partnership of Harford County, a coalition of local organizations, in 2022. Legacy Farms have been continuously owned by the same family for 100 years or more, maintain at least 10 acres of the original land purchased, and continue to be actively farmed. As of November 2023, there are 65 designated Legacy Farms in Harford County covering nearly 10,000 acres. More than 93% of the Legacy Farm acreage has been preserved by Harford County's farming families.*





Photo Credit: Edwin Remsberg

## Maryland Rural Legacy Program

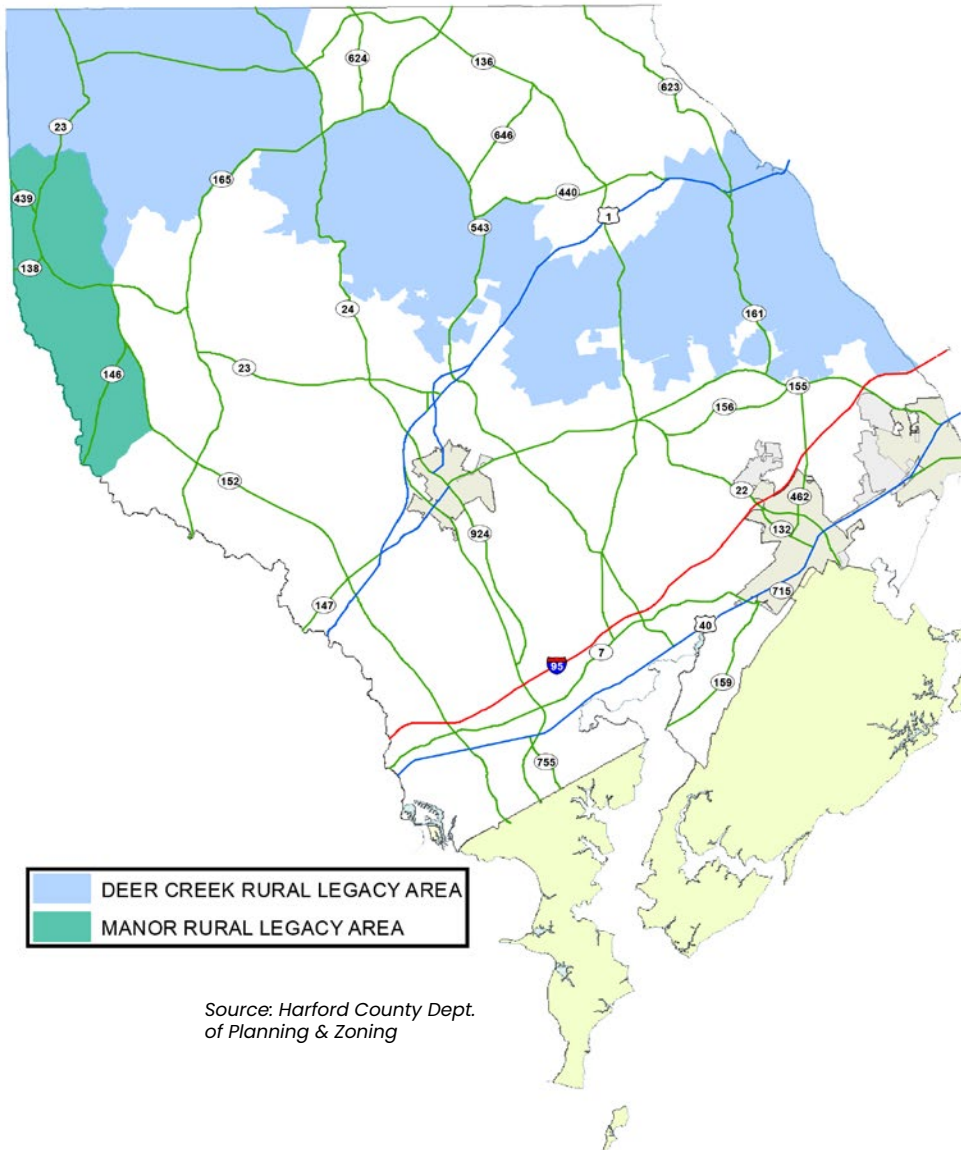
Maryland’s Rural Legacy Program was launched in 1997 to preserve land in large contiguous blocks to help separate developed areas from rural areas, preserve farmland, forests, and natural areas, and maintain the integrity of ecosystems. The Rural Legacy Program is managed by the Maryland Department of Natural Resources with local government or land trust administrators and is funded by Program Open Space with matching funding encouraged. Harford County has two Rural Legacy Areas – Deer Creek and Manor.

The Deer Creek Rural Legacy Area stretches from the northwest corner of Harford County to the Susquehanna River along the Deer Creek Valley (see Figure 4). Covering 66,701 acres, the Deer Creek Rural Legacy Area is one of the largest of the 35 Rural Legacy Areas across the state. The Area is co-managed by the State and County. The Deer Creek Area features a mix of farmland, forests, wildlife habitats of threatened and endangered species, and more than 400 documented historic sites. The eastern part of the Deer Creek Area is located within the Lower Susquehanna Heritage Greenway, a Certified Maryland Heritage Area.

The Manor Rural Legacy Area extends across 28,441 acres of Harford and Baltimore County (see Figure 5). The Manor Area is co-managed by the State and The Manor Conservancy and is known for its scenic beauty and historic structures. It contains the National Register Historic District of My Lady’s Manor, consisting of thousands of acres that Lord Baltimore gave to his wife in 1713. The Manor Area includes a section of Little Gunpowder Falls, a Chesapeake Bay tributary and Class 3 trout stream.

The first Rural Legacy easement in Harford County was purchased in 2001 (light blue properties on Figure 1 on page 7). The Maryland Department of Natural Resources has spent \$23.5 million to purchase easements on 4,699 acres in the two Harford County Rural Legacy Areas. In 2022, Rural Legacy payments for conservation easements in Harford County averaged \$7,011 per acre. The two Rural Legacy areas make up most of the County’s Priority Preservation Area and contain almost 75% of the County’s preserved land, farmland, and woodlands.

**Figure 4. Deer Creek and Manor Rural Legacy Areas**





## Army Compatible Use Buffer Program

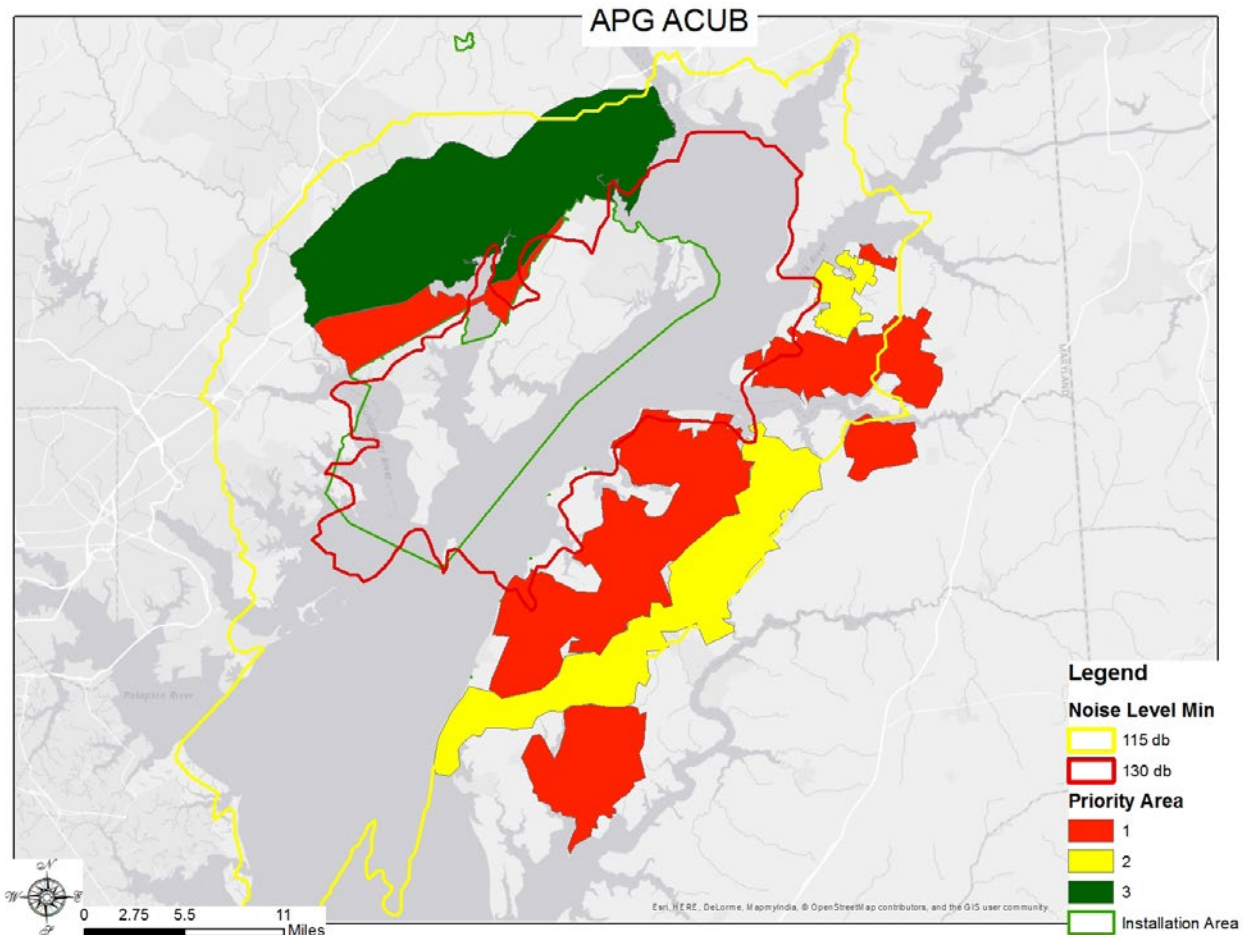
The U.S. Department of Defense launched the Readiness and Environmental Protection Integration (REPI) Program in 2003 to acquire land and conservation easements from willing landowners near military bases. The Army Compatible Use Buffer (ACUB) program is the U.S. Army-specific REPI program to limit encroachment and maintain a balance among military training requirements, community desires, and environmental protection.

Aberdeen Proving Ground (APG) is a major economic engine in Harford County, generating a total of \$4.3 billion in economic activity and creating or supporting 28,995 jobs that provide an estimated \$1.6 billion in employee compensation (US Dept. of Defense 2023b). The buffering of APG from incompatible development is a strategic priority for the County.

APG first partnered with Harford Land Trust as the ACUB administrator for Harford County in 2006. The program prioritizes lands and conservation easements for purchase in proximity to the military installation, principally within a noise decibel range from the base (see Figure 5). As the ACUB priority area is almost entirely within the southern portion of the County’s Development Envelope, the program has resulted in the protection of environmentally sensitive lands with an imminent threat of development.

Through June 2023, the REPI/ACUB program has funded or co-funded the preservation of 1,776 acres at a cost of \$5.8 million.

**Figure 5. Priority Preservation Areas and Noise Levels Outside of Aberdeen Proving Ground**



Source: US Army Environmental Command



Photo Credit: Megan Rigdon

# Local Land Preservation Agencies and Organizations

## Harford County Government

Harford County’s Agricultural Preservation Planners are part of the County’s Department of Planning & Zoning. The planners principally administer the MALPF, Deer Creek Rural Legacy, and Harford County Agricultural Land Preservation programs and monitor lands protected through the three programs. The County Executive appoints a five-member Agricultural Preservation Advisory Board, at least three of whom are owner-operators of commercial farms who earn 50% or more of their income from farming. The Board advises the County on all matters concerning agricultural land preservation.



Harford County’s Parks & Recreation Department is responsible for the acquisition and management of public parks. Parks & Recreation oversees the development of the County’s Land Preservation, Parks, and Recreation Plan and coordinates closely with Maryland’s Program Open Space on the purchase of county parkland. Similarly, Harford County’s three municipalities manage the acquisition of city or town parkland and engage directly with associated state and federal funding programs.

## Harford Land Trust

Harford Land Trust was established in 1991 and is accredited by the Land Trust Alliance, the national umbrella organization for land trusts. The organization’s mission is to conserve land and protect its natural resources for the benefit of all people in Harford County.



Conservation Excellence

Harford Land Trust accepts both donated and purchased easements. The land trust often partners with Maryland Environmental Trust and administers the Army Compatible Use Buffer Program in the County.

The land trust is also the leading non-governmental partner in public land acquisition. Harford Land Trust has been directly involved in the purchase of over 1,500 acres of public parks and forests and owns a further 260 acres of nature preserves. Major projects have included the protection of Kilgore Falls, Belle Vue Farm on Oakington Peninsula, Foster Branch Park in Joppatowne, and the expansion of Palmer State Park, Eden Mill Nature Center, Anita C. Leight Nature Center, and Stoney Demonstration State Forest.

## The Manor Conservancy

The Manor Conservancy was formed in 1993 and preserves land in northern Baltimore and Harford Counties predominantly within the Manor Rural Legacy Area. The Conservancy administers the Manor Rural Legacy program and has preserved 369 acres in the White Hall and Monkton region of Harford County.





Photo Credit: Joe Subolefsky

## Related State and County Planning Tools

### Zoning and the Development Envelope

Harford County's Development Envelope was designated in 1977 as a growth management tool designed to ensure that development is targeted to areas planned for public water and sewer while discouraging development in rural areas. The Development Envelope is generally defined as those areas along the MD 24/MD 924 corridor and the Interstate-95/US 40 corridors, including the three municipalities of Bel Air, Aberdeen, and Havre de Grace.

The Development Envelope is expected to continue to be Harford County's main residential and commercial growth area, accommodating most of Harford County's increasing population and economic activity for the foreseeable future. According to the County's 2022 Annual Growth Report, there is an existing estimated capacity for an additional 12,200 housing units within the Development Envelope with the potential for an additional 2,652 units within the three municipalities.

The boundaries of the Development Envelope and the municipalities are not constant. Aberdeen first annexed land outside of the County's Development Envelope in 1997 and has since annexed more than 350 acres north of Interstate 95. Havre de Grace's northeastern municipal boundary is also butting up against the edge of the Development Envelope.

Zoning is an important planning tool, but it is not permanent. It can be changed by a vote of the County Council members either for a single parcel of land or across several parcels and even thousands of acres during the once every eight years Comprehensive Zoning Review.

## 2016 Harford County HarfordNEXT Master Plan

Harford County has adopted Master Plans since the late 1960s to guide growth and change in the County. In 1986, the County Master Plan first mentioned the need to preserve the County's farms.

Harford County's most recent master plan, 2016's HarfordNEXT, set a goal to reach 75,000 acres of preserved private property by 2040. HarfordNEXT also recognizes that land preservation is a strategy to achieve numerous other related goals. These include:

- 1. Protect streams, wetlands, and their buffers;**
- 2. Preserve 100 year floodplains;**
- 3. Protect rare, threatened, and endangered species and ecologically significant areas from encroachment;**
- 4. Protect and restore forest resources;**
- 5. Preserve our agricultural heritage and resources for future generations;**
- 6. Preserve large blocks of productive farm and natural resource land through conservation easements; and**
- 7. Provide adequate recreational services and facilities to accommodate year-round activity for a diverse population.**

HarfordNEXT recognizes the need to balance the preservation of productive forest and farmland with sustainable development. Compact residential development within the designated Development Envelope for urban growth can continue to accommodate a large majority of the growing population. HarfordNEXT focuses future residential and commercial development primarily within the Development Envelope, which is designated as Tier 1 and Tier 2 development areas under Maryland's 2012 Sustainable Growth and Agricultural Preservation Act (see right). These two tiers have existing public sewer service or planned public sewer service which can support medium to high density residential and commercial development.

## Priority Preservation Area

Maryland's Agricultural Stewardship Act of 2006 required each county to draft a Priority Preservation Area (PPA) Plan. The Act set a goal to preserve 80% of the remaining undeveloped land in each county's PPA, as calculated from the date of a county's PPA application to the state.

HarfordNEXT designated the northern area of the County as a PPA, shown with the red line boundary in Figure 1 on page 7.. The PPA covers 110,109 acres or almost 40% of the County, of which 96,373 acres are zoned agricultural. Agriculture and woodland uses make up almost 85% of the PPA and there are 55 state identified wildlife habitat sites. About 46% or 50,116 acres of the PPA have been preserved.

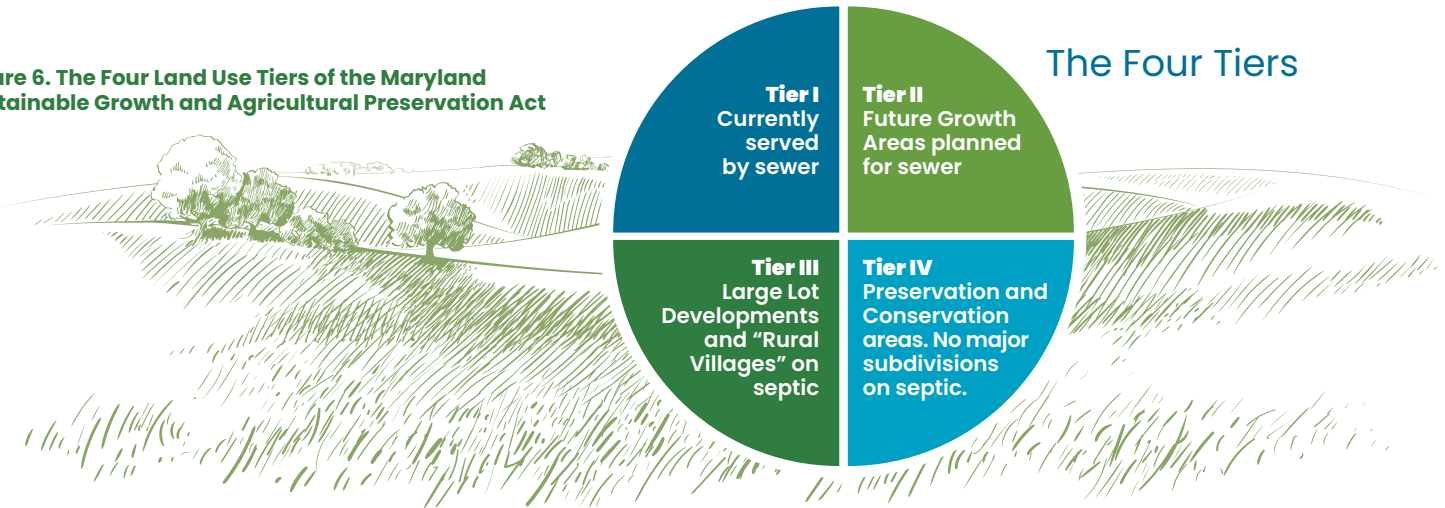
## Sustainable Growth and Agricultural Preservation Act

Maryland passed the Sustainable Growth and Agricultural Preservation Act (also called the "septic law") in 2012. The legislation limits the spread of septic systems on large-lot residential development to reduce the nitrogen pollution into waterways. As a result of this law, residential development outside the Development Envelope started to shrink as a proportion of overall growth. Since 2013, 91% of residential development has occurred on properties inside the Development Envelope (HarfordNEXT, 2016).

Harford County has divided the county into four tiers, as specified in Figure 6. The Development Envelope is a mix of Tier I and Tier II with existing and planned public sewer service which can support medium to high density residential and commercial development. Tier III areas are rural with some capacity to accommodate village-type growth with on-site septic systems. Tier IV areas are remote rural areas with a limit of seven septic systems (lots) per parcel and have a high priority for preservation (see Figure 7). Major subdivisions, defined in Harford County as more than seven lots, are prohibited in Tier IV.

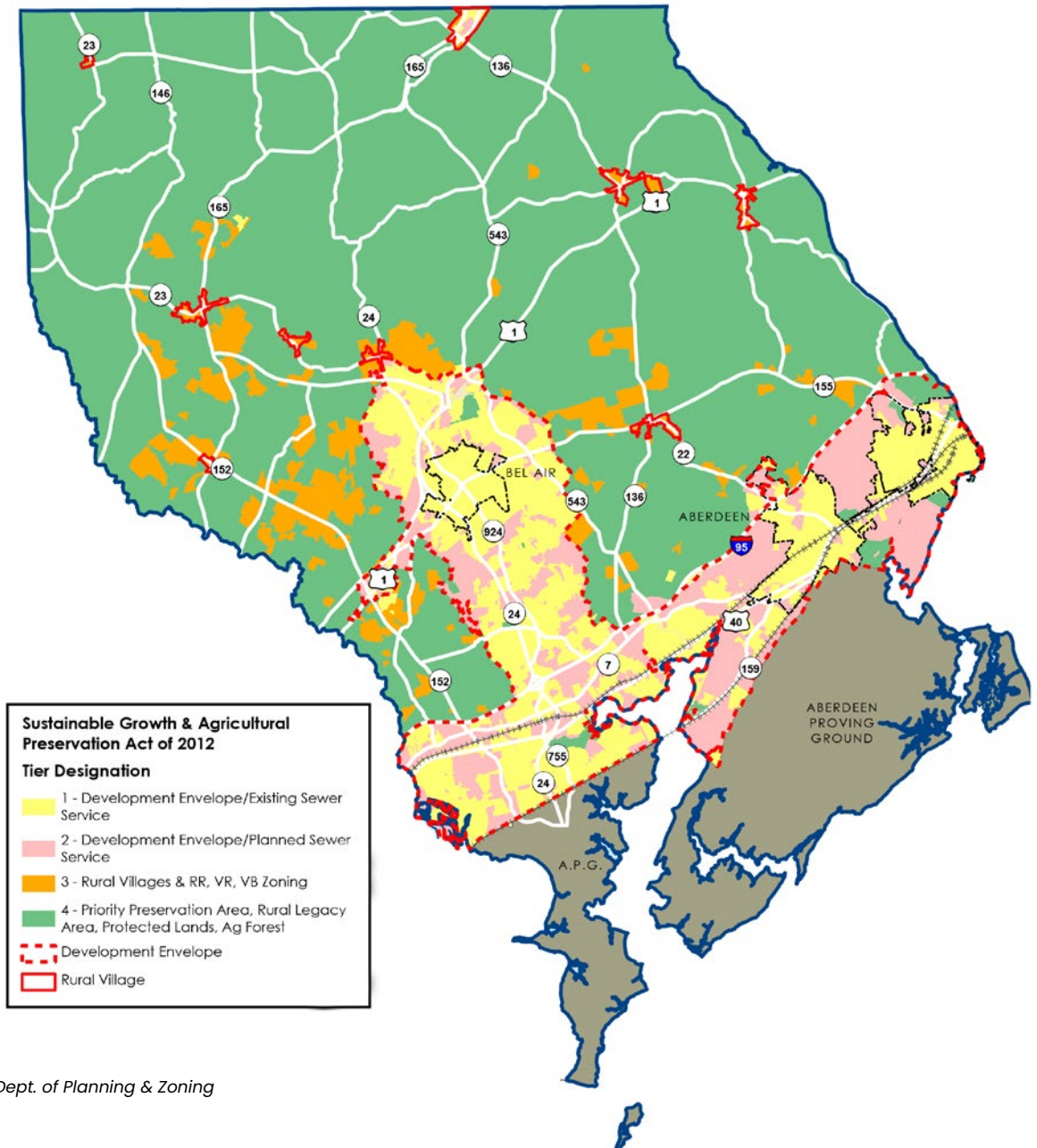
The septic law has been pivotal in incentivizing owners of larger rural parcels to consider land preservation. Additionally, the County's and State's 2020 acquisitions of Belle Vue Farm (347 acres) and the Grays Run Tract of Stoney Demonstration Forest (905 acres) were possible, in part, due to the limited allowable residential subdivision on both properties because of the septic law.

**Figure 6. The Four Land Use Tiers of the Maryland Sustainable Growth and Agricultural Preservation Act**



The Four Tiers

**Figure 7. The Four Tiers in Harford County**



**Sustainable Growth & Agricultural Preservation Act of 2012**

**Tier Designation**

- 1 - Development Envelope/Existing Sewer Service
- 2 - Development Envelope/Planned Sewer Service
- 3 - Rural Villages & RR, VR, VB Zoning
- 4 - Priority Preservation Area, Rural Legacy Area, Protected Lands, Ag Forest

--- Development Envelope

▭ Rural Village

Source: Harford County Dept. of Planning & Zoning



Photo Credit: Scott McDaniel

## Land Preservation, Parks, and Recreation Plan

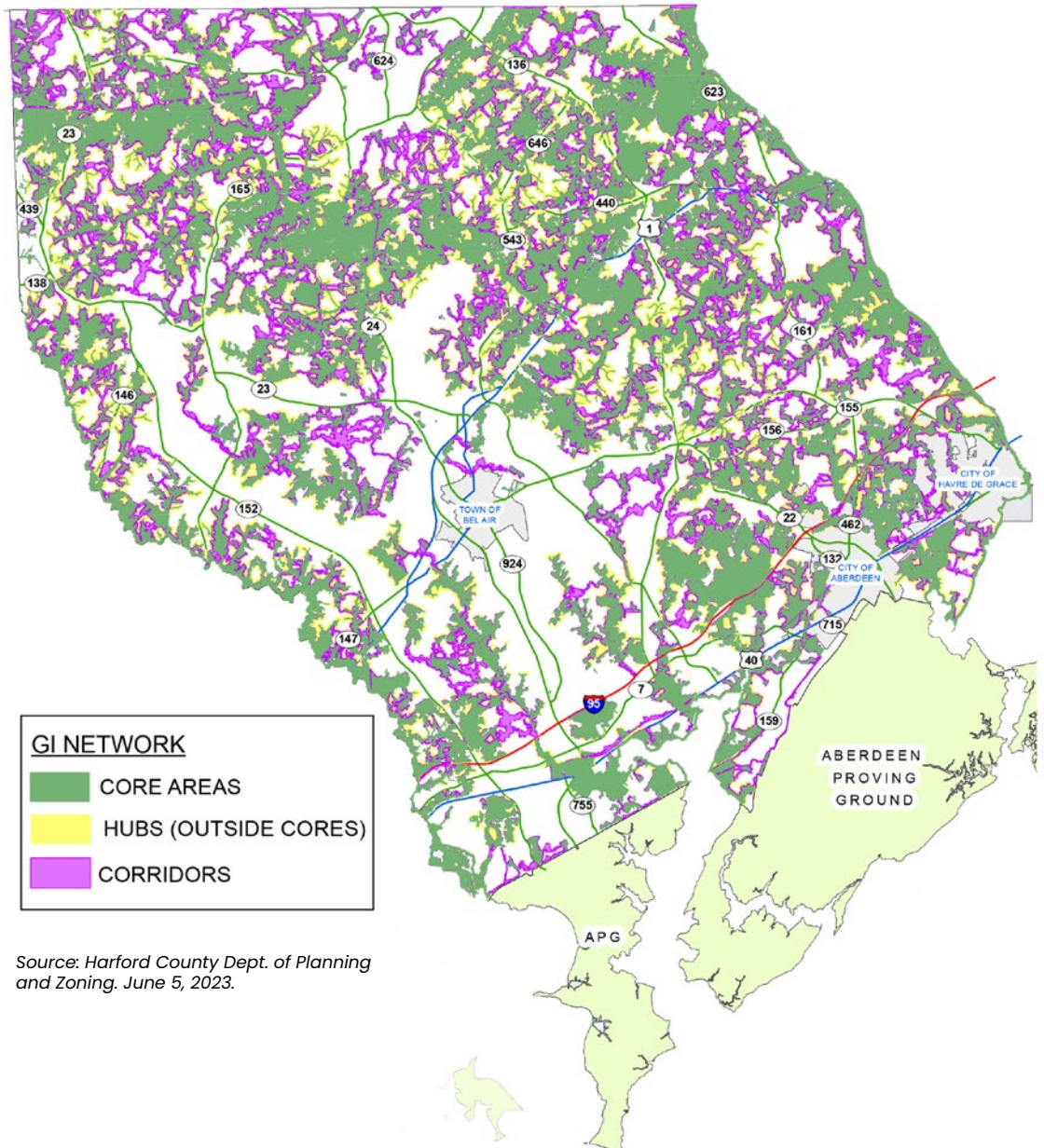
Since 2003, the State guidelines for Local Land Preservation, Parks, and Recreation Plans (LPPRPs) have included agricultural and natural resources sections in local LPPRP's in addition to the traditional emphasis on recreation and parks. LPPRPs are also required to fulfill the requirements of Maryland's Program Open Space. Harford County's most recent LPPRP was adopted in 2022 and describes the County's status and efforts in recreation and parks, agricultural preservation, and natural resource conservation.

## Green Infrastructure Plan

In 2018, Harford County adopted a Green Infrastructure Plan to identify important concentrations of natural habitat and to provide strategies for maintaining and improving this network. Green Infrastructure (GI) provides wildlife habitat as well as public benefits, such as flood protection, erosion control, removal of pollutants from the air and water, and recreation.

The GI Plan also helps to guide State and County land preservation efforts (see Figure 8). The goal with green infrastructure is to preserve core forest and habitat areas (in green on Figure 8), hubs of habitat outside of the core areas (in yellow), and migration corridors (in purple). 55% of core areas in Harford County are within the Deer Creek and Broad Creek watersheds, which align with the Priority Preservation Area.

**Figure 8. Harford County Green Infrastructure Map**



Source: Harford County Dept. of Planning and Zoning. June 5, 2023.

## Priority Funding Areas

A Priority Funding Area (PFA) identifies where existing and planned development is located and where State investments in housing, economic development, transportation, and brownfields remediation are targeted. Growth-related projects covered by Maryland’s 1997 Smart Growth legislation include most state programs that encourage or support growth and development such as highways, sewer and water construction, economic development assistance, and state leases or construction of new office facilities. In Harford County, the PFA includes the Development Envelope, the municipalities, the nine Rural Villages, Aberdeen’s University Center, Harford Community College, and areas designated for Mixed Office.



Photo Credit: Turney McKnight

# Measuring the Effectiveness of Land Preservation

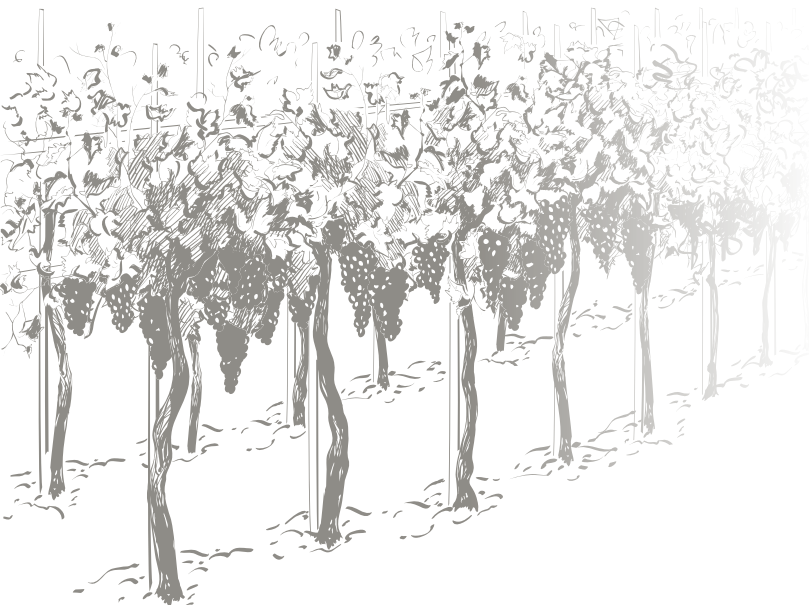
Historically, land preservation efforts nationwide have been described in terms of dollars spent and acres preserved. While these statistics offer a general sense of the investment and progress to preserve more land, consideration of additional indicators of success provide a more complete picture.

## Acres Preserved and Contiguous Blocks of Preserved Land

It is important to look at the **pattern** of land preservation. A pattern of scattered preserved land may attract residential development next door and hinder the productive use and ecological function of the preserved land.

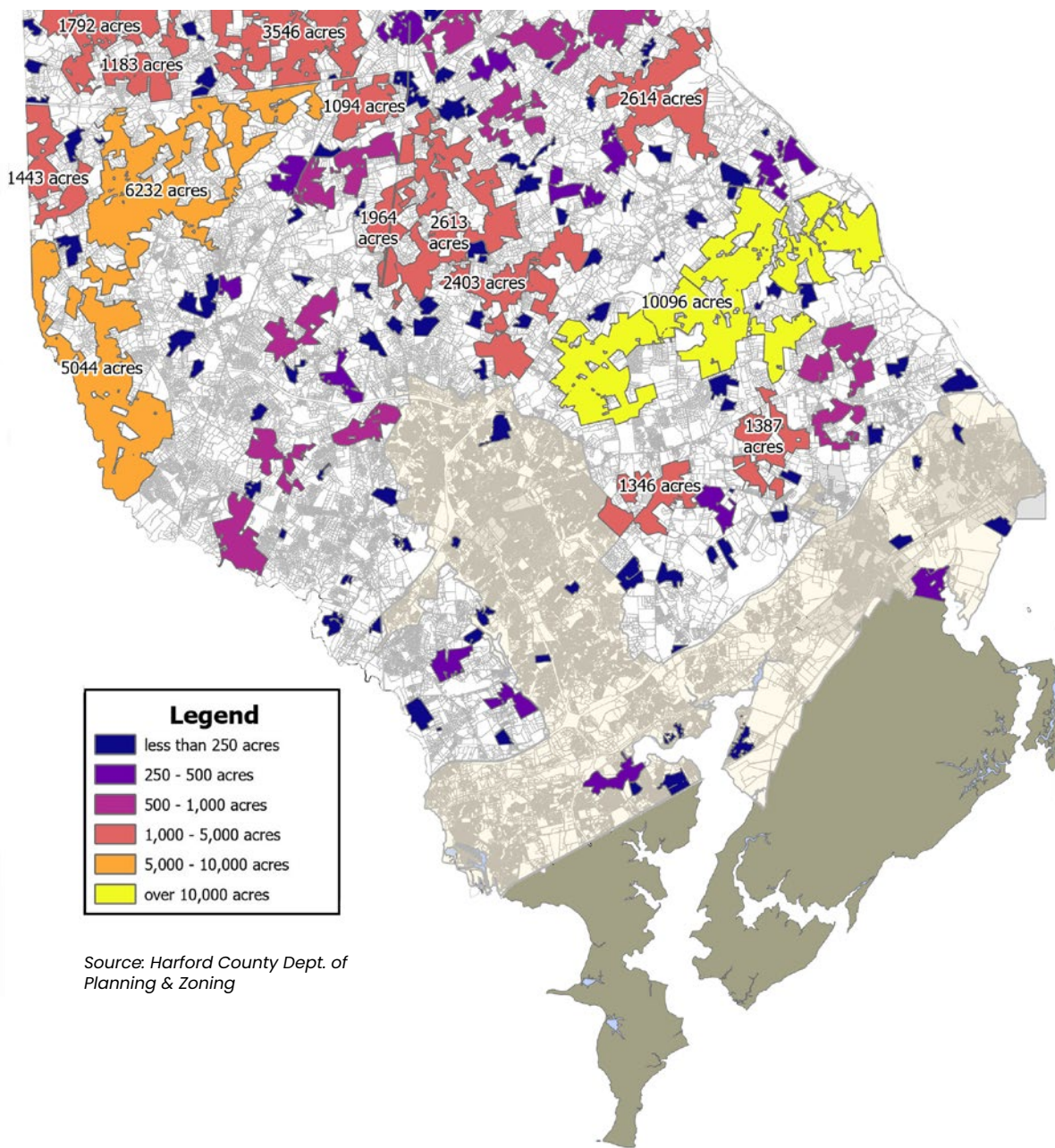
A key strategy is to form large contiguous blocks of preserved land. In Maryland, a block of 1,000 or more acres of preserved land will typically include several properties and will help to direct residential development to urban and village growth areas.

For farmland, large blocks keep non-farm development at a distance and limit the possibility for complaints over the noise, dust, and odors of standard farming practices. Forest fragmentation is a major threat to timber and forest product operations and wildlife habitats. Preserving core forests of more than 50 acres is essential to maintain ecosystems and retain space for feeding, breeding, and migration for both large and small species. The bigger the natural areas, the greater variety of wildlife they can support and the better protection they can provide for water quality.





**Figure 9. Contiguous Land Preservation Easements in Harford County**



Harford County has 14 contiguous blocks of preserved land of more than 1,000 acres (see Figure 9). Remarkably, there are no stand-alone preserved parcels in the Manor Rural Legacy Area. The southeastern border of the Deer Creek Rural Legacy Area forms an almost linear block of preserved land culminating at Susquehanna State Park (the yellow area with more than 10,000 contiguous acres in Figure 9). The “tightness” of the land preservation in the County’s Priority Preservation Area (see Figure 1 on page 7), which includes the Rural Legacy Areas and additional land north of the Deer Creek Rural Legacy Area, demonstrates substantial progress in forming large contiguous blocks.

## Harford County compared to other Maryland counties

Land protection programs in Harford County have preserved more than 63,000 acres through conservation easements, the fifth most among Maryland counties. Only Carroll, Montgomery, Frederick, and Baltimore Counties have preserved more farmland (see Table 4). Harford County’s percentage of total land preserved is somewhat skewed given the inclusion of Aberdeen Proving Ground.

**Table 4. Preserved Farmland in the Leading Maryland Counties**

County	Acres Preserved	% of total land preserved	Land Preservation Acres Goal
Carroll	76,545	26%	100,000
Montgomery	70,000	22%	70,000
Frederick	69,000	16%	100,000
Baltimore	68,000	18%	75,000
Harford	63,000	22%	75,000

*Source: Carroll County Agricultural Land Preservation, 2022. Montgomery County Agricultural Land Preservation, 2023. Keller, The Frederick News-Post, 2022. Baltimore County, 2021.*

Notably, while many of the same land preservation programs are available to landowners in these counties, the conservation-oriented planning and zoning tools employed have differed greatly and resulted in widely different landscapes today.

- In 1967, Baltimore County decreased residential density in much of its rural area to permit only one lot right or development right per 50 acres. This is starkly different from Harford’s agricultural zoning and has resulted in Baltimore County’s agricultural region remaining rural while large areas of Harford’s agricultural zone have suburbanized, often making agricultural uses more difficult. This contrasting land use is noticeable when traveling between northern Baltimore and Harford Counties.
- Frederick County allows three lots to be created from original parcels in its Agricultural District. A lot must be at least 40,000 square feet in size.
- Montgomery County established the County’s Agricultural Reserve covering more than 93,000 acres in 1980. This agricultural zone has a one house per 25-acre density but landowners in the zone were given one transferable development right per five acres and allowed to sell those transferable development rights to developers who are allowed to build at higher densities in areas designated for growth elsewhere in the County. Montgomery County has preserved nearly 50,000 acres through the transfer of development rights program and another 20,000 acres through the purchase of conservation easements.

Photo Credit: Edwin Remsberg

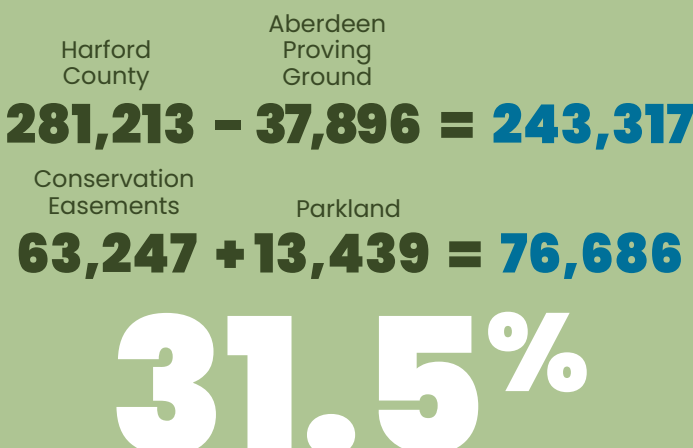
## State, County, and Municipal Parks in Harford County

Historically in Maryland, parks and recreation often used a single assessment metric of acres of parkland per 1,000 population, with a default goal for all counties and the City of Baltimore of 30 acres of parkland and outdoor recreation space per 1,000 population. This approach neglects other important considerations and is most often now coupled with proximity and equity analyses.

When measured against the County’s 2020 population, there are 30.1 acres of recreation land per 1,000 residents. Maintaining this ratio will be challenging as it requires an additional 334 acres of land by 2030 and 557 acres by 2035. Harford County’s Land Preservation, Parks and Recreation Plan (LPPRP) proximity and equity analyses conclude that the bulk of this land is required within the Development Envelope and more specifically within the communities of Belcamp/Riverside, Edgewood, Emmorton, Forest Hill, and Joppa/Joppatowne. This is problematic given the limited open space remaining and the high cost of land in the Development Envelope.

Acres of recreation lands per 1,000 residents vary greatly throughout the State. In their 2022 LPPRP, Cecil County reported 180 acres of recreational land per 1,000 residents, nearly six times that of Harford County. While Baltimore County disaggregates this metric in their 2022 LPPRP, a rough analysis of data suggests approximately 65 acres per 1,000 residents.

**Table 5. Percentage of preserved land in Harford County**



## America the Beautiful and Maryland the Beautiful Acts

In 2021, the federal government adopted a goal to preserve 30% of the land and waters of the United States by 2030. This policy, known as the America the Beautiful initiative or “30 X 30”, was designed as a call to action for locally led and voluntary land conservation.

In 2023, the Maryland the Beautiful Act was passed by the Maryland Legislature and set a goal to preserve 30% of the land in Maryland by 2030 and 40% by 2040.

Both Acts include fee-ownership of public open space land within their goal in addition to land protected by conservation easement. By contrast, HarfordNEXT’s goal of preserving 75,000 acres of land by 2040 is specific to conservation easements only.

Measuring Harford County’s success against the nationwide and statewide goal of 30 X 30 is not straightforward. Aberdeen Proving Ground covers nearly 38,000 acres of the County and while much of the land remains undeveloped, it is not permanently preserved. Similarly, most County and municipal parkland is not preserved with conservation easements or restrictive covenants. Per a 2005 amendment to Maryland’s constitution, the sale of State parkland is only permissible with the express approval of the Maryland Legislature. So, while State parkland is not preserved in a strict sense it is much more protected than County and municipal lands.

Assuming all public parkland is included as preserved, 27% of Harford County’s land area is preserved. Subtracting APG, Harford County has preserved 31.5% (see Table 5). Either way, the County is on track to meet the 30 x 30 goal. Meeting the 40 x 40 goal would require the preservation of an additional 20,500 to 35,800 acres depending on the method of calculation. Most of this preservation will come from conservation easements rather than public land acquisition. Based on the average cost of conservation easements between 2021 and 2023, preservation of an additional 20,000 acres will cost nearly \$120 million in today’s dollars. This price will only increase with time.



Photo Credit: Edwin Remsberg

# The Future of Land Preservation in Harford County

**The past does not predict the future. Land preservation is dependent on continued landowner interest and available funding.**

Land preservation is a voluntary process, depending on the willingness of landowners to preserve their property, either through a sale or donation of land or through a conservation easement. Land is a valuable asset, so, it is reasonable for landowners to expect a financial return as part of their decision to preserve their land. Land values continue to rise along with population growth, which has created a sense of urgency to preserve land now before it is too late.

Public and private land preservation partners have invested more than **\$253 million** to preserve the County's farmland, forests, and natural areas. The bulk of funding for land preservation in Harford County comes from the state and county real estate transfer taxes. It is imperative that these designated funds be maintained. The price of land will continue to increase driven by competition for land among farmers, home buyers, and real estate developers. Land preservation cannot compete unless it is adequately funded.

From the standpoint of planning practice, Harford County has done a good job of balancing population and economic growth with land preservation. The county's agricultural zoning, enacted in 1977, however, did not adequately protect large contiguous areas of farmland. This has resulted in moderate to severe fragmentation of agricultural lands with large lot single residential use and large residential subdivisions in areas throughout the agricultural zoning district. Many farmers who once were able to farm hundreds of acres that were contiguous, and therefore efficiently farmed, are no longer able to do so. To minimize further fragmentation, the County could increase incentives for preservation. This could be in the form of higher payments for those landowners who retire all subdivision potential, and/or making bonus payments in areas where significant fragmentation has occurred but where some farming is still taking place.

Harford County also faces five major related challenges, some old and some new, over the next 20 years.

- 1. Providing adequate and affordable housing to serve a growing population;**
- 2. Adaptive reuse of land and buildings within the Development Envelope;**
- 3. Managing demands for commercial, industrial, solar, and other large acreage non-residential development;**
- 4. The changing economics of farming; and,**
- 5. The impacts of climate change and biodiversity loss.**

Harford County is projected to add nearly 30,000 residents between 2023 and 2045, an increase of almost 11%. A growing population means a greater demand for housing, infrastructure, services, and economic opportunity.

This population growth can be expected to increase the development pressure on open land unless Harford County's development community chooses to pursue the adaptive reuse of already built areas to accommodate growth rather than greenfield development.

As experienced state-wide, Harford County faces a very limited availability of affordable housing for low- and middle-income households. Challenges relating to both housing availability and affordability have historically been solved with sprawl. To avoid sprawl, the County's urban core will need to become denser.

Good-quality density requires creating a sense of place where people want to live, work, and play. This means revitalizing already developed areas to include walkable neighborhoods, mixed commercial and residential land uses, and a range of housing and transportation options.

Given projected population growth, the County should immediately target the remaining large open space properties suitable for parkland within the Development Envelope for acquisition. Use of option contracts and rights of first refusal can provide the County greater chances of success.

Harford County is also actively grappling with pressures for industrial and ground-mount solar energy developments. Such large scale land use development should be carefully regulated and, wherever possible, steered toward redevelopment and brownfield sites. Community and utility-scale solar projects are not permitted on preserved properties.

Most of the preserved land in Harford County is farmland, including cropland, pasture, and woodland. The economics of farming will influence the decisions of other farmland owners whether to preserve their land.

Preservation planning and goals should keep abreast of changes in agriculture and consider three national trends that have emerged over the past few decades: 1) more large farms with annual sales of more than \$500,000 a year; 2) fewer medium-size farms; and 3) more small farms serving local consumers. One or more of these trends could already be effecting change in Harford agriculture, particularly the trend toward smaller farm enterprises. Smaller farm operations generally function differently within their communities in the types of crops grown and in direct sales to consumers. Specialty crops, such as fruits and vegetables, are often produced on smaller acreages and often within communities where residential use is predominant. These operations are typically highly favored by the communities in which they operate and will likely become an increasingly important component of Harford's agricultural economy.

Agriculture continues to have profit potential for those who are good operators and managers and who find farming in Harford County worthwhile and rewarding. To protect its 40-plus years of investment in preservation, it is vital that the County keep agriculture first and foremost in economic development planning as well as land use planning and protect it from encroachment by non-agricultural uses.



Photo Credit: Edwin Remsberg

## State of Land Preservation

The benefits of land preservation are especially valuable as the County adapts to the impacts of climate change. Climate change increases the chances of extreme weather events, including hotter temperatures, drought, wildfires, flooding, and sea level rise.

The prolonged drought in California from 2012–2022 raised questions about how much Americans can rely on the Golden State to produce most of the nation’s fruits and nuts and one-third of its vegetables. The availability of farmland to produce food for local consumers is likely to increase in importance. Drought threatens not only food production but also local water supplies, water quality, and wildlife.

Green infrastructure in the form of core forests, forested streambanks, and open land can help address drought conditions by protecting water supplies, cooling rivers and streams, and keeping land open to re-charge aquifers during rain events. Harford County averages just over 45 inches of precipitation in a year. Floods from heavy storms cause more runoff and soil erosion where there is more impervious surface. Open land is far more able to absorb stormwater and reduce flooding.

There are several actions that Harford County, its municipal partners, and land trusts can take to increase the amount of preserved land in the County and plan for sustainable development.



Photo Credit: Jeanne Sisk

## Recommended Actions

- Maintain Harford County's ½% real estate transfer tax allocation to the County's land preservation program.
- Maintain the current boundaries of the Development Envelope and use Smart Growth principles to accommodate commercial and residential growth within the Development Envelope.
- Adopt Maryland's goal of preserving 30% of the land in Harford County by 2030 and 40% by 2040.
- Utilize payment incentives to attract land preservation in areas at risk of sprawl, such as between the Development Envelope and the Priority Preservation Area.
- Target large open space parcels within or adjacent to the Development Envelope for parkland acquisition and maximize the use of Maryland's Program Open Space funding.
- Consider new funding mechanisms and partnerships to preserve critical Green Infrastructure.
- Support economic development programs and policies that strengthen agriculture, forestry, and related commercial activities that are compatible with preserved land.

**Chart 3. Harford County Land Preservation by Acres and Program**

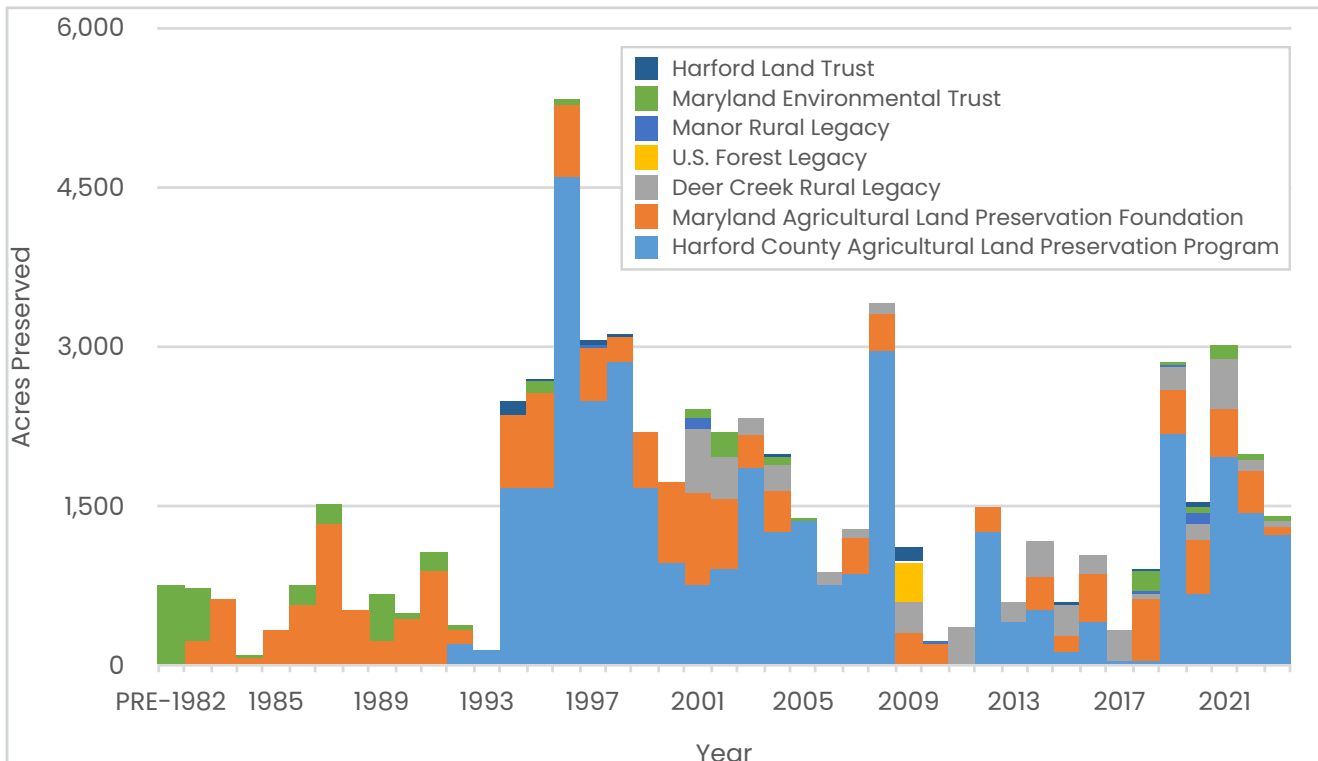




Photo Credit: Megan Rigdon

# Acknowledgements

Tom Daniels is a professor in the Department of City and Regional Planning at the University of Pennsylvania. He holds a Ph.D. in Agricultural Economics from Oregon State University and from 1989 to 1998 he was the Director of the Agricultural Preserve Board of Lancaster County, Pennsylvania.

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Numerous photographers allowed the use of their photographs which show the great beauty of the Harford County landscape.

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# Resources

## **Harford County Department of Planning and Zoning, Agricultural Land Preservation**

Website: <https://www.harfordcountymd.gov/366/Agricultural-Preservation>

E-mail: [wdamoss@harfordcountymd.gov](mailto:wdamoss@harfordcountymd.gov), [jrwilson@harfordcountymd.gov](mailto:jrwilson@harfordcountymd.gov)

Phone: 410-638-3103

Location: 220 S Main Street, 2nd Floor, Bel Air, MD 21014

## **Harford County Agriculture Land Preservation Advisory Board**

Website: <https://www.harfordcountymd.gov/938/Agriculture-Land-Preservation-Advisory-B>

Meetings: 7 p.m., First Tuesday of every month

Location: 220 S. Main Street, 1st Floor Conference Room, Bel Air, MD 21014

## **Harford Land Trust**

Website: <https://www.harfordlandtrust.org>

E-mail: [info@harfordlandtrust.org](mailto:info@harfordlandtrust.org)

Phone: (410) 836-2103

Location: 22 W Pennsylvania Ave # 2, Bel Air, MD 21014

## **Manor Conservancy**

Website: <https://www.themanorconservancy.org>

E-mail: [info@themanorconservancy.org](mailto:info@themanorconservancy.org)

Phone: (240) 389-2531

Address: PO Box 408, Monkton, MD 21111



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