

Successful Preservation of U.S. Farmland as Demonstrated by Montgomery County,  
MD and Washington County, OR

Recent years show a change in the ways American communities conceptualize growth and development. While past decades were defined by limitless expansion, private family homes and individualized transit, growth today questions those ideals and seeks to improve the status quo via sustainable, smart growth. While smart growth typically revolves around patterns of development within cities and suburbs, preservation of farmland and open space also plays an essential role in the creation of sustainable communities.

For one, the majority of prime agricultural lands surround urban centers, where pressure to sprawl is greatest (Benfield et al, 2001). “Urbanization of prime farmland is presently compensated for by putting lower quality, marginal land into production at greater economic and environmental cost,” (Nelson, 1992). Use of these less fertile lands results in unsustainable farming practices as greater energy inputs are required to meet the same production demands. This is also a serious risk to food security, because it increases dependence upon food imports (Montgomery County Government, 2005; Oregon Executive Summary, 2008). Costs of additional energy inputs can also be prohibitive for smaller farms and can result in increased food costs.

In addition, farmland produces a number of environmental benefits: it absorbs floods, improves air and water quality, sustains ecosystems, and helps regulate climate (Swinton et al, 2006). In a time of mounting environmental threats, it only makes sense to prioritize the preservation of lands and landscape activity that help offset these dangers. “Clean open space is the best environment for the preservation and proper use of natural resources,” (Montgomery County Planning Co, 1964).

Unfortunately, despite the numerous benefits wrought by maintaining viable agricultural communities, the transition of farmland into suburban and exurban communities continues to occur rapidly throughout the U.S. The U.S. population grew on average by 17% between 1982 and 1997; during the same period, urbanized land grew at 47% (Springer, 2007). Between the years of 1982 and 1992 prime farmland was lost at a rate of 400,000 acres per year. “For each acre of prime or unique farmland that is being saved...three acres are lost to development.” (Benfield et al, 2001).

There are several unique challenges to preserving agricultural lands. As development inches closer to farmlands, land values increase (Nelson, 1992). This not only tempts farmers to sell their lands due to the huge payoff, but also challenges farms' economic vitality. For one, farmers now must pay higher property taxes based on the increased value of their land. However, the infrastructure these property taxes support (schools, roads, pipelines) do little to benefit farmers (Nelson, 1992). At the same time, farm productivity is threatened by "spillover" effects from the nearby residents. Crops are damaged by automobile exhaust, animals are harassed, equipment and crops stolen, and residential neighbors may even attempt to take farmers to court (Nelson, 1992).

Another issue is that as more farms are divided or consumed by development, the more likely surrounding farms are to undergo these same changes. This is for two reasons. First, there is a critical mass of active farms needed to sustain a viable agricultural community. As more and more farmland is either developed or idled, the number of available agricultural services decreases (Benton et al, 2001; Nelson 1992). Less farmland also weakens natural processes and necessary supporting ecosystems (Swinton et al, 2006). Both of these factors negatively impact farm productivity.

The second factor is impermanence syndrome, "characterized by the belief among farmers that agriculture in their area has limited or no future and that urbanization will absorb the farm," (Nelson, 1992). This leads farmers to stop investing in the farm, either idling larger and larger land parcels or switching to less intensive crops or pasturing. "When farmers become uncertain about the future viability of agriculture in their area, farmland production falls and so does farming income," (Nelson, 1992).

All of these problems make the preservation of farmland exceedingly difficult. As a result, states have enacted a variety of methods to help farmers keep hold of their land and maintain the vitality of agricultural communities. Two states in particular have pioneered in creating successful programs to help farmers and preserve both agricultural land and open space. However, these are comprehensive programs which also make use of a series of policies found in all states to help protect farmers from oncoming development.

The first law to benefit farms is the Right-To-Farm Act. This act helps farmers to defeat litigation attempting to regulate or prevent certain agricultural activities deemed to

upset or endanger suburban neighbors (Springer, 2007; Nelson, 1992). While this law is important in giving farmers an upper hand in the courtroom, it fails because it still necessitates farmers frequenting the courtroom, and paying for court expenses (Nelson, 1992).

Next is property tax relief. All states offer farmers tax breaks to help offset the large sums that farmlands would otherwise occur when located close to suburb or urban neighborhoods (Springer, 2007). Unfortunately, while this tax break ameliorates the cost of holding onto to large amounts of land, it does not help to combat impermanence syndrome (Nelson, 1992).

Agricultural zoning is the third method by which states attempt to protect agricultural land (Springer, 2007). Agricultural zoning usually prohibits the breaking of farmland into parcels smaller than 5-10 acres, but sometimes sets minimum sizes of 20 or more (Montgomery County, 2008; Nelson, 1992; Daniels et al 1986). This can be problematic for farmers if they desire to create housing lots for laborers or family members (Daniels, 1991; Nelson, 1986). Since agricultural zoning also prohibits non-farm related development, it serves to devalue land in the eyes of developers which, while effective in preventing urban sprawl, undercuts farmers a potential source of income and security. "A farmer's land is not only a source of livelihood but may be looked upon as an insurance policy and retirement fund," (Daniels, 1991).

Two states in particular, Maryland and Oregon, are pioneers of preservation policies. This paper focuses on two counties which exemplify the success of these states: Montgomery County, MD and Washington County, OR. Montgomery County and Washington County realized the drawbacks of these measures as early as the 1970s. While the counties shared similar success, they formed very different laws and programs to reach it. Beginning with a discussion of Montgomery County, this paper will compare and contrast each.

Montgomery County is an affluent community about 40 minutes north-west of Washington, D.C. Average median income is slightly greater than 75,000 a year (US Census Bureau, 2007), and average population growth, while it has slowed in the last decade, continues to outdo the rest of the nation with 2.1% population growth vs. 1% population growth respectively between 1980 and 2000 (Preuss et al, 2004; US ). The

density of population is 1760.8 people per square mile, and though this pales in comparison to D.C., with 9,378 people per square mile, it is considerably larger than the average density of Maryland, with 541.9 people per square mile (US Census Bureau, 2007).

Within Montgomery County, there are two distinct feels. One comes from the lively cities of Gaithersburg and Rockville, two densely developed communities. By contrast, the other comes from the vast areas of open space outside of these cities. Here exists a variety of farms specializing in products from corn, soy, berries, vegetables, and even sod and nursery products. (Benfield et al, 2001; Montgomery County, 2008)

The average size of these farms is approximately 58 acres, and the majority of them are family owned and operated. They are a source of cultural pride for the county, and “produce millions of dollars in economic contribution” (Montgomery County, 2008; Benfield et al, 2001).

When sprawling development began to encroach on these farms in the 1950s, Montgomery immediately decided to take action to prevent the division and destruction of its farmland. In 1964 it established the “Wedges and Corridors” plan, which set county wide goals for development (Benfield et al 2001, Montgomery Planning Co., Daniels 1991). The goal of this program spells out a precocious understanding of land development:

Land should be treated as one of our most precious possessions, using efficiently what we need for accommodating expected urban growth, and conserving the rest for the unforeseeable future. Land is too valuable an asset to be heedlessly wasted by allowing it to be developed aimlessly in a scattered pattern. Extravagant “leap-frogging” of development into the countryside and overemphasis on larger and larger residential lots waste the land and establish widespread patterns of land use which become obsolete before they are even fully developed. (Montgomery County Planning Co. 1964)

The plan goes on to list a series of benefits, such as increased opportunity for outdoor recreation and efficient arrangement of public utilities, now commonly associated with smart growth plans (Montgomery County Planning, 2008).

In 1973, Montgomery created a Rural Zone to help implement the goals of Wedges and Corridors. Unfortunately, the development limitations of one house per five acres served to devalue land costs while attracting the attention of affluent people seeking the privacy and luxury of the countryside. (Benfield et al, 2001) This lead to rampant

exurban development; Montgomery County lost approximately 12,000 acres of prime farmland between the years of 1973 and 1979 (Benfield et al, 2001).

In 1980, Montgomery further down-zoned rural areas with the establishment of the Agricultural Reserve, which changed minimum lot sizes from 5 to 25 acres per housing unit. However, the county realized that this new zoning policy failed to compensate farmers for the loss of development rights. As a result, Montgomery created a series of conservation easements the most unique of which is their Transfer-of-Development-Rights program. (Benfield et al, 2001; Preuss et al, 2003; Daniels, 1991) It can be summarized as follows:

The Transfer of Development Rights (TDR) Program is unique among the farmland preservation tools available to the County because it represents a private-sector investment in farmland preservation and the rural economy. The program allows developers to increase residential density in designated receiving areas outside the Agricultural Reserve through the purchase of Transferable Development Rights from farmers. For every unit of density transferred (one TDR per five acres) into a designated receiving area, one development right is extinguished on a corresponding farm parcel. Developers purchasing TDRs provide income to the farmer that is often used for purchasing additional farmland, farm equipment, or estate planning. (Department of Economic Development Agricultural Services Division, 2006)

More than 60% of land preserved through TDRs exists in Montgomery County. (Department of Economic Development Agricultural Services Division, 2006) Montgomery County also makes use of PDRs, or Purchase of Development Rights, which is a public-sector investment found more commonly throughout the Northeast. However, the state of Maryland still holds more than half the total acres preserved through PDRs (Daniels, 1991)

Montgomery had certain advantages, however, with the efficient and successful execution of conservation easements. Between the years of 1985 and 1988, Maryland paid only \$800 dollars per acre of farmland, while states such as Massachusetts paid on average \$2500 and King County, Washington, paid rates as high as \$8000 per acre (Daniels, 1991). Prohibitive costs of land can certainly make a negative impact on the success of conservation easements. For this reason, many states (particularly those with significantly larger amounts of land) continue to depend upon zoning as the primary way to control sprawl. (Daniels, 1991)

The voluntary nature of conservation easements can also result in parcels of land too small to sustain productive agricultural communities (Nelson, 1992; Daniels 1991)

Montgomery's preference towards TDRs helped to combat this problem by making it easier for developers to increase densities within urban zones (Benfield et al, 2001).

Other states have also had trouble making use of conservation easements due to overwhelming wait times during the application process and other difficulties concerning government bureaucracy. In Montgomery, all easements are controlled by the Agricultural Services Division of the Department of Economic Development. (Benfield et al, 2001) These officials are the same people that help farmers receive assistance in times of trouble, advocate for farmers' rights to other government branches, and are well-versed in the economics and practices of agriculture (Montgomery County, 2008; Benfield et al 2001). Montgomery farmers trust these officials to help them secure future stability, and also find the inclusion of all these services within one department extremely convenient (Benfield et al, 2001).

Overall, Montgomery County has over 93,000 acres protected via conservation easements, 68,752 of which are productive farms. It currently has seven different conservation plans, allowing not just for protection of agricultural lands, but also recreational open spaces.

Across the nation, Washington County, Oregon has also led the road of successful agricultural conservation via a comprehensive plan. Washington County is part of the Willamette Valley, which could be equated to the fertile crescent of the Oregon state. This area stretches approximately 100 miles north to south, and forty miles east to west. (Nelson, 1992) It is only about 10% of the total land mass of Oregon, but holds 33% of the state's prime agricultural land; this tiny sector of the state grows up to 40% of the state's agricultural goods (Nelson, 1992).

Willamette Valley is also, however, home to two of the states three million residents, and Washington County holds 522,514 of them (Nelson, 1992; US Census Bureau, 2007). Like Montgomery County, no more than 40 miles distance from the D.C. metropolis, Washington County is only a 45 minute drive from Portland. Washington County is under even more intense pressure to sprawl into its prime agricultural lands; its population has increased 17.3% from the years of 2000-2007 (Washington County, 2008; US Census Bureau, 2007). This more than doubles the population growth of Montgomery County (6.6%) during the same period (US Census Bureau, 2007).

Washington County, like Maryland, also has a large economic agrarian sector, ranking third in agricultural production. (Washington County, 2008)

Washington County shares a very similar mission statement to Montgomery County:

The people of Washington County will lead the region and the Commonwealth in working together to encourage a vibrant and prosperous quality of life for people of all ages. We will serve as an example of responsible and sustainable use of land and natural resources. With this as our foundation, we will create a climate that promotes economic diversity and emphasizes education while celebrating our agricultural character, historical significance and scenic beauty. (Washington County Comprehensive Plan, 2005)

The following is an excerpt from the listed goals of the Land Conservation and Development Department, which oversees land use and conservation throughout Oregon:

Urban reserves designated under this division are intended to facilitate long-term planning for urbanization in the Portland metropolitan area and to provide greater certainty to the agricultural and forest industries, to other industries and commerce, to private landowners and to public and private service providers, about the locations of future expansion of the Metro Urban Growth Boundary. Rural reserves under this division are intended to provide long-term protection for large blocks of agricultural land and forest land, and for important natural landscape features that limit urban development or define natural boundaries of urbanization. The objective of this division is a balance in the designation of urban and rural reserves that, in its entirety, best achieves livable communities, the viability and vitality of the agricultural and forest industries and protection of the important natural landscape features that define the region for its residents. (Oregon.gov, 2008)

Overall, however, Oregon has created a very different preservation plan than that of Maryland. Oregon's Land Use Program, created in 1973, does not utilize conservation easements or TDRs in any form, and instead requires "all counties and municipalities to draft comprehensive plans, establish urban growth boundaries...and place agricultural land in exclusive farm use zones" (Daniels, 1991). The county specific comprehensive plans also include restrictions on exurban development, empower right-to-farm provisions and increase farmer-specific tax deferrals (Oregon.gov, 2008; Daniels et al, 1986).

Over 17 million acres of agricultural land<sup>1</sup> had been zoned as EFUs, or Exclusive Farm Use zones by 1986 (Daniels et al, 1986). EFUs function similarly to typical agricultural zones, but additionally require developers to demonstrate than any proposed

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<sup>1</sup> Unfortunately, most of the 17 million acres is located in East Oregon, where development pressures are not particularly high. (Daniels, 1991)

houses or non-farm oriented development will not threaten the viability of the surrounding agricultural community. If there is dispute, the developer must relocate the proposed development to a new, less damaging location (Daniels et al, 1986; Washington County, 2008). Conversely, if a farmer can demonstrate that a new house or parcel is a necessity and can be expected “to support local markets and help maintain local commercial farming” (Daniels, 1986) then all red tape is cut. This latter section furthers farmers’ and farmland protection because 1) new development that helps sustain agriculture has property taxes assessed at the value of the land in agriculture and 2) helps farmers to avoid cumbersome restrictions on accepted farming practices (Daniels, 1986). Also, because EFUs are not voluntary, as PDRs are, they are better able to create the large contiguous landscapes needed to maintain viable agricultural communities. (Daniels, 1991)

On top of regulation of EFUs, Oregon has also established Urban Growth Boundaries, or UGBs, which seek to restrict urban sprawl by placing limitations on the extensions of municipal water and sewer lines, and has also set up rural residential zones on land deemed to be poor for agricultural use. The latter helps to reduce exurban sprawl while still allowing residents to enjoy the solace and nature of rural settings, and also allows for the creation of “hobby farms”<sup>2</sup> without detracting from the viability of commercial agriculture. (Oregon.gov, 2008; Daniels, 1991; Daniels et al, 1986; Nelson, 1992)

Washington County has exemplified the goals of Oregon’s Land Use Program via stringent adherence to the Washington County Comprehensive Plan created in response to the Land Use Program; “Focused residential and industrial growth has enabled the county to preserve more than 75% of its agricultural and forestlands through utilization of the nationally acclaimed Urban Growth Boundary,” (Washington County, 2008).

With the help of Oregon State University, Washington County has also set up a unique system for gaining residential input on the ways in which it sets up land zones.

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<sup>2</sup> Oregon has faced unique issues with the proliferation of hobby farms, or small parcels of agriculture that make less than \$10,000 a year. These farms, while preserving open space, are a threat to commercial agriculture as they are not as productive as larger farms and thus lead to the devaluing of farmland. Farmers also perceive encroaching hobby farms as a sure sign of upcoming development, leading to impermanence syndrome, which further depletes land productivity. (Daniels, 1991; Nelson, 1986)

Each city or town within Washington County has its' own CPO, or Citizen Participation Organization. Residents can go to the CPO meetings to discuss problems or agendas they feel are important, and it also provides a convenient method of educating residents as to changes in the Comprehensive Plan or proposed community developments. Each CPO is then represented at meetings of Washington's CCI, or the Committee for Citizen Involvement (Oregon State University, 2008).

Overall, Oregon presents a good case that stringent zoning policies present another good option towards preserving agricultural land, and may be more effective for large states. However, case studies of other north western states seem to demonstrate Oregon as an outlier, an unexpected example of success among many cases of failure to secure prime agricultural lands in states such as Wisconsin, Washington, and Florida to name a few. (Daniels, 1991)

Ominously enough, the passing of Measure 37 in Oregon may undo its past records of success with agricultural preservation. Measure 37 was passed in 2004 and popularly received as a pro-farmer initiative that would help farmers cut through red tape to build homes for their children and laborers (which are sometimes blockaded by counties when farmers cannot demonstrate how such development will benefit agriculture). "The law compels the government to pay cash to longtime landowners when land-use rules reduce the value of their property -- or, if the government cannot pay, to allow owners to develop their land as they see fit" (Harden, 2007). However, now large land owners and others are taking advantage of the law and using it to create the same sort of sprawling development the zoning measures were meant to protect against. States can hold up development for only a mere 180 days, during which they must either come up with the cash to pay off the valued difference between the agriculture and developed land, or allow the develop to continue as planned. Some 132,000 acres within the Willamette Valley are threatened by proposed development under Measure 37, which has earned the nickname "Hate Your Neighbor Act" due to the animosity it has stirred between farmers and even rural residents. (Harden, 2007)

Montgomery County, however, now has a new link on its community planning page, providing developers with strict instructions on how to comply with Bill number 12-07. Passed January 2008, the bill's states:

The purpose of Bill 12-07 is inform and educate potential residents in agriculturally zoned areas that agriculture is the preferred land-use and farming operations are permitted at all times. Residents and other occupants of property within or near land in agricultural zones should be prepared to accept the effects of usual and customary agricultural operations, facilities, and practices, including noise, odors, dust, smoke, insects, operation of machinery, storage and disposal of manure, unusual hours of operation, and other agricultural activities. (Montgomery County, 2008)

For Montgomery County, at least, a sustained agricultural community is certainly within site.

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