The County shall maintain existing Future Land Use designations that have been previously adopted that are outside of the UGB to recognize vested development rights. Any expansion or creation of new Urban Areas outside the UGB shall require a Comprehensive Plan Amendment, analysis to demonstrate the potential need for the creation of such new Urban Areas, and other appropriate documentation in accordance with Policy 3.1.3. It shall not be necessary to modify the UGB to expand or create Urban Areas outside the UGB unless the expansion or creation of new urban area is within the FPA.

## OBJECTIVE 3.2: PLANNED SERVICE AREAS

By June 30, 2022, Planned Service Areas shall be established on the Future Land Use Map series to promote the efficient and cost effective development of utility services and to discourage urban sprawl.

1. The county shall develop PSA's within certain areas designated for higher density development and establish priorities for extension of services to each area.
2. Represents designated areas where regional utility service (water and sewer) will be available. Development is encouraged in the PSA because of the availability or future availability of infrastructure to accommodate development.
3. Higher density development is permitted and encouraged within the PSA.
4. The county shall not subsidize development beyond the boundaries of the Planned Service Area.
5. New development proposed in the PSA shall be allowed only when central water and sewer are provided.

**Policy 3.2.1: Incentive Programs**

The County will create incentives to make development within the PSA desirable and cost affordable. Such incentives may include but are not limited to expedited review processes, retrofitting existing development, increased density bonuses, tax incentives, impact fee structuring and pre-zoning of vacant, underutilized lands to achieve planned densities.

**Policy 3.2.2 Limitation on the Extension of Central Utilities**

The County shall limit the extension of central potable water and sanitary sewer service outside of the UGB and PSAs except (a) where existing urban densities (e.g. subdivisions) were constructed without central water and sewer, and for which the County determines the provision of central utilities is desirable to promote water conservation or aquifer and springs protection or (b) to connect to an existing urban area. Extension of centralized water or sewer systems outside of the Urban Growth Boundary or Planned Service Areas in order to provide services to existing urban areas or redundancy in the system shall not be construed as justification for increased densities or intensities adjacent to such systems, or otherwise outside of the Urban Growth Boundary.

**Policy 3.2.2 Periodic Review**

The County will review and update PSAs based on capital improvement plans at least one time every five years.

## OBJECTIVE 3.3: FARMLAND PRESERVATION AREA

The Farmland Preservation area is intended to encourage preservation of agriculture as a viable use of lands and an asset of Marion County's economy and to protect the rural character of the area. Planning

principles within this area are designed to protect significant natural resources, including prime farmland and locally important soils as defined by the United States Department of Agriculture and unique karst geology that provides high recharge to the Floridan Aquifer, a key source of freshwater for central Florida. The County establishes this area as critical to the enhancement and preservation of its designation as the Horse Capital of the World.

**Policy 3.3.1 Elements of Rural Character in the Farmland Preservation Area**

The County shall preserve and protect rural and equestrian/agricultural character within the Rural Lands in the Farmland Preservation Area by requiring that all appropriate future development activities within this Area preserve, support, and enhance the fundamental elements of rural character:

1. *Scenic Views:* The viewshed of arterial and collector roadways in the Rural Area shall be protected from land clearing and other visual intrusions associated with development; such protections, however, shall not restrict the fundamental agricultural uses permitted within this Area.
2. *Open Space Protection:* Residential development options shall include incentives to promote the protection of open spaces.
3. *Rural Lighting*: In order to preserve the rural character of the area, artificial illuminating devices, emission of undesirable rays into the night sky, glare to oncoming traffic and intrusion of light onto adjacent properties shall be prevented to the greatest extent possible, as further defined in the LDC.
4. *Transportation:* Roadway design within the Rural Area shall be consistent with the principles of context sensitive design, which considers the relationship of land uses and all aspects of roadway design, including speed, travel lane width, access management, and landscaping. Where feasible, expansion or alteration of existing roadway corridors, including State Facilities, will be the preferred method to meet long-range transportation needs. New transportation corridors intended to be used specifically for the construction of expressways or limited access roadways within the Farmland Preservation Area shall be developed in such a way as to avoid negative impacts to vital farmlands, key environmental areas, and valuable open space so that transportation and land use are compatible with the rural character of the area. The development of any such corridor shall be closely coordinated with the Board of County Commissioners and County Staff.

5. *Infrastructure:* Other infrastructure including water and sewer utilities and stormwater facilities within the Rural Area shall reflect a rural level of service and shall not be modified to the point that it encourages or allows for urban development.

**Policy 3.3.2: Density Limitations within FPA**

The County shall implement and maintain density intensity increases within the FPA as follows:

1. Hamlet and Cluster Density Bonus developments shall not be permitted within the FPA.
2. Density and Intensity Averaging Allowance shall not be permitted within the FPA.
3. Family Division of properties with a minimum of one (1) dwelling unit per three (3) gross acres shall be permitted as allowed in this element and as further defined in the LDC.

**Policy 3.3.3 Establishment of Sending Areas**

The FPA is an area that automatically qualifies properties designated Rural Land as being within the Transfer of Development Rights Sending Area due to the concentration of agricultural activities and designated locally important and prime farmland areas.

**Policy 3.3.4 Standards for Amending the Farmland Preservation Area**
Any Comprehensive Plan amendment that would increase development intensity or density within the FPA, or that would remove one or more parcels from the FPA, shall be required to be accompanied by a concurrent Comprehensive Plan amendment to extend the Urban Growth Boundary, or create a new Urban Growth Boundary, to include the parcel(s) under consideration. Comprehensive Plan amendments to expand existing Rural Activity Centers are exempted from this requirement if the Rural Activity Center and the proposed amendment comply with the size, density, and other requirements set forth in Policy 2.1.19.

## GOAL 4: IMPLEMENTATION OF THE COMPREHENSIVE PLAN

**To enable the public to know and understand how the County will implement the goals, objectives, and policies of the Comprehensive Plan.**

### OBJECTIVE 4.1: ADMINISTRATION OF THE COMPREHENSIVE PLAN

The County shall administer and interpret the Comprehensive Plan, Zoning, and LDC and resolve issues that may arise during the development review process in a cost effective, efficient, and timely manner in order to reduce barriers that may unnecessarily discourage economic development activities.

**Policy 4.1.2: Consistency between Comprehensive Plan, Zoning, and LDC**
The County shall amend and maintain an official land use and zoning map, appropriate land use designations and zoning classifications, and supporting LDC that shall be consistent with each other.

**Policy 4.1.3: Conflicts between Comprehensive Plan, Zoning, and LDC**
The Comprehensive Plan shall be the governing document. In the event of conflict between the Comprehensive Plan, Zoning, and LDC, the more stringent regulation shall apply, unless the County has developed a process to allow a variance or waiver of the regulation where a conflict in regulations occurs in accordance to the Comprehensive Plan, Zoning, or LDC.

**Policy 4.1.4: Interpretation of Boundaries for the Comprehensive Plan**
Whenever possible, Comprehensive Plan boundaries shall be interpreted as coinciding with manmade boundaries, such as rights-of-way lines, property lines, section lines, or with natural boundaries such as water bodies in effect at the time of establishment. In the event that any Comprehensive Plan boundary shown on the FLUM cannot be determined to coincide with any such boundary, the affected party may request an official interpretation from the Growth Services Director or his designee; these interpretations may be appealed to the Board of County Commissioners whose decision shall be final.

**Policy 4.1.5: Select Uses or Activities with Special Requirements**

QUICKNOTES

*Planning fundamentals for public officials and engaged citizens*

*This PAS QuickNotes was prepared by Jennifer Dempsey, director of American Farmland Trust's Farmland Information Center—a clearinghouse for information about farmland protection supported by the Natural Resources Conservation Service.*

# The Farmland Protection Toolbox

Food production, and therefore long-term food security, depends on the availability of agricultural land. Working lands support local economies through sales of farm goods, job creation, support services and businesses, and by creating secondary markets such as food processing and distribution. Well-managed agricultural land also provides food and cover for wildlife and protects watersheds. It helps control flooding, absorbs and filters stormwater, allows groundwater recharge, and has the potential to produce renewable energy.

Despite its importance, agricultural land is at risk. It is ripe for development because it tends to be flat, well drained, and open. According to the National Resources Inventory, 23,163,500 acres of agricultural land were developed between 1982 and 2007. As development encroaches on farmland it increases the costs and risks of production and drives up land values beyond the reach of agricultural producers.

State and local governments have led the response to agricultural land conversion. Nearly every state has enacted some form of property tax relief for farmland and right-to-farm laws. Thirty-one states have authorized farmland protection programs, and 16 have agricultural district programs that provide a variety of benefits including protection from eminent domain and municipal annexation. Local governments also have addressed the challenge. What follows are the tools most commonly used locally to reduce farm and ranchland conversion and to permanently protect agricultural land.

## Reduce Conversion

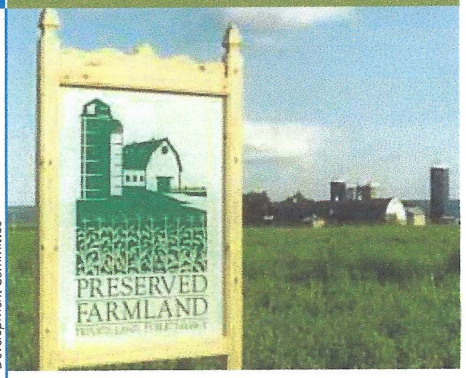
**Comprehensive Plans** can lay the foundation for local farmland protection strategies by identifying areas to be protected for agriculture and areas where growth will be encouraged. Plans may include or recommend specific policies to protect agricultural resources and to head off potential land-use conflicts. Forming a local agricultural advisory committee comprised of farmers and agricultural landowners can help ensure that agricultural needs are integrated into the comprehensive plan.

**Urban Growth Boundaries** (UGBs) define areas intended to accommodate anticipated growth for a given planning horizon. UGBs are often used to guide decisions about infrastructure development including the construction of roads and extension of water and sewer services. In the context of farmland protection, they separate areas appropriate for future growth from areas intended for agricultural use.

**Agricultural Protection Zoning** (APZ) ordinances designate areas where farming is the primary land use and discourage other land uses in those areas. APZ ordinances typically restrict the density of non-farm residential development and may also contain limits on subdivision and site design criteria including buffers and setback requirements. They may permit complementary, on-farm commercial activities that enhance farm profitability.

APZ stabilizes the agricultural land base by keeping large tracts of land relatively free of non-farm development, which can reduce the likelihood of conflicts between farmers and their non-farming neighbors. Also by limiting development potential, APZ can help keep land affordable to farmers and ranchers. Finally, APZ can help promote orderly growth by redirecting development to areas with adequate infrastructure to support it.

**Subdivision Ordinances** govern the division of larger parcels of land and give local officials the authority to review and make decisions about proposed subdivisions. In the context of farmland protection, subdivision ordinances can require review of potential impacts on agricultural resources;




© Stefanie Miller, N.J. State Agriculture Development Committee

*Permanently protected farm in New Jersey.*

American Planning Association

*Making Great Communities Happen*

establish design standards, including setbacks and buffers; and authorize local officials to suggest alternatives or mitigation measures or to deny projects based on the impact to agriculture.

**Right-to-Farm Laws** protect producers from private nuisance suits and overly restrictive local regulations. Local governments enact right-to-farm laws to strengthen and clarify language in state laws and to educate residents about normal agricultural activities. A local right-to-farm ordinance can serve as a formal policy statement that agriculture is a valuable part of the local economy and culture.

**Local Property Tax Reduction Programs** provide an additional reduction in taxes beyond state authorized programs. These programs reduce operating costs for farm operations and rural landowners who rent their land to farmers. Local tax reduction programs may take a few different forms. Some localities adopt agricultural assessment values for service districts. Others offer a reduction in local property taxes in exchange for term easements.

## Save Land for the Future

**Mitigation Ordinances and Policies** require developers to permanently protect an equivalent or greater amount of farmland in the event that agricultural land is converted to other uses. Local ordinances may require mitigation as a condition of approval for development projects that change the general plan designation, zoning from agricultural land to nonagricultural land, or for discretionary land-use approvals that would change an agricultural use to a nonagricultural use. They also establish mitigation ratios that require developers to protect a certain amount of farmland for each acre converted. Farmland loss mitigation ties permanent protection to development activity and can provide a supplemental source of funds for farmland protection.

**Purchase of Agricultural Conservation Easement (PACE) Programs** compensate farmers and ranchers for permanently protecting their land with a conservation easement. Landowners voluntarily sell agricultural conservation easements to government agencies or private conservation organizations, giving them the right to prohibit land uses and activities that could interfere with present or future agricultural use. PACE programs keep threatened farm and ranch lands available for agriculture and provide agricultural landowners with a viable alternative to development.

**Transfer of Development Rights (TDR) Programs** enable the transfer of development potential from one parcel of land to another and are typically established by local zoning ordinances. Localities often use TDR to shift development from agricultural land (sending areas) to designated growth zones (receiving areas) located closer to municipal services. TDR is most suitable in places where large blocks of land remain in agricultural use. Designated receiving areas must be responsive both to residents' concerns about increased density and to market conditions.

## Conclusion

There is evidence that local farmland protection efforts are paying off. From 2002 to 2007, the national average annual conversion rate was 816,060 acres per year, down 29 percent from the 1992–1997 reporting period. The slowdown occurred despite the fact that residential building permits and housing completions reached all-time highs and construction expenditures for private, nonresidential development peaked during this period.

The decline in agricultural land conversion is likely due, in part, to more efficient development. According to the American Housing Survey, single-unit homes built on small lots jumped from 51 to 58 percent between 1997 and 2007 and median lot size dropped from 1.56 acres to 0.36 acre. This outcome underlines the critical role local land-use policies can play in saving agricultural land. The other part of the solution is permanent protection. Permanent protection ensures that, in the face of development, there will be a supply of agricultural land in the future.



## REFERENCES

### 1. Published by the American Planning Association

American Planning Association. 1999. "Policy Guide on Agricultural Land Preservation." Available at http://www.planning.org/policy/guides/adopted/agricultural.htm.

Daniels, Tom. 2009. "Saving Farms and Farmland." *Planning*, August/September. Available at http://www.planning.org/planning/2009/aug/savingfarms.htm.

### 2. Other Resources

The Farmland Information Center's farmland protection fact sheets and technical memos are posted on the FIC website (www.farmland.org). The website also offers a collection of federal, state, and local laws; regulations and policies; sample documents; literature; and statistics related to farmland protection.

Planning November 2015

IN THIS ISSUE:

Preserving Large Landscapes

# Preserving Large Landscapes

Eastern and western styles differ but align in important ways.

*By Tom Daniels and Jack Wright*

The term "rural lands" conjures up visions of wide-open spaces. But behind that vision are growing populations and development pressures for houses, commercial strips, resorts, and second homes. The goal of preserving blocks of thousands of acres to maintain those open spaces has come to the fore over the last 25 years. A comparison of agricultural land preservation in the eastern and western U.S. shows that the long-term protection of large landscapes requires planning, funding, and willing landowners.

**Farmland preservation**

Since the first farm was preserved in Suffolk County, New York, in 1974, farm and ranchlands have been converted to other uses at a rate of about 2.5 million acres a year, or a total of just over 100 million acres. Although today there are 900 million acres of farm and ranch land in this country, more than 500,000 acres are pasture or rangeland, while slightly more than 300 million are in harvested cropland. In response to the loss of agricultural land, state and local governments and private land trusts — with the help of federal dollars — have preserved more than five million acres of farm and ranch lands.

The primary technique for farmland preservation is the conservation easement, also known as the purchase or donation of development rights. A landowner signs a deed of easement with a private land trust or a government agency to restrict the development of the land to agricultural uses and open space. The landowner receives a payment from the land trust or government agency, though it is not uncommon for the landowner to donate some of the value of the conservation easement through a "bargain sale" of part cash and part donation. The landowner can use the donation as an income tax deduction. Some landowners have donated the entire easement value.

Another technique is the transfer of development rights, through which a landowner in a farming area (or TDR sending area) sells the right to develop to a developer who then is allowed to transfer that right to a location (receiving area) where the local government wants more development. Once the landowner sells the development rights, the landowner grants a conservation easement to the local government.

Local governments like the purchase or transfer of development rights because it is an effective way to restrict development without having to worry about the Fifth Amendment "takings" clause. The landowner is voluntarily selling or donating development rights, so there is no taking of land value by the government. For landowners, the sale of development rights offers a way to get cash out of their land without actually having to sell the land. And the land remains private property.

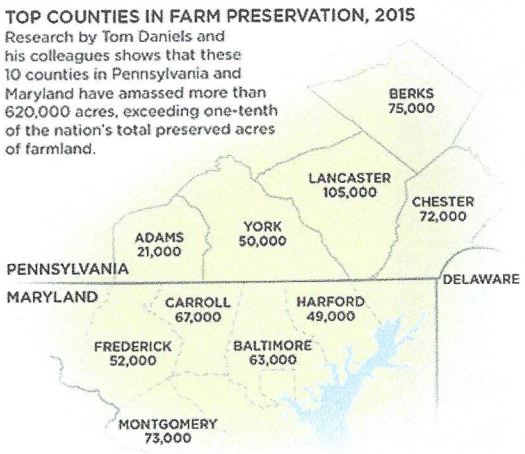
The key attraction for planners is that land preservation programs have the potential to create large, contiguous blocks of preserved land to channel growth and development to areas with adequate infrastructure and to minimize sprawl in the countryside. Planners know that if land is not preserved in large blocks, it can act as a magnet for development next door.

**Saving Maryland and Pennsylvania farms**

Maryland and Pennsylvania have a total population of nearly 19 million, most of whom are concentrated along the I-95 corridor between Philadelphia and Washington, D.C. Yet, these two states accounted for more than $11 billion in farm output in 2012.

Maryland created the first state-level farmland preservation program in 1977, and Pennsylvania followed in 1988. The two states rank first and second in farmland acres preserved nationally, with more than 500,000 acres preserved in Pennsylvania and 320,000 acres in Maryland, accounting for almost one-sixth of all the agricultural land preserved so far in the U.S.

Together, the 10 leading counties in Pennsylvania and Western Maryland have amassed more than 620,000 acres of preserved farmland, exceeding one-tenth of the nation's total preserved farmland acres. To preserve so much farmland in a region with intense development pressure has required not just steady and abundant funding from government and private sources, but also planning and land-use regulations to protect farms while they are waiting for the preservation dollars to become available and to protect farms from encroaching development after they are preserved.




Baltimore County, Maryland, adopted an urban growth boundary, known as the Urban-Rural Demarcation Line, in 1967 to keep sewer and water lines out of its northern rural lands. Over time, the county implemented very restrictive agricultural zoning that allows only one house per 50 acres for a lot of record over 100 acres, and only two lots for lots of record from two to 100 acres. To date, the county has preserved more than 62,000 acres.

Montgomery County, Maryland, just northwest of Washington, D.C., pioneered the use of transfer of development rights and has preserved more than 52,000 acres through TDRs. The county began its TDR program by downzoning its agricultural area from one house per five acres to one house per 25 acres and giving each landowner one TDR per five acres owned. The county then designated receiving areas closer to the nation's capital. The county has preserved an additional 21,000 acres through the purchase of development rights.

"I don't think anyone had a clear goal of how much farmland to preserve or how to preserve it in contiguous blocks," says Deborah Bowers, program manager of the Carroll County, Maryland, farmland preservation program. "The most successful county programs have been around for a long time and have steadily put together large blocks of preserved farmland, thanks to landowners who love their land and do not want to see it developed."

Lancaster County in southeastern Pennsylvania has preserved more farmland than any other U.S. county: 105,000 acres. A key to the county's success has been the partnership between the county and the Lancaster Farmland Trust, a local land trust. With an annual farm output of almost $1.5 billion, the county is also the cornerstone of the agricultural industry in the region. The county has combined the purchase and donation of development rights to farmland with urban growth boundaries (since 1993) and agricultural zoning that covers more than half of the county.

Thanks to these efforts, it's likely that the region will have an agricultural industry far into the future, as well as the open spaces that people love to look at.

**Preserving western lands**

The West's wide open spaces have inspired dozens of gigantic conservation projects that link the conservation of private agricultural land with publicly owned wildlife habitats. The most famous of the region's 122 large landscape initiatives — organized by the Practitioners' Network for Large Landscape Conservation — are the Yellowstone to Yukon and Crown of the Continent bioregional efforts to assure ecological connectivity in the face of climate change and mining, forestry, and ranching activities.

The large landscapes initiatives encourage collaborative ecosystem management by government agencies across jurisdictions. Some of the West's landscape programs could exceed 100 million acres, a scale that places land conservation at the center of a sustainable future.

The widely accepted theory of island biogeography — defined in the 1960s by ecologists E.O. Wilson and Robert MacArthur — stresses that large, connected preserves house more species and are more resilient than small, fragmented ones. Landscape ecology now drives conservation programs across the West, with land trusts and growth management strategies playing a much larger role than state and local government funding. This is in contrast to the East, where public funding measures have been important (for example, the $12.4 billion approved by voters in Florida in 2014 for open space protection and the restoration of the Everglades).

In the West, the acres protected by land trusts stand out: California (2.3 million acres), Colorado (1.2 million acres), and Montana (1.1 million acres). Nearly all of this preservation involves working agricultural and forest lands.

**Ranch land leads the way**

Ranchers control a large share of the private property in the West, and they traditionally resist county or state land-use planning programs. While national parks, national forests, and wilderness areas tend to be the focus of many of the region's large landscape initiatives, conserving contiguous expanses of ranch land is essential if the West's wildlife habitats, open spaces, historic sites, and watersheds are to survive.

One group that has stepped forward is the Partnership of Rangeland Trusts, an association of land trusts formed by stock growers associations in California, Colorado, Kansas, Montana, Oregon, Texas, and Wyoming. Twenty years ago, many of these ranch groups opposed conservation easements. Now, these trusts have preserved 2.2 million acres of agricultural lands — an area the size of Yellowstone National Park — through donated and purchased conservation easements.

Also worth noting is the New Mexico Land Conservancy, a statewide land trust that has preserved 344,000 acres, much of it in support of large landscapes projects. Although not a member of PORT, NMLC has taken on the job of protecting ranch lands from subdivision.

"We help communities and landowners come together to save the places they love," says Scott Wilber, NMLC's executive director. "NMLC is all about voluntary, financially compensating tools such as conservation easements. We're not here to tell anyone how to manage a ranch. I grew up in Wyoming. I know ranching culture, and you have to build trust."

NMLC holds conservation easements on more than 64,000 acres in the Greater Gila Ecosystem, terrain with more than 500,000 acres of wilderness at its core. These ranch-land easements protect critical winter range habitat for elk and other species as well as a scenic buffer for wilderness lands. Critically endangered gray wolves, endangered Little Colorado River spinedace, and the threatened Gila trout are also being protected.

Yet the goals of ranchers mostly focus on family-based agriculture. Easement donor Zeke Shortes's view is typical: "My family wanted to do something to preserve a legacy provided us by my ancestors," he says. "The area has suffered from the influx of subdivisions, and has threatened the sacredness that first entranced my grandfather."

Michael Scisco, formerly on the staff of NMLC, agrees: "The conservation of ranches has multiple benefits not only for wildlife but also provides sustainability and security to agricultural operations."

In northeastern New Mexico, NMLC holds easements on 31,000 acres of prairie grasslands riparian ecosystems, archeological treasures, and big game habitats in a region called the "Hi-Lo Country," where the Great Plains meet the Sangre de Cristo Mountains. One 7,500-acre easement surrounds the Fort Union Trading Post National Historic Site, a once vital stop on the Santa Fe Trail.

Wagon ruts, artifacts, historic sites, and scenic beauty are now secure. The owners may incrementally place easements on their entire 94,000-acre ranch. NMLC has a goal of protecting 500,000 acres in the Hi-Lo County, much of it former Spanish and Mexican-era land grants that have been broken into numerous

ranches.

In New Mexico's southwest "Bootheel" region, NMLC holds an easement on the 1,760-acre Bioresearch Ranch. The property contains Chihuahuan Desert grasslands and oak woodlands in the Peloncillo Mountains, one of the country's most biodiverse landscapes. Rare and endangered species include jaguars — moving between Mexico and the U.S. — desert bighorn sheep, collared peccary, coatimundi, desert tortoise, and Mexican long-tongued bats.

Scott Wilber of NMLC is excited about the West's success in large landscape conservation: "We are breaking through with ranchers, building trust, doing deals," he says. "When they first contact us about putting their land under a conservation easement, they are very concerned about losing their private property rights. Our response is always that it's their choice. After all, conservation is as much a private property right as development."

Across the West, increasing numbers of ranchers and farmers are exercising that right by safeguarding an enormous agricultural legacy while simultaneously protecting wildlife habitat. The income and estate tax benefits of conservation easement transactions are a powerful driver of these achievements.

The preservation of agricultural land has predominated in the East in part because the federal government owns relatively little land there, whereas it owns most of the land in many western states. In the East, state and local governments have been more active in preserving agricultural land; in the West, federal funding, grants from private foundations, and land trusts have been especially important.

In safeguarding large landscapes, the West has a big advantage because ranchers typically own thousands of acres, and a single conservation easement can preserve a huge area. The New Mexico Land Conservancy has preserved a 30,000-acre ranch in a single conservation easement. To preserve that many acres in Pennsylvania or Maryland would involve about 300 easements because of the small average size of the farms.

**Lessons learned**

Efforts to preserve large landscapes hold several lessons for planners.

- Plan for preservation, not just development.
- Preservation takes time.
- Preservation is expensive; a dedicated funding source is a big help.
- Public-private partnerships are important.
- Preserve large contiguous blocks.
- Don't be afraid to preserve land adjacent to development.
- A package of planning techniques is essential in areas under heavy development pressures.

*Tom Daniels is a professor in the Department of City and Regional Planning at the University of Pennsylvania and the author of* The Environmental Planning Handbook, *whose second edition was published by APA Planners Press in 2014. Jack Wright is a professor in the Department of Geography at New Mexico State University.*

## RESOURCES

**Images:** Top — Landowner Greg Moore worked with the New Mexico Land Conservancy to conserve the entire Wagon Mound Ranch in Mora County, New Mexico — more than 23,000 acres that include a broad valley, riparian areas along Carrizo Creek, grassland, and numerous tree and cactus species. Photo by Evalyn Bemis. Middle — Wagon Mound Ranch in Mora County, New Mexico. Photo by Evalyn Bemis. Bottom — The owner of the Wagon Mound Ranch conserved his land in part to protect it from subdivision and development. Photos by Evalyn Bemis.

**Map:** Top Counties in Farm Preservation, 2015 — Research by Tom Daniels and his colleagues shows that these 10 counties in Pennsylvania and Maryland have amassed more than 620,000 acres, exceeding one-tenth of the nation's total preserved acres of farmland. Map by Ethan Daniels; colorized by Dolly Holmes.

Practitioners' Network for Large Landscape Conservation: www.largelandscapenetwork.org (http://www.largelandscapenetwork.org)

Partnership of Rangeland Trusts: www.maintaintherange.org (http://www.maintaintherange.org)

New Mexico Land Conservancy: www.nmlandconservancy.org (http://www.nmlandconservancy.org)

# Local Agricultural Preservation: Making the Food System Connection

PAS Memo — March/April 2011

*By Joel Russell*

One of the fastest growing fields in planning today is what has become known as "food systems" planning. This field has emerged from the realization of the important connections between farms, food processors, food distribution, food retailing, and consumption.

This *PAS Memo* begins by setting the context for the local food movement and its relationship to planning and economic development, showing why local food is important and why its economic importance has been undervalued in the past. The article then describes measures that planners, local officials, and citizens can take to overcome this lack of understanding and appreciation to help promote local small-scale agriculture and the many benefits it offers. These measures go beyond the familiar tools of comprehensive plans, zoning ordinances, farmland preservation, and economic development, and they will work only if seen in the larger context of the food system as a whole. Because this article is conceptual in nature and looks at the "big picture," it does not go into specific detail on agricultural planning programs or projects, which are worthy subjects for other articles.

The components of what we now call the "food system" have generally not been recognized by planners as part of an integrated whole. Planning for agriculture and agricultural land has been viewed primarily as the province of rural community planning; food distribution and merchandising are partly about economic development and partly about provision of commercial services; food services for restaurants, resorts, hotels, schools, and institutions have been viewed as separate activities.

There is also the issue of scale and how the parts fit together. Before the advent of cheap fossil fuel and a national market for food controlled by a handful of industrial food processors, most food was locally sourced. As with electricians, carpenters, music teachers, and doctors, you got what you needed from somebody nearby, someone you often knew personally (if not the farmer, then the local grocer who bought from the local farmer), not from a vertically integrated global conglomerate that produced or purchased your food and the inputs that went into it and then distributed it nationwide. Today, food has come to be seen as just another consumer product that emerges from a vast industrial system of production.

Increasing recognition of the importance of where food comes from and how it is produced has created a rapidly accelerating "locavore" movement. The locavore movement is at the confluence of a growing awareness of both the health implications of industrial chemical agriculture and the awareness of the

significant contribution local businesses make to community character and the health of the local economy. "Locally grown" connotes not only "healthy for the body" but also "healthy for the community, environment, and economy." Writers like Michael Pollan have made us much more keenly aware of the health and economic implications of our food choices: both *how* and *where* our food is grown.

This growing interest in bringing food closer to home is demonstrated by a new real estate concept: the farm-based development project, where real estate developers integrate local farms into the fabric of their developments. Successful examples include Serenbe, in the Chattahoochee Hill Country near Atlanta (www.serenbe.com (http://www.serenbe.com/)) and Prairie Crossing, in Grayslake, Illinois (www.prairiecrossing.com (http://www.prairiecrossing.com/)). There is a growing market of homebuyers who derive great satisfaction from knowing their food comes from the farmer down the road or in their backyard. They want to be part of a food system that they can see, touch, and taste, and they are willing to pay a premium for it (Ranney et al. 2010). These developments are among the few that are still selling well in the face of the worst real estate market in memory.

Serenbe is an example of a successful farm-based development project. Photo Joel Russell.

Agriculture also fits well in depressed urban areas where jobs are scarce and food quality is poor, but vacant land is abundant. Recent projects in rust-belt cities like Detroit, Cleveland, and Holyoke, Massachusetts, have shown that putting vacant urban land into agriculture solves multiple problems synergistically. It provides jobs and income for the unemployed, healthy food for the sick and undernourished, skill development for the undereducated, and perhaps most importantly, hope and pride for people who have lived without these for years or even generations.

Community-supported agriculture (CSA) and farmers markets, while still small in relation to the overall food system, have gained popularity disproportionate to their current economic volume, and the "buy local" movement is expanding and gaining recognition in mainstream food marketing. More and more supermarkets now have "local food" sections complementing their relatively new organic food aisles. The food production systems that underlie these trends have undergone unprecedented re-examination as a result.

## Why Preserving Local Agriculture is Important

Despite the growing interest in local food and the systems that support it, the predominant food production system today is one of increasing concentration and industrialization. Federal and state farm policies have for decades followed "cheap food," "get big or get out" policies designed to encourage large-scale production, which leads to economies of scale and lower food prices. However, these policies have had serious consequences. Recent books, articles, and films have documented the decline of farming towns and counties due to the substitution of capital and machinery for farm labor; threats to our food supply and the environment due to overuse of pesticides, herbicides, and antibiotics in feed; inhumane treatment of farm animals in confinement operations; an increased dependence on fossil fuels; and the epidemic of obesity resulting from an unhealthy diet of cheap food.

While we export millions of tons of commodity crops around the world, many parts of our major cities are "food deserts" where residents lack access to healthy food. Nationally, 68 percent of adults and 32 percent of children and teens are currently obese or overweight, trends exacerbated by diets consisting of unhealthful food made cheap by federal subsidies (Levi et al. 2010, 9). Our current food system thus directly impacts the health care crisis that threatens our society's economic stability.

Today's large-scale agriculture has come at the expense of local small farmers who cannot compete with the low prices and subsidized production costs of industrialized farming. The result has been the loss of farmland and the decline of rural communities. We also now face concerns about "food security" as we recognize that our food supply depends upon a far-reaching global network, highly dependent on fossil fuels, the breakdown of which could threaten our ability to feed ourselves.

The decline of local agriculture and the industrialization and globalization of food production is by now a familiar story to many. What can be done to reverse it, aside from the critical but politically difficult task of withdrawing subsidies that distort the market and benefit large-scale industrial agriculture at the expense of small and mid-size independent farmers who produce healthy, local food?

**Farmland, Farms, or Farmers?**

The farmland preservation movement began in the 1970s and 1980s, as Americans recognized that much of our productive farmland was being lost to suburban development. The interstate highway system opened up more and more of the farmland surrounding cities to sprawling residential and commercial development, which took advantage of the good soils and gentle topography. At the same time that this conversion of farmland was occurring, the industrial productivity of agriculture increased, allowing more food to be grown on less land. Fossil fuel, in the form of fertilizers, pesticides, and fuel for farm machinery and trucks, replaced land and labor, making the land around cities less valuable for farming and more valuable for development. At the same time, much of the less productive farmland outside of those metropolitan areas was simply abandoned, growing back to brush and forest. In essence, less land was being farmed, and former farmland was turning into suburbs or forests.

The national shift to large-scale industrialized agriculture has threatened small family farms (Cooperstown, New York). Photo Joel Russell.

As this shift was occurring, few people realized just how fundamentally unsustainable it was. It was *ecologically* unsustainable because of its heavy reliance on declining supplies of oil, its destruction of topsoil that took centuries to build up, and its pollution of our waterways with chemicals; and it was *economically* unsustainable because of its heavy reliance on subsidies for large-scale agriculture financed by federal deficit spending. These government policies aimed to make industrial food very cheap; the resulting apparent "higher cost" of local food helped drive smaller-scale farms out of business. Equally problematic were other federal policies encouraging the development of farmland, including housing and transportation subsidies that catalyzed the vast movement of Americans out of cities into suburbs and exurbs.

What appeared to many to be a crisis of farmland loss was really one small part of a much larger crisis in the making, a crisis that links food, health, housing, banking, finance, transportation, and ultimately, energy and climate change.

As awareness of this loss of farmland grew, a farmland preservation movement emerged, spearheaded by local land conservation organizations (especially land trusts) and national organizations such as the American Farmland Trust. However, preserving the land base is at best only a partial solution, because farmland cannot really be preserved unless it is being actively and profitably farmed. And profitable farming depends upon a whole range of economic factors, many of which are outside of local control. The less that farmers need to depend on global market conditions, federal subsidies, and off-site inputs such as fertilizer and pesticides, the less vulnerable they are to these uncontrollable fluctuations in their economic environment. Organic and biodynamic farming practices that recycle nutrients from animal and vegetable waste through composting and use ecological principles to control pests offer self-reliance on the input side, and farmers markets, local produce stores, and CSAs help protect farmers from the vagaries of national and international market conditions.

Profitable farming also depends upon a supportive infrastructure of agriculturally related businesses and communities that value farmers, so any policy to protect farms, farmers, or farmland that does not take into account the food system as a whole is bound to be limited in its effect. The good news is that consumers are the largest segment of this system, and they could ultimately drive change. When enough of us insist upon high quality, wholesome local food, the system will have to adapt to our demands. The

growing interest in local, healthy food is a sign that a change in consciousness is underway. Perhaps the current national economic and budget crisis, as well as the growing costs of inputs and fossil fuels, is what it will take to rethink the politics of food.

## Current Agricultural Planning Approaches: Limitations and Opportunities

In the meantime, what can planners and local government officials do in the current economic and political climate to help promote this shift? The relatively few areas under local control include zoning and land use controls, local taxes, local forms of subsidy, and local infrastructure investment. Perhaps as important are local cultural attitudes and values about the connection between people and the land and between food, farming, ecology, nature, and human health. The place of agriculture in a community and its value to residents is an intangible factor that can make a great difference in the success of local farming and the use of planning tools such as comprehensive plans, zoning, property tax incentives, and Purchase of Development Rights (PDR).

**Comprehensive Plans**

Local comprehensive plans increasingly address the need to preserve agricultural land for a variety of reasons, including scenic value, the desire to preserve "rural character," or water resource protection. Comprehensive plans usually pay less attention to agriculture as a significant force in the local economy. Except in predominantly agricultural regions, the economic value of agriculture tends to be underestimated by planners and public officials. Indeed, agriculture is most often considered part of the "land use" element of a comprehensive plan rather part of its economic development section, and in many communities in or near metropolitan areas, agriculture is considered to be a temporary or transient land use that is being phased out as development takes over the landscape. This is changing as people come to value farmland both as a natural and cultural resource and as a source of food and economic activity.

Comprehensive plans should acknowledge the many values of agriculture, especially where it defines an area's character and economic foundations (Amenia, New York). Photo Joel Russell.

Very few plans directly address food systems as the concept is still new, but this may be changing. At the American Planning Association's 2010 National Planning Conference in New Orleans, a "food interest group" meeting attracted a standing-room only, predominantly younger crowd of students and planners. When someone asked how many participants wanted to become "food systems planners," almost every hand in the room shot up. The opportunity for integration of food systems planning into the comprehensive planning process is one of the most exciting in the field today.

This type of planning would combine economic development, local infrastructure and commercial services, natural resources, land use, open space, and conservation under the overall umbrella of tying together food producers, processors, distributors, retailers, restaurateurs, and consumers into a coherent system that focuses on protecting the local agricultural land base, making farms economically profitable, and producing, buying, and selling as much local food as possible.

The growing interest in food systems as an integral part of community planning means that opportunities for the planning and enhancement of local food systems will increase in the coming years. The time may come in the near future when county planning departments will add food systems planners to their staff, and when comprehensive plans will include food systems sections that make connections between farms, food, markets, and consumers. Until that time, the consideration of food systems in planning will likely continue to be haphazard and ineffective.

**Zoning and Land Use Controls**

Many communities approach the protection of farmland and farms through zoning measures that are intended to help preserve farmland. There are many variations of this, many well-intended, but most quite counterproductive. These include:

1. Large-lot agricultural residential zoning, which merely encourages sprawl residential development.
2. Cluster development, which is really a form of modified sprawl where homes are scattered through the countryside in a more clustered configuration, often using views of farmland as an "amenity" to promote sales.
3. Exclusive agricultural zoning, which is more effective, but also more restrictive and politically unpopular in areas where development pressures exist.
4. Natural resource protection zoning, which promotes economically viable agriculture or forestry as preferred land uses, makes large-scale residential development economically infeasible through substantial residential downzoning, and adds flexibility for non-residential uses, enabling farmers to add complementary uses to provide additional streams of income. This is a compromise approach which is more effective than clustering and more politically palatable than exclusive agricultural zoning.
5. "Town and Country" zoning, which requires that development occur only in densely populated hamlets and villages, with the surrounding rural areas (70 percent or more of the land) remaining undeveloped and available for farming, forestry, natural area preservation, and recreation. This type of zoning only works in rare instances where land holdings are very large and there is substantial support among landowners (e.g., the Chattahoochee Hill Country outside of Atlanta).

The main problem with reliance on zoning and similar regulatory measures is that it usually alienates the very people whose livelihoods it is supposed to benefit: farmers. Farmers generally view restrictive zoning, even if it is intended to protect agriculture, as taking something away from them; this can aggravate tensions between farmers and the rest of the community. They are more inclined to support approaches that recognize and compensate them for their contribution to the local economy and landscape. In a 2009 review of agricultural preservation zoning's track record, I found that nonzoning programs generally played a more important role in determining whether or not a community was successful at keeping its farmland in production and its farms profitable (Russell 2009). The most important factors in successful protection of agriculture were cultural in nature: shared community values, steady political leadership, broad-based knowledge and understanding of agriculture within the community, and communication and trust among the farm and nonfarm populations. Where farmland protection zoning has been successful, it has usually been supported by or even proposed by the farmers rather than imposed upon them.

Another shortcoming of agricultural zoning is its narrow focus on farms and farmland; it typically ignores the other links in the food system needed to make farms profitable. A good example of this is the need for slaughter facilities, which most zoning ordinances prohibit categorically, even in remote rural locations where they would have little or no impact on residential neighbors. This lack of slaughter facilities may be the largest bottleneck in the food system today. Demand for locally produced meat far exceeds the supply, and farmers and restaurateurs report that lack of slaughtering capacity is the major obstacle to capitalizing on this trend. According to Dan Barber, executive chef of Blue Hill Restaurant at Stone Barns, "Slaughterhouses are the single most important thing that farmers in the region need" (Glynwood n.d). Zoning, originally written to separate slaughterhouses and other "incompatible" uses from housing, must now be revised to allow them in appropriate places. Such facilities are an essential link in the chain that connects land and farmers to anyone who eats meat, and they need to be encouraged as essential uses for a local economy.

To reiterate this important point, land use controls are most effective when enacted in the context of a larger community effort that supports farms and farmers. This community culture develops in places where agriculture is appreciated as an essential part of the local food system, a system that provides economic, health, environmental, and social benefits, and that allows and encourages the infrastructure needed to make farmers successful. This only happens when there is shared understanding, good communication, and the political leadership and will to make meaningful change.

**PDR, Taxation, and Subsidies**

Experience has shown that incentive-based mechanisms for farmland preservation, such as Purchase of Development Rights (PDR), property tax reductions for active farming, and various forms of local subsidy for farmers, are politically more palatable and much more likely to engender cooperation from landowners. This is where the development of state and federal subsidy programs for local farming could be very helpful. Though local subsidy programs can meet political opposition, people are far more willing to pay a little more in taxes, contribute to a community farm program, or buy local even if it is more expensive when they have made the connection between local farms and farmers and the food they eat. When they know the farmer selling them their dozen eggs, they are surprisingly willing to add a dollar or two to the price because they trust that the eggs will be high quality and that buying them will help keep the farmer on the land and the land productive. The recent large-scale recalls of industrially produced eggs (and other products) have further increased the value of knowing where one's food has come from and who produced it.

When consumers make the connection between farmers and their food — in this case, the chickens laying their eggs — they are surprisingly willing to pay premium prices for local products (Glynwood Center, New York). Photo Joel Russell.

When a critical mass of community members is willing to support PDR, tax incentives, or subsidies, farmers respond enthusiastically because financial incentive programs make them feel appreciated and recognized, make farms more profitable, and show the community's commitment to local agriculture. Still, without a broader-based understanding of food systems, PDR and other incentives will have limited impact. Even where state programs providing limited property tax relief for farmland exist, they are often insufficient to offset the cost and price advantages industrial farmers enjoy by virtue of government subsidies, economies of scale, and cheap transportation. There is no way the public can afford to pay for

all of the farmland that must be preserved or subsidize the small farms that need help in order to rebalance the scales that remain tilted so decisively in favor of industrial petroleum-based agriculture. (Of course, using those same subsidies to help small farmers instead of their industrial competitors would make a huge difference.)

**Economics and Infrastructure**

Space does not permit a thorough discussion of the broader issues of farm economics and infrastructure. Supplies, equipment, markets, pricing, financing, processing, transportation, and distribution are key factors in food systems planning. A food system plan or food system component of a comprehensive plan should deal with these issues in detail. In addition to the usual analysis of agricultural soils and lists of farm operations, it should include inventories of the total value of farm production with a breakdown by crop and product type, and also address value-added products, food processing facilities, availability and gaps of availability in credit for farms, markets (local, regional, and national, including web-based marketing), suppliers, equipment dealers and repair facilities, labor supply (local and migrant), farm labor housing, and price differentials between local and national/industrial producers. When the total value of agricultural production is calculated in many communities, it often surprises those who think that industry and retail are the most significant economic generators.

The food system is among the least understood components of a local economy, both by local citizens and their elected representatives and by those who gather statistics for federal and state agencies. Agriculture and food have not been viewed holistically, so that the information available has to be extracted from the various silos where it is stored, and much of it has to be generated from scratch by interviewing local farmers, grocers, distributors, chefs, and others involved in the food system. This type of analysis will quickly reveal constraints that impede local food systems, such as deficiencies of necessary infrastructure (including the slaughter facilities discussed above), credit and "patient capital," affordable land, markets, and housing for farm owners and workers.

## The Need for a Whole Community Food Systems Approach

We need an entirely new approach to planning for agriculture and food systems, one that links local agriculture with local food and the complex web of institutions and businesses that support agriculture. Agricultural preservation should no longer be seen as merely a subset of land-use planning, but must be brought into the larger context of food systems planning and the regional economy.

This article is a starting point — a call to rethink farmland, farms, and food. It is also a call to action, to bring together the stakeholders whose cooperation is essential to the success of a fully functioning local food system. The full development of this field will require the efforts of a new generation of multidisciplinary planners, activists, entrepreneurs, public officials, restaurateurs, and farmers. We all eat food, so we all have a stake in this.

The main ingredients of a whole community food systems approach include the following:

**A Supportive Community Culture.** This is the single most important part of the solution; it underpins all of the recommendations in this article. Creating this culture involves forging social connections and communication between producers and consumers. It means turning consumers into producers through gardening and backyard farming, strengthening the role of CSAs, and connecting food retailers and bulk food purchasers (hospitals, restaurants, schools, institutions) with local food producers. In a supportive community culture, people will be far more aware of the dynamics of the food system and the need for farm profitability in the face of a market which is heavily biased toward large-scale commodity crops. People will recognize that if they want to eat good meat, they need to allow slaughter facilities (just as if they want to talk on their cell phones, they need to allow cell towers). Community leaders will put food systems and agriculture high on their agendas and appreciate the linkages with other important issues such as education, public health, and land use policy.

**Education.** Educational institutions from primary school through college are important in two ways: (1) by purchasing local food, they can guarantee large markets for fresh local food and thereby help farmers while better nourishing their students; and (2) by teaching about food systems and agriculture they can help train the next generation of food system workers and professionals. They can also use the land on their often sprawling campuses to produce food and train future farmers. The old "ag school" model, largely abandoned, needs to be reinvented so that agriculture is taught as a noble profession that lies at the heart of the food system and even national security. A college student majoring in agriculture and food should have the same prestige as a computer science major. We need to bring back the heroic ideal of the yeoman farmer who forms the bedrock of the economic and social system of his or her community. We also must create better-educated consumers and citizens to increase public awareness of the food system and the importance of buying local food.

**Health.** Everyone in the health industry — public health officials, hospitals, doctors, even health insurers — needs to understand the connection between healthy local food and individual and public health. The federal Centers for Disease Control and Prevention has recently become a leader in this (CDC 2020). The CDC's interest is an encouraging sign, but this awareness has to permeate the entire medical world. Doctors should set an example by going out of their way to buy local food from farmers markets and local grocers, and they should explain to their patients why it is important to do so. Health care plans should provide members with rebates for CSA shares, as has been done in Wisconsin (Madison Area CSA Coalition 2011; Wholesome Harvest CSA 2011).

**Infrastructure.** Access to affordable land, credit, food processing, farm supplies and equipment, farm-animal veterinary care, farm housing, farmers markets, and slaughter and distribution facilities are all essential to a healthy food system. Each community should inventory its food system infrastructure, identify gaps, and take action to fill these. This must be done at both the local and regional levels.

Access to food-system infrastructure, including land and farm-animal veterinary care, is essential to a diversified farming base (Glynwood Center, New York). Photo Joel Russell.

**Land Conservation.** Land preservationists should be sure that they are not just protecting land but also protecting the land's productive capacity and the farmers who make it produce (LaBelle and Rubin 2008). This means, for example, that restrictions on the subdivision of land or construction of farmhouses on land under a conservation easement should take into account the possibility that smaller land holdings may someday be needed for intensive organic vegetable farming, and that farmers will need to live on their land. The 10-acre "farmette" which today epitomizes large-lot sprawl could evolve into 10-acre cornucopias of healthy food production. The protection of land through conservation easements should not prevent this.

**Planning and Development.** Food system considerations should permeate planning, permitting, and preservation activities, so that no decisions are made by local town boards, planning boards, city councils, and conservation organizations without considering the ramifications for the food system. This includes zoning and PDR, but goes far beyond it, to such seemingly far-flung matters as budgets for school lunches and planting edible landscapes in parks and the buffers separating industrial uses.

**Local Financing.** Many individuals have their life savings tied up in various investments, most of which are in retirement plans administered by money managers with close ties to Wall Street. If even a small percentage of this reservoir of capital were invested in strengthening the local food system, the results could be phenomenal. Putting money to work building local food systems, instead of investing it in large corporations — including those that operate and profit from the industrial food system — is a component of the "slow money" movement (Tasch 2008). The key missing ingredient, from a food-systems standpoint, is an institutional vehicle linking local savings with local food-system businesses.

## The Glynwood Center's Keep Farming® Program

A planning process that pays proper attention to agriculture and food systems will include a component that measures and assesses the economic importance of agriculture. Glynwood Center in Cold Spring, New York, has pioneered an approach to planning and community action called Keep Farming® that puts food systems planning at the center of community planning efforts.

The Keep Farming program works with selected communities to engage in a community-based process for saving agriculture. Glynwood staff provide community leaders and residents with training, instructional materials, and expert guidance organized in three major phases.

In phase 1, Organizing the Community for Success, Keep Farming engages a wide variety of stakeholders in the process and helps community residents gain a deeper appreciation of local farming, how it benefits the community, and why it is worthy of strong support. This helps local residents feel truly invested in the "action plan" later developed for local agriculture and its implementation.

In phase 2, Analyzing the Challenges and Opportunities of Local Agriculture, Keep Farming helps the community document the contributions that farming makes by assessing the following key values:

- Economics. This helps the community understand how important agriculture is in generating income: it sells products, employs people, and supports many more in agriculture-related businesses. Additionally, keeping land in agricultural production saves the municipality money because farmland requires fewer services than developed land.
- Local Foods. This helps the community pinpoint where their food comes from and how much of that food is produced locally. It also uncovers opportunities for farmers to diversify to meet the demands of local consumers.
- Natural Resources. This helps the community learn about their natural resources and understand how these resources are affected and protected by farming.
- Aesthetics. This demonstrates the aesthetic quality that farmland brings to a community and how farming keeps the countryside alive. Rolling hills, green pastures, and working landscapes provide an important sense of place and community identity.

In phase 3, Preparing the Keep Farming Action Plan, Keep Farming uses the community's newfound understanding of agriculture's multiple benefits to design a strategy that both protects farmland and supports farmers through the following actions:

- Preserving Agricultural Land. In high and moderate growth areas, the first step in protecting agriculture is to secure the land base. There are many different tools that communities can use to preserve farmland. Keep Farming helps the community understand why certain land use tools work and others do not, which ones are appropriate for their particular circumstances, and how to customize these tools.
- Creating Economic Opportunities. Small and midsized farms have been challenged for too long by a lack of local markets for their products. Most supermarkets do not purchase local products because buyers cannot be guaranteed sufficient volume, year-round delivery of seasonal produce, or the lowest price. Keep Farming helps the community develop new markets for local products and shorten the food-supply chain to link producers and consumers.

The Keep Farming process has been used in Chatham, New York, and has resulted in an agriculture and food systems component being added as an integral part of the town's comprehensive plan. More importantly, but more intangibly, it has changed the culture of the community and greatly increased communication among farmers, town officials, local businesspeople, restaurateurs, long-term residents, and newcomers. It has also, surprisingly, greatly increased communication *among* different kinds of farmers who previously had very little contact with one another (Russell 2010).

### FOR MORE INFORMATION:

Glynwood Keep Farming www.glynwood.org/programs/keep-farming/ (http://www.glynwood.org/programs/keep-farming/)
Chatham Keep Farming www.chathamkeepfarming.org/ (http://www.chathamkeepfarming.org/)
Russell, Joel. 2010. "Building Your Planning Process from the Ground Up." *Planning Commissioners Journal,* Winter. Available at www.plannersweb.com (http://www.plannersweb.com/).

# What Planners Can Do: Action Steps

There are many things that planners can do to help support local food systems. Here are some of them:

1. Planning departments in counties and large townships can add a dedicated staff person whose responsibility is food systems planning to carry out the recommendations in this *PAS Memo*.
2. Comprehensive plans can be revised by adding a section on food systems planning following the approach suggested above, especially by inventorying farm production and food infrastructure and using a highly participatory process such as that devised by Glynwood in its Keep Farming program. Part of this can be a "food security" plan designed to maximize production of local food. Students at the Conway School of Landscape Design in Conway, Massachusetts, have prepared food security plans for the nearby communities of Northampton and Shelburne Falls (see for example Dunbar, Hoffmeier, and Rhodes 2009).
3. Planners can recruit farmers to be actively involved in any food systems or agricultural protection planning process, and a conscious effort should be made to increase communication and build trust between the farm and non-farm communities.
4. The economic development function in planning departments can give explicit recognition to farming and food systems as economic generators and important parts of the local economy and work hard to promote farmers markets, CSAs, local food restaurants, backyard farming, and other parts of the food system infrastructure from farm fields and processors to markets and restaurants.
5. Planners can propose mechanisms to implement food systems recommendations, such as PDR programs, changes in zoning to allow slaughter facilities, farmstands, a wide range of nonresidential uses on farms, urban agriculture, and agricultural protection zoning where there is a culture of support for such measures. These mechanisms are most likely to succeed if they emerge from a community conversation about what farmers need in order to be successful rather than from planners telling the community what is best.
6. Planners can work to change zoning to encourage and incentivize clustered and new urbanist developments that include edible landscapes and establish community farms and CSAs as protected open space (such as Serenbe and Prairie Crossing).
7. Planners can work with local economic development organizations on financing agricultural operations and land purchases and leases for local production.
8. Local governments can acquire farmland and lease it to small commercial farmers and CSAs on favorable terms to create as much local food production as possible. Such land can also be leased on a smaller scale for non-commercial community gardens. Planners play a key role in arranging such transactions.
9. Planners can coordinate with other municipal departments such as school food services and parks departments to ensure that as much local food as possible is purchased using public money (where it might otherwise be bought from industrial food suppliers) and to use as much vacant land as possible to grow food.

# Conclusion

As described above, The Glynwood Center's pioneering approach to food systems planning offers a coherent methodology for a food systems planning process at the local level adapted to meet the needs of each community. This promising beginning should be complemented by similar efforts at the regional, state, and federal levels. There is no "one-size-fits-all" solution. Each community must find its own path toward a better food system, starting with the simple act of each person becoming aware of where food comes from and choosing to buy quality food that is local.

Larger-scale farming will always be able to benefit from economies of scale, but this advantage can be at least partially offset by the superior quality, freshness, safety, and reduced transportation costs of local food. Local food deserves a fair chance to compete in the marketplace and in the hearts, minds, and mouths of all. Planners

have a major role to play in educating the public, helping to put in place the components of a viable food system, and advocating change at systemic as well as local levels.

However, as this article has emphasized, local food will not be sufficiently valued unless and until more people make the food system connection between food, farms, infrastructure, diet, and health. A transformation is already in the making, but its fulfillment requires the efforts of people in all walks of life and in every community to put pressure on their elected representatives to build and support an infrastructure of community food systems. Planners have a key role to play in helping to raise community awareness and increasing communication among participants in the food system. Indeed, most people are not even aware that they are essential links in something planners call the food system.

If we do this, we will eat better, reduce our carbon footprint, and enjoy the sheer pleasure of sitting down to a dinner of healthy local food, knowing that it makes our planet a better place for all. Fortunately, food is something that makes people happy. Unlike discussions of planning, policy, and PDR, which we as planners know can be deadly boring to the layperson, food is just plain fun. Making the food system connection is our best hope for the future of agriculture.

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