

BLOWING IN THE WIND: *The Answer to Farmland Preservation*

A RECENT SURVEY by University of Michigan's Center for Local, State, and Urban Policy finds that farmland preservation is important. It is a topic of discussion in almost half (46%) of the state's townships that have Master Plans. Farmland preservation, though, can mean different things in different communities. In some, where the population is growing, particularly those on the outskirts of metropolitan areas, it can mean reducing fragmentation of agricultural landscapes—preventing sprawl from cutting into farmlands. For other communities, particularly those more distant from urban centers, concern over farmland preservation isn't about saving the land from development, it's about saving farming communities from a shrinking population or a loss of young people.

Historically, planners have had two distinct sets of tools for these two situations:

- Large-lot agriculture zoning and conservation easements (through public or private PDR programs) in those communities concerned about curbing population growth, and
- Economic development programs in communities concerned about population decline.

Wind energy development has the potential to be a new tool for both growing and shrinking agricultural communities.

INCREASED INCOME FOR LANDOWNERS

In communities concerned about urban growth, the economic concern is that landowners strapped for cash can often find it most lucrative to sell off some of their land for residential

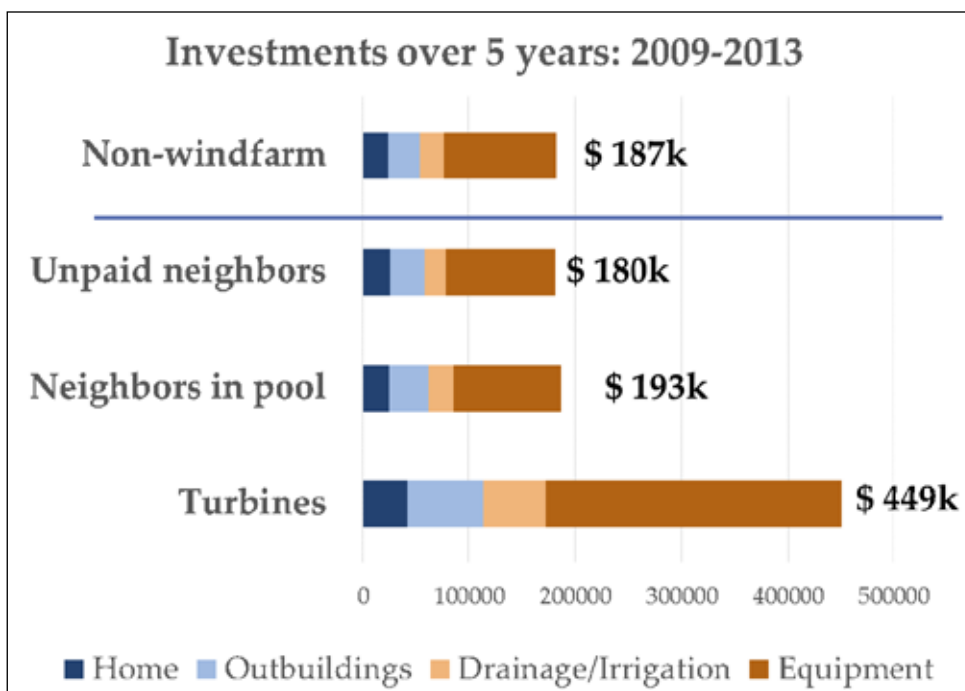
development. In communities facing population decline, the economic concern is that smaller farms, unable to achieve economies of scale, are outbid by larger farmers, leading to one less farming family in the town.

In both of these situations, wind development provides landowners with a dependable source of revenue, which can help farmers diversify—and often increase—their farm income. Rather than buy the land outright, wind developers enter into long-term leases with landowners, usually paid through annual payments. Research reveals that landowners reinvest these revenues in their farm (*see chart below*). In a 2014 study of 1,210 owners of farmland in Michigan, those landowners with turbines on their property invested twice as much in their farm (outbuildings, equipment, home, and drainage/irrigation) as their neighbors and those landowners in similar non-windfarm communities. This holds true even after accounting for the size of the farm (in other words,

larger farms are more likely to have a wind turbine, and also see more investment). This added investment in the farm is a good indicator for farmland preservation, suggesting that the landowner doesn't plan to get out of farming anytime soon. It also suggests that these revenues are recirculated locally, which may be good for the whole community.

INCREASED SUCCESSION PLANNING

Another promising indicator that the land will stay actively farmed is having a succession plan in place. That same 2014 survey found that those landowners with wind turbines on their property were significantly more likely to have a succession plan in place than their neighbors without turbines or those in the non-windfarm communities. Again, this is true even after accounting for farm size. Interviews with some of these landowners found that the steady, drought-free income provided by wind development is helping a younger generation feel that farming is not such a risky business. This



income may also provide a financial cushion for this newer generation of farmers, allowing them to try new crops or to make ends meet on smaller farms. While succession planning is a positive sign in both growing and shrinking agricultural communities, it is particularly promising for communities facing population decline.

TAKING LAND OUT OF PRODUCTION

It is true that the turbine itself and the access road to get to the turbine both have a physical footprint. Typically, a wind turbine requires 1-2 acres of land per turbine, most of which is for the access road. One way to minimize the impact on prime farmland is to place the access road along fence rows or property lines. This practice has the added benefit of minimizing disturbance to field tile or pivot irrigation, and often provides the farmer with a new lane, which may be used during harvest season. Furthermore, the state's PA 116 Farmland Preservation Program has ruled that wind turbines may be placed on enrolled lands under certain conditions.

PLANNING CONSIDERATIONS

This does not mean, though, that everyone who lives in farming communities eagerly welcomes wind energy development. Those who value the landscape for its productive capacity often see wind energy as just another resource that they can harvest. By contrast, those who value the landscape for aesthetic reasons are more likely to question whether wind energy fits in with the landscape. As a result, it is not uncommon to see modern-day discussions about wind energy resembling those that gave rise to Right to Farm laws nearly 40 years ago: trying to balance the rights of farmers and other rural residents. Some of these tensions might be eased by wind development business models that compensate all landowners—large and small—within the vicinity of the project, so that more of the community has a stake in the project.

Gratiot County's County-Wide Plan and Ordinances offers a good example of a Master Plan and Zoning Ordinance which explicitly considers wind energy and its connection to farmland preservation.

Tensions can also be alleviated through conversations and smart planning before the developer is knocking on anyone's door. Rural communities should analyze, for example, in which areas of the township they want to encourage agricultural uses, and consider concentrating wind development in those areas. If the township already has an agricultural preservation district, this is an ideal place to start, as the ordinance and master plan have prescribed this land for productive land uses. Sections of the township with larger parcels are also often better suited for wind energy, as they help minimize impacts on residential landowners. By constructively and intentionally visioning for the future and plotting a course, communities can determine how wind energy may enable that future to become a reality.

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