

BROWN TOWNSHIP AGRICULTURAL PRESERVATION PLAN STEERING COMMITTEE REPORT

This report is an analysis of the topics that the Brown Township Board of Trustees assigned to the Brown Township Agricultural Preservation Plan Steering Committee (APPSC). The report consists of an introduction, discussion and analysis addressing six issue areas and a conclusion.

The introduction addresses the history of the project, general background issues and strategic goals that the Township should consider in future planning efforts. The discussion and analysis looks at each of the six topics assigned to the APPSC by the Board of Trustees. This includes a discussion and list of issues, tools and recommendations on how Brown Township should proceed to address each topic. The conclusion discusses where the project is and where it should go next. Finally, the report includes two appendices. One of these summarizes the results of a township-wide survey and one describes several of the tools that are discussed as part of the recommendations.

Goal of the Brown Township Agricultural Preservation Plan Steering Committee

The Brown Township Agricultural Preservation Plan Steering Committee understands that its goal is as follows:

"The development of a land use document defining suitable development which preserves agricultural land and open space while enhancing the health and sovereignty of the township as a whole."

In order to accomplish this goal, the Brown Township Board of Trustees assigned several topic areas for the committee to address. These topic areas are:

- * Farmland Preservation
- * Cluster Development
- * Farm Village Development
- * Wastewater Treatment Issues
- * Open Space Conservation
- * Township Zoning

Discussion of cluster development and farm village development are combined because of the degree to which these topics overlap.

The Process and the Products

The Brown Township Trustees formed the APPSC to address the subjects of agriculture and open space preservation. The members of this Committee are:

- * Larry Baumgartner
- * Donna Carrel, Chair
- * Tom Crook
- * Harold Jerman
- * Cheryl Lorson

- * Joe Martin
- * Steve Rider
- * Dick Stahl

The APPSC has done extensive research into a range of issues related to its task. This research ranged from hearing from technical experts, to site visits, to conducting a community survey. The group's work has also included analysis of natural and man-made features in the township that will influence growth patterns. This analysis has included identifying development potential of land parcels based upon soil suitability for on-lot treatment and parcel size/ownership data. Maps 1 and 2 present this information.

Finally, the group conducted an extensive survey of public opinion, the results of which have been provided to the Board of Trustees and will be reported to township residents. This survey addressed the topics of development, farmland preservation, protection of the natural environment, quality of life, a "village center" concept and acceptance of land use controls. The Committee sent the questionnaire to all 745 households in the Township. Residents responded enthusiastically with well over half of the households responding. This survey, along with the APPSC's other investigations, has been considered in the following analysis.

In addition, the APPSC has documented its work and proceedings in detail. This documentation provides background information for those wishing to learn more about the committee's work and is available for public inspection.

Further Defining the Task

Preserving agricultural land means different things to different people. All of these definitions can be important depending upon the kind of community that township planning efforts promote. In fact, these planning efforts often reveal that the community thinks of agricultural preservation in different ways, depending upon where you are in the township. Furthermore, these different ideas about agricultural preservation overlap and get intertwined in the public's mind.

Strictly speaking, land use planning for agricultural preservation involves preserving tracts of the correct size, with the correct resources, and in the right location to encourage long-term viable agriculture. However, this economic emphasis is not the single most important aspect of agricultural preservation to many people. Instead the issue of the loss of open space to sprawling suburban development is important to these people. Agriculture represents the antithesis of this sprawl because it is the land use that is often being replaced by the development. Finally, agricultural preservation and natural resource conservation become intertwined in the public eye because they both commonly address open space conservation and face challenges from suburban expansion.

Strategic Goals

The APPSC has formulated four strategic goals for agricultural and open space preservation in Brown Township. The committee recommends that the township adopt these goals as guiding principals in ongoing farmland and open space preservation planning efforts.

- * Balance the inevitable growth and changes that the township faces with the desire for open space and a rural quality of life.
- * Temporary, borrowed open space should become permanent protected open space through responsible land use policies and decisions.
- * Open space retained as a result of a given development should tie into open space

retained through other responsibly designed developments in order to create an open space network.

★ Recognizing that eastern Brown Township is on the urban fringe of the Columbus region, the township should plan for development there that provides a transition to the rural areas beyond while being sensitive to water quality issues in the Hellbranch watershed.

Preservation

Current Conditions

The committee notes certain factors that Brown Township should address in evaluating a strategy to preserve farmland. These issues, among others, are addressed in preparing an agricultural Land Evaluation/Site Assessment (LESA) model. A primary concern is that the land being preserved contains soils that are sufficiently productive to warrant preservation. Which soils meet this definition depends upon the crops that will be raised on the preserved land. The Ohio State University Extension Service published bulletin 472, which provides a productivity index for corn production in Ohio soils. This report should be used as a baseline if the Township decides to preserve farmland based on corn production.

In addition, excessive fragmentation of land into smaller parcels will shut down farming activity. The loss of larger tracts to subdivision and the incursion of significant numbers of residential lots into farming areas threaten the practicality of agriculture in those areas. Open land must be preserved in significantly large, contiguous tracts. These tracts must be large enough so that they are practical to farm. The minimum size of such a parcel depends on the type of agriculture that the township anticipates will take place in a given area. The corn and soy agriculture that is traditional in Brown Township would demand larger parcels than more specialized farming that is sometimes practiced on the edge of urban areas.

Also, a number of these tracts must exist within a given area so as to create a critical mass of agricultural activity. This critical mass serves to prevent smaller numbers of parcels or individual parcels from being isolated, smothering farming activities. Isolated agricultural operations not only suffer from threats from incompatible land uses, but also from being cut off from an infrastructure system that supports farming. This infrastructure includes a rural road network that is adequate for moving equipment without having heavy suburban or exurban traffic volumes that are a result of land fragmentation. In addition farming operations (farmers), suppliers and buyers will find it difficult to economically justify locating in an area where there is not a significant amount of farming activity.

Preservation efforts face an uphill battle in areas that are, or will be, subject to significant pressure to develop. For instance, an area that would otherwise be ideal for farming in terms of soils, parcel size, numbers of active farm, and other factors may be immediately adjacent to a freeway interchange, high intensity development or include a large number of tracts owned by developers. These are factors that suggest a likelihood that the area will be developed. Agricultural preservation efforts are often better spent in areas away from such pressure.

Issues and Recommendations

★ Farmland should be preserved in large contiguous tracts.

- * The township should maintain a road system that is appropriate for moving machinery to and from preserved agricultural areas.

- * Land preserved for farming should not be in areas otherwise earmarked for development or considered to be under development pressure.

Recommended Tools

(see Appendix B for an explanation of these tools)

- * **Current Agricultural Use Valuation (CAUV):** This statewide, county administered program is on-going.

- * **Agriculture Districts:** This voluntary designation continues to be available as a program of the State of Ohio.

- * **Right to Farm Ordinance or Resolution:** Such an ordinance exists on the state level, but a county or township level policy statement would provide more emphasis on the local level.

- * **Mitigation Ordinance**

- * **Agricultural Supportive Zoning:** Most farmland preservation on a large scale would require use on very large lot zoning or sliding scale zoning. Conservation, or rural cluster, zoning would typically have potential for smaller scale preservation efforts.

- * **Development Rights:** Purchase of development rights would be possible, with state financial support, once prime agricultural areas are defined in the township. Transferring development rights within parcels would be possible using conservation zoning techniques. Inter-parcel transfer of development rights would require specific planning and zoning modifications that would identify sending and receiving areas as well as specific mechanisms for the transfers.

- * **Marketing Programs**

Development

Conservation Development Farm Village Development

This category of development options includes a range of specific options. Generally, this type of development is called cluster or conservation development. The Farm Village and OSCAR Lots permitted in the Franklin County Zoning Resolution are conservation development districts. The Residential Planned Unit Development district also permits a version of conservation development. These approaches are all applicable in a rural setting. While most people would not think of them as conservation development, some open space developments focus on reserving space for farmland or recreation.

In considering the impact of this style of development on a community, it is important to remember the

difference between lot size and overall density. Clustering development does not necessarily result in an increase in the number of homes in an area (the overall density), it is basically used to rearrange the homes onto smaller lots so that some open space can be preserved. In most communities, the actual number of homes in a conservation or cluster development stays at or near the number of units that would occur with a more conventional development on the same site. Only sometimes does a jurisdiction choose to give a small increase as an incentive for clustering density. In Brown Township is also possible that some areas on the eastern boundary would be designated as transition areas with higher gross densities. Either way, these developments tend to have a more open, less congested feel because open space is consolidated and well-planned instead of being sliced up into yards.

Cluster or conservation development requirements and designs vary with the objective that the community is trying to achieve. These developments may be designed to protect agricultural lands; provide recreational space; conserve important natural resources; or preserve rural views and character. Communities often have one or more cluster development options available in their codes depending on what type of open space development they wish to allow. Brown Township should determine which uses are acceptable for open space that would be preserved under conservation/cluster development in its jurisdiction.

Issues and Recommendations

- * Conservation/Cluster development should be considered in a broad range of forms including farm villages, OSCAR lots and golf course communities.
- * The township should consider different kinds of cluster developments for different purposes in different portions of the township. However, the township should determine which possible use(s) would be permitted in the open space that is preserved.
- * Township development policy should recognize the difference between density (the number of dwelling units per acre in a given area) and lot size in analyzing and explaining cluster development. Small lots can be okay if they are part of a scheme to retain open space and lower overall densities.
- * Open space preserved in conservation developments should be placed under perpetual conservation easements.

Recommended Tools

- * **Agricultural Supportive Zoning:** Cluster and conservation development is one version of what is sometimes considered to be agriculture supportive zoning. These types of developments would be zoned using some version of a planned unit development (PUD) district.
- * **Development Rights:** Shifting development rights is inherent in the cluster development concept. This is usually done within a single property, but can be done by shifting development rights among a few or several land parcels. Large clusters, or villages could be created by doing this on a regional scale through a transfer of development rights program.
- * **Alternative Wastewater Treatment:** New non-discharge wastewater treatment technologies discussed in the wastewater treatment section of this report should be explored as a tool with which to facilitate development on smaller lots within a cluster.
- * **Resource Modeling:** The township and the county should work to identify important farmland and natural areas for preservation using the clustering/conservation design techniques. This can be

done through the Land Evaluation Site Assessment (LESA) program and other computer modeling efforts.

Wastewater

Wastewater Treatment Issues

Wastewater treatment and disposal defines development patterns in an area. The type of wastewater systems that are available in an area are the main force behind the nature of development that will occur there. For instance, if centralized wastewater treatment and conveyance systems are available in an area, higher development densities that dictate a suburban or urban character will follow. This in turn will necessitate addressing all of the planning and infrastructure issues that arise in such communities. However, if a centralized system is not available, the resulting lower densities will create a more rural or "rururban" community. Traditionally there has been a clear line established between urban areas served by centralized systems and rural areas where limited wastewater treatment placed extensive limitations on development.

In recent years new wastewater treatment technology has blurred the line between central sewer service and on-lots systems. There are emerging methods of treatment that have been designed to serve cluster or conservation development of about forty lots using a small community system. These systems provide a level of treatment beyond variations of the traditional septic and leach field systems. This allows for placement in a wider variety of conditions, including in areas with difficult soils and high water tables. As a result, developers have more flexibility in the placement and resulting density of rural house sites. The ability to place these systems in a more-dense layout and with fewer environmental constraints suggests that they may be used, in conjunction with a small diameter conveyance system, to create small versions of centralized systems.

In one way, these systems lessen the concern that a community would have about rural wastewater treatment, but in another way these concerns may increase. These new treatment-oriented systems allow for wastewater to be treated and disposed of in areas where it would not have been possible in the past. They allow this without discharging effluent into public ditches or into natural waterways. However, these systems are more complicated than conventional on-lot wastewater disposal systems. The more complicated nature of the systems can lead to maintenance concerns such as those experienced with the aeration systems that have been popular in Ohio in recent decades.

The switch of concerns from effluent quality to system maintenance suggests that a centralized maintenance plan would be necessary if these alternative wastewater treatment systems are to be practical. Together, the concern about maintenance and the ability to combine these wastewater treatment units into small, centralized treatment systems suggests a potential use of these technologies to facilitate conservation-style development.

Finally, there is also continued discussion in Franklin County of spray irrigation systems, where treated effluent is land applied. Given the prevalence of hydric soils in Brown Township, under-drains would be needed for such land application. Therefore, NPDS permits should be required for these systems.

Issues and Recommendations

- * Any wastewater treatment option considered for use in the township should be

environmentally responsible. There should be no potential for introducing pollutants into a waterway.

- * The township should explore wastewater treatment options that are appropriate in scale to serve rural cluster.
- * The systems used to serve rural cluster development should be as simple to maintain as possible and a reliable system of ownership and maintenance should be established for these facilities.
- * Facility ownership and management should be designed so that the users pay and not the taxpayers.
- * Alternative systems using techniques other than land application should be explored.
- * NPDES permits should be required where there is a potential for discharge (ie: under-drains are used in conjunction with land application systems).

Recommended Tools

- * **Proper Alternative Wastewater Treatment and Disposal Technology:** The township should work with appropriate county and state agencies to identify alternative wastewater treatment technologies that are safe and affordable for use in rural cluster developments.
- * **Ownership and Management Systems:** The township should explore options for ownership and operation of these facilities, keeping in mind that a solid solution to this problem will facilitate Ohio Environmental Protection Agency approval of these systems.

Open Space

Open Space Conservation

To Brown Township, open space represents both an economic resource and a community identity. Open space conservation can occur for many reasons, on a range of scales and by using a number of mechanisms. Essentially, open space conservation requires that a given area not be developed, that it be left as open space. Preserving open space can help to preserve a natural resource (wetlands, floodplains, wildlife habitat, etc...); an economic resource (farmland, forestland, etc...); or an open, rural-like character in a community. A community can identify and preserve open space resources on individual lots, larger parcels, or on groups of parcels throughout a region. Open space can be preserved indirectly through policy decisions such as the direction of sewer and other public facilities improvements or directly by restricting or shifting development rights.

Traditionally, residents in most communities value open space, while taking the interests of the persons that own the open space for granted. These residents assume that some places should just be left undeveloped, but the open space that they value belongs to individuals that usually have a high stake in its current and potential value. This "borrowing" of valued open space has led to disappointment and conflict as communities struggle to balance community values with individual rights.

In the past many communities have sought to address this balance and to preserve the rural character

and open space by requiring that subdivision and development be limited to large lots. As more and more people choose to move into rural areas it became apparent that this strategy merely hastened the disappearance of open space as rows of houses appeared along the existing road system. Land trusts and other entities may preserve open space by accepting and maintaining open space easements. These easements remove the possibility that landowners will develop open space by separating the development rights from other rights enjoyed by landowners. This approach is effective but expensive. Another approach suggests shifting the location of development rights instead of eliminating those rights. Under this approach, development occurs at the same level as it normally would, it is just made more compact so that a portion of the original tract can be preserved in open space. This is an approach that tries to let a developer and the community have their cake and eat it too.

Issues and Recommendations

- * Open space can be used for passive recreation, storm water management, farming, horse trails, or any number of other purposes.
- * The township should strive to balance open space preservation with growth pressures.
- * Protected open space should be located and designed so that it can be shared.
- * Open space should be held in perpetual conservation easements.

Recommended Tools

- * **Land Trusts:** The township should identify methods for working with, or possibly forming a land trust that could acquire and hold open space easements on its most critical open space.
- * **Rural Cluster Development/Conservation Development:** The township should put in place policies and regulations to encourage rural cluster development that preserves an appropriate open space.
- * **Resource Modeling:** The township and the county should work to identify important farmland and natural areas for preservation through land trusts and clustering/conservation design techniques. This can be done through the Land Evaluation Site Assessment (LESA) program and other computer modeling efforts.

Zoning

Township Zoning

In Ohio, zoning outside of municipalities may be done through either county or township authority. Brown Township is currently covered under the Franklin County Zoning Resolution. This arrangement saves the township from expending the money and other resources involved in maintaining and enforcing its own zoning resolution. Use of county zoning among several of Franklin County's townships takes advantage of the County's resources for providing administrative services. However, with county zoning, the rural zoning commission and the board of zoning appeals are county-wide entities, as is the Board of Commissioners. These entities are making zoning decisions in the township.

(The Franklin County Planning Commission's role is essentially the same under both county and township zoning.) This removes some of the direct decision-making power from the township. For instance, a county zoning commission and the Board of Commissioner may make a different decision in a given rezoning case than a township zoning commission and the Board of Trustees would. However, it is important to note that township input is built into the county zoning process.

Brown Township, like other townships in the region, is concerned that the interests of its residents will be forgotten in the high-stakes game of development on the urban fringe. One reaction to this concern is to retain as much authority on the township level as is possible. Converting to township zoning is one way to accomplish this goal. However, while specific rezonings within the township may be affected by such a transition, larger issues such as annexations would see less of an impact from the conversion to township zoning. Achieving this autonomy, and determining how much additional autonomy that township zoning provides, should be balanced against the lower cost and administrative resources that county zoning provides.

Issues and Recommendations

- * Township zoning would increase local control and input.
- * An important use of township zoning should be to hold back annexation.
- * Zoning should create a zone of transition along the urban fringe of Columbus.

Recommended Tools

- * The Township should explore contracting with Franklin County to administer township zoning as a way of saving money and maintaining consistency while achieving greater local control.
- * The Township would need to identify additional funding sources for any costs beyond that covered by zoning fees.
- * Randall Arendt, a planner specializing in conservation development, should be enlisted to help with the zoning plan.

Conclusion

Conclusion and Next Steps

This is an important time for Brown Township so far as deciding its future is concerned. Regional policies concerning water quality and wastewater treatment are suggesting new directions that are consistent with a broad vision of Brown Township as an open space community.

The APPSC's analysis indicates that use of a conservation development strategy is possible given more specific planning analysis and policy formulation. This effort would involve identifying the tools necessary for making conservation developments feasible; formulating design guidelines; and formulating a township-wide strategy for employing conservation development.

The Township should proceed with this step employing a more broad-based version of the current APPSC. This committee would include representatives from the development community, neighboring

municipalities, and other agencies in addition to a core group of Brown Township residents.



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