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Resident perspectives of the open space conservation subdivision in Hamburg Township, Michigan

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Abstract

The open space conservation subdivision (R.G. Arendt, 1996) has been presented as an alternative to conventional large lot residential development. A form of clustering, this planning approach emphasizes the quality as well as the quantity of land preserved. The format offers a means for local planning officials to accommodate residential growth while preserving natural areas, rural features, and wildlife habitat that is typically altered as sprawl spreads outward from urban centers. These preserved areas become part of the residential community, accessible via trails and pathways. Residents share in the ownership of the preserved open space and take responsibility for its management. The purpose of this study was to gain an understanding of residents' perspectives of open space conservation subdivisions. What is their understanding of living in an open space community? How this process is implemented and how homebuyers respond to lot size and group management of natural areas is important to further application of this planning technique. Interviews were conducted with homeowners in 13 open space communities in southeast Michigan. Responses to questions about the satisfactions and problems associated with life in these communities, as well as understanding of the open space concept, provide useful feedback from residents to those seeking to implement this planning philosophy. Interviews reveal residents are pleased with the access to nearby nature as well as the social aspects of living in their neighborhoods. However, understanding of the open space conservation concept varies considerably among the residents and carries little recognition of the unique features offered by such subdivisions. Greater emphasis on sharing the principles behind the open space conservation approach with homebuyers may lead to a fuller appreciation of their choice to live there. Furthermore, residents' understanding of this concept may be key to their continued involvement in managing local natural areas and advocating this approach to those who live outside these communities.

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1. Introduction

Across the country our landscape is undergoing considerable change. Urban sprawl was once a concern for high growth regions; today many areas in the United States are experiencing unprecedented residential development (Morris, 1999; Carruthers and

Ulfarsson, 2002; Lovaas, 2002). Accompanying new residential subdivisions are changes that further impact the local environment—increased traffic on narrow country roads, new strip malls and commercial facilities, and the loss of rural open space and natural areas. Such developments lead many to question whether it is possible to give new homebuyers the countryside setting they want while preserving the very nature of this setting that led them away from urban areas.

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An innovative land use planning technique proposed by Arendt (1996, 1999a) emphasizes the management of residential growth within a framework of protected communal natural areas and green space. The open space conservation subdivision approach clusters homes on relatively small lots while the remaining land is set aside from development and owned communally by the residents. The protected open space provides residents with access to woods, open meadows, wetlands, and other natural features that are often destroyed by conventional, large lot housing developments.

This paper shares results from a series of interviews with residents of open space conservation subdivisions (called open space communities) in southeast Michigan. The purpose of the interviews was to understand residents' perspectives of living in an open space conservation subdivision and to explore their understanding of this concept. Through these interviews we learn about life in these neighborhoods, in essence, teasing apart the open space conservation subdivision experience in practice. Learning how residents feel about living in these communities, having shared spaces, and being responsible for their management can provide feedback useful in future application of this alternative form of residential development.

2. Open space conservation design

Unlike early cluster developments, which Whyte (1968) feared would focus more on increased density of homes and less on land preservation, the open space conservation subdivision (Arendt, 1996, 1999a) employs a form of clustering that emphasizes the quality as well as the quantity of land preserved from development. Typically, many of the natural areas and spaces that give an area its unique character are altered or destroyed when new residential subdivisions are built in rural areas. With open space conservation subdivisions, primary and secondary conservation areas are designated and set aside from development. Primary conservation areas are unbuildable sections of land (e.g., steep slopes, wetlands), while secondary conservation areas include features such as wooded tracts, meadows, critical wildlife habitat, highly productive farmland, and areas with historic or cultural significance. Homes are then clustered on the remaining land

and positioned such that homeowners have views and access to open space and natural areas nearby. The resulting subdivisions will vary in design features, yet all will include trails and pathways within the undeveloped secondary conservation areas, as well as more developed commons areas. Some can also include developed recreational spaces (e.g., ball fields and tennis courts). The preserved lands are protected from future development by a permanent conservation easement. There are several approaches that specify who is then responsible for the management of these preserved areas, including the neighborhood homeowners' association or a local land trust or public entity.

The open space conservation subdivision gives local planners, developers, and community residents an easy-to-follow planning technique for managing growth within a regional landscape framework. By connecting areas of open space it reduces the damaging effects of conventional residential development on local natural resources. A higher proportion of land is spared from development (typically 40–60% of the original parcel), particularly land important to healthy ecosystem function. Open space conservation subdivisions preserve the natural character of the landscape and provide residents with greater access to the open spaces many seek when moving out of urban centers.

The approach has social implications as well. The communal ownership of land can provide a vehicle for more contact among residents and for increased involvement in stewardship of nearby natural areas as they work together to manage these open spaces (Arendt, 1999b). These social dimensions can play an important role in fostering sense of community.

Residential developments that extend out into rural landscapes provide residents with access to natural areas, yet such access can come at a substantial cost. Beatley and Manning (1997) have noted an increasing trend in this country of less citizen contact with one another and more time spent in cars commuting or at home watching television. Suburban residential communities that rely heavily upon automobile use show an accompanying decrease in the amount of neighborhood social ties (Freeman, 2001). Informal social interactions are an important component in the formation of neighborhood social ties, which strengthen sense of community among residents (McMillan and Chavis, 1986). Having a sense of privacy as well as participation in local activities contribute to sense of

community in suburban neighborhoods (Wilson and Baldassare, 1996). As urban sprawl continues to produce subdivisions that result in the loss of precious agricultural land and open space, increased reliance upon the automobile, and longer commute times for residents, opportunities are reduced for citizen contact with both nature and community. Exploring the experience of living in an open space community can further our understanding of the opportunities and challenges afforded by this residential planning approach.

3. Methods

3.1. Study site

Located in southeast Michigan, Hamburg Township is one of the fastest growing townships in the state's fastest growing county (Livingston County Data Book, 2000). County population grew by 31% between 1990 and 1999. The township population increased considerably during that time (43%), and its growth is projected to continue with a 58% population increase through the year 2020.

Two factors contributing to residential growth in the township are its proximity to metropolitan Detroit (less than 50 miles (80 km)) and location near two major transportation routes (Stanford, 1999). Visual evidence of this growth, most strikingly in the form of a 100-unit residential subdivision with 1 acre (0.4 ha) lot minimums, led members of the township planning commission to adopt an open space ordinance in 1992 based upon the concept proposed by Arendt (1999a) (Stanford, 1999). The township open space ordinance is optional; thus developers are encouraged to construct open space residential subdivisions through use of a density bonus. Working with the township planning commission, developers submit new subdivision designs featuring homes clustered on lots smaller than the lot minimum zoned for that particular area (e.g., 0.67 acre (0.27 ha) in a 1 acre (0.4 ha) minimum zone). As a result, the total number of homes built is somewhat higher than would have resulted using a traditional residential design, while the amount of land preserved or set aside from development also increases.

The township is recognized as one of the most forward-thinking townships in the state with respect

to use of open space conservation design as a means of land preservation. Township planning staff are often consulted about their open space ordinance by members of other township planning commissions, and open space communities in the township have been featured in land-use planning tours offered by the state extension service (personal communication with Leslie Meyers, June 2001).

Shared natural areas within the township open space subdivisions contain walking paths, recreation areas, provide nature views, and preserve wildlife habitat. Established as site condominiums, open space community residents are required to establish a homeowners' association and guidelines, elect association leaders, and vote on the management of the shared areas within the subdivision. Early in the development process the shared natural areas are the responsibility of the developer. Upon reaching 75% capacity, however, the ownership and responsibility for management of shared areas shifts to the homeowners' association (Stanford, 1999).

3.2. Data collection and analysis

Interviews were conducted with 15 residents living in 13 open space communities in the Township. The communities are diverse in terms of size (overall acreage and number of homes), median home value, open space areas (total acreage preserved and the natural features contained within), walking paths (layout and composition), and the presence of developed recreational features (e.g., tennis court, soccer field). These open space communities are similar, however, in age (each community is less than 10 years old), the presence of communally-owned open space, access by residents to these shared natural areas via walking paths, and shared responsibility for the management of communally-owned areas. In addition, every open space subdivision has a sign at its entrance, which, in addition to providing the name of the neighborhood, includes the phrase "an open space community."

Contacts from each community were obtained from a list provided by the director of the township planning department, who felt that these individuals would be open about sharing both positive and negative opinions. The list contained the names of individuals who served in a leadership capacity within the neighborhood homeowners' association or had, at some point

in the past, served as a liaison between the neighborhood and the township planning department. Two or three individuals were listed for each of 16 open space communities. The leadership status of these individuals meant they were more likely to be available to speak on behalf of their communities and were knowledgeable of activities that occur within the neighborhoods. Such selection criteria can introduce a bias to the data collection process, although, as is clear from the results, it is not the case that they assumed their role was to be uncritical.

Individuals were contacted by telephone, the research project was explained to them, and they were asked if they would be willing to participate in an interview about their neighborhood. Appointments then were made for conducting the interview in person at a location convenient to the resident. A maximum of three attempts to contact each individual were made. A total of 24 individuals were successfully contacted and fifteen agreed to participate in the interviews. The remaining nine declined to participate, most citing they lacked the time to schedule the approximately 1 h interview.

Two people conducted the interviews, the author and a second member of the research team. Both researchers were present during the first four interviews in order to ensure consistency of the interview process. The remaining 11 interviews were conducted individually, eight by the author, and three by the second researcher. A structured interview format with 13 open-ended questions was followed. Residents were asked about their likes and dislikes with respect to living in the neighborhood, their knowledge of the open space community concept, the tradeoffs made by choosing to live in an open space community, specifics of the homeowners' association rules and regulations, and background questions. Questions that are the focus of this article include the following:

- What do you like most about living in (subdivision name)?
- What do you like least about living in (subdivision name)?
- What does the phrase "open space community" mean to you?
- In what ways do you think your residential community is different from other neighborhood developments?
- What do you feel you have gained and lost by having a smaller lot and shared open space?

Notes were taken during the interview and, whenever possible, residents' exact words were transcribed. Analysis of the interview data was performed by the author using cross-case analysis (Patton, 1990). Interview responses were compiled by question and individual responses were grouped into categories, which were subsequently named according to theme. Themes and their associated responses were reviewed and discussed by four researchers on several occasions during the analysis phase. A code book of themes was developed, responses were coded by theme, and responses within each theme were totaled. Quotes are included in the results section, adding imagery helpful in illustrating the construct measured.

4. The open space community experience

In general, residents were eager to talk about their neighborhood and were pleased with their decision to live there. In fact, when asked to describe what they liked best and least about their neighborhood, nearly 70% of the total responses were positive. The positive aspects of life in these open space communities are featured in the next two sections and relate to the physical setting and the neighborhood social scene.

4.1. Physical setting

Eleven of the 15 residents expressed pleasure with respect to the "openness" of their neighborhood. This satisfied, for many, the desire to leave behind the congestion of urban life and move to a more open setting with space around them and where views were unobstructed.

It feels way out, but it's really not.

The amount of space between houses.

I was watching a storm roll in the other day and I remembered that I could never do that where we used to live, because everything was so built up around us.

A second benefit, expressed by eight residents, pertained to viewing natural settings or appreciating the easy access they have to nature from their home.

Seeing green, seeing woods out my front door.

When I'm out working in the yard, I see grasshoppers and frogs, and you forget about those things when you live in the city.

A benefit mentioned with less frequency, yet related to the physical setting, was that of the neighborhood being "peaceful" or "quiet." This benefit was experienced from different perspectives including the neighborhood location (being "tucked away" or "out of the way") and noting that the neighborhood had minimal traffic ("not noisy").

Four residents specifically mentioned the enjoyment gained from having shared spaces such as walking trails, recreational features, and community picnic areas. Later in the interview, when asked what they had gained by living in an open space community, both communal natural areas and recreational features were frequently cited in resident responses, mentioned by eight of the 15 residents.

With the [communal] park areas, there is the opportunity to have large family gatherings if your own place is too small. There is more space that you can say you have if you need it.

In another community, we wouldn't be able to have our own tennis court or basketball court.

The communal areas are conducive for families with young children—they are able to enjoy the common space. Kids can look for frogs or sled on the toboggan hill. In other places where you have big lots, children don't feel free to go roaming through the lots.

Three residents mentioned that they enjoyed having a more manageable lot size, something that is "easier to maintain." In addition, three residents were pleased that the communal open space provided a sense of security from future development. In nearly all of the open space subdivisions, the shared natural areas included a buffer of land around the perimeter of the neighborhood.

4.2. *Social scene*

Social aspects of the neighborhood experience were mentioned in 13 of the 15 interviews. Nine residents included favorable mention of social or community aspects when describing what they liked about their neighborhood. Four additional residents spoke favorably about their neighbors and social aspects of their community when asked in what ways they thought their residential neighborhood was different from other neighborhood developments nearby.

Residents liked having neighbors with whom they shared something in common. For instance, those with small children enjoyed having other families nearby with small children. Others were pleased that the community attracted residents with "similar interests," which they felt gave the neighborhood a certain degree of cohesion.

People look out for each other's children.

This type of community draws community-minded folks to it.

It's like a little village.

Everyone sticks together.

While the research focused on teasing apart the physical and social dimensions of the open space community experience, for residents the experience of living there provided a mingling of both dimensions. Evidence of this overlap is found in residents' comments about the design of the neighborhood. Three residents felt neighborhood social ties were strengthened by the shared common areas and pathways. These pathways, they believed, provided a space or setting for residents to meet and chat with one another. One resident concluded that the shared ownership of property and, therefore, the responsibility for its management, necessitated that residents "work together."

I have more interaction with my neighbors because you practically walk in their backyards when using the walking path.

As a neighborhood we have to make group decisions, which gives me more contact with neighbors.

4.3. *Negative aspects of the open space community experience*

Despite a majority of positive statements made by these residents, the open space neighborhood picture is not as rosy as it appears. Most of the problems or less than favorable experiences mentioned by residents were social in nature, involving certain individuals or the process of group interaction. Five of the 15 residents expressed frustrations related to the homeowners' association, people not following the association rules, or being a member of a community which requires a degree of commitment that some individuals were not willing to make.

I don't like having to be the bad guy [homeowners' association president] and having to enforce the rules.

You have to be willing to keep the communal areas up. Forty percent of the area is communally owned. This can be a problem for other folks who don't like to volunteer.

Some people want the path removed. Some have torn up the path and put in trip wires. They don't like that people can see into their homes from the path because the foliage around their homes has not grown up yet.

There are always one or two squeaky wheels that make a lot of noise.

Other complaints included difficulties with individual developers. In some neighborhoods, the transition of open space management duties from the developer to the homeowners' association did not proceed smoothly. In these cases, the developer had not yet relinquished responsibility for these areas or had not performed promised work related to the communal natural areas. While limited to a few subdivisions, it is possible these developer–resident conflicts may have been avoided with more careful oversight on the part of township planning officials.

It would be nice if the pathway were done because we could walk around the loop. The township signed off on our development before all of the open space areas were completed.

Two residents expressed concern with respect to the future management of the shared natural areas. At the time of the interviews these subdivisions were still relatively new, with some open space communities having formed their homeowners' association within the past year. Even though relatively little natural areas management effort had been required of the residents at the time of the interviews, residents anticipated some problems would arise around future management issues (“we might get into common areas concerns,” “there may be problems once we have to discuss things like mowing around the retention pond”). A subsequent series of interviews conducted 1 year later more fully explored natural resource management within these open space communities (Austin and Kaplan, 2003).

Other concerns shared by residents were related to the current rate of growth in the township and having to commute long distances to work or to the grocery store. It would appear that this type of residential development, though commendable in terms of preserving land from development and offering environmental and social benefits to residents, is still not immune from contributing to and suffering from the negative aspects of urban sprawl.

4.4. *Resident understanding of the open space community concept*

Does living in an open space community within a township that is one of the most advanced in the state with respect to open space conservation design somehow factor into residents' understanding of this concept? Resident response to the question “What does ‘open space community’ mean to you?” reflected the aspects of the community that are meaningful to these individuals. The impetus behind this query was to determine if residents' understanding of the open space community concept informed their experience of living in one. Do residents speak about the concept in a manner consistent with the way it is described in the literature?

About half of the respondents (seven) indicated that the phrase “open space community” meant a neighborhood that contained communal areas, which could be accessed by all residents. Three individuals said that an open space community meant that residents were given greater access to nature. Two individuals said

the phrase meant that the neighborhood had strong social ties among its residents.

While these comments reflect some of the characteristic features of open space communities—shared open space, greater access to nature, and social interaction (Arendt, 1999b)—residents' comments did not articulate the underlying intention of this concept as an alternative to conventional residential development. Furthermore, two individuals believed the phrase meant giving residents more space between homes (i.e., having "larger lots"). And one individual indicated that he had never heard of the phrase "open space community." When it was explained that his neighborhood was indeed, an "open space community," he commented that he simply called it living "out in the country."

Residents were asked to relate what they thought made their neighborhood different from neighborhoods nearby. It is possible that, without necessarily understanding the principles of the open space conservation subdivision design, residents might recognize certain forces at work to make their neighborhoods unique or special places. Their responses, once again, expressed social and physical dimensions of the neighborhood setting.

Nine of the 15 residents thought their neighborhood was unique because of its residents, indicating it was "the people," "the neighbors," who made their subdivision a special place in which to live. Many viewed their neighborhood as a "smaller-knit community," believing that it was the relative size of the neighborhood that facilitated neighbor-to-neighbor contact. Residents expressing these sentiments reside in neighborhoods that ranged in size from 12 homes to 59 homes per subdivision.

I think it's a closer knit community because it's smaller.

It's small enough to get to know people, but big enough for variety.

The physical dimensions that residents felt contributed to neighborhood uniqueness were expressed in four ways. Three residents thought their community was different from others because it offered a greater sense of space. Their responses described their neighborhood as having "more space between homes," being "isolated" or "hidden," or being "more rural" than

other nearby subdivisions. For others, the community was unique because it offered a certain "look" or "character" that was different. Its homes were different from those in other subdivisions, or the overall layout of the neighborhood was nicer than most because more trees were left standing in home sites. Two individuals thought the neighborhood provided residents with access to nature, was surrounded by a "woods line" or had "lots of greenery." One individual thought the neighborhood unique because having "open space that would never be sold or developed" meant his neighborhood would be spared from the impacts of future development. The range of these responses suggests relatively little recognition of the unique aspects intended by the open space conservation subdivision.

5. Discussion

These residents enjoyed their neighborhoods and were eager to speak about the experience of living there. Open space communities provide them with natural elements important to their well being, including nature views from home and opportunities to access nature nearby. They enjoyed the peace and tranquility afforded by the amount of nature in their subdivisions that was left undeveloped. Their open space community provided social benefits as well, attracting neighbors with similar interests and encouraging neighborhood interaction along trails and in neighborhood association meetings. Despite struggles with some residents who do not always follow the rules, these residents appeared pleased with living in that setting and conveyed a willingness to be a contributing member of the neighborhood.

This type of residential community provides a unique combination of accommodating residents' desire for new housing in rural areas, promoting neighborhood social interaction, and at the same time preserving natural areas from development. In addition, open space conservation subdivisions offer residents an opportunity to assume an active role in the stewardship of nearby natural areas.

Planning officials see the open space conservation subdivision as a means for managing the growth experienced in this township. Local developers

constructing open space communities work closely with township officials in setting aside open space areas, thus promoting the concept in practice. While it is certainly not necessary for residents to speak about the open space conservation concept in terms similar to land use professionals, the variety of ways residents described it, and the lack of familiarity with the phrase by some, particularly those serving a leadership capacity, is noteworthy. It is evident from this small sample that an understanding of the concept is not being uniformly transferred from planning officials and developers to residents. A larger survey of open space community residents is needed to more fully realize the extent to which the concept has been conveyed to homebuyers.

Given the township's positioning at the forefront of the conservation subdivision movement in the state, it is unfortunate that more has not been done to increase homeowners' understanding of this concept. Since residents seem to recognize a special quality in the way their neighborhoods are organized and composed, this recognition could be used to an advantage with proper planning and guidance. If information about the principles behind the open space conservation subdivision were given to residents early in the home-buying process, it is possible that the neighborhood would have fewer rule breakers. In addition, more information and a clearer understanding of the concept may translate into stronger advocates within these communities for this type of land use planning technique. Land use planners may find residents are more willing stewards of local natural areas with an understanding that the environmental and social benefits of living in an open space community are intended outcomes of this planning process.

There is reason to be both optimistic and timely in attending to this matter, given evidence of a strong social component to life in these communities. Residents may not necessarily see their subdivision as different from conventional large lot subdivisions in the sense that homes are clustered on smaller lots, or that in doing so, land is preserved from development, or that wildlife habitat is saved. However, their belief that their community is unique because of its people and its setting can provide a secure position from which to further their understanding of the contributions this type of residential subdivision can make toward curbing the impacts of sprawl.

6. Conclusion

As rural landscapes continue to undergo the changes brought about by increasing residential development, we are faced with an ever increasing urgency to find alternative ways to approach the residential development process. Such alternatives need to preserve natural areas for healthy human and ecosystem function. The open space conservation subdivision seems to provide the preservation of natural resources in the form of open space, while at the same time offering opportunities for residents to take a more active role in managing these resources. How this approach is applied, and how residents understand this approach, will have important ramifications for its future use, acceptance, and feasibility.

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