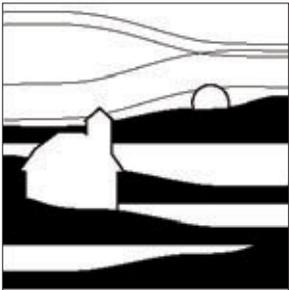


## 4. Village Development

### Fact Sheet



This smart growth tool can be used in rural and suburban communities.

### What is Village Development?

Village development involves the clustering of housing and other uses into compact settlements, adjoining or featuring open space and park resources. By creating such higher-density nodes, village development serves as an alternative to low-density sprawl, saving farmland and open space. If combined with mixed-use, pedestrian oriented development, village-style settlements can provide greater opportunities for walking and biking and thereby reduce auto-dependency. The challenge is how to create higher-density, mixed-use development in suburban and rural areas, where development potential is limited by the lack of water and sewer utilities.

### Toolbox

-  **Clustered Housing.** A "cluster" development project is essentially the same as a conventional residential subdivision, except that houses are clustered onto smaller lot sizes on one portion of the property, and the remaining land area is set aside as an open space preserve or parks. By creating higher density housing, cluster development provides one piece of the "village development" puzzle.
-  **Open Space Preservation.** Open space preservation goes hand-in-hand with clustered development. Such open space can not only provide as a key feature of aesthetic "greenbelt" around a village, but can serve as recreational areas for residents and help protect natural resources. Also, open space areas could be used as septic fields and storm water drainage areas. Preserved open space areas should not consist of the undesirable or unusable left-over space that remains after all the best land is carved out for private lots. Instead, open space areas should be accessible, useable, and well-designed and should serve as a community-wide, if not also a public, amenity.
-  **Mixed Use Development.** Mixed-use can be combined with higher-density cluster development to provide additional neighborhood conveniences and greater opportunities for walking. Primary non-residential uses in a clustered neighborhood could be small offices, cultural attractions, educational institutions, and parks. Small-scale retail stores and restaurants could also be added, provided that a large enough mar-

ket exists in the surrounding area. Ideally, such non-residential uses should be grouped together in a "village center", where each use could benefit from the pass-by pedestrian traffic generated by the other uses.

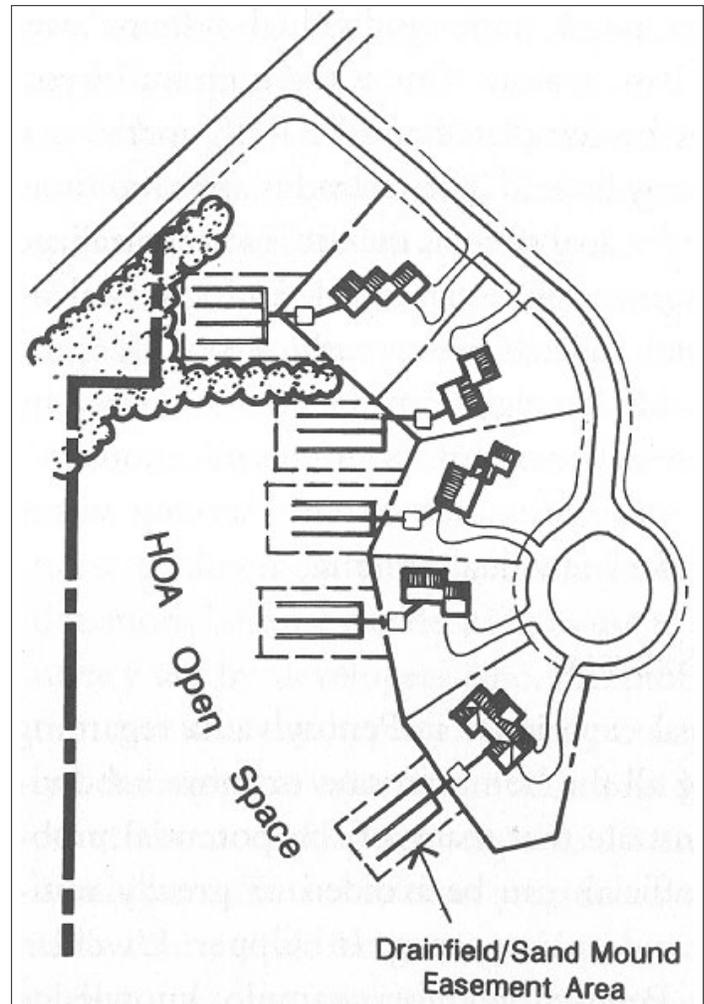


**Alternatives to Conventional Sewer and Septic.** Typically, residential subdivisions in rural areas are outfitted with individual septic systems on each residential site. Lot sizes of one to two acres or more are necessary to accommodate individual septic systems. If clustered lot sizes are any smaller, an alternative method is needed for wastewater disposal. Aside from hooking up the subdivision into the public sewer system, there are two possible alternatives:

- Package Treatment Plant. A package treatment plant is a smaller version of a sewage treatment plant. A package plant collects sewage from on-site sources, treats the sewage, and then discharges the sewage into an adjacent body of water (i.e., a stream or wetland).
- Common-Area Septic Easements. Rather than placing septic tanks and leaching fields on individual lots the tank and field could be placed in the common open space areas. Each lot could have ownership over a septic easement in the open space area that serves the lot. Alternatively, the septic tank and field could collect the effluent of several adjacent lots, with the owners of the adjacent lots sharing the use and responsibility for upkeep.



**Traditional Neighborhood Design.** As discussed in Chapter 6, Traditional Neighborhood Design (TND) can help weave together the compact housing and mixed use into a coherent village environment. The key characteristic of TND is that buildings are primarily oriented to pedestrians and transit, with auto access playing a supporting role. TND also pays a great deal of attention to the design of public streets, buildings, and plazas, which are intended to serve as identifiable community centers that provide opportunities for socializing with neighbors.



Village development is a form of clustering, whereby homes are concentrated on one part of a site, with the remaining area set aside as permanent open space. If sewer infrastructure is not available, innovative wastewater disposal techniques may be needed to achieve smaller lot sizes. These include shared septic systems, placement of septic in shared open space areas, as shown above, package treatment plants, and constructed wetlands. (Source: Randall Arendt, Growing Greener)

## Keys to Success



**Provide density incentives and reduce the allowable base density.** When village development is allowed as a voluntary alternative to conventional subdivisions, it is rarely employed. A municipality can encourage village development by establishing density incentives. For example, if a rural area were zoned for two-acre lots normally, yielding five lots on a ten-acre parcel, then the cluster option would allow six or more units to be built. Developers may not respond to density incentives unless they are substantial and the demand for new development is strong. In order to provide a significant density bonus and still ensure that new development will be in keeping with the character of the area, the base density should be reduced.



**Consider establishing a density penalty for conventional subdivisions.** An alternative to the use of density incentives is the use of a density "penalty". Under this system, a developer would be required to cluster in order to use the full development allotment possible under the zoning code. Building off the example above, the developer would be allowed to build five units (the total yield of the base two-acre zoning) only if a village development pattern were implemented. If clustering were not utilized, then the minimum lot size would be increased, reducing the total yield. For instance, if the minimum lot size were increased to five acres under the non-cluster design, then the total yield would be reduced from five units to two units.



**Establish a homeowner's association.** In any village development where portions of the area have been set aside as open space, those common open space areas require ongoing maintenance. Dedication of that open space area to the municipality may not be preferable, because it burdens the local government with the cost and hassle of maintenance, or because the area would then be made open to the general public, a potentially unpopular idea with local residents. Village development projects with common septic systems or package plants may also require ongoing maintenance. A homeowner's association can be used to take over the responsibility of maintaining open space areas, as well as any wastewater facilities.



**Require homeowner's associations to follow a civic model of governance.** Most associations are organized on a "corporate" model, with a board of directors that makes decisions for the neighborhood. Although homeowners are able to elect their representatives on the board, the discussions and decisions of the board are not open to public debate, and the town can do little to address problems in maintenance or operation of open space areas or utilities. A "civic" model is an alternative organizational structure for the homeowner's association. In this model, the association would have the equivalent of a Mayor and Council, who would balance and check each other's authority in a public forum.



**Allow mixed-use buildings, as well as mixed-use neighborhoods.** Mixed-use neighborhoods can fit into either a rural or a suburban setting. Suburban areas, where development pressure is more intense, may even be able to support mixed-use buildings. The prototypical example of a mixed-use building is the corner store with apartments or offices above. This compact design helps encourage pedestrian activity, because different land uses (trip origins and destinations) are closer together.



**Allow home occupations, subject to development standards.** Another way to achieve mixed-use on a more limited scale is to allow residences to have a home office or other small business (e.g., artist studio) within the house itself or in the garage. Whereas a traditional mixed-use building has more than one distinct use with different users, a home occupation is used by the resident of the premises. Performance standards would help ensure that neighbors are not subject to excessive noise, traffic, visual nuisances, etc.



**Adopt standards to ensure that non-residential uses are small-scale and in keeping with the neighborhood character.** Residential uses are particularly sensitive to the impacts of adjacent commercial operations, such as noise, exhaust, and visual blight. Villages should specifically prohibit land uses that would be incompatible with residential uses, such as heavy industry or major utilities (i.e., a sewage treatment plant). Large-scale office campuses and large-format shopping centers should also be prohibited. However, some small-scale operations (carpenter shops, contractor's offices,



Village development can involve the mixing of higher density residential and small-scale commercial uses to create a "village center". The village center of the Vermillion neighborhood, outside Huntersville, North Carolina, has small professional offices, a convenience store, restaurants, townhouses, apartments, live/work units, and a public square. This limited mix of uses is just enough to provide local conveniences within walking distance and to create a sense of place. (Source: Sierra Club, Smart Choices or Sprawling Growth)

artist lofts) may be acceptable, provided that their impacts can be limited through (1) buffering, (2) limits on hours of operation; (3) performance standards for noise, emissions, glare, and other aspects of the environment; (4) size restrictions; (5) limits on outdoor storage and shipping activity; and/or (6) restrictions on signage and parking.

 **Encourage village development through "planned unit development" zoning.** Some of the most successful examples of mixed-use village development were designed as master-planned communities. Vermillion,

North Carolina, for example, was designed to have a variety of land uses that are compatible with a residential neighborhood. At the center of the community is a public square, lined with townhouses, restaurants, a convenience store, small offices, and live/work units. Lower-density houses are found beyond the square. "Planned unit development" zoning would allow some flexibility in use, provided that the area is carefully designed, with attention to park space, circulation, and aesthetics.



**Organize a public education campaign.** Developers and property owners may be skeptical of village development for several reasons. The primary concern is that by complicating wastewater disposal and eliminating large-lot sizes (which have a proven record in the real estate market), village development would erode property values and sale prices. The education campaign should:

- Counteract fears of decreasing property values. By reducing infrastructure needs and allowing more compact development, village development can actually reduce the per-unit costs of development. By increasing open space and other public amenities on-site, it can result in sales premiums.
- Explain the quality-of-life advantages of village development. It saves open space, protects the environment, and reduces auto-dependency. With village centers and common recreational areas, village development provides more opportunities for social interaction.
- Demonstrate the alternatives to single-family septic. Techniques such as joint septic and constructed wetlands

should be introduced and explained. Examples of successful projects, such as The Fields of St. Croix (see sidebar) should be provided to demonstrate feasibility.



**Undertake a demonstration project.** To build confidence in village development, towns should consider undertaking a "demonstration project" that proves that the village model can be successfully implemented. Public funding can be used to help make the project a success and to promote the project as a model for future development.

### How Can the State Help?



**Conduct a statewide public education campaign.** A potential model for the State is the "smart growth" education campaign conducted by the Local Government Commission's (LGC). In the mid-1990s, the LGC initiated a campaign to promote its "Ahwahnee Principles for More Livable Communities," which call for the development of compact, pedestrian-oriented, transit-oriented, mixed-use, and mixed-housing neighborhoods, as an alternative to suburban sprawl. The campaign included publications, conferences, workshops, guidebooks, newsletters, videos, and slide presentations, and it primarily targeted local government officials.



**Create a level playing field with regard to wastewater permitting for conventional and village subdivisions.** Currently, the design for an individual septic system must be approved by the State Department of Public Health (DPH). An individual septic system is not required to obtain a Ground Water Discharge Permit from the Department of Environmental Protection (DEP), unless it has a volume of 5,000 gallons per day (gpd) or more or unless it constitutes a "community sewer system". This suggests that a village development with a collective septic system, package treatment plant, or other joint disposal system would be subject to an additional permit process, even though the total project effluent would not necessarily be any greater. CRCOG should advocate for a fairer procedure between conventional and cluster subdivisions.

### The Fields of St. Croix Lake Elmo, Minnesota

Located about 30 miles outside St. Paul, the Fields of St. Croix is a residential "conservation subdivision" that was designed to fit in with the traditional character, scenic beauty, and natural resources of the surrounding area. Although The Fields, in and of itself, is not a complete village (i.e., it does not have a commercial core), it was designed to be functionally and aesthetically related to nearby Lake Elmo Village Center as a satellite neighborhood.

Under the base zoning, the developer could have built 72 houses on three-acre lots in a conventional subdivision. Instead, with a 50 percent density bonus, he built 125 single-family units on lots of varied sizes, and the entire residential development occupied less than 100 acres. The remaining land area — about 144 acres — was permanently preserved as open space and includes a large neighborhood park, a pond with walking trails, an organic farm, and a restored prairie with indigenous grasses and wildflowers.

All of the 144 acres has been permanently protected through easements held by the Minnesota Land Trust.  
Continued on next page

Common open space areas are owned and maintained by a Community Association, and the organic farm is privately owned.

The Fields of St. Croix is located in a semi-rural area, where sewer infrastructure is not readily available. Some of the parcels on the subdivision, measuring about 2 acres in size, were still large enough to have on-site septic systems. However, the smaller parcels (the smallest were about 11,000 square feet) required some form of joint treatment and disposal. The solution was the use of an innovative "constructed wetland". A constructed wetland is nothing more than a human-built water basin, planted with wetland vegetation, that collects and naturally filters wastewater.

The Fields has been extremely successful in the local real estate market. Nearly 80 percent of the home sites sold within six months of the opening of the Phase I (45 homes). Lots varied in price from \$44,500 to \$150,000, with houses selling for \$250,000 to \$450,000. The most expensive were the ones backing up against the hillside, the pond, or the restored prairie. The environmental conservation features of the project have been its best selling points.

### For More Information

1. Arendt, Randall. Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks. Washington, D.C. Island Press, 1996.
2. Arendt, Randall; Elizabeth Brabec; Harry L. Dodson; Christine Reid; and Robert D. Yaro. Rural by Design: Maintaining Small Town Character. Chicago: American Planning Association, 1994.
3. Lincoln Institute of Land Policy, Cambridge, MA, Phone: (617) 661-3016; (800) LAND-USE, <[www.lincolninst.edu](http://www.lincolninst.edu)>.
4. Local Government Commission (and the Center for Livable Communities), Sacramento, C., Phone: (916) 448-1198, <[www.lgc.org](http://www.lgc.org)>.
5. Natural Lands Trust. Growing Greener: Putting Conservation into Local Codes. Media, Pennsylvania: Natural Lands Trust, November 1997.
6. Urban Land Institute (ULI), Washington, D.C. Phone: (202) 624-7000; (800) 321-5011, <[www.uli.org](http://www.uli.org)>.

See also, Detailed Technical Analysis on Village Development, available through CRCOG.

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