The Maximum Solution: Maximum Lot Size and Densities In Rural Zoning Districts

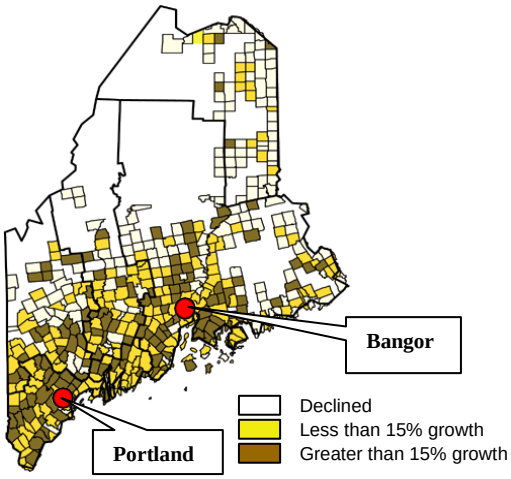
Information and Tools for Citizen Planners

State of Maine Perspective

It isn't news that Maine is a rural state. Ninety percent of its total land base is forest. Its overall density is just 41 persons per square mile, or about 6.5 people per 100 acres. But focus on the 7 counties of southern Maine and the news is different. Here, land for active forestry and farming has dropped to about 60% of the total, with suburban land use now at 33% (or 900,000 acres) of the total. At 186 persons per square mile, population density is 4.5 times higher than for the state as a whole. And many of the towns in this region are growing at 4 to 5 times the statewide average.

Throughout this region, communities are trying to preserve rural character. Under existing, large-lot zoning, they are unlikely to succeed. But through a simple, innovative zoning technique – the use of ***maximum lot size along with maximum densities*** in rural zoning districts - towns can take a new and different approach to help achieve their goal.

[1]Population change in Maine's towns and cities, 1990 to 2000



what

[1] Thomas G. Allen; May 20, 2002 An Overview of the Demographic and Economic Conditions in Maine: A Background for Workforce and Tax Policy Considerations

What is Rural?

Rural land is land organized ***for production***. The rural landowner gets part of his or her livelihood from the land. Rural land also includes wetlands, prime farmland soils, river corridors, wildlife habitat, and areas for recreation. This is different from low-density **suburban land** which is organized not for production but ***for consumption***: for the dividing, buying and selling of lots, for consumption of scenery, and for buying privacy from intrusions – including the intrusions of noisy or dirty rural activities. The suburban landowner commutes somewhere else for livelihood.

How is the Scale of Rural Land Different?

Rural uses require much larger, contiguous, undeveloped spaces than low density suburbs. For example:

- The average farm in southern New England is just under 100 acres, and in northern New England about 200 acres. Agriculture needs multiple farms in this range if supporting businesses in the region are to survive.
- A small commercial woodlot requires at least 50 to 100 acres in order to harvest enough cords on a sustainable basis to at least cover costs. Cost of management and harvesting small woodlots are optimal in the 100 to 500 acre range. Costs rise sharply below 50 acres.
- To breed, find food and find protection, the wildlife native to Maine need at least a few unbroken blocks of land with 2,500 to 5,000 acres in each growing region of the state, plus multiple unfragmented blocks of land in the range of 250 to 1000 acres. If these aren't provided in rural areas, they won't be provided at all.

Current Zoning Practices

Towns with zoning ordinances know about *minimum* lot size requirements. They are the staple of most zoning districts. For example, many "rural residential" districts require minimum lot sizes of 1 to 5 acres.

But when large tracts of land are divided up (whether all at once or a little bit at a time) into lots of 1 to 5 acres, that signals the beginning of

The Maximum Solution: Maximum Lot Size and Densities In Rural Zoning Districts

Information and Tools for Citizen Planners

the end for "rural character." True, the buyers of 3-acre lots won't be able to see their neighbors from their windows. They each will have private open space. But don't confuse that with "rural." In time, this low-density suburban development will compromise whatever is left of "rural."

A New Idea - Maximum Lot Size

That's where the idea of ***maximum lot sizes/maximum density*** comes in. With some care, growing rural towns can accommodate a modest amount of growth in their rural districts AND keep available a base of land for rural uses.

How does it work?

First, we need to distinguish between *lot size* and *density*. *Lot size* is the area contained within a house lot. *Density* is the number of house lots to be carved out of a parcel of land. Most zoning ordinances don't distinguish between the two: a minimum lot size of 2 acres gets directly translated into a maximum density of one unit per two acres.

To separate lot size from density in a rural zoning district, you want:

- a *minimum lot size* that will provide for safe septic systems and wells, and privacy;
- a *maximum lot size* that won't intrude on the rural land; and
- *a maximum density* that limits the overall number of house lots.

Let's take these one at a time, in reverse order. What should be the **maximum density**? To preserve blocks of land large enough to keep rural character and activities, a maximum of no more than 1 unit per 10 acres is desirable. (Many farm zones put the maximum at 1 unit per 25 or 35 acres).

But even this low density won't preserve the blocks of rural land needed if it gets translated into 10-acre house lots, each requiring long road frontage, long driveways, etc. You need to establish a **maximum lot size**. In combination with the maximum density, maximum lot size should strive to preserve at least 80% of the parcel as contiguous open space. This means a maximum lot size of 40,000 to 60,000 square feet (about an acre to one-and-a-half acres). At this maximum, one to one-and-a-half acres of every 10 will be house lots. Allowing for roads, that leaves eight to eight-and-a-half acres of open space.

Minimum lot size should be the final consideration. Under Maine law, lots that rely on septic systems must be at least 20,000 square feet (or about one-half acre). This is the minimum needed to safely separate wells from septic systems. With proper septic system design and installation, Maine's Division of Health Engineering and its State Soil Scientist believe larger lots usually are not required for health or safety.

The rural zoning thus would call for:

Minimum lot size	20-30,000 sq. ft.
Maximum lot size	40-60,000 sq. ft.
Maximum residential density	1-unit/10 acres

On a 50-acre parcel, this would allow for 5 house lots that would occupy around 5 acres, with 40-45 acres (after accounting for roads) open.

Site design is also a consideration, to maintain rural function. When abutting parcels are developed, proper siting is important to ensure the open space of each parcel can combine to preserve the critical blocks of land necessary to keep rural land functioning as rural land.

Other Considerations

This technique is meant to accommodate modest residential development in rural areas. It is NOT a substitute for planning that directs the majority of new development into designated growth areas of town, such as villages, expanded residential neighborhoods, hamlets, and downtowns, per the town's Comprehensive Plan.

In addition, it is important to acknowledge that the overall amount of development allowed on a particular parcel may be reduced. This consideration can often be addressed with proper planning and a public process.

Additional Resources

- Growing Greener: Conservation Subdivision Design by Randall Arendt
- "Open Space" Zoning: What It Is & Why It Works by Randall Arendt
- Open Space Subdivision Presentation KVCOG
- *Growing Smart Legislative Guidebook: Model Statutes for Planning and the Management of Change*, 2002 Edition
- American Farmland Trust Information Center