Regulating without Zoning in Maine Towns

Salim Furth

Abstract
For a century, zoning has been the quintessential form of land use regulation in the United States. But in Maine, at least 200 towns continue to regulate land use without dividing their territory into districts subject to differing regulation. I use qualitative and statistical methods to investigate the causes and effects of persistent nonzoning in Maine. Unzoned towns are typically smaller and have less commercial development pressure. Unzoned towns are neither more nor less strict than similar, zoned neighbors. Nonspatial regulation is a sustainable alternative to zoning for small Maine towns.

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Keywords: Zoning, land use regulation, local government

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Introduction

Zoning is the quintessential land use regulation in the United States. As early as 1970, legal scholar Bernard H. Siegan could call the absence of zoning “unthinkable” and study unzoned Houston, Texas, as an inspirational curiosity.1 Yet nonzoning persists; today at least 200 Maine towns still regulate land use without zoning. This paper documents regulation without zoning in Maine and shows that it remains viable as a regulatory approach although it is not necessarily more permissive than regulating through zoning.

There are at least 200 unzoned Maine towns, as mapped in figure 12 which contain 20 percent of the state’s population. They are not unregulated: they employ minimum lot sizes, development restrictions, conditional permits, and a variety of other restrictions. What distinguishes zoning from other land use regulations is that zoning divides the town into zones or districts in which differing rules apply. In particular, zoning can specify districts for particular uses, such as commercial and industrial, and for varying levels of density.

Despite its original promise of organizing land use on an ostensibly rational, planned basis, there are no obvious differences between zoned and unzoned towns of similar size and situation. Investigating in detail using both qualitative and statistical methods, I find few meaningful differences hiding beneath the apparent similarity between zoned and unzoned towns.

2 The author has posted an interactive version of figure 1 to accompany this article. Salim Furth, Non-Zoning in Maine, Datawrapper, https://datawrapper.dwcdn.net/11BHV/ (2021).
Section I defines nonzoning as practiced in Maine and characterizes town land regulations in the absence of zoning, including two important, state-mandated regulatory institutions that towns enforce: Shoreland Zoning and the Subdivision Law. Section II describes the geographic extent and patterns of nonzoning, both qualitatively and statistically. I find that historical population and access to a major highway are credible but relatively weak predictors of zoning. Instead, zoning and nonzoning show a pattern of randomness with a strong tendency of nearby towns to choose the same regulatory approach. Section III argues that unzoned towns always have the option to adopt zoning and connects the persistence of nonzoning to Heather Sanborn’s criticism of retroactive...
zoning power. In Section IV, I analyze fifteen pairs of zoning codes to show that nonzoning is neither systematically looser nor stricter than zoning. Instead, neighboring zoned and unzoned towns usually have similar stances toward development. In remote Maine, state-run zoning of unorganized areas is generally more restrictive than the minimalist regulation present in small, unzoned towns. Section V looks for evidence of systematic development differences between zoned and unzoned towns. I use statistical methods to show that unzoned towns have more manufactured homes and fewer multifamily homes than zoned towns, although those differences may be due to unobserved differences other than zoning. I also find evidence of differences in commercial development by documenting the location choices of Walmart and Dunkin’. In Section VI, I conclude that nonzoning has proven sustainable but is likely to decline.

I. How Unzoned Towns Regulate

“Skowhegan has Flood Hazard and Shoreland Zoning, other than these there are currently no residential or commercial zoning districts in the community.”

Skowhegan is a town of 8,000 in central Maine. It is the county seat and most populous town of Somerset County. The town consists of a thickly settled core, which is served by town water and sewer, and an ample hinterland of woods and farms. Outside the core, development consists of homes, farms, and businesses scattered principally along the roads that lead to neighboring towns. Sappi North America operates a large paper mill that straddles the line between unzoned Skowhegan and zoned Fairfield.

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4 FAQs: Code Enforcement and Planning, Town of Skowhegan.
In Skowhegan, as the website FAQ referenced earlier implies, land uses are not segregated into different districts. This is not to say that there are no regulations, or even that there are no spatial distinctions in the regulations. For example, Skowhegan’s subdivision ordinance requires that new lots must be at least 10,000 square feet where connected to public sewerage or 40,000 square feet if served by an on-site septic field. The Sappi mill, if it were built today, would be subject to a suite of local development rules but could have been built almost anywhere in Skowhegan.

On the Fairfield side of the line, the Sappi facility is in an area zoned “Industrial.” As in most US cities and towns, the entirety of Fairfield is divided into zones with names like “Rural Residential,” “Commercial,” and “Main Street.” The town’s land use ordinance subjects each zone, or “district”, to unique development restrictions, including minimum lot sizes and setbacks from property lines. More fundamentally, each zone allows or disallows a long list of specific land uses.

What distinguishes zoning from other forms of land use regulation is the establishment of districts in which differing uses are allowed. Since the word “zoning” is often used as a catchall

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6 SKOWHEGAN, ME., SUBDIVISION REVIEW ORDINANCE art. 6 § 6.10.2.1 (2012).
7 Fairfield, Me., Town of Fairfield Maine Zoning Map, in Maine Town Documents, 6867 (2016).
8 FAIRFIELD, ME., LAND USE ORDINANCE art. 6 § 6.5(A) (2021).
9 Id. § 6.4(A) (2019).
10 The longstanding debate about whether Houston’s land use regulations constitute “zoning” was litigated in Powell v. City of Houston, No. 19-0689 (Tex. Jun. 4, 2021). Plaintiffs claimed that the institution of regulated historic districts violated Houston’s charter, which prohibits “zoning” unless approved by a referendum. Professor Siegan certainly believed that Houston’s system was not zoning (BERNARD H. SIEGAN, LAND USE WITHOUT ZONING (1972, repr 2020). Other scholars have argued that Houston’s partially-spatial regulatory system amounts to de facto zoning. See Alexius Marcano et al., Developing Houston: Land-Use Regulation in the “Unzoned City” and Its Outcomes (Kinder Inst. Working Paper, 2017). Sara C. Bronin and others deemphasized the spatial aspects of zoning, arguing that “the most essential characteristic of the function of zoning law is that it regulates the use of land.” See Sara C. Bronin, Brief for the Historic Preservation Organizations and Law Scholars as Amicus Curiae at 18, Powell v. City of Houston, No. 19-0689 (Tex. June 4, 2021). The Texas Supreme Court concluded that “zoning is the district-based regulation of the uses to which land can be put and of the height, bulk, and placement of buildings on land, with the regulations being uniform within each district and implementing a comprehensive plan” (Powell at 6).
term for land use regulation, segregating uses by district is also called “Euclidean zoning,” a winking reference to both *Euclid v. Ambler* and the tidy lines of Euclidean geometry.

Land use regulation without zoning is largely nonspatial. Whereas zoning, from its outset, was premised on reducing unwanted spillovers between incompatible land uses, nonspatial regulations restrict uses based on criteria universal enough to apply everywhere in the municipality.

Maine’s first zoning ordinances were enacted in 1926 by the City of Portland and the York Village Corporation. Eight others followed through 1939, several of them summer destinations. Bar Harbor’s 1935 zoning code applied “to camping grounds only.”

There are many book-length treatments of zoning’s merits, effects, and history. This paper, by contrast, is primarily concerned with characterizing the forms of regulation that are practiced in unzoned Maine towns and secondarily with the inevitable comparison between zoned and unzoned.

To study unzoned Maine towns comprehensively, two research assistants and I used town websites and direct inquiries to ascertain which towns were divided into districts with distinct land uses and which were not. We found that 228 employ zoning districts, 200 do not, and 6 delegate their land use regulation to the state Land Use Planning Commission (LUPC). We could not find data for 19 towns. The unzoned towns account for 279,000 residents, 20 percent

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13 In one otherwise-unzoned town, Northport, a Village Corporation has instituted zoning in a small neighborhood. Village Corporations in Maine are quasi-municipal entities with taxing, zoning, and planning powers pursuant to ME. REV. STAT. ANN. tit. 30-A, § 6303 (2021). They exist within towns and are subordinate to town ordinances. Both town and village corporation can regulate the same land, with the stricter regulation usually governing. One history suggests that Village Corporations gained land use authority when the Farmington Village Corporation wanted to prevent construction of a filling station in 1955 (Kaitlin Schroeder, Village Corporations Watch Their Power Wane in Maine, MORNING SENTINEL, Apr. 7, 2014).
of the state population, and 23 percent of the state’s area. Although my categorizations of towns as “zoned” or “unzoned” are open to debate in a few cases, it is evident that Maine towns in all parts of the state use a variety of regulatory approaches.

Maine is not the only state with unzoned areas. New Hampshire has 17 towns with no zoning and Vermont, as of 2014, reportedly had 134 unzoned places. Unincorporated rural land may be unzoned in many states. In Texas, unincorporated land outside of municipal extraterritorial jurisdiction must be unzoned.

Land in New England has been “organized” into towns since the colonial era. What John Adams noted in 1783 is still true: each “Town contains upon an Average Six miles or two Leagues Square.” Some towns later became cities, as Portland did in 1832 and Boston, Massachusetts, in 1822. Unorganized territory is broken into “townships,” which are administered by the state, and counties. They often have few year-round residents. If an unorganized township is settled, it is likely to organize into a new town instead of being annexed to an existing town.

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14 Population data are from the 2020 Census.
17 TEX. LOCAL GOV. § 231. See interpretation in CAP. AREA COUNCIL GOV’TS, COUNTY LAND USE AUTHORITY IN TEXAS 15 (2009).
18 Michelle Wilde Anderson argues that unincorporated areas are, today, largely subject to land use regulations, but the content of those regulations encourages “sprawl.” The same can be argued of most zoning regimes. Michelle Wilde Anderson, Sprawl’s Shepherd: The Rural County, 100 CALIF. L. REV. 365 (2012).
19 Whereas most of the United States distinguishes “incorporated” from “unincorporated” land, Maine land is divided into “organized” and “unorganized” territory.
20 Letter from John Adams to the Abbé de Mably (Jan. 15 1783), Founders Online, National Archives, https://founders.archives.gov/documents/Adams/06-14-02-0111-0004.
21 Robert A. McCaughey, From Town to City: Boston in the 1820s, 88 POL. SCI. Q. 191 (1973)
Cities and towns are equal units of local government; they differ in their internal governance but have the same powers regardless of their size. All twenty-three of Maine’s cities are zoned. Throughout this paper, I use “town” as a synonym for “municipality.”

Regulation in unzoned Maine towns varies widely across two principle dimensions: allowable land uses and density. The remainder of this section profiles the principal methods of regulation in unzoned towns, including two state-mandated regulations.

**Land Use Regulations**

The first dimension across which unzoned towns differ is in which uses are allowed by right, allowed conditionally, or not allowed at all. By default, many unzoned towns allow any land use that can comply with state environmental rules. In individual cases, this can be difficult to verify, but it appears that many of the smallest inland towns have no site plan review or other restrictions on the use of land. One Penobscot County town employee stated, “We’re small and have no ordinances of any kind. It's lovely!” Another, in Washington County, emphasized that the town will not stand in your way: “If you want to build a store, you can build a store; if you want to build a house, you can build a house.”

Other towns clearly favor certain uses—usually single-family residences, agriculture, and forestry. For example, Freedom (despite its name) requires a detailed and costly application

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23 A local official we interviewed was unsure if her town has zoning; she said, “It hasn’t come up in the eight years I’ve been here.” Telephone Interview with Priscilla Mallory, Selectman, Town of Winn, Me. (2020).

24 Telephone conversation between Isaac LaGrand and an unrecorded respondent from the Town of Stacyville, Me. (2020).

25 Telephone Interview with Dana Porter, Town of Wesley, Me. (Sept. 28, 2020).
process and discretionary Planning Board approval for new commercial uses and any multifamily construction. Unzoned towns near the coast are more likely to have strict use restrictions, as are those with larger populations. Coastal St. George is typical in that it requires site plan review for development or expansion of “commercial, industrial, municipal, office, institutional or multi-residential” uses.

Machiasport takes an intermediate approach. It requires building permits (including a mild form of site plan review) for all construction, but most business uses face the same legal requirements as houses. The town does have specific clauses and ordinances that govern a few specific uses more strictly, including mobile homes and windmills. It also has an ordinance banning retail marijuana commerce. This intermediate approach to use regulation appears to be less common than the two blanket approaches outlined earlier.

**Minimum Lot Size**

Development density in Maine is dictated by historical patterns and the presence or absence of sewers. Many small towns have dense urban cores consisting of a handful of streets—these are always old and usually served by a small public sewer system. In theory, towns with sewers could allow development at high densities. Instead, unzoned towns with sewerage typically allow new lots of moderate size—10,000 or 15,000 square feet—for lots served by public sewers.

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26 FREEDOM, ME., COMMERCIAL DEVELOPMENT REVIEW ORDINANCE (2012).
28 MACHIASPORT, ME., BUILDING PERMIT ORDINANCE (2016).
29 MACHIASPORT, ME., MOBILE HOME AND TRAILER PARK ORDINANCE (n.d.).
30 MACHIASPORT, ME., ORDINANCE PROHIBITING RETAIL MARIJUANA ESTABLISHMENTS AND RETAIL MARIJUANA SOCIAL CLUBS (2017).
31 Blue Hill may be an exception; it does not have a published minimum lot size.
No unzoned town has universal sewer service and most unzoned towns have no sewers. The state imposes a minimum of 20,000 square feet for single family lots with subsurface solid waste disposal.\textsuperscript{32} In addition, most towns publish a minimum lot size, commonly set at one acre for a detached house. In the few towns that have no minimum lot size, a developer could conceivably build houses on small lots served by a community septic system that disposes of waste in a common leach field.\textsuperscript{33}

One town with relatively permissive minimum lot sizes is Madison, which allows sewer-served lots of 10,000 square feet and 80 feet of frontage.\textsuperscript{34} For lots unconnected to the public sewer, it requires 20,000 square feet, coinciding with the state minimum for on-site septic.

At the restrictive extreme, the Town of Lebanon requires two-acre lots for single family homes and an additional half acre for each additional unit of multifamily housing.\textsuperscript{35}

Unzoned Maine makes little allowance for multifamily housing. Where it is expressly considered, it faces tight restrictions. For example, St. George restricts multifamily buildings to five-acre lots and a maximum of five units per lot.\textsuperscript{36} In many towns, multifamily buildings require the same base lot size as single-family homes plus 20,000 square feet per additional unit.\textsuperscript{37}

\textit{Shoreland Zoning}

Even in towns that I have deemed “unzoned,” a small ribbon of shoreline must be zoned in

\textsuperscript{32} The Minimum Lot Size Law requires, \textit{inter alia}, 20,000 square feet (slightly less than a half acre) for single family lots with on-site, subsurface solid waste disposal. \textsc{Me. Rev. Stat. Ann.} tit. 12, § 4807 (1973). However, towns typically write their own lot size requirements that cover all uses, not only those using septic fields.

\textsuperscript{33} Witold Rybczynski has described such a system is described in detail in an exurban Pennsylvania context. \textsc{Witold Rybczynski, Last Harvest: From Cornfield to New Town} (2008).

\textsuperscript{34} For infill development, frontage is the more relevant restriction, since lot depth is set by the street layout.

\textsuperscript{35} \textsc{Lebanon, Me., Lot Size Ordinance} (2017).

\textsuperscript{36} \textsc{St. George, Me., Minimum Lot Size Ordinance} (2013).

\textsuperscript{37} Examples include Easton and West Paris.
accordance with state environmental law. Along with other environmental rules, principally protecting watersheds and proscribing development in floodplains, Shoreland Zoning smuggles a limited spatial element into towns which otherwise have nonspatial regulations.

The Mandatory Shoreland Zoning Act (MSZA) requires that all Maine towns “adopt, administer, and enforce” regulations that meet state standards governing land use within 250 feet of coasts, rivers, and wetlands, or 75 feet of streams.39

Because Shoreland Zoning is crafted after the model of Euclidean zoning, town administrators have some degree of familiarity with its enforcement. These ordinances, largely copied from state model text, are far longer and more detailed than town-authored ordinances.

The Town of Lubec (which claims Maine’s longest shoreline40) is typical. It has a detailed Shoreland Zoning ordinance, complete with six zones, a table of allowed uses, and varying minimum lot sizes.41 The town has willingly engaged in this state-mandated regulatory role, revising the Shoreland Zoning ordinance twice.

Interior towns are not exempt from Shoreland Zoning. Palermo, for example, divides its shoreland among three of the state-created zones: Resource Protection, Stream Protection, and Limited Residential. The allowed uses in each district are largely identical, but the Protection districts impose a higher degree of town scrutiny. Building a house in a Protection district requires Planning Board approval, whereas a house in the Limited Residential district only requires certification by the code enforcement officer.

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39 As provided by the MSZA, the Maine Department of Environmental Protection wrote “state-imposed” Shoreland Zoning ordinances for 54 towns that did not write their own in time. Shoreland Zoning does not require a comprehensive plan. Enos v. Town of Stetson, 665 A.2d 678 (Me. 1995).
40 LUBEC, ME., SHORELAND ZONING GUIDELINES 1 (2015).
41 LUBEC, ME., SHORELAND ZONING ORDINANCE (2014).
Despite having many of the trappings of a zoning code, however, Shoreland Zoning is not “real” zoning. In Lubec, as in most towns, the same land uses are allowed in most of the zones. The salient restrictions are against dense development and the use of on-site septic systems in shoreland zones. Any segregation of uses among Shoreland Zoning districts is largely incidental to environmental performance standards.

Subdivision Regulations

Maine requires that towns regulate and review subdivisions that create three or more lots within a five-year timespan. The state has informed model subdivision ordinances for towns to adopt, and many towns—including almost all zoned towns—have adopted their own subdivision ordinance, whether based on the state model or adapted to the state requirements. However, less-regulated towns quickly learned that the state’s subdivision law was substantially complete. Unlike zoning, the subdivision law is sufficiently detailed to operate and be enforced without further local elucidation.

The Town of Easton, for example, lists the state Subdivision Law among its ordinances and has published a helpful collection of legal interpretations from the Maine Townsman and other sources alongside a copy of the statute.

Maine’s state subdivision regulations place up-front costs and subjective approval risks on any potential subdivision. The subdivider is responsible for carrying out surveys, soil tests, and other studies to satisfy the conditions of Title 30-A, Section 4404, of the Maine Revised Statutes.

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43 See SOUTHERN MAINE REGIONAL PLANNING COMMISSION, MODEL SUBDIVISION REGULATIONS FOR USE BY MAINE PLANNING BOARDS (12th ed. 2006).
44 Easton, Me., Appendix I: Subdivisions (2017).
Even if the clearer criteria are met—for example, “The long-term cumulative effects of the proposed subdivision will not unreasonably increase a great pond's phosphorus concentration during the construction phase and life of the proposed subdivision”—the town may have room to reject the application on subjective grounds. Not only must the subdivision’s traffic, drinking water, sewer, and stormwater impacts not be “unreasonable,” the statute requires that it must “not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites ... or any public rights for physical or visual access to the shoreline.”

Maine case law has protected citizens from the “unlawful delegation of legislative authority”46 to zoning boards via vague local ordinances, a tradition which Orlando Delogu and Susan Spokes argued was weakening by the mid-1990s.47 However, in Kosalka v. Town of Georgetown, the court found that a town requirement to “conserve natural beauty” was “an unconstitutional standardless delegation of legislative authority and therefore a violation of due process.”48

A decade later, the court reversed its view on the ineffability of beauty, upholding a statute protecting “existing scenic [and] aesthetic” uses in Uliano v. Board of Environmental Protection.49 Whereas Georgetown’s scenic requirement was found “totally lacking in cognizable, quantitative standards,”50 the statutory requirement at issue in Uliano merely

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46 Wakelin v. Town of Yarmouth, 523 A.2d 575 (Me. 1987).
48 Kosalka v. Town of Georgetown, 752 A.2d 183 (Me. 2000).
49 Uliano v. Board of Environmental Protection, 977 A.2d 400 (Me. 2009).
50 Kosalka, 752 A.2d 183.
“regulate[s] [sic] uses that do not lend themselves to precise guidelines.”51 The court distinguished Uliano from the Kosalka finding on the grounds of differences in wording, greater deference to the state executive branch than to municipalities, and—in a somewhat circular argument—the existence of procedural protections such as judicial review.52

The state subdivision law sits uncomfortably between Kosalka and Uliano. The statute requires municipalities to consider subjective factors when approving subdivisions but does not endow the local officials making these decisions with the statutory language, degree of deference, or procedural protections that the court used to distinguish its stance in Uliano from its stance in Kosalka. However, research revealed no Supreme Judicial Court cases contesting the subdivision statute.

II. The Geography of Nonzoning

*Qualitatively*

Maine towns without zoning are typically less populous and face greater commercial development demand than zoned towns. In figure 1, one can visually trace the courses of I-95 from Waterville to Bangor and US Rt. 1 through Midcoast Maine as lines of zoned towns, with unzoned towns passing by on both sides a few miles from the highway.

Another visually apparent regularity is that nonzoning occurs in clusters. The largest area where nonzoning is the norm is a swath of Central and Western Maine, loosely centered on US Rt. 2. Smaller clusters are centered on the Blue Hill Peninsula and inland Waldo County.

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51 The statute in question protects “scenic use”; it does not regulate it. *Uliano*.
52 *Uliano*, 977 A.2d 400.
As figure 2 shows, all of Maine’s large cities and towns are zoned; the largest unzoned town is Skowhegan (pop. 8,620, the 32nd largest municipality). Among towns with 5,000 to 10,000 inhabitants, one in six is unzoned. Among small towns, nonzoning is the more common option.

Still, the 200 unzoned towns together are home to 279,000 of Maine’s 1.3 million inhabitants—twenty percent. Table 1 shows that about 70 percent of the population of Somerset and Oxford counties live in unzoned towns. Aroostook County has the most unzoned towns, 30. Every county has at least one town without zoning. At least one high-demand part of the state has remained largely unzoned: the peninsula and island towns from Harpswell to St. George. They attract affluent summer populations but, due to remoteness, have little commercial activity. The adjacent towns along bustling US Rt. 1, by contrast, are all zoned. Residents, reasonably, are more concerned with restricting commercial development than summer homes.

Nonzoning is more common in declining towns than fast-growing ones. Since 1940, 115 Maine towns have lost population; half of these are unzoned, a little higher than the statewide rate. By contrast, among the 91 towns that more than tripled in population since 1940, just 23 percent were zoned. The median population growth in unzoned towns since 1940 is 46 percent, compared to 108 percent in zoned towns. Although zoning can certainly affect population growth, it is more likely that zoning’s association with higher growth is due to towns adopting zoning when they face development pressure.
In the following section, I show that some sources of development pressure—such as highway access—can partially predict the adoption of zoning.

**Statistically, Nonzoning Is Mostly Random**

The likely determinants of nonzoning are all interrelated: interstate highways tend to serve larger towns and follow the southern Maine coast while towns closer to Boston tend to have larger populations, and so on. Statistical methods can help us distinguish one cause from another and can also help distinguish between systematic and idiosyncratic variation.

As the following analysis shows, nonzoning in Maine is principally the result of idiosyncratic (or unobserved) factors and regional clustering. Although population and major highway access are statistically credible factors, they account for little of the variation. This make sense in light of the one-third of small towns that have zoning or the one-third of towns in remote Aroostook County that have zoning.

Given the nature of the data, the best statistical tool for distinguishing among these entangled determinants of zoning is a Bayesian logistic regression (see table 2). I predict the likelihood

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**Table 1: Nonzoning by County**

<table>
<thead>
<tr>
<th>County</th>
<th>Towns</th>
<th>Unzoned</th>
<th>Zoned</th>
<th>Unzoned population share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somerset</td>
<td>27</td>
<td>20</td>
<td>7</td>
<td>71%</td>
</tr>
<tr>
<td>Oxford</td>
<td>34</td>
<td>21</td>
<td>12</td>
<td>69%</td>
</tr>
<tr>
<td>Piscataquis</td>
<td>16</td>
<td>9</td>
<td>3</td>
<td>57%</td>
</tr>
<tr>
<td>Washington</td>
<td>41</td>
<td>22</td>
<td>13</td>
<td>50%</td>
</tr>
<tr>
<td>Franklin</td>
<td>17</td>
<td>10</td>
<td>7</td>
<td>43%</td>
</tr>
<tr>
<td>Waldo</td>
<td>26</td>
<td>15</td>
<td>11</td>
<td>44%</td>
</tr>
<tr>
<td>Lincoln</td>
<td>18</td>
<td>8</td>
<td>10</td>
<td>37%</td>
</tr>
<tr>
<td>Hancock</td>
<td>37</td>
<td>18</td>
<td>18</td>
<td>37%</td>
</tr>
<tr>
<td>Aroostook</td>
<td>55</td>
<td>30</td>
<td>20</td>
<td>26%</td>
</tr>
<tr>
<td>Kennebec</td>
<td>29</td>
<td>13</td>
<td>16</td>
<td>35%</td>
</tr>
<tr>
<td>Penobscot</td>
<td>55</td>
<td>21</td>
<td>26</td>
<td>17%</td>
</tr>
<tr>
<td>Knox</td>
<td>17</td>
<td>4</td>
<td>13</td>
<td>16%</td>
</tr>
<tr>
<td>Sagadahoc</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td>17%</td>
</tr>
<tr>
<td>Androscoggin</td>
<td>14</td>
<td>2</td>
<td>12</td>
<td>5%</td>
</tr>
<tr>
<td>York</td>
<td>29</td>
<td>2</td>
<td>27</td>
<td>4%</td>
</tr>
<tr>
<td>Cumberland</td>
<td>28</td>
<td>2</td>
<td>26</td>
<td>2%</td>
</tr>
<tr>
<td>Maine</td>
<td>453</td>
<td>200</td>
<td>228</td>
<td>21%</td>
</tr>
</tbody>
</table>

Note: Areas governed by LUPC and towns lacking data are not included in the last three columns.

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53 Logistic regression is a standard choice for analyzing problems with binary outcomes. I chose to use Bayesian methods in this analysis because they better align with the framing of the question than do frequentist methods. Frequentist methods are designed for sampling-based statistical problems, and the outputs are not readily interpreted in a case where the sample is nearly equal to the population. (In this case, the population is “all towns in Maine,” and the sample covers 95 percent of the population). See Neal Alexander, *What’s More General than a Whole Population?*, 12 EMERGING THEMES EPIDEMIOLOGY 11 (2015). One should not believe that factors like coastal access and population have a precise, deterministic relationship with zoning. Rather, they are indicators of the types of political questions that may arise in that town with more or less frequency. This question is analogous to the0
that a given town is unzoned based on several factors: population, land area, linear distance to Boston, coastal access, major highway access, and a spatial neighborhood effect. Following best practices from statistical sciences, I use a lagged (1940) measure of population. This avoids the problem of reverse causation and is, in any case, highly correlated with current population. Land area and distance to Boston are expressed in natural logarithms (ln). The spatial neighborhood factor is the share of nearby towns that are unzoned, weighted by inverse distance. The neighborhood factor is intended to capture both the direct influence of neighbors’ zoning choices and the influence of spatially varying, unobserved phenomena, such as topography, industry mix, and culture.

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Table 2: Determinants of Nonzoning

<table>
<thead>
<tr>
<th>Variable</th>
<th>Average coefficient</th>
<th>Smallest credible coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940 population, thousands</td>
<td>-0.46 (-0.11)</td>
<td>-0.27</td>
</tr>
<tr>
<td>Major highway</td>
<td>-0.99 (0.46)</td>
<td>-0.23</td>
</tr>
<tr>
<td>Land area, ln</td>
<td>0.10 (0.14)</td>
<td>0</td>
</tr>
<tr>
<td>Linear distance to Boston, ln</td>
<td>0.29 (0.34)</td>
<td>0</td>
</tr>
<tr>
<td>Coast</td>
<td>-0.20 (0.28)</td>
<td>0</td>
</tr>
<tr>
<td>Neighborhood factor</td>
<td>3.43 (0.58)</td>
<td>2.25</td>
</tr>
<tr>
<td>Number of observations</td>
<td>4.22</td>
<td>4.22</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.16</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Standard deviations, which measure uncertainty in the estimated coefficient, are in parentheses. The ‘smallest credible coefficient’ is the value in the 95% credible interval nearest zero. Results were obtained using STATA’s bayes: logit command. Priors for all coefficients were normally distributed with a mean of 0 and a standard deviation of 2. The pseudo R² is calculated as 1 minus the ratio of the log marginal likelihood of this model to that of a model using only a constant term.

54 Towns with ocean or wide estuary frontage to the southeast of US Rt. 1 are coded as 1; others are 0.
55 Towns containing an interstate on- or off-ramp or US Rt. 1 west of Acadia National Park (the easternmost major coastal destination) are coded as 1; others are 0.
56 Reverse causation would occur if zoning influenced population growth, as is likely, as well as population growth influencing zoning.
57 A side effect of this decision is that six recently created towns are not included in the sample. All but one, West Paris, are vacation towns. The correlation between 1940 and 2020 population is 0.89. Incidentally, 1940 population is a stronger predictor of zoning than is 2020 population. Population level is a slightly better predictor than the natural log of population, which exaggerates the importance of differences in population among very small towns.
58 Distances are based on town centroids. Thus, a town centered 6 miles away has twice the weight of a town centered 12 miles away. The “neighborhood” is cut off at 25 miles; other cutoffs give similar results.
Regression results are presented in table 1. Three variables are decisively associated with nonzoning: population and major highway access (negatively) and the neighborhood factor.

The average estimated coefficients imply that, all else equal, increasing a town’s 1940 population by 2,000 people would decrease its odds of being unzoned by about 0.9. Adding access to a major highway would have a similar effect, as would moving the town from a neighborhood where half of towns are unzoned to a neighborhood where a quarter of towns are unzoned.

The remaining variables—area, distance to Boston, and coastal access—may have positive or negative associations with nonzoning.

Although these factors seem large, they are dwarfed by randomness. The pseudo R-squared indicates that this model performs better than an entirely random model, but only increases explanatory power by 16 percent. Most of that improvement comes from the neighborhood factor, which is a pattern rather than a concrete explanation.

Statistically, then, idiosyncratic local factors and unobserved neighborhood factors explain most of the patterns of zoning and nonzoning. The importance of randomness and clustering, rather than real regularities, is the key statistical takeaway.

Other, unreported regressions show that current income (which may be both a cause and effect of zoning) is negatively associated with zoning and that adding indicator variables for each county does not substantially change the implications or improve the fit of the model reported here.

59 “Odds” in this case—technically “log odds”—refers to the natural log of the probability of being unzoned divided by the probability of being zoned. Having higher log odds implies a higher probability of being unzoned.
III. Just-in-Time Zoning

Towns always have the choice of adopting zoning. Choosing to be unzoned is reversible. Abandoning zoning for nonzoning, however, is sufficiently rare that the author is unaware of a single case nationwide. Are any towns unzoned? We might better say they are not zoned yet.

To adopt comprehensive zoning, a town must commission (or self-produce) a comprehensive plan. The Washington County Council of Governments estimates that commissioning a comp plan costs $15,000 to $18,000 for the small towns of its region. Promulgating and enforcing a simple land use ordinance with zoning districts requires further expense. These figures are within reach for most small towns—although a big enough expense to force serious consideration.

The impetus for zoning adoption is sometimes the proposal of an undesired land use. Lisa Prevost chronicles Milbridge’s scramble to adopt regulations to prevent affordable housing from being built after a nonprofit organization serving Hispanic migrant workers, Mano En Mano, proposed a six-unit apartment building. The town initially instituted a moratorium to block the building, which was challenged in federal court on fair housing grounds. The town settled the suit, but quickly adopted a land use ordinance to limit future development.

In Kittery Retail Ventures, LLC v. Town of Kittery, the court allowed a town to change land use regulations retroactively to block a partially permitted development. Heather Sanborn

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62 Hand in Hand/Mano en Mano v. Town of Milbridge, Maine C.A. No. 1:09cv287 (D. Me.)
63 Prevost, supra note 62, at 65.
64 856 A.2d 1183, 2004 ME 65 (Me. 2004)
characterizes *Kittery Retail Ventures* as “validating a virtually unlimited reach-back power” that “ignored the interests of the developer,” which ought to be reconsidered or reversed by statute.65

Sanborn further claims that the power of retroactive zoning “has removed any incentive for meaningful, comprehensive planning.”66 This overstates the case—the comprehensive planning process has been meaningful, for example, in the City of Auburn’s ambitious deregulatory effort67—but retroactive zoning remains a risk.

Even if retroactive zoning power were limited by statute, towns can reasonably wait until demand rises before writing a detailed zoning ordinance.

Identifying the specific triggers for zoning adoption is beyond the scope of this paper. However, some communities were clearly nudged to enact zoning by the 1989 Growth Management Act.68 The Town of Mount Vernon (or its consultants) understood the act as requiring that “every Maine town enact town-wide zoning with a minimum of two zones.”69 Investigating the zoning adoption timing across a typical county, the author found that nine of the sixteen Kennebec County towns with zoning ordinances first adopted one in the decade beginning in 1989.

For a town that has adopted zoning, returning to an unzoned, nonspatial regime would be politically difficult. When adopting or amending zoning, the path of least political resistance is to give each landowner zoning that he or she finds no worse than the status quo ante. Because

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65 Sanborn, supra note 3, at 603.
66 Id.
67 Andrew Rice, Auburn Adopts Updated Comprehensive Plan, with Housing in Mind, LEWISTON (ME.) SUN JOURNAL, Dec. 8, 2021.
nonspatial regulations give equal treatment to all locations, they cannot be molded to meet local desires.

IV. Permissive and Restrictive Regimes under Nonzoning, Zoning, and LUPC

Nonzoning is not systematically stricter or more permissive than zoning. Strict and relaxed regulatory regimes, insofar as they can be inferred from textual evidence, clearly exist within both systems. When zoned and unzoned towns are neighbors and face similar economic conditions they usually regulate with a similar degree of stringency.

Comparing Neighbors

To compare the stringency of regulation between zoned and unzoned towns, I investigated pairs of similarly situated,\textsuperscript{70} neighboring towns in each of Maine’s counties. Where practicable, I used the most populous unzoned town and found a similar neighbor. But in several cases there was no good match for the most populous town (or data were lacking), so I used a different pair. In one county, Piscataquis, I found no reasonably similar pairs with sufficient information to make a comparison. I focused on residential regulations.

Across the fifteen pairs of towns, I found four equally common patterns. In four pairs, the zoned town regulates more strictly in some or all of its zones.\textsuperscript{71} This pattern included the only pair of towns where the zoned town takes a strict regulatory stance while the unzoned town is clearly permissive.\textsuperscript{72}

\textsuperscript{70} I tried to match population, existence of public sewer, highway access, and tourist appeal, and to avoid places with obviously unique situations.

\textsuperscript{71} Livermore/Leeds, Easton/Mars Hill, Norway/Oxford, Blue Hill/Surry.

\textsuperscript{72} Blue Hill is one of the most permissive towns in the nation; its voters rejected a nonbinding Comprehensive Plan that would have recommended the imposition of minimum lot sizes, while neighboring Surry requires 40,000 square foot lots even in its “Village” zone. \textsc{Blue Hill Comprehensive Planning Committee, Blue Hill Comprehensive Plan [draft], 114 (2006); Surry, Me., Unified Development Ordinance art. V (2016).}
In another four pairs of towns, the zoned town regulated less strictly. In those cases, the zoned towns have at least one relatively permissive district, often with “village” in its name. But even outside the village districts, these zoned towns were no stricter than their unzoned neighbors. This pattern includes pairs where both are quite restrictive, such as Bowdoin and Bowdoinham, and pairs where both are relatively accommodative, such as Jay and Wilton. However, in none of these cases was a restrictive unzoned town neighbor to a broadly permissive zoned town.

Three more pairs of towns had very comparable residential requirements in areas without public sewers, but the zoned town had a sewer area which allows greater density. Finally, in four pairs of towns the zoned town has a “Village” or “Main Street” zoning district allowing significantly higher density and a rural residential district requiring significantly lower density than the unzoned neighbor. This pattern conforms to some planning ideals, where zoning is used to concentrate development into service areas. This pattern is clearest in Monmouth and Winthrop. Monmouth is unzoned and allows 15,000 square foot lots when served by sewer and 40,000 square foot lots without. Winthrop is zoned to allow a range of lots sizes, as low as 3,500 square feet in the “Village” district and as high as 80,000 square feet (regardless of sewerage) in the “Rural” district.

**Town and State Zoning in Remote Maine**

Moving from relatively large communities to small, remote ones, I find that rural unzoned towns

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73 Jay/Wilton, Bowdoin/Bowdoinham, Montville/Searsmont, Steuben/Cherryfield.
74 Harrison/Naples, St. George/South Thomaston, Nobleboro/Damariscotta.
75 Monmouth/Winthrop, Levant/Glenburn, Skowhegan/Fairfield, Lebanon/North Berwick.
76 **MONMOUTH, ME., COMPREHENSIVE DEVELOPMENT ORDINANCE** art. 4 § 4.1.1.1 (2020).
77 **WINTHROP, ME., ZONING ORDINANCE FOR THE MUNICIPALITY OF WINTHROP** (2019).
are usually more permissive than adjacent areas under the authority of the state Land Use Planning Commission (LUPC). LUPC is a state and county instrumentality that governs land use in half the state’s area—but covering only one percent of the population. LUPC’s jurisdiction covers all townships, plantations, and unorganized territory, as well as six and a half towns.\(^{78}\) LUPC uses a simple zoning code to designate different areas for different uses and performs the usual functions of a planning board and zoning board of appeals. In 2019, for instance, LUPC approved a rezoning petition covering 51,000 acres in northern Aroostook County to allow development along the Fish River Chain of Lakes.\(^{79}\)

LUPC effectively imposes a vast swath of one-acre-per-dwelling residential and forestry zoning across Maine’s wilderness with small patches allowing commercial or other uses.\(^{80}\) By comparison, unzoned towns that govern similarly rural areas allow uses to intermix and enforce either a one-acre lot size or default to the state’s 20,000 square foot requirement for lots served by septic. Perhaps more importantly, LUPC has a professional enforcement staff backed up by hundreds of pages of detailed regulations, while small towns employ a part-time code enforcement officer.

V. Does Nonzoning Impact Development Patterns?

Whatever development differences do exist between zoned and unzoned towns, they are not obvious. This author could not, by visiting or viewing satellite maps of many towns, accurately predict whether they would have zoning. No telltale pattern of mixed uses or obvious outward appearance gives away the absence of zoning.


Spatial regulation—that is, zoning—has several potential purposes. Depending on the relative contributions of local bureaucrats, homeowners, professional planning consultants, and activists, spatial regulation may be intended to boost local finances, to raise or protect local property values, to exclude disfavored minorities by maintaining high entry costs, to distance nuisances and traffic from residences, and to plan communities “rationally” by preventing “sprawl,” among other goals.

Having established that nonspatial residential land use regulations are usually similar in substance to nearby zoning regulations, which may aim at a variety of potentially conflicting goals, one does not expect to find vast differences in outcomes. Indeed, I find that zoned and unzoned towns differ somewhat in the proportions of manufactured housing and multifamily housing. Investigating the location patterns of two commercial chains, I find suggestive evidence that zoned towns are friendlier to large-footprint commercial development along state highways.


85 The State of Maine’s statement of findings, purposes, and goals for planning and land use regulation are a representative statement of the purposes of zoning. See ME. REV. STAT. ANN. tit. 30-A, § 4312) (2021). The urban planning literature on the costs of sprawl is reviewed in Reid Ewing & Shima Hamidi, Compactness versus Sprawl: A Review of Recent Evidence from the United States, 30 J. PLAN. Lit. 413 (2015). Academic urban planners have distanced themselves from the modernist concept of “rational” top-down planning, but the profession’s name and praxis are inextricable from rationality. See Alain BERTAUD, ORDER WITHOUT DESIGN: HOW MARKETS SHAPE CITIES (2018) and Ernest R. Alexander, Rationality Revisited: Planning Paradigms in a Post-Postmodernist Perspective, 19 J. PLAN. EDUC. AND RSCH. 242 (2000).
Testing for Residential Exclusion

To test whether nonzoning is more or less exclusionary than spatial regulation, I investigate whether unzoned towns have greater or lesser concentrations of manufactured homes, multifamily homes, and non-white residents.

I use a Bayesian regression, as in Section II. This time I incorporate nonzoning status as a binary predictor of housing typology share or non-white racial and ethnic share. Since housing typology, demographics, and land use policy are intertwined, these should be viewed as correlations, not causal estimates. The regression framework helps to remove other factors, including county, neighborhood effect,\(^\text{86}\) and geographic influences, including coastal and highway access.

The regressions show that nonzoning has a credible positive association with manufactured home share, a credible negative association with multifamily housing share,\(^\text{87}\) and no correlation with non-white racial and ethnic share. All else equal, an unzoned town has 3 percentage points more manufactured housing as a share of its housing stock and 4 percentage points less multifamily housing than a zoned town. The association between race and nonzoning is precisely estimated at zero.

There are a few logical explanations for the divergent results for manufactured homes and multifamily housing. One is simply that there are unobserved differences between towns that are correlated with zoning. Another potential explanation is that professional planning consultants have typically had a hand in writing spatial codes but not, with a few exceptions, nonspatial

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\(^{86}\) Each variable is regressed on its own neighborhood effect. Thus, the non-white share in neighboring towns is a predictor of the non-white share of any given town, hopefully neutralizing unobserved, spatially varying factors.

\(^{87}\) “Multifamily” is defined expansively here to include any building with two or more units.
codes. Their influence may channel low-cost housing toward dense, multifamily typologies at the expense of manufactured housing.

Interestingly, although nonzoning has no association with race, both manufactured and multifamily housing are credibly correlated with non-white population share.

**Walmart’s Town Choices**

According to the theory of fiscal zoning, towns will overzone for commercial development—excluding residential or other uses—to attract large national chains that pay hefty property taxes. In an unzoned town, by contrast, commercial land uses must compete with residential and other uses. Commercial investors may also prefer dedicated commercial zones where they are less likely to end up next to a residential neighbor unhappy with the traffic or noise.

Location choices by Walmart, the largest national retailer, have favored zoned towns in Maine.

There are 22 Walmart stores in Maine, all but one of them in a zoned town. This is not surprising: that is where most of the people are. But it is illuminating to find that in all six cases where a Walmart is located on a highway between the centers of a zoned and an unzoned town, the retailer has chosen to locate on the zoned side of the town line.

Two aspects of Walmart’s apparent business model give it a degree of jurisdictional choice. First, its per-store customer base is much larger than the typical Maine town, implying a regional mindset. Second, it frequently locates on the roads between towns, rarely in town centers. To customers, it matters little whether Walmart is on the Ellsworth or Hancock side of the town line.

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88 See supra note 82.
90 Walmart’s location strategy is influenced by many factors, including market geography and local finance incentives. Michael Walker explored the latter, referring to a hypothetical BigMart. Michael Walker, *Tax Increment Financing in Maine*, 70 ME. L. REV. 115 (2018).
As it happens, Walmart is on the (zoned) Ellsworth side of the line, less than half a mile from (unzoned) Hancock. In five other cases where Walmart is located on the outskirts of towns and clearly had jurisdictional choice, it is in zoned towns: Farmington (rather than unzoned Jay, Chesterville, or New Sharon); Lincoln (rather than unzoned Medway, Enfield, or Howland); Mexico (rather than unzoned Rumford); Oxford (rather than unzoned Paris or Norway); Waterville (rather than unzoned Oakland). In two of these cases (Mexico and Oxford), the zoned town has a smaller population than an unzoned neighbor.

Walmart has not chosen to locate in unzoned towns when it has had the choice. Whether this is due to less competition for real estate along state highways or large commercial enterprises’ preference for predictable adjacent land use is worthy of deeper investigation.

**Dunkin’s Location Choices**

Spatial regulation of commercial uses can push commerce toward village centers, which is the stated intent of many “Village” zones, or pull it outward when large strips of land along highways are zoned for commerce. Two zoning maps already referenced in this paper—Fairfield’s and the Northport Village Corporation’s—both allow large-lot commercial zoning only along highways. Maine’s unzoned towns, which largely welcome moderate-scale commercial uses in any context, offer a valuable control group against which to judge the net of zoning’s centripetal and centrifugal effects. To evaluate within-town location choices, I turn to Dunkin’.

Dunkin’ is an international coffee-and-donut franchise chain headquartered in Canton, Massachusetts. Unlike Walmart, Dunkin’ has dozens of franchises in Maine, serving almost

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91 In the relatively isolated towns of Calais, Houlton, and Presque Isle, there are unzoned locations nearby, but the distances are greater and the outlying towns are much smaller. The sole Walmart in an unzoned town is in Skowhegan. Zoned Fairfield is in the vicinity, but in the direction of the existing Waterville Walmart, so it does not represent a good alternative.
every substantial town. Since Dunkin’ shops are small, they can be located either within a town center or, like most Walmarts, along state highways between town centers. With its franchise model, Dunkin’ location decisions are decentralized.

To ensure that the comparison is among similarly situated towns, I exclude the southern and Midcoast counties (York, Cumberland, Lincoln, and Knox) and towns above 10,000 in population. This leaves 15 Dunkin’ locations in unzoned towns and 36 in zoned towns.

Table 3 shows the distribution of Dunkin’ locations. Among the Dunkin’ locations in unzoned towns, six are in walkable town centers and three in rural centers. The remaining six are on highways either adjacent to or between town centers, constituting commercial sprawl. Dunkin’ locations in zoned towns are about half as likely to be in a walkable center or a rural center. Two thirds are sited along highways.

Although factors other than zoning are clearly at work, Dunkin’s location decisions are consistent with zoning being, on net, a cause of greater commercial sprawl, at least in the specific context considered here.

VI. Conclusion

Maine towns as diverse as affluent Harpswell, industrial Rumford, exurban Sidney, and agricultural Littleton regulate land use without zoning. Their approach has proven sustainable across Maine. Aside from the southern coast and metropolitan Portland area, which consist almost

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92 To qualify, a location had to have access by a sidewalk to a residential neighborhood.

93 Rural centers (for present purposes) exist in towns where a walkable center does not exist and all the public amenities—shops, schools, post office—are strung out along a stretch of rural road or highway. These rural centers are not walkable. The Dunkin’ at 247 Main St., Canaan, is typical of a rural center.
entirely of zoned towns, patterns of zoning and nonzoning are quite random across the state, although they exhibit a strong clustering pattern that may indicate unobserved local conditions, political attitudes, or imitation.

Maine’s experience shows that zoning is one of many regulatory tools that local governments can use to guide and restrict development and land use. Spatial regulation is not inherently more or less restrictive than nonspatial regulation, as shown by the comparisons among towns in Section IV. Local governments ought to use the tools at their disposal judiciously and sparingly, applying restrictions only in cases where they are necessary to the ongoing health and well-being of the community.

As Professor Siegan argued of Houston, Texas, a half century ago, there are relatively few differences between zoned and nonzoned places.94 In Maine, qualitative observation yielded no obvious differences between zoned and unzoned towns in similar situations. Quantitative approaches yielded a few insights. Unzoned towns have more manufactured homes and fewer multifamily homes than zoned towns. Unzoned towns appear to be less attractive to Walmart. And, in unzoned towns, Dunkin’ franchises were more likely to locate in a walkable center.

Nonetheless, nonzoning is likely to decline gradually. Towns can adopt zoning without great political difficulty by applying to each area regulations that most local landowners find no worse than the existing regulatory framework. Returning from zoning to nonzoning is harder, because it applies a single set of rules to all land, which is unlikely to satisfy all constituencies. Paradoxically, the best reason for Maine towns to maintain nonzoning may be that they always have the option to get rid of it.

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94 SIEGAN, LAND USE WITHOUT ZONING, supra note 10.