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A Walk Along Willow: Patterns of Land Use Coordination in Pre-Zoning
New Haven (1870-1926)

Andrew J. Cappel

INTRODUCTION

Zoning is the most pervasive and familiar form of local government control over land use. In a zoned legal regime, land is divided into geographical districts or zones pursuant to local ordinance; municipal regulations then specify the types of land use permitted within each zone. Zoning ordinances typically regulate matters such as maximum building mass and height, location of a building on its site, maximum density of residential construction, and whether land can be used for residential, commercial, or industrial purposes.¹ These

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¹. For example, according to the Standard State Zoning Enabling Act, zoning empowers the local legislative body:

[T]o regulate and restrict the height, number of stories, and size of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts, and other open spaces, the density of population, the location and use of buildings, structures, and land for trade, industry, residence, or other purposes.

A STANDARD ZONING ENABLING ACT § 1 (U.S. Dep’t Commerce rev. ed. 1926) [hereinafter SZEA], reprinted in ROBERT C. ELLICKSON & A. DAN TARLOCK, LAND USE CONTROLS 40-41 (1981); see also DANIEL MANDELBURG, LAND USE LAW § 5.01 (2d ed. 1988). Early zoning ordinances established “cumulative” (or “Euclidean”) zones, in which less intensive, especially single-family residential, land uses were permitted in areas zoned for more intensive uses such as high-density residential, commercial, or industrial ones. More recent ordinances tend not to be cumulative allowing only the uses specifically permitted in that zone. Id. at § 1.03; ELLICKSON & TARLOCK, supra, at 58-61. Recent innovations in zoning, including
regulations, together with municipal regulations governing the location of streets and other features of the urban infrastructure, provide public control over most salient aspects of development. In theory, these regulations are employed to further the goals contained in a city's comprehensive plan, in which public authorities have laid out a master scheme for future urban development.\(^2\) After New York City enacted the first comprehensive zoning ordinance in 1916,\(^3\) and the Supreme Court upheld zoning against a constitutional challenge in 1926,\(^4\) zoning rapidly spread throughout the country. Today, virtually every large American city employs some form of zoning.\(^5\)

Despite its ubiquity, zoning has not been without its critics, and the last thirty years have witnessed a lively debate between supporters and opponents of zoning.\(^6\) Supporters base their arguments on the explicit or implicit assumption that rational land use decisions cannot be made without public controls.\(^7\) Without zoning, the argument goes, incompatible uses, such as apartments and commercial or industrial enterprises, would encroach upon low-density residential neighborhoods—thus decreasing residential property values. In addition, uncontrolled development would place severe burdens on school systems, road networks, and other aspects of urban infrastructure and could cause environmental damage.\(^8\) Supporters of zoning buttress their argument by relying on an

conditional zoning, floating zones, and planned development districts, have been designed to offer local governments more flexibility in meeting local land use needs than offered by traditional types of zoning. See 1 EDWARD H. ZIEGLER, JR., RATHKOPF'S THE LAW OF ZONING AND PLANNING § 1.03 (1990).

2. See SZEA, supra note 1, § 3; see also MANDECKER, supra note 1, § 3.01. In Fasano v. Board of County Commissioners, 507 P.2d 23 (Or. 1977), the Oregon Supreme Court reinforced the role of the comprehensive plan in land use control by striking down changes in zoning restrictions which were not in conformity with the local comprehensive plan. In addition, several states have statutes requiring that changes in local zoning ordinances be made in a manner consistent with the provisions of the comprehensive plan. See ELICKSON & TARLOCK, supra note 1, at 403-06.

3. For the provisions of this ordinance and the events surrounding its enactment, see SEYMOUR I. TOLL, ZONED AMERICAN 143-210 (1969).


5. By 1925, 500 cities had enacted zoning ordinances, and by 1930, 35 states had passed zoning enabling acts. ELICKSON & TARLOCK, supra note 1, at 41. One survey revealed that 98% of all cities with populations larger that 10,000 employ some form of zoning, as do 90% of suburban municipalities with populations greater than 5,000. 1 ZIEGLER, supra note 1, § 1.01. The most notable exception is Houston. See infra note 13.

6. The initial critique of zoning was made in RICHARD BABCOCK, THE ZONING GAME (1966).

7. See, e.g., Philip P. Tierney, Maryland's Growing Pains: The Need for State Regulation, 16 U. BALT. L. REV. 201, 203 (1987) (arguing that in the absence of public control, market forces cannot ensure coordinated development); see also MANDECKER, supra note 1, § 1.03.

8. See, e.g., Tierney, supra note 7, at 203-05; 5 NORMAN WILLIAMS, JR., AMERICAN PLANNING LAW § 161.07 (rev. ed. 1985); MANDECKER, supra note 1, §§ 1.03, 1.07; Developments in the Law—Zoning, 91 HARV. L. REV. 1427, 1578-1624 (1978) (discussing role of zoning in environmental protection). Recently, advocates of zoning have also stressed its importance as a tool to create democratic empowerment of local residents over development of their neighborhoods. See, e.g., Garret Power, The Unwisdom of Allowing City Growth to Work Out Its Own Destiny, 47 MD. L. REV. 626, 672-73 (1988). Some supporters of zoning admit the existence of flaws in the zoning system, notably zoning's tendency to reduce the stock of affordable housing and to exclude minorities from middle class residential areas, see infra note 10 and accompanying text, but argue that these problems can be rectified by relatively minor changes in an otherwise beneficial system. See, e.g., ANTHONY DOWNS, OPENING UP THE SUBURBS (1973); John R. Nolon, Shattering the Myth of Municipal Impotence: The Authority of Local Government to Create Affordable Housing, 17 FORDHAM
historical narrative which credits the rise of zoning to the failure of the earlier, unzoned legal regime, based primarily on common law nuisance, to promote adequately coordinated land use.9

Opponents of zoning, on the other hand, claim that zoning diverts land to less efficient uses, is costly to administer, and is susceptible to processes of municipal corruption. Critics also argue that zoning allows communities to exclude racially or economically undesired groups and may increase the cost of available housing for such groups.10 They have also cast doubts upon the ability of local authorities to predict future community land use needs accurately when drawing up a comprehensive plan.11 Suggested reforms range from proposals to curtail sharply the role of government (especially local government) in controlling land use to outright abolition of zoning.12

The assumption underlying all of these criticisms is that market forces, in conjunction with popular social and aesthetic norms, will produce a system of satisfactorily coordinated land use without the defects associated with a zoned legal regime. The pioneering work on this subject was done by Bernard Siegan, who studied land use patterns in Houston, the only major unzoned city in the United States.13 Concentrating on representative types of commercial use, such

9. This narrative was constructed by zoning advocates during the first decades after zoning achieved widespread implementation in the United States. See, e.g., EDWARD M. BASSETT, ZONING 22-26 (1936); I JAMES METZENBAUM, THE LAW OF ZONING 7-11, 65-68 (2d ed. 1955). For the application of this narrative in more recent works, see ANDREW J. KING, LAW AND LAND USE IN CHICAGO (1976); 1 ZIEGLER, supra note 1, § 1.01 (noting that zoning arose due to difficulties in applying traditional law of public and private nuisance to problems of urban development).


12. See, e.g., Delogu, supra note 10 (replace municipal land use controls with less restrictive regional rules administered by state); Ellickson, supra note 10 (replace zoning with land use controls system based on covenants, nuisance law, and fines); Kmiec, supra note 10 (restrict local land use control to determining total amount of undeveloped land available for four uses—residential, commercial, industrial, and mixed—and to establishing maximum permitted densities for each, while leaving decisions concerning use of individual sites to market forces); Krasnowiecki, supra note 10 (replace zoning with public determination of permissible uses on case-by-case, rather than geographically zoned, basis); Robert H. Nelson, Marketable Zoning, LAND USE L. & ZONING DIG., Nov. 1985, at 3 (allow neighborhood residents to sell to developers the right to rezone sections of their neighborhood).

as gas stations and automobile dealerships, and on selected residential districts, Siegan concluded that Houston had attained roughly the same degree of land use coordination—especially segregation of incompatible uses, a traditional objective of zoning—as cities operating under zoned legal regimes.\textsuperscript{14} Results of a handful of other studies of land use patterns in major American cities prior to the enactment of zoning ordinances at least partially support the notion that coordinated land use can arise under an unzoned legal system.\textsuperscript{15}

All of these studies concern themselves with large, metropolitan areas and thus are necessarily impressionistic; moreover, most of them focus only on selected types of land use. In contrast, this Note constitutes the first attempt to look at an unzoned regime on a microlevel, block-by-block. It examines all of the aspects of land use that zoning traditionally regulates: building coverage, height, use, lot size, yards, and setbacks. The goal of this study is not to come to a definitive conclusion concerning the desirability of zoning as compared to a less regulated system of land use control. Rather, it seeks to provide empirical evidence, on the microlevel of neighborhood development, of the ways in which a community without zoning succeeded in achieving rational land use coordination. This study offers a contribution to the larger contemporary debate concerning optimal forms of land use control by documenting the following: (1) the degree of land use coordination that can arise under an unzoned legal regime; (2) the extent to which any such coordinated land use may arise from economic and social forces, rather than from formal legal controls; and (3) the circumstances under which public regulations are effective in influencing private choices about land use and the circumstances under which they are relatively ineffective in doing so. In addition, this Note will cast some doubt upon the validity of the prevailing pro-zoning historical narrative: contrary to this narrative, my research suggests that zoning might not always have been adopted in response to serious failures of the unzoned legal regime.

The subject of my research is New Haven, Connecticut, from 1870 to 1926. The study starts at the same time the city began the largest urban expansion in its history and concludes in 1926 with the enactment of its first zoning ordinance. New Haven offers a number of advantages for a study of this nature. It is representative of medium-sized cities that warmly embraced zoning during the 1920’s. As an early, well-developed commercial and industrial center, as well as a center of rail transportation, New Haven possessed an abundance of the types of land uses thought to be incompatible with the preservation of residential neighborhoods. Like most medium-sized and large American cities,

\textsuperscript{14} See Siegan, Houston Solution, supra note 13, at 1. But cf. John Mixon, Neighborhood Zoning for Houston, 31 S. Tex. L. Rev. 1 (1990). Mixon argues that Houston’s unzoned system has failed in important aspects of land use coordination, particularly in preserving residential areas (and residential property values) from damage resulting from the proximity of incompatible commercial and industrial uses.

\textsuperscript{15} See Roger W. Lotchin, San Francisco 1846-1856 (1974); Sam B. Warner, Jr., Streetcar Suburbs (2d ed. 1978) (urban development in Boston, 1870-1900); Power, supra note 8, (pre-zoning in Baltimore).
New Haven had a heterogeneous population composed of Yankees, Italian and Irish immigrants, and small Jewish and Black communities;\textsuperscript{16} it is therefore unlikely that any observed patterns of coordinated land use can be attributed to particular cultural characteristics of individual ethnic groups. Local historians have left extremely thorough documentation of the city's history, and printed records are available for all of the city's Board of Aldermen meetings during the period 1870-1926. Above all, we can trace the development of land use in pre-zoning New Haven through a remarkable series of maps, dated 1886, 1901, and 1923, that were developed for use by fire insurance companies. These maps specify the exact location, height, and mass of every structure in the city, and also specify each structure's use, such as commercial, industrial, or residential, and single or multifamily.

My research has concentrated on a seventeen block, predominantly middle class residential area in the northeast part of the city, between Lawrence and Cold Spring Streets and between Foster and St. Ronan Streets—and in particular, on the "Willow-Canner strip" which consists of the blocks between Willow Street and the south side of Canner from Foster to St. Ronan.\textsuperscript{17} On this strip, land use patterns have been analyzed on a lot-by-lot basis. This district has been selected because it is representative of the type of areas opened to development in the post-1870 years and because it is especially well suited for study in conjunction with the fire insurance maps, the first set of which was produced in 1886. Because the northeast residential district was one of the few in the city to remain rural until this time,\textsuperscript{18} it offers an exceptional opportunity to follow the growth of a neighborhood from the ground up.

Part I documents the patterns of land use coordination in the northeast residential section of pre-zoning New Haven. Part II briefly outlines the character of the pre-zoning legal regime. Part III attempts to combine the results of Parts I and II, in order to determine the respective roles that law and nonlegal factors, such as market mechanisms and social and aesthetic norms, played in coordinating land use. Part IV then briefly considers the possibility that the reasons for the enactment of zoning in 1926 were largely unrelated to any failures of the unzoned legal regime.

\section*{I. PATRONS OF LAND USE}

A cursory glance at maps of pre-zoning New Haven reveals an unmistakable pattern: most industrial and commercial uses were segregated from residen-

\textsuperscript{16} For example, the portion of the northeast residential district lying east of Orange Street had a large, although not exclusively, Irish population. See \textsc{Walker Lithograph \\& Publishing Co., Map of New Haven, Conn.} (1911) (showing names of district's residents).

\textsuperscript{17} See Map of Northeast New Haven in 1923. References to this map are to the color map inserted in this Note.

\textsuperscript{18} Until the late 19th century, this area was shielded from development as part of the private Whitney estate.
tial property. In 1912, over sixty percent of manufacturing concerns, including virtually all heavy industry in the city, were located in a relatively small number of locations: Nicoll Street, Audubon Street, Dixwell Avenue/Newhallville, Grand Avenue/Wooster Square, and near New Haven Harbor.\(^1\) Within these areas, industrial concerns tended to group themselves together in discrete units, separated from neighboring housing.\(^2\) The resulting concentration left other portions of the city completely nonindustrial. Thus, in 1923, the northeast residential section of the city contained no manufacturing concerns; factories instead were grouped along its fringes on Winchester Avenue, Nicoll Street, and upper State Street.\(^3\) Similarly, while State Street and the central downtown district were flourishing commercial centers,\(^4\) the area between Lawrence and East Rock Streets possessed only eighteen commercial sites, all but three of which were situated on corners along the north-south thoroughfares of Orange, Anderson, and Foster Streets. These sites did not encroach into the surrounding east-west residential blocks.\(^5\)

Examination of the northeast residential district, in particular of the Willow-Canner strip, reveals other, more subtle patterns of coordinated land use. The very existence of such patterns seems remarkable in light of how most of northeast New Haven was developed in the late nineteenth and early twentieth centuries. There are only occasional examples of developers in the modern sense of the term, who bought large parcels of land on which to build homes for public sale.\(^6\) More commonly, the original rural landowner\(^7\) sold lots directly to individual buyers or to small-scale investors who held the property—generally in groups of four lots or less—for resale.\(^8\) As originally surveyed, lots were of uniform size with fifty-foot frontages, but purchasers could

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19. See Price & Lee Co., New Haven Directory (1912) (80 of 131 firms were located in these areas). Firms in the same business tended to group together: firearms manufacturers along Winchester Avenue and Nicoll Street, carriage makers near Wooster Square, and tool manufacturers near the harbor. See id.; Floyd M. Shumway & Richard Hegel, New Haven: A Topographical History 40-43 (1988).

20. See, e.g., 2 Sanborn Map Co., Insurance Maps of New Haven, Connecticut No. 276 (1923) [hereinafter Sanborn] (Nicoll Street); 1 id. Nos. 22-23 (Wooster Square). Unless otherwise specified, all references are to the 1923 series of maps.


22. Shumway & Hegel, supra note 19, at 41.


24. A notable exception was Charles Coyle, who developed and built homes on the blocks from Canner to Cold Spring Streets, between Whitney Avenue and Livingston Street. See Elizabeth M. Brown, New Haven: A Guide to Architecture and Urban Design 43 (1976). The remainder of the northeast residential district, in contrast, developed in the more typical piecemeal fashion.

25. All of the land in the northeast district west of Livingston Street was originally owned by Stephen Whitney, and the land east of Livingston was owned by a partnership of Charles Fellowes and Maria Livingston.

26. For example, the three lots on 468-74 Orange Street were sold in 1914 by Charles Fellowes to Adolph Perloth and resold in the following year to individual buyers. 736 New Haven, Conn., Land Title Records 257 [hereinafter Land Title] (sale to Perloth); 758 id. at 211 (sale of one lot to Sarah R. Johnson); id. at 212 (sale of another lot to Frederick B. Farnsworth); id. at 213 (sale of third lot to David T. Langrock); see also 602 id. at 411 (sale of four lots on Willow Street to Charles Murdock); 483 id. at 139 (sale of two lots on Canner Street to William Atwater).
always buy lots with greater or lesser dimensions. After purchase, owners hired their own builders or architects to design and construct their homes. Thus, the high degree of land use coordination that we find in this area cannot, for the most part, be attributed to the actions of a single planner-owner-builder. New Haven was largely developed house-by-house with the patterns of coordination emerging out of the independent decisions of many individuals.

A. Lot Size

One of the most striking features of the pre-zoning regime was the segregation of lots according to size. From Foster to Orange Streets, lots along Willow and Canner Streets tended to be small, with the majority under 4000 square feet. Sizes increased from Orange to Livingston Streets, where a typical lot measured between 5000 and 7000 square feet. Lots between Livingston and Whitney Avenue ran larger, with half measuring 7000 square feet or more. The largest lots were those from Whitney Avenue to the west, with the majority in excess of 9000 square feet. A glance at the map confirms that this progressive east-west increase in lot size was a dominant characteristic of the entire northeast residential district.

B. Single v. Multifamily Dwellings

The location of single-family houses and two- and three-family "flats" roughly mirrored the segregation of lots, with the number of multifamily homes decreasing from east to west. A number of two-family houses, as well as some three-family, "triple-decker" buildings, were built east of Orange Street. Two-family houses predominated on most blocks between Orange and Livingston Streets, while, moving west, two-family houses appeared less frequently near Whitney Avenue. The area west of Whitney was composed almost exclusively of single-family dwellings.

By 1923, the northeast residential district, like the rest of New Haven, had undergone the phenomenon of multiple unit apartment construction. Here, as

27. See, e.g., 569 id. at 426 (owner buys site with 62-foot frontage); 463 id. at 406 (60-foot frontage); 529 id. at 33 (owner buys additional 10-foot strip of land adjoining her 50-foot wide lot). For lots smaller than 50 feet wide, see 393 id. at 209 (40-foot frontage); 505 id. at 15 (37-foot frontage); 591 id. at 161 (40-foot frontage).
29. See infra Appendix I, Table 1.
30. See infra Appendix I, Table 1.
31. See infra Appendix I, Table 1.
32. See infra Appendix I, Table 1.
33. See Map of Northeast New Haven in 1923.
34. See infra Appendix I, Table 2.
35. See infra Appendix I, Table 2.
36. See infra Appendix I, Table 2.
with lot size and multifamily home distribution, it is possible to observe a remarkable degree of segregation: while complexes were built along Whitney Avenue and in fringe areas on south Orange and near State, there was no sign of significant encroachment by apartments into the central portion of the residential district.\(^{37}\)

C. Building Coverage

Despite substantial variations in lot and building size, the houses along Canner and Willow Streets displayed surprising uniformity in building coverage, i.e., the percentage of a lot covered by a structure. Of the 111 sites with reliable documentation, all but twelve had buildings (excluding garages) that covered a third or less of total lot size. In fact, the majority of sites had building coverage of a quarter or less of total lot size, and no building covered more than half its site.\(^{38}\) Indeed, in the northeast residential district as a whole, only six sites had building coverage greater than fifty percent.\(^{39}\)

D. Building Height

With the exception of fourteen structures, eight triple-decker residences east of Orange Street, two stores on Foster Street, single houses on Lawrence and Everit Streets, and two apartment complexes on Whitney Avenue (all three stories high), all buildings in the northeast residential district were two and one-half stories or less.\(^{40}\)

E. Frontyards and Rearyards

Most of the structures on Willow and Canner Streets were generously set back from the street line,\(^{41}\) often with a notable degree of uniformity. On the north side of Willow Street between Livingston Street and Whitney Avenue, for example, every building was set back exactly twelve feet.\(^{42}\) On the south side of Canner Street between Whitney and Orange, the closest building stood twelve feet away from the street line, and most of the remaining houses on the

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37. See Map of Northeast New Haven in 1923.
38. See infra Appendix I, Table 3.
39. The locations were 708 Orange Street, 717-21 Orange Street, 27 Cottage Street, 28-30 Avon Street, 763-69 Orange Street, and 743 Orange Street. See 2 SANBORN, supra note 20, Nos. 267-85.
40. See Map of Northeast New Haven in 1923.
41. In most cases, the established street line in New Haven appears to have extended beyond the actual street itself and to have included the area up to the edge of the sidewalk nearest to the buildings themselves. The setbacks are measured from this point.
42. See 2 SANBORN, supra note 20, No. 273 (showing 12-foot setbacks); see also infra Appendix I, Table 4.
block were set back twelve to fifteen feet. Frontyard setbacks were similarly spaced throughout most of the northeast residential district, although the distances diminished somewhat at the eastern edge. Rearyards throughout northeast New Haven were uniformly deeper than thirty feet, and most were greater than forty to fifty feet deep.

F. Sideyards

Sideyards also displayed a great deal of coordination, although it is superficially hard to see. At first glance, the small size of sideyards seems to reflect a weakness in New Haven's pre-zoning regime. In the northeast residential district, sideyards were small: along the Willow-Canner strip, more than half measured five feet or less. If the distance between houses serves as our standard of measure, however, the proportions were more ample. Few houses were closer to one another than ten feet, and most stood much farther apart than that. Indeed, the size of their separation often compared favorably to the fourteen foot minimum enacted under the 1926 zoning ordinance. Even on the small lots east of Orange Street, only two buildings extended to the lot line, and sufficient space normally existed between buildings to ensure adequate air and light. When an early buyer on a block placed his house near the lot edge, the subsequent purchaser of an adjacent lot would often place his house at the extreme opposite edge of his own lot, setting a pattern followed by subsequent purchasers. For example, prior to 1901, houses were built on the right side of lots at 285-87 and 281-83 Willow Street. When owners built in 1906-07 on the next two adjacent lots, 279 and 277, they likewise positioned their structures at the far right side. Throughout the northeast residential district, whole lines of buildings on adjacent lots owed their site configuration

43. See 2 SANBORN, supra note 20, Nos. 273-74 (showing minimum 12-foot setbacks); see also infra Appendix I, Table 4.
44. See infra Appendix I, Table 4. A notable exception can be found on the south side of Willow Street, between Orange and Livingston Streets, where a number of buildings were less than 10 feet away from the street line.
45. See infra Appendix I, Table 5.
46. See infra Appendix I, Table 6A.
47. See infra Appendix I, Table 6B; infra note 118.
48. See 2 SANBORN, supra note 20, No. 275 (215-17 and 189 Willow Street).
49. For locations of these structures on their sites, see infra Appendix II. The buildings at 285-87 and 281-83 appear on 1901 maps. See 2 SANBORN, supra note 20, No. 36 (1901). The 1906-07 construction dates for houses at 279 and 277 can be established by information contained in land records. In 1905, the lot at 279 Willow was purchased by George S. Routh, 578 LAND TITLE, supra note 26, at 65, and one-half of a completed two-family house on this site was rented by Routh to the Beers family in 1907. 603 id. at 469. A building mortgage was taken out for 277 Willow in 1906. 593 id. at 32.
to this same phenomenon.\textsuperscript{50} An informal social mechanism was thus created to resolve a complicated coordination problem.\textsuperscript{51}

In sum, on the eve of zoning, the northeast sector constituted a predominantly residential district bordered, but largely unencroached upon, by industrial and commercial sites. Lots gradually increased in size on blocks running from east to west, while the incidence of multifamily homes decreased; apartment construction remained largely confined to Whitney Avenue and areas near State Street. Building heights were low, rear yards large, and, with some exceptions, houses were situated in a roughly uniform manner an ample distance from the street. Landowners do not appear to have economized on land costs by erecting large structures on small lots; building coverage was low and remarkably uniform, and side yards, although sometimes small, were normally sufficient for light and ventilation. Taken together, these patterns reveal a complex system of land use coordination arising out of the gradual processes of neighborhood development.

II. LAND USE CONTROLS UNDER A PRE-ZONING LEGAL REGIME

The unzoned legal regime, as we have just noted, was capable of producing examples of highly sophisticated land use coordination. What is not clear from the foregoing discussion is the extent to which such coordination arose from the existence of legal rules and regulations as opposed to nonlegal forces. In order to clarify these issues, it is first necessary to outline the essential features of the pre-zoning regime.

A. Public Law: Municipal Ordinances and Regulations

As was the case elsewhere in the country, New Haven's city government underwent a transformation during the course of the second half of the nineteenth century\textsuperscript{52}—expanding, with the creation of most of the major city departments, into roughly its current form.\textsuperscript{53} With these changes in the size

\textsuperscript{50} See infra Appendix II (277 to 285-87 Willow Street; 179 to 165-69 Willow Street); see also 2 SANBORN, supra note 20, No. 275 (165-77 Willow; 189-193 Willow).

\textsuperscript{51} A similar type of informal coordination can be observed with respect to the width of lot frontages. When an early purchaser bought a lot with a width greater than 50 feet, succeeding purchasers on the block often bought additional strips of land adjoining their main property to bring their frontage up to the customary 50-foot norm. For striking examples of this phenomenon on Willow Street between Whitney and Livingston, see 487 LAND TITLE, supra note 26, at 150 (1846); 519 id. at 235 (1898); 529 id. at 33 (1900); 529 id. at 541 (1900); see also supra note 27.

\textsuperscript{52} On the 19th-century transformation of urban local government in the United States, see generally HENDRIK HARTOG, PUBLIC PROPERTY AND PRIVATE POWER (1983); ROBIN L. EINHORN, PROPERTY RULES (1991). Einhorn's hook also provides a valuable discussion of how pre-zoning legal rules, in particular the use of special assessments to finance public works, influenced development patterns in Chicago during the years 1833-1872. See EINHORN, supra, at 61-187.

and organization of city government came a vast enlargement in the extent and
scope of municipal legislation. For example, the Building Code, which in 1870
took a mere four pages, comprised seventy-three pages of detailed regulations
by 1914.\footnote{54} Land use regulations were unusually extensive and often painstakingly
detailed, with countless pages in the minutes of city council meetings
devoted to such issues as whether to allow erection of billboards,\footnote{55} theater
marquises,\footnote{56} and illuminated signs,\footnote{57} and whether to permit building cornices
to project over the sidewalk.\footnote{58}

This did not constitute regulation in the modern sense of zoning, that is,
consciously planned public control over the size and location of all types of
public and private land uses. In keeping with nineteenth-century laissez faire
doctrines, the city charter largely limited the scope of municipal legislation to
matters of public property. To the extent that government authority extended
over private property, it was restricted within the confines of the police power:
prevention of fire, supervision of building safety, prohibition of private en-
croachment onto public streets and walks, and abatement of public nuisances.\footnote{59}

The ordinances enacted under these charter provisions nevertheless covered
a wide range of concerns touching upon problems related to land use coordina-
tion and urban development. For example, the city controlled the layout of
streets in developing areas and approved the plan for private streets that land-
owners established before selling their parcels to the public.\footnote{60} Similarly, the
state controlled the location of street railway lines, which, by tying outlying
areas to the downtown, constituted the avenues along which urban development
took place.\footnote{61}

Even before 1870, New Haven had received state authorization to establish
building lines that would provide uniform mandatory minimum setbacks along
each block.\footnote{62} By 1910, however, it had become clear that the city’s efforts
to establish minimum legal setbacks had proven ineffective: some areas had no
building lines; in other areas, there was widespread encroachment of buildings
across the designated lines; and many earlier lines were established without the

\footnote{54} Compare NEW HAVEN, CONN., ORDINANCES: BUILDINGS §§ 1-7 (1870) with id. §§ 55-258 (1914).
\footnote{55} See, e.g., 1902-1903 Journal of the Board of Aldermen of the City of New Haven 434 [hereinafter
B.A. Journal] (permission to erect sign in front of building); 1903-1904 id. at 156; 1908 id. at 380 (petition
to prohibit billboards in residential neighborhoods); 1911 id. at 414 (petition to regulate height of billboards).
\footnote{56} See, e.g., 1911 id. at 704 (city permits erection); 1913 id. at 168; 1914 id. at 142.
\footnote{57} See 1919 id. at 94 (permission to erect sign). But cf. 1909 id. at 331, 496 (city denies request to
erect illuminated sign due to opposition from neighboring property owners); 1920 id. at 92, 105.
\footnote{58} See, e.g., 1909 id. at 156 (petition to extend cornice over street); 1910 id. at 209 (proposed
extension denied); see also 1910 id. at 306-07 (New Haven corporation counsel defines legal basis of city’s
right to regulate cornices).
\footnote{59} NEW HAVEN, CONN., CITY CHARTER §§ 13, 16, 32 (1870).
\footnote{60} Id. § 16; see also 1917 B.A. Journal, supra note 55, at 173-76 (description by city engineer of
method by which city approved private roads).
\footnote{61} See 1893 B.A. Journal, supra note 55, at 22-25; 1911 id. at 212 (petition to state for permission
to extend streetcar lines). See generally SHUMWAY & HEGEL, supra note 19, at 31-37 (role of streetcars
in New Haven’s development).
\footnote{62} NEW HAVEN, CONN., CITY CHARTER § 13 (1870).
legally mandated assessment of damages and benefits, and were therefore unenforceable. Between 1910 and 1914, the Board of Aldermen, assisted by a newly created Commission on Building Lines, established new lines confirmed or modified hundreds of existing ones and passed an ordinance requiring that a building line be established for each new street at the time of its initial layout. The city designated some of these lines on its own initiative, but the majority of these lines appear to have been established in response to petitions of local landowners who desired legally mandated setbacks.

Other land use regulations appeared in the Fire and Building Codes. Most of the downtown area was designated a fire district: within this area, owners were prohibited from erecting new wooden structures; additions to existing wooden buildings were permitted only after the owner had received special approval from the city; and no such addition could extend closer than five feet to the property line. New wooden construction was permitted outside of the fire district, but wooden houses could not be built to a height greater than three floors. In addition, no existing frame building could be converted into flats containing more than three units and owners were prohibited from constructing multifamily housing in their rearyards. In 1905, the state enacted legislation regulating construction of "tenements"—multifamily dwellings of more than three units—that mandated maximum building coverage (ninety percent of corner lots, seventy-five percent of others), minimum rearyard sizes (ten feet), and, in most cases, minimum sideyards (four feet). At the same time, a municipal ordinance seeking to guarantee minimum levels of light and ventilation in other buildings imposed a maximum ninety-percent limit on building coverage, except for corner lots, throughout the city.

Finally, New Haven's charter empowered the city to abate nuisances injurious to health or offensive to the public. Under this grant, the city was able to regulate particularly hazardous or noxious uses: tanneries, sellers of gunpowder and inflammable oils, slaughterhouses, and manufacturers of tallow

64. See An Act Establishing a Special Commission on Building Lines in the City of New Haven, 1911 Conn. Spec. Acts 433.
65. See, e.g., 1910 B.A. Journal, supra note 55, at 146.
66. See, e.g., id.
67. NEW HAVEN, CONN., ORDINANCES § 254 (1914).
68. See, e.g., 1910 B.A. Journal, supra note 55, at 146 (city reestablished 20 downtown building lines).
69. See, e.g., 1910 id. at 274 (petition of August Ockert for building lines on his block of Orange Street); id. at 49 (petitions for new, reestablished, or altered lines); id. at 149 (more petitions).
70. NEW HAVEN, CONN., ORDINANCES: FIRE §§ 27, 29 (1870).
71. Id. BUILDINGS § 95 (1898).
72. Id. § 94.
73. Id. § 97.
75. NEW HAVEN, CONN., ORDINANCES § 191 (1905).
76. NEW HAVEN, CONN., CITY CHARTER § 13 (1870).
and soap could not occupy a site without obtaining a special license. The
minutes of city council meetings occasionally mention citizen complaints
concerning smoke and noise were nuisances emanating from nearby railroad
tracks or industrial concerns and specify the actions taken by the city for the
abatement of these nuisances.

B. Private Law: Nuisance

Where public nuisance action was impossible, either because the harm was
confined to a few neighbors or because those affected by the nuisance sought
damages as well as abatement, aggrieved owners found a potent source of relief
in the law of private nuisance. In particular, Connecticut law was unusually
favorable to local residents in actions against nearby industrial concerns. In
Whitney v. Bartholomew, the Connecticut Supreme Court of Errors held that
even lawful uses, performed without negligence on the defendant's property,
could be considered nuisances if they caused unreasonable damage to a neigh-
bor's health or property. In other decisions, Connecticut courts rejected two
common defenses to nuisance actions: plaintiff's coming to the
nuisance, and defendant's operating under a city license. To balance the scales
somewhat, courts defined "reasonable use" in a flexible manner. Rather than applying
an abstract uniform standard, courts held that reasonableness depended not
only on the nature of the use, but also on its location; homeowners in industrial
districts were expected to endure higher degrees of discomfort from smoke and
noise than were their counterparts in more residential areas. Industry was
thus protected against sensitive neighbors, and judges had the freedom to allow
industrial and residential uses to coexist near one another, while still protecting
homeowners from glaring abuses.

77. NEW HAVEN, CONN., ORDINANCES §§ 218-19 (1898); see also 1904-1905 B.A. Journal, supra note 55, at 11 (applications to Board of Aldermen to permit opening of gas stations in various neighborhoods). As automobiles became more common and such requests increased, responsibility for giving permits was transferred to the fire marshall. NEW HAVEN, CONN., ORDINANCES § 405 (1914).
78. See, e.g., 1916 B.A. Journal, supra note 55, at 222 (citizen petition against noise and smoke); id. at 241 (complaint against noxious smells emanating from factory); id. at 288 (city abatement of railroad smoke nuisance); see also 1910 id. at 150-51 (proposal for smoke nuisance abatement ordinance); 1917 id. at 128 (petition for same).
79. See 1923 id. at 285 (city refuses to abate factory nuisance on grounds that detriment was private, not public).
81. Hurlbut v. McKone, 10 A. 164, 166-67 (Conn. 1887); see also Nailor v. C.W. Blakeslee & Sons, 167 A. 548, 549 (Conn. 1933).
82. Nichols v. Pixly, 1 Root 129 (Conn. 1789). An exception to this rule precluded private nuisance suits where the defendant acted under the express provisions of a state statute or charter, but only in the case where the statute or charter explicitly barred such actions or provided an exclusive alternative remedy to abutters. See Hooker v. New-Haven & Northampton Co., 14 Conn. 146, 153 (1841); see also Bristol v. Ousatomic Water Co., 42 Conn. 403, 414-15 (1875).
83. Hurlbut, 10 A. at 166.
84. In addition to nuisance suits, the existence of private covenants among landowners could have had a significant impact on local land use patterns. By the mid-19th century, Connecticut courts had upheld the
III. LEGAL AND NON-LEGAL DETERMINANTS OF COORDINATION

Public and private law in New Haven had the potential to influence land use significantly. By returning to northeast New Haven, this Note analyzes the extent to which the existing patterns of coordination may have arisen as a response to the regulations of this legal regime or, alternatively, to nonlegal factors.

A. The Role of Law

1. Street Grid

When preparing an area for development, owners were required to submit plans for new streets for city approval, and such approval was almost invariably granted. City officials seem to have shared with developers and individual buyers a common cultural notion of what a residential street should look like, and City Hall—hoping to increase the rate of private homeownership—provided a layout of streets and blocks that was attractive to potential buyers. A harmonious combination of public regulation and popular expectations thus gave rise to the familiar street grid of small blocks which were easily divisible into the deep rectangular lots favored by most buyers.

2. Segregation of Uses

The pattern of segregation of industry away from residences appears largely to be rooted in the legal regime. Confronted with proresidential nuisance law, industry tended to congregate in isolated districts and blocks. The possibility of a nuisance suit also facilitated coordination between disparate uses by encouraging private abatement agreements. In addition, the flexible juridical notion of "reasonable use" promoted industrial/residential coordination by enforceability of covenants running with the land. See Wright v. Wright, 21 Conn. 329 (1851). The issue of covenants need not be studied here in detail, however, since restrictive covenants were not employed in New Haven to any significant extent prior to the 1940's as a method of attaining large-scale coordinated land use. Interview with attorneys Paul North, Jr., and Daniel Dennis, Jr., in New Haven, Conn. (Nov. 20, 1990) (authorities on history of New Haven real estate). For example, with the exception of a number of right-of-way easements, see infra note 104 and accompanying text, none of the lots on the Willow-Canner strip are encumbered by title restrictions.

83. During the period 1870-1926, there was only one case in which the city failed to approve a proposed street plan. See 1904-1905 B.A. Journal, supra note 55, at 479.

86. Thus, in 1917, the City Engineer announced plans to intensify municipal activity so as to fill the city with the rectangular blocks favored by developers. See 1917 id. at 174-75.

87. See 1921 id. at 188-90 (mayor's proposal to provide tax incentives to stimulate single- and two-family homeownership).

88. See, e.g., Hurlbut v. McKone, 10 A. 164, 165 (Conn. 1887) (describing defendant who, during trial, voluntarily took steps to abate nuisance so as to avoid injunction).
stimulating construction of inexpensive housing in strips alongside industrial districts, whose low cost compensated for the annoyance of smoke and noise.

There are other examples of segregated uses that are attributable to public decisionmaking. In particular, government control over the location of streetcar lines profoundly influenced patterns of neighborhood development. Apartment buildings appeared near Whitney Avenue and State Street where the presence of streetcars made these areas uniquely well suited for multiunit construction. Similarly, the presence of a streetcar line on State Street stimulated a concentration of commercial establishments there. As a result of such concentration, the remainder of the northeast part of the city was left free for low-density residential use.

3. Setbacks

Ironically, building lines, the object of so much municipal regulation, played a relatively minor role in neighborhood development. Along the Willow-Canner strip, most residences failed to observe the legal limit, and the same pattern can be seen elsewhere in the city, even after the Board of Aldermen attempted to redesignate the lines between 1910 and 1914. This phenomenon is partly explained by lax municipal enforcement, but it also reflects a deep conflict between municipal law and entrenched building custom. When owners, usually early purchasers on a block, petitioned for a building line, the city usually designated one a few feet behind the line of existing structures in order to ensure larger future setbacks. Subsequent purchasers had to choose whether to follow the mandated line or their neighbors' practice. While examples of both decisions exist, the latter is more common, reflecting the dominance of local building customs at the time when most of the northeast residential district

89. See SHIMWAY & HEGEL, supra note 19, at 44 (discussing housing development in manufacturing areas of New Haven).
90. For the location of streetcar lines in New Haven, see id. at 36.
91. Compare, e.g., 1895 B.A. Journal, supra note 35, at 384-85 (20-foot line mandated for the east side of Livingston Street between Willow and Canner Streets) with 2 SANBORN, supra note 20, No. 274 (no building on this block stood farther back than 12 feet from street). For more examples of non-compliance, see infra notes 95-96.
92. See FREDERICK L. OLMSTED, BUILDING LINES IN THE FIRST WARD OF NEW HAVEN (n.d.) (noting widespread encroachment of lines downtown); supra notes 64-67 and accompanying text.
93. No cases have been found where the city took enforcement action against encroachment.
94. In 1893, the city set 20-foot building lines on the south side of Canner Street and on both sides of Willow Street, between Whitney and Livingston. See 1893 B.A. Journal, supra note 55, at 291, 292, 327. This was well behind the setback of the only building on Canner Street, a house at 230 Canner. See 2 SANBORN, supra note 20, No. 273 (15-foot setback). The same is true on Willow, where two houses predated the building line. 432 LAND TITLE, supra note 26, at 89 (355 Willow, purchased by Friend E. Brooks and Frederick A. Betts in 1889); 443 id. at 213 (351 Willow, purchased by Frank A. Bunnell in 1892). Both of these houses stood eight feet in violation of the line. See 2 SANBORN, supra note 20, No. 273. The explanation for this policy seems to be that the city intended to create building lines that would prevent development of land thought to be needed for future street widening, regardless of the setbacks of those structures already built on the block. See GEORGE D. SEYMOUR, NEW HAVEN 598-601 (1942).
was built. The power of this custom was more evident on blocks like those at the east end of Willow Street, where there were predominantly uniform setbacks of six to twelve feet, despite the fact that the law permitted building up to the street line. This suggests that the law was valuable mainly as a reinforcement to local practice, encouraging owners to leave adequate, if not always fully legal, setbacks by building as far from the street as their neighbors.

4. Height, Lot Size, Building Coverage, Two-Family Houses, and Sideyards/Rearyards

With the exception of apartment complexes, whose specifications conformed to the provisions of the 1905 Tenement Act, law does not appear to have appreciably impacted height, lot size, building coverage, two-family houses, or sideyards and rearyards. Rather, factors outside of the legal regime were responsible for the high degree of coordination observed in these areas.

B. Nonlegal Determinants

In the absence of formal regulation, market forces and social custom played a large role in neighborhood development. As Part I, Section A demonstrated, lot sizes in northeast New Haven were segregated, with lots becoming larger on blocks further west. This pattern cannot be explained by legal requirements or by the contemporary practice of developers, who would sell any size lot anywhere. It does, however, conform to the well-documented nineteenth-century preference of people with similar incomes to live near each other. The same phenomenon explains why we find shabby triple-decker housing only in poorer areas east of Orange Street and no multifamily homes in the affluent blocks west of Whitney Avenue. In contrast, market as well as social forces seem to have caused the predominance of single-family homes between Whitney Avenue and Livingston Street, and of two-family homes from Livingston to

95. After William Atwater purchased adjacent properties at 220 and 222 Canner Street in 1895, 483 LAND TITLE, supra note 26, at 139, he constructed his buildings in conformity with the 20-foot legal building line. See 2 SANBORN, supra note 20, No. 273 (houses built 20 feet from street). In contrast, most of the remaining owners on the block built 10 to 15 feet from the street. See infra Appendix I, Table 4. The same pattern occurred on Willow Street, where houses on the north side of the street had a uniform 12-foot setback, despite the 20-foot building line.

96. Compare 2 SANBORN, supra note 20, Nos. 275, 279 (showing setbacks) with 1909 B.A. Journal, supra note 55, at 69 (setting building line for these blocks at street line). For more examples of six- to 12-foot setbacks, see infra Appendix I, Table 4.


98. There seem to be two reasons for this. First, to the extent that there was any regulation at all, it was enacted largely after the northeast residential district had substantially completed its development. Second, the legal standard set by this regulation was so minimal (as in the case of building coverage) that all structures in the northeast normally exceeded it.

Walk Along Willow

Orange Streets. These blocks developed roughly sequentially from west to east. The most desirable properties, those near Whitney Avenue that were closest to streetcar lines, Yale University, and downtown New Haven, sold first for use as single-family homes. Latecomers with more modest incomes and neighborhood residents who purchased second lots as rental investment properties were thus compelled to place their two-family structures on less desirable sites closer to Orange Street.

Uniformity in height, building coverage, and yards seems largely attributable to purchaser preferences. A number of magazines at the turn of the century published plans and descriptions of idealized detached homes characterized by low height, limited mass, and generous yards of the type found in northeast New Haven. These publications played an important role in shaping popular demand for a certain type of construction. Such uniformity was furthered by the fact that New Haven possessed relatively few residential architects and builders whom owners could ask to design their homes, and they tended to build the same type of house over and over. For example, many of the houses on Willow Street were designed by two men, William Allen and Frank Brown.

Coordinated land use was also promoted by private agreements between individuals: when the owner of lots at 344 and 346 Willow Street sold the 346 property in 1924, he included in the sales agreement a provision giving him an eight-foot right-of-way easement over the land directly adjacent to his remaining property, thus preventing the neighbor from building too close to the lot line.

In addition, there are examples of informal social norms exerting influence over landowner behavior: archival records reveal instances where individuals encouraged their neighbors to conform to community building standards.

100. This pattern is clearest as we move along the south side of Willow Street from Whitney Avenue to Livingston Street. 483 LAND TITLE, supra note 26, at 342 (352 Willow, purchased 1896); 487 id. at 151 (350 Willow, 1896); 519 id. at 236 (346 Willow, 1898); 529 id. at 47 (344 Willow, 1900); 569 id. at 472 (324-26 Willow, 1905); 569 id. at 285 (318-20 Willow, 1904); 569 id. at 304 (314-16 Willow, 1904). Willow was by no means exceptional, however, and the same phenomenon can be found along every block of Willow and Canner west of Whitney Avenue.

101. See, e.g., 432 id. at 41 (investment property of neighborhood residents Frederick A. Betts and Friend E. Brooks purchased at 361-63 Willow); 569 id. at 285 (investment property of J. English at 318-20 Willow); 578 id. at 61 (investment property on Willow purchased by R. Beebe); cf. 719 id. at 371 (double house with two resident owners at 285-87 Willow); 505 id. at 15 (another two-owner house); 603 id. at 469 (owner of double house leased one-half to another family).

102. See BROWN, supra note 24, at 44.

103. At least six of the 20 houses on Willow Street between Whitney and Livingston can be attributed to these two architects. See id.

104. 1017 LAND TITLE, supra note 26, at 347; see also 439 id. at 80, 454 (specifying other right-of-way easements on Willow Street). For examples of other types of private agreements, see Hoadley v. M. Seward & Son Co., 42 A. 997, 998 (Conn. 1889) (suit arose from breached informal agreement to abate nuisance); Robinson v. Clapp, 35 A. 504, 505 (Conn. 1896) (plaintiff unsuccessfully tried to pay defendant not to build too close to lot line).

105. See Letter from Laurence Carmalt to James Gamble Rogers (Apr. 17, 1926) (collection of Yale University, Ms. Gr. 847, ser. I, fol. 27) (urging Yale to construct new building suitable distance from street); Letter from Security Insurance Company to George Dudley Seymour (Sept. 9, 1909) (collection of Yale University, Ms. Gr. 442, ser. IV, fol. 1204) (responding to Seymour’s criticism of design of company’s new
IV. THE INTRODUCTION OF ZONING

In 1926, despite the presence of sophisticated patterns of coordinated land use, New Haven passed its first zoning ordinance. The question therefore arises whether the introduction of zoning occurred as a response to significant failings of the pre-zoning regime or was caused by factors having little or nothing to do with actual conditions of land use in the city. The paucity of source material makes it impossible to give a conclusive answer to this question, but some general observations can be made. Initial interest in zoning appears to have arisen as the result of anxieties associated with the rapid pace of urban growth in the years after 1870.

In the aftermath of the population and building booms of 1870-1910, New Haven was confronted with a shortage of land for development in reasonable proximity to downtown. At the same time, technological advances in transportation and engineering led to the introduction of automobiles and highrise construction in the city. As a result, the city began to experience problems of increased traffic, lack of parking, and congestion caused by the construction of apartments and tall downtown office buildings. Moreover, some homeowners may have become apprehensive that this congestion might force commercial enterprises to locate on residential blocks and thereby cause a decline in nearby residential property values. Concern about these problems appears to have led to fears that the formal and informal controls that had formerly determined land use decisionmaking and safeguarded the interests of property owners might prove inadequate in the face of large-scale demographic and technological change. Such fears persuaded important elements of the city’s business and political elites, above all the Chamber of Commerce, to support the City Plan Commission’s proposal to adopt zoning as part of a broader

106. See SHUMWAY & HEGEL, supra note 19, at 42.
108. Id. at 109-10.
109. Such concern is reflected in the fact that the reason most frequently advanced by supporters of zoning in New Haven had nothing to do with contemporary land use conditions in the city in the 1920’s, but rather focused on the need for the city to manage anticipated future growth. See Statement of Zoning Committee to Public, NEW HAVEN J.-COURIER, Apr. 19, 1924, at 27 (citing need to plan for future development over number of years); 1927 B.A. Journal, supra note 55, at 4 (mayor stated that zoning would “greatly benefit the future growth of New Haven”). In light of the tremendous physical and demographic expansion of New Haven during the years 1870-1920, such a concern for the possibly deleterious results of future expansion is understandable. The underlying assumption of continuing growth, however, proved to be erroneous. New Haven has slowly lost much of its manufacturing and commercial base, and its population has declined from a high of 165,000 in 1930 to 125,000 in 1980. See Leonard, supra note 53, at 55-60 (citing census data).
110. See Letter from M. Sargent to Louis Ullman, President of the New Haven Chamber of Commerce (Sept. 8, 1923) (collection of Yale University, Ms. Gr. 847, ser. I, fol. 36) (acknowledging Chamber’s influential role in promoting zoning legislation).
scheme of planned urban development. Over time, local advocates of urban planning, armed with theories of the "City Beautiful" movement, which had become prominent throughout the country after its inception at the 1893 Columbian Exposition, came to dominate the discussion of land use controls, and the actual conditions of the city became increasingly irrelevant. Outside consultants educated residents on the theoretical superiority of zoned to unzoned land use, and in 1924 the mayor chided his fellow citizens for failing to adopt the progressive policies already enacted by more enlightened neighbors.

What got lost in this discussion was the fact that the unzoned system appeared to function fairly well. This was clearly the case in residential northeast New Haven, where there was no indication of widespread problems of traffic or of encroachment of high-density or commercial uses onto residential blocks. The scant evidence also suggests that problems of land use coordination were also not acute in the remainder of the city. For example, while several traditionally poor areas of New Haven had degenerated into slums by the 1920's, this process of urban decay appears to have been largely self-contained and did not seem to have spread significantly into surrounding areas. In addition, there is no evidence of widespread popular dissatisfaction with the pre-zoning system. Instead, the mass of small residential and commercial landowners formed some of zoning's most vociferous critics. In 1924, a group of property owners petitioned the Board of Aldermen in opposition to zoning, and public reaction at hearings held in 1925 was overwhelmingly.

111. The City Plan Commission was created in 1913 to harmonize the development of streets, squares, parks, and public buildings. See, e.g., 1922 B.A. Journal, supra note 55, at 71-72 (two members of Commission, George Dudley Seymour and Edward Nettleton, appointed to committee drafting proposed zoning ordinance); 1926 id. at 308-09 (Commission petitioned Board of Aldermen to adopt zoning ordinance). George Dudley Seymour, longtime secretary of the Plan Commission, was an influential member of the Chamber of Commerce and a supporter of zoning. See Letter from New Haven Chamber of Commerce to George D. Seymour (May 6, 1909) (collection of Yale University, Ms. Gr. 442, ser. IV, fol. 1140) (appointing Seymour to Chamber's Town and City Improvement Committee); SEYMOUR, supra note 94, at 600 (zoning an important complement to city planning).

112. The early development of this movement is documented in TOLL, supra note 3, at 117-40. For an example of the influence of "City Beautiful" urban planning theories on a prominent New Haven advocate of zoning, see SEYMOUR, supra note 94, at 593, 598.


114. See 1922 B.A. Journal, supra note 55, at 29. Not only was New Haven influenced by the introduction of zoning in other American cities, but it was also influenced by the model of zoned European cities, whose conditions had little to do with the realities of American urban development. See, e.g., Letter from George D. Seymour to the Association des Cités-Jardins de France (Feb. 16, 1914) ("[W]e appreciate in this country the value of the zone system, now receiving so much attention in continental Europe . . . .") (collection of Yale University, Ms. Gr. 442, ser. IV, fol. 1137).

115. See SHUMWAY & HEGEL, supra note 19, at 44-45.

opposed to zoning, as unduly restrictive of owners' rights to find the most profitable use for their properties.117

Thus, there never appears to have been a widespread, grass roots perception in New Haven's neighborhoods that the city's pre-zoning regime did not work. Rather, new theories of urban planning fed into and complemented general fears relating to the city's growth and modernization, making zoning supporters view zoning as both necessary and inevitable. The continuing efficacy of the pre-zoning system of land use coordination, however, is confirmed by a glance at provisions of the 1926 zoning ordinance for northeast New Haven: instead of imposing stricter requirements on the area, the ordinance, with a few exceptions, simply confirmed existing patterns of development.118 As a result, the great majority of buildings in northeast New Haven were already in substantial compliance with the ordinance's provisions.

CONCLUSION

This study of conditions in pre-zoning New Haven presents a number of interesting observations. Above all, a complex system of land use coordination, touching upon almost all of the areas regulated by zoning, arose spontaneously in the process of neighborhood development under an unzoned legal regime. Most instructive is the pattern of sideyards: the placement of a building near a lot's edge led to a series of adjustments by subsequent neighboring homeowners, who coordinated the locations of buildings on their sites so as to minimize conflicts over light and air. While observed patterns of coordination were partly influenced by municipal ordinances and nuisance law, they arose primarily out of the interaction of market forces, contractual agreements, and social and architectural norms. Although the results of a single, small-scale study cannot be considered determinative, this study of New Haven casts doubt upon the prevailing assumption that coherent land use cannot take place without the type of planned public regulation represented by zoning. In particular, the

118. NEW HAVEN, CONN., ZONING ORDINANCE (1926). Under the ordinance's provisions, most of the northeast residential section of the city was zoned "Residence B," and restricted to single- and two-family residential construction, id. § 501, with the following requirements: building coverage was limited to 35%; aggregate sideyards were required to total 15 feet (and neither yard could be less than 7 feet); backyards were given a 20-foot minimum; and height was limited to six stories. Id. §§ 1200, 1202-06. Blocks west of Whitney Avenue were zoned "Residence A." Here, permitted use was limited to single-family detached houses, id. § 301, and requirements for building coverage, height, and maximum yards were more restrictive than in the Residence B zone. Id. §§ 1200, 1202-06. The strip of land along both sides of Orange Street, where a number of commercial establishments were located, was zoned "Business A," permitting commercial use. Id. § 701. Thus, with two exceptions, the ordinance essentially tracked conditions existing prior to zoning. The exceptions are the requirement of minimum sideyards larger than were customary in northeast New Haven, see supra notes 46-47 and accompanying text, and the prohibition on new multiunit apartment construction near Whitney Avenue. The fact that the introduction of zoning did little to change existing development patterns is also reflected in a statement made by the mayor in 1927 that zoning would only in very few instances "prohibit the use of some property for the purpose originally intended by the owners." 1927 B.A. Journal, supra note 55, at 4.
results of this survey indicate that where public regulation conflicts with local economic realities or social norms—as was the case with municipal regulation of building lines—such regulation is likely to prove ineffective.\textsuperscript{119}

In addition, this study suggests that the introduction of zoning into New Haven was not necessitated by actual conditions of local land use, but rather was the work of certain elites, particularly members of the Chamber of Commerce and City Plan Commission, who were influenced by theories developed as part of the national "City Beautiful" movement. Therefore, in contrast to the narrative traditionally advanced by supporters of zoning, the rapid spread of zoning in the 1920's may well have brought zoning to cities like New Haven where it was not really needed.

\textsuperscript{119} A similar result was reached as part of a study of patterns of urban change in New Haven several decades after the initiation of zoning. It concluded that when a community is confronted with changes either in economic conditions or in popular expectations concerning land use, "zoning probably does little more than slow down the inevitable." DAVID L. BIRCH ET AL., PATTERNS OF URBAN CHANGE 71-73 (1974).
APPENDIX I: THE WILLOW-CANNER STRIP

ABBREVIATIONS

Willow\(^1\) North Side of Willow, Foster to Orange
Willow\(^2\) South Side of Willow, Foster to Orange
Willow\(^3\) North Side of Willow, Orange to Livingston
Willow\(^4\) South Side of Willow, Orange to Livingston
Willow\(^5\) North Side of Willow, Livingston to Whitney
Willow\(^6\) South Side of Willow, Livingston to Whitney
Canner\(^1\) South Side of Canner, Foster to Orange
Canner\(^2\) South Side of Canner, Orange to Livingston
Canner\(^3\) South Side of Canner, Livingston to Whitney
Canner\(^4\) South Side of Canner, Whitney to St. Ronan

Due to imperfections in the data, certain measurements could not be calculated for all sites. Thus, the tables show results for different numbers of structures.

| TABLE 1. Lot Size, in square feet |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| BLOCK           | STREET          | ≤ 4000          | 4001-5000       | 5001-6000       | 6001-7000       | 7001-8000       | 8001-9000       | 9001+           |
| Foster to Orange| Willow\(^1\)     | 11              | 2               | 1               | 0               | 0               | 0               | 0               |
|                 | Willow\(^2\)     | 11              | 0               | 0               | 1               | 0               | 0               | 0               |
|                 | Canner\(^4\)     | 1               | 3               | 0               | 2               | 1               | 1               | 0               |
| Orange          |                 | 0               | 0               | 0               | 0               | 0               | 6               | 0               |
| Orange to Livingston| Willow\(^3\) | 0               | 0               | 3               | 5               | 0               | 2               | 0               |
|                 | Willow\(^4\)     | 0               | 1               | 5               | 4               | 1               | 0               | 0               |
|                 | Canner\(^2\)     | 0               | 2               | 0               | 0               | 0               | 4               | 2               |
| Livingston      |                 | 0               | 0               | 0               | 0               | 6               | 0               | 0               |
| Livingston to Whitney| Willow\(^5\) | 0               | 1               | 1               | 4               | 0               | 3               | 1               |
|                 | Willow\(^6\)     | 0               | 0               | 0               | 3               | 6               | 0               | 0               |
|                 | Canner\(^3\)     | 0               | 1               | 0               | 5               | 1               | 1               | 0               |
| Whitney         |                 | 0               | 0               | 0               | 0               | 3               | 0               | 6               |
| Whitney to St. Ronan| Canner\(^4\) | 0               | 0               | 0               | 4               | 0               | 0               | 0               |
| St. Ronan       |                 | 0               | 0               | 0               | 0               | 0               | 0               | 4               |
| TOTAL           |                 | 23              | 10              | 10              | 28              | 24              | 11              | 13              |
### Table 2. Single vs. Multifamily Dwelling

<table>
<thead>
<tr>
<th>Block</th>
<th>Street</th>
<th>One-Family</th>
<th>Two-Family</th>
<th>Three-Family</th>
<th>Apartment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster to Orange</td>
<td>Willow¹</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Willow²</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Canner¹</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Orange</td>
<td>Willow³</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Orange to Livingston</td>
<td>Willow⁴</td>
<td>5</td>
<td>6</td>
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</tr>
<tr>
<td></td>
<td>Willow⁵</td>
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<td>0</td>
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</tr>
<tr>
<td></td>
<td>Canner²</td>
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<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Livingston</td>
<td>Willow⁶</td>
<td>7</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
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<td>Willow⁷</td>
<td>5</td>
<td>4</td>
<td>0</td>
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</tr>
<tr>
<td></td>
<td>Canner³</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Whitney</td>
<td>Willow⁸</td>
<td>7</td>
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<td>0</td>
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</tr>
<tr>
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<td>Canner⁴</td>
<td>4</td>
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<td>0</td>
</tr>
<tr>
<td>St. Renan</td>
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### Table 3. Building Coverage, by percentage of site covered

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<th>26-30</th>
<th>31-35</th>
<th>36-40</th>
<th>41-50</th>
<th>51+</th>
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<td>Foster to Orange</td>
<td>Willow¹</td>
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<td>1</td>
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</tr>
<tr>
<td></td>
<td>Willow²</td>
<td>1</td>
<td>6</td>
<td>4</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
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<td>Canner¹</td>
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<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Orange</td>
<td>Willow³</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Orange to Livingston</td>
<td>Willow⁴</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Canner²</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Livingston</td>
<td>Willow⁵</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Livingston to Whitney</td>
<td>Willow⁶</td>
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<td>2</td>
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<td>0</td>
</tr>
<tr>
<td></td>
<td>Canner³</td>
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<td>5</td>
<td>1</td>
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<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Whitney</td>
<td>Willow⁷</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Whitney to St. Renan</td>
<td>Canner⁴</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>St. Renan</td>
<td></td>
<td>3</td>
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<td>0</td>
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### Table 4. Setbacks, in feet

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<th>0-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>21-25</th>
<th>26+</th>
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<tr>
<td>Foster to Orange</td>
<td>Willow¹</td>
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<td>1</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Willow²</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Canner²</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Orange to Livingston</td>
<td>Willow³</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Willow⁴</td>
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<td>8</td>
<td>2</td>
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<td>0</td>
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</tr>
<tr>
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<td>Canner³</td>
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</tr>
<tr>
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<td>Willow⁵</td>
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<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Livingston to Whitney</td>
<td>Willow⁶</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Willow⁷</td>
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<td>0</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
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<td>Canner²</td>
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<td>0</td>
<td>6</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>Whitney</td>
<td>Willow⁸</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Whitney to St. Ronan</td>
<td>Canner⁴</td>
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<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>St. Ronan</td>
<td>Willow⁹</td>
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<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
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<td>16</td>
<td>61</td>
<td>16</td>
<td>13</td>
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### Table 5. Rearyards, in feet

<table>
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<th>BLOCK TO STREET</th>
<th>STREET</th>
<th>≤ 20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster to Orange</td>
<td>Willow¹</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Willow²</td>
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<td>0</td>
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</tr>
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<td>3</td>
</tr>
<tr>
<td>Orange to Livingston</td>
<td>Willow³</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
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<tr>
<td></td>
<td>Willow⁴</td>
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<td>0</td>
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<tr>
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<td>Willow⁵</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Livingston to Whitney</td>
<td>Willow⁶</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
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<td>Willow⁷</td>
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<td>0</td>
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<td>3</td>
<td>3</td>
</tr>
<tr>
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<td>0</td>
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<td>9</td>
</tr>
<tr>
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<td>Willow⁸</td>
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<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Whitney to St. Ronan</td>
<td>Canner⁴</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>St. Ronan</td>
<td>Willow⁹</td>
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<td>0</td>
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<td>4</td>
</tr>
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</table>
### TABLE 6A. Sideyards, by distance in feet to closest adjacent lot

<table>
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<th>STREET</th>
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<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>21+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster to Orange</td>
<td>Willow ¹</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Willow ²</td>
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<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Cannet ¹</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Orange to Livingston</td>
<td>Willow ³</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Willow ⁴</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Cannet ²</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Livingston to Whitney</td>
<td>Willow ⁵</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Willow ⁶</td>
<td>3</td>
<td>4</td>
<td>0</td>
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</tr>
<tr>
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<td>Cannet ³</td>
<td>3</td>
<td>6</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Whitney</td>
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<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
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<td>Cannet ⁴</td>
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### TABLE 6B. Sideyards, by distance in feet to nearest building

<table>
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<th>STREET</th>
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<th>6-10</th>
<th>11-15</th>
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<tbody>
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<td>1</td>
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<td>3</td>
</tr>
<tr>
<td></td>
<td>Willow ²</td>
<td>1</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Cannet ¹</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Orange to Livingston</td>
<td>Willow ³</td>
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<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Willow ⁴</td>
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<td>3</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Cannet ²</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Livingston to Whitney</td>
<td>Willow ⁵</td>
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<td>0</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Willow ⁶</td>
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<td>4</td>
<td>3</td>
<td>0</td>
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<tr>
<td></td>
<td>Cannet ³</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Whitney</td>
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<td>0</td>
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<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Whitney to St. Ronan</td>
<td>Cannet ⁴</td>
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<td>3</td>
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<td>1</td>
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</table>
APPENDIX II: EXAMPLES OF BUILDING PLACEMENT ON SITES (SIDEYARDS)

277 to 285-87 Willow Street

165-69 to 179 Willow Street

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