Zoning and the American Suburb*

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June 2026

Abstract

American suburbs are generally characterized by single-family neighborhoods featuring large lots, with few businesses or apartments. To understand the origins of this pattern of development, we construct the first panel dataset of suburban zoning maps and bylaws for a major American metropolitan area and ask how comprehensive land use regulation shaped the form of the suburbs of Chicago today. Our strategy identifies the impact of zoning using land that was undeveloped before such regulations were adopted. The typical post-zoning suburban neighborhood sets aside over 90% of land for single-family homes, but adopting the most diverse zoning we observe reduces the single family share by about half, with most of this land redistributed to businesses and apartments in equal measure. Supply restrictions were also binding earlier than widely believed, and prewar minimum lot size regulations were associated with lots that were 20% larger than those that emerged from unregulated markets. Comprehensive land use regulation thus substantially increased the prevalence of single-family residential neighborhoods relative to the suburban form that would have prevailed without zoning, which would have featured more mixed uses and smaller lots.

Keywords: Zoning, land use regulation, urban form, suburban development.
JEL codes: K11, N92, R14, R31, R52.

*The authors acknowledge the support of the Russell Sage Foundation, the Institute for Humane Studies, the Center for Governance and Markets at the University of Pittsburgh, and the Committee for Organized Research at Northeastern Illinois University. We thank our excellent research assistants Alex Broz, Jack Campbell, Madison Dolnick, Faryal Faizan, Fischer Finck, Lauren Fisher, Avary Flynn, Abigail Freund, Elizabeth Goodwin, Tejal Gupta, Ethan Jantz, Elisa Juarez Lopez, Katherine Kivimaki, Elise Mikailov, Bram Nutt, Bruna Rocha, Alec Solberg, Kirk Stephens, Declan Walsh, and Jasmine Wu. We benefited from conversations with Nathaniel Baum-Snow, Enrico Berkes, Leah Boustan, Jeffrey Brinkman, Leah Brooks, Leonardo D'Amico, Fernando Ferreira, Price Fishback, Joe Gyourko, Jeffrey Lin, Kyle Mangum, Raven Molloy, Evan Soltas, and Matt Turner. We appreciate comments from seminar participants at the Columbia, DePaul, Economic History Association (EHA), NYU Wagner, Philadelphia Federal Reserve, Princeton, Stanford, Toronto, North American and European meetings of the Urban Economics Association, Virginia Commonwealth University, Washington Area Economic History Seminar (WAEHS), and Wharton. The views expressed in this paper are solely those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

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1 Introduction

American suburbs are notable for their residential uniformity and extreme separation of uses. Jane Jacobs wrote of suburban developments of the 1950s – composed almost exclusively of detached single-family homes – as exhibiting a remarkable degree of "monotony, sterility, and vulgarity" (Jacobs, 1961, p. 7). Why did compact neighborhoods with a mix of residential and commercial uses stop being built in American metropolitan areas? And why are so many American suburbs filled with single-family homes on large lots that are inaccessible except by car and unwalkable even to the nearest store? While critics and fans alike have pointed to land use regulation as the explanation for the distinctive form of American suburbs, we know surprisingly little about what these regulations looked like historically, or how they influenced the development of neighborhoods. Even in the early 20th century, upwardly mobile Americans increasingly sought homes in planned neighborhoods and viewed apartment buildings as "parasitic" nuisances to be avoided.[1] These preferences for neighborhoods complicate efforts to understand the role of zoning during the 1920–1980 period when a significant share of the U.S. housing stock was constructed.

The central challenge in understanding the long-run impact of zoning on the suburbs is in observing the regulatory environment when these places were originally developed. Historical zoning maps and regulations can be very difficult to locate, as they have nearly all been superseded and relegated to municipal archives and libraries. Accordingly, ambitious efforts to map the nation's zoning laws such as the National Zoning Atlas (Xu et al., 2023) do not provide information on historical regulations, nor do widely used zoning surveys such as the Wharton Regulatory Land Use Regulation Index (Gyourko et al., 2008). The lack of information on historic zoning laws has limited efforts to understand the impact of zoning over the long run, particularly because current regulations have likely been shaped by many of the economic forces social scientists wish to study (Davidoff et al., 2016; Molloy, 2020; Trounstine, 2020).

In this paper, we construct the first panel dataset of the complete zoning regulations for a major U.S. metropolitan area using the original maps and bylaws from suburban municipalities surrounding Chicago. Our Cook County Longitudinal Zoning Database covers regulations from 1921, when

[1] The original case legalizing comprehensive land use regulation Euclid v. Ambler (1926) contained the following description of apartments in suburban neighborhoods: "very often the apartment house is a mere parasite, constructed in order to take advantage of the open spaces and attractive surroundings created by the residential character of the district."

suburban zoning first appeared, up to 1980. We combine these historical zoning regulations with unusually detailed spatial data that we obtained through public records requests to Cook County. This data includes a map with the date of subdivision for individual parcels of land and the date of construction of existing houses.[2] This information is important because parcels were often subdivided decades before houses were built on them; this limits the usefulness of national datasets (like those provided by Cotality, which only includes structure built dates) for studying lot sizes.[3] Cook County contains over 120 municipalities that developed at different times and under various regulatory environments, yielding a broad variety of contemporary suburban forms.

We use this dataset to establish several new facts about early suburban zoning ordinances and residential development. Even the earliest suburban ordinances set aside a striking amount of land for single-family residential uses. Our data shows that approximately 60% of zoned inner-ring suburban land was set aside for single-family housing in the 1920s, and the median zoned suburb devoted 85% of land to single-family homes. The corresponding share was just 4% in the zoning ordinance adopted by the city of Chicago in 1923. This suburban bias towards low-density housing only grew over time. While the share of zoned suburban land limited to single-family uses reached 65% by the 1970s, the share devoted to multi-family apartment uses declined considerably from 18% in the 1920s to just 6% by 1970. Patterns favoring low-density suburban housing are also evident from the trends in minimum lot size requirements. Minimum lot sizes were ubiquitous early on and grew substantially larger over time, from a median of 5,000 square feet required in the 1920s to 7,500 square feet in the 1970s.

To date, most work in economics on historical zoning laws has focused on density restrictions. However, our descriptive work suggests that the most important impact of suburban zoning may have been to shift the overall distribution of land use, principally towards single-family homes and away from virtually everything else. To explore this idea, we use the Cook County Longitudinal Zoning Database and the Public Land Use Survey System (PLSS) grid, which was created as part of the Land Ordinance of 1785, to measure the impact of zoning on land that was undeveloped (i.e.,

[2]We use the term "subdivision" to refer to the process of dividing up open or formerly agricultural land into parcels for residential, commercial, and industrial uses. We use the term "development" to refer to both subdivision and the construction of buildings. Thus, land that was not developed was neither subdivided into parcels nor built on.

[3]For example, more than half of the homes built in suburban Cook County in the 1950s were built on parcels that were subdivided in the 1920s or before.

neither built up nor subdivided) at the time regulations were adopted. Using such "greenfield" development facilitates causal inference by minimizing the chance that zoning followed existing land use. In addition, we can control for a rich set of attributes of the land in each grid square, including its estimated value, its proximity to different areas of Chicago, major geographic features, and historic transportation networks. Importantly, because we can observe the date of plat for parcels in the county, we can assess whether development occurred under regulation or before it was adopted.

We find that areas that were developed before zoning was in place devoted on average 63% of their land to single-family homes, with 11% for commercial uses and 18% for apartments. But under zoning, this distribution shifted to 83% single-family homes, 7% commercial uses, and 5% apartments. The post-zoning land use distribution also exhibits much greater skew: The median post-zoning suburban neighborhood is nearly 93% single-family homes, with no apartments at all. Is this shift the result of zoning? Using simple entropy indexes to measure the diversity of zoning and contemporary land use, we ask how zoning restrictiveness at the time of development affected the overall distribution of land use. Adopting the most flexible zoning we observe reduces the single family share by 44 percentage points and increases the commercial and apartment shares by 16 and 12 percentage points, respectively. We also show that these estimates are essentially invariant to the inclusion of controls for other factors that could drive these differences, including the location and value of land.

These results together suggest that zoning regulations themselves shifted the allocation of land in the suburbs. But assembling the data needed to provide causal evidence on this relationship required a years-long archival effort and the existence of an unusually well-equipped county GIS office. It would be thus be difficult to replicate this approach for a broader sample of metro areas, particularly with respect to information on the original subdivision of land parcels. We thus consider what economists can learn from more typical settings where there is uncertainty of the timing of development and regulation adoption. Specifically, we estimate the same baseline regression from above on subsamples where zoning would have had less and less of an impact on the current built environment, beginning with our preferred subsample where no development had occurred before zoning and concluding with a subsample where virtually all land was subdivided and built up before land use regulation was adopted. We find nearly identical estimates of the "impact" of zoning on

the diversity of land use on all samples, a result attributable to the tendency of planners to match zoning to the existing environment when development was already underway. We conclude that the suburbs would have contained substantially more mixed-use development had comprehensive land use regulation not been allowed by *Euclid v. Ambler Realty Co.* in 1926, but an extraordinary amount of information is needed to be certain of causality when studying land use regulation.

We also contribute to the literature on minimum lot sizes by providing well-identified estimates of the effects of these regulations on residential neighborhoods. We find that, conditional on location within the county and year of development, new single-family residential neighborhoods were becoming less walkable and further from apartments and stores in both regulated and unregulated municipalities. In the prewar era, the existence of a zoning ordinance explains few of the differences across residential neighborhoods. The one exception is in fact minimum lot size regulations. Although the prevailing wisdom suggests that density restrictions were not important in the United States until the 1970s (for instance, see discussions in Fischel, 2005; Krimmel, 2021), we find that minimum lot sizes were binding as early as the 1920s. Zoning was associated with a 1,494 square foot increase in lot size (20% of the mean) in residential development from 1921 to 1945. In the postwar era (1945-1980), we compare developments under different regulatory restrictiveness, finding an elasticity of lot sizes with respect to MLS of .48. The robustness of these effects strongly suggests that zoning shifted the lot sizes of residential neighborhoods beyond what the private market would have delivered. These larger-lot developments also mechanically increased the distance of single-family homes from other use types.

A growing number of recent papers have developed creative methods to impute past minimum lot size requirements from contemporary real estate data (Cui, 2024; Macek, 2024; Song, 2025; Zabel & Dalton, 2011). These approaches are undoubtedly important, as zoning has become a crucial part of the national debate on housing. Yet our findings suggest the need for caution in interpreting today's lot size distribution as a measure of past regulation. We find that suburban developers chose lot sizes clustered around similar round numbers whether zoning was in place or not. Zoning ordinances also largely followed existing subdivision patterns, so the distribution of lot sizes from unregulated development was crystallized into future minimum lot size regulations. The observed lot size distribution today is thus informative of past minimum lot size regulations both because these regulations shaped development, and because existing development shaped future

regulations. The dataset we have assembled for this paper provides the ground truth for one metro area, which will provide a new means of validating approaches with broader geographic coverage.[4]

This paper contributes to a literature in economics that seeks to understand the causal impacts of land use regulation. Economists have studied the short-run impact of zoning on undeveloped areas (Turner et al., 2014) and on existing urban development, both in recent years (Anagol et al., 2021) and in historical settings (McMillen & McDonald, 2002). This emphasis on identification complements the broader literature on land use regulation, which argues that zoning can be used to preserve local control and increase home values (Fischel, 2005; Glaeser et al., 2005) but at the cost of excluding less privileged households (Trounstine, 2018). The increase in home values is related to the strong preferences of U.S. households for low-density development (Gyourko & McCulloch, 2023). Historical zoning parameters beyond minimum lot sizes have received comparatively little attention in economics due to the difficulty of observing them. Two existing papers that study the long-run, causal impact of zoning focus on central cities only (Shertzer et al., 2018; Twinam, 2018).

The archival zoning ordinances digitized for this paper represent a new avenue of inquiry for the study of zoning. The current literature on zoning largely relies on surveys (Glickfeld & Levine, 1992; Gyourko et al., 2008), digitized maps of contemporary regulations (Glaeser & Ward, 2009; Xu et al., 2023), and promising new methods using natural language processing (NLP) to analyze the text of zoning codes (Bartik et al., 2025). While all of these methods are useful for understanding the constraints on current development (**kulka2024under**), none of them allow researchers to observe the exact regulations in place when a particular parcel was subdivided. Our approach, which trades off broad geographic coverage for an exceptional level of spatial detail, provides a new benchmark for understanding both the impact of zoning and the accuracy of our measures of regulation.

Zoning has been linked to persistent racial segregation, disparities in public goods provision, and accelerating regional inequality (Ganong & Shoag, 2017; Gyourko & Krimmel, 2021; Sahn, 2025; Schuetz, 2022). Restrictive land use regulation is thus intertwined with some of the most critical socioeconomic challenges facing the United States. This paper contributes to this larger literature by clarifying the role of regulation in shaping the form of many suburban areas in the

[4]The Cook County Longitudinal Zoning Database is available for download at https://www.allisonshertzer.com/research/.

United States. Initial development is costly to change (Brooks & Lutz, 2016; Gallagher et al., 2025; Lindenthal et al., 2017), so the decisions made in past decades will constrain development far into the future, complicating efforts to increase the density and affordability of housing in high-demand areas of the United States.

2 Background on Suburban Zoning in the United States

American cities have adopted land use regulations since colonial times, with rules governing the location of noxious uses first appearing in the Massachusetts Bay Colony in 1692.[5] Early regulations typically reflected a piecemeal approach, regulating specific offensive uses such as tanneries (Schwieterman & Caspall, 2006, Ch. 2). An 1869 New Orleans' ordinance that required butchering to take place down river of the city was upheld by the Supreme Court in 1873 on 14th Amendment grounds, marking a key precedent for later jurisprudence on land use regulation. However, fragmented approaches had their limits, and in 1908 the city of Los Angeles adopted the nation's first land use zoning ordinance. This ordinance mapped out three residential districts in which most industrial uses were disallowed. In contrast to later ordinances, existing businesses could be forced to vacate their premises without compensation.

The authority to regulate industrial uses derived from local governments' police power to control "nuisances." The Supreme Court placed some restrictions on this authority by striking down the wave of racial zoning laws that appeared in southern cities beginning in 1910. The *Buchanan v. Warley* decision of 1917 found that preventing homeowners from selling their home to a member of a different race constituted an inappropriate exercise of police power. But the Supreme Court viewed race-neutral, "comprehensive" zoning laws differently. These ordinances, which first appeared in New York City in 1916, created districts that permitted residential, commercial, and unrestricted uses and introduced city-wide setbacks for buildings of all types. The threat of industrial encroachment continued to motivate local governments, including the Ohio village of Euclid's adoption of a comprehensive zoning ordinance in response to Ambler Realty's plans for industrial development. This ordinance sparked the landmark 1926 decision in *Euclid v. Ambler*, which found that regulating allowable uses – including setting aside land for purely residential or commercial

[5] "An Act for Prevention of Common Nuisances Arising by Slaughter-Houses, Still-Houses, Tallow Chandlers, And Curriers," Massachusetts Acts and Resolves, 1:59-60.

use – was a valid exercise of police power.

Municipalities across the United States adopted similar zoning ordinances over the next decade, and by 1936, 1,322 cities had them (about 85% of the total) (Jackson, 1987, p. 242). The spread of zoning was aided by the Standard State Zoning Enabling Act, which was drafted by the U.S. Department of Commerce under Herbert Hoover and released in 1924. This gave states a model framework for authorizing municipal governments to zone, and in part explains why ordinances across the country are structured similarly. Ordinances typically contain a map of districts alongside a list of allowable uses and density restrictions specific to each district. Density restrictions typically take the form of limits on building heights, lot sizes, and lot coverage. City governments were concerned with the blocking of light and the creation of wind tunnels after steel-reinforced skyscrapers became viable, and the courts generally upheld height restrictions (Hall, 2014, pp. 36-47). In the suburbs, restrictions on lot sizes were more important, as we discuss in Section 3. The "discretionary" aspects of zoning, particularly related to multiple rounds of approvals and associated delays, emerged from progressive activism in the 1960s and 1970s and were not a major factor shaping the residential development we study in this paper (Schuetz, 2022, p. 20).

Suburban development prior to World War I had been concentrated in inner-ring suburbs and areas accessible by steam rail and electric streetcar lines. The expansion of private automobile ownership in the 1920s allowed developers to open land far from existing rail lines, and outlying areas found themselves under pressure to manage the resulting growth and provide the services that new commuters demanded (Keating, 1988, p. 89). This was true not just in greater Chicago but across the United States, as a nationwide land subdivision and housing boom unfolded over the 1920s (Brocker & Hanes, 2013; Field, 1992; White, 2009). New suburban settlements first had to incorporate as a municipality before they could adopt a zoning ordinance. The ability to control development via land use regulation served as a powerful motivation for homeowners in newer suburban settlements to incorporate (Fischel, 2005, p. 222). Newly established local governments and private developers then coordinated around the adoption of zoning regulations, the subdivision of agricultural land on the periphery, and plans to extend roads and utilities into new areas (Weiss, 2002, p. 66). Local governments were especially interested in preventing "wildcat" lots, or disorganized and haphazard subdivision of land (Weiss, 2002, p. 116).

Zoning addressed some of the limitations of the other tools available to developers and homeown-

ers to control undesirable land uses, namely the use of restrictive covenants on deeds. Developers used deed restrictions on new homes to ensure the kind of stability that White suburban homeowners desired. In practice, this meant the exclusion of commercial and industrial uses, which were viewed as having adverse impacts on home values and quality of life (Fischel, 2004; McMillen & McDonald, 2002). Developers within a municipality faced a collective action problem, since the value of any individual parcel depended heavily on what neighbors built. Restrictive covenants solved this problem by contractually locking in land use expectations across a subdivision, reducing uncertainty and allowing developers to capture the value of neighborhood homogeneity in their initial lot prices. Zoning provided further guarantees on what kind of development would be allowed beyond the borders of a subdivision. Homeowners also wished to block apartments because dense residential development had long been associated with overcrowding, disease, and immigrant populations (Hirt, 2015, p. 117). Indeed, developers used restrictive covenants to block apartment buildings in the urban periphery even in the 19th century, before comprehensive zoning regulations were introduced (Wolf, 2008). Zoning made it possible to block apartment construction on a much broader scale.

Existing scholarship from the social sciences has focused on racially restrictive covenants, which were used extensively by developers to prevent the entry of racial minorities into White neighborhoods. Homeowners formed "neighborhood improvement associations" to organize covenants and resorted to violence to enforce them (Rothstein, 2017, p. 139). The Federal Housing Administration (FHA) reinforced the use of racially restrictive covenants through underwriting guidelines until such restrictions were rendered unenforceable by *Shelley v. Kraemer* in 1948 (Jackson, 1987, p. 208). The FHA also recommended the use of zoning regulations to maintain neighborhood stability, and large-lot, single-family development became a new tool of racial exclusion (Gordon, 2023, p. 155).

That comprehensive zoning laws impacted the racial composition of the suburbs is almost universally indicated by the existing literature. However, the impact of historical zoning regulations on the built environment today has received little quantitative attention because of the difficulties of observing the laws in place at a particular location and point in time. Identifying the impact of zoning is difficult because, given the strong preferences of homeowners for "orderly" residential development composed entirely of single-family homes, one may expect that the market would have delivered these kinds of neighborhoods even if *Euclid v. Ambler* (1926) had been decided differently.

Indeed, the idea that zoning simply "follows the market" and has little overall impact on land use was influential in economics for decades (for instance, see Wallace, 1988). Put differently, zoning wasn't essential to shift new single-family homes away from the nearest apartment or business, as private developers would have had the incentive to do this anyway. The goal of our paper is to assess how important zoning regulations were in shaping the form of suburbs.

3 Data

3.1 The Cook County Longitudinal Zoning Database

The zoning dataset for this paper was constructed from archival zoning ordinances from the municipalities of suburban Cook County, the second most populous county in the country and home to the city of Chicago. Our panel of zoning regulations begins in 1921 with the first three suburbs to adopt zoning ordinances: Evanston, Glencoe, and Oak Park. Our panel ends in 1980. The zoning ordinances all have two components, the zoning district map and the associated bylaws. The maps and bylaws were typically archived separately, with maps in some libraries and the bylaws in others. We found the various ordinance components in academic libraries in Illinois and in public libraries, including the Library of Congress. In many cases we made public records requests to the municipal offices themselves. If these approaches did not work, we used Olcott's Blue Books of Chicago to fill in missing bylaw information.[6] All of the maps were digitized using the 2020 street grid provided by Cook County's GIS office as a reference.[7]

Zoning maps and bylaws were updated infrequently, but maps changed more frequently than their underlying bylaws, particularly due to changes in a municipality's corporate boundaries. We updated a municipality's bylaws each time they changed for each year from 1921 to 1980. Making use of an ordinance's precise start/end dates allows us to observe the near-continuous evolution of the individual municipality's zoning bylaws over time. For the maps, we digitized the original zoning ordinance map adopted by a municipality in the 1920s, if the municipality existed and was zoned at that time. Then, in order to account for maps' more frequent changes, we then digitized updated or additional zoning ordinance maps as they would have been around the start

[6] The Blue Books were occasionally missing the most up to date regulations, and for this reason we tried to go back to the primary sources if they could be found.

[7] https://hub-cookcountyil.opendata.arcgis.com/datasets/4569d77e6d004c0ea5fada54640189cf_5/explore.

of each decade from 1940 to 1970, including newly formed municipalities as they incorporated. These maps, after being matched to their underlying bylaws' precise start/end dates, allow us to accurately assign to individual parcels the regulations that were in place at the time that they were subdivided. Because the maps and bylaws changed infrequently, and major alterations were rare, our panel accurately describes the regulatory environment for most of the suburbs in Cook County up through 1980.[8]

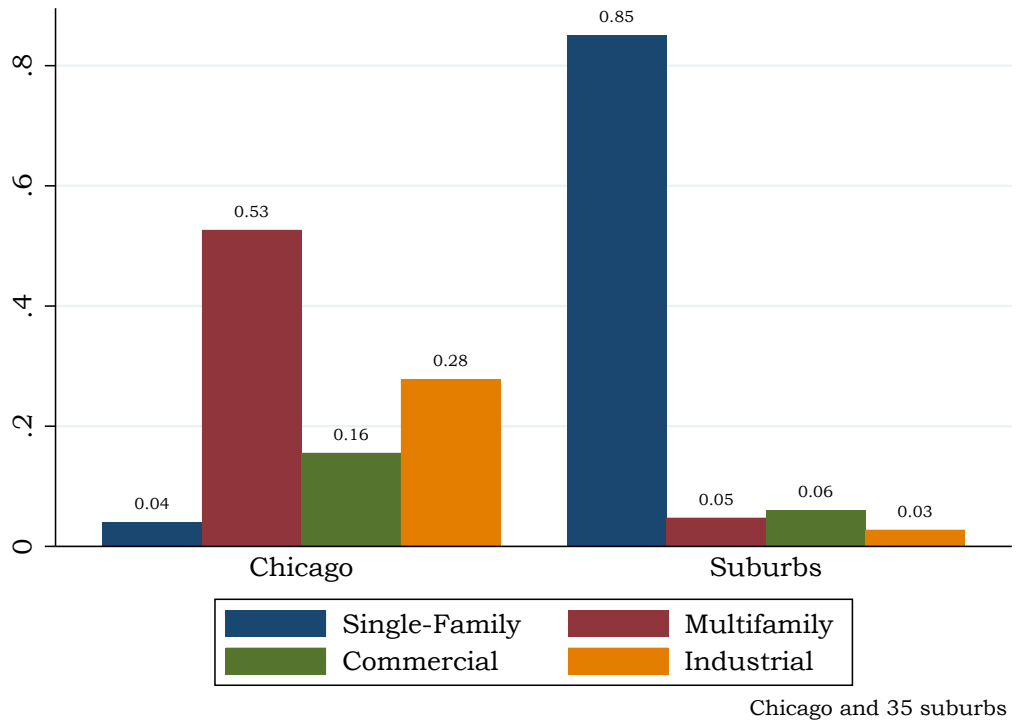
Cook County today contains 129 suburbs, 122 of which lie primarily within Cook County. Of these, 120 municipalities were incorporated and zoned by 1970. The coverage of the dataset expands each year as more suburbs incorporated and adopted zoning ordinances. The dataset covers 35 municipalities in the 1920s, 61 municipalities in 1940, 81 in 1950, 111 in 1960, and 114 in 1970. Cook County adopted a rural zoning ordinance in 1940 that applied to unincorporated land. Therefore, parcels developed on unincorporated land before 1940 were not subject to regulation. The rural ordinance had very large minimum lot sizes and was intended to deter development on unincorporated land (Erdmann, 1940). We focus on parcels developed in incorporated suburbs after zoning was adopted and parcels developed in unzoned areas (either unincorporated areas before 1940, or incorporated suburbs before zoning was adopted).

To illustrate how we constructed the database for this paper, we reproduce a sample zoning ordinance map for Chicago Ridge in Appendix Figure A4a, along with its digitized counterpart in Appendix Figure A4b. This map is the zoning ordinance of 1945, which was still in place in 1950. The associated bylaws corresponding to each district can be seen in Appendix Figure A5. The various shading schemes correspond the allowable uses in each district. For instance, the double-hatched yellow area is reserved for "Heavy Industry," although the associated bylaws contain even more information, including the fact that residential uses were not explicitly banned. The two most restrictive districts allow only single-family homes but with different minimum lot sizes, 7,500 and 5,000 square feet. Appendix Figure A4c zooms in on the Chicago Ridge map to highlight the variation in zoning districts present, while Appendix Figure A4d shows that if we remove the zoning overlay, we can see from a contemporary aerial survey photo (circa 1938–1939) that the underlying area was largely vacant and undeveloped. The abundance of zoned but undeveloped land in our

[8]See Appendix A.2 for a detailed discussion of how the Cook County Longitudinal Zoning Database (CCLZD) was constructed.

sample is an important part of our identification strategy discussed below.

Figure 1: 1923 Chicago Zoning vs. Early Suburban Zoning



Note: The sample of suburbs includes all 35 Cook County municipalities with use zoning restrictions adopted in the 1920s.

Combining the various ordinances gives us an unprecedented view into the regulatory environment that shaped the development of the suburbs. Figure 1 shows the median use shares for the 35 suburbs in our sample that adopted zoning ordinances in the 1920s, compared with the initial zoning ordinance adopted by the city of Chicago in 1923. The median suburban municipality set aside a striking 85% of its land for single-family homes. Just 5% of land was zoned for apartments and 6% for commercial uses. The development allowed under these ordinances represents a dramatic break from existing urban form. Meanwhile, residential districts permitting apartments covered more than half of Chicago's land, with commercial areas allowing for mixed uses permitted on another 16%. We would expect some difference in use shares because the suburbs in this sample are further from the central business district of the city. We turn to the question of whether such proximity can explain the observed differences in Section 5.

3.2 Subdivision Plat Maps and other Parcel Data Sources

We rely on several other data sources to construct our parcel-level dataset. National datasets do not typically contain information on when parcels were platted. However, we obtained subdivision plat maps for the suburbs, along with detailed subdivision information, through public records requests to Cook County. This data is crucial for linking each parcel to the regulatory environment under which it was developed, because the date on which any structure was built can be much later than the date on which the underlying land parcel was subdivided. Figure 2 visualizes the gap between the year a parcel was subdivided and the year a structure was built on it in five-year intervals over our sample period. The average (median) gap between year built and year subdivided across our whole sample is 27 (18) years. More than half of the homes built in suburban Cook County in the early 1950s were built on parcels that were subdivided in the 1920s or before, underscoring the importance of using year of plat rather than the year built when studying questions related to lot sizes.[9]

Additionally, we obtained information on when each parcel became part of an incorporated municipality from the Cook County GIS Office's Municipal Incorporation Inventory.[10] This allows us to determine if suburban parcels were subject to the regulations adopted within their suburb at the time of subdivision or development. The parcel map for Cook County was also obtained through the Cook County GIS Office.[11] We obtained information on the location of present-day uses, including apartments and stores, from the Chicago Metropolitan Agency for Planning.[12]

This combined dataset contains rich variation in the regulatory environment under which suburbs were developed. Figure 3 illustrates the timing around development and regulation in Cook County for five representative municipalities, along with the median year that parcels were subdivided and houses were built. In the more distant suburbs of Arlington Heights and Niles, most development occurred well after the adoption of zoning. In contrast, the inner ring suburb of Oak Park was mostly developed by the time that zoning was adopted in 1921, and the majority of

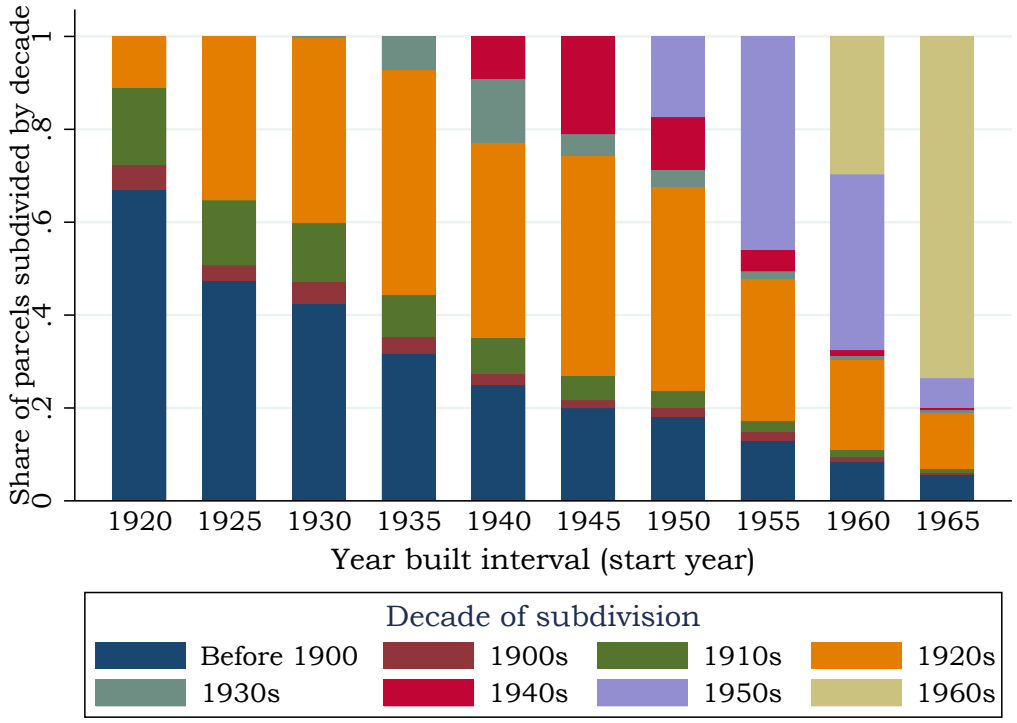
[9] While it is generally difficult to observe date of plat, we are aware of one other project that did so for housing in Hennepin county. In Sood et al. (2024), the authors found a gap of 14 years between the date of subdivision and the date a structure was completed for homes built between 1940 and 1960.

[10] Cook County Municipal Incorporation Inventory, accessed 2023. See https://maps.cookcountyil.gov/mii/.

[11] Cook County GIS. Historical Lots, 2017 (updated August 2022). See https://hub-cookcountyil.opendata.arcgis.com/datasets/2d2d5e9fb3934612809109b6833e5897_17/explore.

[12] The 2018 Land Use Inventory for Northeastern Illinois can be obtained from CMAP.

Figure 2: Gap between Parcel Plat and Structure Built Year

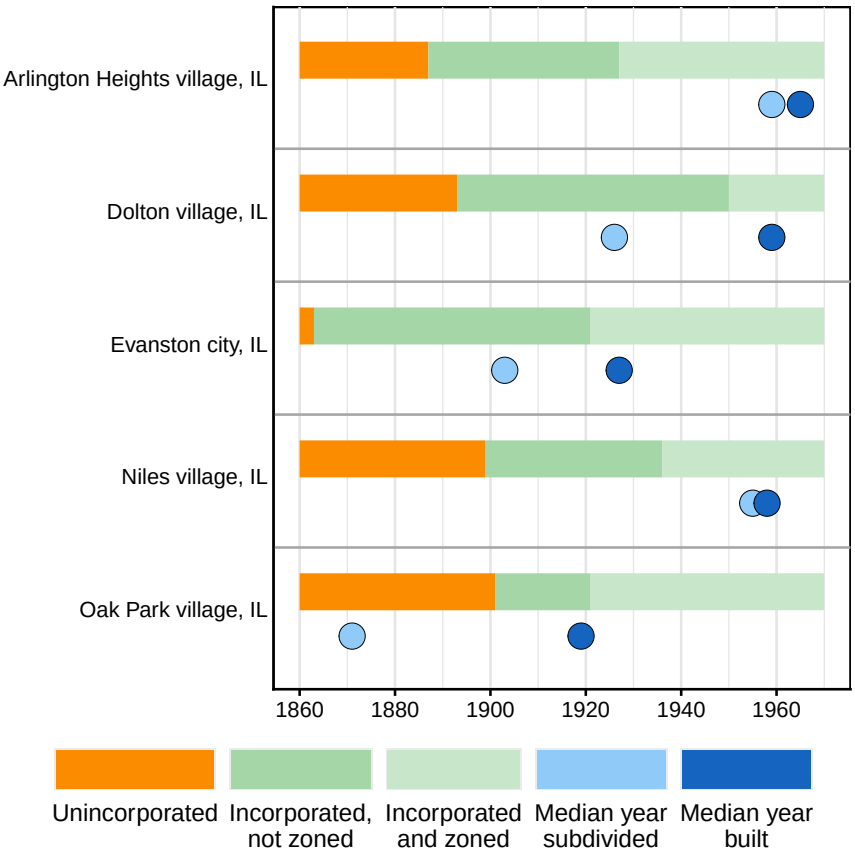


Note: This figure shows the parcel plat distribution for houses built over five-year intervals. For example, the 1920 bar contains single-family houses built from 1920 to 1924, the 1925 bar from 1925 to 1929, and so on.

parcels were subdivided before the village was even incorporated. In both Dolton and Evanston, most subdivision occurred after incorporation, but before the adoption of zoning; however, most construction occurred under zoning. Homes built in Evanston and Oak Park reflect the preferences and incomes prevailing before the Great Depression, while homes built in Arlington Heights and Niles will reflect those found in the Baby Boom era. The dataset we have assembled allows us to ask how, conditional on the year and location within the county, regulation shaped suburban development.

We also visualize the increasing restrictiveness of zoning ordinances over time using the easily comparable parameter of minimum lot sizes (per household) in Figure 4. This is the first visualization of the actual minimum lot sizes that were in place by *zoning district* over this period. It is worth noting that survey-based approaches to collect zoning information typically ask about the most stringent lot size restriction in the municipality. With our data, we can see the whole range

Figure 3: Development Timeline



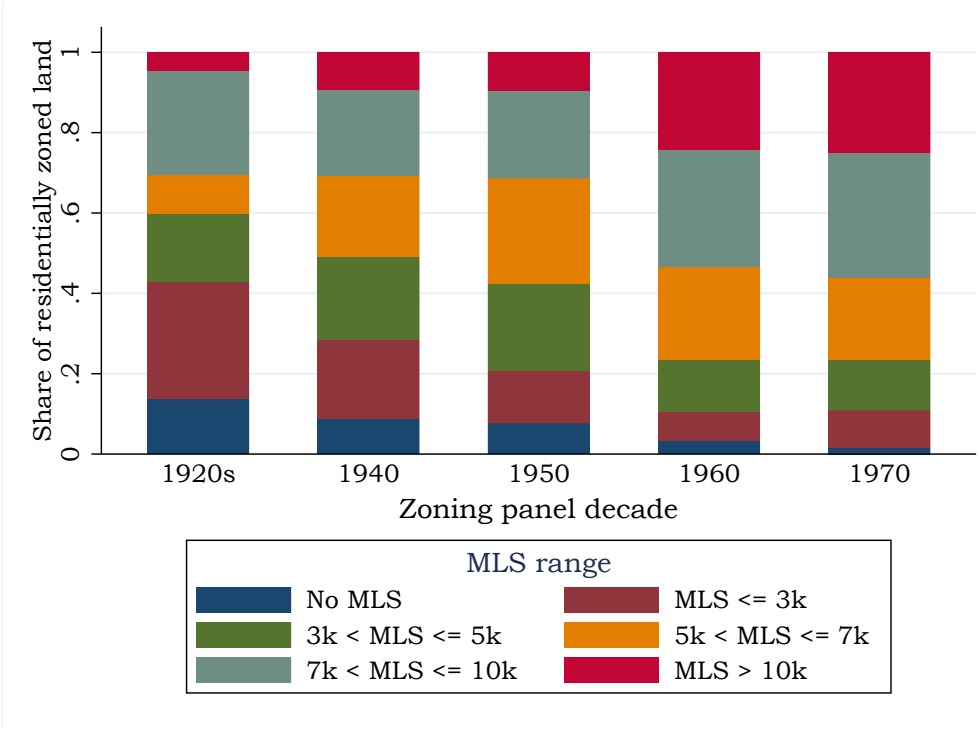
Note: This figure depicts the timeline of incorporation and zoning for five cities in our sample over the period 1860-1970. Evanston was the first of these cities to incorporate in 1863. Also depicted are the median year subdivided and median year built for residential parcels in each city.

of density restrictions that applied in different zoning districts, and measure their actual spatial extent.[13] The median lot size requirement per household was 5,000 square feet in the 1920s and grew to 7,500 in the 1970s. We discuss below how lot sizes were often much larger than 7,500 square feet by the end of our sample period, underscoring the importance of having independent measures of regulation.

In our empirical work below, we also include covariates that measure the distance between our unit of observation and Lake Michigan, the nearest major river, the central business district of Chicago, the city boundary of Chicago, the nearest 1942 zoning use district in Chicago (single-family, townhome, apartment, commercial, and industrial), historic commuter rail lines and

[13] In this figure we weight zoning districts by land area for representativeness.

Figure 4: Distribution of Minimum Lot Size Restrictions by Year



Note: This figure summarizes the distribution of minimum lot size (MLS) required per household by year. Zoning district observations are weighted by land area.

stations, and the value of land in 1943. These controls have various sources.[14] For our analysis of zoning restrictiveness across ordinances, we rely on the division of Cook County into quarter sections established by the Land Ordinance of 1785, which laid the ground for the Public Land Survey System (PLSS). We obtained the map of PLSS sections from the Cook County GIS office.[15] Finally, Walkscores were from accessed from Walkscore.com (as of 2023).

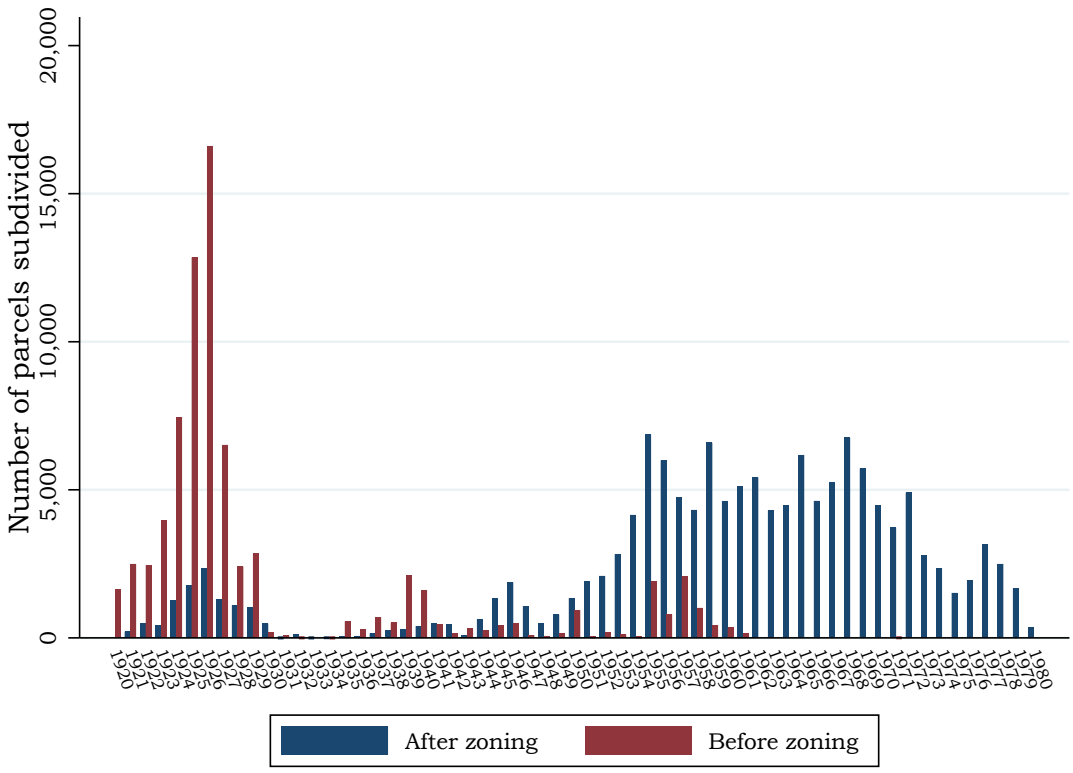
Finally, using our new dataset, we can visualize residential development by whether it was zoned or not over time. Figure 5 demonstrates that unzoned development dominated in the 1920s, trailed off after World War II, and disappeared completely by the 1970s.[16] This timeline also motivates

[14]Cook County and the city of Chicago keep a wealth of geographic information online. We constructed the distance to the lake or river measure from https://hub-cookcountyil.opendata.arcgis.com/datasets/078a8acf872548eb9c91d68658f2895a_8/explore, the distance to city measure from https://data.cityofchicago.org/Facilities-Geographic-Boundaries/Boundaries-City/ewy2-6yfk, the distance to the CBD from https://data.cityofchicago.org/Facilities-Geographic-Boundaries/Boundaries-Central-Business-District/tksj-nvsw, and the distance to the nearest use district from our own digitization of Chicago's 1942 zoning ordinance. The source for this ordinance is the Chicago Planning Commission, 1942 Map of Zoning Districts of Chicago. Historic commuter rail lines and stations were digitized from contemporary maps. The source of land values is Olcott (1943).

[15]Cook County GIS (2022), Public Land Survey Section, see https://hub-cookcountyil.opendata.arcgis.com/datasets/217a635972fb4dfa95411e57a57d1250_3/explore.

[16]This figure also confirms the 1920s subdivision boom described by Homer Hoyt in his study of Chicago's devel-

Figure 5: Parcel Development by Year and Regulation



Note: This figure depicts the timeline of parcel subdivision for suburban Cook County by year and regulatory status.

the empirical exercises we undertake in the rest of the paper.

4 The Impact of Zoning on Suburban Land Use

In this section, we ask to what extent zoning influenced the distribution of land use in the suburbs, particularly towards single-family homes and away from everything else. To develop a geography that is independent of political boundaries, we rely on the grid produced by the Public Land Survey System (PLSS). Championed by Thomas Jefferson, the Land Ordinance of 1785 that created the PLSS was intended to manage the subdivision and sale of government lands west of the Appalachian Mountains (Gates, 1996). Importantly for our application, the initial subdivision of land into six-mile-wide squares (townships) was done by surveyors before the earliest known non-Indigenous settlement in the area that would become Chicago. These townships were subdivided into 36 one-

opment (Hoyt, 1933).

mile-wide squares and then made available to potential settlers (Hirt, 2015); these were further divided into quarter sections (each with an area of a quarter square mile); this is the grid we use as our unit of observation.

Figure 6: PLSS Illustration



(a) Entropy of post-zoning land use (low diversity)



(b) Entropy of post-zoning land use (high diversity)

Note: This figure provides a aerial view of the land use patterns of a quarter section developed under zoning with low land use diversity in (a) and high land use diversity in (b).

We further focus on greenfield[17] development to minimize the chance that the initial zoning

[17]By "greenfield," we mean land where development is largely or entirely absent. We impute the development status of our PLSS quarter sections, i.e., the time of subdivision and building, from parcel level data according to the following procedure. We attach a parcel to a quarter section if at least 90% of the parcel area falls into the section. We only retain quarter sections where there are at least 20 distinct parcels, and where parcels cover at least 20% of the quarter section; the interquartile range for number of parcels per quarter section is 160-507, and the same for parcel coverage is 45%-66%. Parcel coverage usually does not exceed 75% due to the fact that public roads/rights-of-way typically cover 25% of land in urban areas; the balance typically consists of open space and waterbodies. We drop any quarter sections where more than 10% of parcels may have been subdivided under Cook County zoning; 84% of retained quarter sections have zero parcels developed under county zoning. In most of our analyses, we focus on quarter sections where at least 90% of subdivision activity occurred after zoning was in place; we refer to this as "subdivided after zoning." We use a 90% threshold (rather than 100%) to allow for the occasional historic farmhouse

classification of land followed existing uses (Shertzer et al., 2018). To measure the diversity of subsequent land use and zoning, we use simple entropy indexes. For each quarter section square, we calculate shares zoned for single-family residential, apartment, commercial, and industrial use in the earliest decade for which we observe zoning. Diversity is given by:

$$\sum_{i=1}^{N} s_i \ln(\frac{1}{s_i})$$

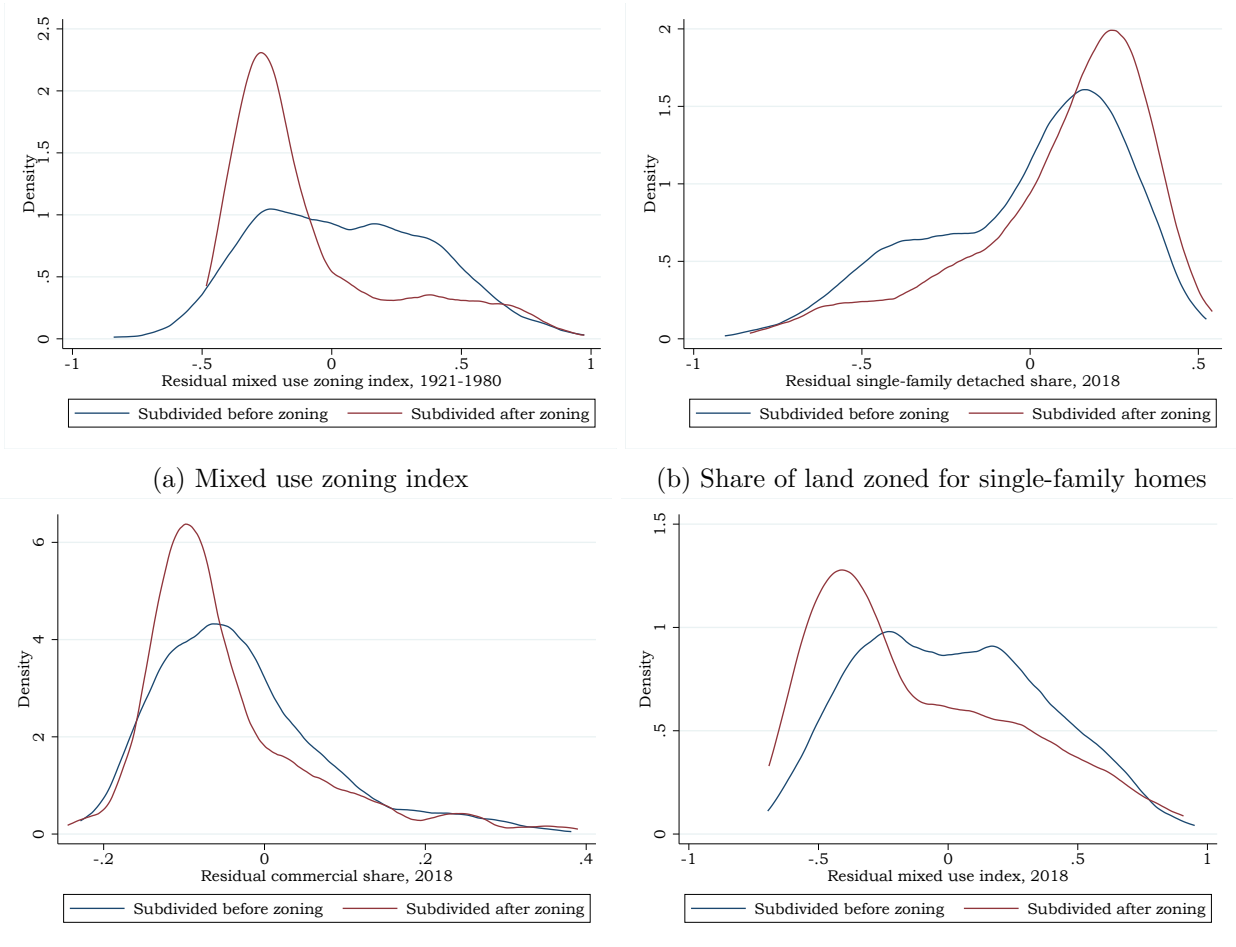
where N is the number of categories and s_i is the share of land devoted to zoning type i in the given decade. We also calculated shares devoted to actual land uses today using the same categories, plus a fifth category for townhomes, using the 2018 land use inventory from the Chicago Metropolitan Agency for Planning. The entropy index for zoning thus ranges from 0 to 1.35 and the entropy of land use today from 0 to 1.5.

To visualize the kind of variation present in the data, Figure 6 provides an aerial view of two different quarter sections. Figure 6a shows a square of land contained only single-family homes and a small industrial area. This is low diversity of land use in our data. In contrast, Figure 6b contains a wide mix of single-family homes, apartments, commercial uses, and industry. This is a high diversity of land use. Broadly speaking, land developed under zoning has a very different distribution from land that was developed prior to the adoption of such regulations. Across Cook County, the average single-family/apartment/commercial/industrial mix if zoning came before development was 83%/5%/7%/5%. But the respective land use distribution that emerged from unregulated development was 63%/18%/11%/8%. This is a strikingly different distribution of land use, particularly away from apartments and stores and towards single-family homes. The question we address in the remainder of this section is whether this difference arose because of zoning, or because of other factors specific to the timing and location of land that was developed after regulations were in place.

To provide our first piece of evidence on this point, we compare development patterns of quarter sections subdivided under zoning compared with those subdivided after zoning, residualizing for year of development, 1943 land value, 1940 population, and controls for the quarter section's

that has persisted to the present. In practice, on our subdivided after zoning sample, an average of 2.1% (0.3%) of parcels were subdivided (built up) before zoning.

Figure 7: Impact of Zoning on Future Land Use Distribution



(a) Mixed use zoning index

(b) Share of land zoned for single-family homes

(c) Share of land zoned commercial

(d) Mixed land use index

Note: The outcome variable in each figure is residualized by the square's distance to the central business district of Chicago, distance to the boundary of Chicago, distance to the nearest of each zoning use type in Chicago in 1942 (industrial, commercial, apartment, townhome, and single family residential), distance to Lake Michigan, distance to the nearest major river, 1943 land value, 1940 population, 1940 Black share, and indicators for the median decade of development for parcels inside the square.

location[18] The residualized density plots are visualized in Figure 7.

These density plots broadly suggest that the zoning had substantial impacts beyond what would have been predicted by market forces. In particular, Figure 7a displays a remarkable concentration of low-diversity zoning in areas developed later, instead of the flatter distribution that emerged when zoning followed existing development. The decline in the diversity of zoning translated

[18]These include the square's distance to the central business district of Chicago, distance to the boundary of Chicago, distance to the nearest of each zoning use type in Chicago in 1942 (industrial, commercial, apartment, townhome, and single family residential), distance to Lake Michigan, distance to the nearest major river, and the distance to the nearest commuter rail line and station.

directly into a higher share of land reserved for single-family homes (Figure 7b) and a lower share of land reserved for commercial uses (Figure 7c). Collectively, we can see that the overall land use entropy distribution shifted to the left, representing a reduction in the diversity of actual land uses today, relative to the distribution of land use entropy for quarter sections subdivided before zoning (Figure 7d).

While these figures suggest shifts in development beyond what can be explained by our rich set of controls, there are limitations to making comparisons on the extensive margin, i.e., comparing places that developed before or after zoning. This comparison involves aspects of municipal decision-making that go beyond the scope of this paper. We thus turn instead to the intensive margin of zoning restrictiveness, which is possible in our data because regulated development became the norm after World War II. Specifically, we restrict our attention to quarter sections that were only developed – that is, subdivided into parcels – after zoning regulations were in place. We then run the following regression:

$$y_i = \alpha + \beta z_i + \gamma' X + \epsilon, \tag{1}$$

where y_i is our outcome of interest. Choices for y_i include: the diversity (entropy) index of land uses in 2018 (residential, townhouse, apartment, commercial, industrial) for quarter section i; the share of quarter section i occupied by apartments in 2018; the share of quarter section i occupied by commercial uses in 2018; and the average Walkscore of the quarter section in 2023. z_i is the diversity (entropy) index of zoning for the quarter section i in the earliest year for which we observe zoning covering at least half of the quarter section. The vector X includes controls for the quarter section's distance to the central business district of Chicago, distance to the boundary of Chicago, distance to the nearest of each zoning use type in Chicago in 1942 (industrial, commercial, apartment, townhome, and single family residential), distance to Lake Michigan, distance to the nearest major river, distance to the nearest commuter rail line and station, 1943 land values, 1940 population, 1940 Black share of the population, and indicators for the median decade of development for parcels inside the square.

We argue that the unique data we have assembled allows us to give a causal interpretation to the β estimated in equation (1). Our identification argument has three components. First, we

restrict the sample to quarter sections where virtually all subdivision activity occurred *after* zoning was already in place. Thus, our analysis uses only land that is essentially undeveloped, as depicted in Appendix Figure A4. The major source of endogeneity in studies of zoning's impact on contemporary outcomes is the fact that zoning typically followed pre-existing patterns of development when it was adopted; we can effectively eliminate this channel.

Second, while there is little to no pre-existing development to drive zoning, undeveloped land may still have differed in terms of its suitability for different uses. For example, industrial uses may have been more likely to locate near railroads and apartment buildings more likely to be built where underlying land values were higher. Our extensive set of controls captures key geographic and infrastructure determinants of future development, including transportation networks and location relative to the different use zones of Chicago, which should largely mitigate selection on observable characteristics of land. We also use geocoded full-count census data to measure the demographics of our quarter sections circa 1940, before the postwar building boom, and we include total population and Black share as controls. On our subdivided after zoning sample, the median 1940 population was zero individuals, and the 95th percentile population was just 68. We can compare this to the population of quarter sections where subdivision (but not necessarily building) pre-dated zoning; on that sample, we find the median population in 1940 was 41 and the 95th percentile population 3,011. Furthermore, our newly digitized data from Olcott's allows us to measure the estimated value of the predominantly agricultural land we study; these prices should capitalize the value of any other locational attributes we cannot directly measure.[19] We include quarter section median land value as a control in all of our regressions.

While we view the above two points as compelling, one could still argue that planners nonetheless correctly anticipated future development demands and tailored zoning to fit them. However, there is little evidence to suggest that planners knew what future demand would look like. Chicago's initial zoning notably allowed for far more density and industrial development than the city would ever see (Hoyt, 1933). Other cities also miscalculated future demand; planners in Minneapolis in the 1920s anticipated the city would grow to a population of 1.5 to 2 million residents by the year 2000,

[19]The Olcott's Blue Books are a well-known source of data on land values in the City of Chicago and its immediate inner-ring suburbs, and have been used in a number of studies. However, the data on agricultural land values that we use is drawn from *Olcott's Cook County Zoning and Land Values, 1943* (Olcott, 1943), which is considerably more obscure; we are not aware of any other researchers employing this data.

and that public transit and high-density inner-city living would continue to be the dominant trend (Commission, 1953). These predictions were wildly off the mark. More importantly, there is little evidence to suggest that planners tailored zoning to market demand in the first place, particularly in the suburbs. Indeed, the primary motivation of suburban zoning was to prevent the kind of market development that would have occurred in the absence of regulation. *Euclid v. Ambler* arose specifically in 1926 because planners attempted to stop privately-planned industrial development. Two years later, the Supreme Court decision invalidating a particular zoning ordinance in *Nectow v. City of Cambridge* was spurred by the city's attempt to zone land for residential use in an area dominated by undesirable industrial activity. The frequency of court disputes involving zoning has been used as a way to measure the stringency of land use regulations (Ganong & Shoag, 2017).

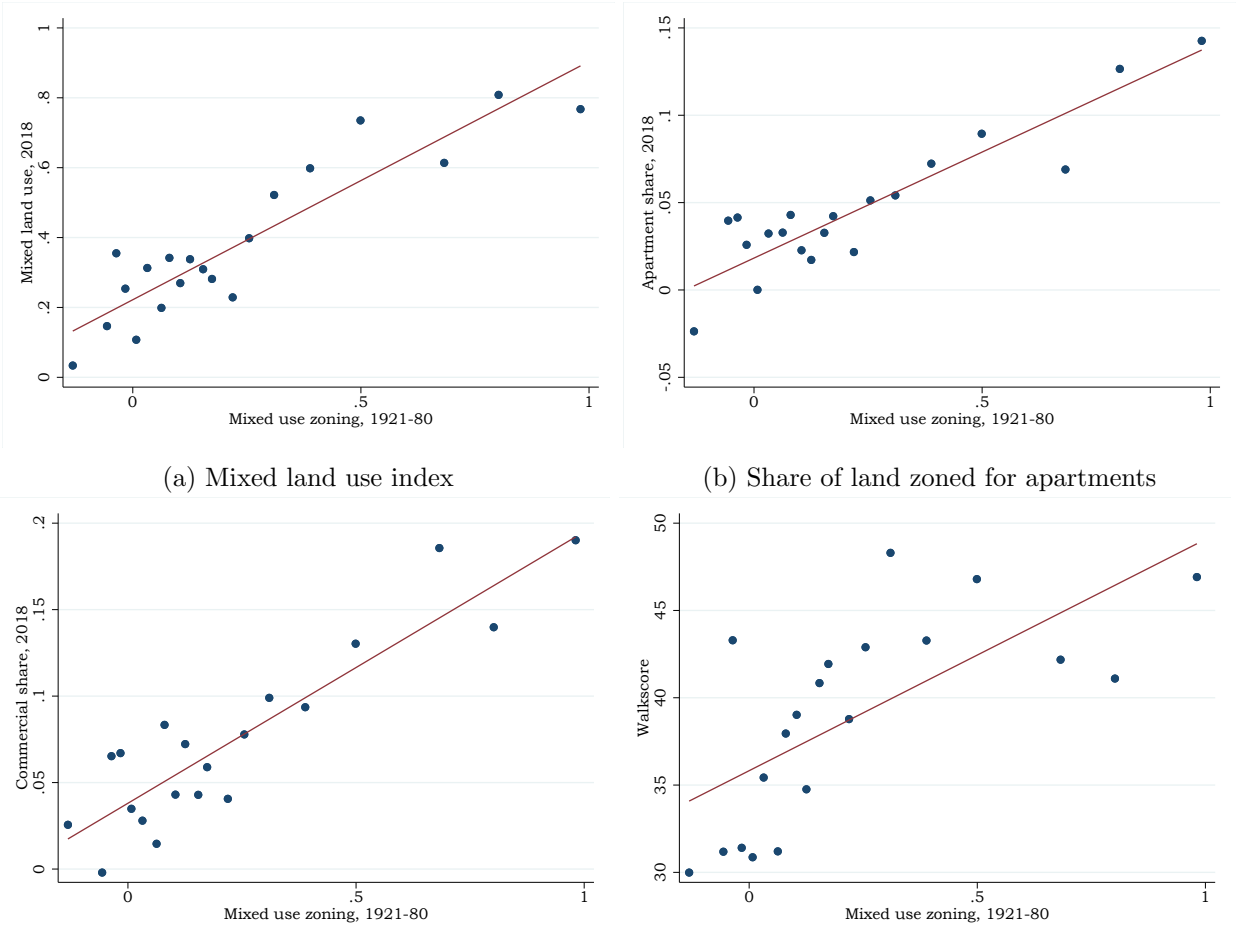
We can provide direct evidence on the relationship between zoning and market demand by estimating a modified version of equation (1). Instead of predicting future land use, we can predict historic zoning diversity itself, based on our set of controls X:

$$z_i = \delta + \phi' X + \eta, \tag{2}$$

If zoning was intended to cater to future market demand, it should be predictable based on our controls, as long as those are correlated with this demand. We estimate equation (2) on four different samples, each reflecting a different relationship between zoning and land use. The R^2s and F-statistics from these regressions are presented in Appendix Figure A1. On the far left of these figures, we can see how effectively we predict zoning on the sample of observations where we know most development (building and subdivision) preceded zoning. This is the sample where development was largely market driven, with zoning following later on. Our controls explain zoning quite well, as one would expect if zoning follows initial uses and our controls accurately capture the features predicting market demand. Moving to the right, we employ different samples where more and more development occurred after to zoning; as we do so, zoning becomes consistently less predictable. The sample used on the far right is the one employed in our analysis: almost all subdivision and building activity must have occurred after zoning was in place. On this sample, zoning is essentially unpredictable, with an adjusted R^2 of just 0.02. The overall F-statistic for equation (2) is not significant at any traditional confidence level. These results strongly suggest

that zoning, when it preceded development, was not heavily influenced by market factors. They also lend credence to our argument that the controls we have assembled do effectively predict market demand factors.

Figure 8: Impact of Diverse Zoning on Future Development



(a) Mixed land use index

(b) Share of land zoned for apartments

(c) Share of land zoned commercial

(d) Median Walkscore

Note: Partial regression (FWL) binscatter plots with linear fit. Outcome and predictor variables are orthogonalized with respect to controls for the quarter section's distance to the central business district of Chicago, distance to the boundary of Chicago, distance to the nearest of each zoning use type in Chicago in 1942 (industrial, commercial, apartment, townhome, and single family residential), distance to Lake Michigan, distance to the nearest major river, distance to the nearest commuter rail line and station, 1943 land value, 1940 population, 1940 Black share, and indicators for the median decade of development for parcels inside the square. The sample is restricted to quarter sections that were at least 90% subdivided after zoning.

We now turn to exploring the impact of zoning assigned prior to development on the built environment today. We begin with simple partial regression plots of equation (1) in Figure 8. Figure 8a visualizes the relationship between zoning diversity preceding development and an index

of mixed land uses today. We see a clear upward trend, with more diversely-zoned places exhibiting much more diverse land use today, consistent with zoning having a substantial long-run impact. The rest of the figure shows sizable positive relationships between zoning diversity and the share of land set aside for commercial uses (Figure 8c), apartments (Figure 8b), and walkability (Figure 8d).

We also estimate the above equation and present the results in Table 1. Increasing the historic diversity of zoning by 1 (approximately moving from the 25th to 95th percentile) translates into a 0.68 increase in real land use diversity today, which corresponds to a shift in contemporary diversity from the 25th to 75th percentile. We also see that more diverse initial zoning is associated with an increased share of land zoned for apartments and commercial uses, as well a sizable reduction in the share of land zoned for single-family homes. Adopting the most flexible zoning we observe reduces the single family share by 44 percentage points and increases commercial and apartment shares by 16 and 12 percentage points, respectively.

Table 1: Causal Impact of Zoning on Land Use

	Land use diversity, 2018		Single family, 2018		Apartment, 2018		Commercial, 2018	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mixed use zoning, 1921-80	.68***	.69***	-.44***	-.45***	.12***	.12***	.16***	.15***
	(.074)	(.065)	(.059)	(.054)	(.035)	(.035)	(.032)	(.03)
Observations	245	245	245	245	245	245	245	245
R^2	0.37	0.31	0.41	0.25	0.27	0.11	0.22	0.15
Median of outcome	0.25	0.25	0.93	0.93	0.00	0.00	0.02	0.02
Controls	Yes	No	Yes	No	Yes	No	Yes	No
HC3 standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1								

Note: Unit of observation is a quarter section. Regressions in odd-numbered columns include covariates for the quarter section's distance to the central business district of Chicago, distance to the boundary of Chicago, distance to the nearest of each zoning use type in Chicago in 1942 (industrial, commercial, apartment, townhome, and single family residential), distance to Lake Michigan, distance to the nearest major river, distance to the nearest commuter rail line and station, 1943 land value, 1940 population, 1940 Black share, and indicators for the median decade of development for parcels inside the square. The sample is restricted to quarter sections that were at least 90% subdivided after zoning.

Do these estimates reflect the impact of zoning, or the effects of other factors that were correlated with zoning? In Table 1, we present the regression results for each outcome with and without controls. The estimates are nearly invariant to the inclusion of controls for other factors that could

drive these differences, including the location and value of the land. These results together suggest that zoning regulations themselves shifted the allocation of land in the suburbs. If our estimated impacts of zoning were driven by omitted variables, these would have to be highly correlated with both historic zoning and present-day land use, but orthogonal to any of the other factors we measure. As discussed above, we view this as highly unlikely.

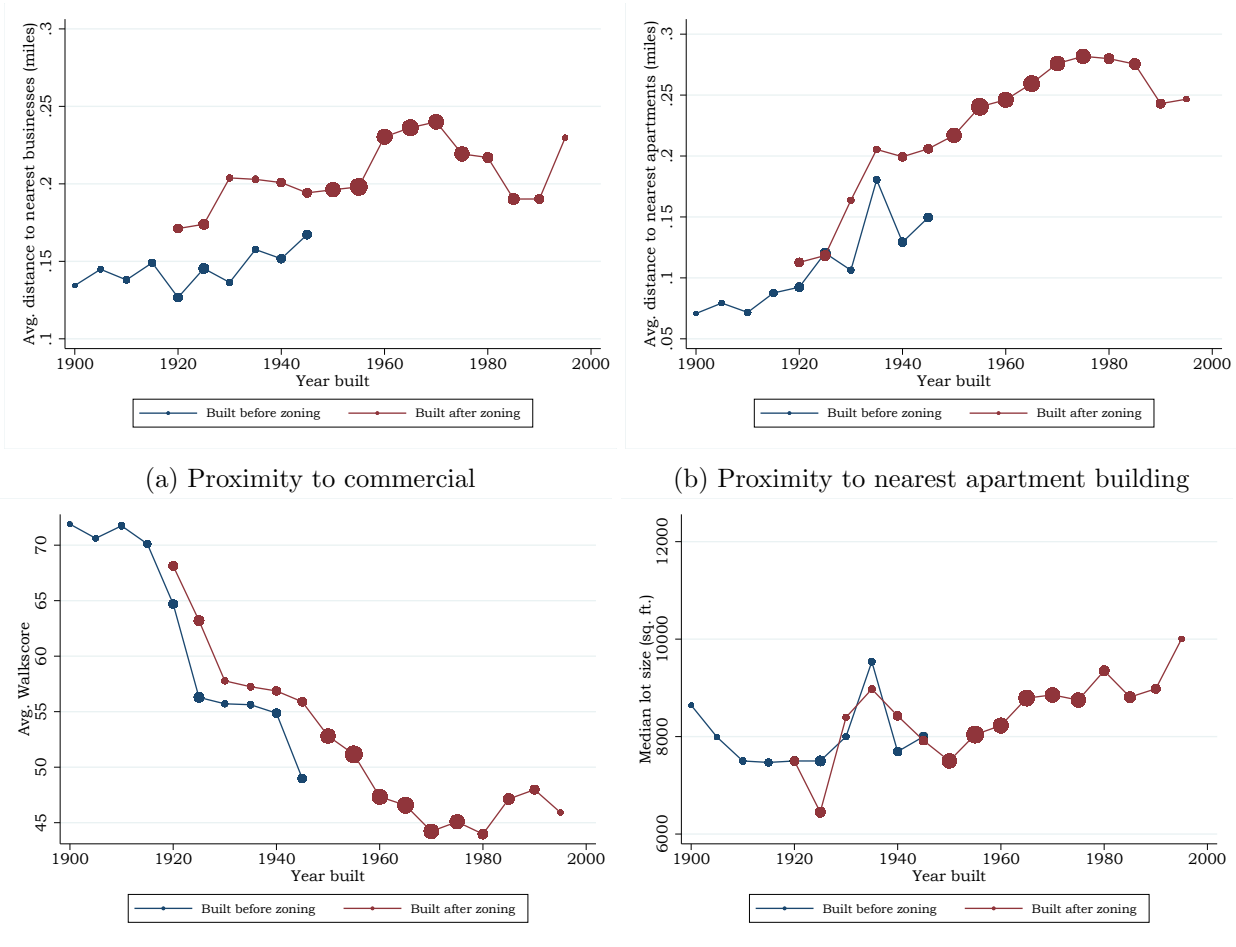
5 The Impact of Zoning on Residential Neighborhoods

We have thus far established that zoning itself shifted the distribution of land use towards single-family homes relative to the type of built environment that emerged in less restrictively regulated areas. In this section we focus on how zoning changed the built environment within these residential neighborhoods.

To understand the impact of zoning on residential neighborhoods, we need a strategy that allows us to disentangle the role of regulation from these broader changes in new neighborhoods being built over time, particularly as the development frontier moved further from Chicago. To visualize these trends, in Figure 9 we plot the characteristics of single-family homes in suburban Cook County today by the year in which they were built, separately for homes built under zoning or before it was adopted. The trends in commercial proximity in Figure 9a suggest that zoned residential development was generally further from the nearest store or retail establishment relative to single-family homes built in unzoned municipalities. However, the difference in average distance is about .07 miles, or 370 feet, which is not substantial, and both zoned and unzoned single-family home developments were gradually being built further from commercial uses.

We can also see that single-family homes were being built further from apartment buildings in both zoned and unzoned municipalities by the mid-1920s in Figure 9b. We similarly see declining walkability in the residential development in both zoned and unzoned municipalities in Figure 9c. The trends are very similar for this outcome, underscoring the need to also consider market explanations for changing development patterns when assessing the role of zoning. Figure 9d visualizes the trends in lot size across both regulated and unregulated development, which appear to follow each other relatively closely. Lot sizes continue to expand after World War II as unzoned development trailed off (see Figure 5).

Figure 9: Trends in Suburban Single-Family Home Characteristics by Year Built



(a) Proximity to commercial

(b) Proximity to nearest apartment building

(c) Walkability

(d) Lot size

Note: Panel (a) and (b) depict the evolution (by year built) of the median distance to nearest commercial and apartment use, respectively, for single-family homes in suburban Cook County municipalities by whether they were built before or after zoning was adopted. Commercial and apartment uses are taken from a 2018 survey by the Chicago Metropolitan Agency for Planning. Panel (c) depicts the median Walkscore for parcels by year built; this metric was taken from Walkscore.com. Panel (d) depicts the evolution of mean lot sizes for single family homes by year built (observed in 2017). Dot sizes are scaled by the number of parcels represented.

These figures suggest a surprisingly limited role for the impact of regulation on residential neighborhoods over the prewar period, with broader market forces shaping the character of new neighborhoods whether regulations were in place or not. To explore this idea further, we consider the universe of residential subdivisions built in Cook County from 1921 (the first year of any suburban zoning ordinance) to 1980 (the last year we treat as covered by a 1970-era zoning ordinance) by their regulatory status at the time of development, which we continue to define as the date that the land

was subdivided. Table 2 contains summary statistics for these subdivisions. Starting at the top of the table, zoning was associated with larger average lot sizes and reduced coefficients of variation of lot sizes within subdivisions. Lots subdivided under zoning had a average size of 10,808 square feet, while those subdivided before zoning were just 8,266 square feet. Lots subdivided *and* built up before zoning had a median size of 9,466 square feet, suggesting the potential for compositional effects. Table 2 also reports that subdivisions developed under zoning were further from the nearest commercial use (.23 versus .16 miles) and apartment building (.27 versus versus .17 miles) and less walkable.

Table 2: Summary Statistics for Subdivisions, 1921-1980

	Subdivided after zoning	Subdivided before zoning	Subdivided & built before zoning
Actual lot size:			
▷ Average	10,808	8,266	9,466
▷ Median	9,000	6,735	7,534
CV of lot size:			
▷ Average	0.13	0.21	0.22
▷ Median	0.10	0.20	0.20
Dist. to commercial use in 2018:			
▷ Average	0.23	0.16	0.15
▷ Median	0.20	0.12	0.12
Dist. to apartments in 2018:			
▷ Average	0.27	0.17	0.17
▷ Median	0.21	0.12	0.12
Walkscore in 2023:			
▷ Average	47	55	54
▷ Median	48	56	55
Total number	6,719	1,186	460

Note: Summary statistics for residential subdivisions in Cook County; subdivisions contain an average of 27 individual parcels. Includes only subdivisions that are eventually incorporated or annexed into a suburban municipality, and excludes any subdivisions that were created on unincorporated land after the Cook County zoning ordinance of 1940 took effect. The "subdivided after zoning" column includes only subdivisions for which every parcel was subdivided after all parcels were subject to zoning. The "subdivided before zoning" column includes only subdivisions for which every parcel was subdivided before any were subject to zoning. The "subdivided & built before zoning" column includes only subdivisions for which every parcel was subdivided and at least 50% of parcels had homes constructed on them before being subject to zoning.

These summary measures, while suggestive, conflate zoning with other factors that were chang-

ing residential development patterns over time. Our empirical approach aims to identify the impact of zoning on new residential subdivisions from other factors that could have shaped the built environment such as the year of development and the subdivision's location within Cook County. We first estimate the impact of zoning without controls using simple regressions relating subdivision characteristics to regulatory status at the time of development. We restrict the analysis to subdivisions that occurred within 5 years of zoning adoption. The top panel of Table 3 reports the results of this regression with the following outcomes: subdivision average lot size, the coefficient of variation of lot size within the subdivision, average distance to the nearest commercial use, average distance to the nearest apartment building, and average Walkscore. The effect on lot size is sizeable and statistically significant, while the effect on distance to nearest industrial use is significant but economically small.

Table 3: Zoning and Prewar (1921-1945) Subdivision Characteristics

	Avg. lot size (1)	CV lot size (2)	Dist. to com (3)	Dist. to apt (4)	Dist. to ind (5)	Avg. Walkscore (6)
Subdivided after zoning	924.63*	-0.01	0.03*	0.01	0.20***	1.00
	(495.05)	(0.01)	(0.02)	(0.02)	(0.05)	(2.12)
Observations	640	622	640	640	640	640
R^2	0.01	0.00	0.01	0.00	0.05	0.00
Controls	No	No	No	No	No	No
Subdivided after zoning	1,619.20***	-0.03**	0.04**	0.04**	0.14***	-0.47
	(459.62)	(0.01)	(0.02)	(0.02)	(0.03)	(1.30)
Observations	640	622	640	640	640	640
R^2	0.29	0.15	0.18	0.21	0.32	0.32
Controls	Yes	Yes	Yes	Yes	Yes	Yes

Note: Unit of observation is a subdivision, which may contain multiple parcels. In both panels, we restrict to subdivisions platted between 1921 and 1945. We further restrict to subdivisions created within 5 years of zoning implementation. In the top panel, there are no additional covariates besides an indicator for whether or not the subdivision occurred under a zoning law. In the lower panel, we additionally include covariates for distances to the CBD of Chicago, the boundary of Chicago, the nearest of each zoning use type in Chicago in 1942, Lake Michigan, the nearest river, and the nearest commuter rail line and station. We also include indicators for the year that subdivision began (which is typically the year most parcels were subdivided within each subdivision). Standard errors are clustered at year of subdivision.

In the lower panel of Table 3 we repeat this exercise controlling for other observable characteristics of parcels, namely the year subdivision occurred and a vector of relevant distance variables. These include distance to the central business district of Chicago, distance to the boundary of Chicago, distance to the nearest of each zoning use type in Chicago in 1942 (industrial, commer-

cial, apartment, townhome, and single family residential), distance to Lake Michigan, distance to the nearest major river, and the nearest commuter rail line and station. These controls are the most important determinants of the kind of residential development that would be delivered by market forces. The estimated effect of zoning is larger once we include controls in the regression, particularly for average lot sizes. Having a zoning ordinance in place was associated with average lot sizes that were 1,619 square feet larger relative to subdivisions in unzoned municipalities, an increase of 20% relative to the pre-zoning mean. The effects of zoning on other aspects of prewar subdivisions were small however, with a zoning ordinance associated with just a .04 mile (200 feet) further distance to the nearest store. These results suggest that zoning explains little of the changes in the built environment of prewar neighborhoods beyond lot size.

Table 4: Zoning and Postwar (1945–1980) Subdivision Characteristics

	Log avg. lot size	Log dist. to com	Log dist. to apt	Log dist. to ind	Avg. Walkscore
	(1)	(2)	(3)	(4)	(5)
Log avg. MLS	0.54***	0.56***	0.71***	0.61***	-16.35***
	(0.03)	(0.05)	(0.06)	(0.06)	(0.95)
Observations	5,790	5,783	5,705	5,790	5,790
R^2	0.17	0.04	0.05	0.05	0.10
Controls	No	No	No	No	No
Log avg. MLS	0.48***	0.33***	0.34***	0.38***	-6.64***
	(0.03)	(0.05)	(0.05)	(0.06)	(0.96)
Observations	5,755	5,748	5,670	5,755	5,755
R^2	0.27	0.11	0.17	0.26	0.25
Controls	Yes	Yes	Yes	Yes	Yes

Note: Unit of observation is a subdivision, which may contain multiple parcels. In both panels, we restrict to subdivisions platted after 1945 (inclusive) and subject to a minimum lot size. We exclude subdivisions with a greater than 15,000 square foot MLS (top 5% of the sample), as these areas were significantly more rural in character. In the top panel, there are no additional covariates besides the natural log of average MLS. In the lower panel, we additionally include covariates for distances to the CBD of Chicago, the boundary of Chicago, the nearest of each zoning use type in Chicago in 1942, Lake Michigan, and the nearest river, and the nearest commuter rail line and station. We also include a measure of land values in 1943 and indicators for the year that subdivision began (which is typically the year most/all parcels were subdivided within each subdivision). Standard errors are clustered at year of subdivision.

We also explore the intensive margin impact of zoning in the postwar era, when unzoned development was gradually disappearing. Specifically, we focus on the relationship between minimum lot size regulations and the built environment from 1945 to 1980 in municipalities that adopted comprehensive zoning ordinances. In Table 4 we report the relationship between the log of average

MLS with respect to the same set of characteristics of the built environment, again without (top) and with (lower) controls for year of development and location within Cook County. The inclusion of controls reduces the estimated elasticity of average MLS with respect to average lot size from .54 to .48. The relationship between log average MLS and the other characteristics of the built environment is reduced by about half with controls. As we may expect, larger MLS requirements affected other aspects of the built environment, reducing Walkscores and pushing stores and apartments farther away.

The robustness and magnitude of the effect on lot size strongly suggests that zoning impacted the built environment of suburbs beyond what we would have expected from the expanding urban frontier and forces in the private market. However, both zoned and unzoned developments were becoming less diverse and walkable as early as the 1920s. These results underscore the powerful incentives faced by developers to build detached single-family homes in exclusively residential neighborhoods.

6 Measuring Minimum Lot Size Regulations in the Past

The data work in this paper required a years-long archival effort and the existence of an unusually well-equipped county GIS office. It would thus be extraordinarily difficult to replicate this approach for a broader sample of metro areas. Yet zoning – particularly for minimum lot sizes – has become central to many housing policy debates, and researchers will continue to demand better data on these regulations. We close the paper by considering what we can learn from our setting, in which nearly everything was observed, to inform research on broader geographic contexts.

First, recall that the date of land subdivision is rarely observed, and that it was often decades before houses were built on the resulting parcels. To illustrate why this is a challenge for identifying the impact of zoning, we demonstrate how easy it is to "estimate" an economically meaningful effect of zoning when these regulations had little scope for impact. Consider our baseline estimate of the impact of mixed-use zoning on the diversity of the built environment today from the first column of Table 1. The effect of .68 is identified from greenfield development, that is, quarter sections that were not subdivided before zoning was adopted. We repeat this estimate in the first column of Table 5. In column (2), we run the same regression on quarter sections that were not yet built up

before zoning was adopted, but may have been subdivided before zoning.[20] In these areas, zoning could still have had some scope for impact. The coefficient is .61 and significant at the one percent level.

We then restrict the sample to quarter sections where zoning could *not* have had much of an impact, because the land was already developed. In column (3), we restrict attention to quarter sections where 90% of subdivision activity occurred before zoning was adopted in the municipality. Zoning still appears to have an economically important (albeit attenuated) impact on land use diversity today. In column (4), we consider only quarter sections that were almost entirely developed, that is, subdivided and built up, prior to the adoption of zoning.[21] Even in these areas we "estimate" a significant effect of zoning that is very similar to the well-identified estimate. But zoning had very little scope to impact the diversity of land use in these areas. These results underscore how difficult it is to credibly estimate effects of zoning when these regulations are almost always designed around existing development. In other contexts, researchers simply cannot observe whether regulation or land subdivision came first. We emphasize that information on the year a house was built, almost always present in transaction records, does not solve this problem, because this date may be decades after the lots were established.

The difficulties of measuring timing manifest across other approaches to estimating the impact of zoning. One increasingly common approach to measuring past lot size regulations without an archival data effort is to impute these zoning parameters from contemporary lot sizes and the date of construction of houses. Several recent papers use such approaches to consider the impact of minimum lot sizes on various outcomes such as home prices and racial segregation (Cui, 2024; Macek, 2024; Song, 2025; Zabel & Dalton, 2011). These papers estimate minimum lot size regulations using discontinuities in the distribution of lots sizes across some area observed in property tax records or other national datasets. The intuition is that lot sizes will "bunch" to the right of binding minimum lot sizes, making it possible to detect such regulations using econometric methods. What can we learn from our setting to guide the interpretation of these more indirect approaches?

[20] To be included in this sample, at least 90% of parcels must have been built up after zoning; we impose no restriction on year of subdivision.

[21] To be included in this sample, at least 90% of parcels must have been subdivided before zoning, and at least half must have been built up before zoning.

Table 5: Causal and "Causal" Effects of Zoning

	Land use diversity, 2018			
	(1)	(2)	(3)	(4)
Mixed use zoning, 1921-80	.68***	.61***	.5***	.65***
	(.074)	(.057)	(.053)	(.097)
Observations	245	392	337	73
R^2	0.37	0.34	0.39	0.84
Med. 1940 population	0	6	422	2,099
Controls	Yes	Yes	Yes	Yes
Subdivided after zoning	Yes	No	No	No
Built after zoning	No	Yes	No	No
Subdivided before zoning	No	No	Yes	Yes
Built before zoning	No	No	No	Yes
HC3 standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1				

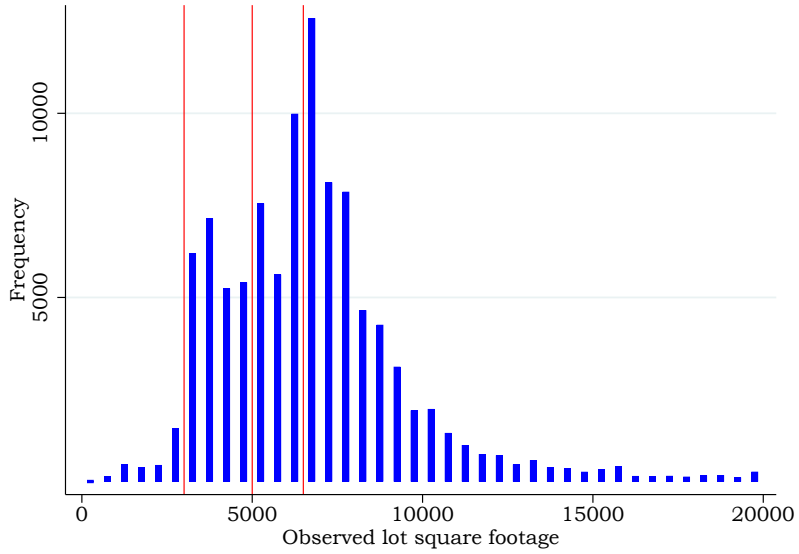
Note: Unit of observation is a quarter section and only the portion which is zoned. All regressions include covariates for the quarter section's distance to the central business district of Chicago, distance to the boundary of Chicago, distance to the nearest of each zoning use type in Chicago in 1942 (industrial, commercial, apartment, townhome, and single family residential), distance to Lake Michigan, distance to the nearest major river, 1943 land value, 1940 population, 1940 Black share, and indicators for the median decade of development for parcels inside the square.

The primary difficulty with these approaches is that we have very little understanding of what unregulated development would have looked like at the same time and place. Put differently, how lumpy would the lot size distribution be if private developers had subdivided the land before zoning ordinances were in place? An advantage of the dataset we have assembled for Cook County is that we can gain intuition on precisely this question: we can directly measure the distribution of lot sizes for neighborhoods platted before zoning. We begin with the top panel of Figure 10, which visualizes the distribution of lot sizes for all homes built in the 1950s across incorporated suburbs of Cook County. We see a substantial degree of "bunching" to the right of common MLSs such as 3,000, 5,000, and 6,000 square feet. Do these jumps in the distribution reflect regulation? Since we can observe the date of subdivision and match it to the regulations in place at the time, we can repeat this exercise restricting to homes built on parcels that were subdivided *before* zoning was adopted in the municipality. We see even more pronounced bunching around the same three minimum lot sizes. Because these lots were all subdivided before zoning was present, this bunching around round numbers is solely the result of developer choices.

Why do lot sizes chosen by private developers exhibit this same bunching around round numbers? Advertisements in newspapers at the time reveal that developers often stated sizes of lots they were selling to aspiring homeowners. It was likely more appealing to subdivide land evenly and advertise "new homes on 5,000 square foot lots!," rather than advertise lots of slightly smaller dimensions, appealing to the converse of the marketing logic that guides price setting. There is also ample historical evidence to suggest that developers intended to market their developments to buyers of a certain class. Uniformly large lots were one of many tools used to exclude lower-income households, and particularly African-American households, from these communities.

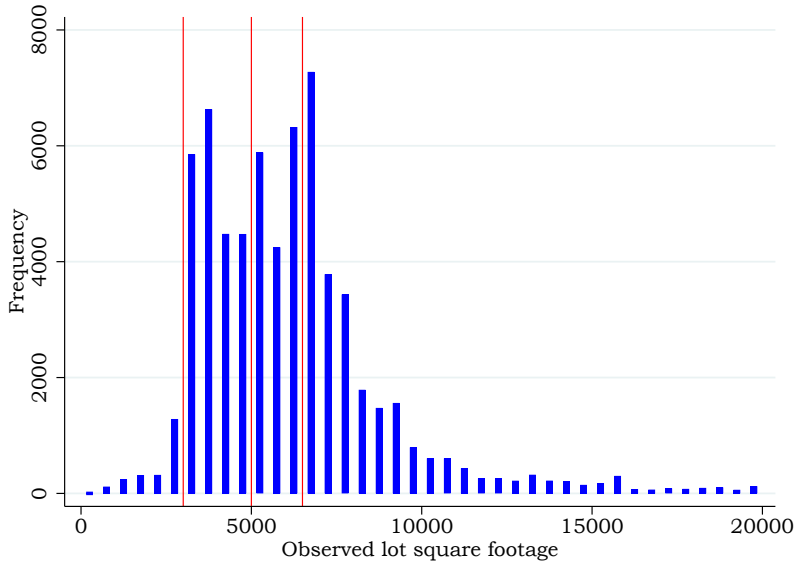
If developer lot size choices bunch around common round numbers to a similar extent whether regulations were in place or not, what can economists learn about regulation from the current built environment? In the top panel of Figure 11, we plot the ratio of observed lot sizes to either the minimum lot size in place at the time, or the first future minimum lot size to be adopted for that parcel if it was subdivided before zoning, for all homes built in the 1950s. As expected, we see the most mass at 1, consistent with lot size regulations being binding. However, if we reproduce the same plot for only parcels that were subdivided before zoning was adopted and compute the ratio of lot sizes to the *future* MLS, we see almost the same degree of mass around 1 (right panel of

Figure 10: The Distribution of Lot Sizes for Suburban Homes Built in 1950s



(a) All houses built 1950s

Note: $N = 102,516$ parcels built in the 1950s. Red lines represent 3 common MLS values of 3,000, 5,000, and 6,000.

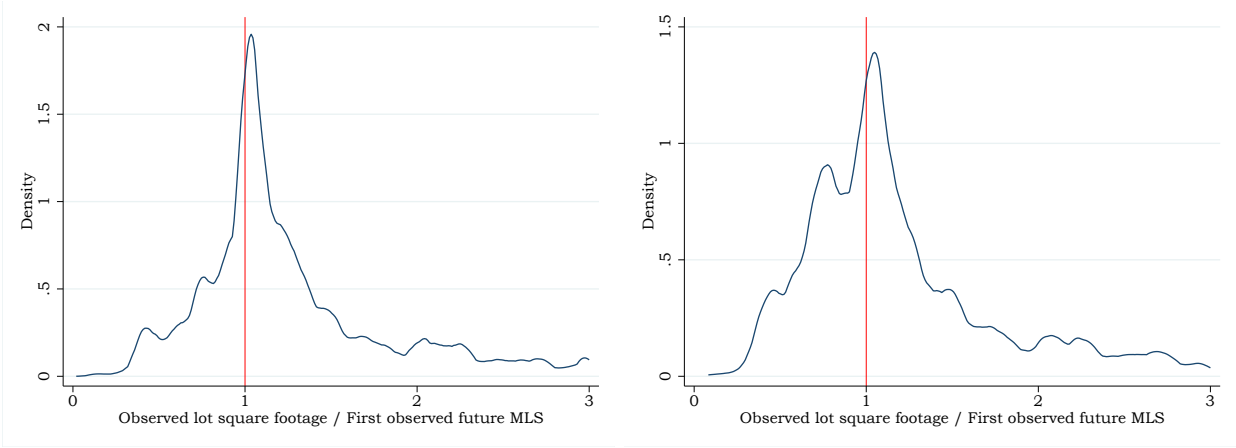


(b) Houses on lots subdivided before zoning

Note: $N = 64,765$ parcels subdivided before they were zoned and built in the 1950s. Red lines represent 3 common future MLS values of 3,000, 5,000, and 6,000.

Figure 11). This figure is consistent with what we know about historical land use regulation from the city of Chicago (Shertzer et al., 2018), which is that zoning often followed existing land use patterns.

Figure 11: Minimum Lot Size Regulations Followed Earlier Subdivision



(a) Built in 1950s, first observed MLS

(b) Subdivided before zoning, future MLS

Note: These figures show the ratio of the observed lot size for homes built in the 1950s to the first minimum lot size regulation. The MLS regulation in panel (a) is in place because this sample is zoned and the MLS regulation in panel (b) is the first regulation that will be adopted in the future because this sample has not yet been zoned.

Figures 10 and 11 focus on the 1950s, but in Appendix Figures A2 and A3 show the same patterns for the 1920s, 1940s, and 1960s. Taken all together, the evidence presented here demonstrates that minimum lot sizes can appear binding because they were, or because regulations were designed to match existing subdivision, which frequently featured lot sizes of particular round numbers. Although it is difficult to detect whether the lot size distribution is driven by regulation or private markets, they are an important part of the built environment and worthy of further study, particularly because they are very costly to change (Brooks & Lutz, 2016; Gallagher et al., 2019). We acknowledge that parcel subdivision information is very difficult to obtain, and thus imputation methods will remain important for future work. Our goal here was to better understand what today's lot size distribution can tell us about the regulations of the past.

7 Conclusion

In this paper, we construct the first panel dataset of zoning regulations for a major American metropolitan area and use it to study how comprehensive land use regulation shaped the suburban built environment. The Cook County Longitudinal Zoning Database documents the evolution of zoning bylaws and maps across more than 120 municipalities from the early 1920s through 1980,

a period during which a significant share of the U.S. housing stock was originally developed. We combine these historical regulations with unusually detailed spatial data on parcel subdivision and home construction dates to implement a research design that isolates the causal impact of zoning on land use outcomes.

The results paint a consistent picture of zoning as a powerful force in shaping the character of American suburbs. Parcels that were subdivided and developed after the adoption of zoning ordinances are considerably more likely to be devoted to single-family residential uses and feature larger lots than those that were developed before such regulations arrived. The median post-zoning neighborhood set aside over 90% of land for single-family homes, but having adopted the most diverse zoning we observe reduces the single family share by about half, with most of this land having been redistributed to businesses and apartments in equal measure. Minimum lot size regulations were also binding earlier than has been widely appreciated, with prewar regulations associated with lots approximately 20% larger than those produced by unregulated private markets. These findings suggest that zoning substantially altered the trajectory of suburban development relative to what the market would have provided on its own, despite the fact that demand for low-density, car-oriented neighborhoods was already strong in the early twentieth century.

This paper also sheds new light on the relationship between zoning regulations and prior land use patterns. A well-documented concern in the study of land use regulation is that zoning may simply follow existing development rather than independently constraining it. We find abundant evidence that zoning was designed to match existing patterns of development, particularly for lots, complicating efforts to impute regulations from the current distribution of lot sizes. But the zoning of undeveloped land had stark consequences. The greenfield analysis we undertook in this paper makes clear that for land that was zoned before it was developed, regulations had real and substantial effects on the suburban form that eventually emerged. Most prominently, zoning sharply reduced the share of land available for stores and apartments in favor of single-family homes.

Zoning remains a critically important area of future research, and the construction of the Cook County Longitudinal Zoning Database points toward several directions. An important next step is developing methods to recover historical regulations governing allowable land uses at a larger geographic scale, a task that to our knowledge has not yet been attempted for any major metropolitan area beyond Chicago. The patterns documented here suggest that zoning was used to systemati-

cally exclude commercial uses and apartments from the suburbs, but it remains an open question how generalizable these findings are to other metropolitan contexts with different regulatory histories and demographic trajectories. A further challenge for future work is the difficulty of obtaining parcel subdivision dates at scale, which limits the ability to disentangle the effects of regulation from those of prior private market activity. Addressing these data gaps will be essential for building a fuller understanding of how land use regulation has shaped the American metropolitan landscape over the long run.

References

Anagol, S., Ferreira, F. V., & Rexer, J. M. (2021). Estimating the economic value of zoning reform. *National Bureau of Economic Research Working Paper*.

Bartik, A., Gupta, A., & Milo, D. (2025). The costs of housing regulation: Evidence from generative regulatory measurement. *Available at SSRN 4627587*.

Brocker, M., & Hanes, C. (2013). The 1920s American real estate boom and the downturn of the Great Depression: Evidence from city cross sections. *National Bureau of Economic Research Working Paper*.

Brooks, L., & Lutz, B. (2016). From today's city to tomorrow's city: An empirical investigation of urban land assembly. *American Economic Journal: Economic Policy*, *8*(3), 69–105.

Commission, C. P. (1953). *Official City Plan of the City of Minneapolis, Minnesota*. City of Minneapolis, Minnesota.

Cui, T. (2024). Did Race Fence Off The American City? The Great Migration and the Evolution of Exclusionary Zoning. *Working paper*.

Davidoff, T. et al. (2016). Supply constraints are not valid instrumental variables for home prices because they are correlated with many demand factors. *Critical Finance Review*, *5*(2), 177–206.

Erdmann, A. G. (1940). The Rural Zoning Ordinance of Cook County. *The Journal of Land & Public Utility Economics*, *16*(4), 438–442.

Field, A. J. (1992). Uncontrolled land development and the duration of the Depression in the United States. *Journal of Economic History*, *52*(4), 785–805.

Fischel, W. A. (2004). An economic history of zoning and a cure for its exclusionary effects. *Urban Studies*, *41*(2), 317–340.

Fischel, W. A. (2005). *The homevoter hypothesis: How home values influence local government taxation, school finance, and land-use policies*. Harvard University Press.

Gallagher, R., Liu, Y., & Sigler, T. (2019). Parcel amalgamation as a mechanism for achieving urban consolidation through densification: The fixity of property boundaries over time. *Land Use Policy*, *89*, 104239.

Gallagher, R., Sigler, T., & Liu, Y. (2025). How path dependent urban morphology restricts the effectiveness of rezoning for urban consolidation: Lessons from Brisbane, Australia. *Journal of Urban Affairs*, *47*(4), 1208–1228.

Ganong, P., & Shoag, D. (2017). Why has regional income convergence in the U.S. declined? *Journal of Urban Economics*, *102*, 76–90.

Gates, P. W. (1996). *The Jeffersonian Dream: Studies in the History of American Land Policy and Development*. University of New Mexico Press.

Glaeser, E. L., Gyourko, J., & Saks, R. E. (2005). Why have housing prices gone up? *American Economic Review*, *95*(2), 329–333.

Glaeser, E. L., & Ward, B. A. (2009). The causes and consequences of land use regulation: Evidence from Greater Boston. *Journal of Urban Economics*, *65*(3), 265–278.

Glickfeld, M., & Levine, N. (1992). *Regional growth–local reaction: The enactment and effects of local growth control and management measures in California*. Lincoln Institute of Land Policy.

Gordon, C. (2023). *Patchwork apartheid: Private restriction, racial segregation, and urban inequality*. Russell Sage Foundation.

Gyourko, J., & Krimmel, J. (2021). The impact of local residential land use restrictions on land values across and within single family housing markets. *Journal of Urban Economics*, *126*, 103374.

Gyourko, J., & McCulloch, S. (2023). Minimum lot size restrictions: Impacts on urban form and house price at the border. *National Bureau of Economic Research Working Paper*.

Gyourko, J., Saiz, A., & Summers, A. (2008). A new measure of the local regulatory environment for housing markets: The Wharton Residential Land Use Regulatory Index. *Urban Studies*, *45*(3), 693–729.

Hall, P. (2014). *Cities of tomorrow: An intellectual history of urban planning and design since 1880*. John Wiley & Sons.

Hirt, S. A. (2015). *Zoned in the USA*. Cornell University Press.

Hoyt, H. (1933). *One Hundred Years of Land Values in Chicago* (Doctoral dissertation). The University of Chicago.

Jackson, K. T. (1987). *Crabgrass frontier: The suburbanization of the United States*. Oxford University Press.

Jacobs, J. (1961). *The Death and Life of Great American Cities*. Random House.

Keating, A. D. (1988). *Building Chicago: Suburban developers & the creation of a divided metropolis*. The Ohio State University Press.

Krimmel, J. (2021). Reclaiming local control: School finance reforms and housing supply restrictions. *FRB Working Paper*.

Lindenthal, T., Eichholtz, P., & Geltner, D. (2017). Land assembly in Amsterdam, 1832–2015. *Regional science and urban economics*, *64*, 57–67.

Macek, J. (2024). Housing Regulation and Neighborhood Sorting across the United States. *Working Paper*.

McMillen, D. P., & McDonald, J. F. (2002). Land values in a newly zoned city. *Review of Economics and Statistics*, *84*(1), 62–72.

Molloy, R. (2020). The effect of housing supply regulation on housing affordability: A review. *Regional Science and Urban Economics*, *80*(100).

Olcott, G. C. (1943). *Cook County Zoning and Land Values 1943*. George C. Olcott & Co.

Rothstein, R. (2017). *The color of law: A forgotten history of how our government segregated America*. Liveright publishing.

Sahn, A. (2025). Racial diversity and exclusionary zoning: Evidence from the Great Migration. *Journal of Politics*, *87*(4), 1302–1318.

Schuetz, J. (2022). *Fixer-Upper: How to Repair America's Broken Housing Systems*. Brookings Institution Press.

Schwieterman, J. P., & Caspall, D. M. (2006). *The politics of place: A history of zoning in Chicago*. Lake Claremont Press.

Shertzer, A., Twinam, T., & Walsh, R. P. (2018). Zoning and the economic geography of cities. *Journal of Urban Economics*, *105*, 20–39.

Song, J. (2025). The effects of residential zoning in us housing markets. *Journal of Urban Economics*, *149*, 103784.

Sood, A. et al. (2024). The long shadow of housing discrimination: Evidence from racial covenants. *Available at SSRN 4606234*.

Trounstine, J. (2018). *Segregation by design: Local politics and inequality in American cities*. Cambridge University Press.

Trounstine, J. (2020). The geography of inequality: How land use regulation produces segregation. *American Political Science Review*, *114*(2), 443–455.

Turner, M. A., Haughwout, A., & Van Der Klaauw, W. (2014). Land use regulation and welfare. *Econometrica*, *82*(4), 1341–1403.

Twinam, T. (2018). The long-run impact of zoning: Institutional hysteresis and durable capital in Seattle, 1920–2015. *Regional Science and Urban Economics*, *73*, 155–169.

Wallace, N. E. (1988). The market effects of zoning undeveloped land: Does zoning follow the market? *Journal of Urban Economics*, *23*(3), 307–326.

Weiss, M. A. (2002). *The rise of the community builders: The American real estate industry and urban land planning*. Beard Books.

White, E. N. (2009). Lessons from the great American real estate boom and bust of the 1920s. *National Bureau of Economic Research Working Paper*.

Wolf, M. A. (2008). *The zoning of America: Euclid v. Ambler*. University Press of Kansas.

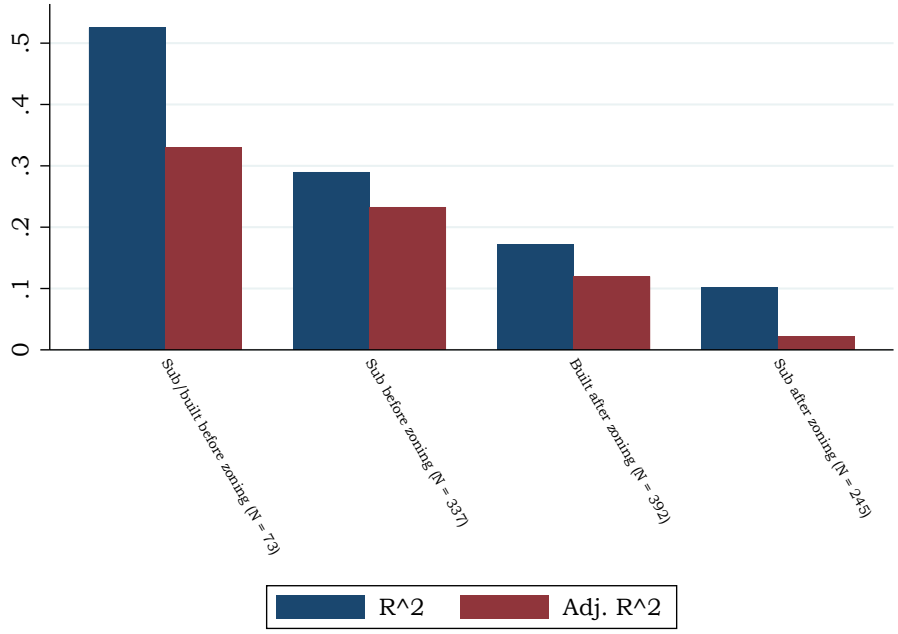
Xu, W., Markley, S., Bronin, S. C., & Drogaris, D. (2023). A national zoning atlas to inform housing research, policy, and public participation. *Cityscape*, *25*(3), 55–72.

Zabel, J., & Dalton, M. (2011). The impact of minimum lot size regulations on house prices in Eastern Massachusetts. *Regional Science and Urban Economics*, *41*(6), 571–583.

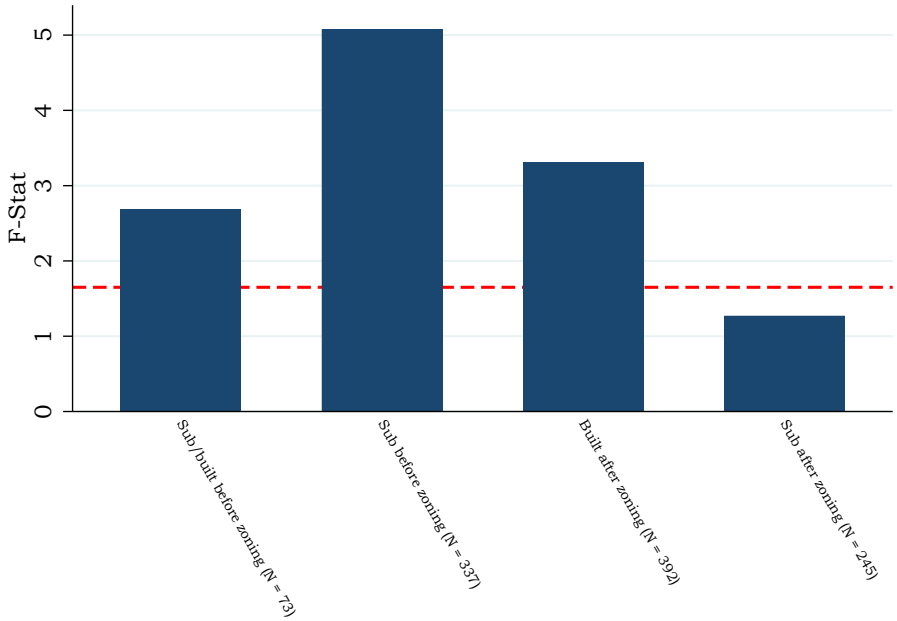
A Appendix

A.1 Supplemental Results

Figure A1: Predicting Zoning Diversity

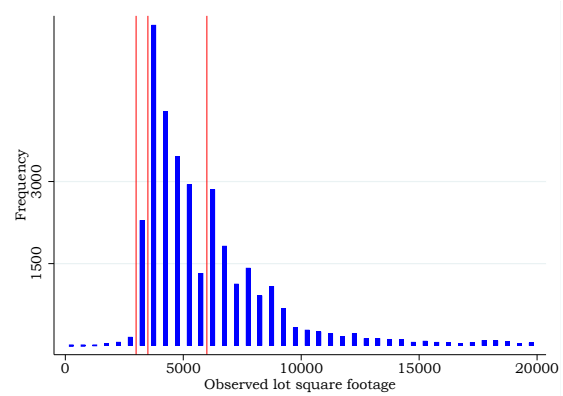


(a) R^2 and adjusted R^2 from estimating equation (2) on different samples.

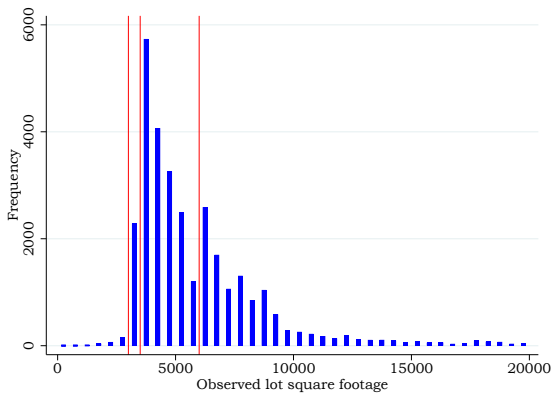


(b) F-statistic from estimating equation (2) on different samples; dashed red line depicts significance at the 5% confidence level.

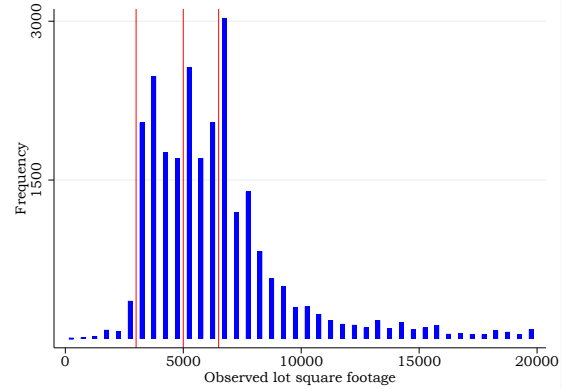
Figure A2: The Distribution of Lot Sizes for Suburban Homes Built in 1920s, 1940s, and 1960s



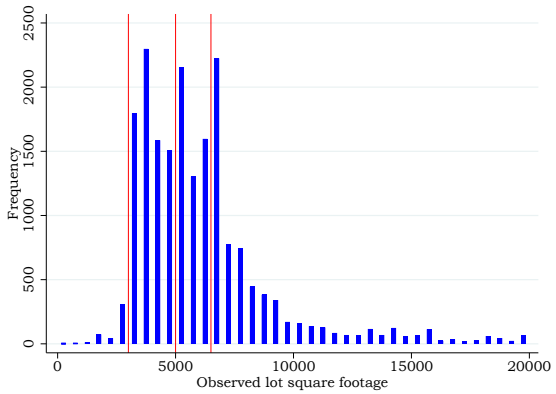
(a) All houses built in 1920s



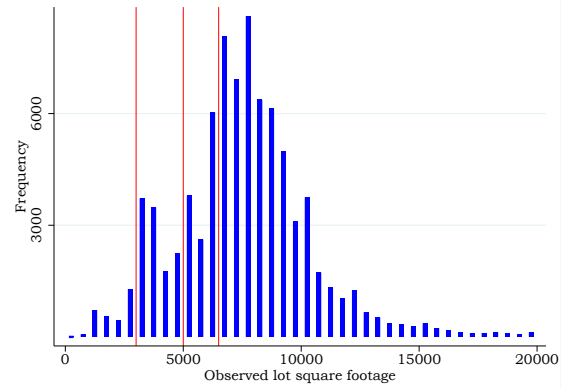
(b) Houses on lots subdivided before zoning, 1920s



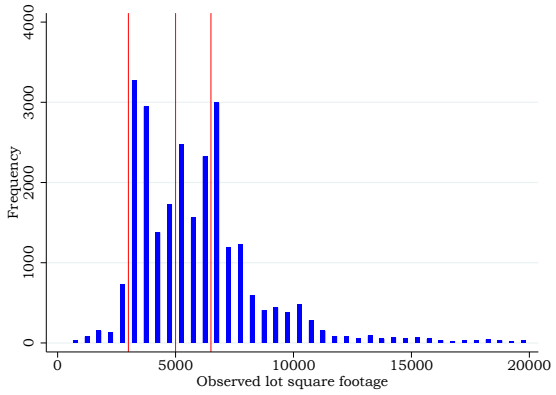
(c) All houses built in 1940s



(d) Houses on lots subdivided before zoning, 1940s



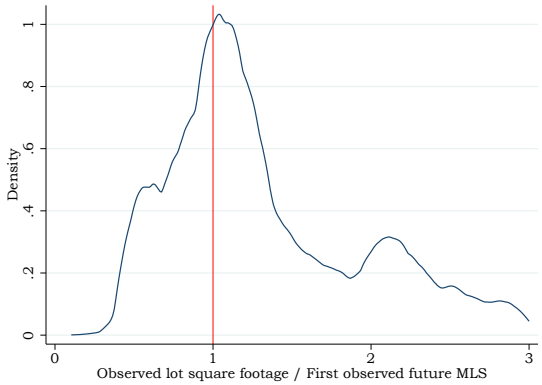
(e) All houses built in 1960s



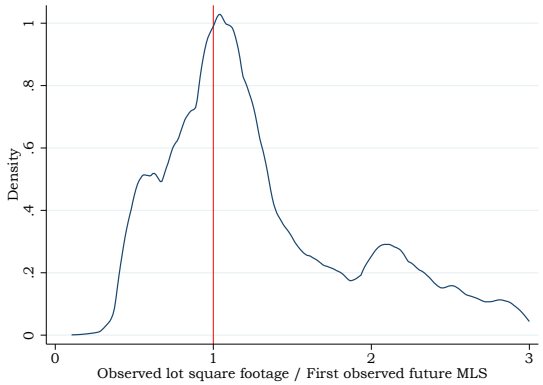
(f) Houses on lots subdivided before zoning, 1960s

Notes: Red lines represent 3 common MLS values. For the 1920s they are 3000, 3500, and 6000 square feet. For the 1940s and 1960s they are 3,000, 5,000, and 6,500 sq ft. Left panels show all houses built in each decade; right panels restrict to parcels subdivided before they were zoned.

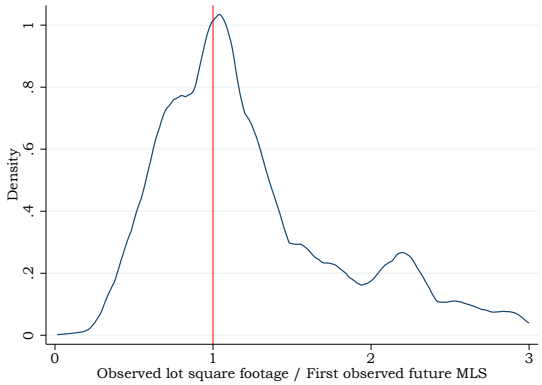
Figure A3: Minimum Lot Size Regulations Followed Earlier Subdivision: 1920s, 1940s, and 1960s



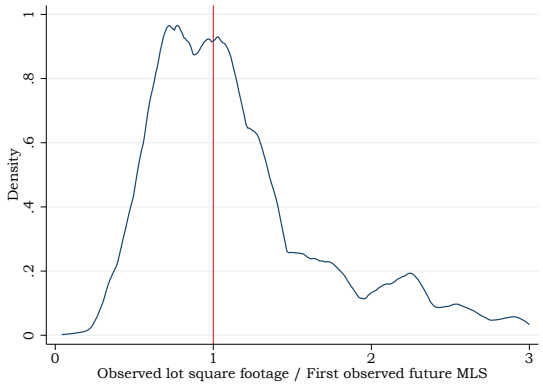
(a) Built in 1920s, first observed MLS



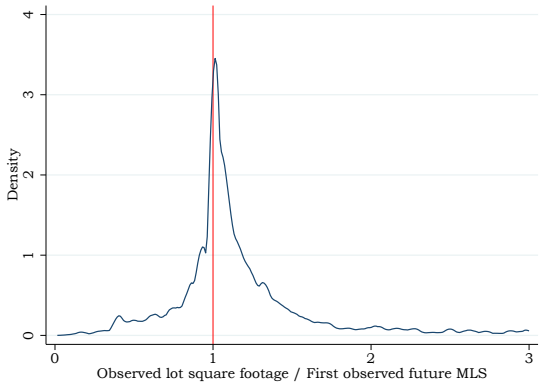
(b) Subdivided before zoning in 1920s, future MLS



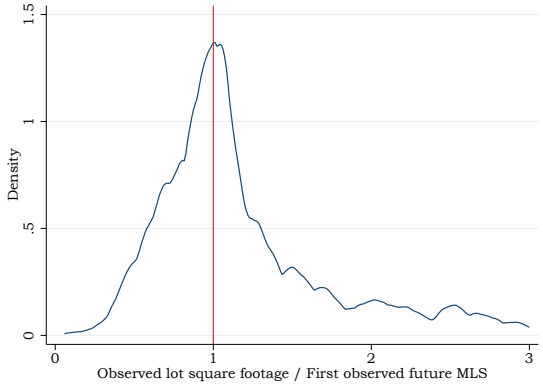
(c) Built in 1940s, first observed MLS



(d) Subdivided before zoning in 1940s, future MLS



(e) Built in 1960s, first observed MLS



(f) Subdivided before zoning in the 1960s, future MLS

Notes: Each panels shows the ratio of observed lot square footage for houses built in the respective decade to the first observed minimum lot size, either in place (left panel) or that will be adopted in the future (right panel).

A.2 Cook County Longitudinal Zoning Database Construction

The Cook County Longitudinal Zoning Database (CCLZD) was constructed from numerous primary and secondary sources. Official records sourced directly from municipalities or academic and public libraries were used when available. Archives of local newspapers, which often printed zoning ordinances (including amendments) and zoning maps, were also an important source of official information, particularly for the earlier years of our study period. Another source of zoning laws was a three-volume collection of official suburban Cook County zoning ordinances as of May 1991/92 published by the Index Publishing Corporation. Information from these volumes was used in instances when a municipality's zoning ordinance in place as of 1991/92 reflected an older (unchanged) ordinance relevant to our study period. Secondary sources for zoning data were used to populate the remainder of the database when primary sources such as the official records were unavailable. These sources included various historic compendiums distributed by Geo. C. Olcott & Co. publishers, most notably editions of its *Olcott's Land Values Book of Chicago*, *Olcott's Land Values Blue Book of Cook County*, and *Chicago Zoning Ordinance and Zoning Maps* publications, each of which provides detailed information on select Cook County suburbs' zoning ordinances.

A suburban zoning ordinance at any given period in time consists of two separate components: the bylaws and the map. For our purposes, an ordinance's bylaws make up the explicit language outlining use parameters for any given parcel of land within the municipality's corporate boundaries. Use parameters are typically organized by zoning district. The aspects of an ordinance's bylaws most important to our study include:

- The establishment of individual and mutually exclusive zoning districts within the municipality,
- The numerous land-use restrictions unique to each zoning district (e.g., allowed uses, minimum lot size requirements, height restrictions, etc.), and
- The range of dates when a particular set of bylaws were in effect.

The zoning ordinance's map outlines how the ordinance's bylaws are distributed across space. These maps are typically very straightforward and depict the physical boundaries for each zoning district within the municipality. Additional information often printed on a map include the publication date, the dates of revision, ordinance numbers linked to particular revisions, and brief summaries of the bylaws.

We digitized an ordinance's map and bylaws with the goal of constructing a database that allows us to observe the zoning parameters assigned to any particular parcel of land on any given date within our study period, 1921–1980. We start by digitizing all relevant bylaws from each municipality's first zoning ordinance (if available). We then repeat this exercise for every subsequent comprehensive zoning amendment known to have passed during or after our project's study period.[22] Making use of an ordinance's precise start and end dates allows us to construct a database

[22]The dates (and ordinance numbers) of particular amendments are typically documented within the language of

that observes the near-continuous evolution of an individual municipality's zoning bylaws over time.

A zoning ordinance's map allows us to observe how the numerous restrictions outlined within a set of bylaws vary across space at a particular point in time. However, maps can change shape even when the underlying bylaws do not; this is most often due to municipal annexation of new territory or individual parcels or tracts of land being rezoned upon request of individual land owners. The CCLZD therefore relies on a series of snapshots over time of a municipality's zoning map in order to observe the spatial-temporal evolution of its zoning bylaws. For municipalities first zoned in the 1920s, we digitized the zoning map as it would have looked around the time that the first zoning ordinance passed. For all subsequent periods, we digitized the map's shape as it would have been in the years centered around 1940, 1950, 1960, and 1970.[23]

Individual zoning maps were typically digitized by overlaying their images (either digitally through georeferencing techniques or visually) onto a set of baseline maps, such as more current land parcel and street grid maps, to help us identify nuanced spatial variation in historic zoning boundaries. Figure A4a and Figure A4b provide a brief example of our map-digitization technique, which often involved overlaying the original map onto the contemporary street grid.[24] This example focuses on the suburb of Chicago Ridge. Once the maps for a particular snapshot period were digitized, a municipality's relevant bylaws were merged to their corresponding map using a unique zoning district identifier. An example of the zoning districts for the Chicago Ridge suburb can be found in Figure A5.

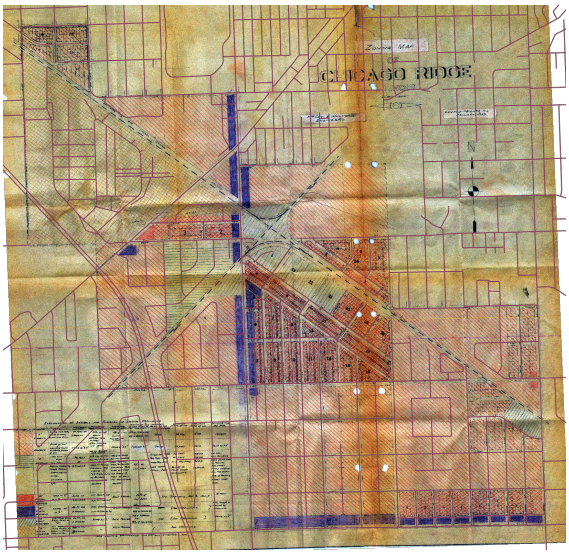
We took special care to ensure that the map digitized for a particular snapshot period was relevant to the merged bylaws and vice versa. This is a particularly important step in instances when a major change to a municipality's bylaws occurred within the snapshot window (i.e., +/- 4 years from the year ending in 0). For example, if a comprehensive amendment to a municipality's zoning ordinance was passed in 1961, the new bylaws accompanying this revision would be assigned to the 1960 snapshot period (because the revision fell within +/- 4 of 1960). We would then take steps to make sure that the 1960s-era map merged to these bylaws reflected a period on or after the new ordinance's 1961 date of passage and not, for example, a 1959 map.

the bylaws themselves, which considerably eased our data collection efforts by allowing us to make precise public record requests to a municipality for copies of the official records when needed.

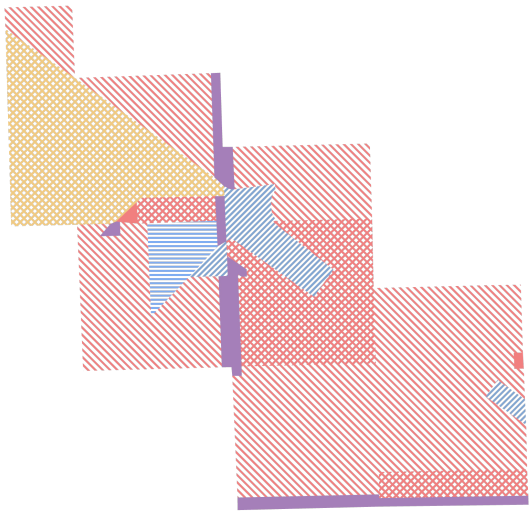
[23] We rely on source maps dated as close as possible to the year ending in '0' when digitizing maps for 1940/50/60/70. We typically allow for a window of time of no more than +/- 4 years (centered around 1940/50/60/70) when choosing source maps to digitize. For example, we made every attempt to use maps dated no later than 1964 and no earlier than 1956 to construct the municipality's "1960-era map."

[24] The bylaws themselves also often provided official language describing a map's unique boundaries, particularly in earlier years when maps were less complex and therefore easy enough to describe using legal descriptions of land.

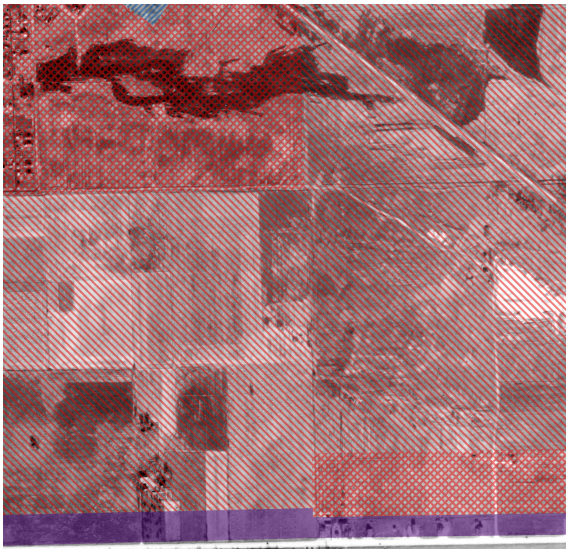
Figure A4: Zoning Maps for Chicago Ridge, IL in 1945



(a) Original paper map



(b) Digitized zoning map



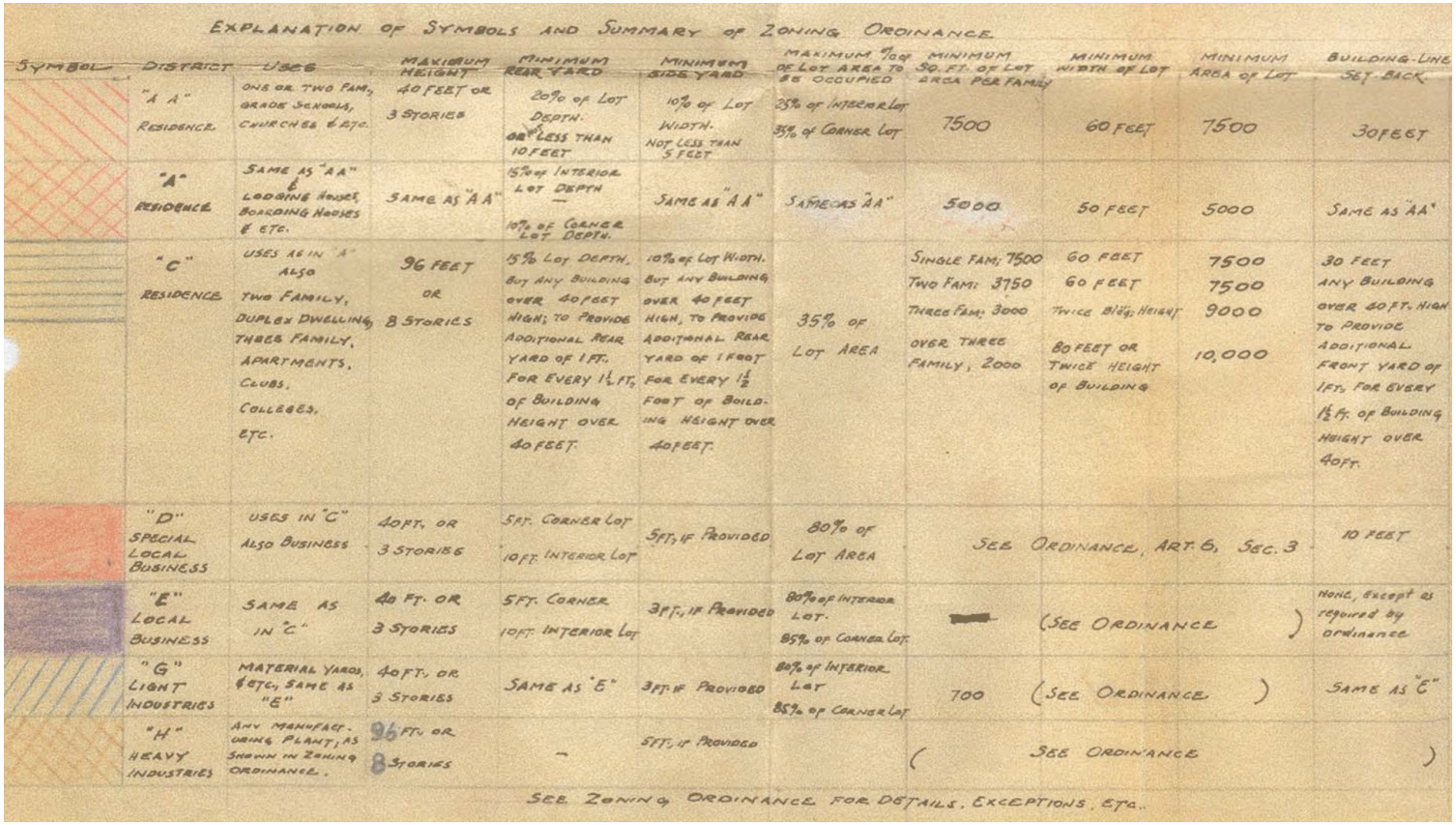
(c) Zoning variation in 1945



(d) Aerial survey photo, 1938-9

Source: Chicago Ridge's 1945 zoning map was provided the Village of Chicago Ridge's Clerk's Office. The 1938-39 aerial photos were originally produced by the United States Department of Agriculture's Agricultural Adjustment Administration under the guidance of the 1933 Agricultural Adjustment Act. Photo archives for Illinois are distributed through the Illinois Natural Resources Geospatial Clearinghouse. See https://clearinghouse.isgs.illinois.edu/webdocs/ilhap/ for the complete set of images.

Figure A5: Chicago Ridge 1945 Ordinance Legend



EXPLANATION OF SYMBOLS AND SUMMARY OF ZONING ORDINANCE

SYMBOL	DISTRICT	USES	MAXIMUM HEIGHT	MINIMUM REAR YARD	MINIMUM SIDE YARD	MAXIMUM % OF LOT AREA TO BE OCCUPIED	MINIMUM SQ. FT. OF LOT AREA PER FAMILY	MINIMUM WIDTH OF LOT	MINIMUM AREA OF LOT	BUILDING-LINE SET BACK
	"A A" RESIDENCE	ONE OR TWO FAM., GRADE SCHOOLS, CHURCHES ETC.	40 FEET OR 3 STORIES	20% of LOT DEPTH. OR LESS THAN 10 FEET	10% of LOT WIDTH. NOT LESS THAN 5 FEET	25% of INTERIOR LOT 35% of CORNER LOT	7500	60 FEET	7500	30 FEET
	"A" RESIDENCE	SAME AS "AA" & LODGING HOUSES, BOARDING HOUSES & ETC.	SAME AS "AA"	15% of INTERIOR LOT DEPTH — 10% of CORNER LOT DEPTH.	SAME AS "AA"	SAME AS "AA"	5000	50 FEET	5000	SAME AS "AA"
	"C" RESIDENCE	USES AS IN "A" ALSO TWO FAMILY, DUPLEX DWELLING, THREE FAMILY, APARTMENTS, CLUBS, COLLEGES, ETC.	96 FEET OR 8 STORIES	15% Lot DEPTH, BUT ANY BUILDING OVER 40 FEET HIGH; TO PROVIDE ADDITIONAL REAR YARD OF 1 FT. FOR EVERY 1½ FT. OF BUILDING HEIGHT OVER 40 FEET.	10% of Lot WIDTH. BUT ANY BUILDING OVER 40 FEET HIGH, TO PROVIDE ADDITIONAL REAR YARD OF 1 FOOT FOR EVERY 1½ FOOT OF BUILDING HEIGHT OVER 40 FEET.	35% OF LOT AREA	SINGLE FAM; 7500 TWO FAM: 3750 THREE FAM: 3000 OVER THREE FAMILY, 2000	60 FEET 60 FEET TWICE Bldg. HEIGHT 80 FEET OR TWICE HEIGHT OF BUILDING	7500 7500 9000 10,000	30 FEET ANY BUILDING OVER 40 FT. HIGH TO PROVIDE ADDITIONAL FRONT YARD OF 1 FT. FOR EVERY ½ Ft. OF BUILDING HEIGHT OVER 40 FT.
	"D" SPECIAL LOCAL BUSINESS	USES IN "C" ALSO BUSINESS	40 FT. OR 3 STORIES	5 FT. CORNER LOT 10 FT. INTERIOR LOT	5 FT. IF PROVIDED	80% of LOT AREA	SEE ORDINANCE, ART. 6, SEC. 3			10 FEET
	"E" LOCAL BUSINESS	SAME AS IN "C"	40 FT. OR 3 STORIES	5 FT. CORNER 10 FT. INTERIOR LOT	3 FT., IF PROVIDED	80% of INTERIOR LOT. 85% of CORNER LOT.	—	(SEE ORDINANCE)		NONE, except as required by ordinance
	"G" LIGHT INDUSTRIES	MATERIAL YARDS, ETC., SAME AS "E"	40 FT. OR 3 STORIES	SAME AS "E"	3 FT. IF PROVIDED	80% of INTERIOR LOT 85% of CORNER LOT	700	(SEE ORDINANCE)		SAME AS "C"
	"H" HEAVY INDUSTRIES	ANY MANUFACTURING PLANT, AS SHOWN IN ZONING ORDINANCE.	96 FT. OR 8 STORIES	—	5 FT. IF PROVIDED		(SEE ORDINANCE)			

SEE ZONING ORDINANCE FOR DETAILS, EXCEPTIONS, ETC.

Source: Chicago Ridge's 1945 zoning ordinance was provided by the Village of Chicago Ridge's Clerk's Office.

Table A1 provides tabulations summarizing the CCLZD's degree of comprehensiveness across individual suburban municipalities for each snapshot period. The second column gives the count of incorporated suburbs within Cook County for the respective snapshot period. The third column reports the number of these municipalities that were zoned at the time. The last two columns of Table A1 report how many of the numerous maps and bylaws for each of these zoned municipalities were digitized. It is clear from this table that the CCLZD achieves near-comprehensive coverage of the suburban zoning landscape (map and bylaws) for each of the snapshot periods. Table A1 also shows that the average/median suburb's minimum lot size required per household rose with time.

Table A1: Municipality-Level Summary Tabulations: Cook County Longitudinal Zoning Database

Snapshot Period	Municipalities	Zoned	Map Digitized	Bylaws Digitized
1920	87	43	35	42
1940	90	65	62	64
1950	99	89	85	83
1960	120	117	112	112
1970	122	122	115	116

Note: This table reports the zoning status of extant municipalities in Cook County, not including Chicago.

Table A2 reports basic municipality-level summary statistics from the CCLZD. These values point to a suburban landscape dominated by low-density zoning restrictions. The average zoned municipality in the 1920s allocated 67% of its land towards single-family uses and only 16% of its land towards multi-family apartment uses. While the average share of land zoned for single-family uses fell to 59% by the 1970s the average share allocated towards apartment uses fall to just 6%.

Table A2: Municipality-Level Summary Statistics: Cook County Longitudinal Zoning Database

		Mean Land Share Zoned for:					MLS per HH (sq. ft.)	
Snapshot Period	N	Single Family	Duplex	Apartment	Commercial	Industrial	Mean	Median
1920	35	0.67	0.02	0.16	0.08	0.06	5,811	4,993
1940	62	0.66	0.02	0.11	0.08	0.11	6,674	6,104
1950	81	0.62	0.04	0.08	0.07	0.15	6,971	6,133
1960	111	0.64	0.04	0.04	0.07	0.17	13,008	6,481
1970	114	0.59	0.04	0.06	0.08	0.19	12,619	6,345

Note: Individual municipality-level observations are not weighted when calculating summary statistics. All values reflect simple averages/medians across municipality-level observations. Zoning district land area shares do not necessarily sum to one because zoning districts for more minor uses (e.g., public parking, forest preserve, etc.) are not included. A municipality's minimum lot size per household is calculated for residential districts only (i.e., single-family, duplex, or apartment districts) and weighted by individual districts' land areas. The sample is limited to zoned municipalities where *both* the zoning bylaws and zoning map are known.

Table A3 provides a deeper look into the CCLZD by summarizing patterns across individual zoning districts (regardless of municipality). The first set of columns reports the share of all zoned suburban land assigned to each major land use. These values also reveal a suburban regulatory

environment where single-family zoning was dominant, accounting for approximately two-thirds of zoned suburban land in each of the CCLZD's snapshot periods. Table A3 also shows that the minimum lot size required per household within the median residential district increased considerably over time, rising 50% from 5,000 square feet in the 1920s to 7,500 square feet around 1970.

Table A3: Zoning District-Level Summary Statistics: Cook County Longitudinal Zoning Database

	Land Share Zoned for:					MLS per HH (sq. ft.)	
Snapshot Period	Single Family	Duplex	Apartment	Industrial	Commercial	Mean	Median
1920	0.61	0.04	0.18	0.10	0.07	5,310	5,000
1940	0.64	0.03	0.13	0.09	0.12	6,378	6,223
1950	0.65	0.04	0.08	0.07	0.15	6,914	6,250
1960	0.67	0.04	0.04	0.07	0.17	32,182	7,260
1970	0.65	0.03	0.06	0.08	0.19	29,581	7,500

Note: Zoning district land area shares do not necessarily sum to one because zoning districts for more minor uses (e.g., public, parking, forest preserve, etc.) are not included. Statistics for minimum lot size per household are calculated for residential districts only (i.e., single-family, duplex, or apartment districts) and weighted by a zoning district's land area.

Figure A6 gives a visual summary of the municipal zoning landscape for each of the five snapshot periods included in the CCLZD. The suburban municipalities incorporated during the respective period of each map are identified as either "zoned" or "unzoned." Zoned municipalities are further stratified based on whether or not we were able to successfully digitize their zoning map for that particular period. The city of Chicago is outlined in blue within each map. The outer boundary (in black) outlines Cook County. Altogether, these maps depict an expanding suburban landscape that was evenly split between "zoned" and "unzoned" in the 1920s but within which zoning became nearly universally adopted by existing municipalities by 1950. The county's suburban land was almost fully covered by a zoned municipality's regulations by the early 1970s.

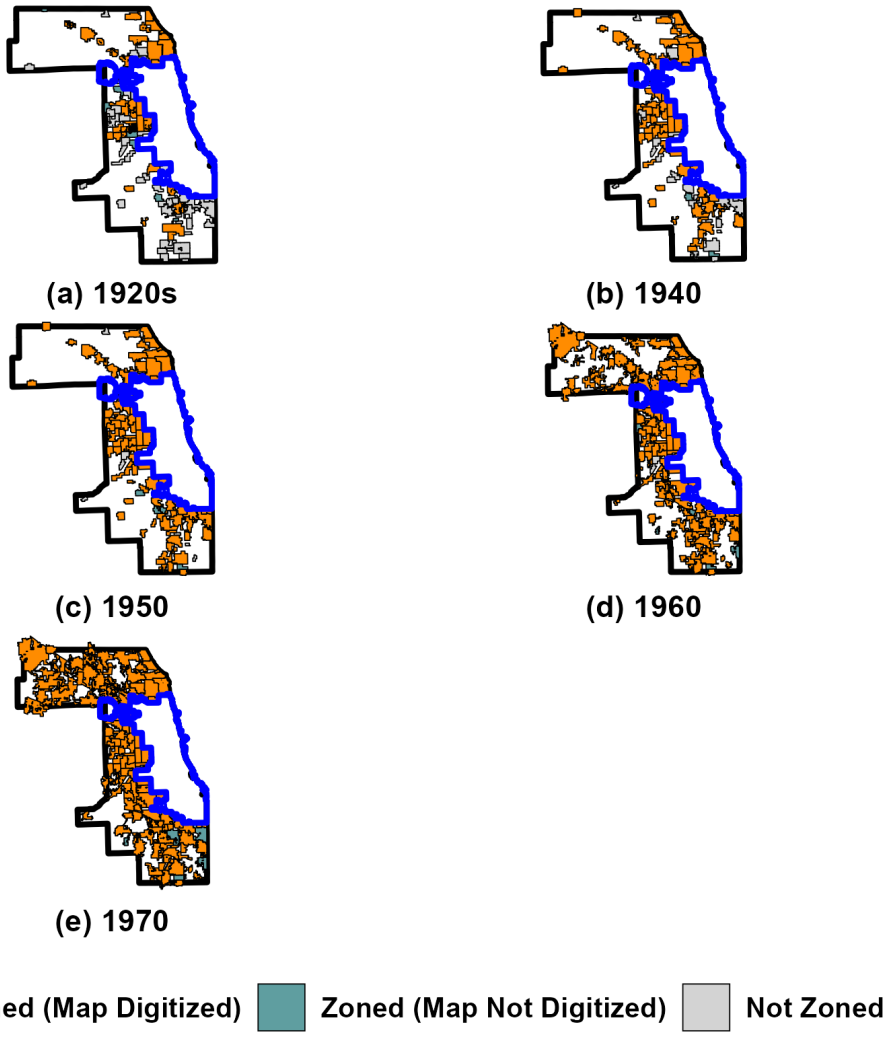
A.3 Building a Parcel-Level Dataset

Data contained in the digitized zoning maps are assigned to individual suburban land parcels using a multi-step process involving numerous data files. We begin with a GIS shapefile of all Cook County land parcels as of 2017.[25] This file is distributed by Cook County's GIS department and provides the exact location and shape for each parcel. We merge this GIS file with another file provided by the Cook County Assessor's office that provides the classification code and age for each parcel as of 2016.[26] This step allows us to distinguish residential and nonresidential parcels as well as identify parcels used for single-family residential purposes.

[25] Cook County GIS. Historical Lots, 2017 (updated August 2022). See https://hub-cookcountyil.opendata.arcgis.com/datasets/2d2d5e9fb3934612809109b6833e5897_17/explore.

[26] This file is the detailed "Board File" that we obtained from a public records request to the Cook County Assessor's Office. This file includes detailed class codes for residential and nonresidential parcels, including vacant land. A property's age is set to "NA" for open undeveloped land. Tax-exempt properties included in the Board File are dropped from our analysis.

Figure A6: Digitized Zoning Maps



Note: See text for details regarding how these maps were constructed. Whitespace outside of the city of Chicago identifies unincorporated suburban land.

We merge the parcel file with two additional publicly-provided shapefiles in order to assign each parcel its most recent date of subdivision and date at the time of subdivision. The subdivision shapefile (along with its accompanying attribute file) was obtained through a public records request to Cook County's GIS office. This file identifies the shape and location of individual subdivision plats as they were in 2017 as well as the exact date the plat was officially recorded within the county clerk's office. We use this shapefile to assign the exact date of the most recent subdivision to each individual parcel.[27] A parcel's date of subdivision is of particular importance to our study because a zoning ordinance's language regulating lot size almost always references the date of subdivision as the key cutoff date for determining whether or not the associated regulations stipulated within the ordinance are binding or not. Parcels subdivided prior to the passage of a particular zoning ordinance were almost always "grandfathered in" within the ordinance's nonconforming use clause, thus allowing their size and shape to remain in place. However, parcels subdivided after the zoning ordinance's passage were required to comply with the new ordinance's lot size restrictions, among other regulations outlined within the ordinance's bylaws.

The second shapefile, Cook County's Municipal Incorporation Inventory (MII), is a unique resource that documents the nearly-complete history of municipal incorporation/annexation activity within the county.[28] Just like private real estate subdividers, individual municipalities are required to file a plat of incorporation/annexation with the county clerk's office for official record-keeping purposes. The MII is the product of an ambitious undertaking whereby Cook County set out to digitize the complete history of these municipal plats. The MII, like the subdivision shapefile, identifies the shape and location of nearly all historical municipal incorporation/annexation plats as well as their official date of record. We spatially merge our parcel file to the MII in order to assign each parcel the date at which it was annexed to whichever municipality would have had authority to restrict its development at the time that it was subdivided (if it was under the authority of a particular municipality at the time that it was subdivided). Unlike the subdivision shapefile, it is not uncommon for a single parcel to overlap multiple municipal incorporation/annexation features contained within the MII shapefile. This is because the MII was built with an eye towards documenting the complete history of municipal boundary changes over time, which often leads to overlapping plats across different periods of time. For example, a piece of land could be annexed to one municipality, disconnected from that municipality at a later date, and then re-annexed into another municipality at a later date. Timelines such as these introduce considerable complexity to the structure of the data once the MII and parcel file are spatially merged. The steps outlined below were taken in order to assign to each parcel the incorporation/annexation date that would be most appropriate for determining which municipality's zoning ordinance would have been binding at the time that the parcel was subdivided.

For parcels overlapping only a single MII feature:

- We assign the incorporation/annexation date associated with that particular MII feature.

[27] We assign parcels their earliest-observed date of subdivision in the rare case that a single parcel overlaps multiple subdivision plat features.

[28] Cook County Municipal Incorporation Inventory, accessed 2023. See https://maps.cookcountyil.gov/mii/.

For parcels overlapping multiple MII features:

- If the subdivision date precedes *all* overlapping incorporation/annexation dates, we assign the latest incorporation/annexation date. This parcel was not subject to any municipal zoning ordinance at the time of subdivision so this date is irrelevant to assigning any zoning ordinance that would have been in place at the time of subdivision.
- If the subdivision date precedes all but one incorporation/annexation date, we assign the latter as the incorporation/annexation date. This particular incorporation/annexation date (and the associated municipality) is the only one that would have been associated with a potentially-binding municipal zoning ordinance at the time of subdivision.
- If the subdivision date comes after multiple incorporation/annexation dates, we assign the latest of these incorporation/annexation date dates, as this date is most likely aligned with whichever municipality the parcel belonged to at the time that it was subdivided. These parcels reflect cases where they initially belonged to one municipality, were then disconnected from that municipality, and then re-annexed into another municipality after which they were eventually subdivided, perhaps under the latter municipality's binding zoning ordinance if one was in place at the time.

Once each individual parcel is assigned its appropriate subdivision and incorporation/annexation dates, the full parcel file is merged with the full collection of detailed zoning maps included in the CCLZD. This is done separately for each CCLZD snapshot period (see Figure A6). We then append these files. In order to avoid problems associated with small boundary errors in our digitized zoning maps, we keep only those parcels that, within a snapshot period, overlap at most one zoning district. We then determine the date that a parcel was first assigned *municipal zoning* by interacting the date that it was incorporated/annexed into its municipality with the date the municipality itself was first zoned. The algorithm is straightforward:

- If date(muni zoned) $<$ date(parcel inc/anx into muni) $\Rightarrow$ date(parcel zoned) = date(parcel inc/anx into muni),
- If date(muni zoned) $>$ date(parcel inc/anx into muni) $\Rightarrow$ date(parcel zoned) = date(muni zoned), and
- Parcel observations overlapping zero zoning districts for a particular time frame receive "NA" for date(parcel zoned).

The next step involves assigning parcels the zoning regulations that would have been in place at the time of subdivision, if observed. We accomplish this by separating the parcel file into three mutually exclusive sub-files based on whether or not a parcel was zoned at the time of subdivision and, if zoned, whether or not we observe the detailed map/bylaws that were in place at the time of subdivision (the bylaws regulating a particular parcel at the time that it was subdivided are only known if the detailed zoning maps has also been digitized).

The three files and the underlying conditions for a parcel's inclusion within each respective file are:

- **Parcels Zoned when Subdivided: Associated Bylaws are Known**
  1. date(parcel subdivided) $\geq$ date(parcel zoned),
  2. date(bylaws begin) $\leq$ date(parcel subdivided) $\leq$ date(bylaws end), and
  3. if multiple parcel $\times$ map snapshot observations still exist (which is common for municipalities that do not regularly update their bylaws), keep the the observation associated with the earliest-observed map snapshot.
- **Parcels Zoned when Subdivided: Associated Bylaws are Unknown**
  1. date(parcel subdivided) $\geq$ date(parcel zoned) and
  2. date(parcel subdivided) $\leq$ min(date bylaws begin).
- **Parcels Not Zoned when Subdivided**
  1. year(parcel subdivided) $<$ 1921 *or* date(parcel subdivided) $<$ date(parcel zoned).

We append these three files to construct the parcel-level file. Table A4 provides basic summary tabulations.

Table A4: Summary Tabulations of Parcel-Level File

Observation Type	Frequency
Not Zoned	332,886
Zoned(Known)	207,680
Zoned(Unknown)	28,522
Total	569,088

In the remainder of this appendix, we document the exact sources we used to construct the CCLZD. Subsection A.4 reports the dates of incorporation and of the first zoning ordinance adoption for each suburban municipality in Cook county. We also made an effort to document every primary and secondary source we consulted to obtain zoning maps and bylaws. Subsection A.5 provides the source of our maps and bylaws for each decade in the sample.

A.4 Dates of Incorporation and Zoning Adoption

Table A5: Year Municipalities were Incorporated and Zoned

Municipality	Year Zoned	Year Incorporated
Alsip	1954	1927
Arlington Heights	1927	1887
Barrington	1926	1888
Barrington Hills	1957	1957
Bartlett	1941	1891
Bedford Park	1941	1940
Bellwood	1931	1900
Berkeley	1928	1925
Berwyn	1922	1901
Blue Island	1926	1872
Bridgeview	1948	1947
Broadview	1942	1913
Brookfield	1924	1893
Buffalo Grove	1958	1958
Burbank	1971	1970
Burnham	1945	1907
Burr Ridge	1958	1956
Calumet	1947	1893
Calumet Park	1941	1912
Chicago Heights	1953	1892
Chicago Ridge	1945	1914
Cicero Town	1923	1867
Country Club Hills	1961	1958
Countryside	1960	1960
Crestwood	1929	1928
Des Plaines	1923	1869
Dixmoor	1943	1922
Dolton	1950	1892
East Hazel Crest	1959	1928
Elk Grove	1957	1956
Elmwood Park	1942	1914
Evanston	1921	1872

Continued on next page

Table A5: Year Municipalities were Incorporated and Zoned

Municipality	Year Zoned	Year Incorporated
Evergreen Park	1940	1893
Flossmoor	1925	1924
Ford Heights	1964	1949
Forest Park	1927	1884
Forest View	1940	1924
Franklin Park	1926	1892
Glencoe	1921	1869
Glenview	1923	1899
Glenwood	1958	1903
Golf	1928	1928
Hanover Park	1958	1958
Harvey	1926	1891
Harwood Heights	—	1947
Hazel Crest	1927	1911
Hickory Hills	1952	1951
Hillside	1948	1905
Hodgkins	1969	1896
Hoffman Estates	1960	1959
Hometown	1957	1953
Homewood	1926	1893
Indian Head Park	1964	1959
Inverness	1963	1963
Justice	1946	1911
Kenilworth	1923	1896
La Grange	1923	1879
La Grange Park	1925	1892
Lansing	1941	1893
Lemont	1958	1873
Lincolnwood	1927	1911
Lynwood	—	1959
Lyons	1923	1888
Mccook	1966	1926
Markham	1936	1925
Matteson	1936	1889

Continued on next page

Table A5: Year Municipalities were Incorporated and Zoned

Municipality	Year Zoned	Year Incorporated
Maywood	1922	1881
Melrose Park	1923	1882
Merrionette Park	—	1947
Midlothian	1946	1927
Morton Grove	1946	1895
Mount Prospect	1923	1917
Niles	1936	1899
Norridge	1957	1948
Northbrook	1926	1901
Northfield	1928	1926
Northlake	1949	1949
North Riverside	1926	1923
Oak Forest	1948	1947
Oak Lawn	1927	1909
Oak Park	1921	1901
Olympia Fields	1933	1927
Orland Hills	1963	1961
Orland Park	1931	1892
Palatine	1926	1877
Palos Heights	1959	1959
Palos Hills	1959	1958
Palos Park	1923	1914
Park Forest	1951	1949
Park Ridge	1922	1873
Phoenix	1959	1900
Posen	1968	1900
Prospect Heights	1977	1976
Richton Park	1945	1926
Riverdale	1936	1892
River Forest	1922	1880
River Grove	1935	1888
Riverside	1922	1875
Robbins	1948	1917
Rolling Meadows	1956	1955

Continued on next page

Table A5: Year Municipalities were Incorporated and Zoned

Municipality	Year Zoned	Year Incorporated
Rosemont	1957	1956
Sauk	1958	1957
Schaumburg	1956	1955
Schiller Park	1947	1914
Skokie	1926	1888
South Barrington	1960	1959
South Chicago Heights	1940	1907
South Holland	1943	1894
Steger	1948	1896
Stickney	1952	1913
Stone Park	1940	1939
Streamwood	1958	1957
Summit	1929	1891
Thornton	1952	1900
Tinley Park	1929	1892
Westchester	1942	1925
Western Springs	1923	1886
Wheeling	1962	1894
Willow Springs	1939	1892
Wilmette	1922	1872
Winnetka	1922	1869
Worth	1953	1914
Cook County (Unincorporated)	1940	1831

Note: The year of incorporation is provided by Cook County's Municipal Incorporation Inventory (MII). The year of first zoning ordinance is the earliest year for which we found evidence of a zoning ordinance for that municipality in our archival work. The exact date that a municipality's first zoning ordinance was passed into law is typically cited within the language of any later ordinances that comprehensively amended the first ordinance.

A.5 Map and Bylaw Sources (1920s, 1940, 1950, 1960, 1970)

We collected the zoning maps and ordinances from a variety of sources, as discussed in Appendix subsection A.2. We list all of our sources for each decade in the below tables.

Table A6: Zoning Law Sources Legend

Legend:	
OCC:	Olcott's Cook County Book
OBB:	Olcott's Blue Book
OM:	Official Map
Ord.:	Official Ordinance
OZB:	Olcott's Zoning Book
MG:	Official Map Guide
CRPA:	Chicago Regional Planning Association
IPC:	Index Publishing Corporation
MII:	Cook County's Municipal Incorporation Inventory
LOC:	Library of Congress
Year indicated by '## (e.g., '24 = 1924).	

Table A7: Zoning and Bylaw Sources (1920)

Municipality	Map Source	Bylaws Source
Arlington Heights	Ord. '27; OBB '39	Ord. '27
Barrington	—	Ord. '26
Berkeley	—	OBB '40
Berwyn	OZB '25	OBB '36
Blue Island	OZB '27	Ord. '26
Brookfield	OM '24	Ord. '24
Cicero Town	OZB '25	OBB '36
Crestwood	—	Ord. '29
Des Plaines	OM '23	Ord. '23
Evanston	OZB '25; OM '27	Ord. '21
Flossmoor	MG '24	Ord. '25
Forest Park	OM '27	Ord. '27
Franklin Park	—	CRPA '31; OBB '40
Glencoe	OZB '25	Ord. '21
Glenview	OM '28	Ord. '28
Golf	—	—
Harvey	OM '30	OM '30; Ord. '26
Hazel Crest	—	CRPA '31
Homewood	OM '28	Ord. '28
Kenilworth	OM '23	Ord. '23
La Grange	OM '20s	Ord. '23
La Grange Park	OM '25	Ord. '25
Lincolnwood	OM '27	Ord. '27
Lyons	—	CRPA '31; OBB '50
Maywood	OM '30; OBB '36; MII	Ord. '22
Melrose Park	OM '23	Ord '24; CRPA '31; OBB '36
Mount Prospect	MG '23	Ord. '23
Northbrook	MG '27; OBB '40	Ord. '27
Northfield	MG '28; OBB '36; MII	Ord. '28
North Riverside	MG '26	Ord. '26
Oak Lawn	OM '27	Ord. '27
Oak Park	OM '21	Ord. '21
Palatine	OM '26	Ord. '26
Palos Park	OM '24	Ord. '24

Continued on next page

Table A7: Zoning and Bylaw Sources (1920)

Municipality	Map Source	Bylaws Source
Park Ridge	OZB '27	OZB '27; OBB '37
River Forest	OM '22	Ord. '22
Riverside	MG '22	Ord. '22
Skokie	OZB '27	Ord. '26
Summit	—	CRPA '31; OBB '40
Tinley Park	MG '29	Ord. '29
Western Springs	OM '23	OBB '41
Wilmette	OZB '25; MG '22	Ord. '22
Winnetka	OM '24	Ord. '22

Note: This table provides the source of the earliest zoning ordinances in the CCLZD for municipalities that were zoned in the 1920s.

Table A8: Zoning and Bylaw Sources (1940)

Municipality	Map Source	Bylaws Source
Arlington Heights	OBB '40	Ord. '27
Barrington	OCC '45	Ord. '26
Bartlett	OM '41	Ord. '41
Bedford Park	OCC '50; OBB '51; OC	Ord. '41; OCC '45
Bellwood	OBB '40	CRPA '31; OBB '40
Berkeley	OBB '40	OBB '40
Berwyn	OBB '40	OBB '40
Blue Island	OBB '40	OBB '40
Broadview	OBB '43	OBB '43
Brookfield	OBB '40	OBB '40
Calumet Park	OBB '41	OBB '41
Cicero Town	OBB '40	OBB '40
Crestwood	—	Ord. '29
Des Plaines	OBB '40	OBB '40
Dixmoor	OCC '50	OCC '50
Elmwood Park	OBB '43	OBB '47
Evanston	OM '46; OBB '43	OBB '40
Evergreen Park	OBB '41	OBB '41
Flossmoor	OBB '40	OM '32 Amd. Ord.
Forest Park	OM '27; OBB '40	OBB '40
Forest View	Ord. '40	Ord. '41
Franklin Park	OBB '40	OBB '39; OBB '40
Glencoe	OM '40	OBB '41
Glenview	OCC '45; OBB '40	OBB '40
Golf	OM '41	Ord. '43
Harvey	OM '48	OM '48; OBB '40
Hazel Crest	OBB '40	CRPA '31
Homewood	OBB '41	OBB '40
Kenilworth	OBB '40	OBB '40
La Grange	OBB '40	OBB '40
La Grange Park	OBB '40	OBB '40
Lansing	OCC '45	OCC '45; OBB '41
Lincolnwood	OBB '40	OBB '40
Lyons	OBB '40	OCC '50

Continued on next page

Table A8: Zoning and Bylaw Sources (1940)

Municipality	Map Source	Bylaws Source
Markham	OM '41	Ord. '41; OBB '42
Matteson	OCC '45	Ord. '37
Maywood	OM '44	OBB '40
Melrose Park	OBB '40	Ord. '23; OBB '40
Mount Prospect	OBB '40	OBB '40
Niles	OBB '40	OBB '40
Northbrook	OBB '40	OBB '40
Northfield	OM '42	OM '43
North Riverside	OBB '41	Ord. '26
Oak Lawn	OBB '40	Ord. '27
Oak Park	OM '41	Ord. '37
Olympia Fields	OCC '45	OCC '45
Orland Park	OCC '45	OCC '45
Palatine	OBB '41	Ord. '26
Palos Park	OBB '41	Ord. '26
Park Ridge	OBB '40	Ord. '28 Amd. '37
Riverdale	OM '36	Ord. '36
River Forest	OBB '40	Ord. '22
River Grove	OBB '40	OBB '40
Riverside	OBB '40	OBB '40
Skokie	OBB '40	OBB '41
South Chicago Heights	—	Ord. '40
South Holland	OBB '45	Ord. '43
Stone Park	—	—
Summit	OBB '40	OBB '40
Tinley Park	OCC '45	OCC '45
Westchester	OM '42	OBB '46
Western Springs	OM '38; OBB '40	OBB '41
Willow Springs	OCC '50; OCC '62; MII	Ord. '39
Wilmette	OBB '41	Ord. '41
Winnetka	OBB '40	Ord. '32 Amd. '39

Note: This table provides the source of the zoning ordinances used in the CCLZD for the year 1940.

Table A9: Zoning and Bylaw Sources (1950)

Municipality	Map Source	Bylaws Source
Alsip	OM '54	Ord. '54
Arlington Heights	OCC '50	Ord. '27
Barrington	OCC '45; OCC '50	Ord. '26
Bartlett	OCC '45; OCC '55	Ord. '41
Bedford Park	Ord. '41; OCC '50; OBB '51	Ord. '41; OBB '50
Bellwood	OM '53	Ord. '53
Berkeley	OBB '51	OBB '50
Berwyn	OBB '53	OBB '50
Blue Island	OCC '50; OBB '53	Ord. '26
Bridgeview	OM '47	Ord. '48
Broadview	OBB '53	OBB '50
Brookfield	OBB '52	OBB '52
Burnham	OCC '50	Ord. '45
Calumet	OM '50	OCC '50
Calumet Park	OCC '50	OCC '50
Chicago Heights	OM '53	Ord. '53
Chicago Ridge	OM '45	Ord. '45
Cicero Town	OBB '51	OBB '50; CRPA '31
Crestwood	—	Ord. '29
Des Plaines	OCC '50	Ord. '23 Amd. '56
Dixmoor	OCC '50	OCC '50
Dolton	OM '51	OBB '53
Elmwood Park	OCC '50	OCC '50
Evanston	OM '46; OBB '53	OM '45; Ord. '40
Evergreen Park	OCC '50	OCC '50
Flossmoor	OM '52	Ord. '25 Amd. '46; OM '52
Forest Park	OBB '51	Ord. '27
Forest View	Ord. '40	Ord. '40
Franklin Park	OM '52	Ord. '52
Glencoe	OCC '50	OBB '50
Glenview	OM '60; OBB '53	Ord. '46
Golf	OM '41	Ord. '43
Harvey	OCC '50	OCC '50
Harwood Heights	OBB '54	—

Continued on next page

Table A9: Zoning and Bylaw Sources (1950)

Municipality	Map Source	Bylaws Source
Hazel Crest	OCC '50	CRPA '31
Hickory Hills	MII	Ord. '52 Amd. '54
Hillside	OM '48	Ord. '48
Homewood	OCC '50	OCC '50
Justice	OCC '50	OCC '50
Kenilworth	OBB '51	Ord. '23
La Grange	OCC '50	OM '44; Ord. '44
La Grange Park	OBB '51	Ord. '45
Lansing	OCC '50	Ord. '41
Lincolnwood	OBB '51	OBB '50
Lyons	OM '52	OBB '52
Markham	OCC '50	Ord. '41
Matteson	OCC '50	Ord. '37
Maywood	OM '52	Ord. '51
Melrose Park	OBB '51	Ord. '23
Merrionette Park	OBB '51	—
Midlothian	OM '46	OM '46; Ord. '46
Morton Grove	OM '46	OM '46; Ord. '46
Mount Prospect	OCC '50	Ord. '44
Niles	OBB '51	OCC '50
Northbrook	OM '50 & '59, OBB '51	Ord. '50
Northfield	OCC '50	OM '53; Ord. '43
Northlake	OCC '45	Ord. '54
North Riverside	OBB '51	Ord. '26
Oak Forest	OCC '50	—
Oak Lawn	OCC '50	Ord. '27
Oak Park	OCC '50	OBB '51
Olympia Fields	OCC '50	OCC '50
Orland Park	OCC '50	OCC '50
Palatine	OCC '50	Ord. '26
Palos Park	OBB '51	Ord. '26
Park Forest	OM '51	Ord. '51
Park Ridge	OCC '50	Ord. '28 Amd. '57
Richton Park	OCC '50	Ord. '45

Continued on next page

Table A9: Zoning and Bylaw Sources (1950)

Municipality	Map Source	Bylaws Source
Riverdale	OCC '50; OBB '51	Ord. '36
River Forest	OBB '51	Ord. '22
River Grove	OCC '50	OBB '50
Riverside	OBB '51	Ord '22 Amd.
Robbins	—	—
Schiller Park	OCC '50	Ord. '47
Skokie	OCC '50	Ord. '46
South Chicago Heights	—	Ord. '40
South Holland	OCC '50	Ord. '38 upd. '42 & '43
Steger	OM '48	Ord. '48
Stickney	Ord. '52	Ord. '52
Stone Park	OBB '53	—
Summit	OCC '50	OBB '50; CRPA '31
Thornton	OM '52	Ord. '52
Tinley Park	OM '47	Ord. '47
Westchester	OM '53	OBB '50
Western Springs	OM '48	Ord. '48
Willow Springs	OCC '62; OCC '49; MII	Ord. '39; OCC '49; Ord '56
Wilmette	OCC '50; OBB '51	Ord. '41; OBB '50
Winnetka	OCC '50; OBB '51	Ord. '40; OBB '50
Worth	—	—

Note: This table provides the source of the zoning ordinances used in the CCLZD for the year 1950.

Table A10: Zoning and Bylaw Sources (1960)

Municipality	Map Source	Bylaws Source
Alsip	OM '63	Ord '54; Amds.
Arlington Heights	OM '59	Ord '59; OM '59
Barrington	OM '62	Ord. '59
Barrington Hills	OM '68	Ord. '63
Bartlett	OM '62	Ord. '63
Bedford Park	Ord. '41; OCC '50; OBB '51	Ord. '41; Amds.
Bellwood	OM '59	Ord. '53 & '59
Berkeley	—	—
Berwyn	OBB ' 63	Code '39; OBB '63
Blue Island	OCC '62; OCC '63	Ord. '26
Bridgeview	OM '67	Ord. '63
Broadview	OBB '61	OBB '63
Brookfield	OCC '63; OM '67	Code '64
Buffalo Grove	OCC '62	Ord. '61
Burnham	OCC '62	Ord. '45
Burr Ridge	OM '58	Ord. '58
Calumet	OBB '63	OBB '63
Calumet Park	OBB '63	Ord. '59
Chicago Heights	OM '63	Ord. '53
Chicago Ridge	OBB '63, OM '57-'65	Ord. '45
Cicero Town	OM '60	OBB '63
Country Club Hills	OM '61 & '62	OM '61 & 62; IPC '91
Countryside	OBB '63; OBB '70	Ord. '61
Crestwood	OM '62	Code 70́s
Des Plaines	OM '62	Ord. '60
Dixmoor	OCC '62	OCC '50 & '55
Dolton	OCC '62	Ord. '59
East Hazel Crest	OBB '63	Ord. '59
Elk Grove	OM '60	Ord. '57 + Amds.
Elmwood Park	OCC '62	OCC '62; OBB '63
Evanston	OM '62	Ord. '60
Evergreen Park	OM '58	Ord. '40 + Amds.
Flossmoor	OM '61	Ord. '61

Continued on next page

Table A10: Continued

Municipality	Map Source	Bylaws Source
Ford Heights	OM '64	OM '64; Current Ord. (never changed)
Forest Park	OM '58	Ord. '58 + '63 Amds.
Forest View	OM '62	OM '62
Franklin Park	OM '64	Ord. '59 + '60 Amd.
Glencoe	OM '59	Ord. '59
Glenview	OM '64	Ord. '64
Glenwood	OBB '69; MII	Ord. '58
Golf	OM '41	Ord. '43 + '62 Amd.
Hanover Park	OM '62	Ord. '58 + Amds.
Harvey	OM '61	OM '61
Harwood Heights	OCC '62; OBB '63	Ord. '56
Hazel Crest	OM '72; OBB '64	Ord. '64
Hickory Hills	OM '61	Ord. '52 + Amds. '54 & '61
Hillside	OM '61	Ord. '48; OBB '63
Hoffman Estates	OM '60	Ord. '60
Hometown	OM '57	Ord. '57
Homewood	OM '60	Ord. '60
Indian Head Park	OM '64	Ord. '64
Inverness	OM '63	Ord. '63
Justice	OM '61; OCC '62	Ord. '61
Kenilworth	OBB '61	Ord. '23; OBB '63
La Grange	OM '62; OCC '62	OM '62; Ord. '44
La Grange Park	OM '62	Ord. '57
Lansing	OM '61	Ord. '61
Lemont	OCC '62	Ord. '58
Lincolnwood	OM '62	Ord. '62
Lynwood	—	—
Lyons	OCC '62; OBB '59	OCC '62; OBB '53
Markham	OM '61	Ord. '56 + Amds. through '77
Matteson	OM '63	Ord. '61
Maywood	OM '59; OM '62	Ord. '52

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Table A10: Continued

Municipality	Map Source	Bylaws Source
Melrose Park	OM '70; OBB '63	Code '70
Merrionette Park	OM '58-'64	Ord. '59 + Amds.
Midlothian	OM '60	Ord. '60
Morton Grove	OM '60	Ord. '59 + Amds.
Mount Prospect	OM '63; OBB '63	Ord. '63
Niles	OM '61	Ord. '61
Norridge	OM '62	Ord. '62
Northbrook	OM '64	Ord. '64
Northfield	OM '63 & '65; OCC '62	Ord. '43 + Amds.
Northlake	OM '60	Ord. '54 & '56
North Riverside	OM '64	Ord. '64
Oak Forest	OM '64	OM '64
Oak Lawn	OM '64	Ord. '63
Oak Park	OM '62	OM '59; Ord. 47 + Amds.
Olympia Fields	OCC '62	OCC '55
Orland Hills	—	—
Orland Park	OM '63	Ord. '57
Palatine	OCC '62	Ord. '57 + Amd. through '63
Palos Heights	OM '63-'77; OCC '62; Amds. through '63	Ord. '57 + Amds. through '68
Palos Hills	OCC '62	Ord. '59
Palos Park	OM '58	Ord. '60
Park Forest	OM '61	Ord. '51
Park Ridge	OBB '64	Ord. '27 + Amds. through '57
Phoenix	OM '77; OBB '67; MII	Ord. '58
Richton Park	OCC '62	Ord. '45 + Amd. '61
Riverdale	OCC '62	Ord. '36 + Amd. '60
River Forest	OBB '63	Ord. '59
River Grove	OCC '62	OBB '63
Riverside	OM '68; Amds.	Ord. '22 + Amds. through early 1960s

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Table A10: Continued

Municipality	Map Source	Bylaws Source
Robbins	—	—
Rolling Meadows	OM '64	Ord. '64
Rosemont	OM '63	Ord. '56
Sauk	OM '76; Amds.	Ord. '58
Schaumburg	OM '61	Ord. '61
Schiller Park	OM '61	Ord. '61
Skokie	OM '64	Ord. '64
South Barrington	OM '59	Ord. '60
South Chicago Heights	—	Ord. '40
South Holland	OCC '62	Ord. '56
Steger	OM '64 revised '70	OM '79; Ord. '63 + Amds.
Stickney	OM '64	Ord. '52
Stone Park	OBB '63	—
Streamwood	OM '63; Amds.; OM '69	Ord. '58
Summit	OM '64	Ord. '64
Thornton	OM '62; OCC '62	Ord. '52
Tinley Park	OM '64	Ord. '56
Westchester	OM '74; OBB '67	Ord. '64
Western Springs	OM '61	OM '61; Ord. '47
Wheeling	OM '64; MII	Ord. '64
Willow Springs	OM '76; MII	Ord. '64
Wilmette	OM '59	Ord. '59
Winnetka	OM '61	Ord. '22 + Amds. '59 & '69; OBB '63
Worth	OM '64	Ord. '64

Note: This table provides the source of the zoning ordinances used in the CCLZD for the year 1960.

Table A11: Zoning and Bylaw Sources (1970)

Municipality	Map Source	Bylaws Source
Alsip	OM '75	Ord. '54 + Amd. '64
Arlington Heights	OM '71	Code '59 + Amd. '74
Barrington	OM '66	Ord. '66
Barrington Hills	OM '77	Ord. '63
Bartlett	OM '70	Ord. '63
Bedford Park	IPC '91	Ord. '41
Bellwood	OM '59 upd. w/ OBB '70	Ord. '59; Ord '63 revisions
Berkeley	OM '84	Ord. '76
Berwyn	OM '66; IPC '00	Ord. '66
Blue Island	OM '68 (proposed)	Official '68 plan
Bridgeview	OM '76 (LOC)	Ord. '70 + Amd. '71
Broadview	OM '86	OBB '63
Brookfield	OM '67	Ord. '24 Amd.
Buffalo Grove	OM '71	Ord. '61; IPC
Burbank	OBB '79; MII	Ord. '72
Burnham	OM '72	Ord. '45
Burr Ridge	OM '70	Ord. '65 + Amd. through '69
Calumet	—	—
Calumet Park	—	Ord. '72
Chicago Heights	OM '73	Ord. '73
Chicago Ridge	OM '68	Ord. '68
Cicero Town	OM '73	Ord. '77
Country Club Hills	OM '71	Official '61 Ord.
Countryside	OM '70s; OBB '79, MII	Ord. '61
Crestwood	OM '78	Ord. '71
Des Plaines	OM '69	Ord. '60
Dixmoor	OM '77	Ord. '60
Dolton	OM '70	Ord. '59
East Hazel Crest	OM '80	Ord. '59
Elk Grove	OM '75 (LOC)	Ord. '72
Elmwood Park	OM '72	Ord. '72
Evanston	OM '69	Ord. '60 + Amd. '68

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Table A11: Continued

Municipality	Map Source	Bylaws Source
Evergreen Park	OM '74	Ord. '40 Ord. + Amds.
Flossmoor	OM '74	Ord. '61
Ford Heights	OM '64; IPC '91	OM '64; Current Ord.
Forest Park	OM '72	Ord. '58 + Amd. '63
Forest View	OM '65 (upd. '78, IPC '91)	Ord. '61; IPC
Franklin Park	OM '74	Ord. '74; IPC
Glencoe	OM '71 & '75	Ord. '59; IPC
Glenview	OM '76	Ord. '62
Glenwood	OM '77	Ord. '77
Golf	OM '41 (current in mid-80s)	Ord. '43 + Amd. '62
Hanover Park	OM '68	Ord. '58 + Amds.
Harvey	—	—
Harwood Heights	OM '73	Ord. '73
Hazel Crest	OM '72	Ord. '64 + Amds.
Hickory Hills	OM '80	Ord. '70
Hillside	OM '71	Ord. '48
Hodgkins	OBB '79; MII	Ord. '69
Hoffman Estates	OM '70	Ord. '60 + Amds. through 70s
Hometown	OM '72	Ord. '61
Homewood	OM '71	Ord. '60
Indian Head Park	OM '69	Ord. '64
Inverness	OM '78	Ord. '63; IPC '91
Justice	OM '75	Official '61, '62 & '72 Amds.
Kenilworth	OM '69	Ord. '69
La Grange	OM '69	OM '69; Ord. '44
La Grange Park	OM '66	OM '66; Ord. '57
Lansing	OM '75	Ord. '61
Lemont	OM '70	Ord. '70
Lincolnwood	OM '66	Ord '62 Amd. through '65

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Table A11: Continued

Municipality	Map Source	Bylaws Source
Lynwood	—	—
Lyons	OM '52; IPC '91	Ord '52 Amd.
Mccook	OM '66 Amd. '88; IPC	Ord. '66
Markham	OM '76	Ord. '56 + Amds.
Matteson	OM '72	Ord. '61 + Amds.
Maywood	OM '68	Ord. '68
Melrose Park	OM '74	Code '70
Merrionette Park	OM '60s; IPC '91	Ord. '59; IPC '91
Midlothian	OM '75	Ord. '60; IPC '91
Morton Grove	OM '61	Ord. '59 + Amds.
Mount Prospect	OM '73	Ord. '63 + Amds. '74 Code
Niles	OM '75	Ord. '61 + Amd. through '70
Norridge	OM '72	Ord. '62; IPC '91
Northbrook	OM '73	Ord. '64 + Amds. through '71
Northfield	OM '69 & '70	Ord. '43 + Amds. through '82
Northlake	OM '70	Ord. '54 & '56
North Riverside	OM '71	Ord. '64
Oak Forest	OM '73	Ord. '64 + Amds. through '73
Oak Lawn	OM '71	Ord. '63
Oak Park	OM '66	Ord. '47
Olympia Fields	OM '77	Ord. '71
Orland Hills	—	—
Orland Park	OM '73 (LOC)	OM '73
Palatine	OM '74	Ord. '56 + Amds. through '76
Palos Heights	OM '76 (LOC)	Ord. '59 + Amds. through '68
Palos Hills	OM '68	Ord. '68
Palos Park	OM '75	Ord. '60

Continued on next page

Table A11: Continued

Municipality	Map Source	Bylaws Source
Park Forest	OM '72	Ord. '51 + Amd. through '67
Park Ridge	OM '74	Ord '27 + Amd. through '61
Phoenix	OM '77	Ord '59; IPC '91
Posen	OM '74	Ord. '68
Prospect Heights	OM '77	Ord. '77
Richton Park	OM '72	Ord. '73
Riverdale	OM '73 (LOC)	Ord. '73
River Forest	OBB '70	Ord. '59
River Grove	OM '74 upd. '81 (LOC)	Ord. '36 + Amd. IPC '91
Riverside	OM '72 (LOC)	Ord. '22 + Amd. through early '60s
Robbins	OM '73	—
Rolling Meadows	OM '73 (LOC)	Ord. '72
Rosemont	OM '68	Ord. '61 Amd. through '76
Sauk	OM '76	Ord. '58
Schaumburg	OM '73	Ord. '61
Schiller Park	OM '73	Ord. '61
Skokie	OM '73	Ord. '64
South Barrington	OM '70	Ord. '60
South Chicago Heights	—	Ord. '40 + Amd. '54
South Holland	OM '72	Ord. '56
Steger	OM '72	Ord. '63
Stickney	OM '72	Ord. '52
Stone Park	—	—
Streamwood	OM '70	Ord. '63
Summit	OM '70	Ord. '64
Thornton	OM '72	Ord. '52
Tinley Park	OM '72	Ord. '56
Westchester	OM '74 (LOC)	Ord. '64 + Amds.

Continued on next page

Table A11: Continued

Municipality	Map Source	Bylaws Source
Western Springs	Official '76 Map (LOC); OM '66	Ord. '48
Wheeling	OM '72	Ord. '64
Willow Springs	OM '76	Ord. '64
Wilmette	OM '71	Ord. '59
Winnetka	OM '69	Ord. '22 + Amd '59 & '69; OBB'63
Worth	OM '64	Ord. '64

Note: This table provides the source of the zoning ordinances used in the CCLZD for the year 1970.